EU CITES Automation Feasibility Study

- EC - DG Environment contracted a consultant to conduct Feasibility Study for an EU Wide Automated System for CITES Certificates & Permits
- **Scope of Study**
  - Report on the current ‘As-Is’ within the MS’s
  - Analyse Business Requirements and produce a Business Case
  - Analyse Technical Requirements and produce an Architecture Overview
- **Assessment made of 4 alternative high level Architectures**
- **Presented to Experts Group of the EU Member State Cites Authorities**
- **The “Open Design” was selected**
Open Design

Adaptor to integrate with EU CITES electronic system
High Level Analysis

- **Choreography**
  - Description of the cooperation between the systems of the involved parties, based on a selected architecture

- **Objectives**
  - Support Full Digital process
  - Accommodate with paper until complete Digitalization
  - Involved all parties
  - Only-Once Principle

- **Parties**
  - MAs in EU
  - MAs outside EU
  - Operators
  - Customs
Strategy

- **EPIX compliance**
  - Identify EPIX corresponding concepts
  - Add specific needs

- **HUB communication**
  - All parties communicate only with the Hub (operated by EC)
  - Point2Point still possible but not recommended

- **Poll mechanism**
  - To send a message: push to Hub
  - To get a message: poll the Hub and retrieve your messages
    (the Hub pushes no message)

- **Polling Frequency**

- **Security**
  - Level of Availability, Confidentiality and Integrity for the Hub
Choreographed Scenario

➢ **Chosen business scenario**
  ➢ Introduction to the EU of species under Annex A(II) & B
  ➢ MA of introduction different than MA of destination

➢ **Choreography scenarios**
  ➢ Full electronic
  ➢ Paper Permit with QR code
  ➢ Paper Permit
  ➢ MA inside TRACES NT

➢ **Only the Happy Flow is presented**
Customs Connected via CERTEX - Exporting MA has fully Connected Automated System

Customs Office of Country of Export

Customs Office of Country of Introduction

European Union Border

Exporter

Importer

CITES MA of Country of Introduction

CITES MA of Foreign Country of Export

CITES MA of EU Country of Country of Destination

CERTEX EU CUSTOMS SINGLE WINDOW

TracesNT EU CITES

PERMITS

Message Broker (Hub)
Customs Connected via CERTEX - Exporting MA has fully Connected Automated System

Exporter

1
Request Export Permit

CITES MA of Foreign Country of Export

European Union Border

CITES MA of Country of Introduction

CERTEX
EU CUSTOMS SINGLE WINDOW

TracesNT
EU CITES

PERMITS

Message Broker (Hub)

Importer

CITES MA of EU Country of Destination
Customs Connected via CERTEX - Exporting MA has fully Connected Automated System

1. Exporter requests export permit.
2. CERTEX (EU Customs Single Window) validates the export permit.
3. Importer advises export permit number and token.

- European Union Border
- Exporter
- Importer
- CERTEX (EU Customs Single Window)
- TracesNT (EU CITES)
- PERMITS
- Message Broker (Hub)
- CITES MA of Foreign Country of Export
  "validateExportPermit (generateToken)"
- CITES MA of EU Country of Destination
Customs Connected via CERTEX - Exporting MA has fully Connected Automated System

1. Request Export Permit
2. "validateExportPermit (generateToken)"
3. Advise Export Permit Number and Token
4. sendExportPermit

CITES MA of Foreign Country of Export

CITES MA of EU Country of Destination
Customs Connected via CERTEX - Exporting MA has fully Connected Automated System

1. Request Export Permit
2. "validateExportPermit (generateToken)"
3. Advise Export Permit Number and Token
4. sendExportPermit
5. Request Import Permit (Provide Export Permit Number and Token)
Customs Connected via CERTEX - Exporting MA has fully Connected Automated System

1. Request Export Permit
2. CITES MA of Foreign Country of Export
   "validateExportPermit (generateToken)"
3. Advise Export Permit Number and Token
4. sendExportPermit
5. Request Import Permit (Provide Export Permit Number and Token)
6. getExportPermit (Non-Final)

CITES MA of EU Country of Country of Destination

European Union Border

Customs Office of Country of Export

Customs Office of Country of Introduction

Importer

Exporter

CERTEX EU CUSTOMS SINGLE WINDOW

TracesNT EU CITES

Message Broker (Hub)
Customs Connected via CERTEX - Exporting MA has fully Connected Automated System

1. Request Export Permit

2. "validateExportPermit (generateToken)"

3. Advise Export Permit Number and Token

4. sendExportPermit

5. Request Import Permit (Provide Export Permit Number and Token)

6. getExportPermit (Non-Final)

7. "validateImportPermit"
Customs Connected via CERTEX - Exporting MA has fully Connected Automated System
Customs Connected via CERTEX -
Exporting MA has fully Connected Automated System

1. Exporter
   - Request Export Permit

2. CITES MA of Foreign Country of Export
   - "validateExportPermit (generateToken)"
   - sendExportPermit
   - getExportPermitStatus

3. Advised Export Permit Number and Token
   - European Union Border

4. CITES MA of EU Country of Destination
   - "validateImportPermit"
   - getExportPermit (Non-Final)
   - consumeExportPermit (Non-Final)

5. Importer
   - Request Import Permit (Provide Export Permit Number and Token)

6. CITES MA of Country of Introduction

7. “validateImportPermit”
Customs Connected via CERTEX - Exporting MA has fully Connected Automated System

1. Exporter
   1. Request Export Permit

2. CITES MA of Foreign Country of Export
   "validateExportPermit (generateToken)"

3. European Union Border
   3. Advising Export Permit Number and Token

4. CITES MA of EU Country of Export
   sendExportPermit

5. Importer
   5. Request Import Permit (Provide Export Permit Number and Token)

6. TracesNT
   EU CITES
   getExportPermit (Non-Final)

7. CITES MA of EU Country of Destination
   "validateImportPermit"

8. consumeExportPermit (Non Final)

9. getExportPermitStatus

10. sendImportPermit

11. Deliver To Customs Of Export
Customs Connected via CERTEX - Exporting MA has fully Connected Automated System

Exporter

1. Request Export Permit

2. CITES MA of Foreign Country of Export
   "validateExportPermit (generateToken)"

3. Advise Export Permit Number and Token

4. sendExportPermit

5. Request Import Permit
   (Provide Export Permit Number and Token)

6. getExportPermit (Non-Final)

7. "validateImportPermit"

8. consumeExportPermit (Non Final)

9. getExportPermitStatus

10. sendImportPermit

Importer

CITES MA of Country of Destination

European Union Border

Customs Office of Country of Export

11. Deliver To Customs Of Export

12. Leave Country Of Export
Customs Connected via CERTEX - Exporting MA has fully Connected Automated System

1. Request Export Permit
2. "validateExportPermit (generateToken)"
3. Advise Export Permit Number and Token
4. sendExportPermit
5. Request Import Permit (Provide Export Permit Number and Token)
6. getExportPermit (Non-Final)
7. "validateImportPermit"
8. consumeExportPermit (Non-Final)
9. getExportPermitStatus
10. sendImportPermit
11. Deliver To Customs Of Export
12. Leave Country Of Export
13. Create Customs Declaration
14. getAssociated Permits
Customs Connected via CERTEX - Exporting MA has fully Connected Automated System

Exporters
1. Request Export Permit
2. CITES MA of Foreign Country of Export "validateExportPermit (generateToken)"
3. sendExportPermit
4. getExportPermitStatus

European Union Border
5. Request Import Permit (Provide Export Permit Number and Token)

CERTEX EU CUSTOMS SINGLE WINDOW
6. getExportPermit (Non-Final)
7. consumeExportPermit (Non-Final)
8. sendImportPermit

Importer
9. getExportPermitStatus
10. sendImportPermit
11. Deliver To Customs Of Export
12. Leave Country Of Export
13. Create Customs Declaration
14. getAssociatedPermits
15. reserveImportPermit

CITES MA of Country of Introduction

Message Broker (Hub)
Customs Connected via CERTEX - Exporting MA has fully Connected Automated System
Customs Connected via CERTEX - Exporting MA has fully Connected Automated System

- **Exporter**
  - Request Export Permit
  - CITES MA of Foreign Country of Export
    - "validateExportPermit (generateToken)"
    - sendExportPermit
    - getExportPermitStatus
    - getClearedQuantities

- **European Union Border**

- **CERTEX EU CUSTOMS SINGLE WINDOW**
  - TracesNT EU CITES
    - consumeExportPermit (Non-Final)
    - getExportPermit (Non-Final)
  - Message Broker (Hub)
    - sendImportPermit
    - getExportPermit
    - sendImportPermit
    - getExportPermit

- **Importers**
  - Request Import Permit (Provide Export Permit Number and Token)
  - CITES MA of EU Country of Country of Destination
    - "validateImportPermit"
    - setClearedQuantities

- **Customs Office of Country of Export**
  - Deliver To Customs Of Export
  - Leave Country Of Export
  - Enter Country Of Introduction
  - Create Customs Declaration
Customs Connected via CERTEX - Exporting MA has fully Connected Automated System

- **Exporter**
  - 1. Request Export Permit
  - 2. "validateExportPermit (generateToken)"
  - 4. sendExportPermit
  - 9. getExportPermitStatus
  - 20. get Cleared Quantities

- **European Union Border**
  - 11. Deliver To Customs Of Export

- **Customs Office of Country of Export**
  - 12. Leave Country Of Export

- **Customs Office of Country of Introduction**
  - 13. Create Customs Declaration
  - 14. getAssociatedPermits
  - 15. reserveImportPermit
  - 17. clearPermitQuantities (Final)

- **TracesNT**
  - 16. Enter Country Of Introduction
  - 18. get Cleared Quantities
  - 6. getExportPermit (Non-Final)
  - 7. "validateImportPermit"
  - 8. consumeExportPermit (Non Final)

- **Message Broker (Hub)**
  - 19. get Cleared Quantities

- **CITES MA of Country of Destination**
  - 10. sendImportPermit
  - 18. getClearedQuantities

- **Importer**
  - 5. Request Import Permit (Provide Export Permit Number and Token)
Other Scenarios

- **Scenarios - Static Definition**
  - Non-EU Country of Export cannot interact with the Hub but is able to implement the pEPIX protocol
  - Non-EU Country of Export has restricted systems capability and effectively can only issue standard paper permits
  - EU CITES Authority has restricted systems capability and must use Graphical User Interface into TracesNT

- **Scenarios – Work In Progress**
  - Import for other Annexes
  - (Re-Export)
  - Internal Movement
  - Derogations (e.g. Travelling Exhibition Certificate)
  - CERTEX not supportive of CITES Certificates and Permits
Customs Connected via CERTEX - Exporting MA has a limited Connectivity Automated System

Exporter

1. Request Export Permit
2. CITES MA of Foreign Country of Export
   "validateExportPermit (generate Paper Permit with URL)"
3. Issue Paper Permit

European Union Border

Customs Office of Country of Export

14. Leave Country Of Export
15. Create Customs Declaration
16. getAssociatedPermits
17. reserveImportPermit
18. Enter Country Of Introduction

Importer

Customs Office of Country of Introduction

19. clearPermitQuantities (Final)
20. getClearerQuantities

CERTEX
EU CUSTOMS SINGLE WINDOW

TracesNT
EU CITES

Message Broker (Hub)

CITES MA of Country of Introduction

Request Import Permit (Provide Copy of paper Export Permit)

"Record Export Permit"

"validateImportPermit"

"Record Export Permit" (Non-Final)

getExportPermit

_sendExportPermit (Non-Final)

consumeExportPermit

sendImportPermit

getClearerQuantities

Get Export Permit 6 using URL

"validateImportPermit"
Customs Connected via CERTEX - Exporting MA has no Automated System

1. Request Export Permit
2. CITES MA of Foreign Country of Export
3. Issue Paper Permit
4. Export Permit
5. Request Import Permit (Provide Copy of paper Export Permit)
6. "Record Export Permit"
7. getExportPermit
8. "validateImportPermit"
9. sendExportPermit (Non-Final)
10. consumeExportPermit (Non Final)
11. sendImportPermit
12. Deliver To Customs Of Export
13. Leave Country Of Export
14. Create Customs Declaration
15. getAssociatedPermits
16. reserveImportPermit
17. Enter Country Of Introduction
18. clearPermitQuantities (Final)
19. getClearPermitQuantities
20. getClearPermitQuantities

European Union Border

Exporter

Importer

CERTEX EU CUSTOMS SINGLE WINDOW

TracesNT EU CITES

PERMITS

Message Broker (Hub)
Customs Connected via CERTEX -
MA of Destination uses EU CITES within TracesNT

1. Request Export Permit

2. CITES MA of Foreign Country of Export
   “validateExportPermit (generateToken)”

3. Advise Export Permit Number and Token

4. CERTEX EU CUSTOMS SINGLE WINDOW

5. Request Import Permit
   (Provide Export Permit Number and Token)

6. read Export Permit (Non-Final)

7. CITES MA of EU Country of Country of Destination
   “validateImportPermit”

8. consume Export Permit (Non Final)

9. sendExportPermit

10. enter Import Permit

11. Deliver To Customs Of Export

12. Leave Country Of Export

13. Create Customs Declaration

14. getAssociatedPermits

15. reserveImportPermit

16. Enter Country Of Introduction

17. clearPermitQuantities (Final)

18. getClearerQuantities

19. Read Cleared Quantities

20. getExportPermitStatus

Exporter

European Union Border

Importer

TracesNT
EU CITES

Message Broker
(Hub)
Questions?

Thank you for your attention
sendExportPermit

 Customs Connected via CERTEX - Exporting MA has fully Connected Automated System

**European**

**Exporter**

1. Request Export Permit

**CITES MA of Foreign Country of Export**

"validateExportPermit (generateToken)"

2. sendExportPermit

3. CITES MA of Country of Export

4. sendExportPermit

5. Request Import Permit (Provide Export Permit Number and Token)

**CITES MA of EU Country of Country of Destination**

"validateImportPermit"

6. getExportPermit (Non-Final)

7. sendImportPermit

8. consumeExportPermit (Non Final)

9. getExportPermitStatus

10. sendImportPermit

11. Deliver To Customs Of Export

12. Leave Country Of Export

13. Create Customs Declaration

14. getAssociatedPermits

15. clearPermit Quantities (Final)

16. Enter Country Of Introduction

17. Message Broker (Hub)

18. getClearedQuantities

19. getClearedQuantities

20. getClearedQuantities

**Importer**

sendExportPermit

This web-service is to create, amend, or cancel permits into CITES MB. This service only accepts export permits:

- Request Parameters
  - (RE-)Export Permit
  - Action [Create, Cancel, Amend]
  - Token

- Response Parameters
  - Status [Ok, Error]
  - Error Codes
    - 010 – Invalid Verification Number
    - 011 – Invalid Action
    - 012 – Licence cannot be empty [null]
    - 013 – Licence Number must be informed.
    - 014 – Invalid Permit Type. Expected: EXPORT.
    - 015 – Licence Already Exist. [Action: CREATE ]
    - 016 – Licence Not Found. [Action: Amend, Cancel]
getExportPermitStatus

Customs Connected via CERTEX - Exporting MA has fully Connected Automated System

Exporter

1. Request Export Permit

2. "validateExportPermit (generateToken)"

3. Advise Export Permit Number and Token

CITES MA of Foreign Country of Export

4. sendExportPermit

5. Request Import Permit (Provide Export Permit Number and Token)

6. getExportPermit (Non-Final)

7. CITES MA of EU Country of Country of Destination

"validateImportPermit"

8. consumeExportPermit (Non Final)

9. getExportPermitStatus

10. sendImportPermit

11. Deliver To Customs Of Export

12. Leave Country Of Export

13. Create Customs Declaration

14. getAssociatedPermits

15. reserveImportPermit

16. Enter Country Of Introduction

17. clearPermitQuantities (Final)

18. getClearedQuantities

19. getClearedQuantities

20. getClearedQuantities

Customs Office of Country of Export

European Union Border

Importer

getExportPermitStatus
This web-service is to get consumed status of an export.

- Request Parameters
- (RE-)Export Permit Number
- Response Parameters
- Status [Ok, Error]
- Error Codes
  - 310 – Licence Consumed
  - 320 – Licence Not Consumed
  - 016 – Licence Not Found
Customs Connected via CERTEX - Exporting MA has fully Connected Automated System

**getClearedQuantExp**

- Customs Office of Country of Export
  - 11. Deliver To Customs Of Export
  - 12. Leave Country Of Export
  - 16. Enter Country Of Introduction
  - 13. Create Customs Declaration
  - 14. getAssociatedPermits
  - 15. reserveImportPermit
  - 17. clearPermitQuantities (Final)
  - 3. Advise Export Permit Number and Token

**European Union Border**

**Exporter**
- 1. Request Export Permit
- 4. sendExportPermit
- 9. getExportPermit
- 20. getClearedQuantities

**CITES MA of Foreign Country of Export**
- "validateExportPermit (generateToken)"

**Importer**
- 5. Request Import Permit
  - (Provide Export Permit Number and Token)
- 18. sendClearedQuantities

**CERTEX EU CUSTOMS SINGLE WINDOW**

**TracesNT**

**CITES MA of Country of Introduction**

**Message Broker**

- (Hub)

**getClearedQuantities**
This web-service based on permit number returns the customs clearance with the quantity cleared.

- Request Parameters
  - (Re-)Export Permit Number
- Response Parameters
  - Cleared Quantities
  - Status [Ok, Error]
  - Error Codes
    - 016 – Licence Not Found.
    - 303 – Licence not valid for this transaction

**CITES MA of EU Country of Country of Destination**
- "validateImportPermit"
Customs Connected via CERTEX -
Exporting MA has fully Connected Automated System

**getClearedQuantImpIntro**

This web-service based on permit number returns the customs clearance with the quantity cleared:

- **Request Parameters**
  - Import Permit Number

- **Response Parameters**
  - Cleared Quantities
  - Status [Ok, Error]
  - Error Codes
    - 016 – Licence Not Found.
    - 303 – Licence not valid for this transaction.

**Exporter**

1. Request Export Permit

2. CITES MA of Foreign Country of Export
   - "validateExportPermit (generateToken)"

3. Advise Export Permit Number and Token

4. sendExportPermit

5. Request Import Permit (Provide Export Permit Number and Token)

6. getExportPermit (Non-Final)

7. "validateImportPermit"

8. consumeExportPermit (Non Final)

9. getExportPermitStatus

10. sendImportPermit

11. Deliver To Customs Of Export

12. Leave Country Of Export

13. Create Customs Declaration

14. getAssociatedPermits

15. reserveImportPermit

16. Enter Country Of Introduction

17. clearPermit Quantities (Final)

18. getClearedQuantities

19. getExportPermitStatus

20. getExportPermitStatus

**Importer**

- CITES MA of EU Country of Country of Destination
  - "validateImportPermit"
getExportPermit (Non-Final)

This web-service is to get an export permit created into CITES MB. The response can be either an export or a re-export permit.

- Request Parameters
  - (RE-)Export Permit Number
- Response Parameters
  - (RE-)Export Licence
  - Status [Ok, Error]
  - Error Codes
    - 016 – Licence Not Found
    - 300 – Licence Already Consumed
**Customs Connected via CERTEX - Exporting MA has fully Connected Automated System**

**Exports**
- Request Export Permit
- Deliver To Customs Office
- Enter Country Of Introduction
- Get Associated Permits
- Reserve Import Permit
- Clear Permit Quantities (Final)
- Create Customs Declaration
- Advise Export Permit Number and Token

**CITES MA of Foreign Country of Export**
- "validateExportPermit (generateToken)"
- sendExportPermit
- getExportPermitStatus
- getClearedQuantities

**CITES MA of EU Country of Country of Destination**
- "validateImportPermit"
- sendImportPermit
- getClearedQuantities

**Message Broker (Hub)**
- consumeExportPermit (Non-Final)
- consumeExportPermit (Non-Final)

**Importer**
- Request Import Permit
- Provide Export Permit Number and Token
- getExportPermit
- getClearerQuantities

**Customs Office of Country of Export**
- Leave Country Of Export

**European Union Border**
- Customs Office of Country of Introduction

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**Notes:**
- This web-service is to consume an export permit created into CITES MB. The response can be either an export or a re-export permit. The status of the Permit in the database is set to consumed.
- Request Parameters:
  - (RE-)Export Permit Number
  - Response Parameters:
    - (RE-)Export Licence
    - Status [Ok, Error]
    - Error Codes:
      - 016 – Licence Not Found
      - 300 – Licence Already Consumed

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**Definitions:**
- Consumed: The Permit is consumed and cannot be used again.
Customs Connected via CERTEX - Exporting MA has fully Connected Automated System

**sendImportPermit**
- **This** web-service is to create, amend, or cancel permits into CITES MB. This service only accepts import permits.
  - **Request Parameters**
    - Import Permit
    - Action [Create, Cancel, Amend]
  - **Response Parameters**
    - Status [Ok, Error]
    - Error Code
      - 010 – Invalid Verification Number
      - 011 – Invalid Action
      - 012 – Licence cannot be empty [null]
      - 013 – Licence Number must be informed.
      - 014 – Invalid Permit Type. Expected: IMPORT.
      - 015 – Licence Already Exist. [Action: CREATE ]
      - 016 – Licence Not Found. [Action: Amend, Cancel]
      - 016 – Invalid Export Licence Number (Attribute 16)
      - 013 – Licence Number must be informed.
      - 014 – Invalid Permit Type. Expected: EXPORT.
      - 015 – Licence Already Exist. [Action: CREATE ]
      - 016 – Licence Not Found. [Action: Amend, Cancel]

**European Union**

**Exporter**
- Request Export Permit

**Importer**
- Request Import Permit (Provide Export Permit Number and Token)

**Message Broker (Hub)**
- sendExportPermit
- getExportPermitStatus
- getClearExportQuantities
- consumeExportPermit (Non Final)
- sendImportPermit (Non Final)
- getClearExportQuantities

**CITES MA of EU Country of Country of Destination**
- "validateExportPermit (generateToken)"

**CITES MA of Foreign Country of Export**
- "validateExportPermit (generateToken)"
- getClearExportQuantities
- getExportPermitStatus
Customs Connected via CERTEX - Exporting MA has fully Connected Automated System

1. Request Export Permit
2. CITES MA of Foreign Country of Export
   - "validateExportPermit (generateToken)"
3. Advise Export Permit Number and Token
4. European Union Border
5. Request Import Permit (Provide Export Permit Number and Token)
6. getExportPermit (Non-Final)
7. CITES MA of EU Country of Country of Destination
   - "validateImportPermit"
8. CERTEX EU Customs Single Window
9. getAssociatedPermits
10. sendImportPermit
11. Deliver To Customs Of Export
12. Leave Country Of Export
13. Create Customs Declaration
14. getAssociatedPermits
15. reserveImportPermit
16. Enter Country Of Introduction
17. clearPermitQuantities (Final)
18. getClearedQuantities
19. getClearedQuantities
20. getClearedQuantities

getClearedQuantities
This web-service based on permit number returns the customs clearance with the quantity cleared:
- Request Parameters
  - Import Permit Number
- Response Parameters
  - Cleared Quantities
  - Status [Ok, Error]
  - Error Codes
  - 016 – Licence Not Found.
  - 303 – Licence not valid for this transaction.