Customs-to Customs (C2C) Electronic Information Exchange for Transit

Georgia – Turkey

Georgia: Project Status
Technical Assistance to National Experts in Georgia to Link the National Customs IT to C2C Exchange Platform

UNDA project 1213AA / UNECE sub-project
“Strengthening the Capacities of Developing Countries and Countries with Economies in Transition to Facilitate Legitimate Border Crossing, Regional Cooperation and Integration”

Ekaterine Katamadze, GEC Developments Corp.
22 June, 2016
Project Status

• Since May 2016, the software is fully operational, hosted by the infrastructure of the Revenues Service of Georgia, working in the test mode and contributing for operational testing of the Central Exchange Platform (CEP)

Implementation Timeline

April 2015:
• Project launched

July 2015:
• Technical Specification elaborated

January 2016:
• Back-end software deployed

April 2016:
• Linked to CEP

May 2016:
• Exchanges information wit CEP in test mode

Status

• **Outbound messages**: sending, analyzing exceptions, improving operational practice

• **Inbound massages**: tested on test data sets, not operational so far

• **Utilization of information**: interim interfaces, analyzing outbound data sets, waiting for inbound information
Assumptions and Constraints

• Messages are structures according current capabilities of Georgian Customs (data, operations)

• Data sets, structure of information and sequence of underlying operations/documents partially differ from the sequence as required by the eTIR, but comparable to enable exchange of information

• The secondary sources of information are used (export declaration, T1)

• Technically, the data exchange is organized in the way, allowing gradual improvement/switch to other sources of information without interventions in the data exchange interfaces.
<table>
<thead>
<tr>
<th>No. (eTIR Ref. Model)</th>
<th>Description</th>
<th>Limitations</th>
<th>Status (As of date of Report)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I5</td>
<td>Query guarantee</td>
<td>No limitations</td>
<td>Implemented, but tested using the test data (no operational testing)</td>
</tr>
<tr>
<td>I6</td>
<td>Query results</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I7</td>
<td>Record Advance Cargo Information</td>
<td>Triggered by export declaration, cannot provide route information</td>
<td>Implemented and tested in operational setting</td>
</tr>
<tr>
<td>I8</td>
<td>Record Advance Cargo Information results</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I9</td>
<td>Start TIR operation</td>
<td>Triggered by internal transit operations (T1)</td>
<td>Implemented and tested in operational setting</td>
</tr>
<tr>
<td>I10</td>
<td>Start results</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I11</td>
<td>Terminate TIR operation</td>
<td>Triggered by internal transit operations (T1)</td>
<td>Implemented and tested in operational setting</td>
</tr>
<tr>
<td>I12</td>
<td>Termination results</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I13</td>
<td>Discharge TIR operation</td>
<td>Triggered by closing internal transit documents</td>
<td>Implemented and tested in operational setting</td>
</tr>
<tr>
<td>I14</td>
<td>Discharge results</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I15</td>
<td>Notify Customs</td>
<td>Receives without limitations</td>
<td>Implemented, but tested using the test data (no operational testing)</td>
</tr>
<tr>
<td>I16</td>
<td>Notification confirmation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Flow of Operations (Scenarios)

Georgia is capable to process:

As well as:

*If route is not changed*
Flow of Operations (Scenarios)

Georgia is **limited** to process:

<table>
<thead>
<tr>
<th>GEORGIA</th>
<th>TURKEY (any destination)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Departure</td>
<td>Entry/Destination</td>
</tr>
<tr>
<td>...</td>
<td></td>
</tr>
<tr>
<td>...</td>
<td></td>
</tr>
<tr>
<td>Exit</td>
<td></td>
</tr>
</tbody>
</table>

As well as:

<table>
<thead>
<tr>
<th>Dep./Exit</th>
<th>...</th>
<th>Entry/Exit</th>
<th>Entry</th>
<th>...</th>
<th>Exit</th>
<th>Entry/Exit</th>
<th>...</th>
<th>...</th>
<th>Entry/Dest.</th>
</tr>
</thead>
</table>

*If route is changed*

**Route information is not available upon departure**
<table>
<thead>
<tr>
<th>Group</th>
<th>Content</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guaranty</td>
<td>TIR Carnet number</td>
<td>In place</td>
</tr>
<tr>
<td></td>
<td>Guaranty expiration date</td>
<td>Not in place</td>
</tr>
<tr>
<td>Holder</td>
<td>Holder Name</td>
<td>Not always in place</td>
</tr>
<tr>
<td></td>
<td>Holder identification</td>
<td>Almost in place</td>
</tr>
<tr>
<td>Consignment</td>
<td>Goods type and HS code</td>
<td>In place</td>
</tr>
<tr>
<td></td>
<td>Total gross weight</td>
<td>In place</td>
</tr>
<tr>
<td></td>
<td>Consignee name, code</td>
<td>In place</td>
</tr>
<tr>
<td></td>
<td>Consigner name, code</td>
<td>In place</td>
</tr>
<tr>
<td></td>
<td>Heavy and bulky goods indication</td>
<td>Partially in place</td>
</tr>
<tr>
<td></td>
<td>List of attached documents, including number, issuing date, type, coded</td>
<td>Not in place</td>
</tr>
<tr>
<td></td>
<td>Internal reference number (declaration, transit document etc.)</td>
<td>In place</td>
</tr>
<tr>
<td></td>
<td>Packaging (Marks and numbers, Number of packages, Type, coded)</td>
<td>In place</td>
</tr>
<tr>
<td></td>
<td>Equipment</td>
<td>Partially in place</td>
</tr>
<tr>
<td></td>
<td>Seals</td>
<td>In place</td>
</tr>
<tr>
<td></td>
<td>Transport means (Identification, Type, coded, Nationality)</td>
<td>In place</td>
</tr>
<tr>
<td></td>
<td>Transport means (Conveyance reference number)</td>
<td>Not in place</td>
</tr>
<tr>
<td></td>
<td>Itinerary (fixed within the scope of the project, only Georgia and Turkey will be included)</td>
<td>Only destination available</td>
</tr>
<tr>
<td>TIR Operations</td>
<td>Customs offices of departure, destination and discharge, as well as intermediate customs offices (coded)</td>
<td>In place</td>
</tr>
<tr>
<td></td>
<td>Start, termination and discharge operation (date, time, status)</td>
<td>In place</td>
</tr>
<tr>
<td></td>
<td>Control actions conducted (seal checks) and results of checks</td>
<td>Partially in place</td>
</tr>
</tbody>
</table>
Architecture

ASYCUDA (eCustoms)
- Data / Triggers

ORACLE
- Monitoring GUI
- Risk Management

Interim Layer
- Interim Data
- Business Logic
- Structured Data

Data Exchange Application
- Business Logic (Transmission / Receiving)
- Inbound/Outbound Messages

CEP
- SOAP WS Security

DB Link, Secured channel

DB Link
Streamlining of Operational Practice

- Structured and consolidated information (outbound) is available to the staff responsible for operations.
- Information enables analysis of quality of data, entered and/or confirmed (entered by the trading operators) by the front line operators.
- Based on consolidated information, several critical cases were identified (sequence of information, format of information, and etc.) and corrective actions to systemized and improve data entry practice were implemented.
- The regular monitoring of quality of data is currently in place to ensure continuity of improvements.
Use of Data / Integration

• Structured and consolidated information (outbound) technically is available to the staff, responsible for risk management, by the means of simple user interfaces, integrated to the current IT System.

• As soon as the information from Turkish Customs becomes available, the inbound information will be analyzed and decision on integration of information to the risk management process/module will be made and implemented by the IT staff.
Next Steps

• Integration and utilization
  • Decision will be made and integration implemented

• Transition to full data set and original flow of operations
  • Switch to original sources of information, ensure completeness of data sets and implementation of original flow of operations

• Transition to full eTIR Model
  • Enhance the structure of the database in accordance with the eTIR Reference Model requirements in the future, when needs for such enhancement will raised, as well as completeness of information will enable implementation of such exercise
Human Capacity

• Due to extensive engagement of the IT staff of the Revenue Service of Georgia in implementation of the project, the knowledge regarding the software was transferred smoothly and in parallel with implementation of the project.

• The IT staff, who is expected to ensure maintenance of the system, is capable to enable maintenance and future enhancement of the provided software.
Central Exchange Platform (CEP)

Brief Introduction to Capabilities
What is CEP?

**CEP** is a secure **C2C versatile electronic exchange platform**, taking due account of the specific challenges faced by developing countries and countries with economies in transition.

With **objectives** to strengthen the capacities of developing countries as well as countries with transitioning economies to facilitate legitimate border crossing, by means of **increased secure electronic exchange of information between customs administrations**.
Status Quo

• Since May 2016, the platform is fully operational, hosted by the infrastructure of the UN Office, and working in test mode
• Georgia Customs is linked

• Ongoing activities
  • Exchange of information with Turkish Customs in progress
  • Operational testing / monitoring / improvements
Exchange Platform in Action

*But not so simple as seen... Intermediate loads and unloads are matter*

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**Country of Departure**

- Office of Departure
- Declaration
- (1) Record Advance Cargo Information
- (2) Start
- (3) Terminate
- (4) Discharge

**Country of Transit**

- Office of Entry
- Start
- (1.1) Notify Customs
- (5) Start
- (6) Terminate
- (7) Discharge

**Country of Destination**

- Office of Destination
- Start
- (8) Start
- (9) Terminate
- (10) Discharge

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EXCHANGE PLATFORM
C2C Platform vs. eTIR Model

Flow of Information

**eTIR Model** (fragment)

- Holder
- AC Declaration (Original, update)
- Declaration (Original)

**C2C Model** (fragment)

- Authorized Party
- Declaration (Export, AC)
- CO of Departure
- Processed info

- Border
- CO of Int. Load/Departure

**eTIR Platform**

**C2C Platform**
High Level Architecture

National Customs Systems

CEP

Central DB

ITDB

TIR Database

Messages (SOAP with WS Security)

Holder Status (SOAP with WS Security)

Guarantee Status

Not available in the current release
Brief Overview of Capabilities

• Data Sets
  • In compliance with eTIR reference Model v.4.1. Currently allows processing of incomplete data. Can be easily configured and extended to the full eTIR model

• Messages Validation
  • Message validation rules are configured to enable processing of incomplete datasets, but exceptions are identified and communicated

• Security
  • Messages are signed and encrypted to ensure messages integrity and confidentiality. Web Services Security (WS-Security, WSS) SOAP extension was chosen for that purpose

• Methods
  • Availability of PULL and PUSH outgoing message communication mechanisms

• Configurability
  • Capability to configure separate validation rules for each type of incoming XML messages and individually for each Agent
  • PUSH and PULL methods are also subject of configuration for each particular Agent
Acknowledgement: We Appreciate

- **Revenue Service of Georgia** for active engagement in the project and the time they spent for discussions and deployment of the system
  - Mr. Nodar Kakriashvili (IT), Mr. Revaz Papukashvili (IT), Mrs. Irina Sigua (Int. Department), Mrs. Ana Gogorishvili (TIR Operations), Mr. Giorgi Kvaratskhelia (Risk Management), and Mr. Anzor Ergeshidze (Operations)

- **Turkish Customs** for their involvement and useful comments, provided during discussion of several issues of the project

- **GEC Developments Corp. and AzRy**, enabled implementation of the Central Exchange Platform for their assistance and effort

- **UNECE/Transport Division**, and especially Mr. Andre Sceia, for supporting and encouragement of the project
Thank You for Attention!

Questions?

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