UN/CEFACT Project Proposal

Proposed project name: Cross border Intercustoms ledger using Blockchain

Date submitted: 2019-2-27
Project proposed by: Steve Capell

1. Project purpose

Facilitating paperless trade has been an important objective of UN/CEFACT’s deliverables. Free Trade Agreements that are signed between countries require that a Certificate of Origin must accompany every shipment in order to avail a reduced duty rate. At present most Certificates of Origin are paper documents that are slow and expensive to produce, presenting a non-tariff barrier to exports.

Electronically verifiable digital origin evidence will therefore help streamline the process, reduce costs and reduce compliance issues at the border. But any digital solution needs to address the issues of digital trust, mutual recognition, data sovereignty, auditability and traceability.

A potential solution to this problem could be the use of Blockchain based distributed ledger technology to create a cross-border inter customs ledger.

This project will be a natural extension to the Blockchain project to facilitate a specific use case of paperless trade using distributed ledgers.

2. Project scope

The project scope is to create a UN/CEFACT standard on the creation of a cross-border inter customs ledger using Blockchain technology and define:

- How Blockchain technology could be used to create a platform that facilitates exchange of digital certificate of origins and other related documents
- Scope of co-operation with other bodies such as World Customs Organization for activities such as membership management and for facilitating participation by member countries
- How existing UN/CEFACT deliverables could be used by such a platform
- Possible changes to existing UN/CEFACT deliverables, or new deliverables, that could be considered in order to support the creation of such a platform
- Key issues to consider while creating, administering and using such a platform

All of the above will be examined from the perspective of UN/CEFACT’s mandates in order to provide input to the Bureau, Programme Development Areas and Domains on

1) Possible future work and a possible common approach to specific use cases built on Blockchain technology

3. Project deliverables
Deliverable 1: Business Requirements Specifications/Requirements specifications mapping for preferential digital certificate of origin and invoice declarations of origin (based on Buy-Ship-Pay)
Deliverable 2: Guidance material on exchange of digital certificate of origin and invoice declaration of origin over a cross border distributed ledger platform
Deliverable 3: Sandbox rollout of the cross-border inter ledger platform

4. Exit Criteria

Required

NOTE: For each deliverable, list the criteria that, when met, will indicate the deliverable has been completed.

<table>
<thead>
<tr>
<th>Deliverable</th>
<th>Exit Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>BRS/RSM ready for publication</td>
</tr>
<tr>
<td>2</td>
<td>Guidance Material ready for publication</td>
</tr>
<tr>
<td>3</td>
<td>Sandbox rollout of the cross-border inter ledger platform</td>
</tr>
</tbody>
</table>

5. Project Team membership and required functional expertise

Membership is open to UN/CEFACT experts with broad knowledge in the area of: Blockchain and/or trade facilitation and related business processes.

In addition, Heads of Delegations may invite technical experts from their constituency to participate in the work.

Experts are expected to contribute to the work based solely on their expertise and to comply with the UN/CEFACT Code of Conduct and Ethics and the policy on Intellectual Property Rights.

6. HoD support

NOTE: At least three HoD support is required for Technical Standards, Business Standards and UNECE Recommendations – and at the request of the UN/CEFACT Bureau. (See annex IV for an optional template).

7. Geographical focus

The geographical focus of the project is global.

8. Initial contributions

The following contributions are submitted as part of this proposal. It is understood that these contributions are only for consideration by the Project Team and that other participants may submit additional contributions in order to ensure that as much information as possible is obtained from those with expertise and a material interest in the project. It is also understood that the Project Team may choose to adopt one or more of these contributions “as is”.

List any initial contributions:
- Core Components Library (CCL);
- Business Requirement Specifications (BRSs),
- Requirement Specification Mappings (RSMs) and
- Reference Data Models (RDMs) as well as
- Blockchain work undertaken by UN/CEFACT
- Proposed Digital ID for cross border trade project
- UN/CEFACT e-Cert electronic message standard

9. Resource requirements

Participants in the project shall provide resources for their own participation. The existence and functioning of the project shall not require any additional resources from the UNECE secretariat.

NOTE: If specialized resources are required to complete the project, and such resources are not available within the Project Team, then those requirements should be clearly identified.
10. Proposed project leadership

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
<th>E-mail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leader</td>
<td>Steve Capell</td>
<td><a href="mailto:Steve.capell@gmail.com">Steve.capell@gmail.com</a></td>
</tr>
<tr>
<td>Co-Lead</td>
<td>Dr. Wang Xiang</td>
<td><a href="mailto:wangxiang@mail.customs.gov.au">wangxiang@mail.customs.gov.au</a></td>
</tr>
<tr>
<td>Co-Lead</td>
<td>Hardeep Batra</td>
<td><a href="mailto:Hardeep.batra@icegate.gov.in">Hardeep.batra@icegate.gov.in</a></td>
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</tbody>
</table>

11. Milestones

*Note: repeat for each deliverable, if different.*

The following are draft milestones of the project.

<table>
<thead>
<tr>
<th>Yes/No*</th>
<th>ODP Stage</th>
<th>Expected Completion Date (Approval + XX months)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Project Inception</td>
<td>Approval + 1 month</td>
</tr>
<tr>
<td>Yes</td>
<td>Requirements gathering</td>
<td>Approval + 4 month</td>
</tr>
<tr>
<td>Yes</td>
<td>Draft development</td>
<td>Approval + 9 month</td>
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<tr>
<td>No</td>
<td>Public Draft Review</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>Project Exit</td>
<td>Approval + 12 month</td>
</tr>
<tr>
<td>Yes</td>
<td>Publication</td>
<td>Approval + 12 month</td>
</tr>
</tbody>
</table>

*NOTE: The following stages are obligatory: Project Inception, Project Exit and Publication. Public Draft Review is obligatory for recommendations, business standards and technical standards. The presence of “Yes” in the field indicates that the stage is required for the project and an expected completion date should be provided.*