Cross border Inter-ledger exchange for Preferential CoO using Blockchain

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other

Project Details

Domain	eData Management Domain
Project Identifier	P1075
Bureau Decision #	#1903057, #2003090; #2101080, #2111045, #2111046, #2203065, #2206085, #2212017, #2309067, #2312002
Project Proposal Status	Official
Project Page	Cross border Inter-ledger exchange for Preferential CoO using Blockchain
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Project Lead	Steven Capell
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Status	In development
Version	2.0
Submitted date	2019-05-03
Draft Development Completion	2023-12-31
Publication Date	2024-04-15

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.

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

This will cover B2G and G2G exchanges.
The project will not deliver technical specifications for blockchain; these will be based on existing work – or the subject of a new project proposal.

Project Deliverables

The project deliverables are:
• Deliverable 1: Business Requirements Specifications/Requirements specifications mapping or equivalent for the preferential digital certificate of

origin based on the Buy-Ship-Pay Reference Data Model
• Deliverable 2: Guidance material on the exchange of digital certificate of origin and other trade / regulatory documents over a cross border distributed ledger platform exploring different options of managing verifiable credentials including verifiable credentials standards
• Deliverable 3: Reference implementation of the cross-border inter ledger platform based on verifiable credentials standards.

Exit Criteria

The exit criteria will be:

- Exit Criteria for Deliv. 1: BRS/RSM ready for publication
- Exit Criteria for Deliv. 2: Guidance Material ready for publication
- Exit Criteria for Deliv. 3: Report on successful implementation of the cross-border inter ledger platform

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.

Geographical Focus

The geographical focus of the project is global.

Initial Contributions

Initial contributions include existing descriptions and technical specifications for the UN/CEFACT:
• Core Components Library (CCL);
• Business Requirement Specifications (BRSs),
• Requirement Specification Mappings (RSMs) and
• Reference Data Models (RDMs), notably the Buy-Ship-Pay RDM as well as
• UN/CEFACT Blockchain white papers
• Digital ID for cross border trade
• UN/CEFACT e-Cert electronic message standard

Resource Requirements

None

Project Proposal Files

File	Modified
PDF File 190228 eGOV Crossborder Intercustoms ledger proposal v3 KS.pdf	Apr 09, 2019 by Malik
PDF File 190429-3x eGOV Interledger - AU HoD support.pdf	Apr 11, 2019 by Malik
PDF File 190429-3x eGOV Interledger - CN HoD support.pdf	Apr 11, 2019 by Malik
PDF File 190429-3x eGOV Interledger - SG HoD support.pdf	Apr 11, 2019 by Malik

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