44th Meeting of the IEC-ISO-ITU-UNECE eB MoU/MG

Report from UN/CEFACT eData Management Domain

Background

The United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT) e-Data Management Domain (eDATA) concentrates on facilitating trade by way of strengthening governance. In order to do this, the Domain engages in the process of facilitating international trade transactions using state of art electronic information exchange instruments. The work programme also includes regulatory aspects of cyber security, interoperability standards, and general ICT best practices with a focus on emerging technologies. This Domain also aims to provide guidance, awareness, and best practices for government systems and technology efforts to support trade facilitation and e-commerce.

The e-Data Management Domain builds upon the structures and work items formerly established (TMG, ATG, ICG) and its predecessor within the UNECE Working Party 4 which was founded in the 1960s.

Under this area of activity, UN/CEFACT develops and maintains e-business standards related to regulatory procedures as well as some White Papers and Executive Guides. These include key themes such as:

- Trusted Transboundary Environment
- White Paper Overview and Technical Application of of Blockchain for Trade and to UN/CEFACT deliverables
- Whitepaper of use of Internet of Things for Trade Faciliation
- Cross Border Inter-ledger exchange for Preferential CoO using Blockchain
- Verifiable Claims for Cross Border Trade

Current and upcoming activities of UN/CEFACT eDATA

UN/CEFACT Chain project

This project aims to develop a framework/mechanism for development and implementation of Blockchain services infrastructure, which will be compatible and in line with European Blockchain services infrastructure and usable or extendable globally. For this, it will develop a White Paper on strategy for development and implementation of interoperable global blockchain technology infrastructure, taking into consideration existing standards for implementation of cross border Blockchain infrastructure in an interoperable manner. This White Paper is being drafted and expected to be completed in mid-2023

Cross-Border Inter-ledger exchange for Preferential Certificates of Origin

Electronically verifiable digital origin evidence can help enable a streamlined process, a reduction of costs and a reduction of compliance issues at the border for preferential certificates of origin used in the framework of free trade agreements. But any digital solution needs to address the issues of digital trust, mutual recognition, data sovereignty, auditability and traceability. This project explores the use of distributed ledger technology in order to respond to this need and more specifically the interaction between separately maintained and developed distributed ledger solutions. This project has developed a Business Requirement Specification, corresponding data requirements and proposed XML schema for the electronic exchange of Preferential Certificates of Origin. It will also deliver guidance on the interoperability of blockchain ledgers and a reference implementation.

Verifiable Claims for Trade

The international supply chain is growing in complexity at the same time as nation states seek to improve their border compliance for imports and facilitate access to export markets for their domestic producers. The global value chain is highly dependent on smooth cross-border supply flows (tangible, intangible and data). This paper describes a highly scalable operating model for digitisation and trust of cross border trade based on verifiable credentials, linked data, and decentralised identifiers. It provides national regulators with implementation guidance that will facilitate outcomes that enable full and rapid digitization, traceability through supply chain and move towards automated compliance

and risk. This project has developed guidance material on how verifiable credentials can be used in the context of cross border trade.

Artificial Intelligence for Trade Facilitation

The eData Management Domain is working on developing a White Paper on the topic of Artificial Intelligence for Trade Facilitation with a focus on use of AI in Trade Facilitation and This project's high level topic focus includes AI for Cross Border Trade, Trade Policies on AI, AI in eCommerce and Digital Payments, Ethical AI and challenges, risks cyber security and legal issues in the use of AI. The project White paper is currently under review.

Digital Identity for Trade

Digital Id systems which allow an entity to prove their identity online are opening new possibilities for cross border trade by eliminating trade barriers and paperwork. Many forms of Identity exist today which are largely physical that have limitations when it comes to the need to provide required level of trustworthiness for dealing with online transactions. The purpose of this UN/CEFACT approved project is to look at Digital ID systems in the context of UN/CEFACT's mandates and create a whitepaper that focuses on studying existing digital ID systems and presenting best practices for existing systems that can act as a guide for future implementation.

Data Governance in cross border exchange of Trade Data

The eData Management Domain is exploring the possibility of developing guidance material on the best practices in data governance in the context of data localization, privacy and cross border exchange of trade data.

Data Retention and Time Stamping

The eData Management Domain is exploring the possibility of developing guidance material on the use of time stamping and data retention.

Trusted Third-Party Services and eNotarization

The eData Management Domain is exploring the possibility of developing guidance material on the use of trusted third-party services and eNotarization.

Semantic harmonization

The UN/CEFACT eDATA Domain invites all groups within the transport and logistics space to submit their data requirements needs in order to harmonize them with existing standards and to other procedures in the supply chain. This is in line with the eB-MoU/MG resolution R07/06.

The UN/CEFACT eDATA Domain is considering the work of ITU-T on Digital Identity Management in order to in their Digital Identity project. This is in line with the eB-MoU/MG resolution R19/02.

The UN/CEFACT eDATA Domain is interested in sharing approaches and requirements on interoperability of DLT. This is in line with the eB-MoU/MG action A20/02.