Working Group Open Customs Blockchain

Introduction

The exchange of paper-based customs documents poses challenges due to the risk of manipulation, making verification difficult. To increase trust and transparency, the working group is developing open source solutions using blockchain to improve the integration of customs and logistics, with a focus on meeting the needs of public authorities. The goal is a secure digital framework that improves the efficiency and reliability of customs procedures and border crossings.
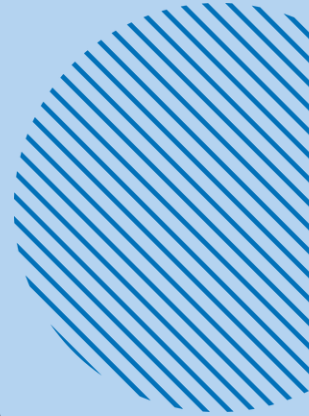
Why is this relevant?

The exchange of documents in the customs area is challenging due to the risk of manipulation, which undermines trust and transparency and leads to delays in verification. To address this issue and improve the integration of customs and logistics, the working group is developing open source solutions using blockchain technology. By focusing on the needs of public authorities, the group aims to create a secure digital framework that improves the efficiency and reliability of customs procedures and border crossings, ultimately fostering trust and transparency and reducing delays.

Challenge: Streamline digital customs processes and data exchange, ensure data authenticity and integrity, and overcome technical complexity while gaining stakeholder acceptance, especially from customs authorities.

Central question: How can we ensure smooth border crossing and compliant trade?

Projects
BORDER & GPID

- **Projects**:
  - **BORDER –** Export data on blockchain based on EAD
  - **GPID –** Simple dataset to speed up cross-border exchange
- **Started**: January 2023
- **Problem**: In cross-border operations, a single source of truth does not exist. This allows the manipulation of data during transport, hence every stakeholder needs to recheck and validate the given information.
- **Goal**: Blockchain technology offers a solution that will be used to create a single source of truth between all stakeholders in customs. Such a solution needs to be widely implemented through open source.
- **Status Completed**:
  - OCB was selected for the European Blockchain Sandbox (Initiative of the European Commission for use cases involving DLT & Blockchain from all industry sectors & independent of used technology)
- **Status In Progress**:
  - Obtain approval from exporters/importers and customs authorities to participate in a pilot project
  - Presentation of the OCB Working Group to customs officials from various EU and non-EU countries
  - Preparations for Pilot Network

Working Group Open Customs Blockchain

WG Members

AEB	ALS Customs simplified. Trade amplified.	BLG LOGISTICS	Cargo Sign	DACHSER Intelligent Logistics
DHL	duisport	Fraunhofer IML	Gebrüder Weiss Transport and Logistics	iP Customs Solutions
LKW WALTER	RHENUS LOGISTICS			

Working Group Leads

Roman Koller
Fraunhofer IML
roman.koller@iml.fraunhofer.de

Michael Douglas
ALS Customs Services
mdouglas@als-cs.com

Get intouch with our OCB Working Group

Scan the QR code for more information about the NE:ONE project, meeting times, and more.

Join our GitLab to stay up to date, download and view our OCB open source solutions: https://git.openlogisticsfoundation.org/

Our Ideation
Topics at a glance

Driver app

Implementation of a white-label driver application focused on the spot market, running in parallel with the company's own applications.

Train & Wagon

Developing uniform interfaces and processes for recording and transmission of train and wagon information.

Explore all the projects available in the Open Logistics Repository:
https://openlogisticsfoundation.org/foundation-projects/all-projects/