

Commercial Customs Operations Advisory Committee (COAC) Government Issue Paper: (Emerging Technologies)

February 2019



U.S. Customs and
Border Protection



Office of Trade/Trade Transformation Office
Business Transformation & Innovation Division
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Action Required: Informational

Background:

- Blockchain is a new technology made famous by Bitcoin. Several large corporations have their own form of blockchain software which is open source. Private industry has been investing into this technology to enhance the supply chain experience and modernize antiquated processes.
- Blockchain's identifying qualities center around trust, decentralization and group awareness. The government's role in blockchain will be predicated upon understanding those principles and applying them to a law enforcement system.
- The aim of utilizing blockchain technology for CBP is to improve the processing of trade-related documents by hosting information about trade transactions on a decentralized, tamper-proof distributed ledger system, which can be authenticated and accessed by various stakeholders.
- A proof of concept (POC) was conducted by CBP's Office of Trade, Trade Transformation Office, (TTO), Business Transformation and Innovation Division (BTID). BTID began developing the blockchain POC during the summer of 2017, in conjunction with trade partners serving on the COAC.

Issue:

- In September 2018, CBP conducted the North American Free Trade Agreement/Central America Free Trade Agreement (NAFTA/CAFTA) POC, which tested the application of blockchain technology for the entry summary submission process for NAFTA/CAFTA entries.
- The POC was a joint effort spearheaded by CBP, Department of Homeland Security (DHS) and private sector organizations. Participants included CBP auditors, import and entry specialists, CBP legal and policy personnel, importers, technology companies, and suppliers.
- The POC specifically tested the feasibility of blockchain technology for receiving certificate of origin (CO) data and conducting free trade agreement (FTA) origin verifications.

Current Status:

- An assessment of the technology, along with the policy and legal issues raised by the POC, was conducted following the test. It was found that use of the blockchain achieved almost instantaneous communications between CBP and trade, improved documentation of receipt, and expedited processing for CBP. Other benefits included:
 - Elimination of manual documentation requirements and duplicative data entry;
 - Ability to capture potential issues early on;
 - Receipt of full data (CO, entity data, etc.) with initial submission of entry summary;
 - Enhanced targeting;
 - More accessibility to importer/more direct communication; and
 - Easier access to back-up documentation when required.

Next Steps:

- With the results of the POC complete, next steps include collecting recommendations from the COAC.
- CBP is also in the process of developing a blockchain POC to facilitate the tracking of intellectual property rights (IPR) licenses. Introducing blockchain into IPR licensing process would allow CBP to track licenses from the rights holder to the licensee, as well as facilitate licensees' ability to become licensors. CBP will be testing this proof of concept technology later in 2019.

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