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

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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 Commercial Customs Operations Advisory Committee (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. The assessment 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:
    - Eliminated manual documentation requirements and duplicative data entry;
    - Captured potential issued early on;
    - Received Full data (CO, entity data, etc.) with initial submission of entry summary;
    - Enhanced targeting;
    - Easier access to importer/more direct communication; and
    - Easier access to back-up documentation when required.
- CBP has begun its second test of Blockchain technology to test the veracity and the business potential for facilitation and security.

- Building on its first successful test regarding Free Trade Agreements, CBP is currently underway with the Intellectual Property Rights (IPR) Blockchain test. This exciting avenue will allow the agency to analyze Blockchain's ability to facilitate shipments by aligning rights' holders and licensee(s) to shipments for an improved importation experience.

Next Steps:

- When the results of the POC are complete, next steps include collecting recommendations from the COAC.

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