Commercial Customs Operations Advisory Committee
Government Issue Paper
Trade Transformation Office
ACE 2.0

December 2022

U.S. Customs and Border Protection

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<u>Action Required:</u>   Informational

<u>Background:</u>
- U.S. Customs and Border Protection (CBP) has started the acquisition process for the Automated Commercial Environment (ACE) 2.0, the next generation platform that will ultimately replace the current ACE platform, as the U.S. government's "single window," connecting CBP, the international trade community, and partner government agencies (PGA) to facilitate trade and enable enforcement.
- In anticipation of the ACE 2.0 acquisition, CBP evaluated various technologies that could be implemented as part of ACE 2.0. After several years of evaluating blockchain, CBP shifted its focus in fiscal year (FY) 2021 to interoperability, which allows all types of systems to participate in supply chain activities without forcing industry into one technology.
- CBP is focusing on interoperability so that ACE 2.0 can communicate with legacy systems, blockchain, distributed ledger technology (DLT), and future systems.

<u>Issue:</u>
- ACE 2.0 is not intended to be simply a refresh of ACE or a set of incremental changes; it is intended to be a new system based on a rethinking of how current and future technologies can be used to meet our mission most effectively.
- After ACE 2.0 is implemented, CBP and PGAs will receive better quality data much earlier in the supply chain, often in near-real time from traditional as well as non-traditional actors. This will vastly increase supply chain visibility as products make their way to the border of the U.S., resulting in faster government responses with earlier determinations on cargo.
- ACE 2.0 builds on the vision of the Re-Imagined Entry Working Group, a collaboration with the trade through the Commercial Customs Operations Advisory Committee (COAC) and is enabled by the legislative framework of the 21st Century Customs Framework (21CCF).
- ACE 2.0 will ensure that CBP has the technology to implement the re-imagined trade processes developed as part of the 21CCF effort, allowing our systems to become even more competitive in the global arena.
- Interoperability provides businesses with the flexibility of choosing the most efficient way to exchange data with CBP and potentially any system in the world using the same standards. Interoperability also enables CBP to receive and transmit data between traditional and non-traditional trade entities in near real-time.
- To facilitate the development of interoperability, CBP is pushing for global standards. For example, in July 2022, the World Wide Web Consortium (W3C) accepted CBP's recommendation for a decentralized identifier (DID), a standard unique identifier.

<u>Current Status:</u>
- So far, CBP's investment into interoperability has demonstrated exciting results, including the ability to expedite cargo processing, support enhanced enforcement activity, and future-proof the trade process through choice of technology.

- Working in collaboration with Department of Homeland Security (DHS) Science and Technology Directorate (S&T), CBP is taking steps to verify some ACE 2.0 concepts through the DHS Silicon Valley Innovation Program (SVIP). CBP has five current projects to test the feasibility of DLT, applying it in the steel, natural gas, oil, food safety, and e-commerce sectors.
  - The steel project will track steel from manufacturer to import, assist with origin compliance under the United States-Mexico-Canada Agreement, and improve product identification.
  - The pipeline oil project will affirm free trade status no matter how many times oil is sold on the open market.
  - The natural gas project will facilitate origin determination and eliminate goods entering from prohibited countries.
  - The food safety project will track perishable goods from farm to import, reduce importer waste, and allow identification of packing materials used in shipping food products.
  - The e-commerce project will enhance traceability of goods bought and sold by online retailers and ensure that importers comply with CBP and other partner government agencies requirements.
- Through these commodity-focused projects, CBP seeks to achieve the following objectives:
  - Introduce interoperable standards,
  - Expedite acquisition of data,
  - Increase transparency, security, and facilitation in supply chain,
  - Enhance identification of trade entities, and
  - Increase security and facilitation throughout trade process.

<u>Next Steps:</u>
- In 2023, CBP will test the first two SVIP programs that will connect CBP with trade users.
- In 2024, CBP will test out the ability to transmit data to PGAs, which will produce an upgraded single window.
- These two testing periods will inform CBP's development of ACE 2.0, which could begin as early as 2025.
- ACE 2.0 is an agency priority and CBP is actively working to secure the necessary funding to support the acquisition.

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