Commercial Customs Operations Advisory Committee Government Issue Paper Next Generation Facilitation Subcommittee ACE 2.0 Working Group

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U.S. Customs and Border Protection

Action Required: Informational

Background:
- U.S. Customs and Border Protection (CBP) has started the acquisition process for the Automated Commercial Environment (ACE) 2.0. ACE 2.0 is 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 (PGAs) to facilitate trade and enable enforcement.
- ACE 2.0 is not merely a refresh of ACE or a set of incremental changes. Instead, it will be a new system based on a rethinking of how current and future technologies can be used to meet CBP's mission most effectively.
- ACE 2.0 will:
  - Build on the vision of the Commercial Customs operations Advisory Committee's (COAC) Re-Imagined Entry Working Group
  - Be enabled by the legislative framework of the 21st Century Customs Framework (21CCF).
  - 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.
- After several years of evaluating blockchain, CBP shifted its focus in Fiscal Year (FY) 2021 to interoperability because:
  - It allows all types of systems to participate in supply chain activities without forcing industry to select one technology.
  - It will enable ACE 2.0 to communicate with legacy systems, blockchain, distributed ledger technology, and future systems.
  - It 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.
  - It 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 accepted CBP's recommendation for a decentralized identifier (DID), a standard unique identifier. DIDs identify, goods, people, and businesses. Their value is in the unique identification of a company that can be recognized, but not stolen, since the DID has a private key.

Issue:
- ACE 2.0 is an agency priority and CBP is actively working to make this a formally recognized acquisition program and secure the necessary funding to support the acquisition.
- ACE 2.0 will provide CBP and PGAs with better quality data and visibility much earlier in the supply chain – often in near-real time – from traditional as well as non-traditional actors. This will result in faster government responses with earlier determinations on cargo.

Current Status:

- Thus 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 U.S. Department of Homeland Security (DHS) Science and Technology Directorate, CBP is taking steps to verify some ACE 2.0 concepts through the DHS Silicon Valley Innovation Program (SVIP). CBP is pursuing five projects to test the feasibility of distributed ledger technology 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 natural gas project will facilitate origin determination and eliminate goods entering from prohibited countries.
  - The pipeline oil project will affirm free trade status no matter how many times oil is sold on the open market.
  - The food safety project will track perishable goods from farm to import, reduce importer waste, and enable 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 PGA requirements.
- Through these commodity-focused projects, CBP seeks to achieve the following objectives:
  - Introduce interoperable standards,
  - Expedite the acquisition of data,
  - Increase transparency, security, and facilitation in supply chains,
  - Enhance identification of trade entities, and
  - Increase security and facilitation throughout trade process.

Next Steps:
- Two testing periods will inform CBP's development of ACE 2.0:
  - In late August 2023, CBP will test the pipeline oil and steel SVIP projects, which will connect CBP with trade users.
  - In 2024, CBP will test the ability to transmit data to PGAs, which will produce an upgraded single window.

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