Commercial Customs Operations Advisory Committee Government Issue Paper

Next Generation Facilitation Subcommittee
ACE 2.0 Working Group

November 2023

U.S. Customs and Border Protection

<u>**Action Required:**</u>   Informational

<u>**Background:**</u>
- The Automated Commercial Environment (ACE) is the commercial trade processing system that provides a single, centralized way to connect U.S. Customs and Border Protection (CBP), the international trade community, and Partner Government Agencies (PGAs).
- While CBP continues to enhance ACE and ensure it is a secure and reliable system, we have been looking further ahead to procure the technology needed to implement the next generation business processes envisioned by the 21st Century Customs Framework (21CCF). We are calling this effort ACE 2.0.
  - 21CCF is CBP's initiative to comprehensively address current and future trade challenges and modernization barriers through legislation for the first time since 1993.
  - ACE 2.0 will enable 21CCF business process changes by giving CBP the needed technology through modifications and additions to ACE.
- For example, 21CCF envisions authority for CBP to collect data from non-traditional actors in near real-time. With the new technologies introduced in ACE 2.0, CBP will be able to make that authority a reality.
  - The result will be a never-before-seen view into the first third of the supply chain, well in advance of arrival as products make their way to the border of the United States.
  - This vast increase in supply chain visibility will provide CBP and PGAs with better quality data much earlier in the supply chain, enabling better, faster, and earlier government responses and determinations on cargo.
- Additionally, the reimagined entry processes of 21CCF will align with modern supply chains. Paired with the latest technology of ACE 2.0, CBP will be able to identify risk and allocate it to appropriate parties.
  - This will improve supply chain accountability and increase predictability for the treatment of goods for the trade industry.
- These advancements, and others to be achieved through ACE 2.0, are underpinned by CBP's development and use of innovative technologies, such as verifiable credentials (VCs) and decentralized identifiers (DIDs).
- To lay the groundwork for ACE 2.0, CBP is promoting international standards for interoperability. Interoperability will allow differing systems and technologies to communicate with CBP, offering businesses flexibility and technology choice while enabling CBP to exchange data with a much wider variety of trade entities in near real-time.
- CBP successfully advocated for global standards for a DID – a standard unique identifier for goods, people, and businesses – at the World Wide Web Consortium in July 2022.

<u>**Issue**</u>:
- 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.

Technology Demonstration Current Status and Next Steps:
- 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 is pursuing five projects 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, 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 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:
  - Introduce interoperable standards
  - Expedite the acquisition of data
  - Increase transparency, security, and facilitation in supply chains
  - Enhance identification of trade entities
  - Increase security and facilitation throughout trade process
- In late August 2023, CBP tested the pipeline oil and steel SVIP projects, which connect CBP with trade users.
- In 2024, CBP will test 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 would begin no sooner than 2025.

ACE 2.0 Acquisition Current Status and Next Steps:
- CBP is still in the early stages of the acquisition process.
- We have made significant progress towards an initial milestone that will mark the transition from documenting the need for ACE 2.0 to analyzing approaches for meeting that need.
- Provided CBP receives authorization and funding to proceed with the proposed acquisition, development would begin no sooner than FY 2025.

Submitted by: Trade Transformation Office, Office of Trade, U.S. Customs and Border Protection
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