

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

**June 2024**



**U.S. Customs and  
Border Protection**

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**Office of Trade / Trade Transformation Office**  
**Next Generation Facilitation Subcommittee**  
**ACE 2.0 Working Group**  
**June 2024**

**Action Required:** Informational

**Background:**

- ACE 2.0 is a U.S. Customs and Border Protection (CBP) effort to build on existing Automated Commercial Environment (ACE) capabilities by adding new functionality and technology to implement the next generation business processes envisioned by the 21st Century Customs Framework.
  - ACE is the commercial trade processing system that provides a single, centralized way to connect CBP, the international trade community, and partner government agencies (PGAs).
  - The 21st Century Customs Framework is CBP's initiative to comprehensively address current and future trade challenges and modernization barriers through legislation. This is the first effort since 1993.
- 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 U.S. border.
- This increased visibility will provide both CBP and PGAs with better quality data much earlier in the supply chain, enabling better, faster, and earlier Government responses and determinations on cargo.
- Incorporating the latest technology into ACE 2.0 will enable CBP to identify and allocate risk, improving supply chain accountability and increasing predictability for the trade industry treatment of goods.
- CBP's development and use of innovative technologies such as verifiable credentials and decentralized identifiers underpin these, and other advancements, achieved through ACE 2.0.
- To lay the groundwork for ACE 2.0, CBP is promoting international interoperability standards.
  - Interoperability means different systems and technologies can communicate with each other. Interoperability standards are written rules that guide software development to enable different systems to connect and exchange data.
  - Investing in global interoperability standards will provide flexibility for businesses to choose the most efficient way to exchange data with CBP and potentially any system in the world.
  - Broad implementation of these standards should also future-proof CBP and the private sector as new technologies emerge.
- Under the Silicon Valley Innovation Program, CBP engaged a consortium of private sector companies to test verifiable credential and decentralized identifier standards using business cases in the steel, pipeline oil, e-commerce, food safety, and natural gas sectors.
  - In August 2023, CBP completed the first test to evaluate the trade benefits of verifiable credentials and decentralized identifiers. Testing was a technological success, supporting continued advancement of global interoperability standards as well as a recommendation for additional testing.

**Issue:**

- ACE 2.0 is an agency priority. CBP is trying to secure the funding necessary to implement the changes envisioned in ACE 2.0.

**Current Status:**

- CBP has made significant progress documenting the capabilities envisioned with ACE 2.0.
- The Department of Homeland Security and CBP have collaborated on a streamlined ACE modernization approach so that software development work on ACE 2.0 capabilities can begin in the Fiscal Year (FY) 2026 timeframe (provided funding is available).
- CBP partners with the Department of Homeland Security Science and Technology Directorate on a modernization strategy that includes global interoperability standards.

**Next Steps:**

- The Silicon Valley Innovation Program will lay the foundation for CBP's ACE 2.0 efforts.
  - In the fall of 2024, CBP will engage advanced capabilities to verify credentials and transmit data to PGAs in the e-commerce, food safety, and natural gas sectors.
  - In 2025, testing will extend to include international government-to-government exchange of information.
- Testing under the Silicon Valley Innovation Program is a prelude to limited production.
  - Development for limited production for the pipeline oil and steel sectors will begin in the fall of 2024, with a potential delivery date in spring 2025.
  - Limited production for natural gas, e-commerce, and food safety sectors depends on the 2024 test results and future funding.

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