

DHS Science and Technology Directorate

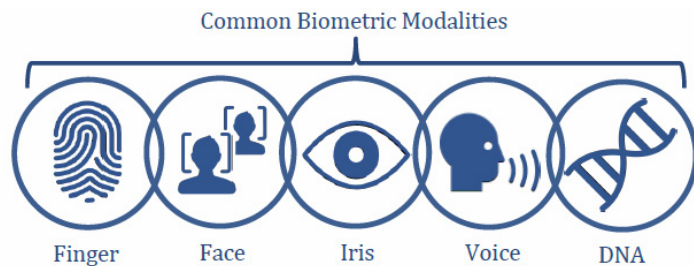
S&T Biometric Technology Engine (BT-E)

Context

The Department of Homeland Security (DHS) Science and Technology Directorate (S&T) launched a series of high-profile, high impact Apex programs to look strategically at the nation's security and address future challenges while supporting today's operational needs. S&T Engines were created to meet cross-cutting needs for all Apex programs.

Impact and Vision

As commercially available biometric technologies, including collection devices and matching algorithms, continue to advance, S&T is driving biometric solutions and innovations within the Department. The Biometric Technology Engine (BT-E) establishes an enduring core capability by leveraging S&T's biometric expertise and ensuring the re-use of biometric tools, methods, and best practices across Apex programs, S&T programs, the Department, and the Homeland Security Enterprise (HSE) writ large.



Description & Approach

The BT-E will accelerate effective integration of biometrics into operations and work in a cross-cutting fashion to mitigate operational inefficiencies. The BT-E will:

- **Drive Efficiency:** provide cross-cutting methods, best practices, and solutions to drive efficiencies across biometric programs;
- **Address Needs:** leverage combined capabilities of the Engine structure to address current, emerging, and future operational needs;
- **Test & Evaluation:** provide objective, first-class biometric testing and evaluation (T&E) services to Apex programs, S&T, DHS, and the HSE;

- **Engage Industry:** leverage combined industry insights and engage private sector to forage for innovative biometric solutions;
- **Encourage Innovation:** drive biometric standards and innovation across the HSE.

Key Activities

The BT-E will provide a sustainable, common platform for driving biometrics standards, best practices, and innovation, further driving down costs and increasing operational impact.

- Coordinate with other Engines and other S&T organizations to address Apex program needs
- Provide objective analysis of biometric technologies (i.e. strengths and weaknesses)
- Execute robust testing and evaluation at the Maryland Test Facility to inform applications of biometric technology to specific operational use cases
- Formalize biometric technology evaluations to inform or streamline DHS technology acquisitions
- Identify common biometric capability gaps across DHS components and HSE stakeholders
- Leverage public and private sector expertise and relationships to identify innovative solutions that account for diverse demographics and human systems integration on the performance of biometric collection and matching processes



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To learn more about the Biometric Technology Engine, contact technologyengines@hq.dhs.gov