

# ANSI Homeland Security Standards Panel Ninth Plenary

## **U.S. – European Collaboration on Security Standardization Systems ■ November 9-10, 2010**

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Homeland  
Security

# DHS S&T Mission

*Strengthen America's security and resiliency by providing knowledge products and innovative technology solutions for the Homeland Security Enterprise*



# S&T Goals

**Goal 1:** Rapidly develop and deliver knowledge, analyses, and innovative solutions that advance the mission of the Department

**Goal 2:** Leverage technical expertise to assist DHS components' efforts to establish operational requirements, and select and acquire needed technologies

**Goal 3:** Strengthen the Homeland Security Enterprise and First Responders' capabilities to protect the homeland and respond to disasters

**Goal 4:** Conduct, catalyze, and survey scientific discoveries and inventions relevant to existing and emerging homeland security challenges

**Goal 5:** Foster a culture of innovation and learning, in S&T and across DHS, that addresses challenges with scientific, analytic, and technical rigor



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# S&T Realignment: Anticipated Outcomes

Ensure S&T contributes in vital ways to DHS/Homeland Security Enterprise mission, operations, strategy



- **Transition** 5-10 high-impact knowledge products or technologies to use in the field within next 2 years
- Assist Components' efforts to **integrate mission needs**, operational requirements, business strategies, S&T investments and acquisition plans
- Strengthen understanding of **1<sup>st</sup> Resp. communities**, tackle big problems
- Make it **easy** to work with S&T: evolve IPTs, Apex Projects, preferred federal partner
- Pursue **strategic approach** to Components' needs, S&T investments, DHS-wide priorities. Solve major problems.
- Become best-in-class at **technology foraging and leveraging**
- Exhibit **high-level commitment** to standards development process to add value to HSE efforts to advance effective solutions for protecting the nation



# International Cooperation

- Facilitating the matching of US entities engaged in homeland security research with foreign counterparts so that they may partner in cooperative research activities. Specifically:
  - Coordinating with partner nations, DHS, and other agencies to identify viable areas for cooperation and partnering opportunities.
  - Engaging international partners to participate in the DHS Centers of Excellence program and encouraging US institutions to partner with academic institutions abroad.
  - Requiring grant recipients to include both a US and foreign institution.
  - Cooperating on development and implementation of standards for key areas such as border security and supply chain security

Developing strategic priorities with Office of International Affairs and other federal agencies in support of the homeland security mission.



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# International Collaborations: S&T Bilateral Partners in Research



Australia



Germany



Israel



Canada



Mexico



Singapore



France



New  
Zealand



Sweden



United  
Kingdom



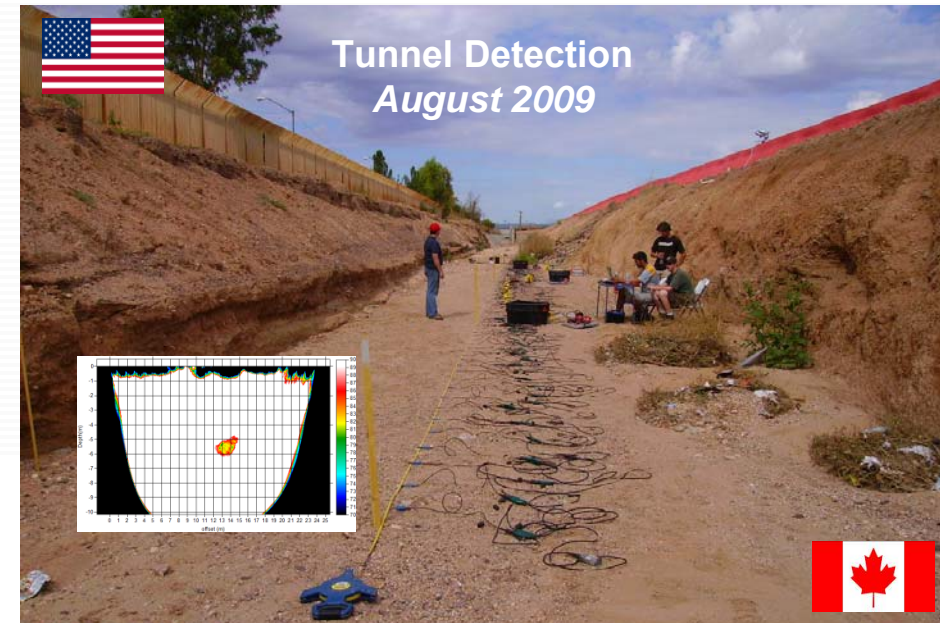
Ocean Acoustic Hurricane Sensing  
March 2008



Resilient Tunnel Demonstration  
August 2008



Composite-Reinforced Glass  
May 2009



Tunnel Detection  
August 2009

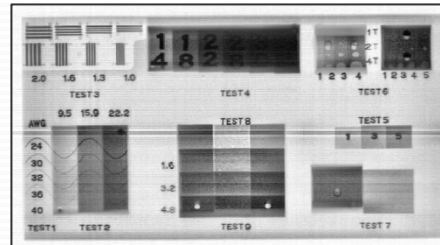


# Aviation Security

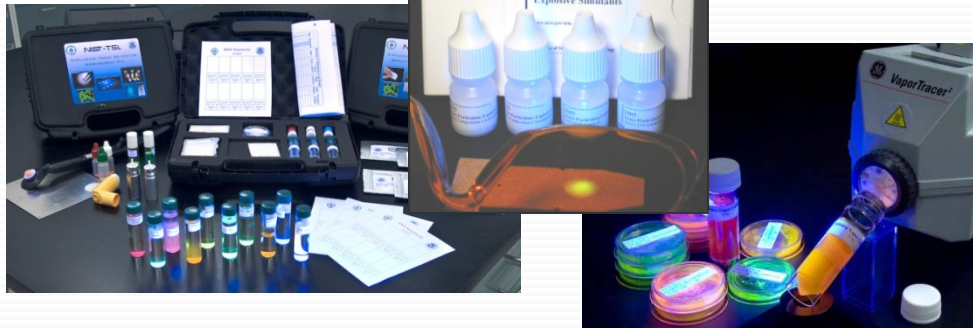
S&T, through the Office of Standards, has invested in standards development in many areas related to aviation security.

- Explosives detection –

- Bulk explosives detection performance standards



- Trace explosives detection performance standards



- Advanced Imaging Technology performance standards (including radiation safety)

- Standards to make whole body imaging safe, private and reliable



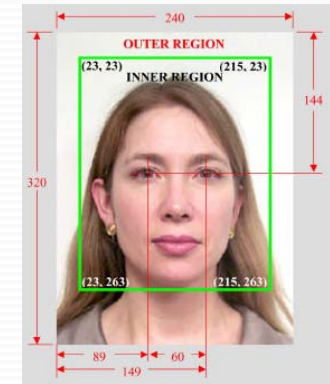
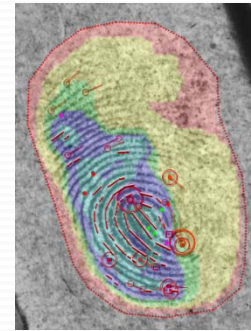


# Borders & Maritime Security

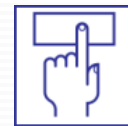
S&T has a strong investment in biometric technologies and performance standards for their use.

- Biometrics

- Face, finger, Iris image standards



- Usability standards to make biometrics easy and reliable to collect



# Conformity Assessment Systems

Standards are most useful when they guide performance, which can be tested – giving purchasers confidence in equipment.

- S&T supports DHS components in the development of conformity assessment systems to support DHS use of:

- Radiological detection equipment (DNDO)
  - GRaDER



- Chemical and Biological detection equipment (OHA)
  - DeTER



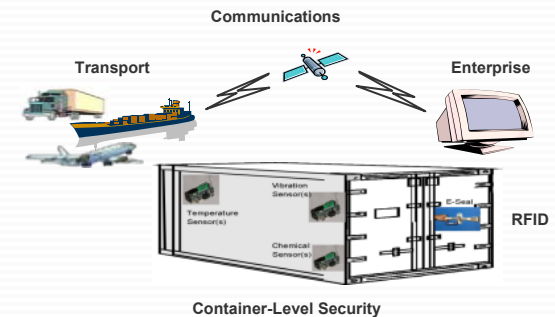
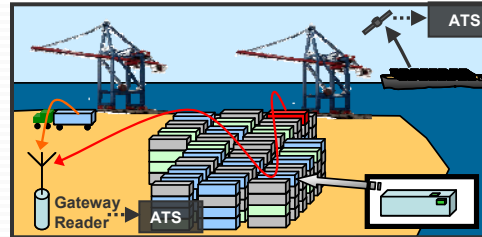
- CBP third party conformity assessment of cargo seals



# Global Supply Chain Security

S&T has investments in cargo security standards and cargo security technologies.

- RFID Cargo tags
  - Performance standards
  - Security of RFID systems against cloning, spoofing, interference
- Asset tracking systems



- Improved cargo containers
  - Stronger, lighter containers, equipped with sensors





# Preparedness & Crisis Management

DHS has established resiliency as a key goal for the Department – Preparedness is central to resiliency.

- Voluntary Private Sector Preparedness Accreditation and Certification Program (PS-Prep™)
  - Establishes a voluntary certification program for private sector preparedness based on DHS adopted standards.
- Incident management standards to establish uniform response across governments (federal, state, local)
- Information sharing standards for critical data
  - Geospatial data
  - Common alerting protocols
  - National Information Exchange Model





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