



**Homeland
Security**

S&T Stakeholders Conference

S&T Thrust Area Bombs

Jim Tuttle

Explosives Division Head

Science and Technology Directorate



June 2-5, 2008

PARTNERING FOR A SAFER NATION

Counter-IED

High Priority Technology Needs (EXD)

- Capability to detect domestic use vehicle-borne improvised explosive devices (VBIEDs)—In particular, technologies to provide a non-intrusive means of screening vehicles for VBIED detection
- Capability to assess, render safe, and neutralize explosive threats—In particular technologies to protect against person- and vehicle-borne explosive threats
- Capability to detect person-borne IEDs from a standoff distance—In particular, technology to enable the detection of person-borne concealed explosive threats in various high-throughput venues, at standoff distances
- Capability of inerting common explosives or making them less sensitive to initiation
- Techniques to track the origin of explosives and bomb components used in domestic IEDs—In particular, to improve forensic evidence investigations with better tools such as biometric technology, taggants, and radio-frequency identification devices (RFIDs)
- Capability to mark explosives material to improve the detection of IEDs

Counter-IED

High Priority Technology Needs (Other)

- Low-cost and practical approaches to protect urban structures and occupants from VBIED attacks
- Protective measures to reduce damage and prevent catastrophic failure of high-consequence infrastructure assets subjected to IED attacks
- Models for predicting of blast effects that take into account the diversity and variability of construction in urban settings
- Affordable blast-, fragment-, and fire-resistant materials
- Rapidly deployable blast-mitigation concepts for rapid threat response or temporary protection
- Tools to rapidly assess damaged structures
- Techniques and tools to stabilize damaged structures and prevent their collapse
- Capability to predict the threat of an IED attack
- Increased capability at vehicle or pedestrian ports of entry and border crossings to identify person born IED threats
- Enhanced capability for local officials to communicate understandable and credible IED warnings and instructions to the public



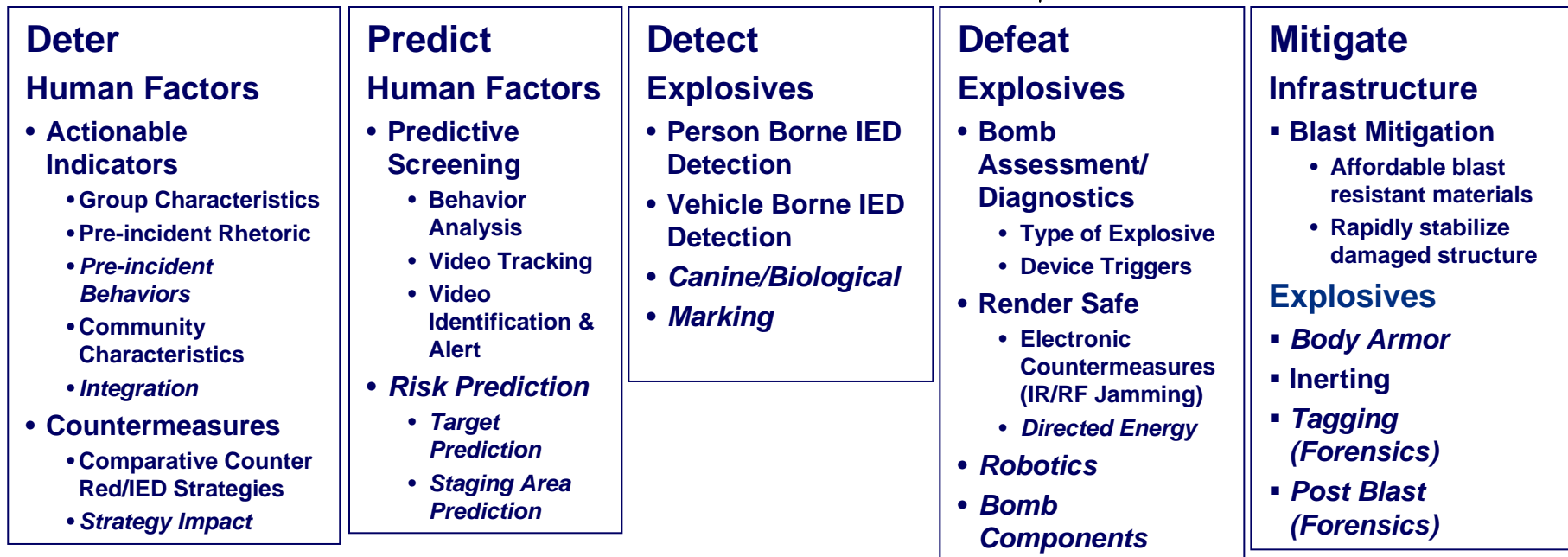
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DHS S&T Counter-IED Program

DHS S&T has established a counter-IED program to leverage existing multi-agency research and investments to deter, predict, detect, defeat and mitigate the impact of IED attacks

Terrorist IED Attack Timeline

INTENT INITIAL PLANNING OBTAIN OPERATIONAL RESOURCES CONDUCT OPERATIONS ATTACK IMMEDIATE EFFECTS LONG-TERM EFFECTS



Cross Cutting:

- Standards; Outreach; Technology Demonstration/ System Integration
- Intel Data Sharing (FBI, CIA, DIA); Technology resource & Test sharing (DoJ, DoD, DoE)



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