



**Homeland
Security**

S&T Stakeholders Conference

What Needs Attention/ The Way Forward:

Bugs (Chemical, Biological, Agriculture Security)

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2008 S&T Stakeholders Conference Input

What Needs Attention

- S&T should find appropriate ways to increase information sharing with industry:
 - Understand S&T long term vision
 - S&T needs to more clearly define the business case for industry opportunities
 - Industry needs to make the ROI case to their leadership
 - By time a BAA comes out it is often too late for industry to have invested in up-front research/development
 - Access to S&T developed capability gaps
 - Insight and/or access to S&T 5 year plans



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2008 S&T Stakeholders Conference Input

What Needs Attention

- S&T should evaluate ways to integrate information and data found in multiple DHS platforms (websites, portals)
 - FEMA example of working with first responders
- S&T should develop more interactive sessions with Industry in future Stakeholder meetings.
 - Give S&T presentations first day with second day reserved for discussions, interactions, recommendations
 - Evaluate holding separate Stakeholder meetings by Capstone IPT Divisions/Offices
- S&T should consider the development of more dual use technologies for increased ROI (DHS/HHS)



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What Needs Attention

- S&T and CDC should pursue development of process to test and validate biosensor technologies installed in private sector facilities as “public health actionable”.
- Engage “cleared” industry partners to assist with, or receive selected information from, CBD, S&T Risk Assessments (BTRA and CTRA)
- Address perception that S&T primarily utilizes the National Laboratories rather than private industry for systems, technologies and/or methodologies.



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Key Take Aways

- S&T should further engage and inform Industry via:
 - Long-term vision
 - Capability gaps
 - 5-year plans
 - Participation in IPT process as appropriate
 - Information access platforms
- S&T should explore expanding Chemical Security Analysis Center capability for use by state and local governmental entities. (CSAC is a centralized reachback facility for Chemical threat awareness, assessment and analysis)
- S&T should consider the development of more dual use technologies for increased ROI



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Chemical Security Analysis Center (CSAC)

Mission: To provide analysis and scientific assessment of the chemical threat against the American homeland and American public.

Objectives

- Chemical threat awareness, assessment and analysis
- Integration and analysis of chemical threat information and data
- Reachback capability to provide expert analysis support
- Science-based risk assessment

Payoffs

- Centralized repository of chemical threat data
- Comprehensive S&T based assessments of chemical threat materials
- Centralized reachback capability for chemical threat information
- A prioritized assessment of chemical threats to provide guidance to Interagency activities



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Bioterrorism Risk Assessment (BTRA) vs. Material Threat Assessments (MTAs)

Bioterrorism Risk Assessment:

- Relative risk assessment of biological agents with thousands of scenarios
 - Provides breadth over depth
 - Includes consequence modeling
- Relative risk and tailored assessments provided to White House Homeland Security Council
- Informs bio-defense strategic investment

Material Threat Assessments:

- In-depth assessment of plausible, high-consequence scenarios on a specific CBRN agent
 - Includes “excursions” to bound results
- Detailed human exposure estimates provided to HHS; HHS performs detailed consequence modeling
- Informs BioShield investments

National Biodefense Analysis and Countermeasures Center (NBACC):

Perform studies to better understand *Traditional, Enhanced, Emerging and Advanced* threat agent properties in terms of processing, stability, decay rates, dissemination efficiency, etc. to close key knowledge gaps



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