Standoff Technology Demonstration Program: Developing an Explosive Countermeasure Architecture for Large Public Events (LPEs)

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"Putting First Responders First"

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Program Overview

- Multi-year field testing program to accelerate the development of promising standoff detection technologies, concepts of operation (ConOps), and deployment architectures for the homeland
- Each field demonstration will address a comprehensive approach to an element of National Planning Scenario 12
- Technologies under development by DHS and other government agencies will feed field demonstrations
- Spiral development approach will be used to accelerate the deployment of promising technologies
- Systems engineering approaches will be pursued to maximize overall detection system performance

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Program Objectives

- Test and evaluate (T&E) technologies, ConOps, and training to prevent suicide bomber (SB), leave behind (LB) and vehicle borne (VB) Improvised Explosive Device (IED) attacks in the homeland
- Implement a “system of systems” architecture to protect against a range of terrorist threats
- Provide feedback from T&E to technology developers to accelerate the development of technologies that meet user needs
- Develop agile test bed(s) to test and evaluate promising explosive countermeasure technologies

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Program Goals

- **Increased technical functionality:** More people screened, more quickly, with improved technical performance; reduced screener manpower and operational demands

- **Increased system integration:** Multi-device screening; single and multi-modal data integration and/or fusion; integrated command and control structure for multiple simultaneous threats

- **Improved ConOps/interdiction approaches:** Automate all or part of the interdiction/secondary screening process such that maximum protection is afforded to security personnel

Program Goals (continued)

- **Standards development:** Standardized threat articles and test protocols; industry standards for the integration of discrete detection systems

- **Industry motivation:** Increase the investment in standoff systems and their integration

- **International integration & liaison:** Coordinate and leverage technologies, architectures, and test results

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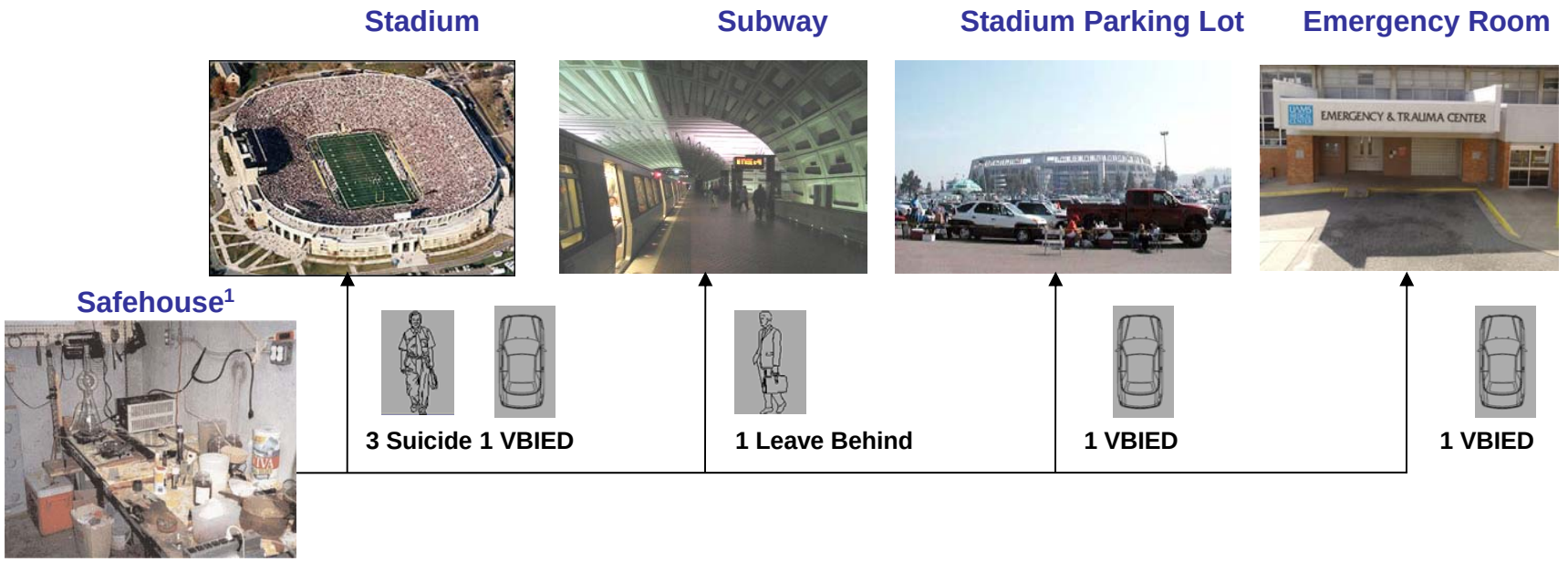
Program Planning Based on National Planning Scenario 12

- Multi-pronged attack at a large sports event
- Attacks are sequenced to maximize impact
- Checkpoint screening infeasible, “too little too late;” use standoff countermeasures



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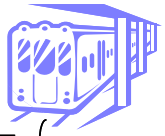
[1] Outside of SOTDP scope

Multi-Year Program Summary

		FY08	FY09	FY10	FY11	FY12	FY13
		Simple Venue			Complex Venue		
Large Public Event	SB	SB LPE	SB LPE	SB LPE	SB LPE	SB LPE	SB LPE
	LB	LB LPE	LB LPE	LB LPE	LB LPE	LB LPE	LB LPE
	VBIED		VBIED	VBIED		VBIED	VBIED
Commuter Rail	SB			SB Rail		SB Rail	SB Rail
	LB			LB Rail		LB Rail	LB Rail



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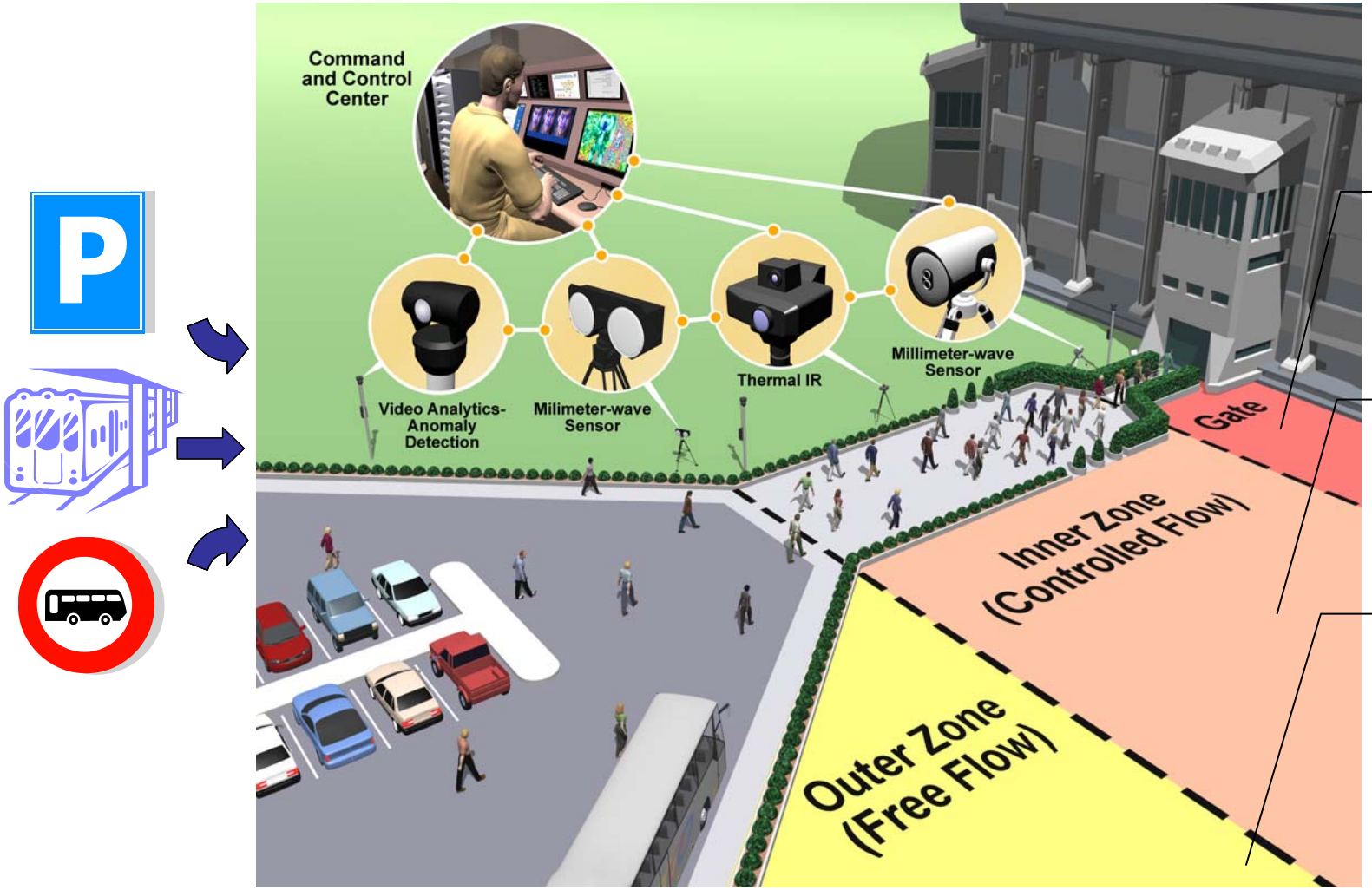
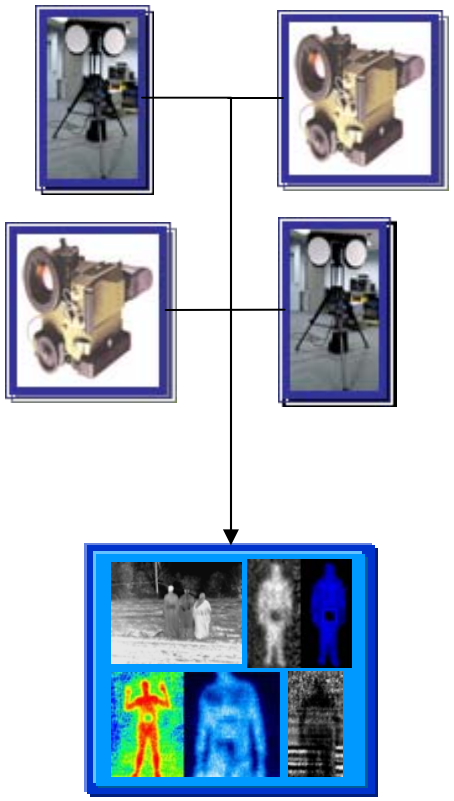
Conceptual Architecture: FY08 Demo

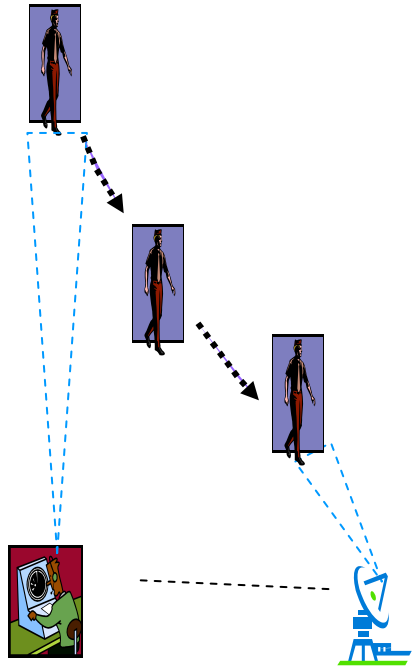


Demonstrate the value of tracking and handoff of potential threats from one device to another to improve overall countermeasure efficiency

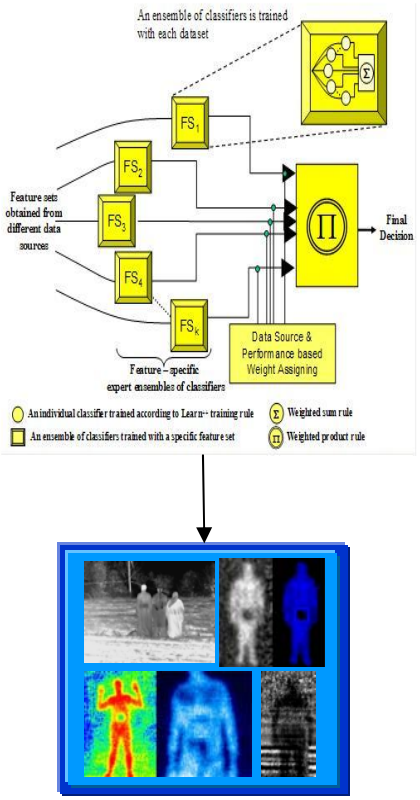
Systems Integration Strategies



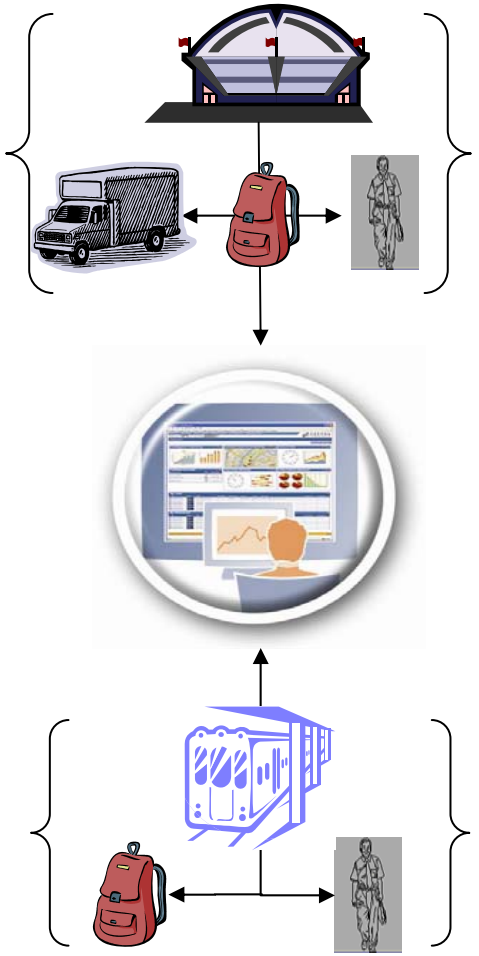
Integrated Operator Console (‘08)



Targeting and Handoff System (’09)



Data Fusion (’10)



Integrated countermeasure/venue C3 (’13)

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Program Team Players and Roles

DHS
- Program Leadership/Sponsor
- Long-term R&D
- Technology Selection
- Privacy impact assessment
- Outreach

Technical Team
- ConOps and test design
- Technology recommendations
- Product maturation/procurement
- Qualification testing
- Data analysis and interpretation
- Vendor feedback

Venue Operator (TBD)
- Operational requirements
- ConOps support
- Equipment installation
- Test support
- Outreach

Other Gov't Agencies
- End-user needs
- Planning Support
- Technologies
- Information from related tests

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