

Terrorism Risk Management From the West Wing to the Front Lines

*The Trials and Tribulations of Balancing
Risk & Expectations in the Post-9/11 World*

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Homeland Security Risk Management

‘A Work in Progress’

“Risk management must guide our decision making as we examine how we can best organize to prevent, respond, and recover from an attack”

Secretary Michael Chertoff
March 16, 2005

“... we have a systemic failure to manage risk properly”

Secretary Michael Chertoff
October 16, 2008

“... how can DHS enhance risk management as the basis of decision making?”

Secretary Janet
Napolitano
January 21, 2009

Terrorism Risk Management

Basic Math

Dynamic Security Environment

- Unpredictable Adversary
- Virtually Unlimited Set of Vulnerabilities

+

Limited Resources

=

Requirement for Systematic &
Authoritative Approach to
Informing Risk Decision Making

‘Gordian Knots’ of Risk Management

- **Unrealistic Public Expectations**
- **Gap Between Risk Perception & Reality**
- **Inconsistent Management of Risk**
- **Difficulties Defining ‘Acceptable Risk’**

***Risk is Seen Through Many
Different Prisms***

Risk Management Dilemma

**“He who tries to
defend
everything,
defends nothing”**

**Sun
Tzu**

**“... the places I
shall attack are
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Terrorism Risk Management

Potemkin Risk Formula?

Requirement for Systematic & Authoritative
Approach to Informing Risk Decision
Making w/Little or No Empirical Data to
Base Prediction

Quantification

$$\sum_1^n H = \sum_1^n TC_{RR} + \sum_1^n IC_{All} + \sum_1^n \$_{P,P,RP}$$



H – Harm

TC_{RR} – Tangible Consequences of Risks Realized

IC_{All} – Intangible Consequences of All Risks, Real and Perceived

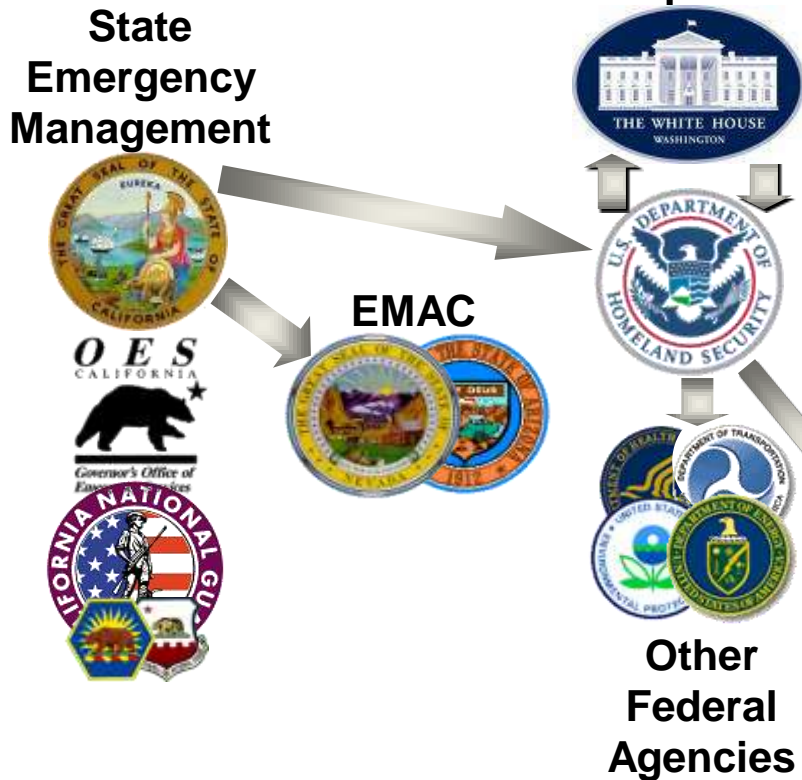
$\$_{P,P,RP}$ – Costs of Prevention, Protection, Response Preparedness

Federal, State, Local Emergency Response Enterprise



Local
Emergency
Management

First
Responders



State
Emergency
Management

Federal
Response



EMAC



Other
Federal
Agencies

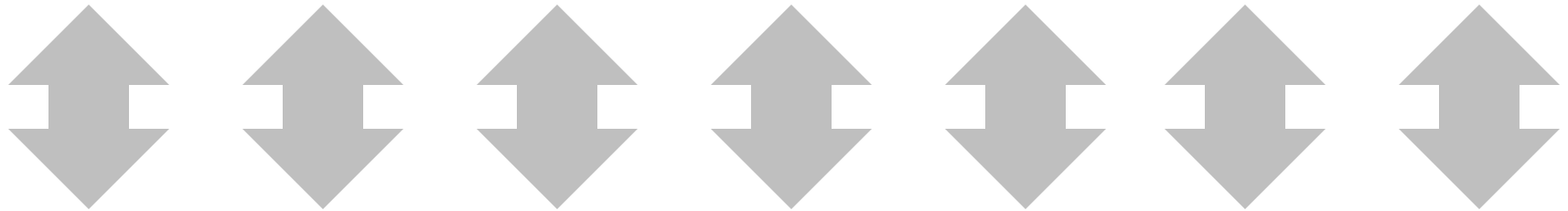


Event Escalation



Systems Engineering & Risk Management Methodologies

Risk Management Methodology



Systems Engineering Methodology

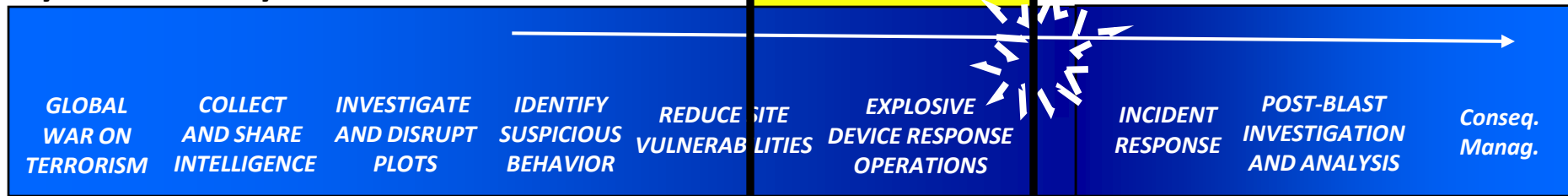


Risk Context – Case A

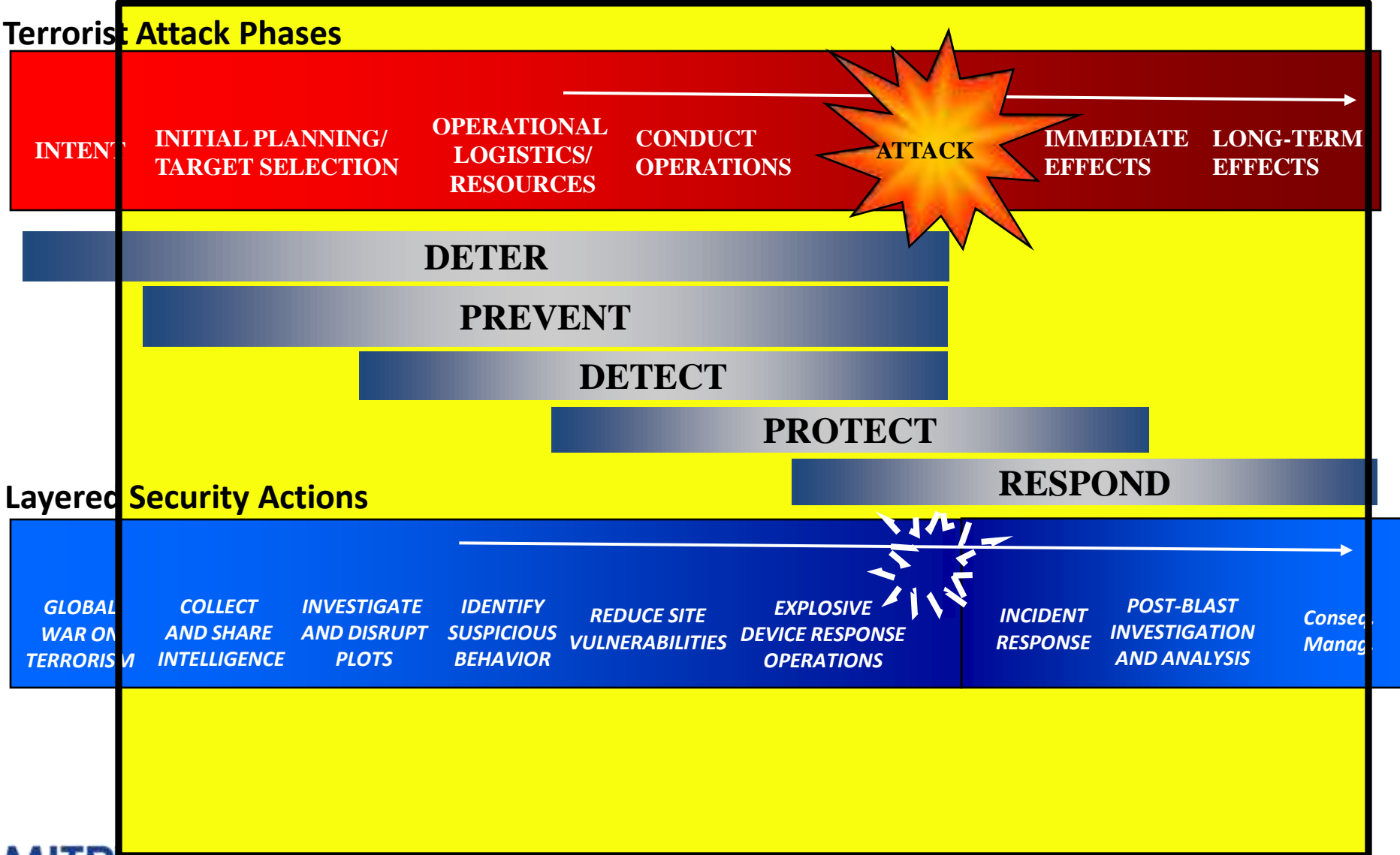
Terrorist Attack Phases



Layered Security Actions



Risk Context – Case B



IED Kill Chain Investment Areas

| Deterrence | Prevention | Detection | Protection | Response |
|---|---|--|--|---|
| <ul style="list-style-type: none">• National Strategy for Combating Terrorism• Declaratory policies and procedures for legal treatment of terrorists• Policies, laws, and regulations to address domestic terrorist threat• Demonstrated and effective overarching layered security approach | <ul style="list-style-type: none">• Collection, exploitation, and dissemination of explosives-related intelligence• Investigations to determine terrorist plans and intentions• Information sharing environment for technical and operational intelligence on terrorist explosive threats | <ul style="list-style-type: none">• Explosives detection canine teams trained to consistent standards• Technical capabilities to detect explosive compounds and precursors• Detection and reporting of suspicious sales of precursors• National public watch campaign | <ul style="list-style-type: none">• NIPP CI/KR Sector Specific Plans with explosive attack considerations• CI/KR Buffer Zone Plans to mitigate site-specific risks• Multi-Jurisdiction IED Security plans to prioritize layered security measures given limited resources• Protection of open-access targets such as mass transit | <ul style="list-style-type: none">• Render-safe capabilities for current and projected terrorist threats• National response protocols for terrorist explosive attacks• Joint bomb squad and SWAT response operations• Consistent, repeatable planning and evaluation of EDRO |

A Systems Context for Homeland Security Risk:

Functioning System in Dynamic Equilibrium (e.g., For a Given CIKR Sector –Energy, Cyber, Public Safety, etc.)

