Red Teaming the Terrorist Threat to Preempt the Next Waves of Catastrophic Terrorism

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Sept. 11 Attacks Represented "Pearl Harbor" for CbT Community

- **Numerous I&W indicators were present prior to 9/11**
  - In al Qaida training manual, missions include:
    - "Blasting and destroying the embassies and attacking vital economic centers" – WTC
    - "Freeing the brothers who are captured by the enemy"
      - September 12 sentencing date for African embassy bombings
- **Al Qaida MO - "If you don't succeed, try again"**
  - 1993 bombing of the World Trade Center
  - December 1994 GIS hijacking of Air France aircraft
  - USS Cole bombing preceded by a failed attack against the USS Sullivan
- Al Qaida operatives trained to fly commercial airplanes
  - Iraqi Salman Pak training camp, south of Baghdad
  - U.S. flight schools

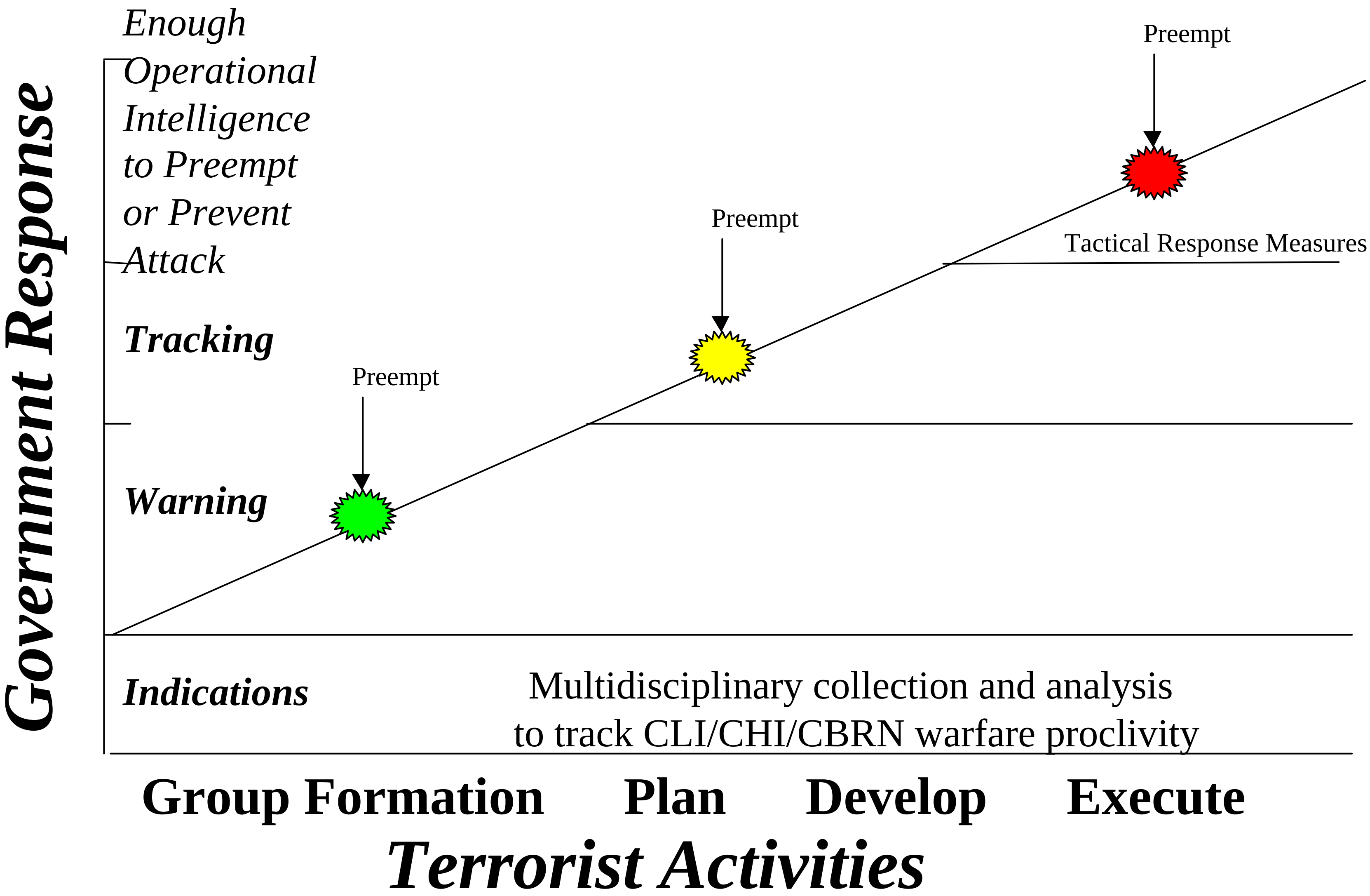
Red Team Can Create Incubation-Period Observables

- High-impact &CBRN/Cyber terrorist attacks usually require longer **“incubation” periods** than Low Impact attacks
  - **February 1993 World Trade Center** bombing plot began in October 1992 (**5 months**)
  - **March 1995 Aum Shinrikyo sarin gas attack** was preceded by a series of attempts to kill adversaries using various gas spraying devices in 1994 (**1 year+)**
  - **April 1995 Oklahoma City bombing plot** began **6 months** earlier in Fall 1994
  - **October 2000 USS Cole attack** reportedly planned for **8 months**
  - **September 2001 WTC/Pentagon attacks** preceded by **2-year** incubation period
- **RT Objective**: create pre-incident **“attack” observables** during the **“incubation”** that can be identified and monitored

Identifying CLI Incubatory Phases

- Identifying CLI preparation for an attack is more difficult because of the **short time frame** involved, generally **3-5 days or less**
  - Palestinian suicide bombers
  - ETA attacks
  - Al Qaida attacks against foreigners in Saudi Arabia or Pakistan
- Even with CLI, always anticipate **new types of attacks and new profiles of operatives**
  - In the case of **suicide bombers**, the use of women, teenagers, dyeing one’s hair blonde, university students, fathers, using ambulances for transportation

Pre-Incident Terrorist Activities vs. Govt. Response



Government Response

Enough Operational Intelligence to Preempt or Prevent Attack

Tracking

Warning

Indications

Preempt

Preempt

Preempt

Tactical Response Measures

Multidisciplinary collection and analysis
to track CLI/CHI/CBRN warfare proclivity

Group Formation Plan Develop Execute

Terrorist Activities

Intention + Capability = Threat

Threat + Indications (observables/activities) = Warning/Tracking/Preemption

Traditional Red Teams

- **The traditional Red Teaming process grew out of the Military Services' readiness and evaluation programs, where a unit's *readiness, capability and campaign plan* (the "*Blue Team*") is tested against an *Opposing Force* (OPFOR) (the "*Red Team*").**
- **The Red Team *projects itself imaginatively* into the terrorists' minds to devise adversary strategies, operations and tactics**
- **The Blue Team tries to design countermeasures**

‘Blue’ Buy-in of Red Teaming

- Forming a Red Team requires the Blue Team planners’ acceptance of Red as a ***valid, value-adding group***
- Two basic ***requirements*** facilitate the Blue Team’s “***buy-in***”:
  - First, officials need to make clear that Red Teaming is the ***product of their own initiative***
  - Second, Red Team members must have ***credibility***, which is the product of their ***expertise and experience***

Alternative Names for Red Teaming

- War Games
- Scenarios (alternative)
  - Best case, most likely, intermediary, worst case etc.
- Simulations
- Tabletop Exercises
- Tiger Teams (Navy concept)
- Peer Review
  - Also, red teaming proposals
- A pilot “chair-flying” a mission before execution

Requirements for Effective Red Teaming – Peter Probst

- In Red Team models, assess vulnerabilities by **using databases that terrorists would use**, **not** necessarily **RT members' expert knowledge** of what might be U.S. vulnerabilities, because **what we consider vital, terrorists may not**.
- Red Team members need to understand how a terrorist group goes about deciding on **what is important for them to target** and what **they perceive to be important criteria** for **measuring the desired impact** of an attack.

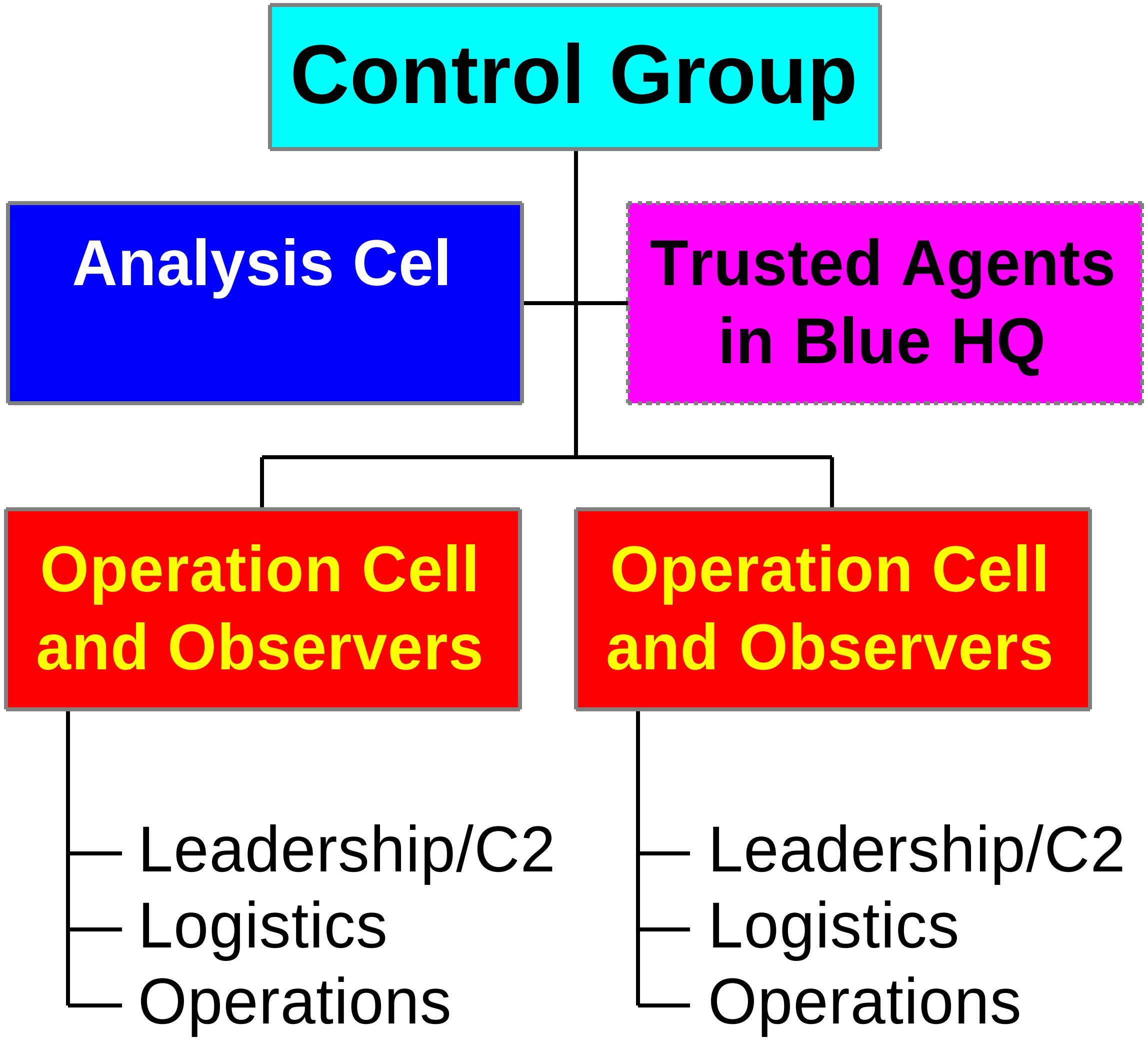
Red Team Methodologies

- Must think **3-5 moves ahead** of the opponent
  - Action/reaction/re-reaction/counteraction/counter-counter action/etc.
- A **continuing process** focusing on the **entire plot** rather than a **single component in an attack**

Three Levels of I&W Observables

Terrorist Group/I&W Observables	**Strategic**	**Operational**	**Tactical**
Federal Government Observables	- Group motivations Group is expanding - Hostile intent - Capabilities upgraded - Activities in safe haven - Previous attacks	-Group's modus operandi (MO) - Types of likely attacks & targeting - Conducting specialized recruitment & training - High noise level	- Plots & conspiracies - Uncover weapons acquisition - Disappearances of operatives -Heightened operational security - Actual attacks
State & Local Government Observables	- Warnings from federal agencies - CIP vulnerabilities - Group interest in attacking high value targets	- Radical subcultures present - Reported presence of cell operatives in city	- Reported surveillance of targets - Reported suspicious activities

Red Team Organization



Control Group

Analysis Cel

Trusted Agents in Blue HQ

Operation Cell and Observers

- Leadership/C2
- Logistics
- Operations

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- Leadership/C2
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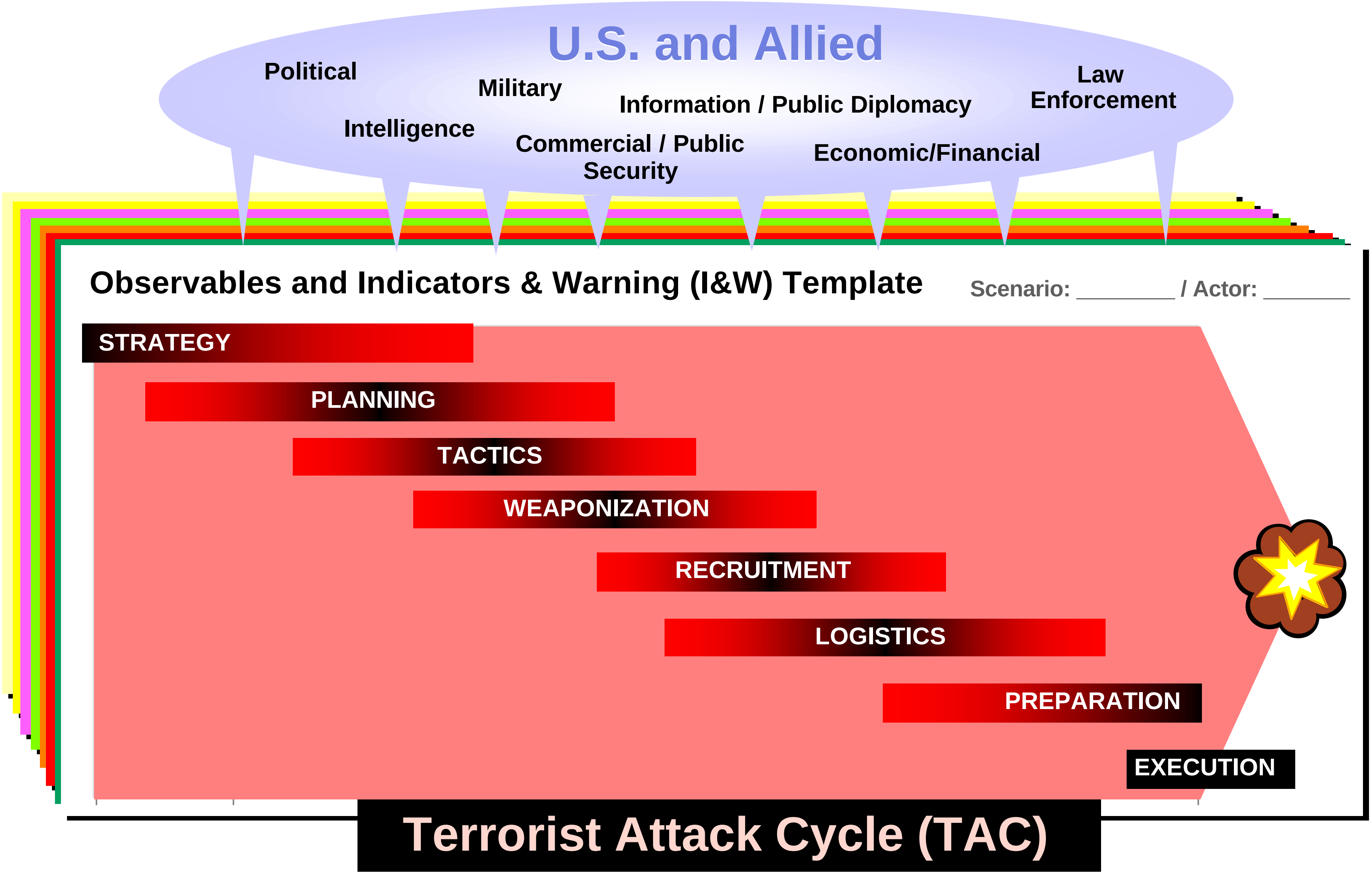
Red Teaming Attack Scenarios

- Conventional Low Impact
- Conventional High Impact
- Chemical
- Biological
- Radiological
- Nuclear
- Cyber
- New/Other

Generic Terrorist Attack Timeline



U.S. and Allied

Political

Intelligence

Military

Commercial / Public Security

Information / Public Diplomacy

Economic/Financial

Law Enforcement

Observables and Indicators & Warning (I&W) Template

Scenario: ________ / Actor: _______

STRATEGY

PLANNING

TACTICS

WEAPONIZATION

RECRUITMENT

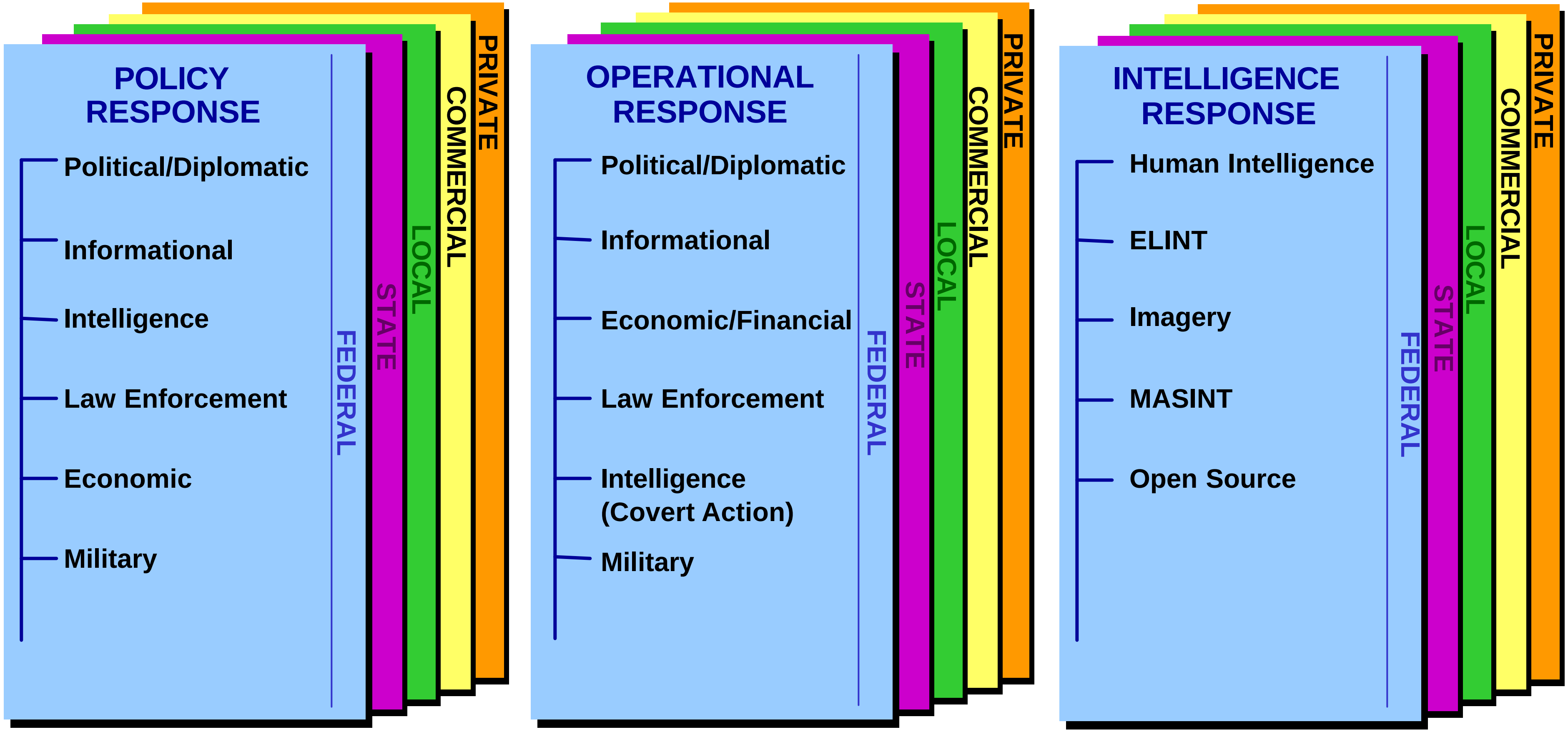
LOGISTICS

PREPARATION

EXECUTION

Terrorist Attack Cycle (TAC)

Response Framework



POLICY RESPONSE

- Political/Diplomatic
- Informational
- Intelligence
- Law Enforcement
- Economic
- Military

FEDERAL

STATE

LOCAL

COMMERCIAL

PRIVATE

OPERATIONAL RESPONSE

- Political/Diplomatic
- Informational
- Economic/Financial
- Law Enforcement
- Intelligence (Covert Action)
- Military

FEDERAL

STATE

LOCAL

COMMERCIAL

PRIVATE

INTELLIGENCE RESPONSE

- Human Intelligence
- ELINT
- Imagery
- MASINT
- Open Source

FEDERAL

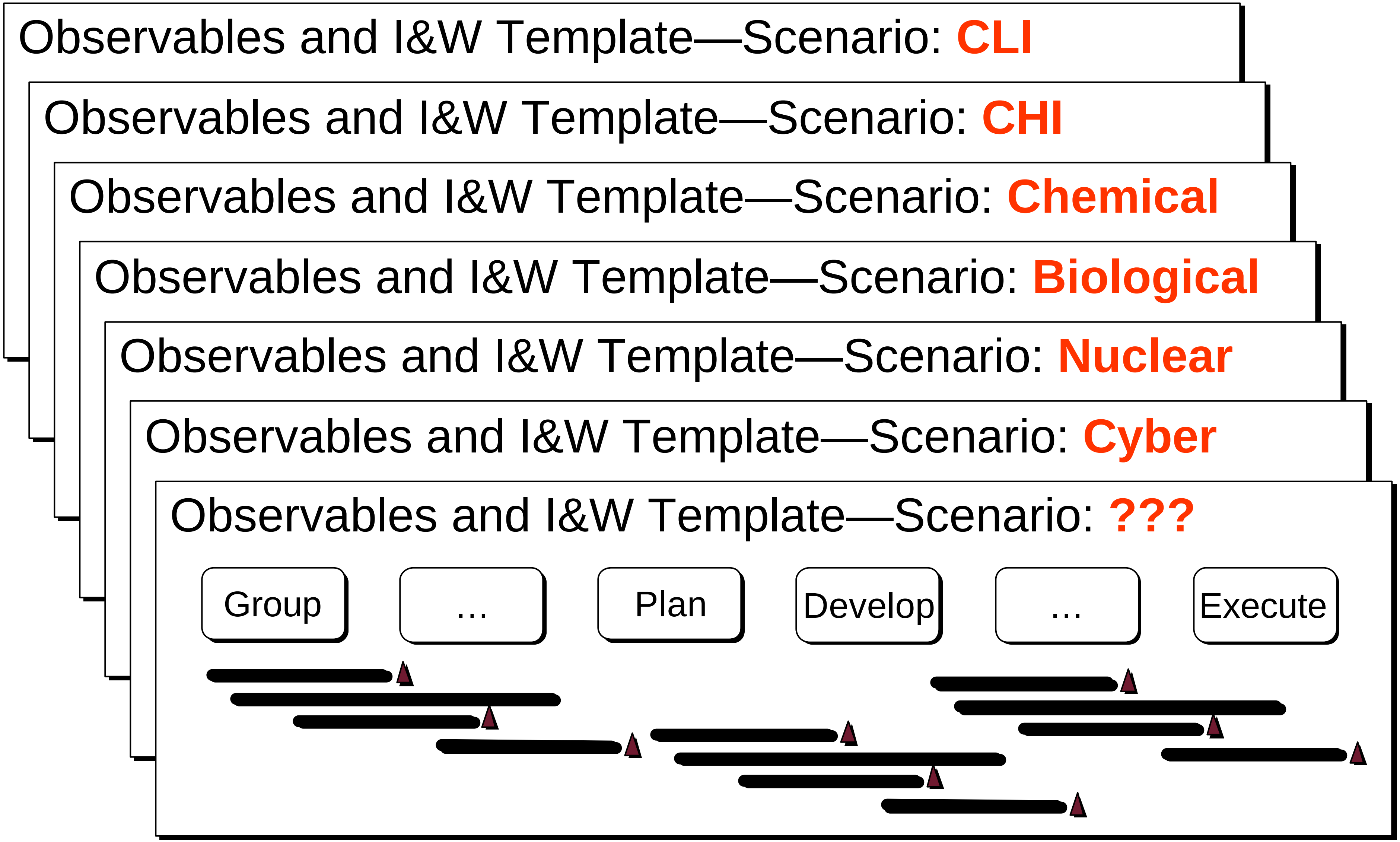
STATE

LOCAL

COMMERCIAL

PRIVATE

Analysis Template Concept



Observables and I&W Template—Scenario: **CLI**

Observables and I&W Template—Scenario: **CHI**

Observables and I&W Template—Scenario: **Chemical**

Observables and I&W Template—Scenario: **Biological**

Observables and I&W Template—Scenario: **Nuclear**

Observables and I&W Template—Scenario: **Cyber**

Observables and I&W Template—Scenario: **???**

Group

…

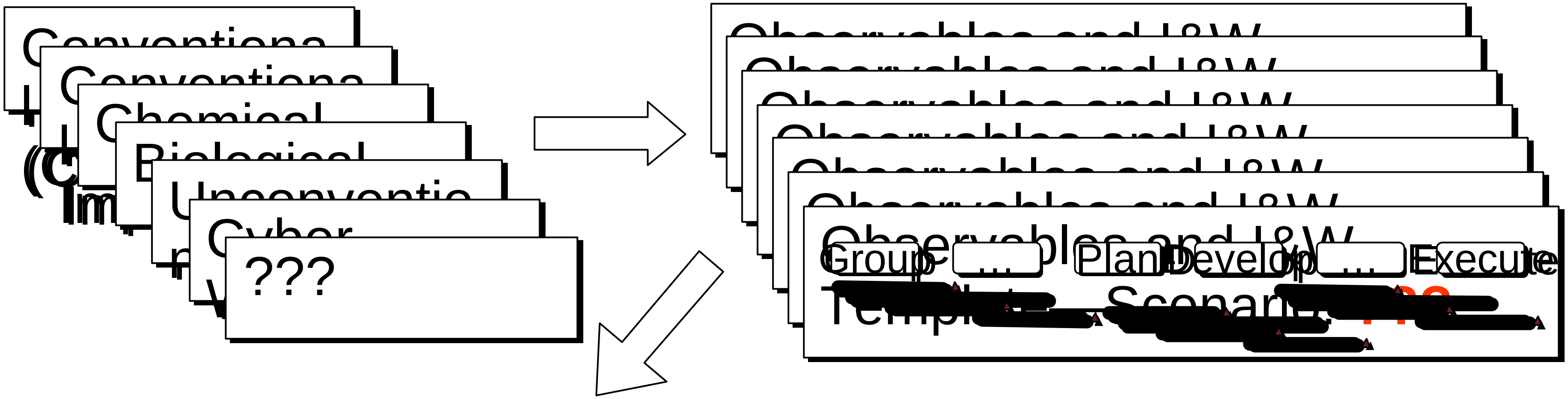
Plan

Develop

…

Execute

Intel-Ops-Policy Linkages



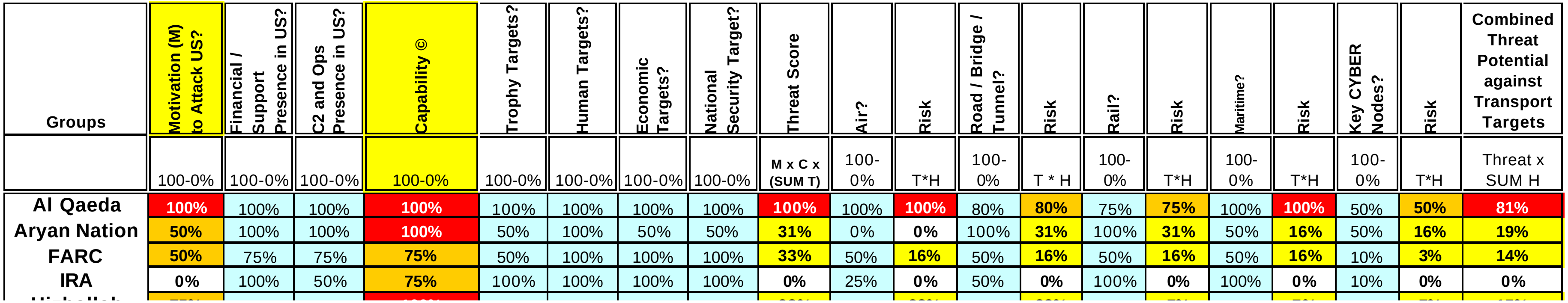
Policy Response (Federal)
- Political
- Diplomatic
- Intelligence
- …
- …
- Military

Operational Response (Federal)
- Political
- Diplomatic
- Intelligence
- …
- …
- Military

Intel Response (Federal)
- Political
- Diplomatic
- Intelligence
- …
- …
- Military

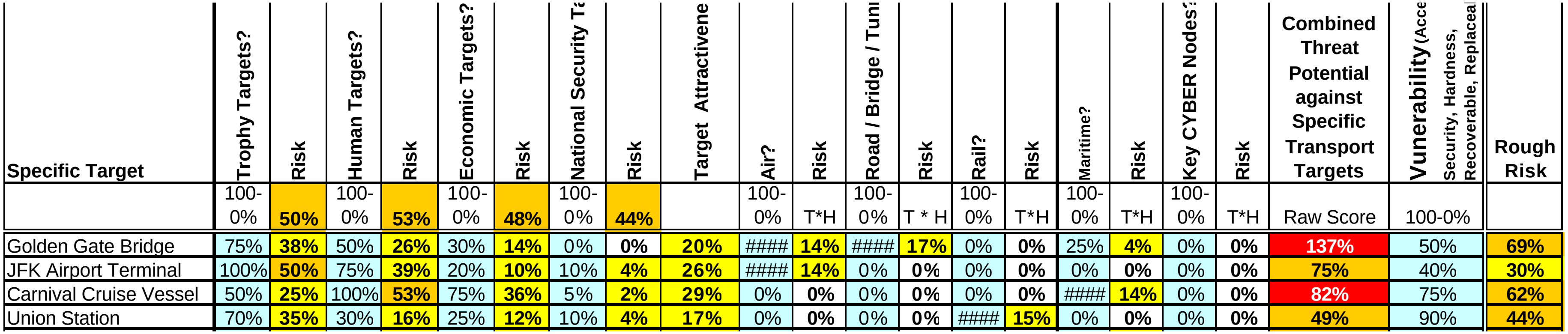
Tool Kits to Red Team Future Terrorism

Critical Infrastructure Protection



Groups	Motivation (M) to Attack US?	Financial / Support Presence in US?	C2 and Ops Presence in US?	Capability ©	Trophy Targets?	Human Targets?	Economic Targets?	National Security Target?	Threat Score	Air?	Risk	Road / Bridge / Tunnel?	Risk	Rail?	Risk	Maritime?	Risk	Key CYBER Nodes?	Risk	Combined Threat Potential against Transport Targets
	100-0%	100-0%	100-0%	100-0%	100-0%	100-0%	100-0%	100-0%	M x C x (SUM T)	100-0%	T*H	100-0%	T * H	100-0%	T*H	100-0%	T*H	100-0%	T*H	Threat x SUM H
Al Qaeda	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	80%	80%	75%	75%	100%	100%	50%	50%	81%
Aryan Nation	50%	100%	100%	100%	50%	100%	50%	50%	31%	0%	0%	100%	31%	100%	31%	50%	16%	50%	16%	19%
FARC	50%	75%	75%	75%	50%	100%	100%	100%	33%	50%	16%	50%	16%	50%	16%	50%	16%	10%	3%	14%
IRA	0%	100%	50%	75%	100%	100%	100%	100%	0%	25%	0%	50%	0%	100%	0%	100%	0%	10%	0%	0%

“Trophy Targets” Risk Prioritization



Specific Target	Trophy Targets?	Risk	Human Targets?	Risk	Economic Targets?	Risk	National Security Ta	Risk	Target Attractivene	Air?	Risk	Road / Bridge / Tunı	Risk	Rail?	Risk	Maritime?	Risk	Key CYBER Nodes?	Risk	Combined Threat Potential against Specific Transport Targets	Vunerability (Acce Security, Hardness, Recoverable, Replaceal	Rough Risk
	100-0%	50%	100-0%	53%	100-0%	48%	100-0%	44%		100-0%	T*H	100-0%	T * H	100-0%	T*H	100-0%	T*H	100-0%	T*H	Raw Score	100-0%	
Golden Gate Bridge	75%	38%	50%	26%	30%	14%	0%	0%	20%	####	14%	####	17%	0%	0%	25%	4%	0%	0%	137%	50%	69%
JFK Airport Terminal	100%	50%	75%	39%	20%	10%	10%	4%	26%	####	14%	0%	0%	0%	0%	0%	0%	0%	0%	75%	40%	30%
Carnival Cruise Vessel	50%	25%	100%	53%	75%	36%	5%	2%	29%	0%	0%	0%	0%	0%	0%	####	14%	0%	0%	82%	75%	62%
Union Station	70%	35%	30%	16%	25%	12%	10%	4%	17%	0%	0%	0%	0%	####	15%	0%	0%	0%	0%	49%	90%	44%

Difficulties and Constraints

- **Cultural**
  - Need to mesh contrasting organizational cultural orientations between Red Team and government bureaucracy
- **Operational**
  - Easier said than done
  - Need to obtain "buy in" for Red Team activities from affected government agencies
  - Need to coordinate Red Team activities with affected government agencies
    - Issue of "need to know," who will be "read" into the exercise, etc.
- **Political**
  - Policy makers don't always have the required range of response options recommended by a Red Team
    - Some Red Team recommendations may be too controversial
- **Safety**
  - Cooperation of security officers may be required for some aspects of the exercises

Summary

- Benefits of Red Teaming
  - Broaden spectrum of intelligence I&W analytical processes to strengthen preemptive capabilities
  - Provides for policy, operational and intelligence fusion
  - Generate government-wide Red Teaming expertise to expand reservoir of experts who are “recycled” back to their parent agencies

Conclusion

- **Think Like the Enemy** **-** always anticipate and prepare to counteract new types of attacks and targeting because terrorists seek to exploit new vulnerabilities and inflict maximum damage
  - Past trends do not necessarily reveal future attack patterns
- Red Team “Out of the Box” Threat/Risk Assessments
  - Focus on multi-dimensional, not uni-dimensional, baskets of potential threats