



CYBER SECURITY ANOTHER CHALLENGE FOR ENERGY





Why Wargame?

Catalyst for Interactive Complex Strategic Thinking

- To **challenge** the traditional view of “reality” stakeholders must break away from their current paradigms. Strategic simulations bring together all relevant stakeholders who often challenge each other.
 - To **understand** how someone views the world you must stand in their shoes. Strategic simulations present unique opportunity for participants to “experience” the complex environment of other stakeholders.
 - To **achieve** a credible test strategy strength you must focus everyone’s full intellectual power on the problem. The intensity of a scenario driven strategy development demands on that focus from participants.
 - To **generate** new ideas you must have competitive interaction. A strategic simulation has multiple competing dynamics, moving the real world.
 - To believe you must **change** the way you think and execute you must experience your strategy in a realistic environment. A strategic simulation uniquely provides an “experimental strategic planning” opportunity. You experience your strategy among competitors and peers.
 - To **accept** this change stakeholders must see the results in a coherent, realistic context which must incorporate all challenges and perspectives. Stakeholder complexity is a critical ingredient for a successful strategy.
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PREVIOUS GAMES

- Executive simulations on cybersecurity have included a wide range of sophisticated clients, Government and Industry.
 - Presidential Commission on Critical Infrastructure Protection, Battle Management Command and Control, Port Security Command and Control, USNavy and US Coast Guard, Port of New York, New Jersey sponsored by DoD and DHS
 - Provides a rare opportunity for senior level government and industry representatives to discuss security, as well as business priorities, economic issues and their implications for corporate operations and investments
 - An inside look with a different perspective
 - CEO of a Fortune 25 Corporation. This is “experiential strategic planning.” It provides the unique opportunity to experience and test your strategies with other key stakeholders for success
 - Simulations are superior formats for participants to candidly exchange other
 - “The one thing you can never do is make a list of things that you never thought of.”
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GOALS

- How can government and industry collaborate to decrease cyber vulnerabilities that have economic and security impacts?
 - Define stakeholders roles and responsibilities
 - Test assumptions, implicit and explicit in roles and responsibilities as defined by stakeholders
 - Gain insights how roles should change to better counter threats and challenges
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OBJECTIVES

How should the government ensure availability and security of Critical Infrastructure and Key Resources (CIKR?)

- **What are the key requirements to ensure cybersecurity?**
- **What are the costs and potential budget impacts?**
- **What resources should the government provide for cybersecurity?**
- **What international agreements need to be in place for national and international cybersecurity?**

How can industry maintain continuity of operations and profitability?

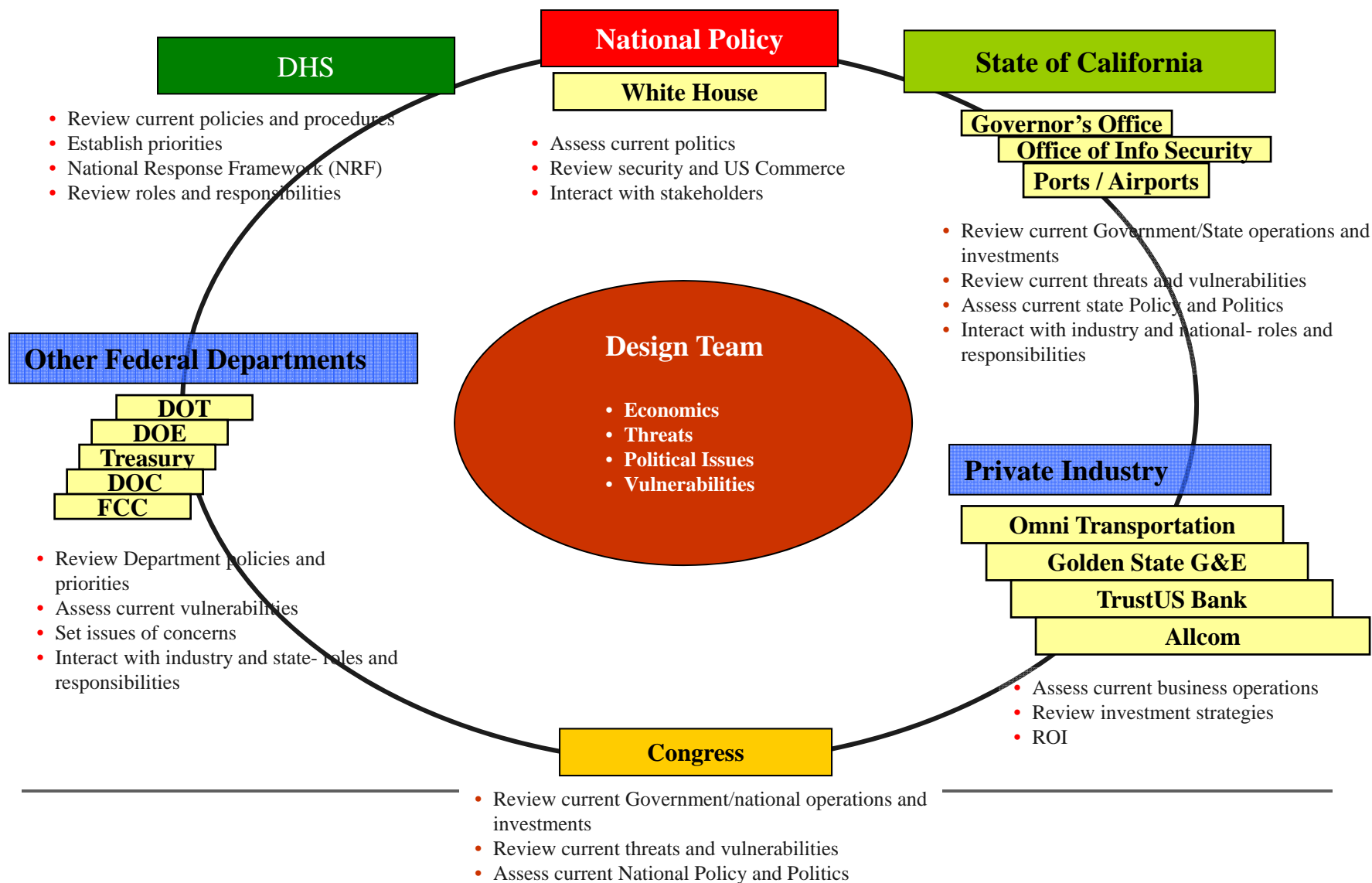
- **What is industry doing independently to address cybersecurity issues?**
- **How should industry organize/collaborate to ensure cybersecurity within their sectors?**
- **What is industry's response to an attack? How is it coordinated?**

What are the roles and responsibilities between industry and government regarding cybersecurity?

- **What information is critical for successful national cybersecurity?**
 - **How can resources between government and industry be coordinated to ensure cybersecurity?**
 - **How should a national investment strategy for cybersecurity be initiated between government and industry?**
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Stakeholders





MOVES

- Time period of simulation was approximately two – three years beginning January 2010
 - Four moves, each covering approximately 6 months were conducted over a 2 day period
 - Scenarios and threats reflected real world current events to realistically test assumption, policies and priorities of stakeholders
 - On the third day, an outbrief, “Hot Wash” was presented to senior level representatives in addition to game participants
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PARTICIPANTS

- Participation was provided at the senior level from:
 - PG&E
 - Southern California Edison
 - Coast Guard
 - San Francisco Airport Authority
 - LA/Long Beach Port Authority
 - Schneider Trucking
 - Wells Fargo
 - Intuit
 - AT&T
 - EMC
 - California Emergency Management
 - DHS
 - NORTHCOM
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KEY INSIGHTS AND OUTCOMES

- **Cyber capabilities are the “new normal” of our lifestyles.**
 - **Capabilities bring vulnerabilities that are not always identified**
 - **Government resources are dependent on industry insights and capabilities. Information sharing protocols critical.**
 - **Energy team was challenged by “Trojan Horse” malicious code that took over power plant serving Los Angeles.**
 - **Four cables that were cut at critical junctures in Santa Clara had far reaching consequences for a number of sectors**
 - **Interdependencies are not always identified. Decisions and risk criteria are not aligned---government to industry, industry to industry.**
 - **Competitors may need to work more closely together. When PG&E lost power to Port of LA/Long Beach, Southern California Edison was not able to step in.**
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Specific Outcomes

- A test of assumption on which business decisions are based
 - A “bullet-proof” strategy – tried out under no-holds-barred competition
 - Identification of the required strengths and potentially fatal weaknesses in the plan
 - Identification of exactly what needs to be done to compete more successfully
 - Understand how to join the strengths of key organizations
 - A buy-in by the managers with responsibilities for implementing the plan
 - Actual experience developing and executing a strategic plan, anticipating surprises, competing in real time
 - A rigorous process which can be replicated to review at these issues or others
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