

North American Public Sector

New Directions in Industrial Base Infrastructure



# Reconciling Protection and Resiliency - Information Technology Sector

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NDIA 2008  
Homeland Security  
Symposium & Exhibition  
September 9, 2008

# Protection and/or Resiliency

- **Protection and Resiliency**
  - **Not either/or**
  - **Different views of the same set of physical and cyber challenges to balance primarily on risk assessment**
- **CSC helps clients – government and private sector – achieve their strategic goals through the use of information technology, frequently as part of a solution set that also includes other technologies, management solutions, processes and deep mission or business understanding and expertise.**
- **Some of the world's most important service, financial, production and government institutions rely on CSC for continuity and availability (COOP and COG in government terms) – DHS, DoD, NASA,**

# Preparation is Key

- Risk Assessment, Priority Implementation, Training, Exercising and Feedback
- The communications backbone, the power distribution grid and IT functions and services are designed to be highly robust, BUT .....
- Specific facilities must consider site, equipment, connectivity and personnel redundancy needs – e.g., Tier III data centers must achieve 99.98 percent availability (no more than 4 hours of unplanned outage every 2.5 years)
- Pervasive management support and employees as the lynchpins
- Katrina and Rita Lessons: ***“Planning and teamwork were the keys to our success. Luck alone won’t take you very far when you have to go to plan B and start thinking on your feet. We learned a lot during this event, and will factor these lessons into our recovery plans for the future.”***

– Deborah Hojem, CIO, DynMcDermott’s CIO. a CSC subsidiary that operates and manages the US Strategic Petroleum Reserve. The SPR is the world’s largest reserve of crude oil, which is stored in underground caverns along the Gulf of Mexico in Louisiana and Texas.

# Partnership is Key

- **President's National Security Telecommunications Advisory Committee (NSTAC)**  
<http://www.ncs.gov/nstac/nstac.html>
- **National Coordinating Center for Telecommunications (NCC)**  
<http://www.ncs.gov/ncc/index.html>
- **Network Security Information Exchanges**  
[http://www.ncs.gov/nstac/reports/fact\\_sheet/NSTAC\\_08.pdf](http://www.ncs.gov/nstac/reports/fact_sheet/NSTAC_08.pdf)
- **Information Technology Information Sharing and Analysis Center (IT-ISAC)**  
<https://www.it-isac.org/>
- **ISAC Council**  
<https://www.isaccouncil.org/>
- **Partnership for Critical Infrastructure Security (PCIS)**  
<http://www.pcis.org/>
- **Cross Sector Cyber Security Working Group**  
<http://homeland.house.gov/SiteDocuments/20071031154922-91266.pdf>

# Cyber is Critical

- **Cyber “Hurricane” is hitting us all – some more than others – 24/7**
- **Risk Assessment, Priority Implementation, Training, Exercising and Feedback all apply**
- **The communications backbone, the power distribution grid and IT functions and services are designed to be highly robust, BUT .....**
- **Consolidate for manageable span of protection and response**
  - DoD and DHS strategy to consolidate and simplify
  - Reduction in Internet access points
- **Certification and Accreditation**
- **Best Practices**
- **Education and awareness**
- **Identity, Access and Privilege Management appropriate to the assets, functions and services to protect**
  - CSC Center of Excellence because this is critical to virtually everything

# Exercise to Verify and Learn

- **Internal**
- **External – National level (e.g., TOPOFF, Cyber Storm, NLE 2-09)**
- **CSC and other companies participated in Cyber Storm II - A national cyber security exercise to test processes and capabilities of companies and agencies in both the private and public sector.**
  - **CSC Objectives**
    - » Opportunity to evaluate operations in a national scenario with partners
    - » Learn lessons for needed improvement
    - » Build upon existing continuous improvement for preparation and response posture
- **The largest government-sponsored national cyber security exercise of its kind.**
- **Exercises such as Cyber Storm II are critical in maintaining and strengthening cross-sector, inter-governmental and international relationships, enhancing processes and communications linkages, as well as ensuring continued improvement to cyber security procedures and processes.**

# Operational Exercise Benefits

- **Operational Exercises' Benefits Include**
  - **Experience in and development of external interaction for major incident handling**
  - **Participation with major international, national, state and local, and private sector players**
  - **Exercise, test and advance the CONOPS for the IT-ISAC**
    - **CSC is a Founding Member and part of the executive committee leadership**
  - **Exercise vendor partnerships - investigate key supply chain dependencies**
  - **Exercise NOC/SOC organizational incident response processes**
  - **Demonstrate and recognize employee skills and leadership**
  - **Support for participating clients (e.g., DHS, EPA, DoS, GETS)**
  - **Education and awareness opportunity – direct and indirect**

# Learn More

- **Be active in the Critical Infrastructure Protection community**
  - **Government and private sector**
- **Join your Sector Coordinating Council**
- **Join your Information Analysis and Sharing Center**
- **Participate in exercises through the SCC and ISAC**
- **Help with your sector's risk assessment and other implementation of your sector's specific plan**
- **Participate actively**
- **Apply lessons learned internally**
- **Ask your sector's CIP leadership how you can help**



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