



# Homeland Security



Homeland  
Security

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**<http://www.cyber.st.dhs.gov>**



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# Science and Technology (S&T) Mission

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Conduct, stimulate, and enable **research, development, test, evaluation and timely transition** of homeland security capabilities to federal, state and local operational end-users.



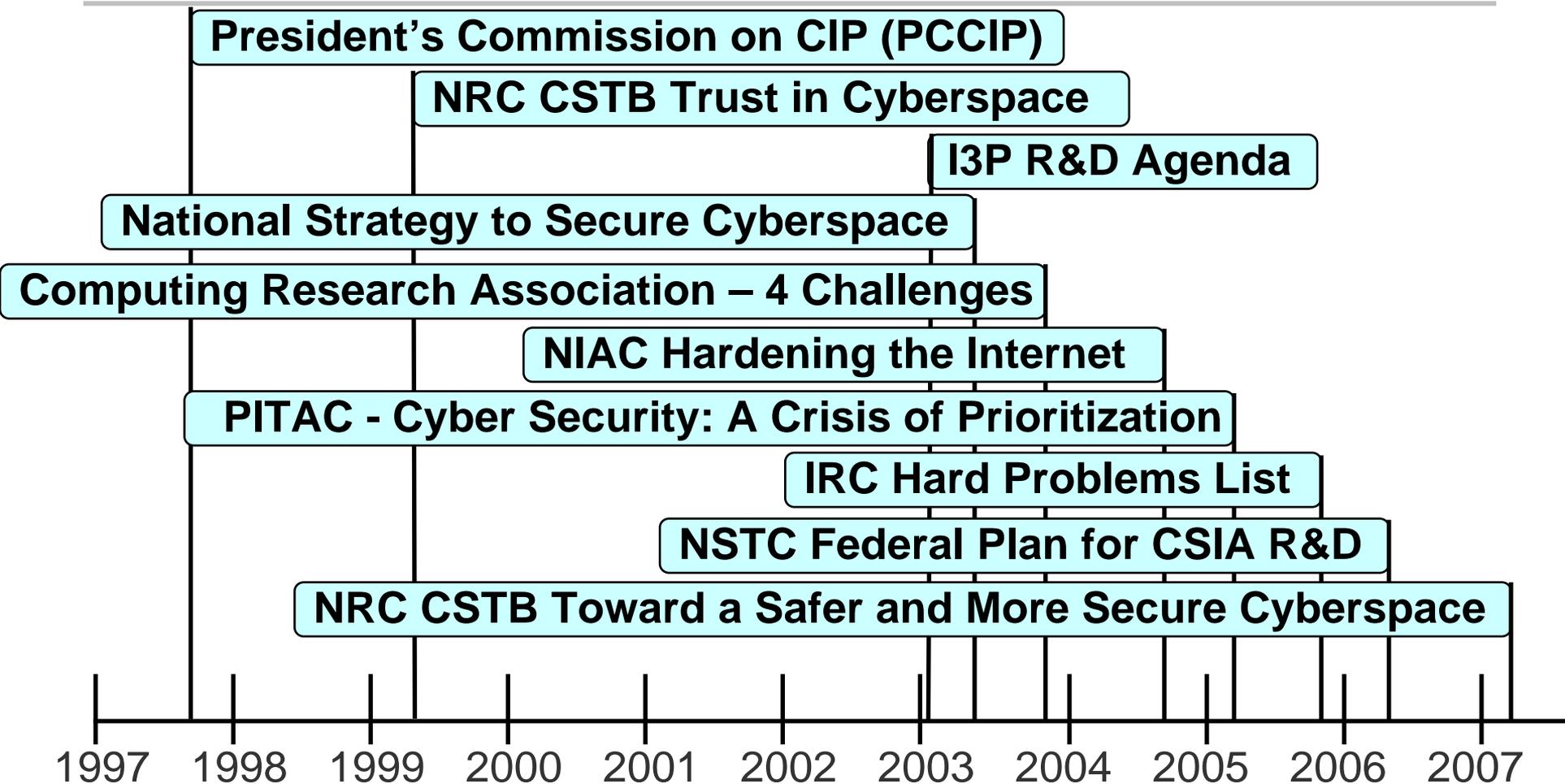
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# Cyber Security Program Goals

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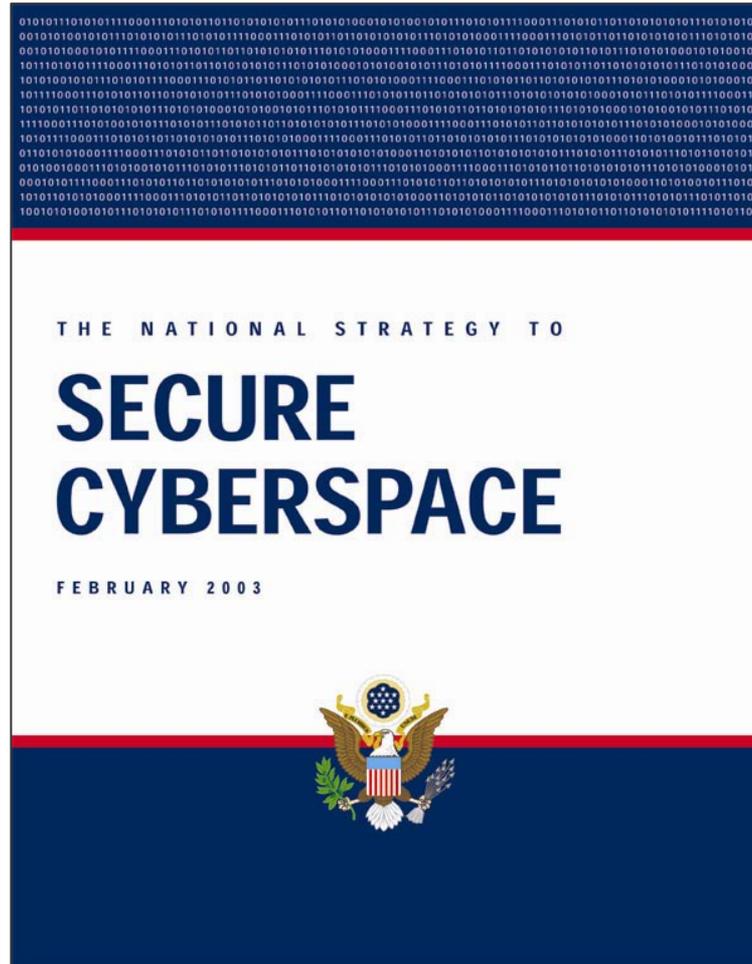
- To perform research and development (R&D) aimed at **improving the security of existing deployed technologies** and to ensure the security of new emerging systems;
- To **develop new and enhanced technologies** for the detection of, prevention of, and response to cyber attacks on the nation's critical information infrastructure.
- To **facilitate the transfer of these technologies** into the national infrastructure as a matter of urgency.

# Timeline of Past Research Reports



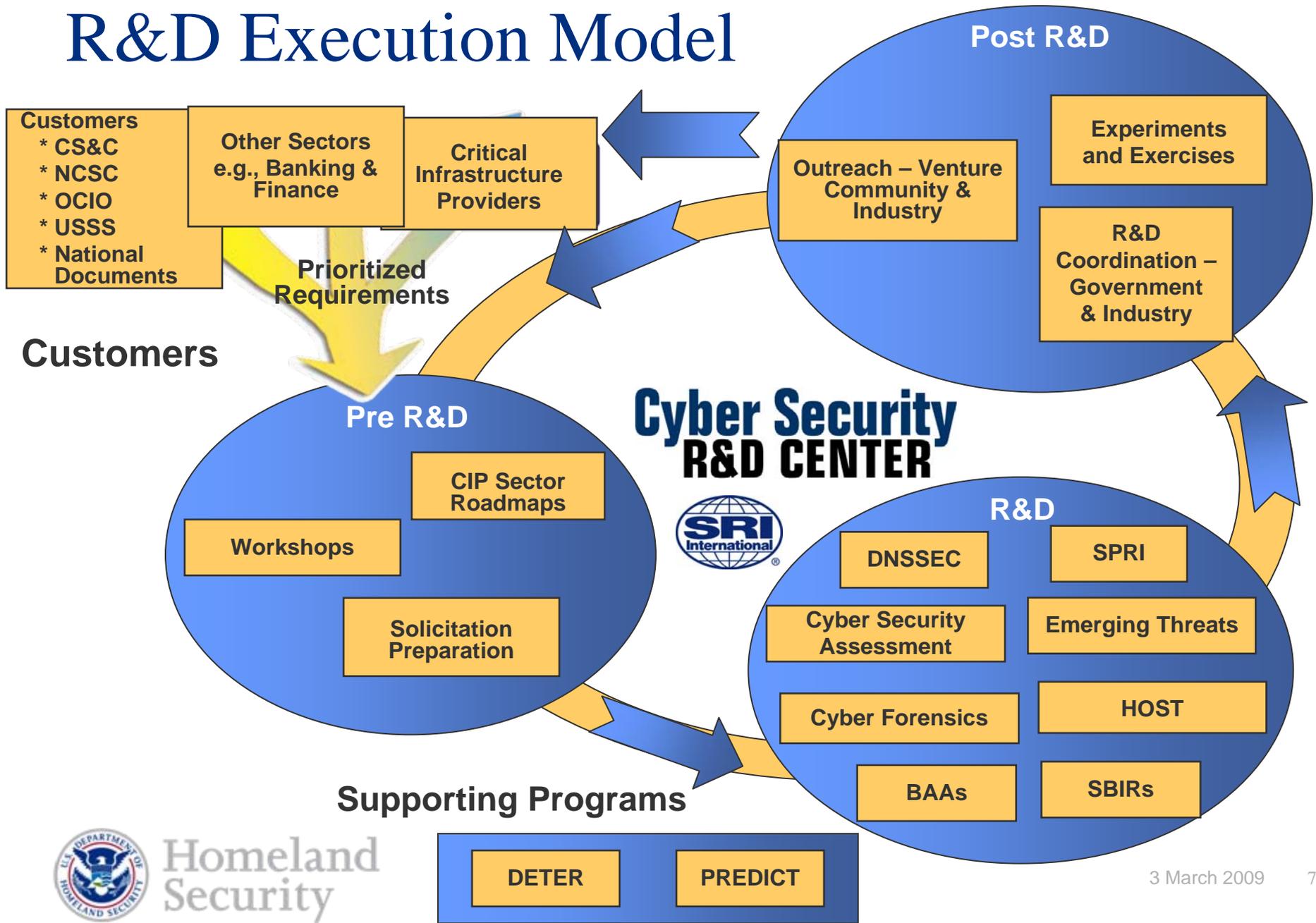
# National Strategy to Secure Cyberspace

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# R&D Execution Model



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# Cyber Security Program Areas

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- Information Infrastructure Security
- Research Tools and Techniques
- Next Generation Technologies

# Small Business Innovative Research (SBIR)

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- Advanced Secure Supervisory Control And Data Acquisition (SCADA)
- Cross-Domain Attack Correlation Technologies
- Real-Time Malicious Code Identification
- Hardware-assisted System Security Monitoring
- Network-based Boundary Controllers
- Botnet Detection and Mitigation
- Secure and Reliable Wireless Communication for Control Systems

# Acknowledgements

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- Program Committee
  - ◆ Full Paper and Extended Abstract reviews
- SRI
  - ◆ Jenny McNeill
  - ◆ Robin Roy
  - ◆ Gary Bridges
  - ◆ Robert Graham
- DHS
  - ◆ Jeri Hessman
  - ◆ Jennifer Mekis
  - ◆ Gregory Wigton
  - ◆ Kevin Thompson



# Agenda

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- Keynotes: Rep. James Langevin (D-RI)  
Pascal Levensohn, Levensohn Venture Partners
- Exposition today from 3-7 pm
- Panel: The Future Cyber Security R&D agenda
- Session 1: Botnets and Malware
- Session 2: Internet Routing and Security
- Session 3: Cybersecurity Research Infrastructure
- Session 4: Domain Name System Security (DNSSEC) and Data Visualization



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