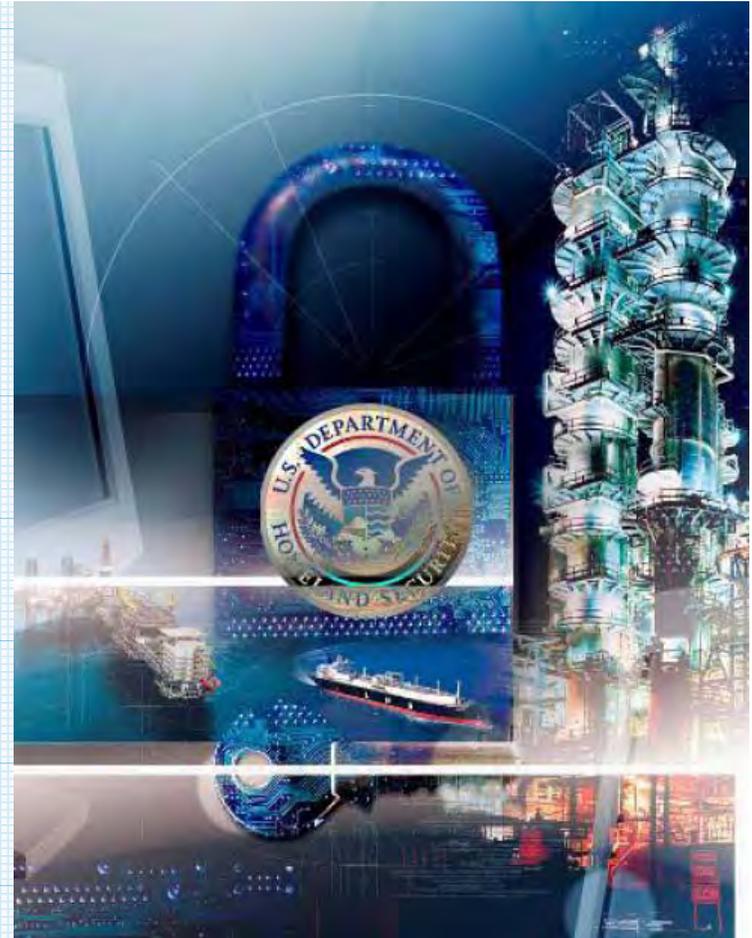




LOGIC – A Working Model for Government Industry Partnerships on Cyber Security

Rich Jackson
Chief Information Protection
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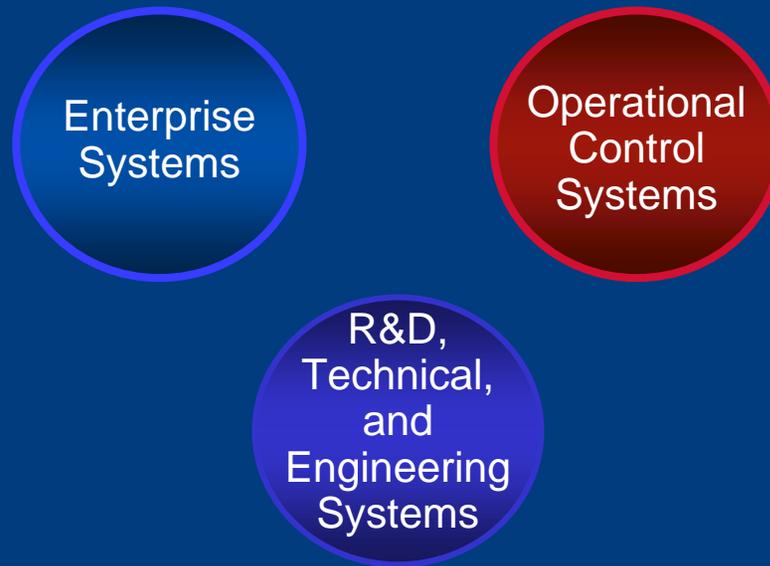


Outline

- The Cyber Security Imperative
 - Digital Intensity
 - Universal Connectivity
 - The Future
 - Implications
- Government – Industry Partnership
- Project LOGIC

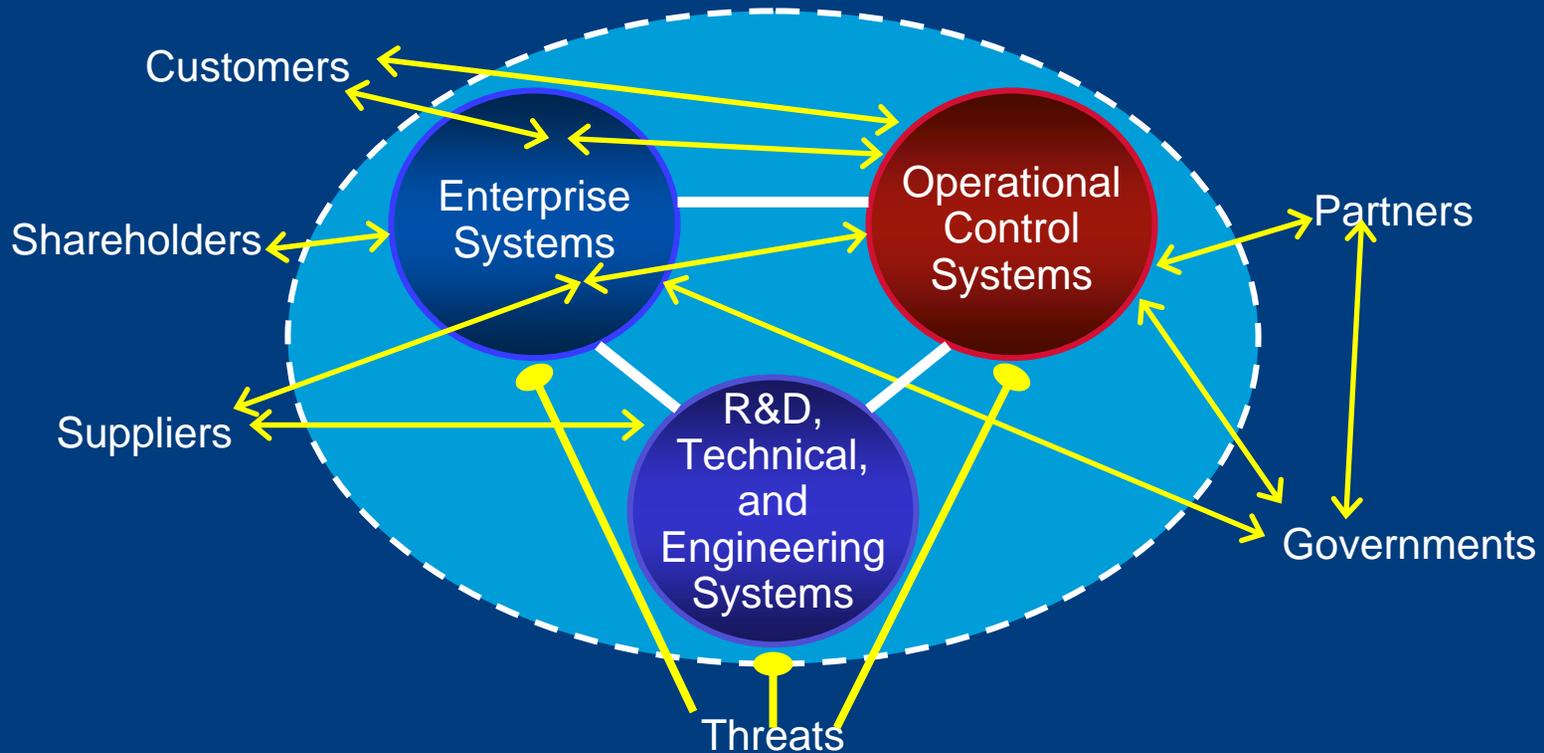
“It’s not just the Control System anymore” Integration and connectivity create a new world

Historically Separate Domains



“It’s not just the Control System anymore” Integration and connectivity create a new world

New Shared Domains



The Future – Only More So

- Increasing access and digital intensity
 - Advanced security and monitoring technologies
 - Digital Oil Fields
- Transformation of the Control System Architecture
 - Open standards in control networks (TCP/IP)
 - Standardized OS in control systems (Windows /Linux)
 - Open standards in information access (WEB)
 - Intelligent and IP enabled sensors
- Explosion of Consumers for Control System Data
 - Governments
 - Partners
 - Suppliers
 - Engineers
 - Business Managers and applications
 - Maintenance Personnel

Implications:

- Growing digital intensity, integration and connectivity can outflank organization and processes
- Stagnant Security posture increases risk and threat exposure
- Advancing cyber security together can take the industry to the next level of performance





Government – Industry Partnerships

Developing together the technologies and systems to protect the nations critical infrastructure

- Leveraging complimentary capabilities
- Building Synergies between different domains of expertise
- Sharing costs and information
- Accessing new technology and focusing R&D
- Access to government experts and labs
- Industry validated Government R&D efforts
- Influencing standards and designs
- Improving risk management process

Government – Industry Partnerships LOGIC

Linking the

Oil and

Gas

Industry to

Improve

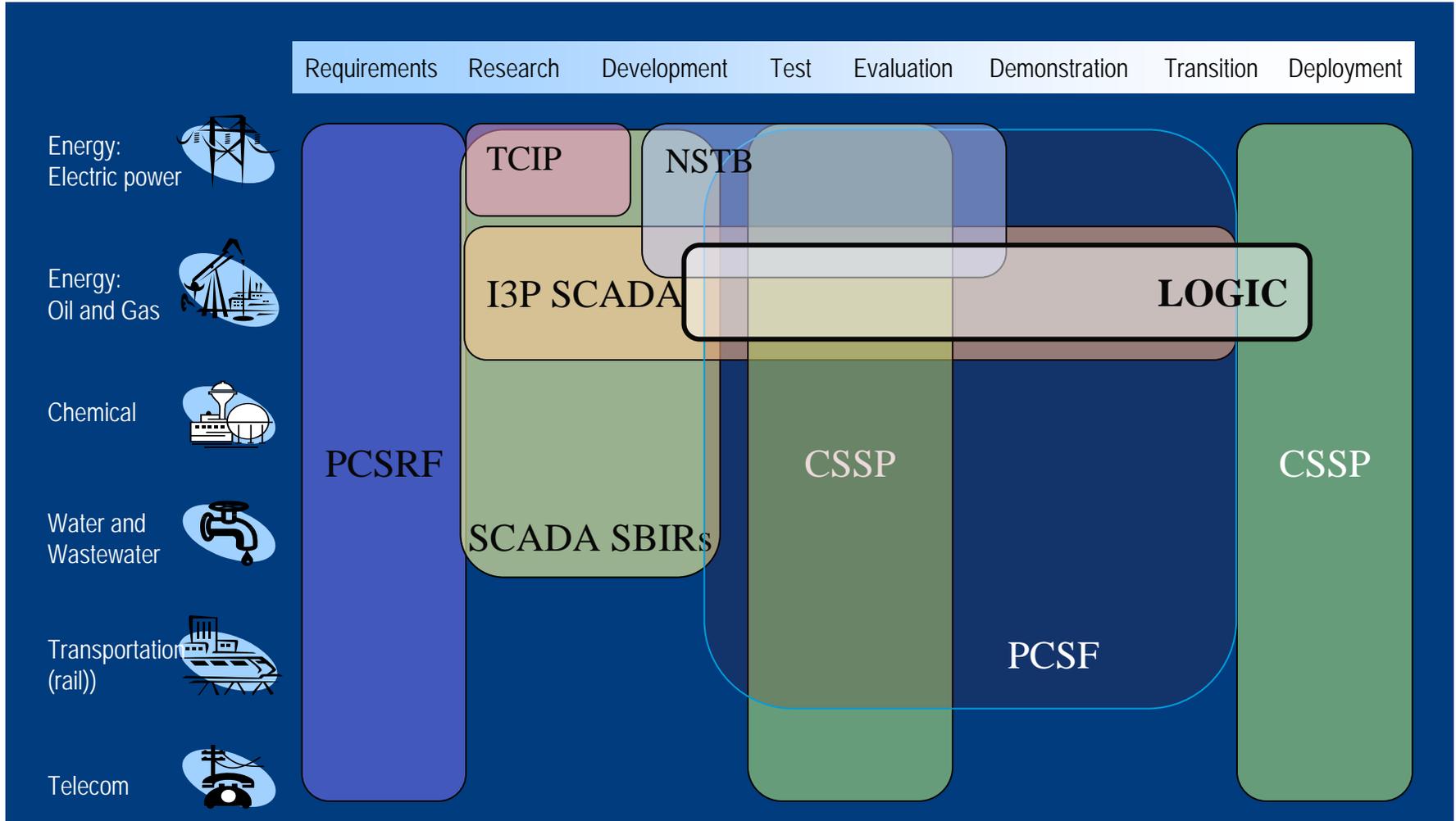
Cyber Security

It is a **forward looking opportunity** to reduce vulnerabilities of oil and gas process control environments.

Create a **working model** to leverage the collective resources of the Oil & Gas Industry, government agencies, and national laboratories for future cyber-security projects

LOGIC

Where it Fits





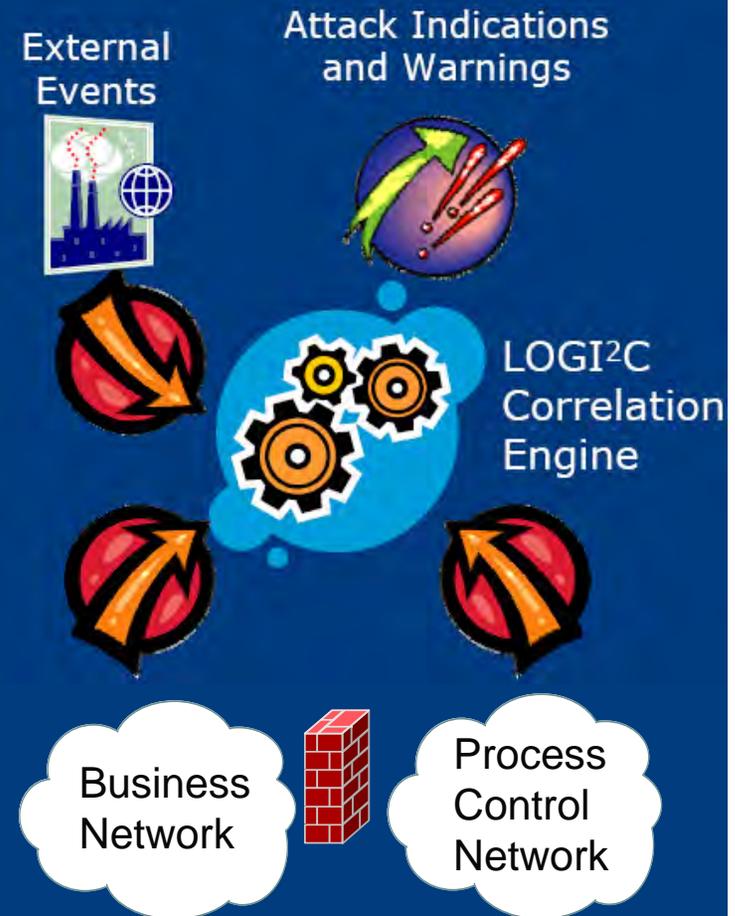
Project LOGIC – An Implementation of the Partnership Model

Project LOGIC is a 12-month technology integration and demonstration effort jointly supported by industry partners and the U.S. Department of Homeland Security (DHS)

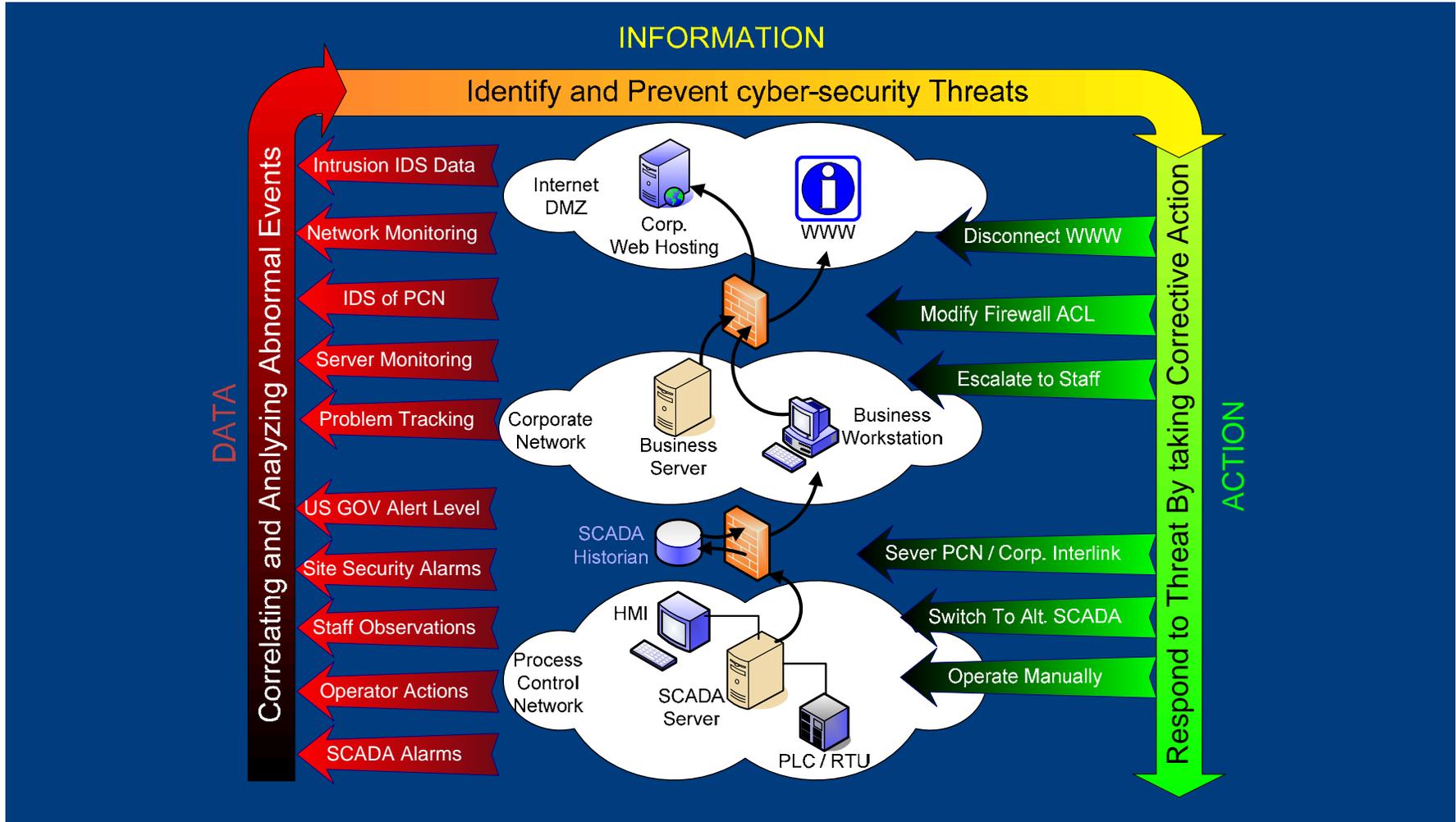


Project LOGIC Overview

- Technical goal: Achieve the ability to correlate abnormal events from the process control network and its interfaces to the business network.
- Technical Challenges:
 - Identify what abnormal events can be caused in a process control system
 - Detect the abnormal events caused by an adversary in a process control system.



Project LOGIC Overview





Project LOGIC Approach

- Identify typical O&G PCN environments.
- Simulate O&G PCN environments within Lab Constraints
- Identify attack scenarios for PCN environments
- Identify security sensors for use in PCN
- Adapt a best-in-class correlation engine to this environment
- Integrate in test bed
- Demonstrate attacks from corporate, public, partner, and PCN
- Produce solution that could be transferred to industry operations



Project LOGIC Technology Insertion

- Solicited solutions from leading PCN and security vendors
- Technology providers underwent intensive selection process base on
 - Alignment with project goals
 - Alignment with technology goals
 - Commercially off the shelf product
 - Willingness to partner with LOGIC team
 - Solution is deployable in near term from leading commercial solutions



Project LOGIC – Solution Building Industry, Government, and Technology Partners

Benefits:

- Industry specific solutions validated in lab
- Validate COTS security solutions for enterprise deployment
- Influence technology providers' product direction
- Pilot related R&D efforts in industry validated solution
- Transition research into field deployable solution
- Solidify a thought leadership position in the O&G Industry
- Provides direct interaction with real O&G Industry needs
- Focus R&D on those needs to:
 - Develop break-through industry validated solutions
 - Penetrate new vertical markets
 - Develop industry-specific solution framework for future sales



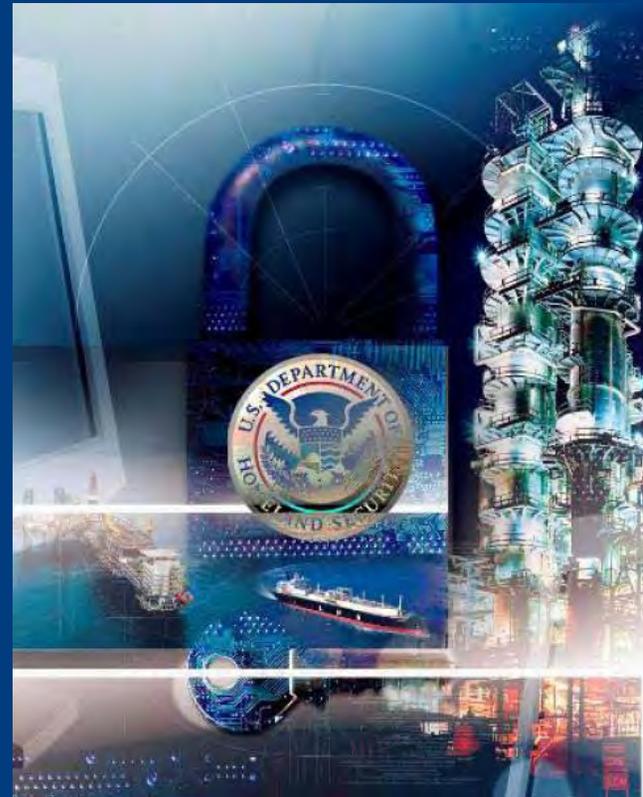
LOGIC

Keys to Success

- LOGIC is a working model for how DHS, Vendor Community and industry can work together in a public-private partnership to address a critical R&D need
- Mutual Interests
- Clear & Focused Goals
- Project Management Methodology
- Aggressive Timeframe with Key Milestones
- Executive Sponsors
- Effective Relationships
- Open Communications

LOGIC – Building Bridges Between Industry, Government, and Technology

Questions?



www.logicpcs.com