Emerging Trends in Port Security

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Overview

- The Challenge
- Emerging Trends—The Big Picture
- Trend 1: Regionalization & Coordination
- Trend 2: Enterprise Integration
- Trend 3: Cybersecurity

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The Challenge

- Normal port operations
- Access control
- Cargo scanning and security
- Port security
- Maritime Domain Awareness
- Continuity of operations and resumption of trade
- Interagency coordination
- Limited budget and resources
- Legacy systems
- Cybersecurity

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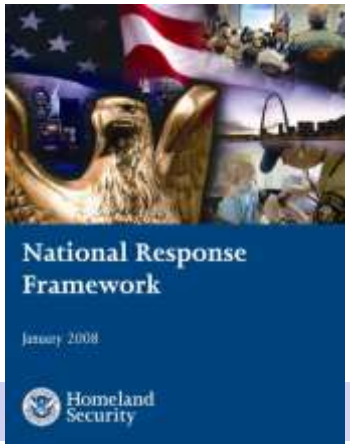
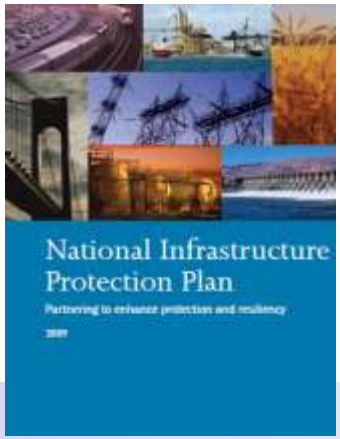
Emerging Trends—The Big Picture

- DHS Policies
  - National Response Framework (NRF)
    - Integration of federal, state, local, and private sectors
  - National Infrastructure Protection Plan (NIPP)
    - Sector-specific critical infrastructure guidance
    - Port Security Grant Program emphasis areas
  - Comprehensive National Cybersecurity Initiative (CNCI)
    - Supply-chain risk management and critical infrastructure





The Comprehensive National Cybersecurity Initiative

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Emerging Trends—The Big Picture (cont.)

- Business Drivers
  - Economic viability
  - Multi-function systems
  - Limited IT budgets
- Operational Imperatives
  - Effective port operations
  - Effective and timely situational awareness and response
  - Smooth transition to emergency operations
  - Right information to the right people under all conditions

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Emerging Trends—The Bottom Line

- Securing critical infrastructure such as ports from both physical and cyber attack
- Coordination between federal, state, regional, local, and private sector agencies for situational awareness, response, and recovery capabilities
- Seamless integration of normal and emergency operations

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Trend 1: Regionalization & Coordination

- Many potential security partners
  - Sector command centers (SCCs)
  - Joint Harbor Operations Centers (JHOCs)
  - Regional emergency management agencies (EMAs)
    - Urban Areas Security Initiative (UASI) regions
    - Municipal EMAs
  - Security and response agencies
    - Harbor police
    - Municipal police, fire, EMS
    - County agencies
    - State and federal agencies

-- *Necessity to tailor coordination to each port*

Trend 2: Enterprise Integration

- Stand-alone (point) solutions less effective, increase expense
- Separate normal and emergency operations systems sub-optimal
  - Drives up expense, maintenance, training
  - Lowers responsiveness and effectiveness
- Same subsystems common to both normal and emergency ops
  - Situational awareness, command and control
- Sensor fusion, intelligence fusion, comprehensive Common Operating Picture (COP)

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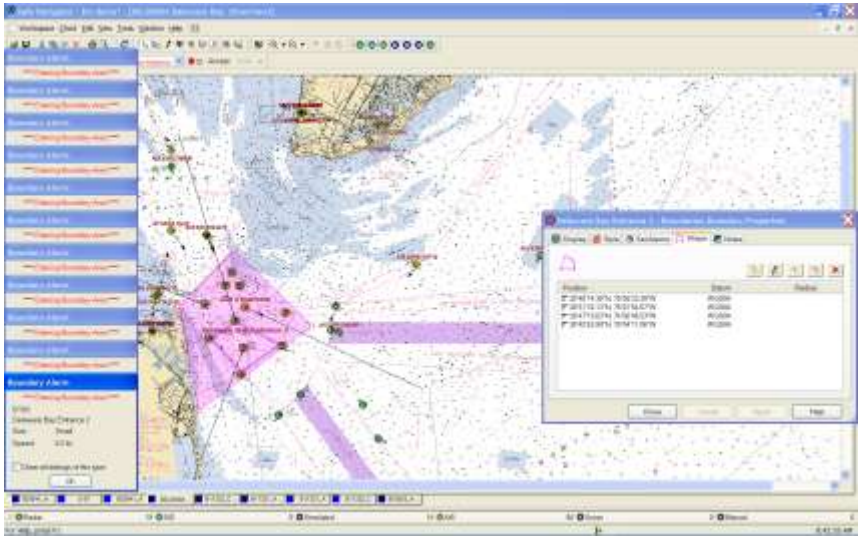
Technology Solution: PSIM Platforms

- Physical Security Information Management (PSIM)
  - Manage disparate systems from one platform
  - Integrate separate security systems into a single COP
  - Coordinate with multiple agencies
  - Provide intelligent workflow



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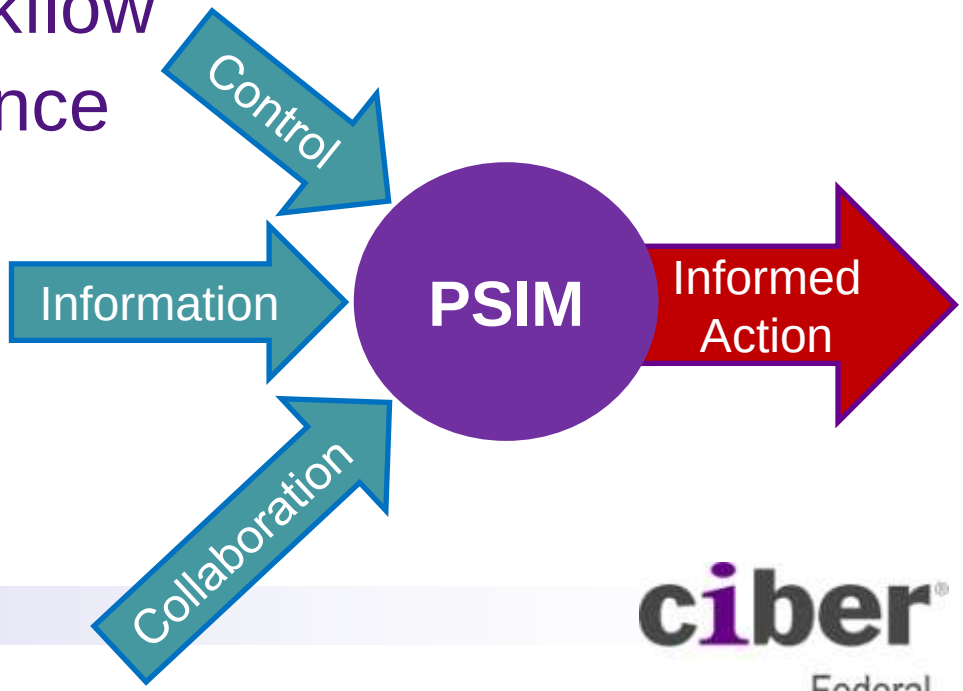
PSIM Qualities

- Integrated data collection
- Intelligent analysis and correlation
- Real-time situational awareness and decision support
- Intelligent process workflow
- Reporting and compliance
- Vendor independent



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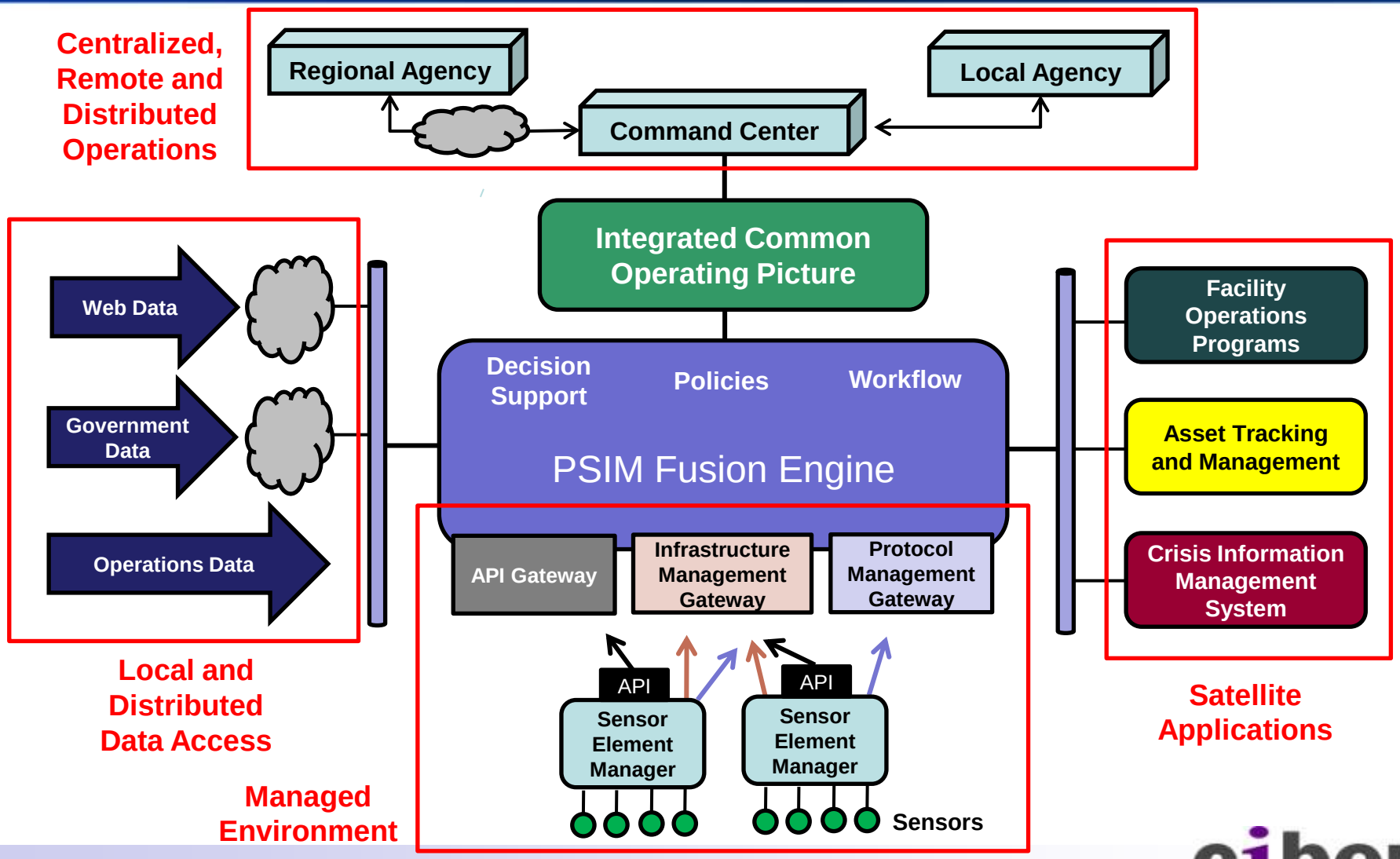
The PSIM Enterprise Solution



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Trend 3: Cybersecurity

- Synonymous with Information Assurance (IA)
- Basic elements:
  - Availability, integrity, authentication, confidentiality, and non-repudiation of information and information systems
  - Includes providing for restoration of information systems by incorporating protection, detection, and reaction capabilities

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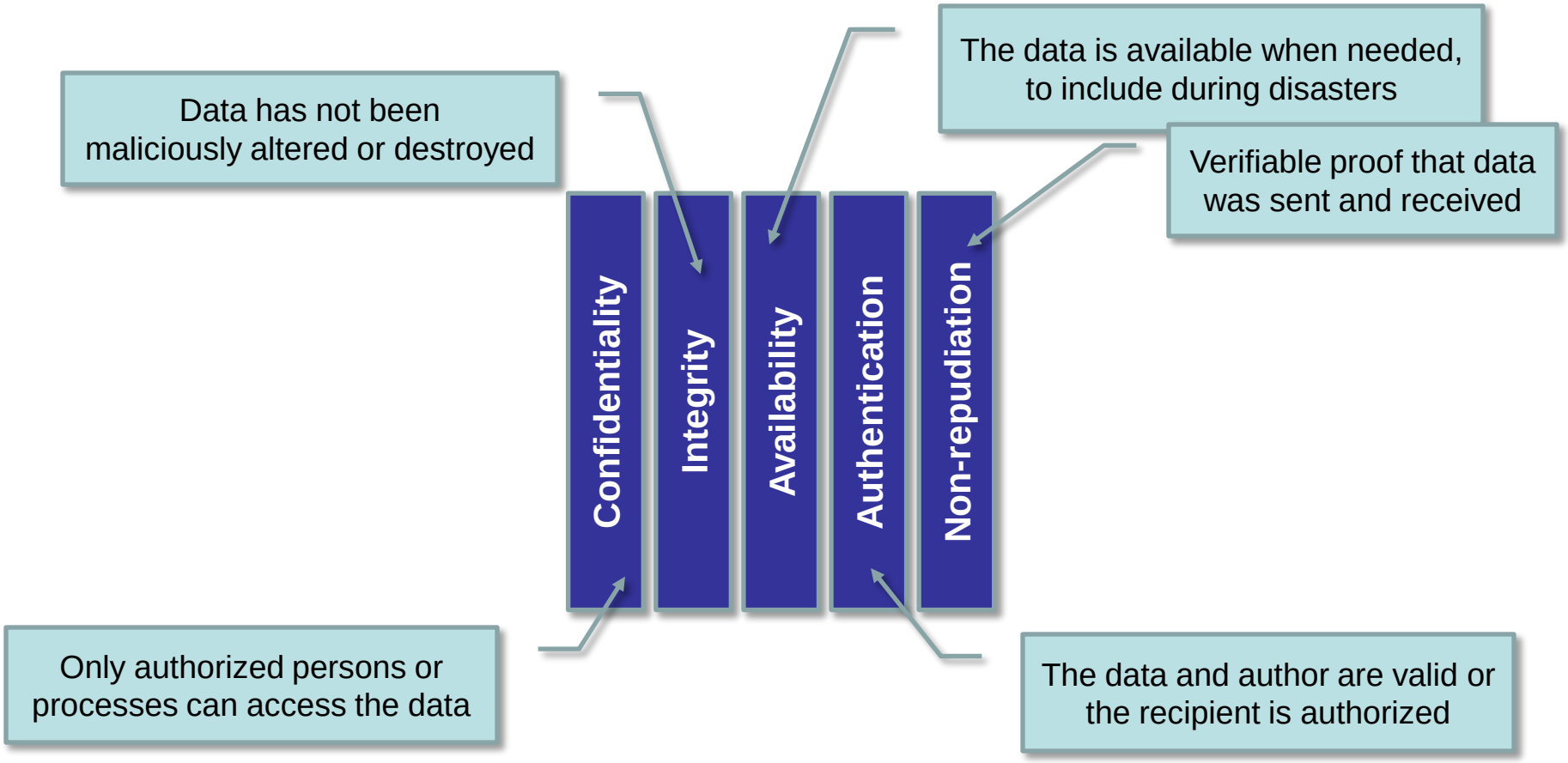
The Five Pillars of Cybersecurity (IA)



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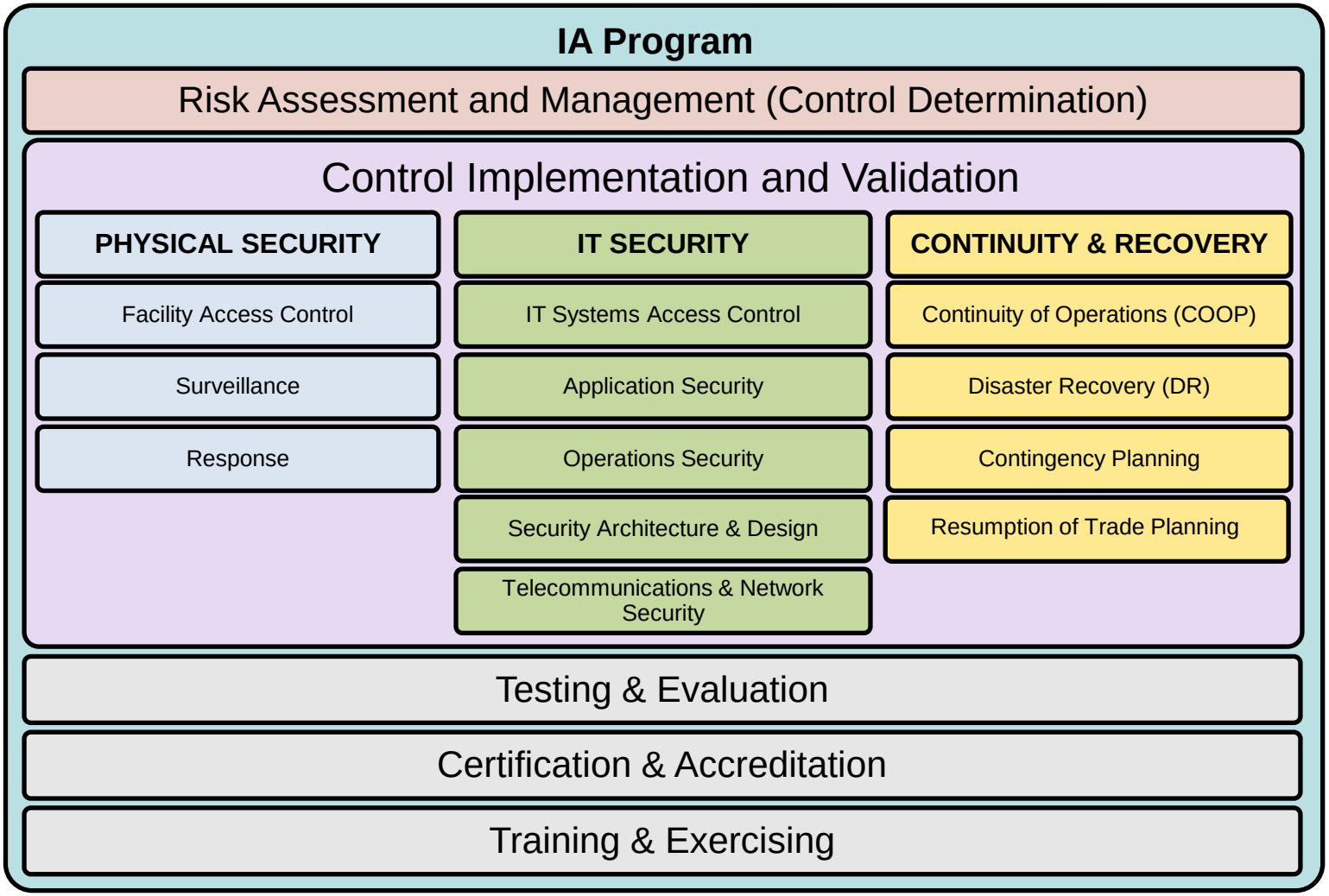
It Takes Much More than IT Security



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Cybersecurity Measures

- Build security standards into products
- Use enterprise approach
  - As strong as the weakest link
- Apply comprehensive risk management to identify and tackle biggest issues
- Refer to National Institute of Standards and Technology (NIST) security control standards for comprehensive approach

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PSGP Authorized Equipment List

[05] Cyber Security Enhancement Equipment

- [05AU-00-BIOM] Device, Biometric User Authentication
- [05AU-00-TOKN] System, Remote Authentication
- [05EN-00-ECRP] Software, Encryption
- [05EN-00-ETRN] Encryption, Data Transmission
- [05HS-00-FRNS] Software, Forensic
- [05HS-00-MALW] Software, Malware Protection
- [05HS-00-PFWL] System, Personal Firewall
- [05NP-00-FWAL] Firewall, Network
- [05NP-00-IDPS] System, Intrusion Detection/Prevention
- [05NP-00-SCAN] Tools, Network Vulnerability Scanning
- [05NP-00-SEIM] System, Security Event/Incident Management
- [05PM-00-PTCH] System, Patch/Configuration Management

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