Increasing Competitiveness / Lowering Costs with Supply Chain Management and Security Standards

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Overview

- Supply Chain Security Basics

- Stakeholders

- Key Programs, Purposes, Responsibilities

- Trends

- Increasing Competitiveness and Lowering Costs

- Questions?

SURGE *logistics* Introduction

- Supply Chain / Trade / Transportation / Border Security Solutions Provider

- Global Public / Private Sector Experience
    - CEO of Cotecna, Inc., Global Supply Chain Security portfolio
    - General Manager of Cargo Security Programs, Director of Maritime Security at TSA
    - US Department of Defense, Unified Commands, US Navy, International Programs

- Core Expertise
    - US Government Cargo, Transportation and Border Security Programs
    - International government and private sector cargo and border security programs
    - Cargo, Transportation and Physical Security Technology and Process

- Government and Private Sector Services
    - <u>Supply Chain Security and Logistics Service Provider</u>

        - Advisory and Consultative Services
        - Problem Identification and Security Solution Development
        - Compliance program implementation and verification, assessments, corporate security reviews
        - Training and Exercises
        - In-Transit Visibility / Asset Tracking Service
        - Technology Selection: Tracking / ITV systems, scanning and detection systems, physical security

    - Business Development Support: Identify and select customers, develop and implement strategies to win
    - Program Management: Service delivery, implementation and outcome management

Global Supply Chain Vision

- Provide <u>uniformity and predictability</u> to the global trade environment by:

    - <u>Safeguarding the end-to-end security</u> of the trade supply chain and
    - <u>Facilitating the passage of legitimate goods</u> through Customs control.

- <u>Improving security</u> and <u>increasing performance</u>

World Customs Organization: SAFE Framework / US CBP C-TPAT Strategy
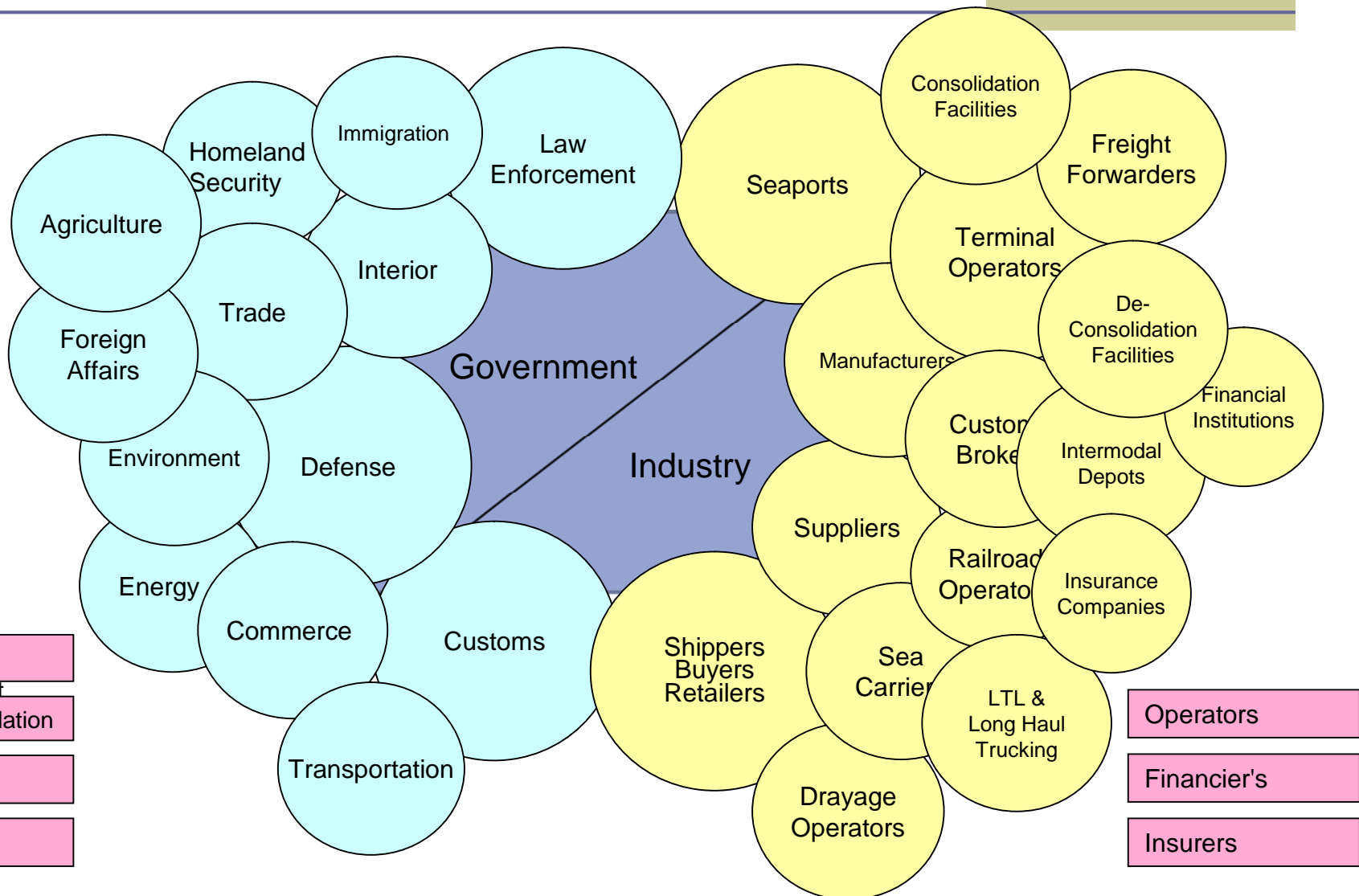
Supply Chain Security Basics

- **Efforts to Protect Cargo, Transportation and Logistics Systems From Exploitation by Criminal Activities**

  - **Five pillars**
    - Awareness -- Identify / understand threats, assess vulnerabilities, determine potential impacts and consequences
    - Prevention — Detect, deter and mitigate threats
    - Protection — Safeguard people, critical infrastructure, property from criminal acts
    - Response — Manage and coordinate the response to criminal acts or emergencies.
    - Recovery — Manage efforts to restore operations after criminal acts or other emergencies

  - **Cargo = all types:** Container, Bulk, Ro-Ro
  - **Conveyances = all conveyances:** Maritime, Rail, Air, Highway, Pipelines
  - **Activities = all locations within the chain**
  - **Involves a layered combination of activities focused on:**
    - Ensuring the integrity of the cargo
    - Ensuring the integrity of the conveyances
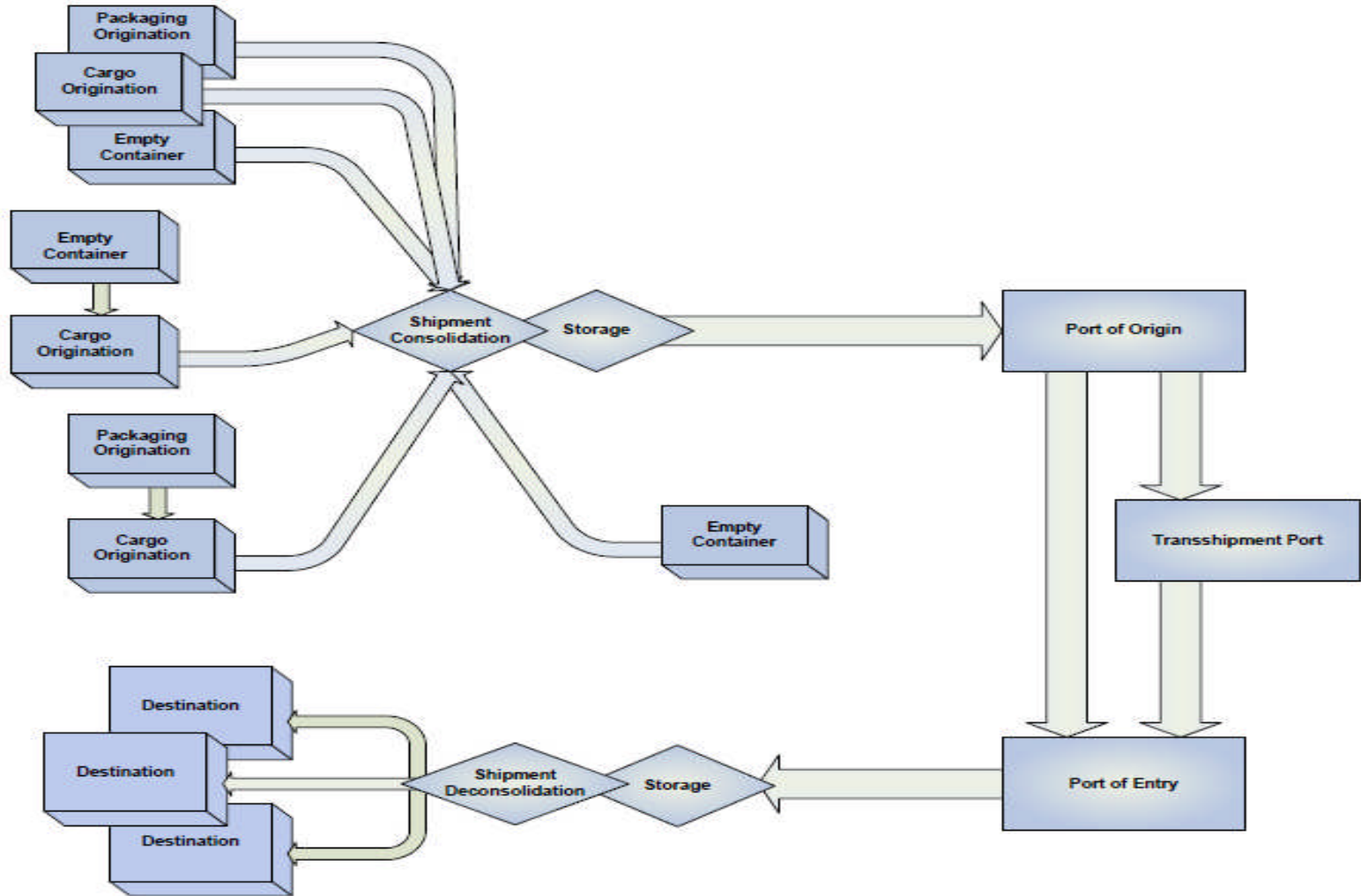   - Ensuring the integrity of transactional trade data

Risk-Based / Layered Security

- Security investments will generally be based on perceived or actual 'Risk'
    - Risk Equation: Risk = Threat X Vulnerability X Consequence (R=TVC)
- Layered Security is the most effective approach to attain objectives
- Security foundation is built on assessment. First step to determine need is to conduct an 'assessments' in accordance with a compliance program
- Assessment identifies areas to focus on for risk mitigation.
- Key areas of assessment include:
    - Physical Security
    - Information Security
    - Personnel Security
    - Procedural Security
    - Conveyance Security
    - Container / Cargo Security
    - External Services Security

Supply Chain Stakeholders

Government:
- Agriculture
- Homeland Security
- Immigration
- Law Enforcement
- Interior
- Trade
- Foreign Affairs
- Environment
- Defense
- Energy
- Commerce
- Customs
- Transportation

Industry:
- Seaports
- Consolidation Facilities
- Freight Forwarders
- Terminal Operators
- Manufacturers
- De-Consolidation Facilities
- Custom Brokers
- Financial Institutions
- Intermodal Depots
- Suppliers
- Railroad Operators
- Insurance Companies
- Shippers Buyers Retailers
- Sea Carriers
- LTL & Long Haul Trucking
- Drayage Operators

Law Enforcement
Policy / Regulation
Compliance
Collection

Operators
Financier's
Insurers

Typical International Container Supply Chain

Example Program Types

- Compliance Programs: Customs-Trade Partnership Against Terrorism and similar
- Certification Programs – ISO 9001, 14000, 26000, 27000,
- Technology Standardization Programs – (Container, Seals, RFID),
- Container Security Devices: SAFE Port Act
- Customs Requirements: 24 Hour Rules / Advanced Manifest Information
- Container X-Ray Scanning Programs
- Container Radiological Detection Programs
- Certified Cargo Screening Program – Air Cargo
- International Ship and Port Facility Security (ISPS) Code Requirements
- Transportation Worker Identification and Credentialing
- HAZMAT / Dangerous Cargoes Driver Programs
- HAZMAT / Dangerous Cargoes Tracking Programs
- Incident Recovery Programs
- National and International Research Initiatives
- National Strategic Plans

Trends

- Government and Industry compliance programs – Mutual Recognition
- Insurance Company involvement, discounts
- Pushing requirements down the supply chain – to manufacturers, Biz-partner certifications
- <u>Maximizing use of data</u> to strengthen and streamline operations
- Overlap with Narco-Terrorism, Human Smuggling, Weapons Trade
- Third party assessments
- Known, trusted, certified shipper programs
- In-Transit Visibility & Cargo tracking
- Hazardous material management
- Personnel security – vetting and background checks
- Access control and biometrics
- Security AwarnessTraining
- 100% scanning legislation – sea and air
- Radiation Detection
- Cost Transfer from Government to Private Sector
- Cost Transfer from national governments to local

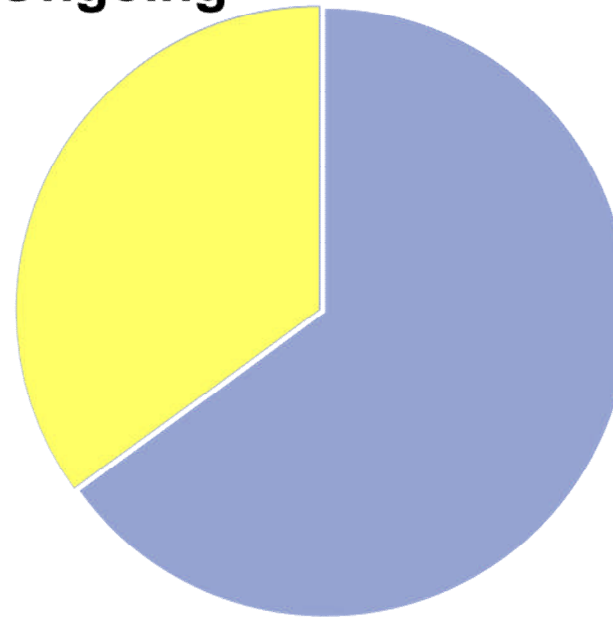# Indicative Responsibility Shift

Post 9-11
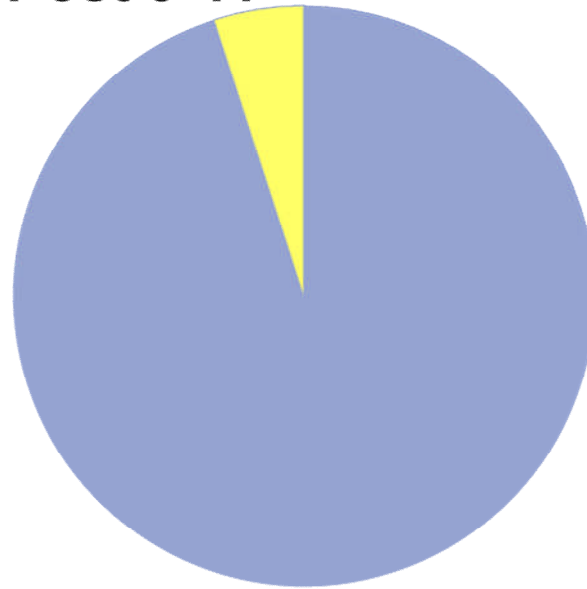
- Government
- Industry

Ongoing

- Government
- Industry

Compliance Programs, Cargo Screening Programs, Background Checks, Business Partner Verifications

Business and Government Relevance

- **Government shift to private sector**
  - Operational problems better understood
  - Budget: too expensive, requires too many resources
  - Coverage: not enough bandwidth, problem's too big
  - International Nature: extended supply chains, multiple jurisdictions

- **Private Sector Self Interest**
  - Operating costs
  - Insurance
  - Global Economy: Business partner requirements
  - BOTTOM LINE

Security Investment Value - ROI

Security Investment	Direct Benefits	Collateral Benefits
Asset Visibility and Tracking	- Provide positive location status - Breach detection / localization - Provide time-definite and controlled chain of custody	- Reduced theft and losses - Faster recalls - Fewer delayed shipments - Increased efficiency - Reduced working capital for inventory - Less Overages, Shortages, and Damages (OS&D) - Protection of brand name
Personnel Security	- Thorough background check minimizes unreliable employees - Improves safety, reliability - Decrease theft, workplace criminal activity	- Customer loyalty - Increased sales revenues - Higher market share - Employee commitment
Physical Security	- Controls authorized access - Protection of intellectual property - Protection of equipment and personnel - Protection of product integrity, safety	- Customer recognition of safe and secure environment - Increased loyalty - Fewer thefts and reduced damage - Lower operating costs (lower insurance rates) - Fewer safety incidents
Compliance Program and Management Standards	- Coordination of company activities - Increased Awareness - Greater reliability / repeatability - Improved breaches detection - Higher levels of security and safety - System-level and supplier security improvement	- Improve the efficiency of operations - Reduced overall shipping times - Platform for collaboration within industry - Common processes reduce confusion, raise predictability - Reduced losses

*Investing in Supply Chain Security: Collateral Benefits; Integrated Supply Chain Management Program, Center for Transportation and Logistics Massachusetts Institute of Technology (James B Rice, Jr., May 2005)

Security Investment Value - ROI

| Security Investment	Direct Benefits	Collateral Benefits
Conveyance Security	▪ Reduce theft losses ▪ Reduce adulteration of produce ▪ Reduce chance of using conveyance or vessel as a weapon ▪ Protect conveyance or vessel	▪ Cost avoidance of non-product-related costs ▪ Reduced crime and vandalism rates ▪ Fewer disruptions to supply chain, associated cost savings ▪ Less capital in inventory ▪ Reduced transportation cycle time
Supplier Selection	▪ Ensure secure supply of materials ▪ Early warning of upstream security issues ▪ Reduced upstream and inbound losses	▪ Lower inspection costs ▪ Faster throughput ▪ Increased efficiency through joint planning ▪ Improved relationships
Information Security	▪ Improved coordination ▪ Improved supply chain efficiency, reliability ▪ Intellectual property protection ▪ Financial security	▪ Improved communications ▪ Enhanced response time ▪ Competitive advantage ▪ Brand protection
Technology Investments	▪ Increased ability to track, monitor cargo ▪ Early threat detection ▪ Increased reaction time to problem solve ▪ Reduced loss ▪ Better inventory management	▪ Increased process efficiency ▪ Reduced loss ▪ Insurance rate benefits ▪ Fewer disruptions ▪ More time spent on value added processes

Primary Security Investment Areas

- **Consulting and Advisory Services**
  - Strategy, Problem Identification and Solutions
- **Management and Compliance Standards**
  - ISO 9001, 14001, 27001, 28000, C-TPAT, AEO, BASC
  - Assessment, Audit, Validation and Implementation
- **Training and Exercises**
  - Security Awareness Training, Crisis Management Exercises
- **Cargo Tracking, Visibility and Chain of Custody**
- **Personnel Security**
- **Physical Security: Perimeter, Access Control**
- **Container Security**
- **Scanning and Inspection**
  - Industry dependent
  - Explosives, narcotics, radiation, chemical, biological

Private Sector: Where to Invest

- Dual Purpose activities that directly enhance <u>both security and efficiency</u>

- Compliance and Management Programs – methodology used to identify and manage areas of both operational and security risk
  - Prioritize Information, personnel, physical, business partner security
  - Orient activities toward loss prevention. Activities will meet:
    - Anti-terrorism needs of government
    - Loss mitigation for insurance companies
    - Make the biggest improvement to bottom line
- Technology – as a means to
  - Deter, Detect, Protect, Collect
- Information Management
  - Information Management and Security will have tremendous trickle-down

SURGE Proprietary

The Common Thread
Data, Information and Knowledge:
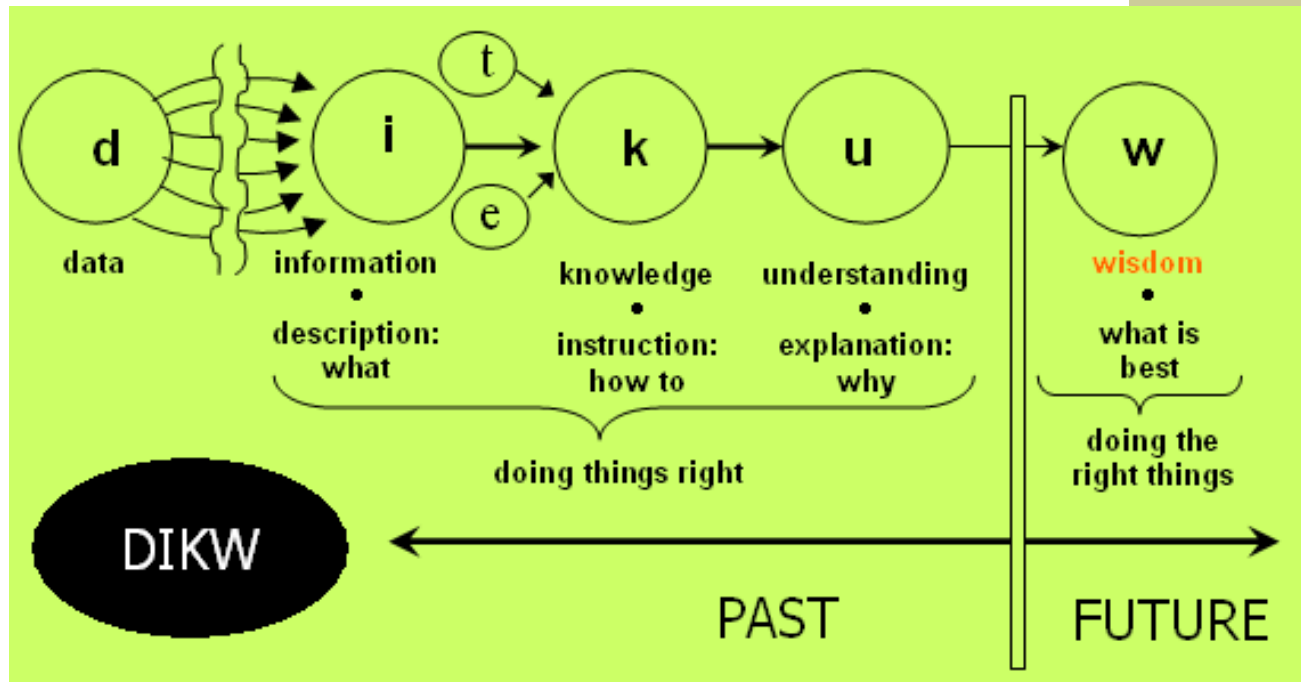
- Data -> Information -> Knowledge -> Understanding -> Wisdom
  - Your data is valuable in many ways
  - Learn what to collect and how to collect it and
  - Turn in it to actionable information in the context of your operations to
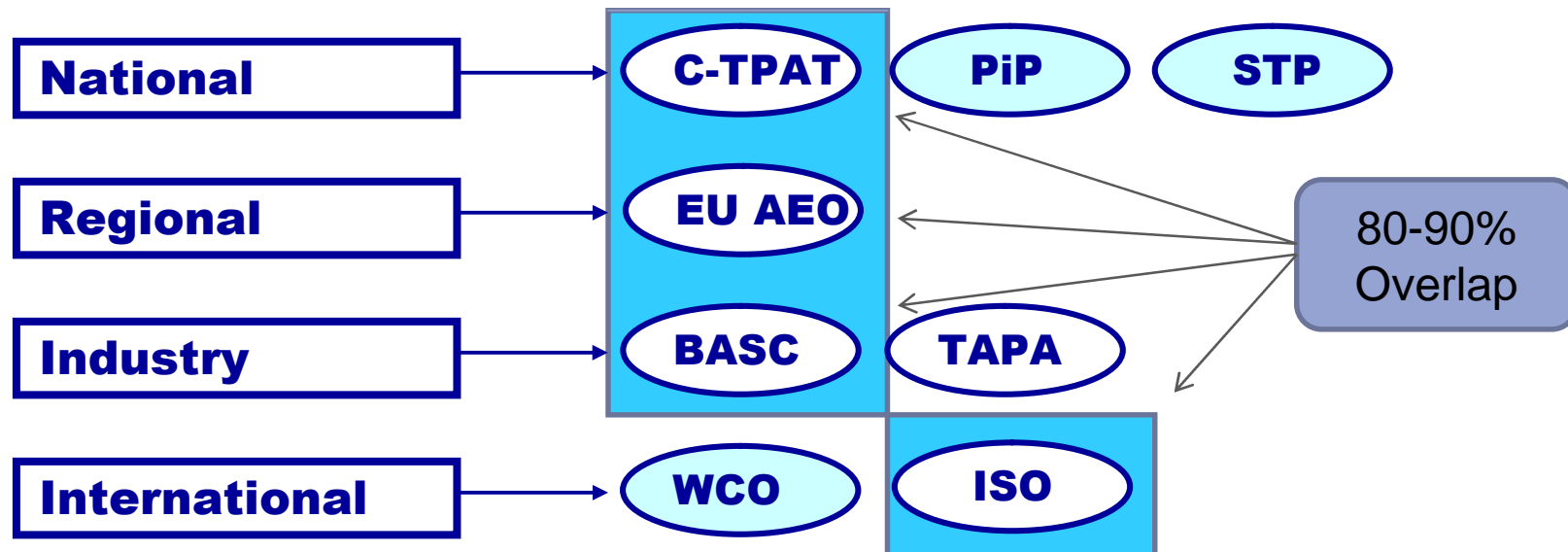
Compliance Programs & Standards

Supply Chain Security standards are now global in nature, and expected by both government and industry. They are essential to maintaining competitive advantage.

National	→	C-TPAT	PiP	STP

Regional	→	EU AEO

Industry	→	BASC	TAPA

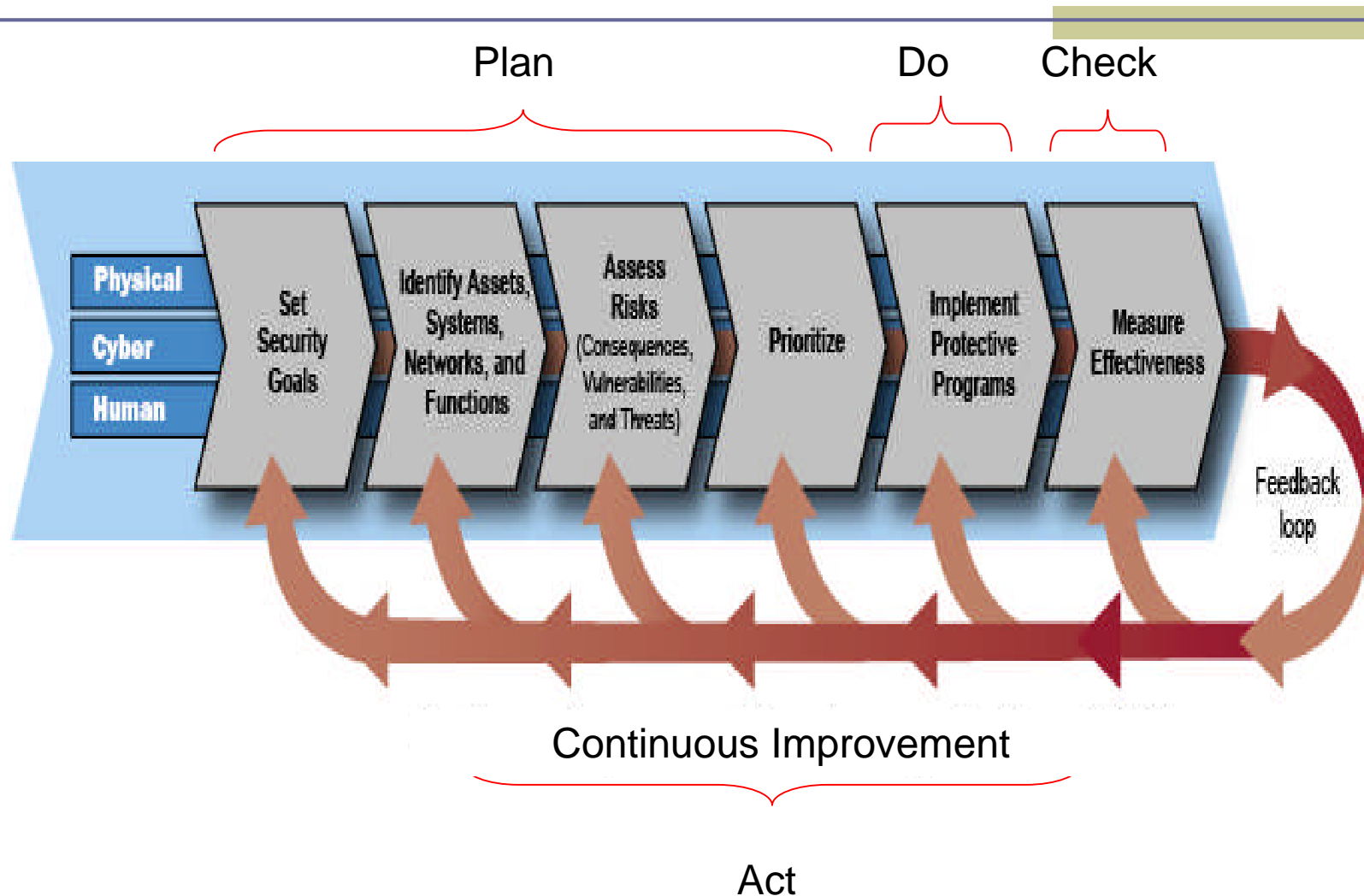| International	→	WCO	ISO
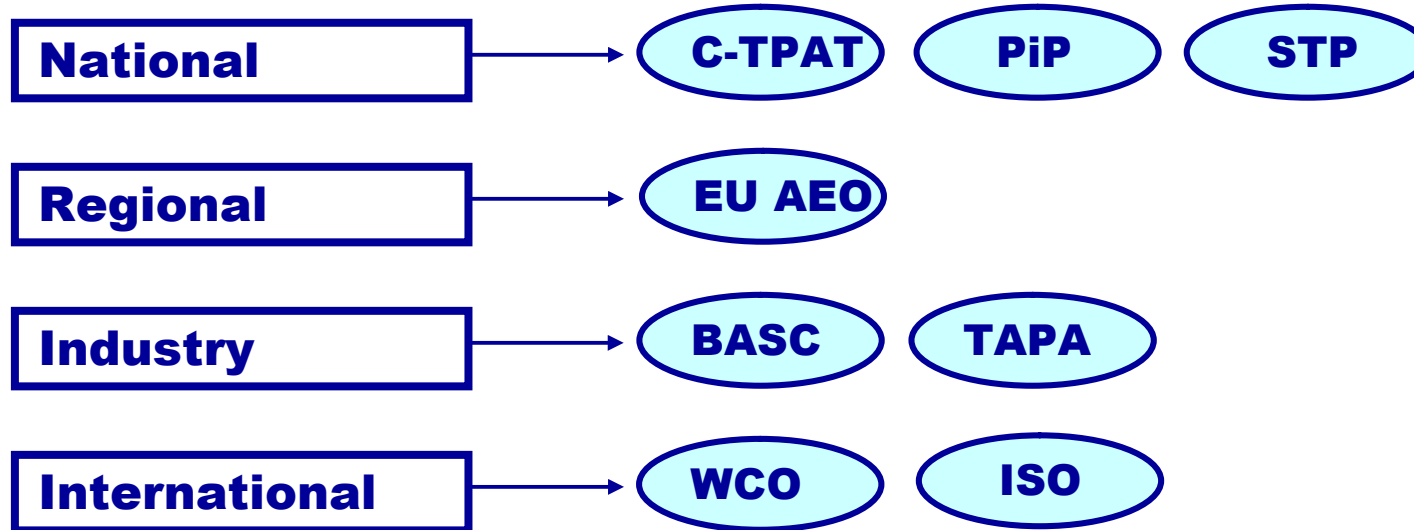
Implementation Planning

Mutual Recognition has not been fully implemented, however, due to the commonality multiple compliance programs can be economically implemented concurrently and give private sector operators a competitive advantage while enhancing security and efficiency.
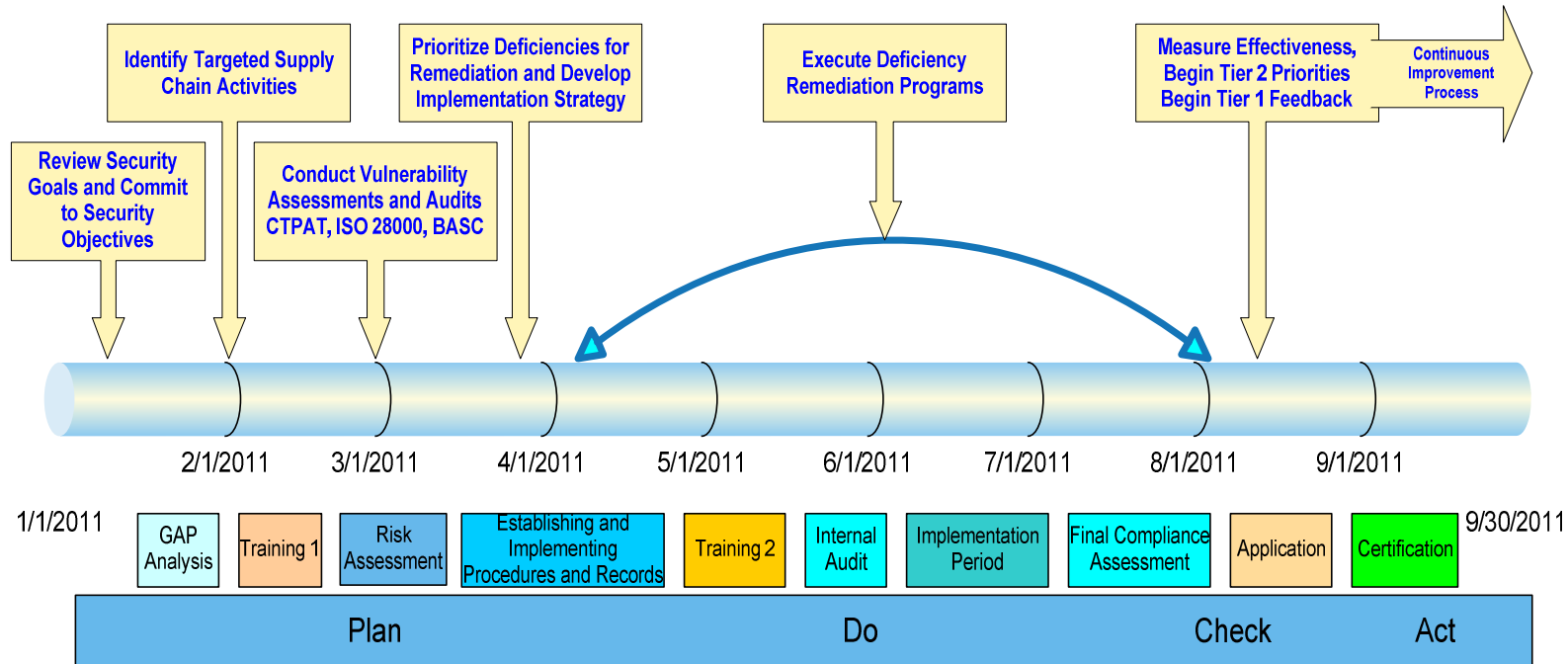
National → C-TPAT   PiP   STP

Regional → EU AEO

Industry → BASC   TAPA

International → WCO   ISO

80-90% Overlap

ISO Management Standards / Security Risk Planning: Similar Methodology

Current Implementation Strategy – Multiple Standards

Integrated Supply Chain Security Program Implementation – Security Foundation

Identify Targeted Supply Chain Activities

Prioritize Deficiencies for Remediation and Develop Implementation Strategy

Execute Deficiency Remediation Programs

Measure Effectiveness, Begin Tier 2 Priorities Begin Tier 1 Feedback

Continuous Improvement Process

Review Security Goals and Commit to Security Objectives

Conduct Vulnerability Assessments and Audits CTPAT, ISO 28000, BASC

2/1/2011   3/1/2011   4/1/2011   5/1/2011   6/1/2011   7/1/2011   8/1/2011   9/1/2011

1/1/2011

9/30/2011

| GAP Analysis | Training 1 | Risk Assessment | Establishing and Implementing Procedures and Records | Training 2 | Internal Audit | Implementation Period | Final Compliance Assessment | Application | Certification |

| Plan | Do | Check | Act |

ROI Examples

- <u>Studies show examples of quantifiable benefits</u>:

  - Reduced their Customs inspections by 48%;
  - Increased the automated handling of their imports by 43%;
  - Saw a 29% reduction in transit times;
  - Improved their asset visibility in the supply chain by 50%;
  - Improved on-time shipping to customers by 30%;
  - Reduced time taken to identify problems by 21%;
  - Reduced theft in inventory management by 38%;
  - Reduced excess inventory by 14%; and
  - Reduced customer attrition by 26%.
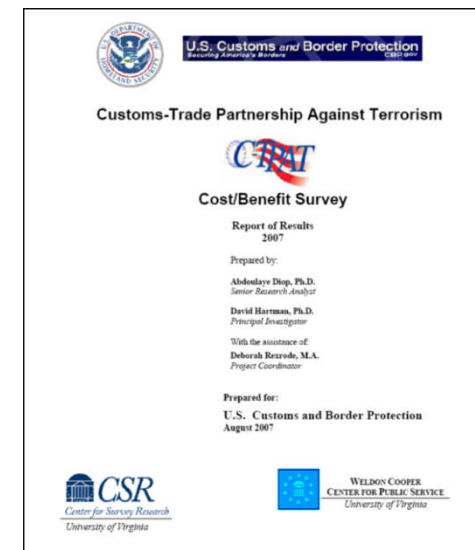
Public Sector: Where to Invest

- Develop Partnership opportunities with the Public Sector:
  - Buy-in and cost sharing: Force Multiplier
  - Develop Compliance programs that leverage and support Private Sector programs
- Incentives
- Personnel credentialing and vetting / records checks
- Surveillance activities
- Intelligence –outside the private domain, BIG Return on Investment
- Detection activities that private sector cannot afford or manage risk
  - Cargo screening: equipment intensive and liability-heavy
- Critical infrastructure protection: ports, airports, bridges, tunnels
- Recovery activities
- Technology R&D, introduction

Thank You!

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