



DoD Radio Frequency Identification  
Update:  
Land and Maritime Supplier  
Conference

August 28 - 30, 2006

# Transformation is a Requirement



**“...Radio Frequency Identification (RFID) will play a key role in achieving the Department’s vision for implementing knowledge-enabled logistics support to the warfighter...”**



Quadrennial Defense Review Report, February 6, 2006

**The static approaches of the Cold War are obsolete.**

# The RFID Vision



Implement knowledge-enabled logistics through fully automated visibility and management of assets in support of the warfighter

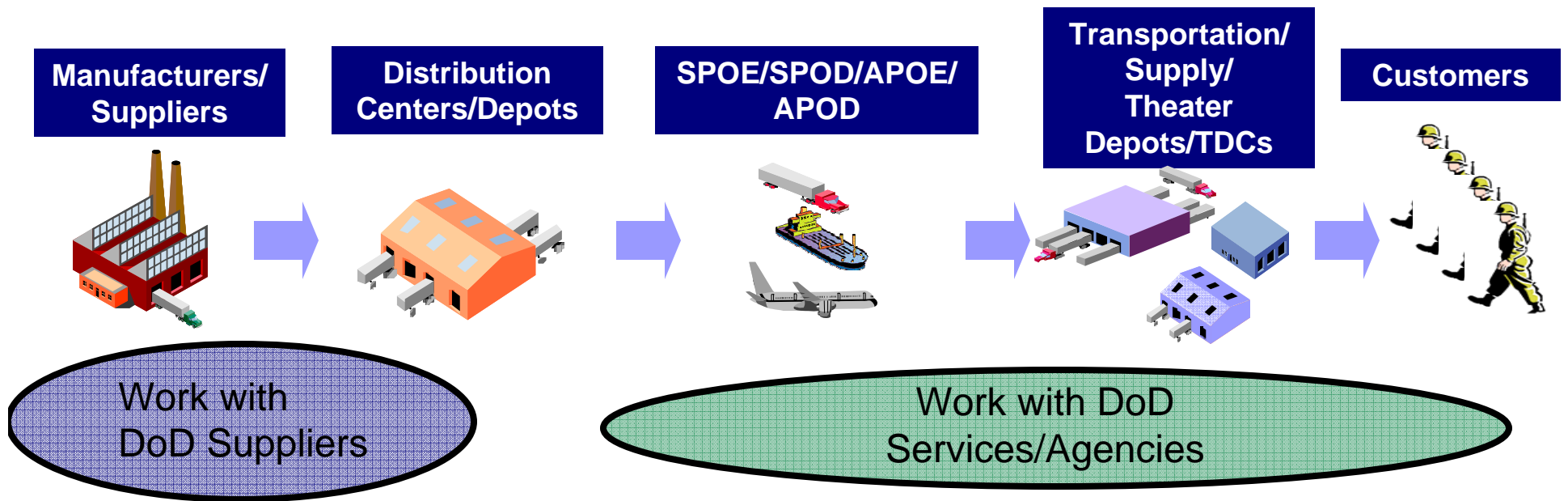


Make the Supply Chain an Offensive Weapon

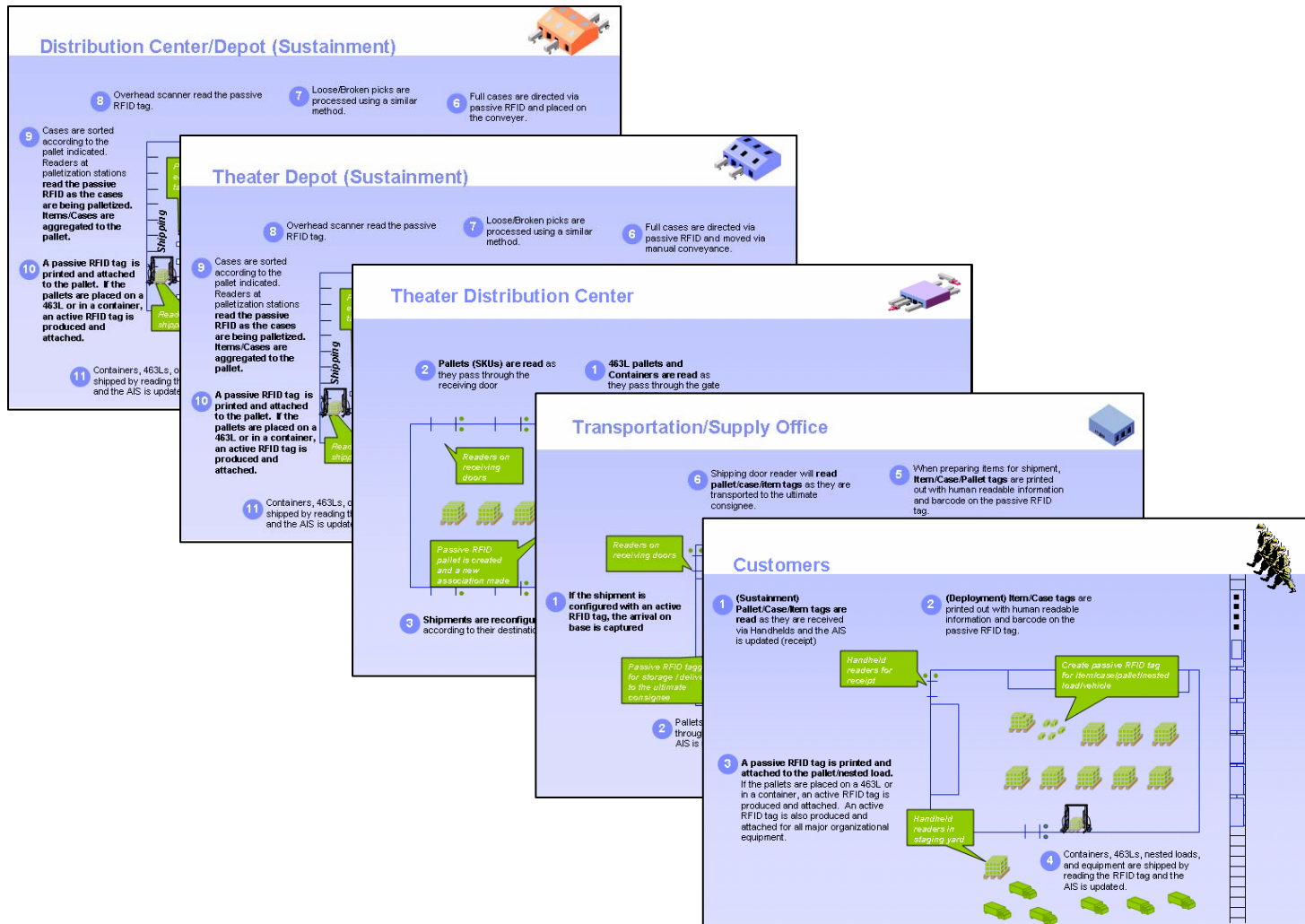
However we are still facing old challenges...



# End-to-End RFID enabled DoD supply chain



# RFID will enable distribution centers, customer sites, etc.



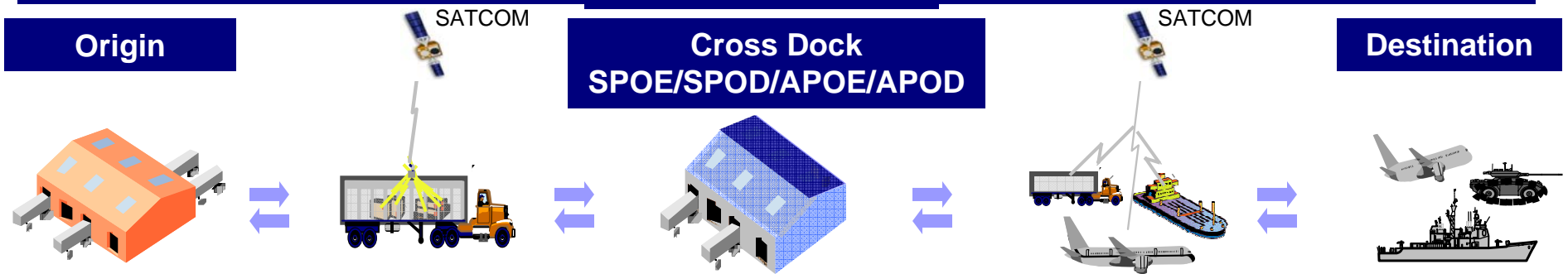


# Goal: An Integrated Supply Chain



## Integrated Data /Asset Visibility

### Communication Link



#### Benefits

- Accurate and timely data capture
- Labor savings

#### Benefits

- Improve In-transit visibility
- Improve destination load planning

#### Benefits

- Reduce shrinkage
- Automated ID of misrouted material
- Improve visibility

#### Benefits

- Improve In-transit visibility
- Improve destination load planning

#### Benefits

- Improve confidence in supply system
- Automatic receipt
- Improve visibility

# RFID Policy Scope & Standards



## Active RFID – In-transit visibility of consolidated shipments

- 433 Mhz readers & tags
- DoD tag data formats
- Suppliers rarely obligated to apply tags
- *No wide scale commercial use*



## Passive RFID – Visibility and Automated Processing at box and pallet level

- EPCglobal Class 0 and Class 1 (both Gen 1 and Gen 2) readers & tags
- EPC tag data formats (includes DoD tag data construct)
- Suppliers contractually obligated to tag
- *Wide scale commercial implementations*





# Passive EPC RFID Status



## ■ 2005 Accomplishments

- Initial DFARS clause effective Nov 14 , 2005
- Two key depots are operational
- RFID data requirements have been incorporated into Wide Area Workflow (WAWF)
- RFID tagged shipments are being processed

## ■ 2006 Plans

- Synchronize Component Plans and ensure Component funding
- Instrument 16 CONUS distribution centers
- Implement 3 AMC aerial ports
- Implement initial RFID related data architecture
- Issue 2006 DFARS (additional commodities/sites)



# Contractual Requirements

## Time line for implementing RFID



- DFAR 2005: Final clause effective November 14, 2005
  - Class II – Clothing and Textiles
  - Class VI – Personal Demand Items
  - Class IX – Weapon System Spare and Repair Parts
  - Class I (subclass for Prepackaged Operational Rations/MREs)
  - ...Shipped to Susquehanna and San Joaquin
  
- **DFAR for 2006 adds additional commodities/locations:**
  - Class III – Packaged Petroleum
  - Class IV – Construction/Barrier Equipment
  - Class VIII – Medical Material **(not Pharmaceuticals, Biologicals, or Reagents)**
  - ...Shipped to all US distribution centers, three strategic aerial ports
  
- *DFAR for 2007 – Analysis underway*



**Released as  
Interim Rule  
May 19, 2006**

An arrow points from the starburst to the "Class VIII" item in the list above.

Acceptable tags...Class 1 (Gen 2)

# Required 2006 DFAR Locations



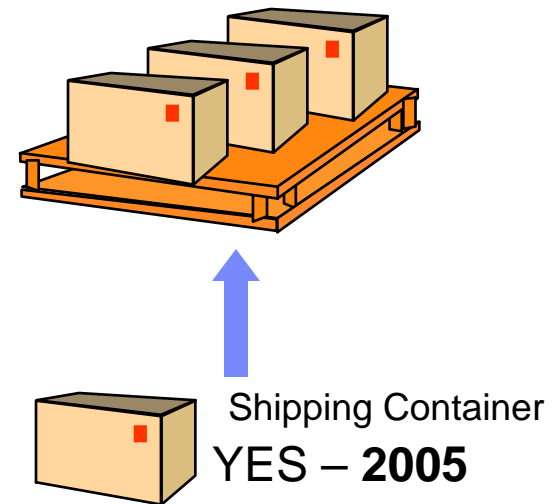
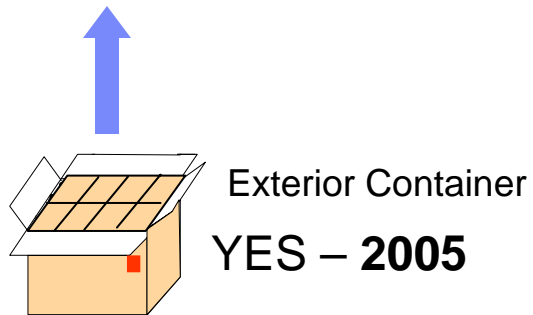
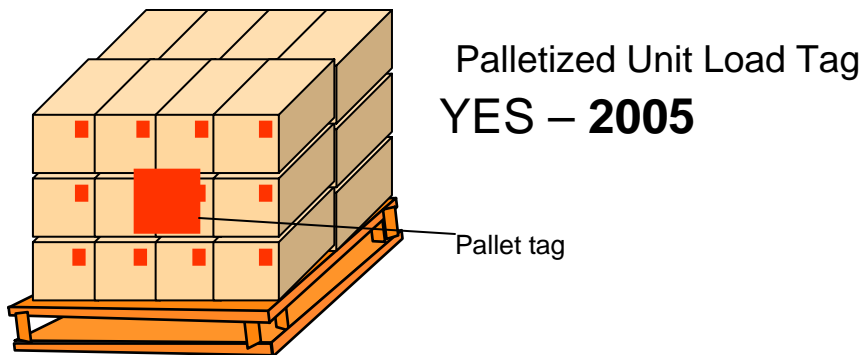
## ■ DLA Defense Distribution Depots

- Albany, GA
- Anniston, AL
- Barstow, CA
- Cherry Point, NC
- Columbus, OH
- Corpus Christi, TX
- Ogden, UT
- Jacksonville, FL
- Oklahoma, OK
- Norfolk, VA
- Puget Sound, WA
- Red River, TX
- Richmond, VA
- San Diego, CA
- **Susquehanna, PA**
- **San Joaquin, CA**
- Tobyhanna, PA
- Warner Robbings, GA

## ■ TRANSCOM Air Mobility Command Terminals

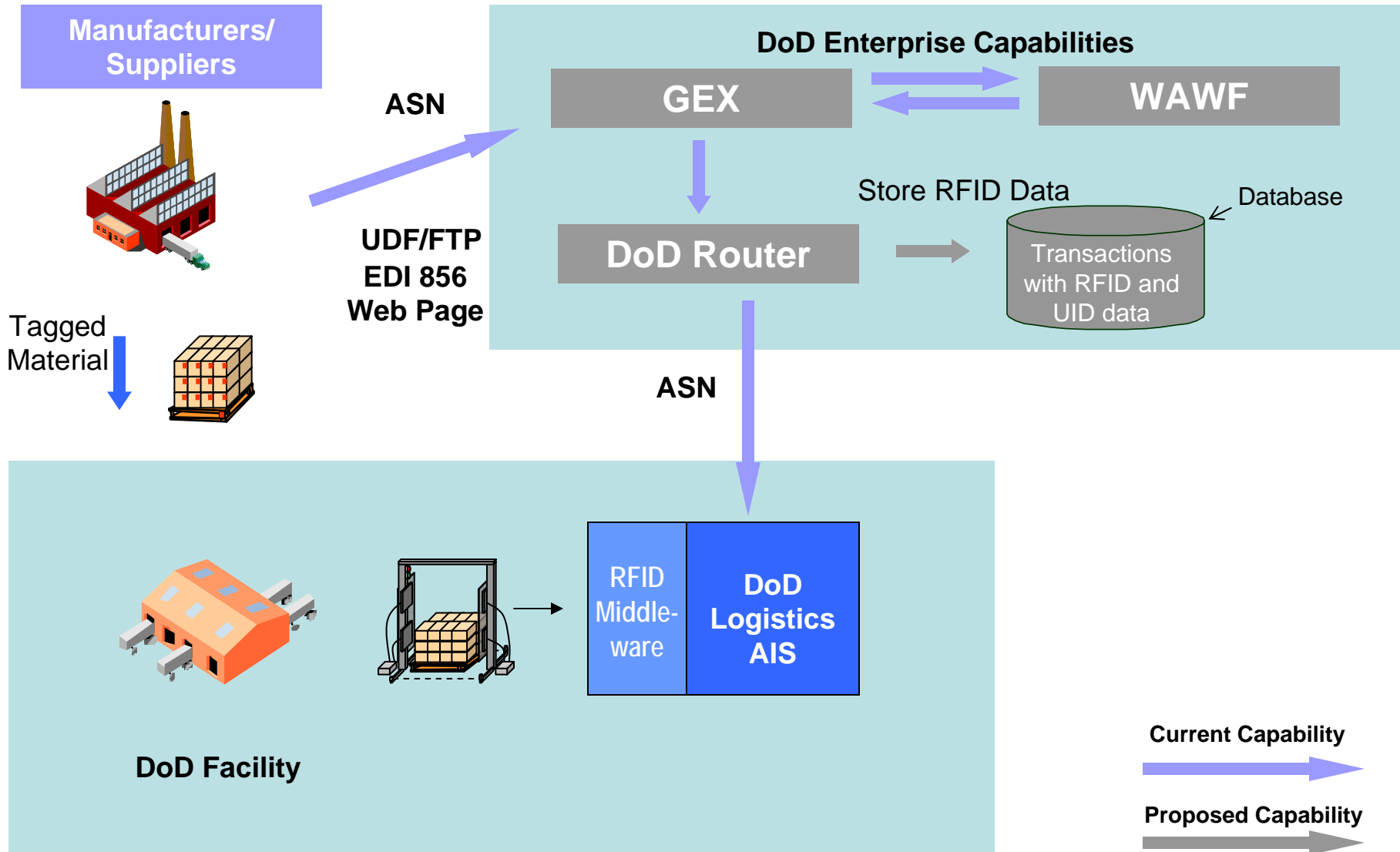
- Charleston, SC
- Norfolk, VA
- Fairfield, CA (Travis AFB)

# Implementation Plan: Level of Packaging

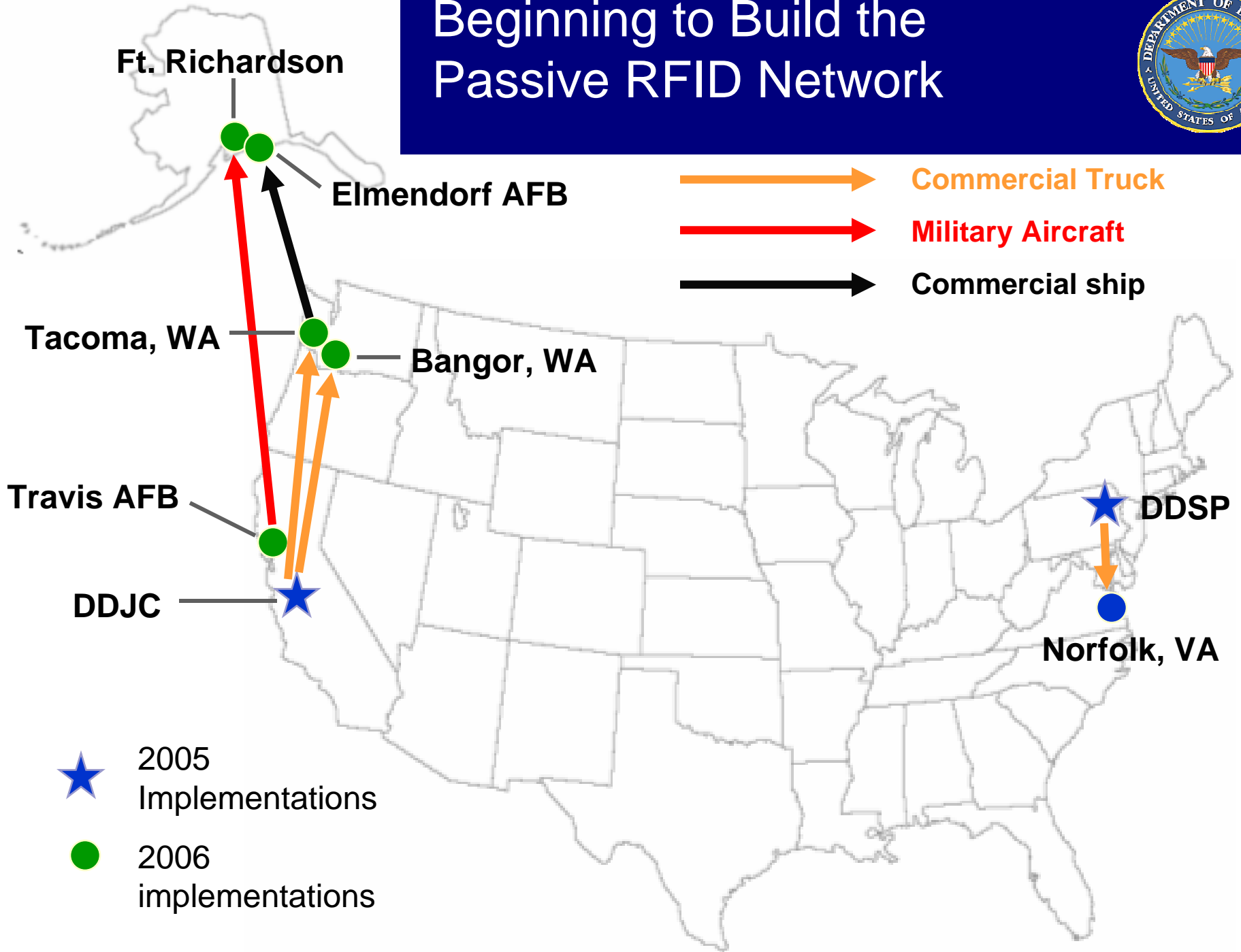


\*If the UID Packaging is also an External Container or a Shipping Container, it will have an RFID tag.

# Advance Shipment Notice Requirement



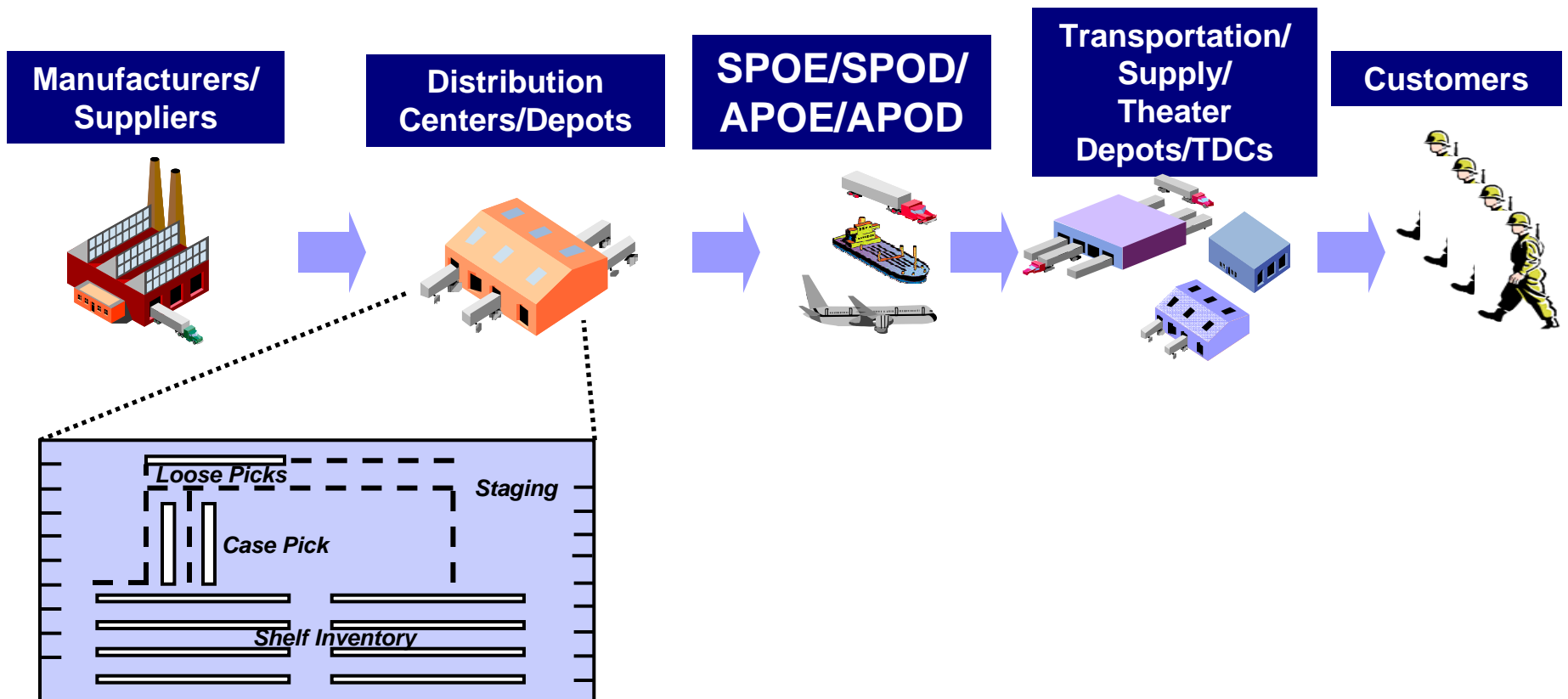
# Beginning to Build the Passive RFID Network







# RFID-enabled Internal Processes



# Early Implementations are Promising



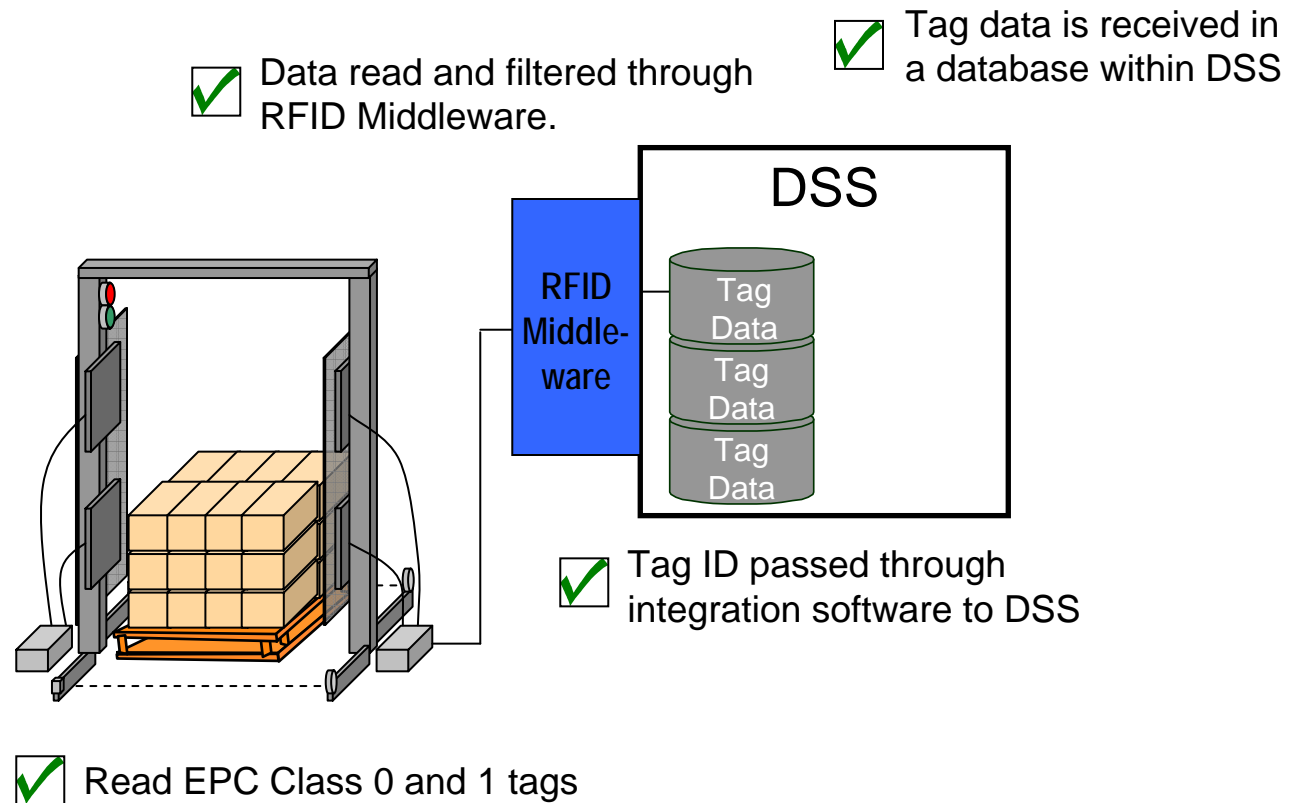
- **Norfolk Ocean Terminal**
  - Accuracy – i.e. Misrouted Shipments (3% improvement)
  - Time Savings (39% improvement)
- **USS Nassau**
  - Indicated that using passive RFID in their receiving/sorting process will result in efficiencies.
- **Advance Traceability & Control Transportation System (ATAC)**
  - Automated receipt information collected via passive RFID identified 355 shipments worth \$12.6M where no proof of delivery information was previously recorded in the depot logistics system.



# DLA Distribution Centers & TRANSCOM Aerial Ports



- Outfitted Defense Distribution Center San Joquain, CA (DDJC) and Defense Distribution Center Susquehanna, PA (DDSP) with passive RFID infrastructure (2005)
- Have begun process for instrumenting remaining CONUS DLA distribution centers & TRANSCOM aerial ports (2006)



# PTAC Training



- **Established a formal agreement with the Procurement Technical Assistance Centers (PTAC) to provide RFID training/outreach to the DoD supplier community.**
  
- **Conducted 14 “Train-the-Trainer” workshops**
  - 300 counselors trained on DoD RFID Policy
  - 94 PTAC Centers in US for local outreach to small businesses
  
- **PTACs are developing and delivering RFID assistance to DoD suppliers via a variety of methods**
  - 25 Local workshops occurred in Fall 2005
  - 1400 attendees to participate
  - <http://www.dla.mil/db/>

# The Way Ahead



- Publish the 2006 DFARS rule for passive RFID
- Work with the Services and Agencies on the DoD internal rollout for passive RFID
- Continue to provide education and outreach







## For Your Information



- For further information that can assist you with compliance, visit: <http://www.dodrfid.org>
  - DoD RFID Policy
  - DoD RFID Supplier Implementation Plan
  - DoD Suppliers' Passive RFID Information Guide
  - MIL-STD 129P(3) (Updated with RFID changes)
  - Wide Area Workflow (WAWF) Information
  - Frequently Asked Questions (FAQ)
  - Class of Supply Lookup
  - Lessons Learned
  - Schedule of RFID Events where DoD RFID personnel will be speaking
- You can ask the team any RFID-related question through the following email address: [info@dodrfid.org](mailto:info@dodrfid.org)