# ENTERPRISE SYSTEMS ENGINEERING


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**CECOM Bottom Line: THE WARFIGHTER**

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**Abstract**

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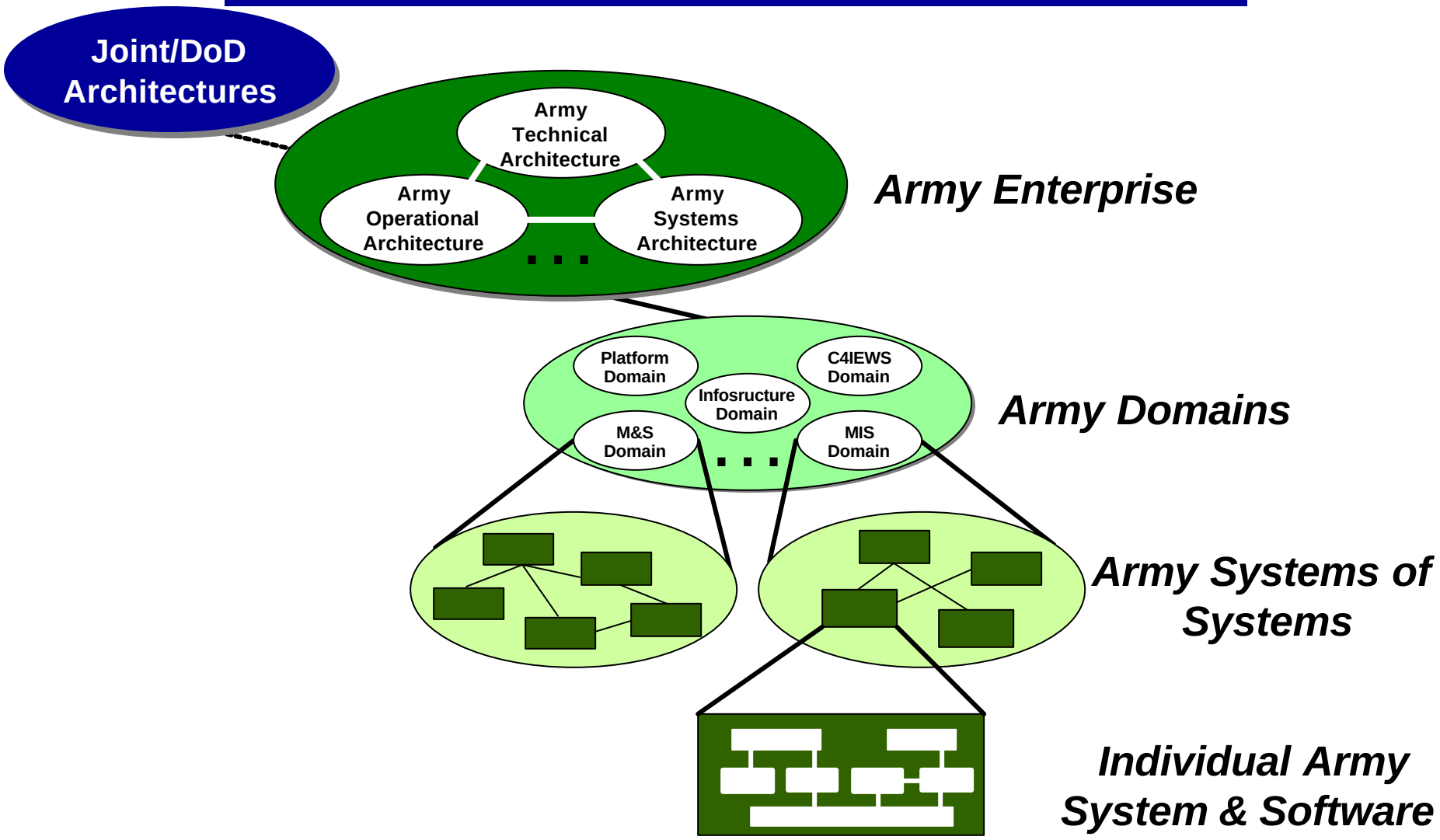
# ARMY ENTERPRISE CONTEXT

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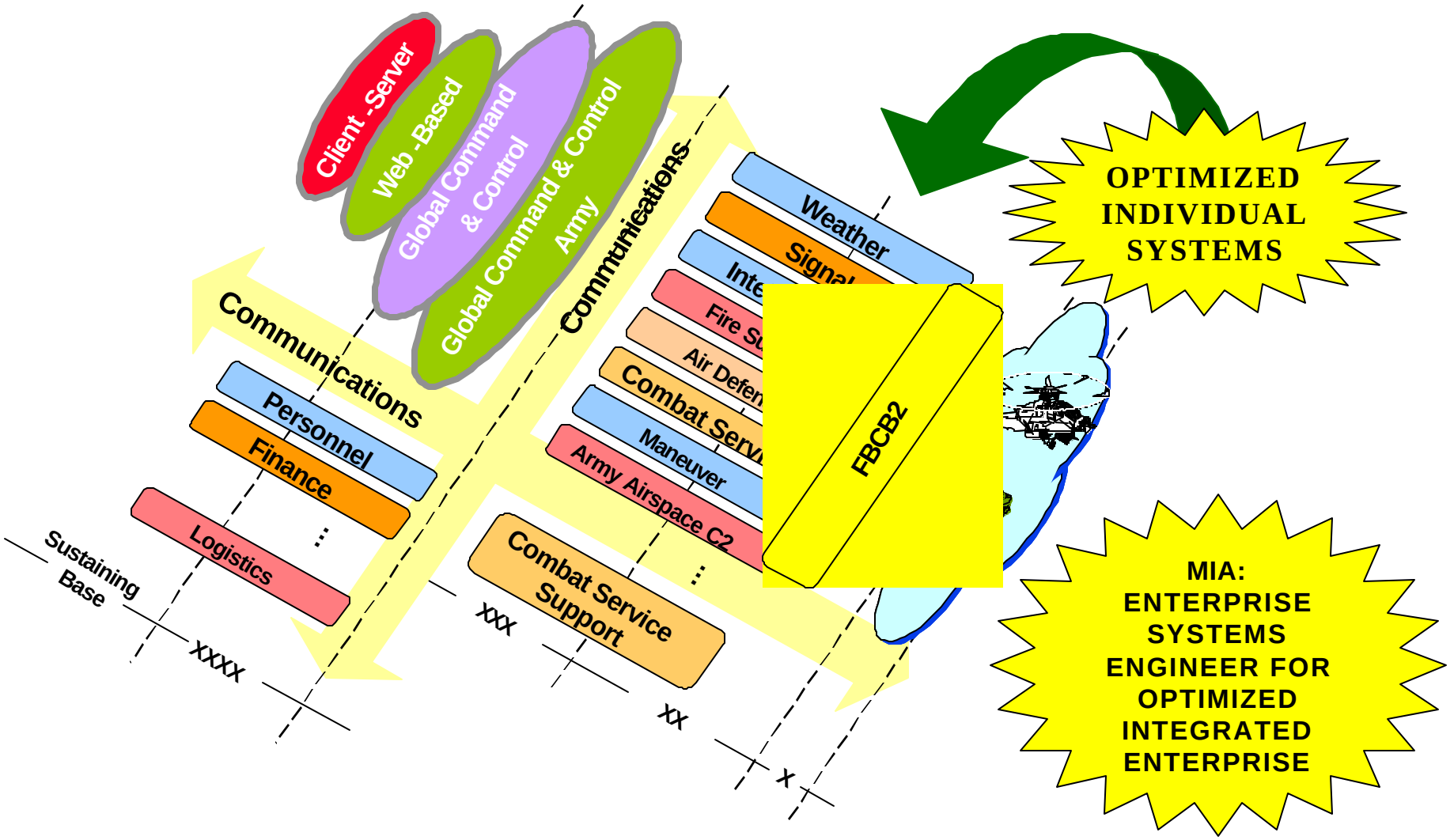
# TODAY

- **CHALLENGES:**
  - ❑ INTEGRATING PLAN (for migration & convergence)
  - ❑ UP-FRONT ENGINEERING (for enterprise integration)
  - ❑ MIGRATION/TRANSITION OF TECHNOLOGY (optimally)
  - ❑ UNIFIED REQUIREMENT
  - ❑ FUNDING FOR HORIZONTAL INTEGRATION
  - ❑ SYNCHRONIZATION
  - ❑ COMPLIANCE (with standards)

# ARMY ENTERPRISE SYSTEMS ENGINEERING

*Ensures Integrated Enterprise*

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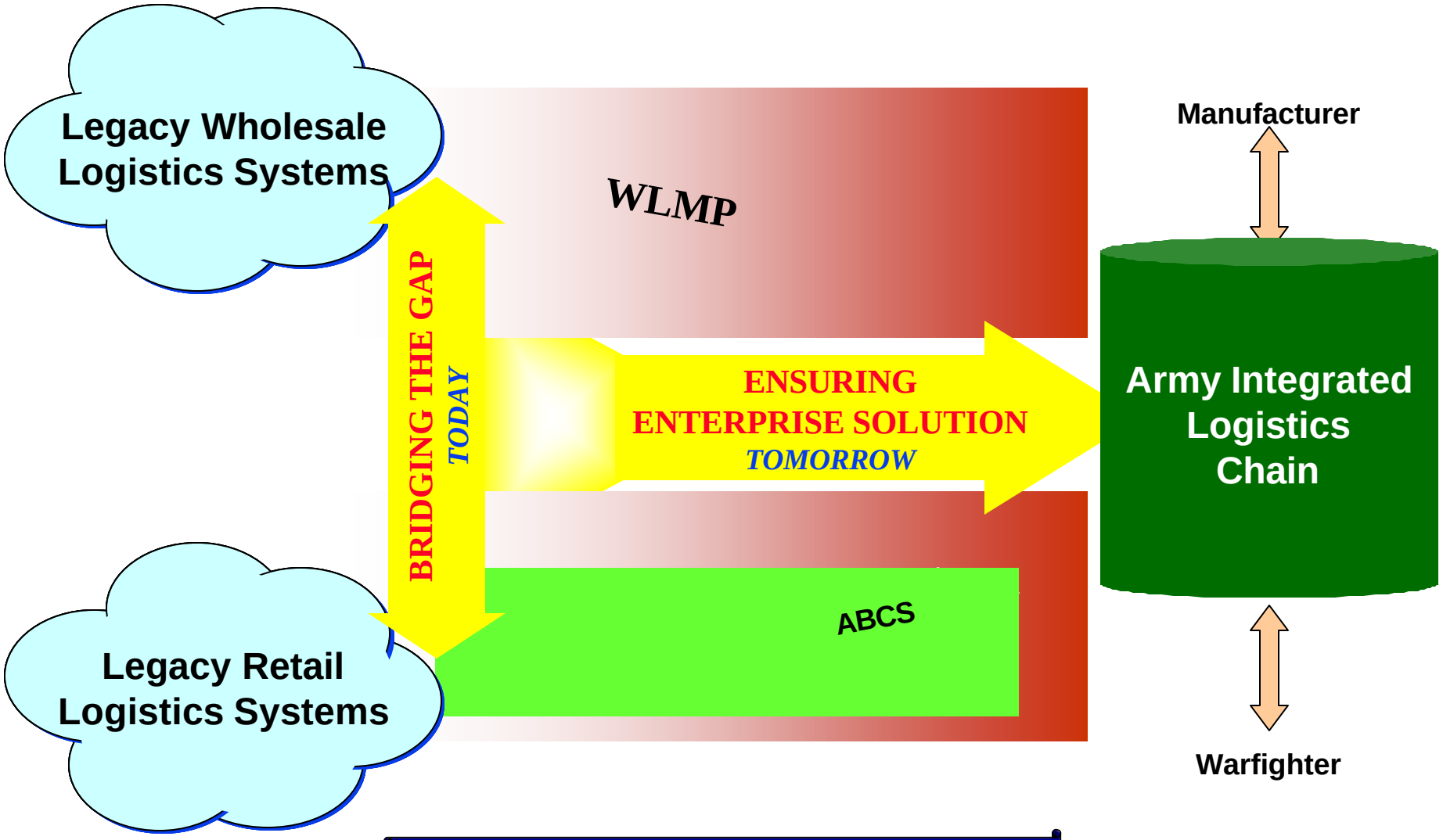
# EXAMPLE - LOGISTICS CHALLENGE

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# EXAMPLE – AKM CHALLENGE

## Army's Infostructure

- Funding Strategy
- Best Business Practices
- Infrastructure Consolidation
- Army Knowledge Online
- Human Capital

**AKM Goals**

**LOGISTICS**

**FINANCE**

**INTELLIGENCE & ELECTRONIC WARFARE**

. . .

**COMMAND AND CONTROL**

## Communications

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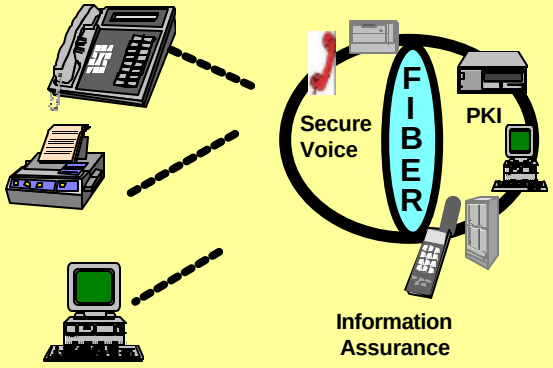


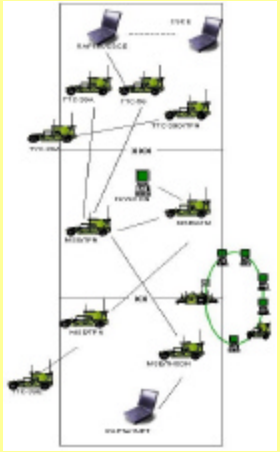

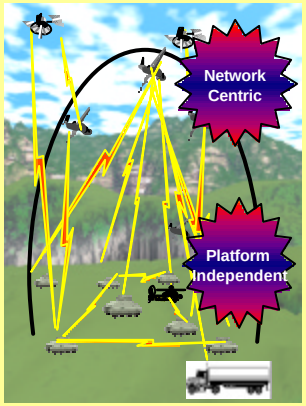


**ADOPT** ⟷ **ADAPT** ⟷ **DEVELOP**

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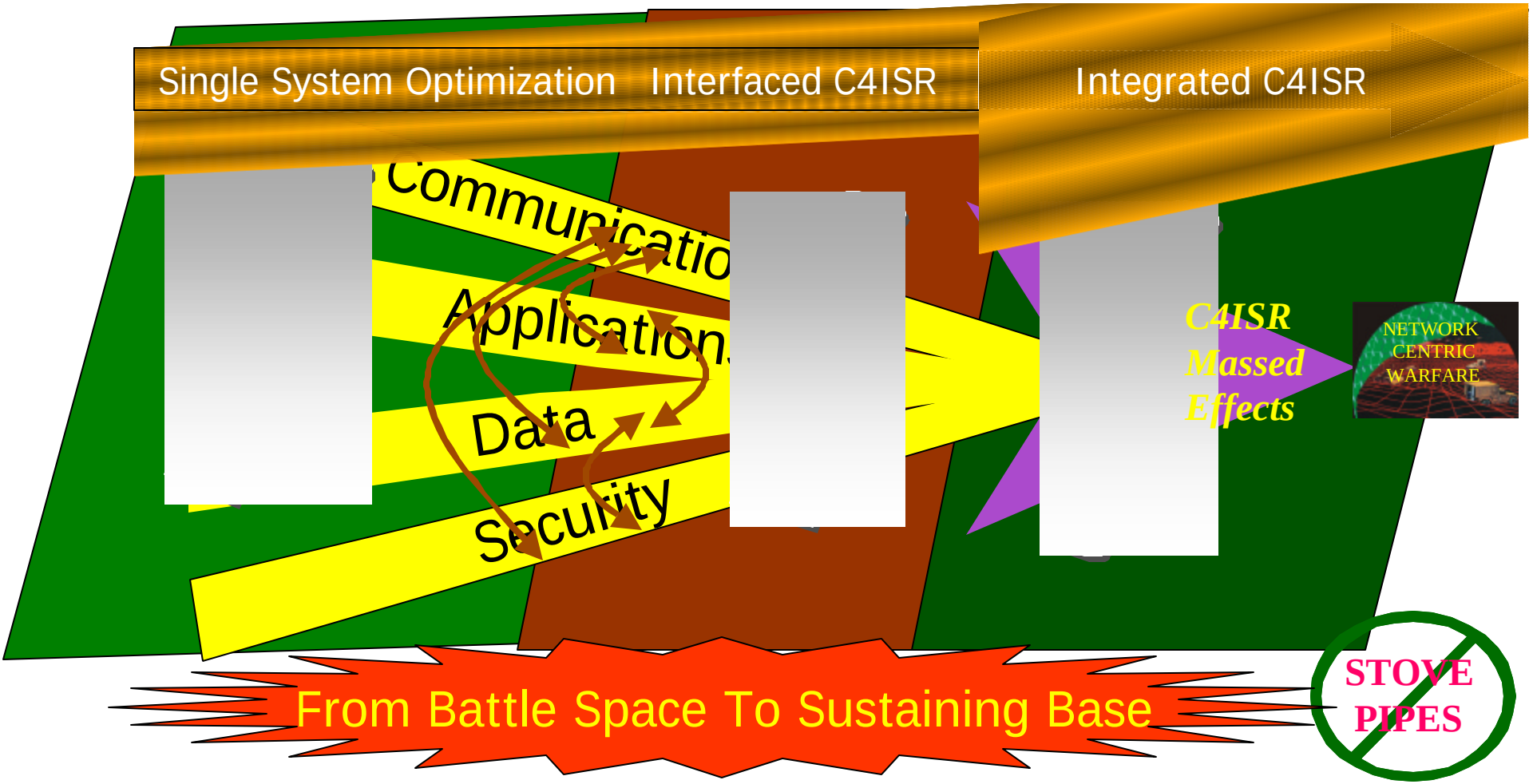
# FUTURE DESIRED STATE

- **SEAMLESS VERTICAL & HORIZONTAL C4ISR SYSTEMS INTEGRATION ACROSS THE SPECTRUM OF OPERATIONS TO MEET THE NEEDS OF THE OBJECTIVE FORCE**

  - ❑ **FROM THE BATTLESPACE TO THE SUSTAINING BASE (Tactical, Strategic, Installation)**
  - ❑ **TODAY AND INTO THE FUTURE (Legacy, Interim, Objective)**
  - ❑ **SPANNING FUNCTIONAL DOMAINS (Fire Support, Intel, Combat Service Support, ….)**

# FUTURE DESIRED STATE

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# WHERE WE ARE HEADED

- **EXPAND ON-GOING ARMY ENTERPRISE SYSTEM ENGINEERING ACTIVITIES**
  - ❑ **DEVELOP & OVERSEE OVERARCHING ARMY ENTERPRISE SYSTEM ENGINEERING MASTER PLAN**
    - ARMY-WIDE ENTERPRISE ARCHITECTURE SUPPORT
    - RISK MITIGATION THROUGH ARMY-WIDE ENTERPRISE PILOTS
    - TECHNOLOGY INSERTION FACILITATION
  - ❑ **RESOLVE CROSS-CUTTING TECHNICAL ISSUES, IDENTIFY OPPORTUNITIES, MAKE RECOMMENDATIONS**
  - ❑ **PROVIDE TECHNICAL CONSULT/EXPERTISE**
  - ❑ **ASSIST & VALIDATE COMPLIANCE WITH ENTERPRISE SYSTEM ENGINEERING MASTER PLAN**

# FULLY ENGAGED ACROSS SPECTRA OF ACTIVITIES

- SYSTEMS ENGINEERING EXPERTISE
  (ASEO, JTA, Tools, …)
- BROAD RANGE OF C4ISR DOMAIN EXPE
  (C2, Comm, IEW, FS, AV, MIS, …)
- TECHNOLOGY EXPERTISE
- FULL LIFE-CYCLE INVOLVEMENT
  (R&D, Post Development/Deployment)

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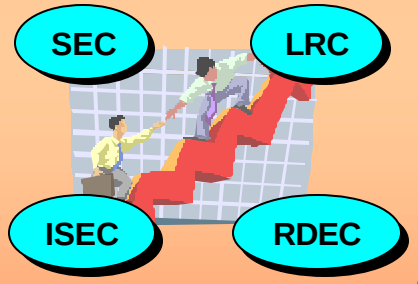
# WHAT WE ARE DOING

- EA (PEO C3T)-TJTN
- FCS C4ISR Architecture
- Enterprise Applications Architecture
- I3MP
- Other Individual Efforts

**CECOM ESE Team**




- Define Enterprise Architecture with plan for migrating from “as is” to objective state
- Synchronize on-going activities to achieve common goal

⋮

- Identify shortcomings with current activities and initiate efforts to resolve

**INTEGRATED OBJECTIVE FORCE**

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# WHAT ARE WE DOING

- **Executive Agent (PEO C3T) – Theater Joint Tactical Network**
  - ❑ Ensure Interoperability and synchronization among Service and Agency programs acquiring network components
- **FCS C4ISR Architecture**
  - ❑ Developed architectural tenets to support Network Centric Warfare
- **ENTERPRISE APPLICATIONS ARCHITECTURE**
  - ❑ Define framework for developing applications compliant with Enterprise Architecture
- **Installation Information Infrastructure Modernization Program (I3MP)**
  - ❑ Upgrade the information infrastructure to provide digital connectivity across installations, active support activities and deployed Forces.

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# HOW INDUSTRY CAN HELP

- **THINK ENTERPRISE SOLUTIONS**
- **PROVIDE FEEDBACK. IT IS CRITICAL.**
- **MORE TO COME**



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