

# *Headquarters U.S. Air Force*

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# Expeditionary Combat Support System (ECSS) Overview



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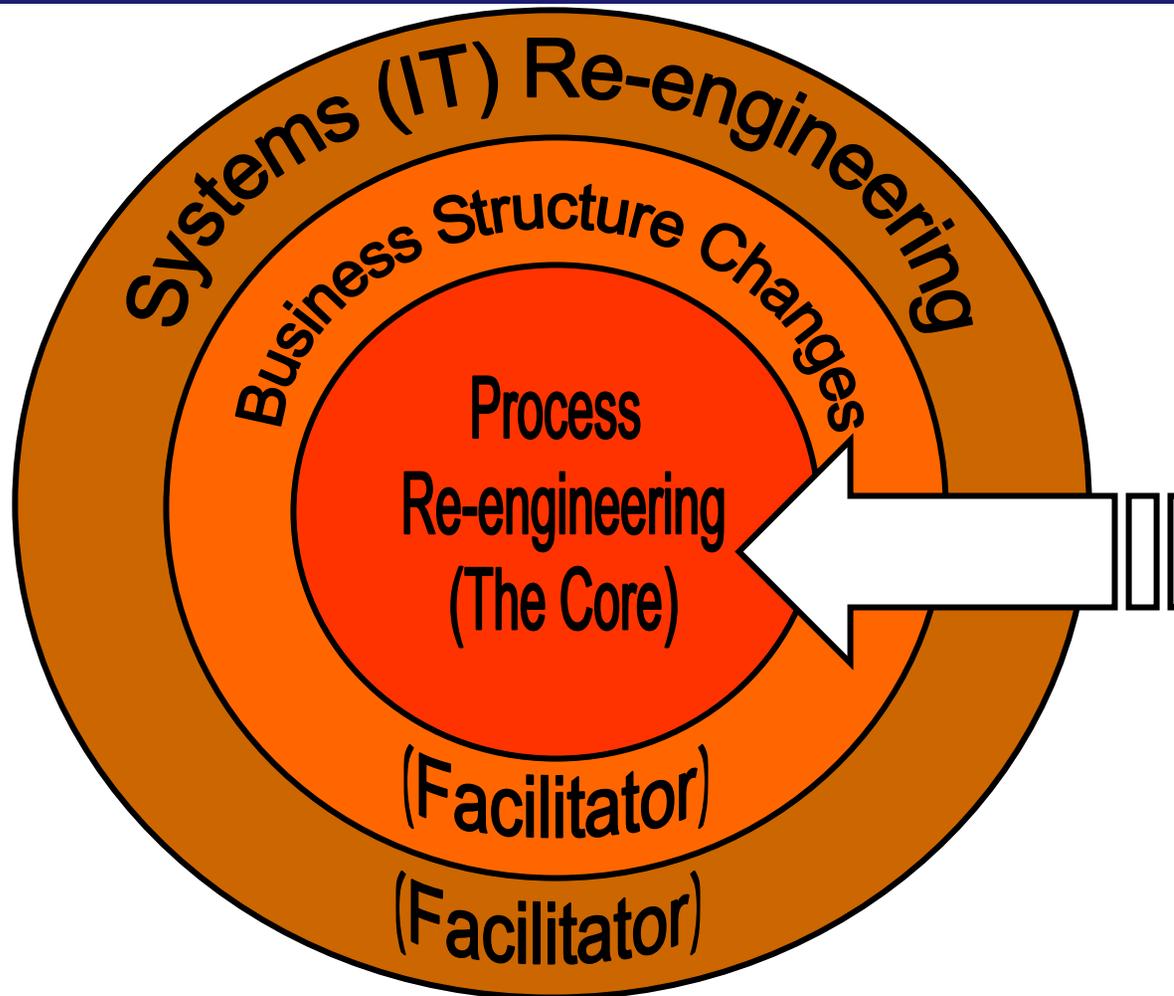
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# The IL Transformation Approach



Think  
 Lean,  
 Act  
 Lean,  
 Be  
 Lean

*Transformed Expeditionary Combat Support Capabilities*

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# AF Logistics IT Strategy



- **Implement Portfolio Management**
  - Inventory, rationalize, control future development
  - Continue fielding near term capabilities supporting LogEA e.g. CAS, CAMS CDB & POMX, PRPS, CMOS, RFID, etc
- **Implement Near Term Data Strategy/Long term IDE**
  - Single Authoritative Sources via AFKS to support COCOM 57, CIPT Dashboards, Analysis tools, et al
  - Start Cleaning up the data
- **Field Supply/Log Chain COP to support overall AF O/S COP & emerging ACS C2 Tool requirements**
- **Move toward long term cross functional IT solution set supporting transformed business processes**
  - Implement LogEA and Transition Plan
- **Assured, Trusted Global Deployable Comm Support – GIG/GCSS**



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# Future AF eLog21 Logistics Expeditionary Network Centric Operations

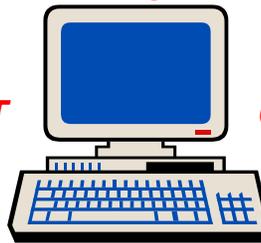


NO TRANSITION  
PEACE TO WAR

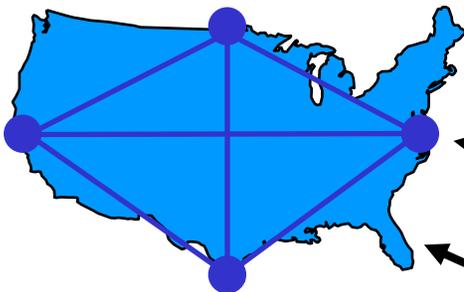
LOG C<sup>2</sup> SYSTEM – Operational Support Centers

DECISION SUPPORT TOOLS

GLOBAL ASSET VISIBILITY & SOURCING



Rear A4



CONUS VIRTUAL SUPPLIER NETWORK

Lateral Support

CIRFs

FORWARD SUPPORT NETWORK

Retrograde

Forward A4



Real Time, Global Expeditionary Network

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# *Transforming AF Logistics*



- **Adopt Lean as our operating system – create & manage flow**
  - **Train our workforce to think lean, act lean, be lean**
- **Dynamic collaborative end to end supply chain planning & execution**
- **Global Network centric Supply Chain/Maintenance Operations**
- **Manage the Supply Chain & suppliers to performance outcomes**
- **Infuse technical knowledge in the process**
- **Real time all source logistics intelligence**
- **Accurate, timely and secure integrated enterprise data**
- **Align metrics & resources to drive business operations**

*Improved Operational Availability & Reduced Cost*

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# Current State Gaps



- **Absence of an enterprise view**
  - Warfighter requirements and logistics capabilities poorly linked
  - Conflicting performance metrics across organizations and functions
- **Fragmented planning processes**
  - Lack of centralized Supply Chain planning process
  - Planning across functions and organizations not coordinated
  - Unresponsive planning and re-planning processes
- **Lack of integration**
  - Limited visibility of resources and capacity across the enterprise
  - Limited predictive or causal analysis capability
  - Disconnect from Suppliers (internal and external)
- **No enterprise systems strategy**
  - Proliferation of non-integrated IT tools
  - No logistics portfolio management
  - Numerous unsynchronized data handoffs and data gaps
  - Multiple data models

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# *Domain Integration*



- **ECSS must be interoperable with Joint, DoD, and AF solutions and architectures**
  - **DoD Domain/BMSI compliance in progress**
  - **ECSS is integrated with the plans of other Domains**

***Making Progress, But More Hard Work To Do***

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# *ECSS Acquisition Goal*



- **Air Force Expeditionary Combat Support System (ECSS) will:**
  - Replace Air Force retail and wholesale logistics legacy systems
  - With Commercially available core ERP package
- **Will involve transforming:**
  - Antiquated “Current State” logistics business processes
  - With enterprise-wide and network-centric set of “Future State” business processes
  - Based on commercial best practices and standards
  - Significant Business Process Reengineering (BPR), Change Management, and Training

*Acquire ERP that best meet functional requirements  
and provide the best value for the Air Force*

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# *ECSS Program Content*

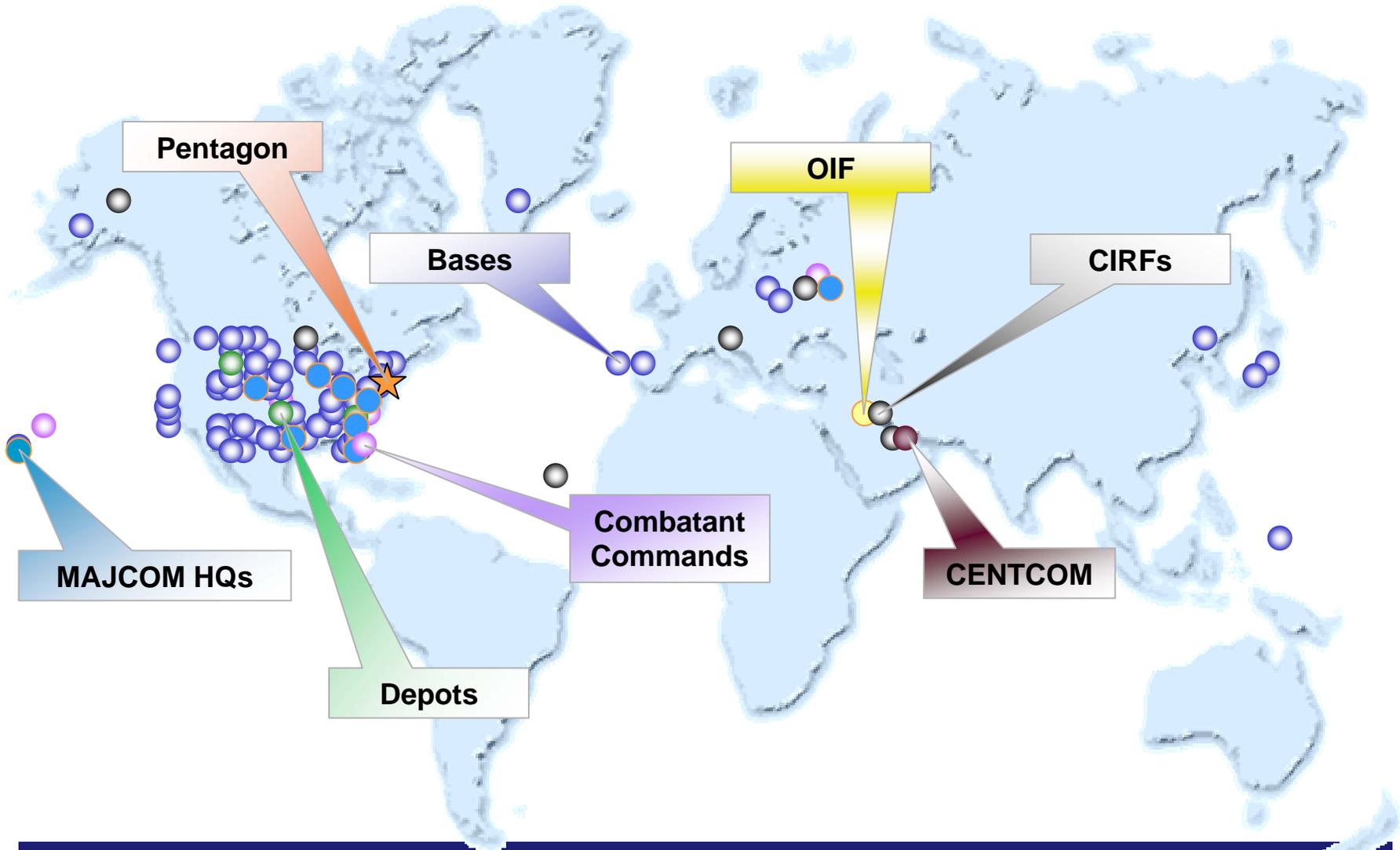


- **All AF Supply and Asset Management capability**
- **All AF Maintenance Capability**
- **AF Distribution network management tools**
- **Advanced Planning and Scheduling Tool**
- **Product Life Cycle Management – engineering, config, data**
- **Customer relations management and Balanced Scorecard**
- **E-business/e-procurement for supplies and services**
- **Supply/Maintenance related financial management (SMAS, FIABS, DMAPs et al) as a minimum**
- **Capacity related HR + other HR Gaps (TBD)**
- **Deployment and facilities management**



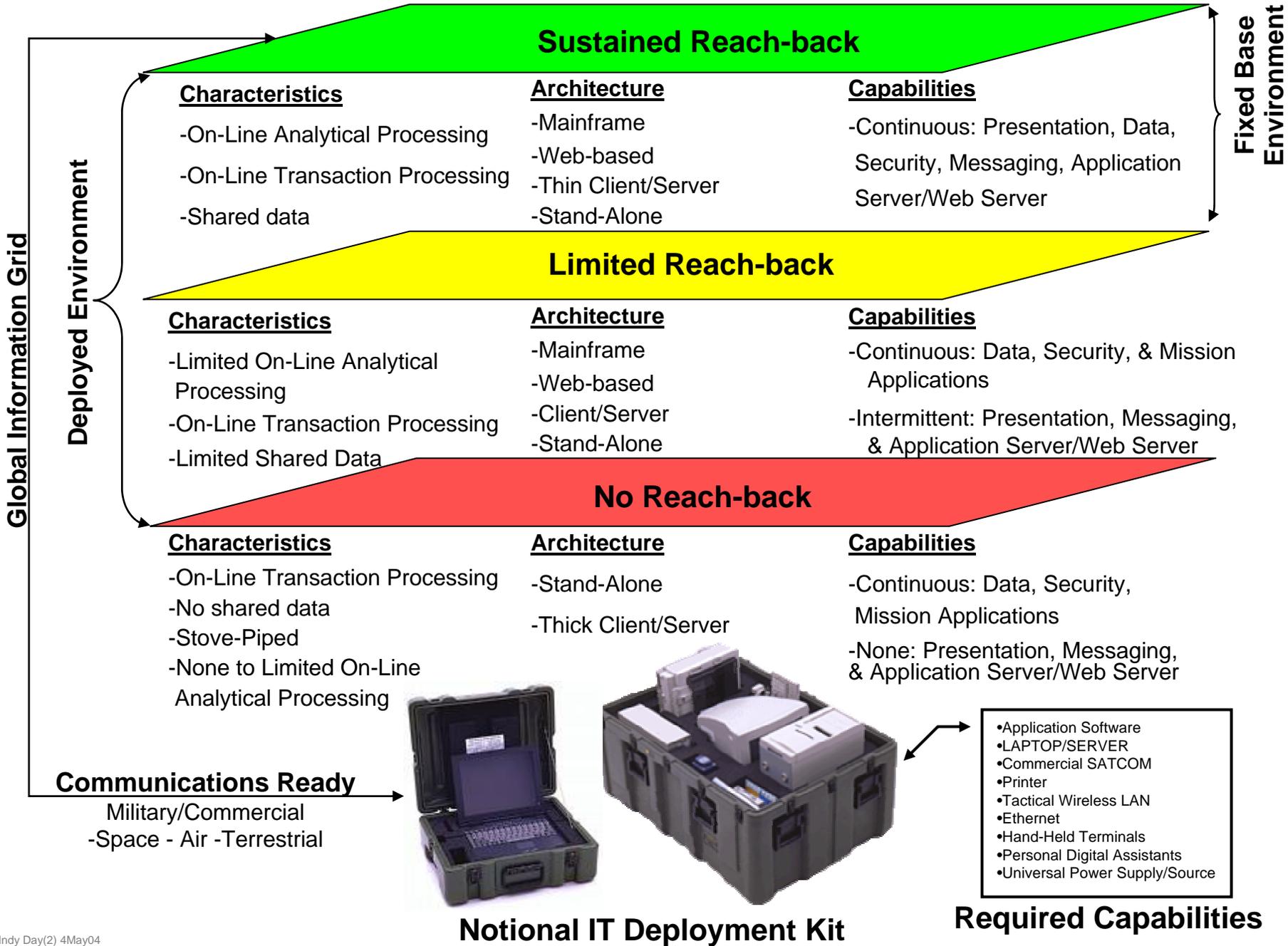
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# Global Coverage



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# Logistics Applications Deployment CONOPS





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# eLog21 Expeditionary Combat Support System - To Be Systems Model



**External Data Exchanges**

- Data Exchange with Services
- DFAS
- DLA399
- Joint Commander
- Supplier Exchange

**Portal**

Air Force Portal

**Integration**

- EAI
- EAI
- External EAI Collaboration
- Web App Server

<p><b>Finance</b></p> <ul style="list-style-type: none"> <li>General Ledger</li> <li>Accounts Payable</li> <li>Accounts Receivable</li> <li>Fixed Assets</li> <li>Personal Property</li> </ul> <p><b>Budgeting</b></p> <ul style="list-style-type: none"> <li>Budgeting</li> </ul>	<p><b>Advanced Planning &amp; Scheduling</b></p> <ul style="list-style-type: none"> <li>Demand Planning</li> <li>Supply Planning</li> <li>Strategic Planning</li> <li>Avail-To-Promise</li> </ul> <p><b>Facilities Mgmt</b></p> <ul style="list-style-type: none"> <li>Building Mgmt</li> <li>Equipment Mgmt</li> <li>Routine Maint</li> <li>Capacity (Equip)</li> </ul>	<p><b>Repair &amp; Maintenance/HR/Costing</b></p> <ul style="list-style-type: none"> <li>Quality Mgmt</li> <li>Shop Floor Costing</li> <li>Shop Floor Control</li> </ul> <p><b>CRM/Order Management</b></p> <ul style="list-style-type: none"> <li>Order Mgmt.</li> <li>Help Desk</li> <li>Order Promising</li> </ul>	<p><b>Materials Mgmt &amp; Contracting Log Finance</b></p> <ul style="list-style-type: none"> <li>SRM</li> <li>eSource</li> <li>Vendor Mgmt</li> <li>Contracts</li> <li>Replenishment</li> <li>Inventory Control</li> <li>Cost Management</li> <li>Quality Control</li> </ul>	<p><b>Configuration &amp; BOMs</b></p> <ul style="list-style-type: none"> <li>Config./BOM</li> <li>Engineering</li> <li>Document Mgmt</li> </ul> <p><b>Distribution &amp; Transportation</b></p> <ul style="list-style-type: none"> <li>Trans Mgmt</li> <li>Warehousing</li> <li>Route Mgmt</li> </ul>	<p><b>Personnel</b></p> <ul style="list-style-type: none"> <li>Certifications</li> <li>Time Keeping</li> <li>Labor Cost</li> <li>Capacity (man)</li> <li>Training</li> </ul> <p><b>Quality Control</b></p> <ul style="list-style-type: none"> <li>Quality Control</li> </ul>	<p><b>Legacy</b></p> <ul style="list-style-type: none"> <li>LOGMOD</li> <li>LOGCAT</li> <li>GATES</li> <li>BBRAMS</li> <li>Others</li> </ul>
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**Enterprise Applications**

**Information Center**

AFKS (Air Force Knowledge Services)

Data

Tools

- PLM
- Modeling Simulation
- Reporting/OLAP

**Leverages GCSS-AF & Cross Domain Programs e.g. DEAMS, DCPS, SPS, etc**

# Transition Planning



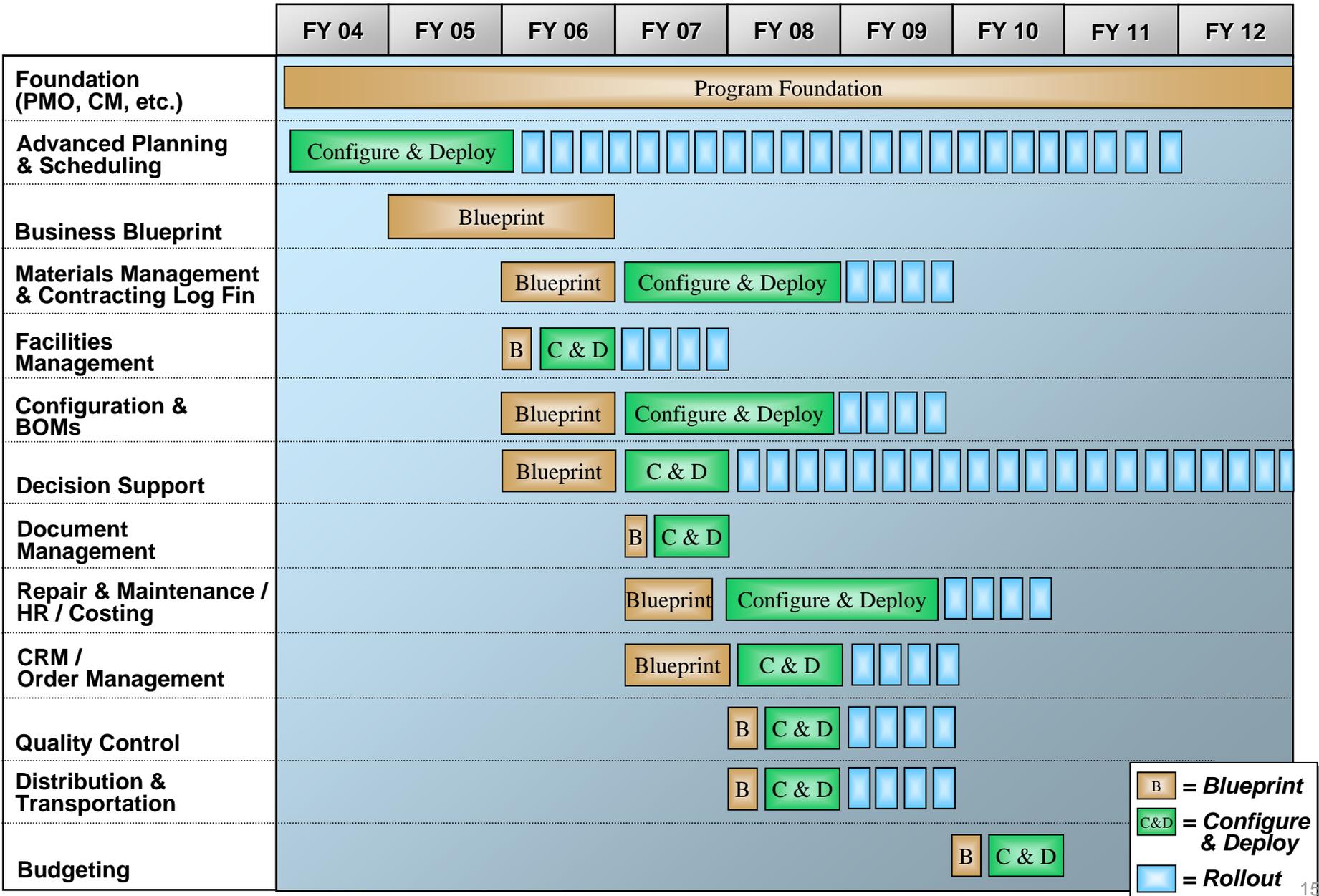
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# *Systems Migration*



- **Legacy systems (173) have been mapped to each of the ERP Implementation Phases**
- **Detailed system migration planning occurs in Blueprinting Phase**
- **As each phase is rolled out:**
  - **Detailed system migration is executed**
  - **Legacy systems are maintained until transition is complete**

# Transition Plan



# Acquisition Way-Ahead



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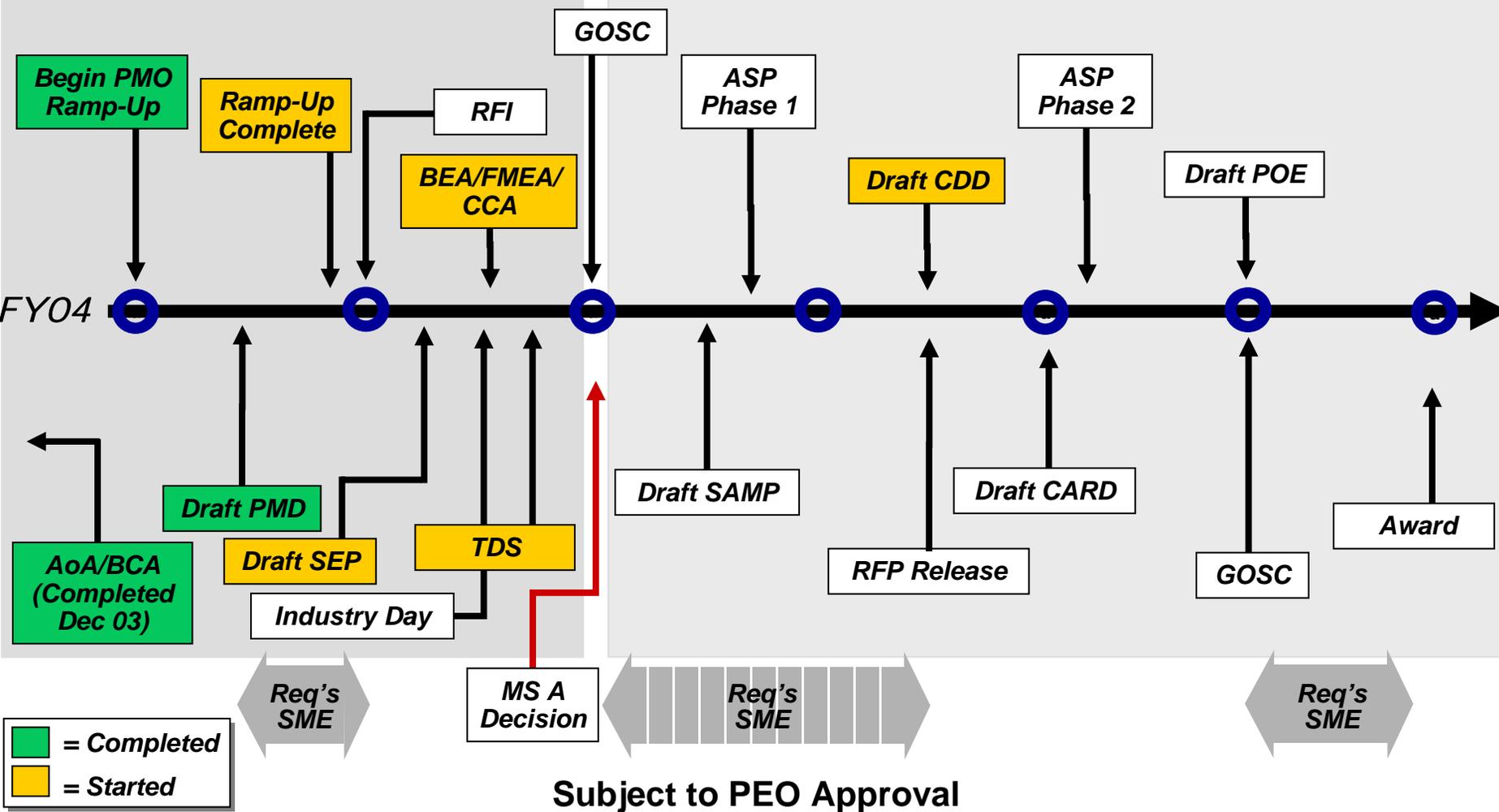


# ERP Acquisition Way-Ahead

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## Determination of Mission Need

## Concept & Technology Development



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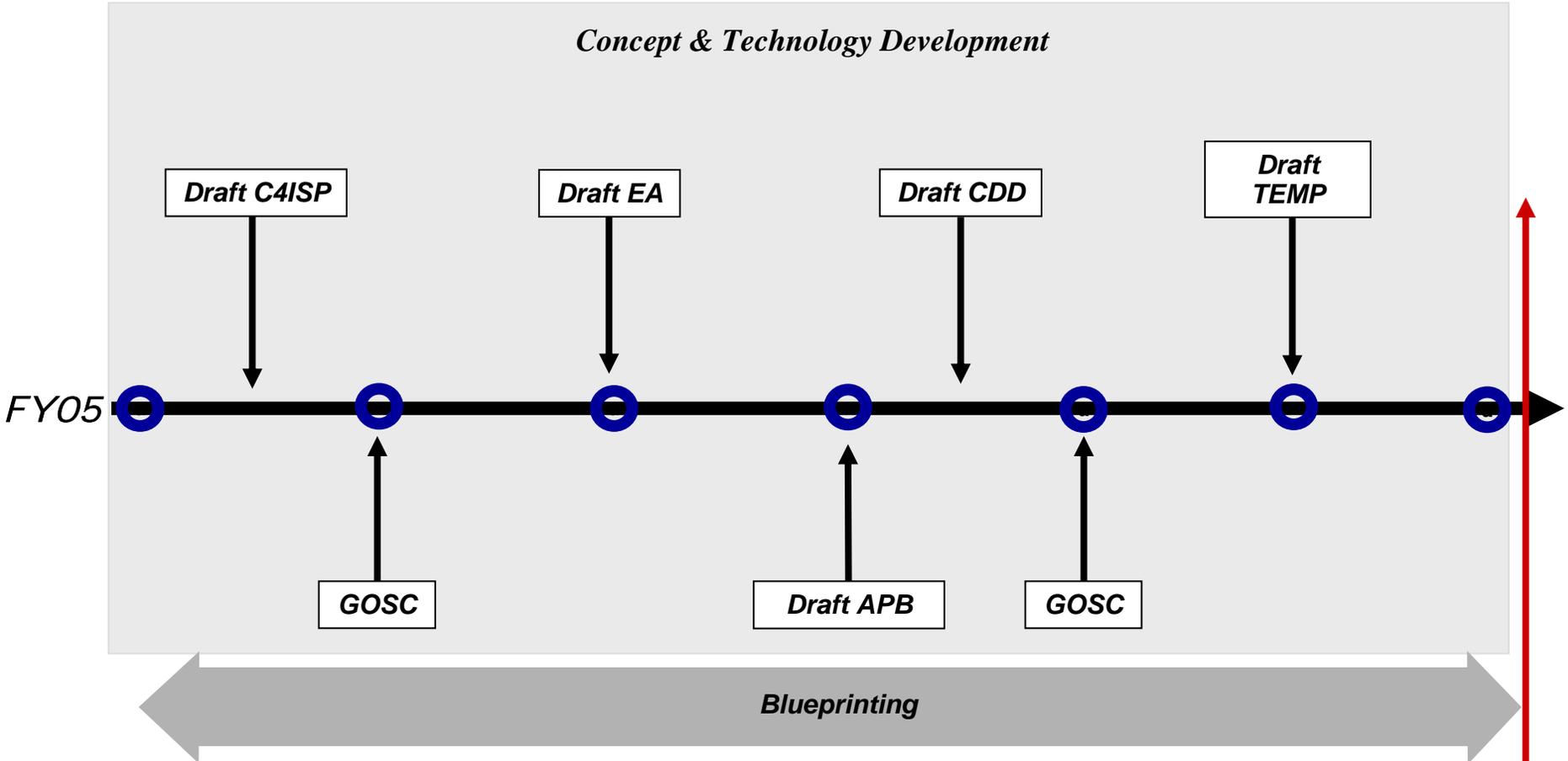
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# ERP Acquisition Plan



## Concept & Technology Development



- = Completed
- = Started

Subject to PEO Approval

MS B Decision

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# Systems Engineering



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# Requirements Development



- **Technical Requirements**
  - Scalability (250,000 end users)
  - Deployment Capabilities
  - Inter-operability
  - Data Architecture
- **Functional Requirements**
  - Current State baseline
  - Future State requirements
  - Business Process Re-Engineering
- **Mandates**
  - Clinger-Cohen
  - OSD Compliance
  - GCSS-AF /GIG Compliance
  - DODAF/C4ISR



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# Functional Requirements Approach



- Document the current Air Force logistics architecture at a high level
  - Organizational, business process and systems
  - Focus on core & unique business scenarios
    - Focus on End to End logistics business processes
- Review and include LogEA, APS, PSCM, EAP, DMT, others
- Identify opportunities for process improvement
- Develop target Air Force logistics scenarios
  - Incorporate logistics best practices - leading logistics management solutions, SCOR and other leading industry initiatives
- Develop Evaluation Criteria for Scenario Testing with ERP vendors
- Evaluate demonstrations of scenarios & vendor capability

*Since Operational Needs Drive Systems Requirements, Most Critical Part of this Effort is understanding Air Force Logistics Business Processes*



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# Summary



- **Changing the culture and processes is the essence of transformation – not just changing the IT suite**
  - **IT is an important enabler but the hard part is the discipline required to change the processes & retrain the people**
- **Lots of tough challenges ahead**
- **Rigorous systems engineering is an absolute requirement**