



Engineering the Army Common Operating Environment (COE)

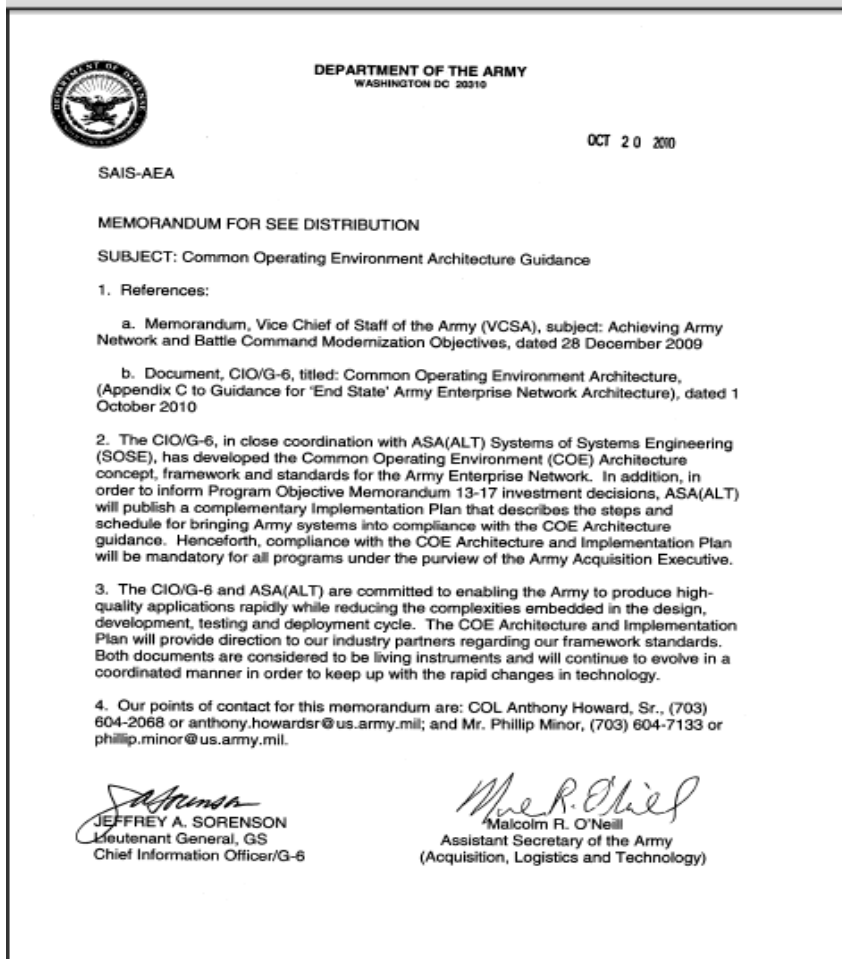
Presentation To:



DESIGN • DEVELOP • DELIVER • DOMINATE
SOLDIERS AS THE DECISIVE EDGE



COE Architecture Guidance

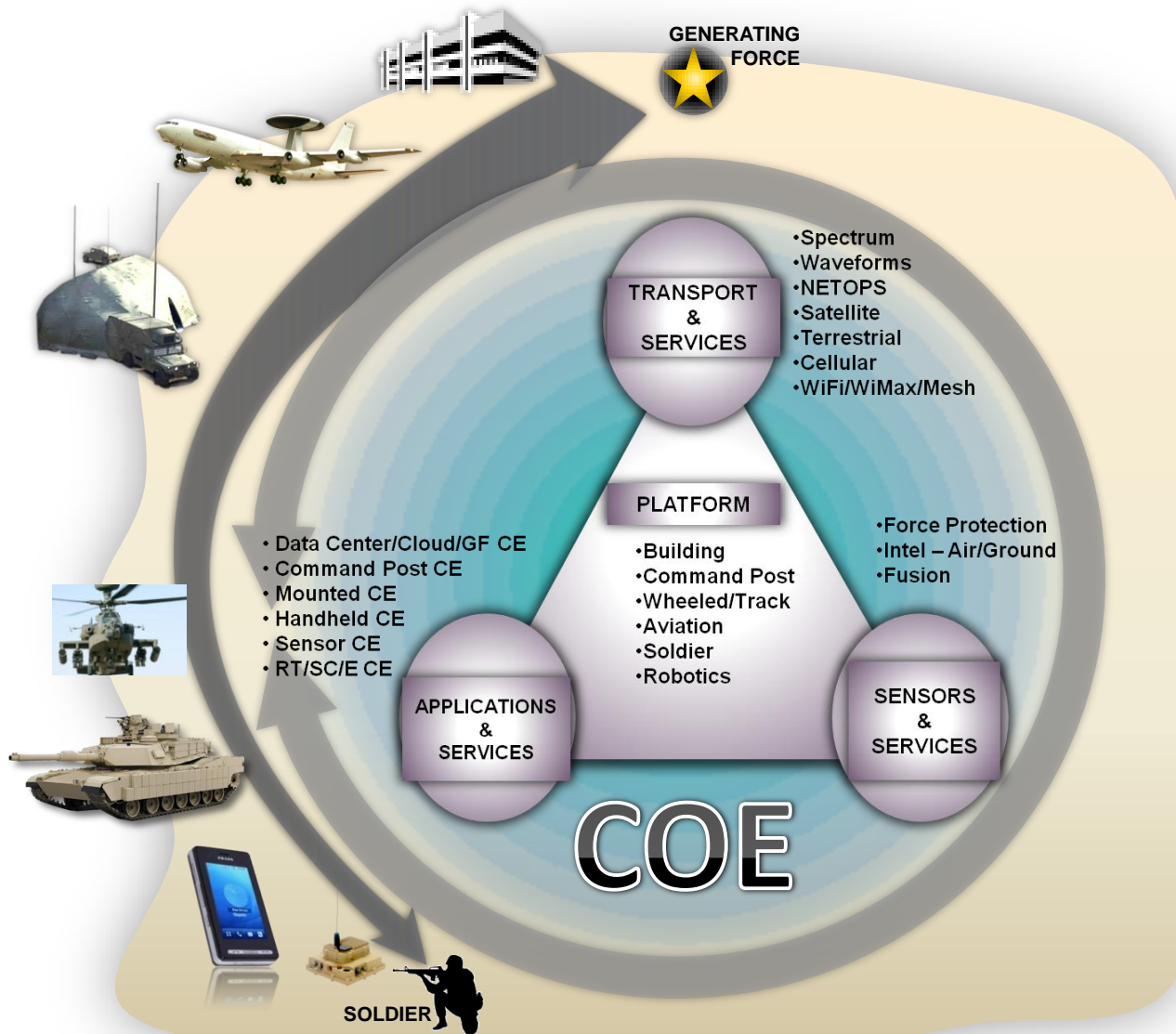


- CIO/G-6 in close coordination with ASA(ALT) Systems of Systems Engineering (SOSE) has developed COE Architecture Guidance
- COE Architecture Guidance:
 - Defines the COE and Computing Environments
 - Describes the CEs architecture and services
 - Specifies COE principles and technical architecture standards
 - Details a maturity model for cost-benefit analysis trades and to evaluate programs' alignments with COE
- ASA(ALT) will develop COE Implementation Plan:
 - Inform Program Objective Memorandum (POM) 13-17 investment decisions
 - Identify the implementation strategy, time lines, effective dates and key milestones for moving Army systems to the COE





WHAT IS THE COE ?



*COE is an approved set of **computing technologies and standards** that enable secure and interoperable applications to be rapidly developed and executed across a variety of Computing Environments*

*Source: Army CIO/G6
COE App C*





Message from the AAE



ASA(ALT) COE Implementation Plan ..

“It is our strategy for not only addressing interoperability within the Force, but to.....”

- Achieve agility on how we deliver capabilities to the Warfighter faster *(Vice Chief of Staff, 14 Apr 2011)*
- Reduce the life cycle cost of development and sustainment of our IT systems *(DoD Efficiency Initiatives, 16 Aug 2010)*
- Promote an Open Architecture that is standards based which leverages industries best practices and products while reserving government purpose rights *(Implementation Directive for Better Buying Power, 3 Nov 2010)*
- Build on a foundation that is cyber hardened and secure *(ARCyber)*



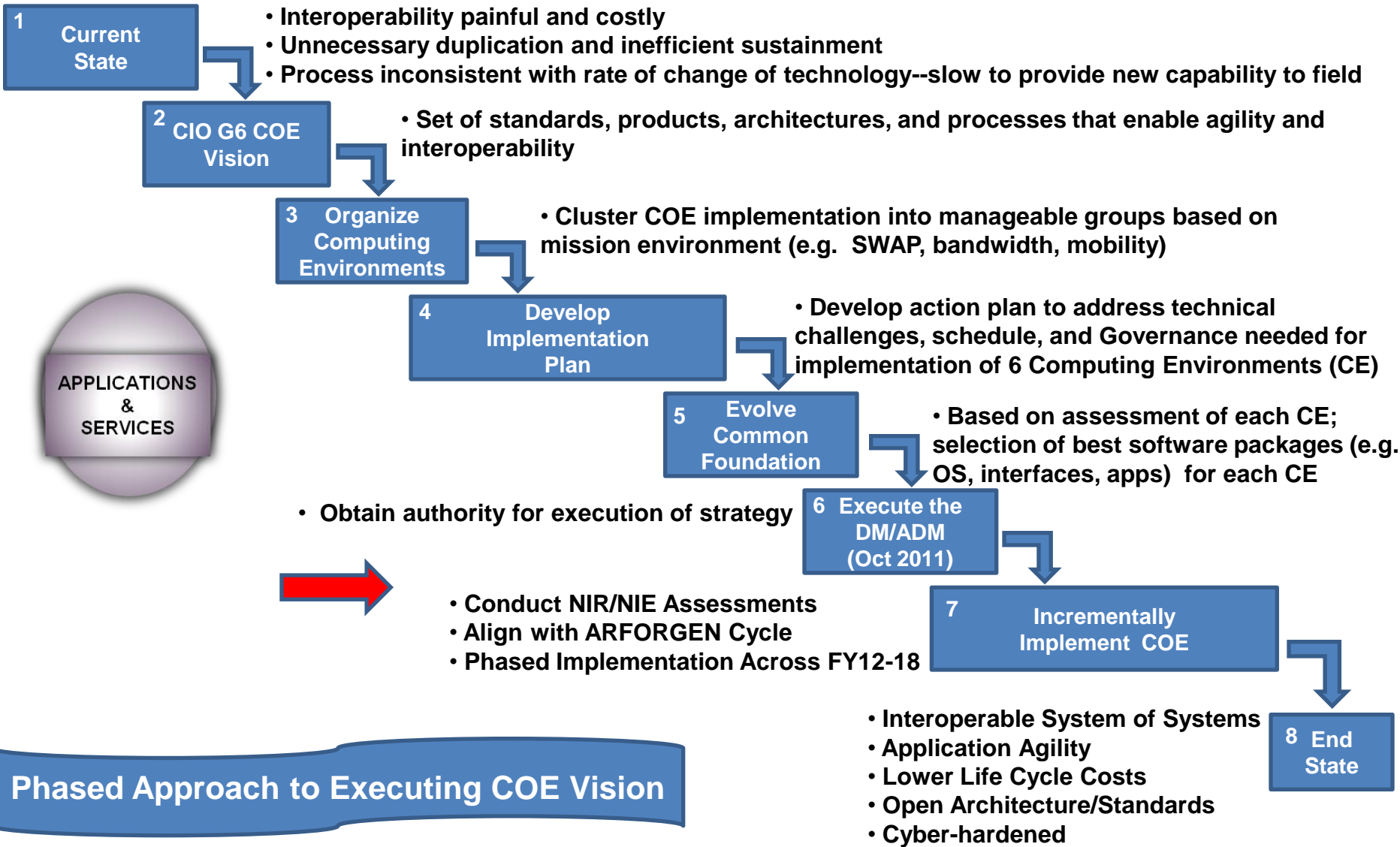
“Our strategy for implementing this COE vision is transformational that will change how we define requirements, resource, acquire, test and deliver capability to the Warfighter. It will require all of us to look within our current business practices and become agents of change.”

- Ms. Heidi Shyu





Overview: COE Implementation for Applications & Services





Apps & Services COE Building Blocks: Vision and Computing Environments

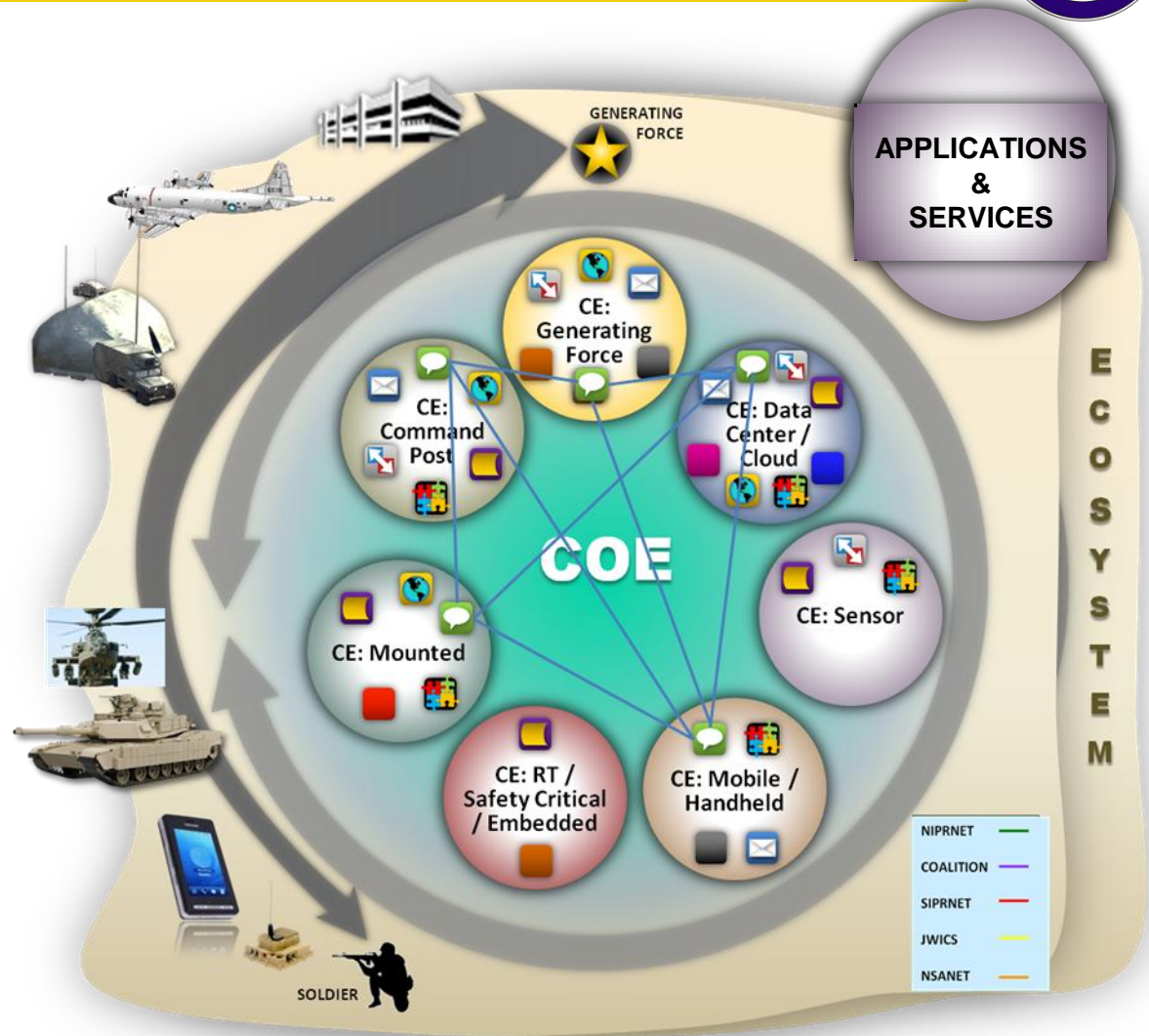


2 CIO G6 COE Vision

- CIO G6 Vision: Set of standards, products, architectures, and processes that enable agility and interoperability

3 Organize Computing Environments

- Scope of COE implementation requires systematic and manageable approach
- Clustering similar systems based on mission environments to facilitate implementation



ASA(ALT) Organized COE Space Into Manageable Pieces: Computing Environments

COE Architecture – Appendix C to Guidance for ‘End State’ Army Enterprise Network Architecture, 1 October 2010



Goals



- Standards-based / Industry-driven solutions
 - IAW the CIO/G6 Technical Architecture
- Strategic approach to software re-use
 - Single Foundation within a Computing Environment (CE)
- Reduce lifecycle cost and improve supportability
 - Abstract software applications from HW/SW infrastructure
- Make the data visible, understandable and accessible
- Encourage direct user involvement in Apps development
- Foster an agile environment that enables direct user involvement and 3rd party App development
- Improve speed to market
 - Reduce testing and certification timelines
- Leverage government labs/support structures to fullest extent

Promote innovation and aggressively pursue efficiencies



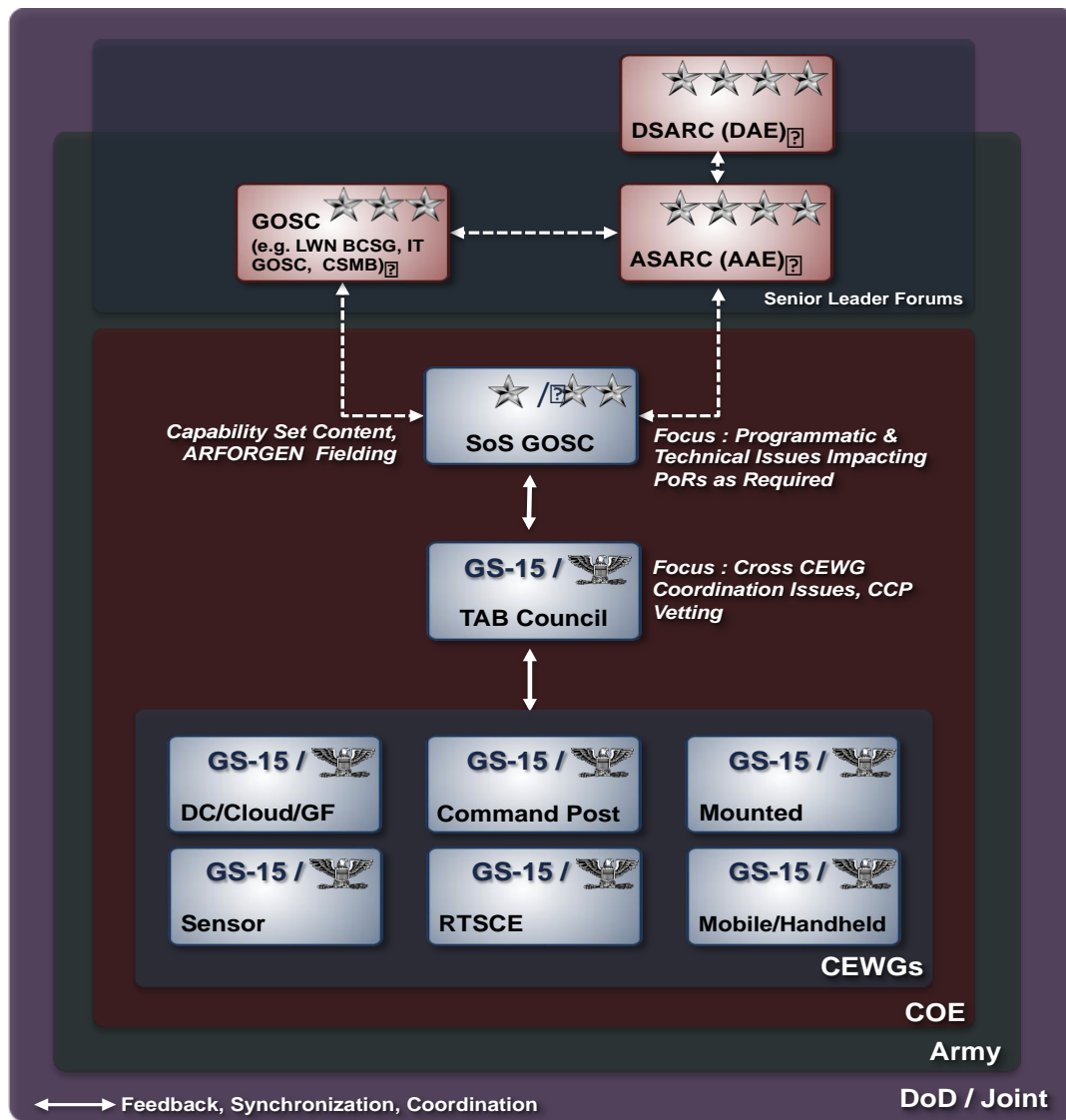


Governance



- Governance applies to all ASA(ALT) SoS activities – in this case COE
- Minor updates by MG Brown and sent out to PEOs for review S- 5 Oct
- Adjudication at lowest levels - elevate as required
- COE Proposals provide traceability and structure
- Acknowledges authorities of ASA(ALT) and non-ASA(ALT) organizations
- Highlights role of the AAE and DAE

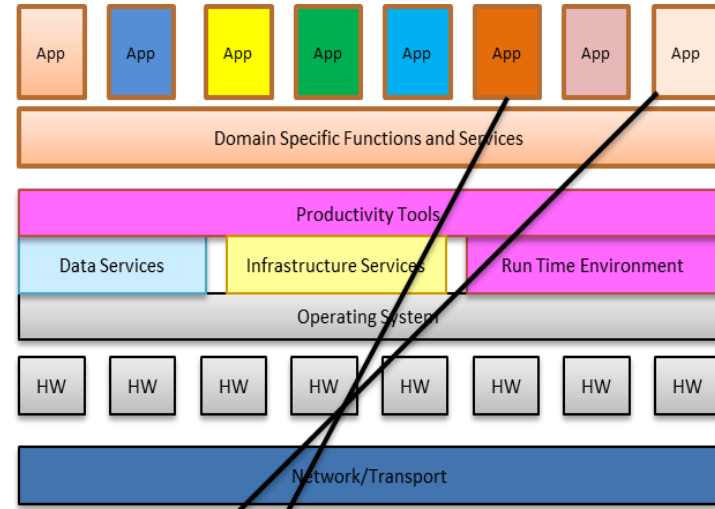
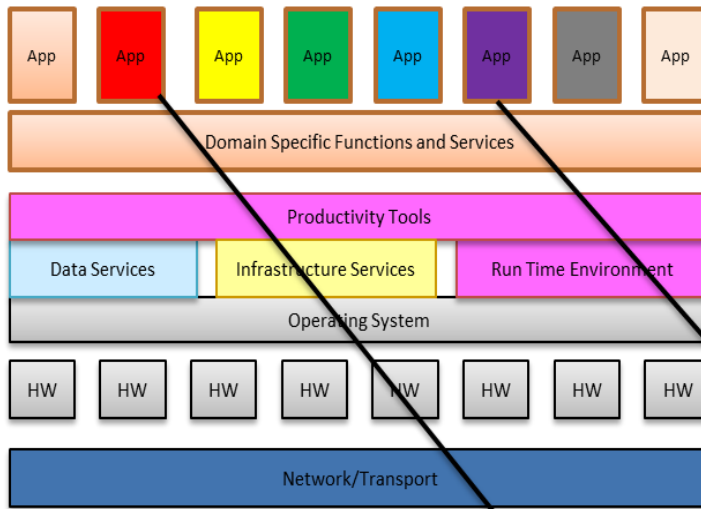
Governance is key to the success of the COE





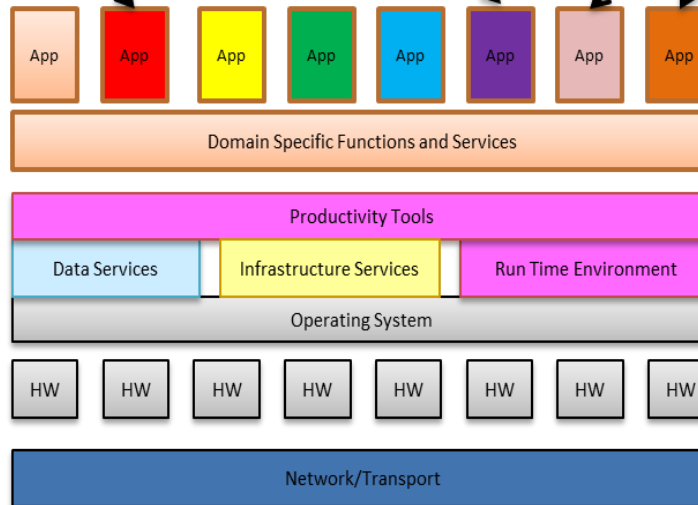
Reference Architecture Framework

What Will We Use It For



Steps:

- Assess Current State
- Map to COE ref. Arch.
- Design / Architect core infrastructure components
- Select / migrate / develop required Apps
- Integrate
- Certify
- Test
- Field



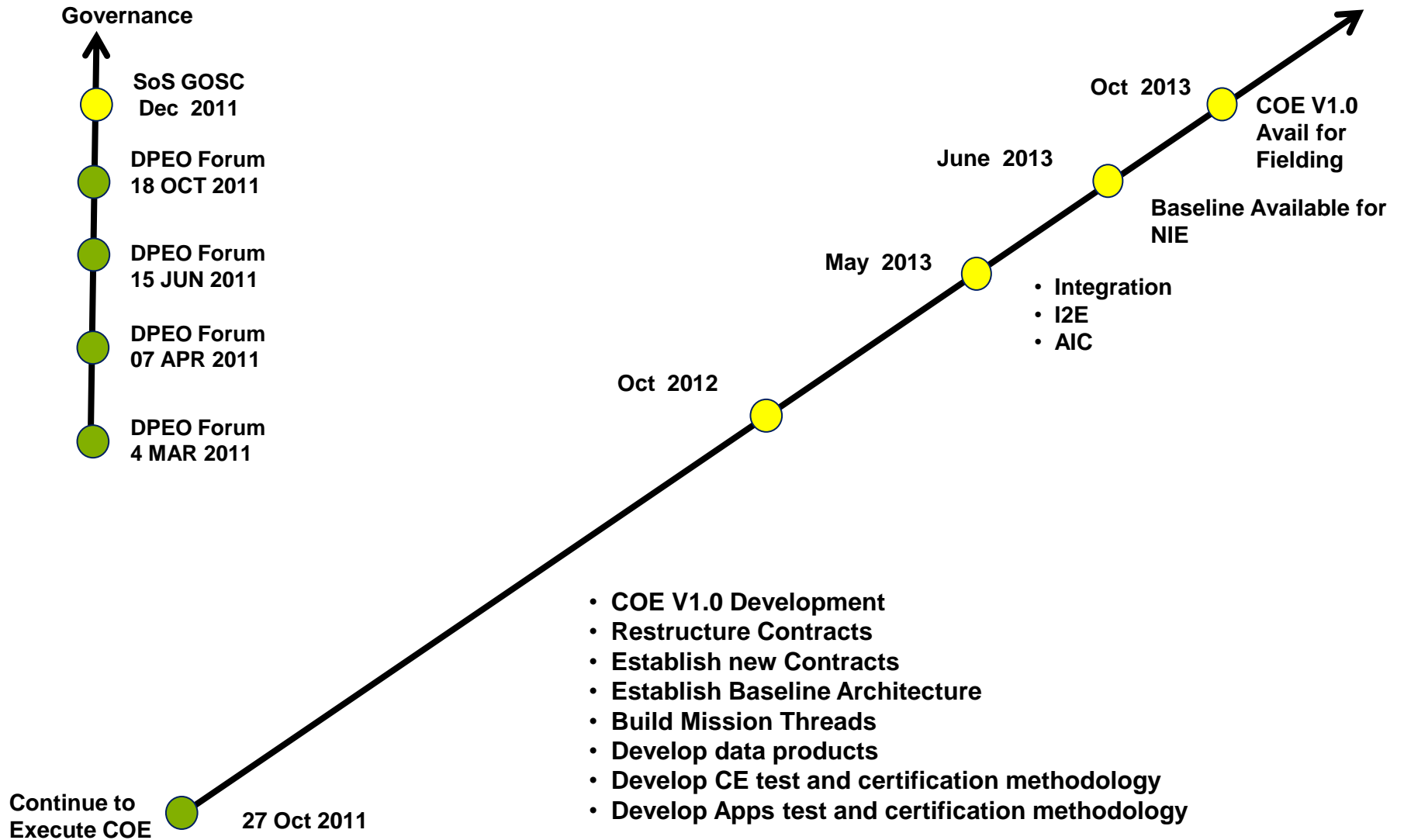
Expected Outcome:

- Single foundation
- Common user experience
- Go multiple interfaces to a single warfighter interface
- Reduced number of PORs
- Faster integration of new services
- Reduced cost for new capabilities
- Simplified training





COE V1.0 High-Level Timeline





Discussion

