Network Integration Evaluations

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Army-Industry Exchange Corner
**NIE14.1 Summary**

- **Network Insights**
  - Network Management & Complexity – the network is too complicated
  - Air-Ground Integration - connecting dismounted forces to aviation assets within the network is challenging
  - Dismounted Force Connectivity - when out of range from gateway node, dismounted force is isolated from higher/adjacent units’ network

- **Other Insights**
  - Mission Command Complexity & Compatibility – MC systems are not integrated with mobile solutions; MC system interoperability is unreliable and difficult – lack of horizontal and vertical integration
  - Command Posts - Main CPs are not expeditionary (scalable, agile, efficient, portable); BN/BDE CDRs expressed need for MCOTM TAC CPs
  - JIIM - Joint Force integration is limited; Multinational / Interagency face considerable interoperability challenges
  - Training - Leverage the NIE operational environment for division training; Modernization and unit readiness are not mutually exclusive
NIE/Bold Quest 14.2 Concept

**NIE Key Objectives**
- Assess the network's ability to provide timely situational awareness, while conducting Joint Force entry operations.
- Accelerate integration of MC on the move into Aviation and Armored Platforms
- Simplify and protect the Network
- Evaluate solutions to enhance the command post
- Improve Home Station capabilities
- Opportunities to leverage:
  - JIIM Interoperability
  - Training Opportunities - DIV HQ
  - Joint Training Experiences

**Interoperability & Integration Opportunities**

**BQ Key Objectives**
- Joint/Coalition Fires
- Digitally Aided Close Air Spt
- Friendly Force Tracking
- Combat ID Server
- Joint Fire C2 Interoperability
- Assess Joint Mission Threads to identify gaps:
  - Joint Fires
  - Integrated Air Picture

**JTE Key Objectives**
- Train 1st AD to perform as JTF (working w/ARCENT)
- Assess overall joint/multi-national interoperability issues
- Train JTF on Mission Partner Environment

**NIE/Bold Quest Teaming offers opportunities to integrate Joint Network capabilities while efficiently providing a significant Joint Training opportunity.**
① ‘Touch Points’ are where BQ Vignettes can interact with NIE
② BQ Vignettes may support JTF transition and preparatory activities
③ JTF Exercise will incorporate NIE events and BQ Vignettes (focus Joint OBJ)

Proposed JOINT MISSION THREADS:
- Joint Fires
- Joint Integrated Air Picture
- Joint Personnel Recovery
- Joint C2/Mission Command
Improving our relationship with Industry

- Industry Feedback Day at the end of NIEs
- Active engagements with industry partners
- Better follow-through and involvement on potential capabilities
Enabling an Expeditionary Army – a 5-year DOTMLPF Roadmap for Effective Integration

**Lines of Effort**

2014 2015 2016 2017 2018...

**Validate Network Baseline**
- Validate NCR
- Validate Capability Sets (IBCT, SBCT, I/SBCT, ABCT, AVN)
- Simplify UTR, Transport Convergence, NETOPS Convergence

**Mission Command**
- Nett Warrior JBC-P & Fires Apps
- INTEL Apps & Maneuver Apps
- Sustain & Protect Apps
- Medical Apps
- Develop Aerial Tier & Air Ground Integration
- CPCE

**Inter-Operability**
- Joint, Coalition Integration
- Inter-Agency Integration

**Command Posts**
- Mobile TAC CP
- Develop / Validate Mobile, Scalable, Efficient, & Survivable Main CP

**Training**
- Execute Division Training Exercises / CJTF Validation
- Develop / Validate Home-Station Training Capability

**Accelerated & Innovative Capabilities**
- Increased expeditionary capabilities of BCTs through technological innovations
- Force 2025 S&T, live experimentation; linkages to DARPA, JIEDDO, REF & AWG

**5 Year End-state:** Enabling the expeditionary Army for decisive action in 2025 and beyond

- Integrated and protected network in all formations to support decisive action
- CS validated in NIE before fielding
- Converge all networks to WIN-T
- Single COE across the Army
- CP CE and Mobile CE validated
- Standardized Mobile CE & CP CE interface
- Mobile apps interoperable w/ CP apps
- Defined requirements for cloud capabilities at BN & BCT levels
- Robust suite of capabilities including cross domain solutions
- Seamless integration within Joint/SOF
- Proven doctrine, refined TTP, mature equipment
- Mobile, scalable CPs with efficient energy
- Validated Division JTEs
- Developed & implemented Home-station Capability Set (CS) training
- Drives change in the Army; BCT reduced footprint underway
- Accelerated capabilities to support regional missions
Transition to Force 2025 Maneuvers

Force 2025 objectives – leaner, more deployable, lethal, and agile Army forces to prevent, shape, and win

NIE Objectives

• Interoperability with Unified Action and Coalition Partners
• Force Entry Mission Command (Ground)
• Fires Net-Centric Messaging Requirements
• Condition Based Maintenance
• Air Ground Network Architecture

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Ramp-Up

NIE 14.1
NIE 14.2

1Q 2Q 3Q 4Q 1Q 2Q 3Q 4Q

FY2014 FY2015

Continue to meet current contractual and legal NIE obligations

- Operational Energy - Onboard Exportable Power
- Adaptive Exchange of Data Among NetOps Mgmt Systems
- Electromagnetic Spectrum Operations
- Extend WIN-T Infrastructure to Support Disadvantaged Users
- BDE/BN Command Post Mobility and Scalability
- Integrated Network Access Control

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