PEO C3T Technical Roadmap Update

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**Purpose:** Update Industry on PEO C3T progress in executing the PEO C3T Technical Roadmap and highlight opportunities for Industry to deliver next generation technical solutions.

PEO C3T Technical Roadmap Update

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**PEO C3T Integrated SoS Approach**

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**Notional Force 2025 Baseline Architecture**
Shaping the Roadmap

MG Hughes’ Operating Tenets

What is the Simplified Tactical Army Reliable Network (STARNet)?

- STARNet lays out the entire PEO C3T SoS portfolio from today through 2020 and identifies opportunities for injecting ‘game changing’ capabilities to establish the Army’s Force 2025 baseline
Delivering a STARNet Capability Package in FY20 as the baseline for Force 2025 Tactical C3
Executing the Technical Roadmap

• **Concept and Strategy Alignment:** Synchronized Next-Gen capabilities/technologies with emerging Force 2025 Objectives

• **Requirements Prioritization:** Prioritized Next-Gen capability requirements in coordination with TRADOC

• **Budget and Modernization Plan Synchronization:** Aligning POM 17-21 strategy to enable STARNet execution

• **S&T Investment Synchronization:** Established Army RDECOM support of Next-Gen capability developments

Next Steps: Prioritize resourcing of STARNet capabilities & develop POM 17-21 guidance to get at 2020 objectives (*Force 2025 baseline*)
Mission Command: **MC Anywhere, Anytime, with Any Team, on Any Device** - Warfighting capabilities and supporting network that perform in a similar fashion wherever (CP, Platform, dismount, garrison), whenever (across full range of operations) they need it, with whoever (JIIM) is required, on whatever device (commercial enhanced thru mil spec) is available.

**Technology Opportunities**
- Web-Enabled MC Applications
- Bandwidth Aware MC Applications
- Unified Data approaches across Computing Environments (CEs)
- Organic User Interfaces across CEs
- Simplified Tactical Server Infrastructure
- Cloud Augmented MC/Big Data Analytic Tools

Network: **Seamless On-Demand Networking** – Flexibility to attach or detach (with limited/no planning) to whatever tactical/strategic/commercial network is available (with appropriate levels of service and security) to achieve their mission.

**Technology Opportunities**
- Secure tactical 4G Cellular
- Low-cost Aerial Layer Comms
- Spectrum-efficient radio waveforms/techniques
- Network Awareness
- Intelligent content caching techniques
Cyber/IA: *Fighting through the Attack* – Improving tactical capability to defend against malicious cyber attacks, execute integrated offensive/defensive cyber ops, and, as required, operate in a degraded mode to adapt to the threat.

NetOps: *Transparent Operations* - Integrated LWN NetOps capability that supports the network from dismounted soldier to the strategic infrastructure; transparent to the network users; simple and tailorable for the echelon, skills and responsibilities of the S6/network operators.

**Technology Opportunities**

- Tactical PKI solutions
- Two Factor Authentication
- Biometric ID
- Converged Comms/EW solutions
- Over-the-Air Management tools
- Secure Remote Administration Tools in Bandwidth Constrained Environment
- Integrated tactical Offensive/Defensive Cyber Ops (OCO/DCO) tools
Today’s Way Ahead

Breakout Session Intent: Provide a more detailed technical understanding of key STARNet capabilities in each functional domain to enable Industry to refine solutions to meet STARNet Operational intent

**STARNet Operational Intent**

**Mission Command:** *MC Anywhere, Anytime, with Any Team, on Any Device* - Warfighting capabilities and supporting network that perform in a similar fashion wherever (CP, Platform, dismount, garrison), whenever (across full range of operations) they need it, with whoever (JIIM) is required, on whatever device (commercial enhanced thru mil spec) is available

**Network:** *Seamless On-Demand Networking* – Flexibility to attach or detach (with limited/no planning) to whatever tactical/strategic/commercial network is available (with appropriate levels of service and security) to achieve their mission

**Cyber/IA:** *Fighting through the Attack* – Improving tactical capability to *defend* against malicious cyber attacks, execute *integrated offensive/defensive* cyber ops, and, as required, operate in a degraded mode to *adapt to the threat*

**NetOps:** *Transparent Operations* - Integrated LWN NetOps capability that supports the network from dismounted soldier to the strategic infrastructure; *transparent* to the network users; *simple and tailorble* for the echelon, skills and responsibilities of the S6/network operators

**Session 1:** Common Operating Environment/Mission Command

**Session 2:** Network

**Session 3:** NetOps and Cyber
Questions?