Defense Communications and Army Transmission Systems

Defense Communications and Army Transmission Systems (DCATS) provides the communications backbone and modernizes IT network infrastructure for the globally engaged Army.

Project Manager DCATS
COL Justin Shell

DISTRIBUTION STATEMENT A. Approved for public release. Distribution is unlimited.
PM DCATS Overview

Enabling information dominance from the tactical edge to the home station for the Army, Department of Defense, and international partners by acquiring, implementing and sustaining strategic satellite and terrestrial communication systems

GLOBAL ENTERPRISE NETWORK MODERNIZATION – AMERICAS (GENM-A)

GLOBAL ENTERPRISE NETWORK MODERNIZATION – OCONUS (GENM-O) Q2FY22

WIDEBAND ENTERPRISE SATELLITE SYSTEMS

LAND MOBILE RADIO

- Voice Services
- Data (NIPR/SIPR/other)
- Infrastructure (Fiber/Copper)
- Home Station Mission Command Centers
- Strategic Command Centers

- Best practices and technology demonstrations
- Resilient IT solutions and cloud services
- Commercial technology demonstrations at three (3) Army sites

- Voice Services
- Data (NIPR/SIPR/other)
- Infrastructure (Fiber/Copper)
- Strategic Command Centers

- DoD SATCOM Gateway Ground Terminals
- Baseband Systems
  - Modern
  - Encryption
  - Routing/Switching
  - Power & Timing
- Satellite Payload Control Tools
  - Planning
  - Monitoring
  - Management

- Computer Aided Dispatch (CAD)
- Enterprise Mass Warning and Notification (EMWN)
- Land Mobile Radio (LMR)
- Wireless – First Responder Broadband Network (FRBN)
- Next Generation 911 (NG-911)
1. As the acquisition center of excellence for enterprise network modernization, what is the current state of the enterprise network and what is the Army’s plan for its modernization?

2. Currently, Army leadership is postured to make a decision on the viability of Enterprise IT as a Service (EITaaS) sometime in Q2, FY22. Assuming it’s approved, where do you see EITaaS’s future going?

3. Given the environment of decreasing resources, how can we gain efficiencies to maximize the effectiveness of the resources that we do have?
Defense Communications and Army Transmission Systems (DCATS)

Colonel Jay Shell
Project Manager
Enabling information dominance from the tactical edge to the home station for the Army, Department of Defense, and international partners by acquiring, implementing and sustaining strategic satellite and terrestrial communication systems

GLOBAL ENTERPRISE NETWORK MODERNIZATION – AMERICAS (GENM-A)

GLOBAL ENTERPRISE NETWORK MODERNIZATION – OCONUS (GENM-O) Q2FY22

WIDEBAND ENTERPRISE SATELLITE SYSTEMS

LAND MOBILE RADIO

Installation IT Modernization (CONUS)
- Voice Services
- Data (NIPR/SIPR/other)
- Infrastructure (Fiber/Copper)
- Home Station Mission Command Centers
- Strategic Command Centers

Innovation / Technology Demonstration
- Best practices and technology demonstrations
- Resilient IT solutions and cloud services
- Commercial technology demonstrations at three (3) Army sites

Installation IT Modernization (OCONUS)
- Voice Services
- Data (NIPR/SIPR/other)
- Infrastructure (Fiber/Copper)
- Strategic Command Centers

SATCOM Ground Segment Modernization
- DoD SATCOM Gateway Ground Terminals
- Baseband Systems
  - Modems
  - Encryption
  - Routing/Switching
  - Power & Timing
- Satellite Payload Control Tools
  - Planning
  - Monitoring
  - Management

Base Support Communications
- Computer Aided Dispatch (CAD)
- Enterprise Mass Warning and Notification (EMWN)
- Land Mobile Radio (LMR)
- Wireless – First Responder Broadband Network (FRBN)
- Next Generation 911 (NG-911)
Installation Information Infrastructure Modernization

A Unified Network Enabling Tactical Effects

DCATS: Defense Communications and Army Transmission Systems
ICAN: Installation Campus Area Network
I3MP: Installation Information Infrastructure Modernization Program
ISP: Inside Plant
LAN: Local Area Network
LMR: Land Mobile Radio

ENABLING WARFIGHTERS WITH:
- Training (STE)
- Communication
- Logistics
- Mission Command From Afar (HSMCC)
- All Domain Operations (ADOC)
- Joint Interoperability (JADC2)
- Store and Compute

ACRONYMS
DCATS: Defense Communications and Army Transmission Systems
ICAN: Installation Campus Area Network
I3MP: Installation Information Infrastructure Modernization Program
ISP: Inside Plant
LAN: Local Area Network
LMR: Land Mobile Radio

STE: Synthetic Training Environment
MCF: Main Communications Facility
OSP: Outside Plant
NIPR: Non-Secure Internet Protocol Router Network
SIPR: Secret Internet Protocol Router Network
VOP: Voice Over Internet Protocol

TCF: Technical Control Facility
VOIP: Voice Over Internet Protocol
SVOIP: Secure Voice Over Internet Protocol
WESS: Wideband Enterprise Satellite Systems
WSOMS: Wideband Satellite Operational Management Systems
Network Modernization

Multi Domain Operations by 2028
Joint All Domain Command and Control
Mission Command from Afar
Synthetic Training Environment

Modern / MDO-capable Communication Architecture

- WiFi
  - Wireless Access Points
  - 5G

- SIPR Regionalization
  - Commercial Solutions for Classified

- Network Switches
  - 10 Gb → 40/100 Gb
  - SDN capable

- Trenching
- Copper → Fiber
- HVAC
- Wiring

- Racks
- Back-up Generators
- Plant Maintenance
- Assured Power

Infrastructure Upgrades

Infrastructure Upgrades are foundational to Multi-Domain Operations in a Unified Network
DCATS Upcoming Opportunities/ Needs from Industry

**BEHAVIORS NEEDED**
- Be Innovative
- Be A Participant, Get In The Game
- Integrate With Each Other
- Provide Metrics That Demonstrate Your Value
- Be Flexible
- Schedule Efficiencies
- Business Best Practices

**CAPABILITIES NEEDED**
- VOIP
- Software Defined Networking
- Commercial Solutions for Classified
- LMR/FirstNet Integration
- Enterprise Mass Warning Systems
- Computer Aided Dispatch
- Infrastructure Modernization Capability Sets (CAPSET)
- SIPR Modernization
- Digital Satellite Modem
- Enterprise Computer Aided Dispatch (CAD
- Enterprise Mass Warning & Notification (EMWN) System
- WiFi 6
PdM WESS AFCEA Belvoir Industry Days

Product Manager: LTC Scott Davis
PdM WESS Product Orientation

PdM WESS MISSION
Acquire, deliver, and sustain superior enterprise (strategic) military satellite communications and payload control capabilities for the US Army, DoD and the Joint Warfighting Community

Satellite Terminal Systems
- Large and medium aperture antennas operating in Military X and Military Ka frequency bands
- Latest generation is MET, currently in production and fielding
- Senior National Leadership Communications

Satellite Baseband Systems
- IT based equipment racks supporting the connection and signal processing between terrestrial and satellite nodes. Provides interaction to the Defense Information Systems Network / DoD Information Network
- Consists of satellite modems, switches, routers, precision timing distribution, power distribution and encryption devices. Predominantly Commercial Off The Shelf products.

Wideband Control Systems
- Wideband SATCOM Operational Management System (WSOMS) provides the tools and systems enabling US Army Space and Missile Defense Command to operate and manage the Wideband Global SATCOM constellation for the Department of Defense.
- Software intensive System of Systems that enables planning and control of satellite vehicles and payloads; monitoring of spectrum (threat and interference); trend analysis and anomaly management. Operates over dedicated closed restricted network connecting.
- Consists of COTS servers, routers/switches, modems, and mix of COTS and developmental software

PdM WESS VISION
The Department of Defense choice for world class enterprise satellite communication systems that increases efficiency and enhances responsiveness to warfighter needs
PdM WESS
Upcoming Opportunities/ Needs from Industry

BEHAVIORS NEEDED
• Be Innovative
• Commercial items, non-developmental
• Interoperable, open architecture
• Industry collaboration for standards
• Business Best Practices
• Scalable solutions

CAPABILITIES NEEDED
• Terminal / Modem Remote monitoring (potential for remote control)
• Terminal amplifier power increase and reliability
• Reduced maintenance
• Digital Multi-carrier FDMA modem
• Wideband Signal Processors (WSP)
• Digital IF Conversion Subsystem (DCS)

• Additional COTS/GOTS Terminals
• Enterprise Management and Control
• Solid State Power Amplifier
• Digital Intermediate Frequency Modem
• Baseband serial-to-IP solutions to replace legacy systems
• Payload Control Network
  Modernization
• Payload Spectrum Monitoring
• Microservice Environment
<table>
<thead>
<tr>
<th>Procurement Type</th>
<th>Description</th>
<th>Vehicle Contract or Method</th>
<th>Projected Quarter FY of Solicitation</th>
<th>Contracting Office</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply</td>
<td>Enterprise SATCOM Gateway Modem (ESGM)</td>
<td>GSA VETS 2</td>
<td>Q1 2022</td>
<td>ACC Rock Island</td>
</tr>
<tr>
<td>Supply</td>
<td>Maintenance Servers</td>
<td>CHESS</td>
<td>Q1 2022</td>
<td>ACC Rock Island</td>
</tr>
<tr>
<td>Supply</td>
<td>Small Fit-form Pluggables</td>
<td>CHESS</td>
<td>Q1 &amp; Q2 2022</td>
<td>ACC Rock Island</td>
</tr>
<tr>
<td>Supply</td>
<td>GEM-One Software</td>
<td>CHESS</td>
<td>Q1 2022</td>
<td>ACC Rock Island</td>
</tr>
<tr>
<td>Supply</td>
<td>Veritas 200 Software</td>
<td>CHESS</td>
<td>Q1 2022</td>
<td>ACC Rock Island</td>
</tr>
<tr>
<td>Supply</td>
<td>Serial Interface Patching System (SIPS)</td>
<td>CHESS/GSA</td>
<td>Q1 2022</td>
<td>ACC Rock Island</td>
</tr>
<tr>
<td>Supply</td>
<td>Wideband Satellite Communications (SATCOM) Trend Analysis and Anomaly Resolution Subsystem (WSTARS) Hardware Spares</td>
<td>CHESS</td>
<td>Q1 2022</td>
<td>ACC Rock Island</td>
</tr>
<tr>
<td>Supply</td>
<td>Wideband Subsystem Merge Hardware Spares</td>
<td>CHESS</td>
<td>Q2 2022</td>
<td>ACC Rock Island</td>
</tr>
</tbody>
</table>
## PdM WESS Business Opportunities

<table>
<thead>
<tr>
<th>Procurement Type</th>
<th>Description</th>
<th>Vehicle Contract or Method</th>
<th>Projected Quarter FY of Solicitation</th>
<th>Contracting Office</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply</td>
<td>Microsoft Licenses</td>
<td>CHESS</td>
<td>Q2 2022</td>
<td>ACC Rock Island</td>
</tr>
<tr>
<td>Supply/Service</td>
<td>Wideband Satellite Communications (SATCOM) Trend Analysis and Anomaly Resolution Subsystem (WSTARS) System/Support</td>
<td>Fair Opportunity</td>
<td>Q1 2022</td>
<td>DISA DITCO</td>
</tr>
<tr>
<td>Service</td>
<td>Global Satellite Configuration Control Element (GSCCE) Engineering Services</td>
<td>Fair Opportunity</td>
<td>Q2 2022</td>
<td>DISA DITCO</td>
</tr>
<tr>
<td>Supply</td>
<td>SolarWinds Licenses</td>
<td>CHESS</td>
<td>Q2 2022</td>
<td>ACC Rock Island</td>
</tr>
<tr>
<td>Supply</td>
<td>Red Hat Licenses</td>
<td>DoD ESI BPA</td>
<td>Q2 &amp; Q3 2022</td>
<td>ACC Rock Island</td>
</tr>
<tr>
<td>Supply</td>
<td>PostGres Licenses</td>
<td>NASA SEWP</td>
<td>Q3 2022</td>
<td>ACC Rock Island</td>
</tr>
<tr>
<td>Supply</td>
<td>Grafana Licenses</td>
<td>CHESS</td>
<td>Q4 2022</td>
<td>ACC Rock Island</td>
</tr>
<tr>
<td>Supply</td>
<td>SL - Graphical Modeling System (SL-GMS) Licenses</td>
<td>CHESS</td>
<td>Q4 2022</td>
<td>ACC Rock Island</td>
</tr>
<tr>
<td>Service/Supply</td>
<td>Enterprise Digital Intermediate Frequency Multi-Carrier (EDIM) Modem</td>
<td>Full and Open</td>
<td>Q2 2022</td>
<td>ACC Rock Island</td>
</tr>
</tbody>
</table>
PUBLIC SAFETY COMMUNICATIONS EVOLUTION

TWO-WAY LAND MOBILE RADIO (LMR)

Two-way Wireless Communication System
- Highly reliable
- Limited interconnectivity with other systems
- Mission-critical voice services
- Basic data transmission
- Public safety enhanced features e.g., Push To Talk (PTT)
- Limited transmission range
- Enhanced performance enabled by Project 25 (P25)

NATIONWIDE PUBLIC SAFETY BROADBAND NETWORK

Public safety-grade data network
- Mission-critical voice over LTE
- Single integrated device (voice & data) for certain user class
- Dedicated network built to public safety requirements using dedicated and allocated 700 MHz spectrum

EXISTING PRIVATE / COMMERCIAL MOBILE DATA

Other data-enabling infrastructure
- Available to augment mission critical voice communications
- May include wireline, cellular mesh, microwave, satellite, wireless local area (e.g., Wi-Fi), paging, HF Radio, and/or unlicensed wireless networks
- Sufficiency for public safety communications based on specific user group needs

EMERGING TECHNOLOGIES

Device-to-device (D2D) Communication
- Devices communicate directly with each other without routing the data paths through a network infrastructure
- Proximity services
- Resiliency options

INTEGRATED TECHNOLOGIES

ADMINISTRATIVE DATA
MISSION CRITICAL DATA
ADMINISTRATIVE VOICE
MISSION CRITICAL VOICE

Base Emergency Communications Systems (BECS)
- Computer Aided Dispatch (CAD)
- Enterprise Mass Warning & Notification (EMWN)
- First Responder Broadband Network (FRBN)
- Land Mobile Radio (LMR)
- Next Generation 9-1-1 (NG 9-1-1)
**PdM BECS Overview**

**BASE EMERGENCY COMMUNICATIONS SYSTEMS (BECS)**

- **Computer Aided Dispatch (CAD)**
  - Central hub capable of dispatching law enforcement, fire, and medical services

- **Enterprise Mass Warning & Notification (EMWN)**
  - Rapid dissemination of warnings and notifications to all DoD personnel within a specific geographic area of an impending or ongoing threat

- **Land Mobile Radio (LMR)**
  - Non-Tactical mission critical communication in support of installation public safety organizations and functions, including first responder, force protection and other installation management functions.

- **Next Generation 9-1-1 (NG-911)**
  - Integrated end-to-end information flow; Text, Video, and Imagery processing
  - Enhanced location information
  - Increased resiliency
  - Interoperability with civilian mission partners
  - Information sharing and Enhanced mutual aid capabilities

- **First Responder Broadband Network (FRBN)**
  - Enhance existing mobile radio communications infrastructure and provide a solution to interoperate with legacy LMR networks for integrated voice, video, and data capabilities
Public Safety Communications (PSC) requires multiple capabilities that must be integrated in order to work optimally.

Legend:
- CAD: Computer Aided Dispatch
- EMWN: Early Warning Mass Notification
- EMS: Emergency Medical Services
- F&ES: Fire and Emergency Services
- LE: Law Enforcement
- LMR: Land Mobile Radio

Interdependence and Interoperability

PSC

- LMR (Voice)
- FirstNet (Broad Band (DATA))
- CAD
- E911/NG911
- EMWN

Impacts include Directory Transfer and telephone upgrades

TDM Telephone Switch Replacement

PSC OPR: Army CIO-G6

Enterprise Enablers

1. AMC / IMCOM
2. ARCYBER
3. HQDA OPMG LE (OPR-CAD)
4. HQDA G-3/5/7 (OPR-EMWN)
5. HQDA G-9 (OPR PSC/LMR)
6. HQDA G-9
7. HQDA G-9 (F&ES)
8. MEDCOM (EMS)
9. NETCOM (LMR)
10. PED BIS
# Contracting Opportunities

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ARMY CONUS ENTERPRISE LAND MOBILE RADIO (ACE LMR)</td>
<td>ACC-RI</td>
<td>ANC 8 (a)</td>
<td>FY22</td>
<td>MAR 2022</td>
<td>$6.5M</td>
<td>YES</td>
</tr>
<tr>
<td>ARMY EUROPEAN ENTERPRISE LAND MOBILE RADIO (EELMR)</td>
<td>ACC-RI</td>
<td>ANC 8 (a)</td>
<td>FY22</td>
<td>SEP 2022</td>
<td>$7-10M</td>
<td>YES</td>
</tr>
<tr>
<td>COMPUTER AIDED DISTPATCH (CAD)</td>
<td>ACC-RI</td>
<td>FULL &amp; OPEN</td>
<td>FY22</td>
<td>JUL 2022</td>
<td>$3 - 3.5M</td>
<td>TBD</td>
</tr>
<tr>
<td>ENTERPRISE MASS WARNING &amp; NOTIFICATION (EMWN)</td>
<td>ACC-RI</td>
<td>FULL &amp; OPEN</td>
<td>FY22</td>
<td>SEP 2022</td>
<td>TBD</td>
<td>TBD</td>
</tr>
</tbody>
</table>

- **CONUS**: Modernize, Integrate and Enterprise Army CONUS LMR subsystems to the ACE Cores -- Award 2 new sites (Sill/Letterkenny)
- **OCONUS**: Modernize, Integrate and Enterprise 60 plus sites in Europe
- Enterprise Computer Aided Dispatch at Tier I Public Safety Access Point (PSAP) locations (3-5 Sites from 1-N List) Starting w/ APG, Campbell, Irwin, Knox and Leaven Worth

These programs are tied to the Base Emergency Communications Systems, Capabilities Development Document which is in staffing at the Army Capability Manager for Network and Services who will validate and turn these efforts into programs of record. PEO EIS currently is the Office of Primary Responsibility for these efforts and looks forward to identifying a material solution for each system of record in the coming year or two.
BACK UP
Organizational Structure

Project Lead
Land Mobile Radio
Mr. Ernest J. Wasikowski
ernest.j.wasikowski.civ@mail.mil
(703) 806-9130

ADMIN
(VACANT)
(703) 806-8490

APM – CONUS
Mr. Eric Hadley
eric.hadley.civ@mail.mil
(703) 806-8248

APM – EUR
Mr. Justin Calixto
justin.calixto.civ@mail.mil
DSN (314) 565-1305

APM – PACJAK/SWA
Mr. Clive Flores
clive.j.flores.civ@mail.mil
(703) 806-8488

APM – EMWN
(VACANT)
(703) 806-8497

ISSO (MATRIX)
Lisa Meade
lisa.m.meade.civ@mail.mil
703-806-8504

APM SUPPORT (SETA)
Mr. Christian Ross
christian.f.ross2.civ@mail.mil
(703) 806-8491

APM SUPPORT (SETA)
Ms. Jennifer Sutherland
jennifer.a.sutherland7.ctr@mail.mil
(703) 806-6668

APM SUPPORT (SETA)
Brenda Toves
brendamarie.p.toves.ctr@mail.mil
(703) 806-8428

ISSO (SETA)
Valerie Edwin-York
valerie.edwin-york.ctr@mail.mil
703-806-8504

APM SUPPORT (SETA)
Janel Akande
janel.l.akande.ctr@mail.mil
703-806-3491

ISSO (SETA)
Chairie Smith
chairie.a.smith.ctr@mail.mil
703-806-8504

APM SUPPORT (SETA)
Tommy Fitzgerald
tommy.d.fitzgerald.ctr@mail.mil
703-806-8473

LOGISTICS (SETA)
Ms. Bertha Robertson
bertha.l.robertson2.ctr@mail.mil
703-806-3302

MATRIX SUPPORT

ACC-ROCK ISLAND

(PCO) Conrad Baker (309) 782-5417 a.c.baker2.civ@mail.mil
Nicole Feddersen (309) 782-5691 corene.n.feddersen.civ@mail.mil
Mark Goethe (309) 782-5748 mark.t.goethe.civ@mail.mil
Mallory Hoffmann (309) 782-6643 mallory.d.hoffmann.civ@mail.mil

LOGISTICS (SETA)
Brett Dolinski
brett.t.dolinski.ctr@mail.mil
703-806-9101

SEC Ft. Detrick, MD
Monique Canale (301) 619-6432
Craig Gandee (301) 619-6463
Bob Cornell (301) 619-6445
Ray Helsley (301) 619-8505
Diane Shaw (443) 861-9180
Jhali Tyson (301) 619-6467
Tapan Pudasaini (301) 619-6462
Bill Schoeneble (301) 619-6415
Tom Davis DSN (314) 565-1305
PdM Global Enterprise Network Modernization – Americas (GENM-A)

PdM Power Projection Enablers (PdM P2E)

AFCEA Belvoir Industry Day
04 November 2021

Overall Classification of the Briefing Is: CUI
PdM GENM-A
Leadership Team

Mr. Charles Cole
Deputy Product Manager

Mr. Michael Van Buskirk
Deputy Product Manager

LTC Xkoshan Arnold

NOTIONAL OPERATING MODEL

TECHNOLOGY INNOVATION

FUTURE OPS

IT MODERNIZATION

CURRENT OPS

TECHNICAL MANAGEMENT DIVISION (TMD)

SYSTEMS ENGINEERING/INTEGRATION

PROGRAM SUPPORT

BUSINESS OPERATIONS & MANAGEMENT
GENM-A Operating Model (Notional)
Integrated Enterprise Network Technology Innovation

FY21: Campbell, JBLE, Carson, Rilev, Hill, Ansbach + 6 sites

Anniston AD, Aberdeen, Benning, Leavenworth, Stanley, Rudder + 10 Sites

Belvoir, Devens, Hamilton, JBSA, Arifjan, Wiesbaden + 11 Sites

Carlisle Barracks, Roberts, Chicago + 3 Sites

Detroit, Leonard Wood, Rock Island, Tobyhanna + 12 Sites

Huachuca, Irwin, Humphreys, Meade, Stuttgart + 5 Sites

Wainwright, Buchanan, McAlester + 5 Sites

Network - Infrastructure/Netw'

Baseline - Infrastructure/Netw'

Holisti Modernization Baseline - ISF/OSP/NetMOD/VoIP/SIPR/MCTA

Army Modernization Office

EITaaS Pilot

Follow-on EITaaS Efforts

Modernization (Unfinished)

Capability Set 25 Sprint

TBD Based on tech maturity / requirements

Decision Point

Industry Day

Small Scale Demo

Large Scale

Demonstration/Analysis

CS 23

CS 26

CS 27

CS 29
# GENM-A Capabilities

## Network Capabilities

### Outside Plant (OSP) Modernization:
Trenching, digging, laying conduit, and installing fiber and copper to connect network devices on a P/C/S. (LCR Cycle 20 years)

### Inside Plant (ISP) Upgrades:
Installation/upgrade of Power, UPS, Generators, HVAC, Communications Shelters, in support of OSP capabilities. (LCR Cycle 20 years)

### Network Services:
Installation and configuration of network switches to provide NIPR and SIPR capabilities to Army P/C/S. (LCR Cycle 7 years)

### Voice Services:
Modernizing P/C/S voice infrastructure to an over Internet Protocol (IP) technology. Divestiture of legacy technology. (LCR Cycle 7 years)

### Tech Control Facilities (TCFs):
Serves as the conduit between the DISN WAN and the ICAN. It also hosts DISA POPs, JRSS, NEC JB-CE, legacy TLAs and commercial POP.

## Command Centers

### Home Station Mission Command Center (HSMCC):
A suite of standardized capabilities utilized at Corps, Division and Theater Headquarters that allows expeditionary mission command during all operational phases.

### Strategic Command Centers (SCC):
Provides core Command, Control, Communications, and Computers (C4) infrastructure for Joint, Coalition and Interagency C4 capabilities at Army and Army supported command centers (SOUTHCOM, AOC, ANMCC & JSOC)

## Others

### Enterprise IT as a Service (EITaaS) Pilot:
A targeted pilot to explore and evaluate a variety of commercial solutions, Process improvement to enhance speed of delivery, Assessment of cost drivers and financial feasibility at pilot sites.

**Note:** Bolded font with shadows denotes shared mission
Continual engagement with all Stakeholders in multiple recurring working groups and forums (annual, semi-annual, and quarterly)

Additionally, we have more in-depth working groups, IPTs, and status reviews at the APM / Action Officer level on a monthly or weekly basis
PdM P2E Leadership Team

Mr. Cary Ferguson
Director
Europe Project Office

Mr. Tim Green
Director
Pacific Project Office

Mr. Scott Ervin
Director
South West Asia Project Office

Ms. Toni Freeland
Deputy Product Manager

Mr. Tom Dunaway
Product Manager

Mr. Mark Smith
Director (Acting)
Acquisition Management Directorate

MAJ Chris Biddie
APM Europe

MAJ Deems McKee
APM Pacific

Vacant
APM SWA

Mr. Mark Broughton
Director

Mr. Jean Anicet
Director (Acting)
Technical Management Directorate

Mr. Tim Green
Director

Mr. Scott Ervin
Director
Continual engagement with all Stakeholders in multiple recurring Theater Deep Dives, Theater Synchronization Reviews (TSR), Theater Requirements Validation Boards (TRVB), TSR Integration Board (TIB) (annual, semi-annual, and quarterly)

Additionally, we have more in-depth working groups, IPTs, and status reviews at the APM / Action Officer level on a monthly or weekly basis.
# P2E Capabilities

<table>
<thead>
<tr>
<th>Capability</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIPR/NIPR ICAN</td>
<td><strong>Communications backbone for installation:</strong> Upgrade network capacity from 1 to 10/40/100 GB Edge Access Switches, Area Core Switches, Area Distribution Switches, Collection Routers, Layer 2 Bridging Switches</td>
</tr>
<tr>
<td>Commercial Solutions for Classified (CSfC) / Virtual Desktop Infrastructure (VDI) / Multiple Independent Levels of Security (MILS)</td>
<td><strong>Agile access to classified networks:</strong> Reduce cybersecurity attack surface for classified networks; Divest of High Assurance Internet Protocol Encryptor (HAIPE) devices; Remove/Reduce legacy technologies that introduce constraints and points of failure for large segments of the current network</td>
</tr>
<tr>
<td>Inside Plant</td>
<td><strong>Required upgrades inside buildings:</strong> HVAC, Power/Grounding, Racks, Building Fiber Wiring, UPS, Comms Shelters, Generators</td>
</tr>
<tr>
<td>Outside Plant</td>
<td><strong>Connecting buildings to main nodes:</strong> Fiber, Copper, Duct, Maintenance Holes, Wireless Access Points, Antennas</td>
</tr>
<tr>
<td>Voice Modernization</td>
<td><strong>Soft Client + Hard Client / TDM Decommissioning</strong> Estimate ~80% soft clients on computers; ~20% hard clients for base services/VIP; decommission TDM's; implement critical infrastructure for base services</td>
</tr>
</tbody>
</table>

*Capabilities Enable Secure A/V Systems, Integration of Command Operations Systems, Secure Video Teleconference Systems, C4ISR Infrastructure, ERPs, STE, MPE, and other key warfighting functions*
<table>
<thead>
<tr>
<th>NAICS</th>
<th>Description</th>
<th>Directorate</th>
<th>Contracting Office</th>
<th>Vehicle Contract / Method</th>
<th>Estimated Award</th>
<th>Estimated Contract Value</th>
<th>Small Business Set Aside?</th>
</tr>
</thead>
<tbody>
<tr>
<td>54130</td>
<td>Europe (EUR) Network &amp; Infrastructure Modernization Capability Set</td>
<td>P2E Europe</td>
<td>ACC-RI</td>
<td>CHESS ITES 3S</td>
<td>3QFY22</td>
<td>$300M</td>
<td>No</td>
</tr>
<tr>
<td>54130</td>
<td>Pacific (PAC) Network &amp; Infrastructure Modernization Capability Set</td>
<td>P2E Pacific</td>
<td>ACC-RI</td>
<td>CHESS ITES 3S</td>
<td>3QFY22</td>
<td>$300M</td>
<td>No</td>
</tr>
<tr>
<td>54130</td>
<td>South West Asia (SWA) Network &amp; Infrastructure Modernization Capability Set</td>
<td>P2E SWA</td>
<td>ACC-RI</td>
<td>TBD</td>
<td>3QFY23</td>
<td>$150M-$250M</td>
<td>No</td>
</tr>
</tbody>
</table>
Path Forward

• Award flexible contracts that align to network lifecycle modernization strategy beginning in FY22
  • Agile scope that accounts for new Capability Set inserts

• Enterprise Information Technology as a Service (EITaaS)

• Voice Modernization IAW future Army Enterprise Solution

• Commercial Solutions for Classified (CSfC)

• FSA: Product Manager, Power Projection Enablers re-brands to Global Enterprise Network Modernization – OCONUS (GENM-O) ~2QFY22
Where Industry Can Help

- Role of OEM and Prime Contractor are defined properly
- How can we leverage emerging technologies?
- How can we optimize and integrate commercial technologies into the enterprise network?
- Deliver reliable, sustainable, and cost-effective capabilities to our Soldiers to win the next fight
  - “What got [us] here won’t get us [there]”
  - We owe it to them to deliver the best capability possible
- Your feedback on our RFIs is critical to improve our processes and the final solicitation
- Accurate timeline assessments for RFPs
- Understand how to operate in OCONUS locations (P2E)
- How can we be more innovative in terms of how we implement Network Modernization?
The Army relies on PEO EIS
Connecting the Army. Working for Soldiers.

Company/usarmypeoeis
peo.eis
@PEOEISPAOffice
www.eis.army.mil
Network Modernization

Multi Domain Operations by 2028
Joint All Domain Command and Control
Mission Command from Afar
Synthetic Training Environment

Modern / MDO-capable Communication Architecture

- WiFi
  - Wireless Access Points
  - 5G
- SIPR Regionalization
  - Commercial Solutions for Classified
- Network Switches
  - 10 Gb ➔ 40/100 Gb
  - SDN capable
- 5G
- Trenching
- Copper ➔ Fiber
- HVAC
- Wiring
- Racks
- Back-up Generators
- Plant Maintenance
- Assured Power

Infrastructure Upgrades are foundational to Multi-Domain Operations in a Unified Network

Infrastructure Upgrades
Voice Modernization

**Direction:** Halt Voice Modernization (VMOD) pending the development of a holistic plan (FY 21 G6 Priorities Memo)

**Intent:** Do not continue status quo of 100% of hard phones on desks

**Decisions:**
- Decommission TDMs
- VoIP on all Army Bases
  - Planning estimate:
    - 80% Soft Clients on computers
    - 20% Hard Clients for base services / VIPs

**Requires:**
- Architecture design with NETCOM / G6
- Soft client sustainment cost assumption (NETCOM)
- E911 Risk acceptance (NETCOM)
- Policy / regulation updates based on VMOD decision (G6 / NETCOM)

**Running Estimates:**
- Select soft client options
  - A365 Teams with Business Voice
  - Jabber (Cisco)
  - Avaya
- % and locations of hard clients

**Assumptions:**
- VOIP Regionalization
- Cloud services where feasible
- O&M costs higher for soft client
- Critical infrastructure receives phones for emergency and base services

PEO EIS ready to restructure VMOD using lessons learned from soft-client early adopter sites (Lee & Jackson).
Proposed Questions

**WESS**

Given the Army’s operational and tactical formations’ continued leverage of data driven intelligence and tools, do you anticipate an expansion of the Wideband Global Satellite (WGS) constellation?

**LMR**

With the advent of FirstNet in selected military communities, the boundaries between military and civilian emergency services continue to blur. Is it possible to envision the management of the Public Safety Communications network being absorbed by a local municipality at some point?

**GENM-A**

Looking into your crystal ball, what do you see as the future for EITaaS initiatives?

**P2E**

What do you see as the hurdles that would preclude large telecomm providers from not wanting to pursue OCONUS EITaaS initiatives?