



CLASSIFICATION

# PEO IEW&S AI / ML & SW Development MATOC

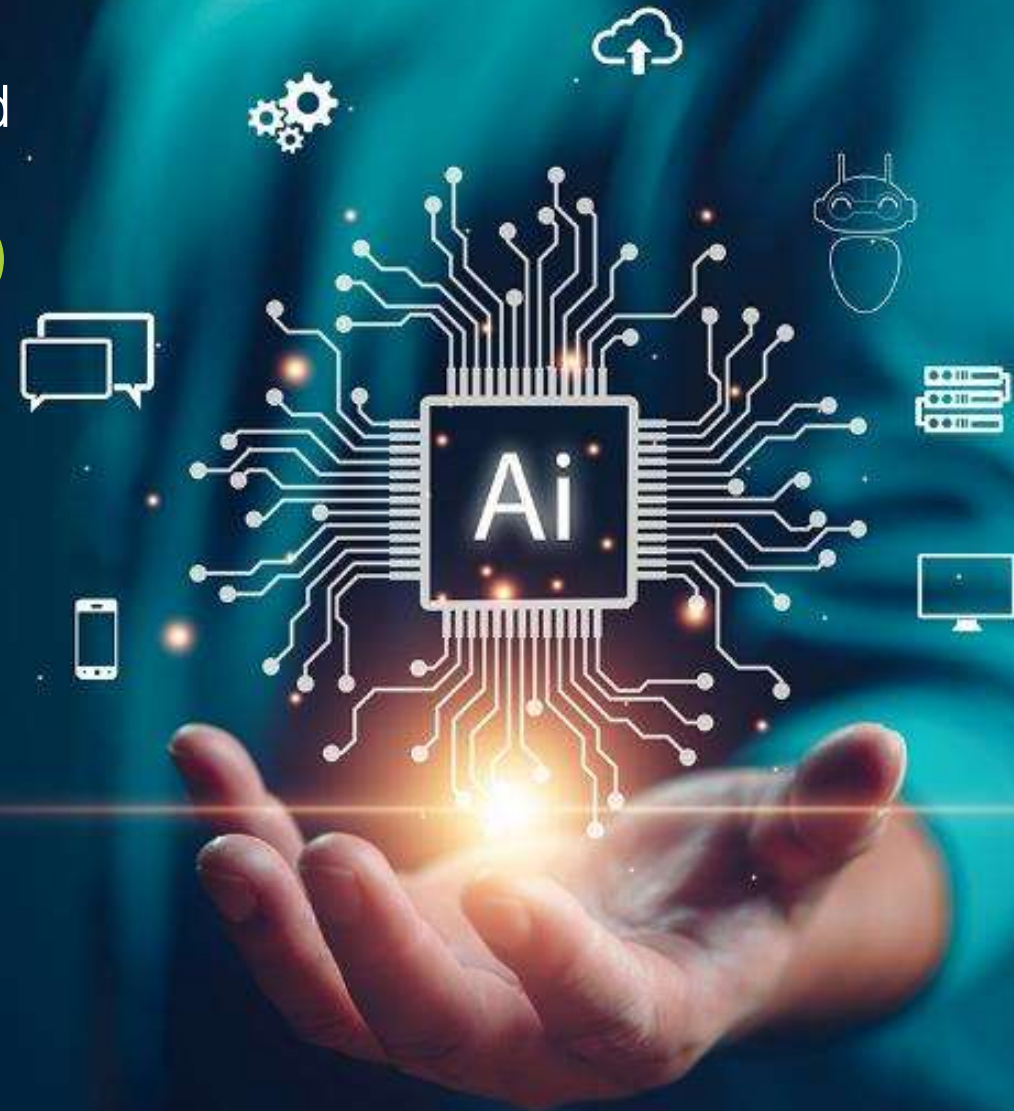


Program Executive Office  
Intelligence, Electronic Warfare & Sensors

10 JULY 2024

Kim Nugent - Contract Planning Division Chief

- **PEO IEW&S** has identified a need for rapid contract awards in the areas of **Artificial Intelligence / Machine Learning (AI / ML)** and **Software (SW) Development**
  - **PM IS&A Project Linchpin** support
  - **PM EW&C SW Development** support for Electronic Warfare (EW) re-programming efforts
- Other **SW Development** as required
- Award large **MATOC** (est. value ~\$500M) in late 4QFY25
- Award Task Orders / Delivery Orders (Tos / DOs) will be <\$25M awarded in 30 days



- **MATOC** to be awarded and managed through **ACC-APG**
  - KO: Ms. Kelly Griffin
  - KS: TBD
- **PEO IEW&S Headquarters (HQ) Contract Planning Division (CPD)** is leading this effort in conjunction with support from **ACC-APG**



- Establish an under \$500M **MATOC** for targeted **PEO** requirements, **MATOC** award NLT 4QFY25
- Low barrier to entry on base IDIQ for industry
- TOs / DOs would be limited to \$25M or less with a goal TO / DO Procurement Action Lead Time (PALT) <30 days
  - Established up front quick turn proposal timelines for vendors (10 days or less) through use of templated documents and limited page counts
  - Shorter Period of Performances (PoPs) to facilitate faster awards
- Ability to on / off ramp vendors rapidly
  - Establish entrance/exit criteria at base RFP release
  - **PEO** is evaluating on-ramping strategies to potentially include continuous on-ramping or quarterly on-ramp reviews

- **MATOC** to contain language for support of majority of **PEO** programs
  - Launch of **MATOC** would see two (2) vendor pools initiated: **AI / ML & SW Development**
    - Vendor pools would be similar in size to contracts such as **ACC-APG's** RS3 contract (estimated ~20-100 vendors)
  - Ability to create additional vendor pools in other technical areas as required
  - Support a “fail early and pivot” strategy
    - Contain strategies for streamlining awards as well as the transition efforts should a contractor prove to be unsuccessful
    - Shorter PoPs

- **MATOC** would be modeled around the idea of low barrier to entry for industry
  - For **MATOC** base awards – Government would not require lengthy proposals, tech demos, oral presentations, etc.
  - Government looking to leverage potential sample task strategy for on-ramping
- Post award of base contract, the Government is exploring the idea of a continuous on-ramping window or potential quarterly reviews of potential new **MATOC** holders

- Government is targeting 4QFY25 award of base **MATOC** and establishment of initial two (2) vendor pools
- RFP for base award end of 1QFY25 – early 2QFY25
- Potential industry day with additional information on **MATOC** strategy and future Terms & Conditions (T&Cs) in September-October 2024 time frame



**ALL DATES SUBJECT TO CHANGE,  
PROVIDED FOR PLANNING PURPOSES ONLY**

- **We Want Your Feedback!**
- The Government is looking for feedback in the following areas:
  - Thoughts on the **MATOC** and rapid award approach
  - On-ramping strategies
  - Will you be participating in either of the two (2) planned pools?
  - Any other areas for this effort
  - Feedback can be provided via email or 1on1s at the vendors request



**Feedback can be submitted to the PEO IEW&S Contract Planning Division (CPD) group box at:**  
**[usarmy.apg.peo-iews.mbx.hq-contracts-planning@army.mil](mailto:usarmy.apg.peo-iews.mbx.hq-contracts-planning@army.mil)**  
**and the KO, Kelly Griffin at [Kelly.L.Griffin11.civ@army.mil](mailto:Kelly.L.Griffin11.civ@army.mil)**



# Project Linchpin Overview

- Who we are
- What we deliver
- What we are looking for

**Mr. Bharat Patel- Project Lead**

**Major Nefjoeny Rosa- Project Officer**

**July 2024**



# Who We Are and What We Deliver

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PEO  
IEW&S



PEO  
IEW&S



# The Army's Program of Record for Artificial Intelligence Operations and Services (AIOps+)



EXPERTISE



INFRASTRUCTURE



RAPID DESIGN



INTEGRATION



STANDARDS AND PROCESSES



TOOLS/TECHNOLOGIES

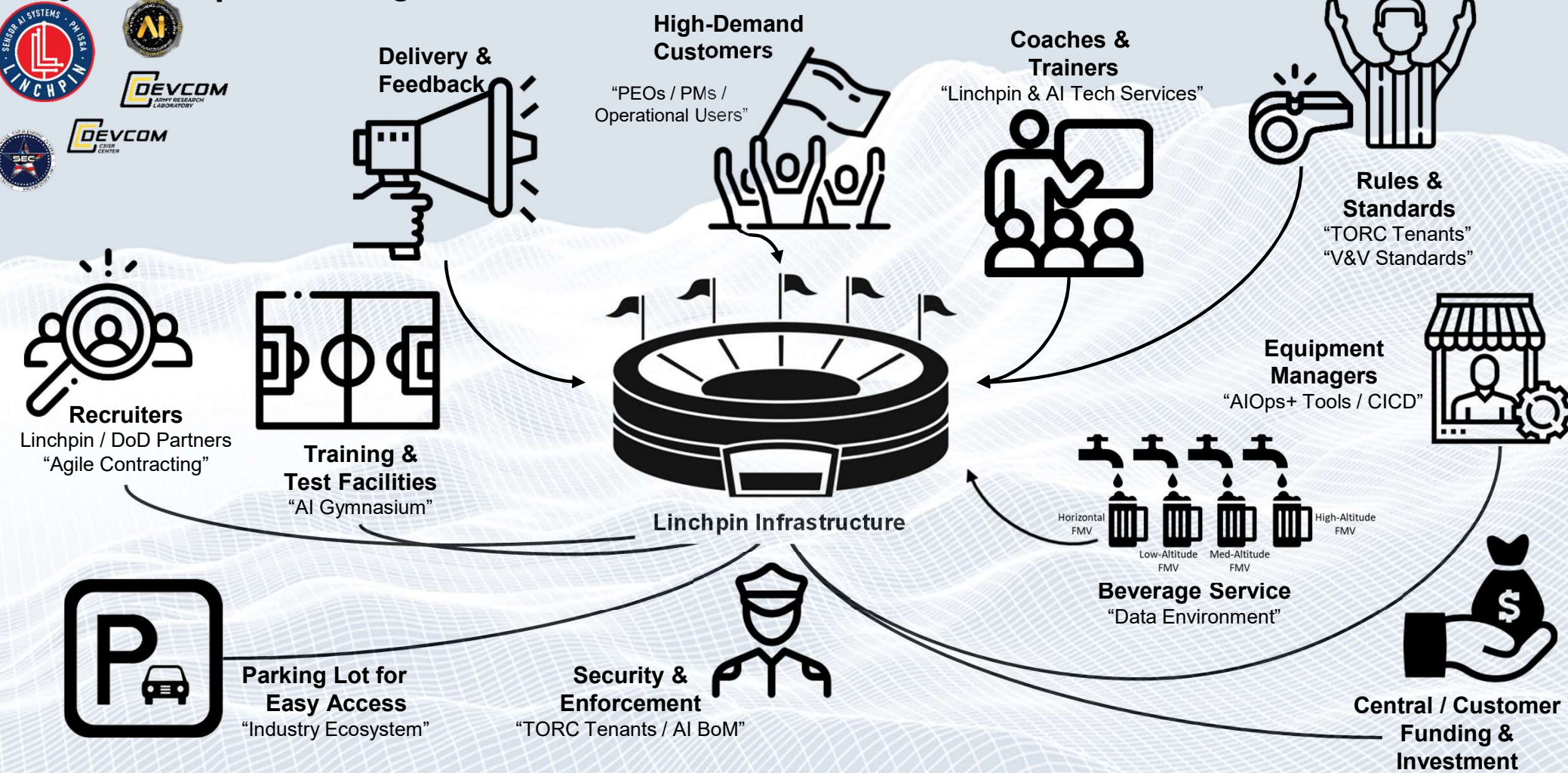


COLLABORATION

# Project Linchpin Delivering Trusted AI

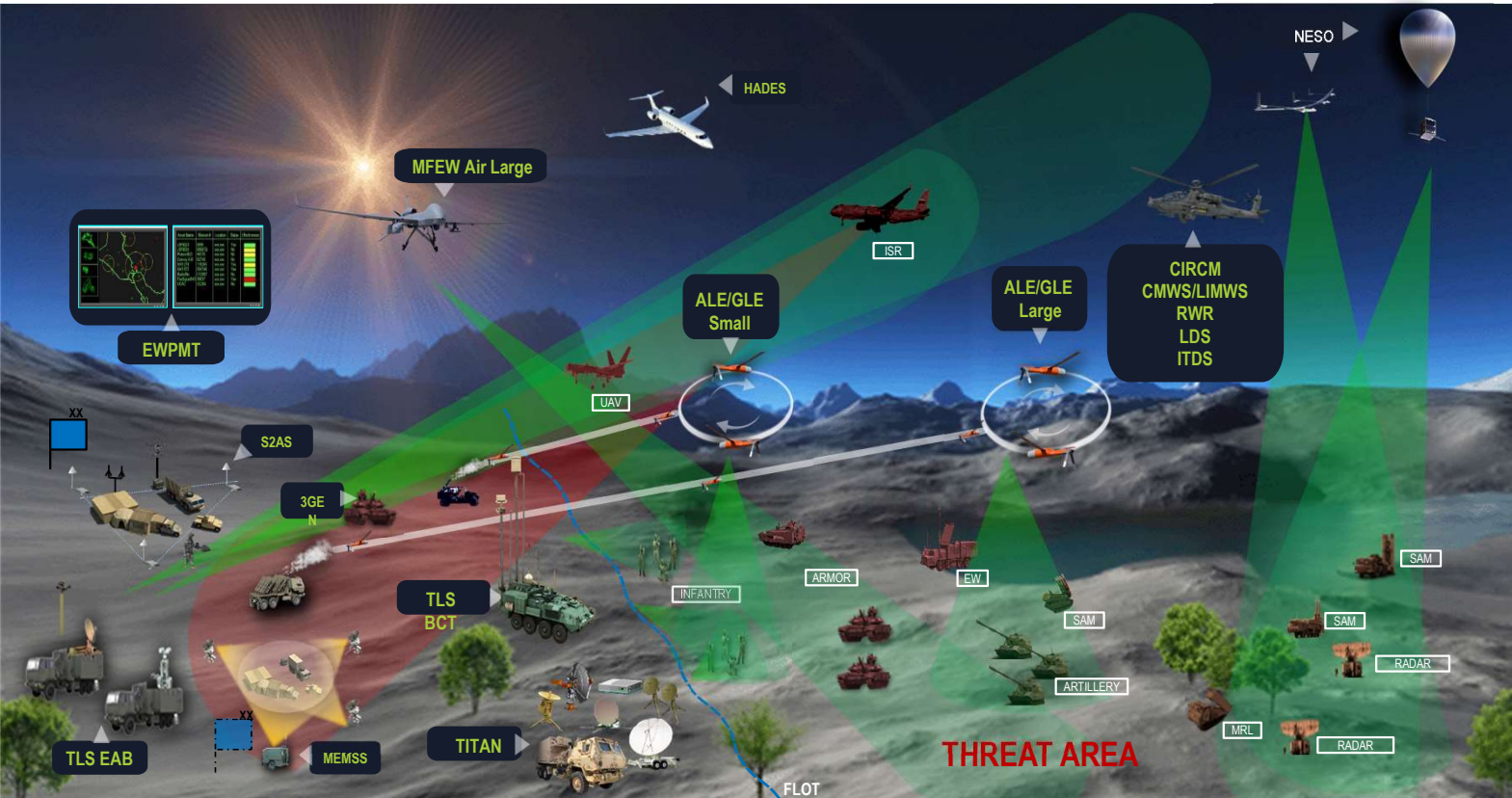
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# The Analogy – Playing the “Game” of AI



Project Linchpin delivers infrastructure, tools/technologies, standards, process that allows AI to “play the game”

# PEO IEW&S Operational View



- ALE – Air Launched Effects
- ABIS – Automated Biometric Identification System
- BAT-A – Biometrics Automated Toolset – Army
- BCT – Brigade Combat Team
- CIRCM – Common Infrared Countermeasure
- CMWS – Common Missile Warning System
- EAB – Echelons Above Brigade
- EW – Electromagnetic Warfare
- EWPMT – Electronic Warfare Planning & Management Tool
- FLOT – Forward Line of Troops
- GLE – Ground Launched Effect
- HADES – High Accuracy Detection and Exploitation System
- ITDS – Improved Threat Detection System
- LDS – Laser Detection System
- LIMWS – Limited Interim Missile Warning System
- MEMSS – Modular Electromagnetic Spectrum System
- MFEW – Multi-Function Electronic Warfare
- MRL – Multiple Rocket Launcher
- NESO – NAVWAR EW Systems Overhead
- RWR – Radar Warning Receiver
- S2AS – Spectrum Situational Awareness System
- SAM – Surface to Air Missile
- TITAN – Tactical Intelligence Targeting Access Node
- TLS – Terrestrial Layer System
- UAV – Unmanned Aerial Vehicle



DoD ABIS



BAT-A

APNT / NAVWAR

CMOSS PNT Card

Mounted APNT

Dismounted APNT

CYBER



JCAP

COMPUTER VISION



DEEP/ REINFORCEMENT LEARNING



MULTIMODAL



AI Enablers "Tasks"

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NATURAL LANGUAGE PROCESSING



AUDIO



TABULAR

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# Project Linchpin Operational and System Concepts

TORC: Traceability, Observability / Orchestration, Replaceability, and automated Consumption (TORC)



## PROJECT LINCHPIN\*

\*Enterprise Infrastructure for Model Training - hybrid cloud-based environments

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### Secure Trusted Hybrid Hosting

Environment on Multiple Security Domains e.g., Green, Red, Yellow

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### Run-time Environment

#### EMPLOYMENT

- SW in each Receiver
- Inference engines run deployed models
- Models optimized for each sensor and sensor system and user need

- AERIAL
- TERRESTRIAL
- GROUND STATION
- FOUNDATIONAL
- Additional Army 2030

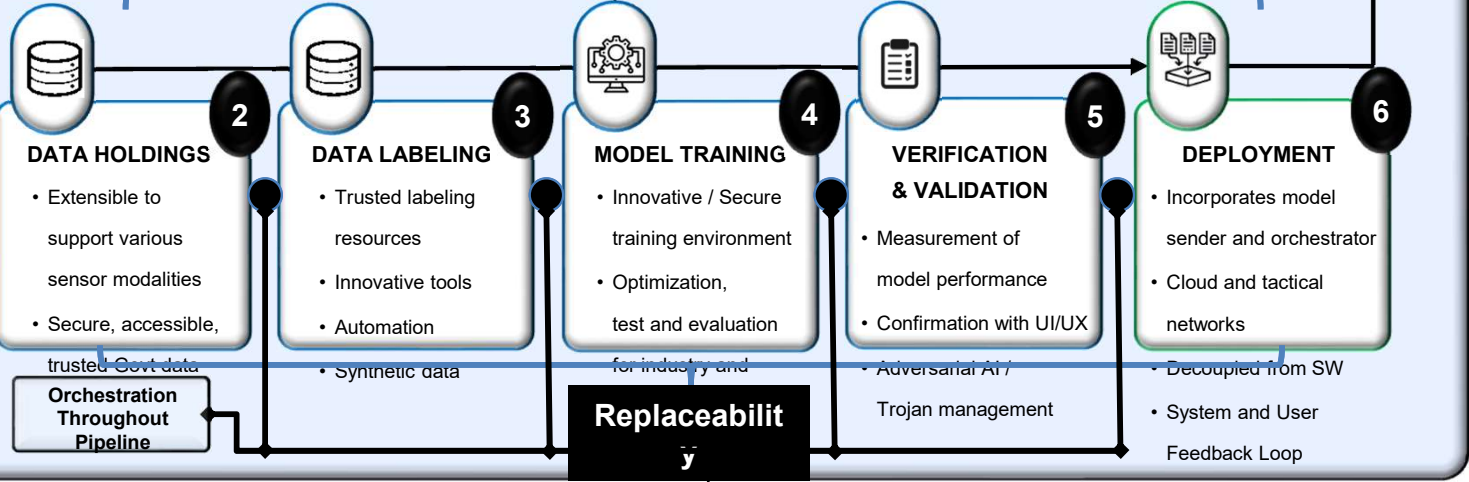
Unified Data Reference Architecture (UDRA) Design Concepts throughout the Pipeline (Data Products – Model Card; Meta Data; Discoverable, Interoperable)

Observability / Orchestration & automated Consumption

Traceability

Shares DoD Environments and Components

DIL Sensor Data  
APIs for Data



Inferences/Data for Model Monitoring & Feedback

Artificial Intelligence Operations and Services (AIOps+) includes the industry recognized practices of AI/Machine Learning Operations (AI/MLOPs) and PL AI ecosystem, PL standardized approaches (e.g. AI Risk Framework), PL design principles, and the secure trusted environments and services which enable the delivery of AI solutions to AI-enabled programs. AIOps+ adopts the tenets of AI/MLOPs, a disciplined approach which includes people, tools/technologies, process, and governance to manage the entire lifecycle of an AI/ML model. A lifecycle which spans from initial data collection/holdings, through data labeling, model training, test & evaluation, validation & verification, deployment, and subsequent post-deployment model monitoring and feedback of operational data to improve the next generation of models.



# Potential Use Cases within the Army enabled by AI/ML

PEO  
**IEW&S**

Other PEOs



## Let's Pull a Thread!?!?!

# Project Linchpin Market Research Overview

## Market Research Approach

- Official Requests for Information (RFIs) via SAM.gov
- “Speed Dating” with Industry: ~25-minute one-on-ones at Army events (NCFT / PEO C3T TEM 9-11, AUSA, etc.)
- “Open-door” Industry engagement policy: Last Friday of every month – 30-minute one-on-ones with potential follow-ons for demos & in-person information exchange sessions
- Social Media: LinkedIn, Facebook
- Leverage OSD-CDAO’s Tradewinds platform



## Bottom Line:

Industry AI Ecosystem Is Growing Everyday  
 Our Goal: Create a multi-pronged competitive but collaborative contracting approach

## Market Research Highlights

- 4x RFIs released on SAM.gov
  - 289 Total Responses
- Engaged with over 250 unique companies involved in the AI / MLOPs landscape
  - ~63% Small Businesses
  - ~67% Non-traditional Defense Contractors
- Headquartered in 33 different states / provinces
  - ~40% located in the DMV area (~10% MD based)
  - ~20% located in “Tech HUBs” (Silicon Valley, Austin, Seattle)
- Participated in over 565 individual engagements with industry



# Contract Requirements

- Multi-Award Task Order Contract (MATOC)
  - MATOC Ceiling of approximately \$500M
  - 10-year ordering period
  - 2 suites of vendors; 1 for AI/ML and 1 for SW development
  - Rapid awards for task orders; award within 30 days
  - Maximum flexibility and agile
  - Promote and foster innovation
- Rapid on/off ramp procedures to maintain competition, innovation, relevancy, and performance
- Functional areas to include, but not limited to: Modeling; Training; Engineering Services; Cloud Architect; Rapid Design Team; Data Services; AIOps and Services (AIOps+); Test and Evaluation/ Validation and Verification

**\*\*Acquisition Strategy is subject to change\*\***



# Thank You

**“To succeed on the future battlefield and continue to dominate the land domain, the Army of 2030 needs to do six basic things: First, see and sense more, farther, and more persistently at every echelon than our enemies...”**

*Christine Wormuth - Secretary of the Army*

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# PM Electronic Warfare & Cyber

## July 2024

PM Electronic Warfare & Cyber



## **Purpose:**

To inform industry on potential EW&C related opportunities for the emerging MATOC SW-focused contract

# PM EW&C PORTFOLIO



## Spectrum Dominance

Upgradable • Integrated • Networked



- Prophet Enhanced
  - ESP, TDEWS
- Terrestrial Layer System – Brigade Combat Team (TLS BCT)
- TLS BCT Manpack
- QRC/ONS
  - USAREUR, CEMA, V Corps - TEWS, TEWS-I



- Terrestrial Layer System – Echelons Above Brigade (TLS EAB)
- Theater SIGINT System (TSIGS)
- QRC / MDTF ONS



- Mounted CREW - Duke
- Dismounted CREW - Modi
- Fixed Site CREW & EA
- Multi-Function Electronic Warfare – Air Large (MFEW-AL)
- Modular Electromagnetic Suite of Systems (MEMSS)
- NAVWAR EW Systems Overhead (NESO)



- Electronic Warfare Planning and Management Tool (EWPMT)
- Spectrum Situational Awareness System (S2AS)



- Space Capabilities

### Operational Capabilities

- Tactical SIGINT
- Actionable Intelligence
- Electromagnetic Attack
- Situational Understanding
- Force Protection

- Strategic SIGINT
- Actionable Intelligence
- Electromagnetic Attack
- Situational Understanding
- Deep Sensing / LRPF

- Electromagnetic Attack Offensive / Defensive
- Electromagnetic Support
- Situational Awareness
- Force Protection - RCIED

- Electromagnetic Battle Management
- Spectrum Management Operations
- Spectrum Compatibility

- Classified

# FY26 PM EW&C Potential MATOC Candidates

Opportunity	Contract Type/ Vehicle	Description	Estimated Value	Estimated Solicitation Release
TLS EAB Enhanced Prototyping Activities	TBD	Various capability additions to EAB architecture	TBD	FY26
MEMSS	TBD	EW capabilities altering the EMS to place the adversary at a disadvantage	\$60-\$120M	2QFY26
NESO	TBD	Lightweight NAVWAR/EW capabilities on High Altitude platform	\$200M-\$250M	3QFY26
Arsenal	TBD	EW detectors & techniques	TBD	FY26