

Government entity looking for expertise in generative AI enabled tactical network service

Scope of Work Document

1. Background

This government entity is aiming to establish a data-centric Command and Control (C2) architecture. A critical component of this initiative is the development of a Generative AI (GenAI) Enabled Tactical Network to enhance modelling and simulation environments, thereby improving decision-making in contested scenarios.

2. Goals

- Develop a GenAI-driven environment that produces realistic tactical data streams, simulating diverse scenarios involving current threats, blue forces, and logistics C2 operations.
- Reflect a realistic tactical network within a Disconnected, Disrupted, Intermittent, and Limited environment, accommodating multiple data access and delivery demands in real-time.
- Utilize AI techniques to emulate limited bandwidth conditions, modelling data exchanges between producers and consumers that align logically with GenAI-generated scenarios.

3. Scope of Work

Phase I: Objective: Assess the feasibility of developing software capable of generating tactically relevant data at scale, following logical scenarios based on current near-peer threat behaviours.

- **Tasks:**
 - Design software that creates and exposes an API delivering tactical data streams, allowing users to adjust data volume and velocity.
 - Incorporate features to simulate DDIL environments by introducing data flow interruptions or packet losses. Evaluate deployment options for both Local Area Network (LAN) and cloud environments.

Phase II:

- **Tasks:**
 - Iterate on AI models to meet performance, accuracy, and security standards.
 - Deliver a prototype demonstrating the effectiveness of the AI technology.

4. Project Details

- **Phase I Duration:** Up to 6 months