



Cyber Quest 2023: Broad Agency Announcement

Cyber Battle Laboratory, Army Futures Command

Defeating peer and near-peer adversaries in the future will require U.S. Army forces to expand the concept of combined arms to include Cross Domain Maneuver. Cross-domain maneuver is the employment of mutually supporting lethal and nonlethal capabilities in multiple domains (i.e. land, air, cyberspace, space, and maritime) to create a synergistic effect that increases relative combat power and provides Army maneuver forces the overmatch necessary to defeat enemy forces. Army Futures Command seeks government, industry, and academia partners interested in demonstrating capabilities at Cyber Quest 2023 that will inform capability development requirements for Multi-Domain Operations, Organizational and Operational Concepts, and Cross Functional Team priorities.

US Government is not obligated by this BAA. This notice does not obligate the Government to award a contract or otherwise pay for the preparation of information provided in the white papers. The Government reserves the right to use information provided by respondents for any legal purpose deemed necessary. Any organization responding to this notice should ensure that its response is complete and sufficiently detailed. The information provided will be used to assess the respondent's ability to address the objectives called for in this BAA. Respondents are advised that the Government is under no obligation to acknowledge receipt of the information received or provide feedback to respondents with respect to any information submitted. This is not an announcement of an acquisition solicitation.



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List of Abbreviations

ACM	Army Capability Manager	TRADOC	Training and Doctrine Command
AFC	Army Futures Command		
ALPA	Army Live Prototyping Assessment	TRL	Technology Readiness Level
AEWE	Army Expeditionary Warrior Experiment	VDA	Vendor Demonstration Agreement
ARCYBER	Army Cyber Command		
CAD	Capabilities and Analysis Division		
CCoE	Cyber Center of Excellence		
C-CDID	Cyber - Capabilities Development Integration Directorate's		
CEMA	Cyber and Electro Magnetic Activity		
CPB	Cyber Protection Brigade		
CQ	Cyber Quest		
DOD	Department of Defense		
EEA	Essential Elements of Analysis		
EMS	Electro Magnetic Spectrum		
EW	Electronic Warfare		
FORSCOM	Forces Command		
ICoE	Intelligence Center of Excellence		
MDO	Multi-Domain Operations		
MOS	Military Occupational Specialties		
NDA	Non-Disclosure Agreement		
O&O	Organizational and Operational		
RID	Requirements and Integration Division		



Section 1: Introduction

Background

- 1.1 The character of warfare is changing as future conflicts will not solely be fought in the physical domain. The virtual domains of cyberspace and the electromagnetic spectrum are increasingly becoming the decisive battlegrounds of future wars. The Army is meeting this complex challenge by developing capabilities to compete and win our nation's wars in Multi-Domain Operations (MDO).
- 1.2 To accelerate its modernization efforts, Army Futures Command (AFC) is conducting Army Focused Warfighting Experiments (AFWE) that provide government, industry, and academia partners an opportunity to demonstrate technologies which address MDO aligned capability gaps. AFC's Cyber Battle Laboratory (CBL) has been tasked to identify those partners interested in demonstrating technology solutions that have the potential to address the Army's Cyber, Signal and Electronic warfare (EW) capability gaps at Cyber Quest 2023 (CQ23).

Cyber Quest Overview

- 1.3 Cyber Quest is an annual AFWE that provides capability development and acquisition communities a unique, realistic, operationally based environment to inform critical capability gaps facing Cyber, Electronic Warfare, Intelligence and Signal operational forces. CQ is conducted at Fort Gordon, GA and is focused on Brigade and above echelons. The experiment will drive requirements definition, inform rapid acquisition initiatives, and support acquisition risk reduction activities.
- 1.4 The event brings Soldiers from Army Cyber Command, Forces Command and Army Futures Command to evaluate emerging Cyber, Electronic Warfare, Intelligence and Signal solutions/technologies against MDO aligned critical capability gaps. The outcome will inform capability development requirements for MDO 2028, Organizational and Operational Concepts, and Cross Functional Team priorities.
- 1.5 CBL will partner with the Intelligence and Mission Command Battle Labs during CQ23 to support the experimentation of MDO concepts from the disadvantaged tactical user to echelons above brigade.



2 Cyber Quest 2023

Intent

2.1 The CBL will host CQ23 10 – 28 July 2023, to assess and evaluate technologies and concepts that are designed to address MDO cross-domain maneuver requirements at the brigade and above levels.

Focus Areas

2.2 The focus areas for CQ23 are listed below. See Enclosure 1 for a detailed explanation of the focus areas.

2.2.1 Army Capability Manager (ACM) Networks and Services - Transport Agnostic, Software Defined and Intent Based Networks.

2.2.2 ACM Tactical Radios - Converged Modular Form Factor architecture and technologies, Tactical Position and Navigation, Satellite Communications and Beyond Line of Site Communications Low and Medium Earth Orbit (LEO/MEO).

2.2.3 ACM Cyber - Cyberspace Incident Response Actions (Automated).

2.2.4 ACM Electronic Warfare - Electromagnetic Support, Electromagnetic Protection, Electromagnetic Spectrum Deception, Air Launched Effects/Ground Launched Effects.

2.2.5 Intelligence Battle Lab - Intelligence Support to Sustainment and Protection, Collection Management Tools, and Intelligence Management Tools.

Outcomes

2.3 CQ23 will inform requirements leading to the utilization of evaluated technologies or concepts in a MDO capable Army. In some cases, technologies may be recommended for further evaluation at larger and more integrated Army experiments (i.e. Project Convergence, NETMOD-X, MDO Live, etc.).

3 Cyber Quest 2023 Phases

3.1 CQ23 offers a unique opportunity for both the Army and its industry partners to learn which concepts and technologies enable a winning, MDO capable force. CQ23 consists of the following phases.

Phase 1: Technology Selection

3.2 Technologies will initially be selected for assessment based on a review of white papers and quad charts provided in response to the BAA focus areas. Final selection will be based on an in-person technology briefing/demonstration at Fort Gordon, Ga.



Phase 2: Assessment Development

3.3 The CBL provides a realistic representation of a deployed force engaged in an operationally relevant fight against a near-peer/peer threat. Selected industry partners will work with CBL and ACM subject matter experts to design and develop the activities necessary to integrate their technology within the CQ23 network and operational environment. CBL will concurrently create the assessment criteria for each technology to allow a framework for experimentation to be conducted.

Phase 3: Integration and Risk Reduction

3.4 The CBL will work with participants to integrate their specific technology with the CQ23 network infrastructure. This is done to ensure that the technology will function properly on the CQ23 network and successfully interoperate with any other technologies that may have dependencies on it.

Phase 4: Execution

3.5 During CQ23 execution phase, Soldiers from the United States Army Forces Command (FORSCOM), Army Cyber Command and Army Futures Command will assess designated technologies, in support of experimentation objectives. This provides a unique opportunity for industry, academia, and government partners to gain valuable feedback on the operational utility of their technologies.

Phase 5: Exploitation

3.6 CQ23 experiment results will be published in a technology assessment report that will be uploaded to the Futures Concepts Center FORGE database. Industry participants will be provided a separate report that documents the performance of their specific technology against CQ23 learning objectives.

4 Participation and White Paper Submission

Vendor and Academic Community

4.1 The following organizations may submit White Papers: colleges and universities, non-profit research institutions, commercial firms, small business, small, disadvantaged business concerns, historically black colleges and universities, and minority business enterprises and institutions. Collaboration among vendors and academia is highly encouraged.

4.2 Vendors are not required to provide a turnkey solution for all areas of interest. Niche systems that provide a critical capability in the key areas of interest will be considered. Vendors will be required to sign a Vendor Demonstration Agreement (VDA) and support CQ23 planning and execution events at their own cost.



- 4.3 To participate in CQ23, vendors are invited to examine *Enclosure 1: Experiment Focus Areas*. Should you possess a capability which addresses – in whole or in part – the need outlined within Enclosure 1, please follow the guidance in *Enclosure 2: Submitter's Guide* to submit a white paper for review.

DOD Participation

- 4.4 The Cyber Battle Lab, Mission Command Battle Lab, Intelligence Battle Lab, Army Cyber Command (ARCYBER), Cyber Protection Brigade (CPB), Army Capabilities Manager (ACM) Cyber, ACM EW, ACM TR, ACM N&S, Requirements, and Integration Division (RID), Capabilities and Analysis Division (CAD), the Army acquisition community (Cross Functional Teams), and other appropriate organizations will be participating in this effort. Other federal and non-federal organizations may be invited to observe CQ23.

Contractor Support.

- 4.5 The Government may use contracted personnel to provide administrative assistance to federal employees regarding all aspects of any actions ensuing from this announcement, including the evaluation of white papers and subsequent proposals. However, federal employees will be responsible for actual reviews and evaluations. Government support contractors will be bound by appropriate non-disclosure agreements (NDA) to protect proprietary and source-selection information. They are not permitted to release any source-selection information to third parties, including others in their organization. By submission of a whitepaper, offerors are hereby granting support contractors access to financial, confidential, proprietary, and/or trade secret markings.

5 Administration

Key Events

- 5.1 Key planning dates are listed below.
- 5.1.1 Deadline for White Paper submissions – 4 November 2022.
 - 5.1.2 Initial Technology selection and vendor notifications – 21 November 2022.
 - 5.1.3 Technology Demonstrations – 28 to 30 November 2022.
 - 5.1.4 Final technology selection and vendor notification – 5 December 2022.
 - 5.1.5 Initial Planning Conference – 9 December 2022.
 - 5.1.6 Main Planning Conference – tentative: 19 April 2023.
 - 5.1.7 Technology Integration Phase starts – 24 April 2023.



5.1.8 Final Planning Conference – tentative: 28 June 2023.

5.1.9 Cyber Quest Experimentation and Execution – 10 to 28 July 2023.

5.1.10 Cyber Quest DV Day – tentative: 28 June 2023.

Points of contact

5.2 Any questions on the submission process should be directed to Mr. Horace Carney (horace.r.carney.civ@army.mil) or Major Tuni Masi, UK Exchange Officer, (tuni.j.masi.fm@army.mil). Questions pertaining to the BAA electronic posting should be directed to Mr. Jason King (jason.l.king1.civ@army.mil) or Ms. Tara McAdoo (tara.l.mcadoo.civ@army.mil), Mission and Installation Contracting Command, Fort Gordon GA, (706) 791-1812. All submission forms should be sent to Ms. Shana Gurley (shana.l.gurley.ctr@army.mil).



6 List of Enclosures

Enclosure 1: CQ23 Experiment Focus Areas

Enclosure 2: CQ23 Submitters Guide

Enclosure 3: CQ23 White Paper Template (*Required for submission*)

Enclosure 4: CQ23 Quad Chart Template (*Required for submission*)