



**Call for Solution
Synthetic Training Environment (STE)
Virtual Software (VSW)
15 September 2026**

Project Number	STE-VSW-26-0006
Army Open Solicitation (AOS) Number	W9128Z-25-S-A002
Call for Solution Title	Synthetic Training Environment (STE) Virtual Software (VSW)
Issued By	Army Contracting Command - Aberdeen Proving Grounds (ACC-APG) Orlando Division
Submission Instructions	To respond to this Call for Solution, please refer to Sections 6 of this Call for Solution
*Solutions Due Date/Time (Suspense)	Monday, 29 Sep 2026 at 1300 Eastern Daylight Time (EDT)
Point of Contracts (POCs) for Solution Brief Submission	Contracting/Agreements Officer: MARK A. MUÑIZ; mark.a.muniz6.civ@army.mil Contracting/Agreements Officer: DAVE HAGLER; david.a.hagler.civ@army.mil Contracting/Agreements Officer: SEAN J. JOHNSON; sean.j.johnson2.civ@army.mil Contracting/Agreements Specialist: RUTH TORRES; ruth.e.torres10.civ@army.mil Contracting/Agreements Specialist: KIMBERLY SKINNER Skinner; kimberly.c.skinner.civ@army.mil

NOTE: Please advise the cognizant Contracting/Agreements Officer and Specialist as soon as possible via the emails above if your organization intends to submit a Solution in response to this Call for Solution. Please complete the Forms at the following link referenced in Description section of the sam.gov posting or at: <https://forms.osi.apps.mil/r/n5qzG3ZZEY>

**Any submissions that are received by the Contracting/Agreements Officer after the suspense date/time listed above will be deemed late and not evaluated. It is the sole responsibility of the company to ensure that its submission is received in the email inboxes listed above before the deadline specified.*

This Call for Solution is issued under the authority of Defense Federal Acquisition Regulation Supplement (DFARS) 212.70 – Defense Commercial Solutions Opening and may result in the Government awarding Federal Acquisition Regulation (FAR) contracts or non-FAR agreements. Other Transactions (OT) that may be awarded from this Call for Solution are not subject to the FAR or its supplements, as applicable.

1. BACKGROUND.

The Synthetic Training Environment (STE) is modernizing how the Army conducts immersive virtual training to match the pace of a rapidly evolving operational environment. While the current Reconfigurable Virtual Collective Trainer (RVCT) software baseline, Training and Simulation Software (TSS), continues to provide critical training value to the force, it currently has capability gaps that must be filled on an accelerated timeline. To meet the demands of the modern operational environment, the STE Virtual Software (VSW) solution must deliver four core operational priority capability deliverables outcomes. These Core Operational Priority Deliverables are the primary near-term focus of this effort:

1. **A Doctrinal Gate to Live Fire:** A Certifiable Table II virtual collective training capability, as defined in the TC 3-20.0 Integrated Weapons Training Strategy (IWTS), that serves as a formal gate to live-fire training for mounted maneuver units at the section through company level. Capability must be capable of accurately simulating the necessary platform behaviors and weapons effects to include fire control systems, ballistics, and pH/pK, that enable realistic training.
2. **TC 3-04.3 Table VII & Table X Collective Gunnery Gate for Air:** Simulating crew coordination, pilot/co-pilot gunner (CPG) handoffs, sensor-to-shooter acquisition, target handovers, and weapon engagement physics (Hellfire, 2.75" Hydra 70 / APKWS, 30mm AWS, M230/M240 door gunnery) for AH-64E, UH-60M/V, and CH-47F.
3. **A True Combined Arms Environment:** The seamless integration of the full spectrum of direct and indirect fires and effects, to include Bradley Fire Support Team (BFIST), and terrain shaping to allow for realistic, combined arms training.
4. **Full Mission Command Concurrency:** The integration of the most current Mounted Mission Command (MMC) and other Mission Command Information System (MCIS) being used by operational units.
5. **Open system architecture with published Software Development Kit (SDKs) and Application Programming Interfaces (APIs)** to enable user manipulation and rapid integration of future capabilities.

2. PROBLEM STATEMENT

The Army is seeking solutions that deliver on the four operational outcomes. Offerors may submit any solution – whether a new Commercial Off the Shelf (COTS), a significant modification of the provided Government Off the Shelf (GOTS) baseline, or a hybrid approach – that they believe best meets the Government's objectives. The Government requires solutions that deliver the user community's desired attributes and can open the software to third-party integration.

To execute the Government-as-Integrator model, the STE Virtual Software solution is divided into five (5) distinct capability Lots. The architecture relies on a "Platform and Application" model, where Lot 1 provides the foundational software platform and Lot 2 provides the

specialized applications that run on it. Lots 3 and 4 provide the critical human interface and data analysis layers, while Lot 5 provides the overarching integration and governance. Offerors may submit solutions for one or multiple Lots (subject to Lot 5 Organizational Conflict of Interest (OCI) restrictions). Each Lot will be evaluated independently to ensure the Army acquires the most advantageous commercial technology for each specific function. The following provide scope and requirements for each Lot.

Lot 1: Common Core Software (CCS)

- **Scope:** The Lot 1 awardee will be granted access to the TSS Government Furnished Information (GFI) source code and is responsible for enhancing, simplifying, and opening the core software architecture for third-party integration. This architecture includes the simulation and rendering engines.
- **Scalability Requirement:** The Lot 1 Common Core Software must execute at a minimum of 60Hz tickrate (simulation) and 90Hz frame rate (rendering) with under 20ms of end-to-end latency, while supporting a minimum threshold of 50,000 active entities.
- **Extensibility:** The Lot 1 CCS must provide fully documented, open SDKs and APIs that allow third-party modules (from Lot 2) to seamlessly “dock” into the environment and utilize the data fabric.
- **Mandate for Open Ecosystem and Fair Competition:** The Lot 1 CCS provider is the steward of the STE Virtual Software application ecosystem. While the Lot 1 provider is encouraged to develop its own native Lot 2 applications, they are contractually obligated to maintain a "level playing field." The Lot 1 provider shall not implement any architectural, API-based, or performance-related features in their native Lot 2 applications that are not also made available to third-party Lot 2 developers via the common, Government-approved SDK. The Lot 5 Conformance Test Suite will be used to verify that the platform provides fair and equal access to all application developers.
- **User Scripting Environment:** The Government has a strong desire for the Lot 1 CCS to provide a high-level scripting environment accessible to non-developers. This environment must allow users to create custom entity behaviors, trigger complex scenario events, and modify simulation parameters without requiring access to the core source code or a professional software development integrated development environment (IDE). Solutions that provide this capability as part of their baseline offering will be evaluated more favorably. If a submitted solution does not have a user scripting environment at the time of award, the offeror must provide a detailed technical roadmap for delivering this capability in a future, near-term software release.

Lot 2: Simulation Application Software (SAS)

- **Scope:** Provide specialized software modules, or “plug-in” applications that execute within the modernized Lot 1 environment via the new Government-approved SDK. This is where the Government seeks to leverage the diverse capabilities of industry. This is a

software-only lot, and there is no limit to how many specialized software modules an offeror can offer for this Lot.

- **Future Expansion and “App Store” Model:** The Government views Lot 2 as a continuous, expanding capability bucket that forms a competitive “app marketplace.” The eventual Lot 1 architecture will support the rapid, competitive integration of third-party Lot 2 applications to prevent end-to-end vendor development lock on future capability development. The Government may execute subsequent, competitive awards for new Lot 2 applications (e.g., future vehicle platforms, s-UAS modules, Table II Precision Gunnery trainers) at any time. The solicitation for this lot will remain open for the life of the project.
- **Requirement:** All Lot 2 applications, regardless of the vendor, must be developed using the common, Government-approved SDK provided by the Lot 1 platform and governed by the Lot 5 integration partner. They must pass the Lot 5 Conformance Test Suite prior to acceptance.

Lot 3: Hardware-in-the-Loop (HIL) Integration and Test

- **Scope:** The Lot 3 awardee shall serve as the specialized engineering partner for hardware-to-software integration. The primary responsibility of this Lot is to ensure the high-fidelity, real-time integration of the Lot 1 Core Simulation Engine with the GFE RVCT physical hardware utilizing the Government-provided Hardware API (HAPI) or equivalent Hardware Abstraction Layer (HAL) for mapping physical GFE RVCT inputs to the HAPI standard.

Lot 4: Training Management & AAR Data Layer

- **Scope:** Provide the suite for instructors to Plan, Prepare, Execute, and Assess (PPEA) training. Must ingest real-time event data from the system message bus to generate objective, automated After-Action Reviews (AAR) and human performance analytics.

Lot 5: Enterprise Integration Support (Independent Team)

- **Scope:** Serve as the Government's technical execution agent. The Lot 5 vendor will strive to leverage the Government's investment in the UnITE IDE/DevSecOps environment to facilitate operations and management of the STE Virtual Software to support the Government's role as the Lead Systems Integrator and is responsible for managing the TSS source code repository, administering the modernized SDK, and operating the Conformance Test Suite to validate all modifications and integrations. The Government retains sole, non-delegable authority over all system configurations, architectural decisions, interface approvals, and final vendor compliance certifications.
- **Key Responsibilities:**
 - **Infrastructure Management:** Deploy and manage the Government-owned DevSecOps CI/CD pipeline, the enterprise API gateways/message bus, and the

physical Software Integration Lab (SIL) under the direct supervision of the Government Program Office.

- **API and SDK Administration:** Serve as the technical custodian and configuration manager for the system's common APIs and SDKs. Lot 5 will maintain the technical documentation and distribute the Government-approved SDKs to Lot 2 and Lot 4 developers, subject to final Government approval of all baseline changes.
- **Independent Conformance Testing:** Operate the automated Conformance Test Suite (CTS) to evaluate software compliance. Lot 5 will generate objective, data-driven test reports for the Government, which the Government will use as the sole basis for final acceptance and certification of all Lot 1–4 components.
- **OCI Firewall:** *Strict Structural OCI Exclusion for Lot 5: To ensure complete objectivity in operating the Software Integration Lab (SIL) and executing the Conformance Test Suite (CTS), an organization (including its parent company, subsidiaries, corporate business units, and corporate affiliates) will not be awarded or permitted to perform on Lot 5 (Enterprise Integration Support) if that organization or any of its affiliates is awarded or performing work on Lot 1 (Common Core), Lot 2 (Simulation Apps), or Lot 4 (Training Management & AAR Data Layer). Firewall-only OCI mitigation plans between corporate affiliates will not be accepted for Lot 5.*
 - *Competing Across Lots: Companies and corporate affiliates are permitted to submit proposals and compete for both Lot 5 and software development lots (Lots 1, 2, or 4) during Phase 1 and Phase 2.*
 - *Award Selection & Election Protocol: In the event an offeror (or its corporate family) is evaluated as the highest-rated / selected vendor for both Lot 5 and one or more software lots (Lots 1, 2, or 4), the Government will issue a formal notification requiring the offeror to elect which Lot award it will accept. The remaining unselected Lot will be awarded to the next highest-rated, unconflicted offeror.*

Demarcation of Responsibilities

To prevent overlap and ensure absolute accountability within the Government-as-Integrator model, the technical boundaries between all STE Virtual Lots are strictly defined as follows. The Government retains sole, non-delegable authority over all architectural decisions, interface approvals, and final compliance of certifications.

- **Lot 5 Boundary (The Government's Technical Agent):** The Lot 5 contractor owns the "digital motherboard" (API Gateway, Message Bus, and HAPI standard) on behalf of, and under the direct authority of, the Government. Lot 5's technical responsibility is limited to the transport, validation, and, if necessary, translation of data payloads between Lots. Lot 5 is responsible for providing objective compliance reports to the Government but does not possess autonomous decision-making authority regarding system acceptance, baseline changes, or vendor compliance.

- **Lot 1 Boundary (The Platform Owner):** The Lot 1 contractor owns the "virtual world operating system." Lot 1's responsibility is to provide the core simulation engine, data fabric, and rendering pipeline. Crucially, the Lot 1 vendor must also provide and document the open SDK and APIs that allow third-party Lot 2 "applications" to run on the platform. Lot 1 shall have no direct software dependency on, or communication with, the physical RVCT hardware.
- **Lot 2 Boundary (The Application Developers):** The Lot 2 contractors own the "specialized applications." A Lot 2 vendor's responsibility begins at the ingestion of data from the Lot 1 data fabric/SDK and stops at the generation of high-fidelity, platform-specific outputs (e.g., accurate flight physics for a s-UAS, doctrinally correct behaviors for a CGF entity). Lot 2 applications must operate entirely within the framework provided by Lot 1 and the governance of Lot 5.
- **Lot 3 Boundary (The HIL Integration Specialist):** The Lot 3 contractor owns the "physical-to-digital translation." Lot 3's responsibility starts at the physical GFE control outputs and stops once those signals are successfully converted into compliant HAPI data packets and delivered to the Lot 5 API Gateway. Lot 3 shall not modify the Lot 1 core simulation physics or the Lot 2 application software.
- **Lot 4 Boundary (The AAR and Data Analytics Provider):** The Lot 4 contractor owns the "data analysis." Lot 4's responsibility starts at the ingestion of validated event data from the system message bus and stops at the rendering of objective AARs and performance dashboards. Lot 4 shall not modify the core simulation or control any runtime components.

3. REQUIRED SOLUTION ATTRIBUTES.

The Government is funding an integration effort of mature technologies. To achieve rapid fielding and eliminate vendor lock-in, all submitted solutions must adhere to the following required attributes.

- **COTS/GOTS/Hybrid Approaches:** The Government will make available the technical baseline for the current TSS software as GFI. This GFI is available to all offerors to serve as a common performance baseline and to enable them to submit the most innovative and efficient solution possible. Offerors are not required to use the GFI in their submitted solution, but they must be prepared to justify their approach (whether GOTS-based, COTS-based, or Hybrid).
- **Technological Maturity (Technical Readiness Level (TRL) 8/9):** The Government will only accept mature, fielded products that meet the baseline requirements of their respective Lot at the time of solution submission. Submitted solutions requiring software development, major re-architecting, or any effort beyond minor configuration and integration to meet the baseline capabilities of a lot will be considered non-compliant. Offerors for Lots 1, 2, and 4 must possess a fully developed, documented SDK and/or APIs at the time of solution submission.

- Modular Open Systems Approach (MOSA) and Interoperability Interface Standards:** To achieve a true plug-and-play ecosystem, all components (Lots 1, 3, and 4) must expose their capabilities and data externally utilizing standard, well-documented, and widely accepted industry protocols. At a minimum, core simulation state data must be shared externally via standardized HLA (IEEE 1516), DIS (IEEE 1278.1), modern web services (REST/gRPC), or similar. While vendors may utilize proprietary, legacy, or Government-owned data fabrics internally within their own component(s), they must provide fully documented, open API wrappers to translate that internal data into standard interfaces at the Lot boundary. Proprietary, closed-loop point-to-point integrations with components that cross Lot boundaries and prevent third-party modular replacement are strictly prohibited.
- Rapid Integration of Emerging Capabilities:** The overarching goal of this acquisition is agility. The proposed software architecture must eliminate the need for long-lead vendor support for routine capability updates. The ecosystem must allow the Government (via the Lot 5 integration partner) to rapidly plug in new 3rd-party technologies, AI models, and capabilities in a matter of days and weeks, not months or years. This will position the government to leverage common software to support future/emerging requirements such as embedded training and new vehicle platforms.
- One World Terrain (OWT) Integration:** The proposed solution must natively ingest and render OWT data formats. This is a critical, non-negotiable requirement for all components incorporating a terrain or 3D rendering engine. The Government provides sample OWT datasets as part of the TSS GFI baseline for verification.
- RVCT Hardware Compatibility:** The software ecosystem must be capable of integrating with existing RVCT physical peripherals through an open hardware abstraction layer.
- Cybersecurity and Rapid Accreditation:** The STE Virtual ecosystem will be built on a "secure by design" foundation. The Government will prioritize solutions that can accelerate the RMF Open Network Authority to Operate (ATO) timeline by leveraging existing FedRAMP authorizations (for cloud components) and demonstrating a clear path to security control inheritance within the Government-managed DevSecOps pipeline provided by Lot 5.
- Program Protection, Releasability, and Data Sanitization:** The STE Virtual ecosystem must structurally support multinational and coalition training environments. Submitted solutions must align with Program Protection Plan (PPP) best practices and support Foreign Disclosure Office (FDO) releasability requirements. Specifically, the software architecture must decouple core executable code from sensitive platform data. The solution must provide a streamlined, verifiable mechanism for administrators to rapidly segregate, manipulate, mask, or entirely remove sensitive data, Controlled

Unclassified Information (CUI), or classified performance parameters to allow the system to operate safely in unclassified or coalition (e.g., FVEY) environments.

- **Modern AI-Assisted Software Development:** The Government expects offerors to utilize modern, efficient software development practices. The use of AI-assisted tools for code generation, automated testing, and DevSecOps pipeline acceleration is expected. Offerors should be prepared to describe their approach to these modern practices.
- **Virtual Training Operational Requirements:**
 - **Doctrinal Foundation:** The STE Virtual Software solution shall enable realistic, rigorous, and scalable training focused on the collective tasks and battle drills required to defeat near-peer threats, as defined in TC 3-20.0 (Integrated Weapons Training Strategy) and detailed in *Attachment A v1_STE Virtual Software Training Requirements Overview (Air)*. The system must facilitate mastery of crew coordination, synchronized maneuver, and collective fire control, moving beyond isolated individual skills to unit-level execution. It must empower commanders to assess, build, and sustain combat readiness at the crew, section, platoon, and company levels through repeatable, standards-based collective scenarios.
 - **Gate to Live Fire (Ground):** The system must function as the primary "gating" event (Table II equivalent) for mounted maneuver sections through companies before they proceed to live-fire qualification.
 - **Adaptable Operating System:** The STE Virtual Software solution shall be delivered as an adaptable and composable software operating system that executes collective training and combat drills seamlessly across both physical simulator devices (e.g. RVCT) and active combat platforms (i.e., as an Embedded Trainer)
 - **Aviation Collective Gunnery and Flight Operations:** To ensure the system fully supports the air domain, it must provide the following capabilities:
 - **High-Fidelity Flight and Weapons Modeling:** The system must deliver high-fidelity flight modeling for AH-64, UH-60, CH-47, and Gray Eagle platforms, accurately simulating aircraft dynamics, systems (weapons, engines, fuel, etc.) and ballistics. Weapons shall simulate all current types and munitions (Hellfire, Rockets, 30mm, M240).
 - **Aviation Gunnery Gate (Air):** The solution must serve as a certifiable gate to live fire for aviation crews by supporting advanced gunnery tables, including Table VII and Table X as defined in TC 3-04.3, stressing crew coordination, sensor-to-shooter drills, and target handovers.

- **Foundational Mission Command:** The software must simulate aircraft specific current Operational Flight Program (OFP), digital communications (BFT, Link 16, Longbow Net) and mission command systems. It must also integrate with AMPS for mission planning to be accomplished on standalone AMPS machines.
- **External Ecosystem and Interoperability Requirements:**
 - **Live, Virtual, and Constructive (LVC) (LVC Interoperability):** The virtual software component of the STE must be interoperable with the broader Army LVC ecosystem. It shall be capable of operating effectively in distributed exercises, sharing data and entity states with both Army Live training systems (e.g., CTC-IS) and Constructive simulations (e.g., Next Generation Constructive – NGC).
 - **Digital Training Record:** The STE Virtual Software solution must capture and share training data with Army enterprise systems in a digital and persistent fashion. All training records, performance assessments, and gate to live fire qualifications generated within the system must be exportable in a standard format for ingestion by the Army’s system of record.

4. AWARDING INSTRUMENT

The Call will be awarded in accordance with the Army Open Solicitation procedures detailed within Solicitation W9128Z-25-S-A002, found here:

<https://sam.gov/opp/860e295fdae04aab9d83810aa4a01531/view>

This Call provides instructions to vendors and how the Government will evaluate submissions.

The Government anticipates awarding multiple CSO FAR based contracts or OTA agreements under this Call for Solutions.

5. CALL INSTRUCTIONS AND NOTES

The Government requires rapid and accountable integration of all products.

- **Automated Conformance Testing:** The Lot 5 vendor will manage an automated Conformance Test Suite (CTS). All Lot 1-4 software must pass the CTS prior to deployment. Lot 5 telemetry will serve as the objective technical record to identify latency or interface failures.
- **Associate Contractor Agreement (ACA):** All awardees (Lots 1-5) must execute a Government-approved ACA within 30 days of award, legally binding them to share technical data, SDKs, APIs, and actively collaborate on troubleshooting without additional cost to the Government. Failure to execute the ACA within 30 days of award will result in the selection of an alternate vendor for its respective lot.

To meet urgent operational needs on an accelerated schedule, the Government intends to execute a modernization effort in a milestone-driven, capability-focused approach. The strategy is centered on rapidly integrating the four Priority Capability Deliverables outlined in Section 1 into the STE Virtual Software solution, while concurrently opening the system's architecture for future growth.

The Government intends to award all five Lots concurrently as either multiple FAR contracts or OTA agreements, to establish the full modernization team from the outset. The total combined value of all awarded Lots is approximately \$250M. The Government will also establish a basket of vendors that have been identified to have developed solutions of technical merit but were not invited to Phase II. These vendors may be selected to be retained in a basket for up to twenty-four (24) months from notice for potential future selection during the performance of any of the identified Lots. Please note, Lot 2 will remain open for on boarding opportunities throughout the performance of Lot 2. Additional opportunities will be identified at various times of the year.

The Government will make available the complete technical baseline for the current TSS, including all available source code, documentation, and Integrated Development Environments (IDEs), as GFI to all qualified offerors upon request. GFI Distribution Agreement is proved as Attachment 6 and the available GFI is referenced in Attachment 6a. All necessary RVCT hardware units, HAPI, technical manuals, and existing software as Government Furnished Property (GFP)/GFI to the Lot 5 awardee upon contract or agreement award. This GFP will be utilized to establish the physical STE Virtual Software Integration Lab (SIL) for multi-vendor testing and conformance validation.

Important, anticipated acquisition events, and dates are as follows:

Acquisition Event	Anticipate Date(s)
DRAFT STE VSW CFS posting	27 Augst 2026
DRAFT STE VSW CFS Q&A	27 August 2026 - 13 September 2026
FINAL STE VSW CFS posting	15 September 2026
STE VSW Industry Day and One on One sessions, Orlando, Fl.	22 - 24 September 2026
STE VSW CFS solutions due	29 September 2026
STE VSW Lots 1-5 Down select notifications	02 October 2026
STE VSW Lot 1-5 Demonstration Pitch	20 - 22 October 2026
Selection Notices STE VSW Lot 1-5 vendors	30 October 2026
SOW/PWS collaboration, request for final price, and solutions	02 – 06 November 2026
Anticipated Lots 1 - 5 awards	13 November 2026

The Government team will host a voluntary in-person Industry Day on 22 0800 – 1600 at the Central Florida Tech Grove, Partnership IV, 12809 Science Drive, Orlando, Florida 32826. The Government will also schedule One-on-One's to be held between 22-24 September 2026 at a location to be determined during Industry Day. Link to Industry Day and One-on-One's Form: <https://forms.osi.apps.mil/r/qBdF1QH0XE>

5.1 Overview of Submission Phases

This Call for Solutions utilizes a multi-phase rapid down-select process designed to identify mature, integration-ready solutions. The Phase I submission is intended to be a lightweight, high-impact technical snapshot, not an exhaustive written proposal.

Updated Phased Solicitations and Awards: To eliminate cross-lot dependencies and ensure application developers build against a validated core foundation, the Government will execute a phased award schedule:

1. Initial Awards: Concurrent award of Lot 1 (two competing vendors for the 90-day sandbox), Lot 3 (HIL Integration), and Lot 5 (Enterprise Integration Support).
2. Deferred Solicitations (Lots 2 and 4): Formal proposal submission deadlines and awards for Lot 2 (Simulation Applications) and Lot 4 (AAR Data Layer) are deferred until completion of the 90-day sandbox and selection of the final Lot 1 Common Core provider (approx. Month 4). Upon final Lot 1 selection, the Government-approved SDK and API specifications will be released to Lot 2 and Lot 4 offerors.

The response process for this Call will generally consist of the following phases:

Phase 1: Solution Brief

Offerors will submit a high-level summary of their solution, addressing the government's objectives and requirements. Offerors shall submit a solution structured into the Volumes as noted in Section 6. Solutions that fail to adhere to the page limitations or submission requirements will be considered non-compliant and may not be reviewed.

Detailed solution brief submission requirements for Phase 1 are provided in Section 6. Evaluation criteria for Phase 1 are outlined in Section 7.

Phase 2: Demonstration Pitch

Selected offerors may be invited to present and discuss their solution in a live or virtual setting.

Phase 3: Revised Solution

After Demonstration Pitches, the Government shall further down-select potential awardees and issue a Request for Revised Solution ("RRS") to the remaining vendors. The RRS will have specific guidelines. Chiefly, offerors must submit a statement of work/performance work statement and a detailed price breakdown as it relates to payment milestones. The Government shall use the same criteria to evaluate prototype solutions as described for Solution Briefs.

5.2 General Notes

- Offerors are reminded that all awards are subject to the availability of funds and the Government reserves the right to make multiple awards, a single award, or no award as a result of this Call.
- Only a Contracting or Agreements Officer has the authority to enter into, modify, or execute a binding instrument on behalf of the United States Government. All payment obligations are subject to Congressional appropriations.

- In order to be eligible for award, offerors must:
 - Possess a Unique Entity ID (UEI) and be registered in the System for Award Management (SAM) prior to award and maintain active registration throughout the period of performance.
 - Register in the prescribed government invoicing system (e.g., Wide Area Work Flow).
 - Accurately represent their small business size and status as required.
 - Be determined responsible by the Contracting/Agreements Officer and not be suspended, debarred, or otherwise prohibited from receiving an award.
 - Disclose any actual or potential OCIs to the Contracting/Agreements Officer prior to award.
- Offerors are responsible for monitoring SAM.gov for any amendments or updates to this Call.

Notice to Offeror(s): The Government reserves the right to cancel this open Call, either before or after the closing date. If the Government cancels this open Call, the Government has no obligation to reimburse an offeror for any costs.

6. SOLUTION BRIEF SUBMISSION REQUIREMENTS

6.1 Phase 1 – Solution Brief

All solution briefs must conform to the guidance outlined in Section 6 and be sent electronically to all Point of Contracts (POCs) for Solution Brief Submission, identified on Page 1 of the Call for Solution, no later than September 29, 2026 at 1300 hours EDT. Submissions will be evaluated with consideration given to the vendor's ability to substantiate a solution that presents the best value to the Government and lowest overall project risk.

6.1.1 Volume I: Mandatory Technical Readiness and Compliance

(No Page Limit, Standard Forms, MS Word or PDF)

1. Interested Vendor and Information Form: <https://forms.osi.apps.mil/r/n5qzG3ZZEY>
2. Attachment 4, ACA Letter of Intent (LOI): A signed statement acknowledging and agreeing to the ACA data-sharing requirements.
3. One World Terrain (OWT) / OGC Ingestion & Rendering (Applicable to any Lot with a Terrain/Rendering Engine). The proposed solution must demonstrate the native ability to ingest and render One World Terrain (OWT) data formats. Offerors must provide either:
 - a. Direct links to technical documentation, user manuals, or software release notes demonstrating native support for OWT data formats and standard OGC 3D streaming protocols (e.g., OGC 3D Tiles, WMS, WFS); or
 - b. A screen capture / short video clip (embedded in the 5-minute product demo) showing the software successfully ingesting, streaming, and rendering OWT sample datasets (provided in the TSS GFI baseline) or standard OGC 3D Tiles.
4. OCI Dual-Submission Acknowledgement Statement (If bidding Lot 5): Offerors bidding on Lot 5 must provide a signed corporate statement acknowledging the Lot 5 Structural

Award Exclusion. If the offeror or any of its corporate affiliates are simultaneously proposing on Lots 1, 2, or 4, the statement must explicitly acknowledge that:

- a. The corporate family, and its subcontractors, cannot be awarded or perform on both Lot 5 and Lots 1,2, or 4; and
 - b. If selected for award on multiple conflicting Lots, the offeror agrees to execute the Government's single-award election process prior to Phase 3 agreement/contract execution.
5. Master Compliance Matrix (Optional): Offerors may include a comprehensive Master Compliance Matrix mapping all CFS requirements to proposal sections in Volume I. This does not count against any page limits.

6.1.2 Volume II: Anonymous Technical Concept Submission

(Limit: Pages limitation as described below applicable per Lot Submission, MS Word or PDF)

Page Limits:

- Lot 1 (Common Core Software): Maximum of 8 pages total, structured as:
 - Core Technical Concept (Pages 1-5): Core simulation architecture, modernization path (A, B, or C), Ground Table II collective live-fire gating capability, open SDK/API framework.
 - Annex A – RVCT-Air Architectural Strategy (Pages 6-8): A dedicated 3-page trade space narrative addressing the offeror's architectural approach to delivering RVCT-Air requirements (e.g., Unified Simulation Core vs. Modular Lot 2 Flight Plugins vs. Federated Aviation Engines; 6-Degree of Freedom aerodynamic modeling; TC 3-04.3 Tables VII/X collective gunnery; and AMPS/mission-rehearsal tool interoperability).
- Lot 2 (Simulation Applications): Maximum of 5 pages per distinct standalone software application/module offered).
- Standard Baseline: Maximum of 5 pages per Lot submission (Lots 3, 4, and 5).

Architectural Diagrams: Up to two (2) additional pages of high-level architectural diagrams may be included as an attachment that does not count against the page limit. Narrative text on diagram pages must be strictly limited to structural labels and functional callouts; embedded descriptive narratives will be disregarded by evaluators.

Anonymity Guidelines: Offerors must omit company names, corporate logos, CAGE codes, personnel names, and prime contract numbers from Volume II. Standard commercial product names, third-party COTS, and GOTS baselines (e.g., *Unreal Engine*, *Unity*, *Kafka*, *gRPC*, *OneSAF*, *Cesium*, *TSS*) may be named for technical and architectural clarity, provided the offeror does not state they are the developer/owner of the product or make claims that disclose corporate identity.

Solutions that violate this anonymity requirement in Volume II may be considered non-compliant and may not be reviewed. All other volumes should be clearly marked with the vendor's information.

Each solution brief must include:

1. Modernization Path Declaration (Applicable to Lot 1 Offerors Only): The offeror must explicitly declare which of the following modernization paths their solution is based on:
 - a. Path A: GOTS-based Approach. The vendor's solution is primarily based on modifying and enhancing the available TSS GFI.
 - b. Path B: COTS-based Approach. The vendor's solution is based on a new COTS solution that will replace the TSS baseline.
 - c. Path C: Hybrid Approach. The vendor's solution is a hybrid that combines significant portions of the GOTS baseline with new COTS components.
2. A high-level software architecture diagram relevant to that Lot's function and declared Modernization Path.
 - a. Lots 1, 2, and 4 (Software Providers): Detail the software architecture, scalability, and physics/data handling capabilities. For Lot 1, this section must also address the solution's current capability or future roadmap for providing a user-facing scripting environment.
 - b. Lot 3 (HIL Integrator): Detail the engineering methodology for mapping physical GFE RVCT inputs to the HAPI standard, minimizing latency, and the deployment plan for fielded sites.
 - c. Lot 5 (Enterprise Integrator): Detail the DevSecOps administration, the plan for managing the physical Software Integration Lab (SIL), and the methodology for executing the Conformance Test Suite (CTS).
 - i. (Optional) Lot 5 vendors may also submit an alternative, hybrid or cloud-based operational hosting model as an appendix to this volume. This optional solution should detail the value proposition, including potential cost savings, performance benefits, and a realistic assessment of the network and security challenges associated with streaming the simulation from the cloud to fielded sites.
3. Data Segregation and Releasability Approach: A description of the architectural approach to data segregation, showing how sensitive/CUI data is isolated from the core application to enable rapid data sanitization and coalition releasability.
4. The licensing model and architectural data rights for the software solution for that Lot. Offerors must clearly define their commercial model (e.g., Perpetual License for one-time purchase, Enterprise Subscription, or usage-based).

6.1.2.1 Schedule Narrative:

(This is also part of Volume II and page count)

The vendor will provide a brief narrative describing how the solution meets the requirements of that specific Lot.

- a. For Lot 1 Offerors: Based on your declared path, you must provide:
 - i. If Path A (GOTS): A detailed plan for opening, simplifying, and enhancing the GFI to meet all core four priority capability deliverables.
 - ii. If Path B (COTS): A detailed plan to configure, integrate, and if necessary, modify the COTS product to meet all four priority capability deliverables.
 - iii. If Path C (Hybrid): A clear description of which GFI components will be retained, which COTS components will be introduced, and the integration plan between them.
- b. For All Other Lots: A detailed integration plan demonstrating how your application/service will utilize the Government-approved SDK to plug into the core architecture.

5. Special Topic: Aviation Simulation Architectural Approach (RVCT-Air):

Army Aviation requires high-fidelity flight dynamics (6-DOF), rigorous aircraft OFP concurrency, specialized mission rehearsal tools, and TC 3-04.3 Table VII/X collective gunnery. Vendors proposing Lot 1 or Lot 2 (Aviation Applications) must specifically articulate their architectural strategy for delivering RVCT-Air capabilities by addressing:

1. Architectural Paradigm: Does the offeror propose (a) a Unified Engine handling both ground vehicle dynamics and high-fidelity rotary-wing flight physics; (b) a Modular App-Store Model where specialized Lot 2 aviation physics modules plug into a core platform via the SDK; or (c) a Federated Architecture interfacing the core ground simulation with dedicated aviation simulation/rehearsal engines via standard protocols (DIS, HLA, gRPC)?
2. External Tool & AMPS Integration: How does the proposed solution ingest AMPS mission-planning data and interoperate with incumbent aviation mission-rehearsal tools (e.g., MACE, FalconView) and cockpit hardware (e.g., RVCT-A, CAP-T)?
3. Teaming & Subject Matter Expertise: What teaming or co-development strategies will the offeror leverage with accredited aviation simulation providers to ensure rapid delivery of certified AH-64E, UH-60M/V, and CH-47F collective capabilities?

6.1.3 Volume III: Product Demonstration Artifacts

(No page limit for artifacts, MS Word or PDF)

Volume III serves as an objective technical readiness gate to verify and validate TRL 8/9 maturity and integration readiness. Volume III artifacts are not required to be anonymous.

Vendors must provide the following “show, don’t tell” artifacts:

1. Product Demonstration Video (5-Minute Maximum): Video demonstrating the core functionality of the working software, HIL test rig (Lot 3), or operational DevSecOps/CTS tooling (Lot 5). Videos may be provided via public URL, password-protected portal, or secure electronic transfer (details in submission instructions).
2. Live API/SDK Documentation: A URL/link to existing public or access-controlled developer documentation, OpenAPI specs, or test harnesses. *(Note: Path A GOTS-based offerors are exempt from public internet URL requirements for GFI code and may provide technical interface architecture specifications).*

6.1.4 Volume IV: Rough Order of Magnitude (ROM) and Licensing Model

(No Page Limit. Offerors shall provide a fully unlocked Excel workbook)

This volume provides the Government with a Rough Order of Magnitude (ROM) and is collected for Government planning and market research only; this volume will NOT be evaluated or scored.

1 The ROM for Government-Owned (GOTS) Solutions: If an offeror is submitting the use of existing GOTS, they shall not provide software license cost data. Instead, the ROM must detail:

- a. Any non-recurring engineering (NRE) costs required to modify, wrap, or configure the GOTS component to meet the open API mandates of this RFS.
 - b. The annual, recurring labor and material price required to sustain and support the GOTS component for the period of performance.
2. Software Licensing Models (Applicable to Lots 1, 2, and 4): Offerors submitting commercial software must define their price. The Government heavily prefers flat, Enterprise-wide licensing models that do not penalize the Army for scaling user counts or adding installations. Enterprise-wide refers to the Synthetic Training Environment (STE) / STE Virtual Software (VSW) program ecosystem across all planned simulator suites and deployed Passive Optical Network (PoN) nodes.
- a. Perpetual Licenses (One-Time Purchase): If submitting an outright sale, the offeror must clearly separate the one-time perpetual license price from the recurring annual Maintenance and Support price.
 - b. Subscription/SaaS Licenses: If submitting a subscription, the offeror must define the term (e.g., annual) and exactly what is included (e.g., software access, hosting, all patches/updates, and tech support).
 - c. Tiered/Metric-Based Pricing: If the license is not Enterprise-wide, the offeror must explicitly state the limiting metric (e.g., price per concurrent user, price per physical node, or price per CPU core) and provide the cost-scaling tiers.

3. ROM for Labor and Integration Services (As applicable to all Lots): Offerors must provide a ROM for the labor required to execute the scope of their Lot
 - a. A breakdown of labor categories and estimated annual hours.
 - b. For Lot 3, ROM pricing must focus exclusively on HIL engineering, HAPI translation development, and SIL integration testing.
 - c. For Lot 5, ROM pricing must clearly separate the setup of the DevSecOps pipeline and API Gateway from the ongoing, continuous management of the physical SIL.
4. ROM for Data Rights and Intellectual Property: If there are any separate price or fees required for the Government to obtain the necessary rights to use, modify, or share the vendor's API documentation, SDKs, or Interface Control Documents (ICDs) within the STE Virtual Software ecosystem, a ROM for those prices must be explicitly identified as a separate line item.

6.1.5 Volume V: Recent and Relevant Experience

(Limit: 3 pages per lot submission, MS Word or PDF)

Offerors shall provide narrative detailing up to three (3) recent, within three (3) years from CFS submission date, relevant contracts/agreements. The narrative for each contract/agreement must be no more than one page and must include:

1. Contract Identification: Contract number, period of performance, total contract value, and current Government Point of Contact (POC) with phone number and email.
2. Brief Description of Work: A short summary of the work performed.
3. Relevance Narrative: A specific, detailed narrative explaining how the referenced contract demonstrates the offeror's experience with the key capabilities outlined in Relevant Experience (e.g., how they acted as a modular component, how they teamed with other vendors, or how they managed a secure IL environment).

6.2 Overall Risk: Assessment of risks is subjective. If the risk is obvious or the schedule seems overly aggressive, the Government will consider that in the overall project risk assessment. Vendors are responsible for identifying risks within their submissions, as well as providing specific mitigating solutions.

6.3 Phase 2 – Demonstration Pitch

Live Demonstrations: Down-selected offerors will be invited to conduct a one-hour, live technical demonstration of their submitted software solution to the Government evaluation team.

6.4 Phase 3 – Revised Solution Submission

Phase 3 revised submission requirements and evaluation criteria will be outlined in the invitation to this phase.

7. EVALUATION CRITERIA

7.1 Phase 1 - Solution Brief Basis of Evaluation

Phase I Evaluations will follow a two-step process: step (1) Mandatory acceptable/not acceptable Readiness applicable to Volume I. If step 1 receives an acceptable rating, then the evaluation moved to step (2) Weighted Qualitative Evaluation of Volume II (Anonymous Technical Concept), Recent and Relevant Experience applicable to Volume V and overall project risk.

(Note: Volume IV Rough Order of Magnitude is collected for Government planning and market research only and will NOT be evaluated or scored)

7.1.1 Step 1: Mandatory Technical Readiness and Compliance (Acceptable/Not Acceptable)

A solution/proposal must receive a rating of acceptable on all focus area submission to move into evaluated under step 2. Ratings will be acceptable/not acceptable

	Focus Area	Submission Location	Acceptable/Not Acceptable
1	Administrative & OCI Compliance	Volume I	Valid SAM.gov registration; approved DD Form 2345 (JCP); signed Attachment 04 ACA Letter of Intent (LOI); and signed Lot 5 OCI Structural Award Exclusion statement.
2	Proof of Commercial Maturity (TRL 8/9)	Volume III	5-minute video and live documentation links demonstrating working, fielded software, HIL test rig (Lot 3), or operational DevSecOps tooling (Lot 5). (Exempt from anonymity).
3	One World Terrain (OWT) Ingestion	Volumes I & III	Verifiable proof that the proposed terrain/rendering engine natively ingests and renders OWT data formats and OGC 3D streaming standards (3D Tiles/WMS/WFS).
4	U.S. Security & Recipient Eligibility	Volume I	Verification that the prime offeror and its subs are U.S. entities with U.S. citizen custodians under CUI//SP-CTI NOFORN restrictions.

Step 2: Weighted Qualitative Evaluation Factors

7.1.2 Volume II Anonymous Technical Concept Submission: Compliant Solution briefs correctly submitted in response to the Call will be evaluated. The Government reserves the right to use external market research in the evaluation of a Company's viability. The Government reserves the right to not respond to solution briefs incorrectly submitted under this Call.

The Government intends to evaluate the Solution Brief to determine which proposed solutions have the potential to best meet the Governments needs while also revealing to have the lowest overall project risk utilizing the two-step evaluation criteria referenced above. The Government reserves the right to select all, some, or none of the solution submissions for award.

Solution Briefs submitted in response to this Call for Solutions will be evaluated using the following criteria in descending order of importance are: (a) Schedule, (b) Technical Merit and architectural soundness, and (c) Viability.

a. **Schedule Narrative:** The Government will evaluate the speed, credibility, and feasibility of the offeror's schedule narrative (part of Volume II) to deliver operational capability.

- Speed to Table II Live-Fire Gate: The aggressiveness and credibility of the timeline to deliver an accredited, certifiable Table II virtual collective gunnery capability for mounted maneuver units IAW TC 3-20.0, and TC 3-04.3 Table VII/X collective gunnery for aviation units.
- Velocity to Initial Operational Capability (IOC): The clarity of milestones for integrating priority combat platforms (M1A2, M2A3/A4, Stryker, AH-64, UH-60, CH-47).

b. **Technical Merit:** The Government will evaluate the technical and completeness of the proposed software/system architecture (Volume II) against the Lot-specific scope:

- Core Operational Priority Deliverables: The extent to which the solution satisfies Table II live-fire gating, combined arms direct/indirect fires (including BFIST), Mounted Mission Command concurrency, and open API access.
- Modular Open Systems Approach (MOSA): Clear separation of concerns, loose coupling of components, microservices/service-oriented design, and absence of proprietary, closed-loop dependencies.
- Developer Experience and Extensibility (Lot 1): The maturity and completeness of the proposed SDK/APIs to allow third-party Lot 2 applications to seamlessly dock into the platform, including the availability or roadmap for a user-facing scripting environment

c. **Solution Viability.** The Government will evaluate the technical, security, and operational viability of the required attributes to include, data rights, IP and Sustainment Freedom with minimal impedance to downstream execution and integration:

- Data Rights, IP and Sustainment Freedom: The extent to which the proposed data rights and licensing support long-term, unencumbered sustainment:
 - Interface Rights: Delivery of all APIs, SDKs, schemas, and connectors with at least Government Purpose Rights (GPR) to allow open multi-vendor integration.
 - Sustainment/PDSS: Freedom for the Government to maintain, patch, install, configure, and update software over its life cycle without vendor lock-in.
 - GFI Baseline (Paths A & C): Granting Unlimited Rights to any modifications made to the TSS GFI baseline.

7.1.3 Volume III: Product Demonstration Artifacts: This submission will be rated as being compliant/non-compliant based on the verification and validation of the "show, don't tell" artifacts.

7.1.4 Volume IV: Rough Order of Magnitude (ROM) and Licensing Model: is collected for Government planning and market research only, this volume will NOT be evaluated or scored.

7.1.5 Relevancy and Recency (Volume V): Demonstrated track record within the past three (3) years from date of solution/proposal submission and relevant to scope of each applicable Lot. As long as one of the submitted contracts/agreements is relevant, the overall relevant rating will be relevant.

This volume is going to be assessed as being Relevant or Not Relevant and Recency will be determined within 3 years of submission.

The relevant ratings will be relevancy/not relevant.

The recency ratings will be recent/not recent.

7.2 Overall Project Risk:

The Government will evaluate the criteria set forth in Section 7.1 to assign a composite Overall Project Risk Rating. This subjective overall project risk rating is synthesized from the individual evaluation findings across Volumes I, II, III, and V, reflecting the Government's confidence in the offeror's ability to successfully deliver and integrate the proposed STE Virtual Software capabilities without mission failure or critical delay. The Government will utilize the following risk tiers:

- **Low Risk:** The solution submission demonstrates a sound, highly feasible technical approach, a realistic schedule, and a thorough understanding of the STE VSW architecture, with little potential to cause schedule disruption or degradation of operational performance. Weaknesses, if any, are minor, and normal contractor effort and routine Government monitoring will likely overcome any difficulties.
- **Moderate Risk:** The solution submission demonstrates an acceptable approach but contains weaknesses that can potentially cause schedule disruption or degradation of technical and interoperability performance. Special contractor emphasis and close Government monitoring will likely be required to mitigate identified difficulties.
- **High Risk:** The solution submission contains significant weaknesses, deficiencies, or unachievable schedule and technical assumptions that are likely to cause severe schedule delays or failure to meet core operational requirements. Difficulties are unlikely to be overcome even with intensive Government monitoring.

7.2 Selection for consideration

Based on the evaluated sections, the Solution submission will be categorized as Selected for Further Consideration or Not Selected for Further Consideration. Those selected to have Schedule Narrative, Technical Merit, and Solution Viability with Low or Moderate overall project risk, but not selected for further consideration, may be selected for basket consideration for up to twenty-four (24) months.

The selection of one (1) or more submissions into the next Phase will be based on the criteria listed above and funding availability.

Selected for Further Consideration: The submitted Solution submission has been determined to be of technical merit, represents an achievable schedule and viable maturity pathway with recent and relevant experience and having the lowest overall project risk. As such, the Government may invite the Company to participate in next phase should funding be available.

Not Selected for Further Consideration: The submitted Solution submission does not represent either the necessary degree of technical merit, technical innovation, relevance, or lowest overall project risk to agency priorities to warrant further proposal effort or consideration.

The Army anticipates Lots 1 & 2 may routinely receive more Solution Brief submissions than resources to award. All submissions will be fairly evaluated, however, only select Solution Brief submissions will be invited to Phase 2 and/or subsequent Phases. The government reserves the right to limit the number of Vendors invited to Phase 2 and/or subsequent Phases. As such, a Vendor's solution may be evaluated for Schedule Narrative, Technical Merit, Solution Viability, Relevancy, Recency and overall project risk but not invited to Phase 2 and/or Subsequent Phases. Solution submissions that are chosen for Phase 2 and/or subsequent Phases will be notified in writing as soon as practicable. The Government reserves the right to bypass Phase 2 into Phase 3 to request a formal proposal should funding be available.

7.3 PHASE 2: Demonstration Pitch

Evaluation criteria will remain the same as in Phase 1 for Lots 1,2, and 4. Lots 3 & 5 evaluations will be identified upon selection.

7.4 PHASE 3: Revised Solution Submission

Revised submission requirements and evaluation criteria will be outlined in the invitation to this phase.

8. ITERATIVE PROTOTYPING

In accordance with AOS, Section F, iterative prototyping will be conducted in multiple phases, with each phase building upon the outcomes of the previous one. At the end of each phase, the Government and stakeholders will review deliverables and provide feedback, which will be incorporated into subsequent iterations. The scope of the prototype may be modified by mutual agreement to adapt the technology for additional unique and discrete purposes or mission sets, which may be identified by the Government during the prototyping process. Progress will be evaluated against predefined milestones and deliverables, and adjustments will be made as necessary to ensure continued alignment with project objectives and requirements. The iterative prototyping process may result in separate phased prototype awards or modifications to the original award, as appropriate, and will continue until all milestones to completion have been achieved to the satisfaction of the Government.

9. SUCCESSFUL COMPLETION OF PROTOTYPE

In accordance with AOS, Section G, successful completion of the prototype will be determined by the Government, through written determination by the appropriate approving official, based on the achievement of all agreed-upon deliverables, performance metrics, and acceptance

criteria as outlined in the prototype agreement. The Government will conduct a final evaluation to confirm that all requirements have been met prior to considering any follow-on production activities. The Government may also, prior to full completion, transition any complete and substantive aspect of the prototype determined to provide utility into production, as appropriate.

10. FOLLOW-ON PRODUCTION

In accordance with AOS, Section H – Follow-On Production of a Prototype, and pursuant to 10 U.S.C. 4022, companies are advised that any prototype awarded in response to this Call may result in the award of a follow-on production contract or agreement without the use of further competitive procedures, contingent upon successful completion of the prototype and determination by the Government. The follow-on production contract or agreement may be available for use by one or more organization(s) within the Department of Defense (DoD), and the scope and magnitude of the follow-on award could be significantly larger than that of the prototype effort.

11. NON-GOVERNMENT ADVISORS

N/A; The Government will not be using non-Government advisors.

12. ORGANIZATIONAL CONFLICT OF INTEREST (OCI)

Offerors and corporate affiliates are permitted to submit proposals for multiple Lots (including concurrent submissions for Lot 5 and Lots 1, 2, or 4). However, due to the inherent Impaired Objectivity conflict associated with Lot 5's testing and certification responsibilities, no single corporate entity or affiliated family will be awarded or permitted to perform on both Lot 5 and any software development lot (Lots 1, 2, or 4). Firewall-only mitigation plans between corporate affiliates will not be accepted to permit dual-lot performance. In the event of dual selection, the Government will require the offeror to elect a single Lot award.

13. APPENDICES

N/A