Engineer Research and Development Center
High Performance Computing Modernization Program
Sovereign Defense Cloud (SDC)
Commercial Solutions Openings (CSO)
Under Solicitation Number: W912HZ26SC005

SECTION A: INTRODUCTION:

The Engineer Research and Development Center (ERDC) is issuing a Commercial Solutions Opening (CSO) authorized by the Department of Defense (DoD) Class Deviation 2022-O0007. Under a CSO, the ERDC may competitively award proposals received in response to a general solicitation, similar to a Broad Agency Announcement (BAA), to acquire innovative commercial products, technologies, or services based on a review of solutions by scientific, technological, or other subject matter expert peers within the ERDC. “Innovative,” for CSO purposes, means any new technology, process, or method, including research and development (R&D), or any new application of an existing technology, process, or method. Under this CSO, all products, technologies, and services shall be treated as commercial items; products, technologies, and services do not have to be “commercially available” to be submitted in response to this solicitation. If the solution meets the requirements of the regulation, the solution is *treated* as commercial whereby the Contracting Officer will utilize commercial procedures to develop and execute the resultant award.

The U.S. Army Engineer Research and Development Center (ERDC) Information Technology Laboratory (ITL), High Performance Computing Modernization Program (HPCMP) in collaboration with OUSD(R&E), aims to accelerate the transformation of the High-Performance Computing Modernization Program (HPCMP) into a cloud-forward ecosystem that redefines user experience, workflows, and infrastructure to meet the evolving needs of the Department of Defense (DoD). This announcement seeks to foster innovation by encouraging participants to envision and design a future-ready HPCMP platform that integrates emerging technologies, modern cloud principles, and advanced architectures to deliver a resilient, scalable, and secure solution.

Problem Statement:

The High-Performance Computing Modernization Program (HPCMP) requires a significant transformation to keep pace with evolving technological and operational demands. The current ecosystem needs to be modernized into a cloud-forward model to enhance user experience, automate workflows, and create a scalable and secure hybrid cloud architecture. This challenge seeks solutions to prevent vendor lock-in, improve mission-critical responsiveness, and ensure the long-term sustainability and adaptability of the HPCMP.

Objective:

To identify and evaluate innovative solutions that will enable the HPCMP to modernize its user experience, enable a hybrid cloud architecture, automate workflows, and integrate a secure data fabric, while preventing vendor lock-in. The objective is not only to modernize the HPCMP

but to build a capability and business model that is strategically advantageous to the DoD by rethinking foundational elements such as data storage, processing, security, and accessibility. The desired outcome is a sovereign, cloud-enabled, AI-driven platform that empowers the DoD to maintain technological superiority.

Background:

Aligned with the DoD's acquisition reform priorities, the SDC Tech Challenge emphasizes commercial readiness, cost efficiency, scalability, and vendor-agnostic practices to ensure the High-Performance Computing Modernization Program (HPCMP) remains adaptable and sustainable. Participants are encouraged to address the unique requirements of HPCMP's federated enterprise and enclave security while considering critical factors such as data egress/ingress costs, operational flexibility, and long-term economic viability.

Requirements:

Participants are invited to propose solutions that address one or more of the following key focus areas:

- **Unified Service Layer:** Design a unified HPCMP Service Layer integrating portal, CLI, and API capabilities for a consistent user experience, and implement workflow orchestration, policy-as-code guardrails, and observability tools.
- **Hybrid Cloud Architecture:** Propose scalable hybrid cloud models that integrate government-owned and commercial cloud resources across all classification levels, addressing data portability and hardware refresh cycles.
- **AI-Powered Orchestration**: Create intelligent orchestration layers to automate provisioning, workload execution, and data management with intuitive interfaces for AI/ML, simulation, and data pipelines.
- **Secure Data Fabric:** Build a unified data layer that enables seamless discovery, tagging, and utilization of diverse data sources while implementing advanced security measures, including Zero Trust architecture.
- **User Experience Modernization:** Redesign the Portal to the Information Environment (pIE) to provide a seamless user experience and propose concierge support services to enhance user engagement.
- **Vendor Lock-In Prevention:** Adhere to open standards (e.g., OpenStack, Kubernetes, OpenAPI) and design modular architectures to ensure interoperability and allow components to be replaced or upgraded independently.

Estimated Government Funding Profile:
Funding is not currently available for this project. Resources may be allocated in the future.

This project does not commit ERDC or ERDCWERX to pay any costs incurred in preparation of a response or guarantee a contract.

Estimated Period of Performance: The period of performance will run from the point of selection through participation in the final phase of the challenge (Phase IV: Implementation and Scaling).

Desired End-state:
The announcement will follow a phased approach:

- Concept Submission: Participants submit detailed solution briefs addressing one or more focus areas. Solution briefs are evaluated based on innovation, feasibility, scalability, and alignment with DoD priorities.
- Prototype Development: Selected participants receive funding and access to HPCMP resources to develop and test prototypes in collaboration with HPCMP experts.
- Demonstration and Evaluation: Participants present prototypes to a panel of DoD stakeholders. Prototypes are evaluated on performance, security, interoperability, utility, and cost efficiency.
- Implementation and Scaling: Winning solutions are integrated into the HPCMP ecosystem to support the development of the Sovereign Defense Cloud.

This request for solution briefs is a two-step project announcement:

Step 1: This announcement is being issued to solicit solution briefs ONLY. The purpose of the solution brief submission is to identify potential partners that may have promising solutions relative to fulfilling the requirements herein. An offeror that describes a promising solution may be asked questions regarding their solution via email or requested to virtually attend a solution pitch with the Government project team. The Government reserves the right to move straight to Request for Proposal (RFP) based on solution brief only. Further, an offeror's inability to accept an invitation to provide a solution pitch does not preclude them from receiving an RFP.

Step 2: If a solution is selected and funding is available, the Government will issue an RFP. If a solution is selected and funding is not available, the Government may request that the solution brief be maintained in the electronic library for consideration and subsequent funding availability up to three years after submission. If a solution is not selected, the offeror will be notified generally within 30 days of submission.

SECTION B: SOLUTION BRIEF PREPARATION AND SUBMISSION

NOTE: The Government reserves the right to not select a solution if it omits any of the required information below.

DO NOT INCLUDE CLASSIFIED OR PROPRIETARY INFORMATION

1. **GENERAL FORMATTING REQUIREMENTS:** Solution briefs shall be **no more than five pages** and submitted electronically. All submissions must be clear, legible, and conform to the following general formatting guidelines:
    - Paper: Pages shall be 8.5 x 11 inches, single sided, with each page numbered "X of Y pages."
    - Margins: Minimum of 1 inch on all sides.
    - Type Font: 12 point Times New Roman, single spaced.
    - Acronyms: Spell out all acronyms the first time they are used. One page of the proposal body is allocated to spell out acronyms, abbreviations and symbols.

- Language: English.
- Electronic file format: PDF, compatible with current Adobe Acrobat Reader. File size less than 20 MB.

2. **TECHNICAL REQUIREMENTS**:
   - Describe the proposed solution and how it will enhance the mission effectiveness of the agency. The proposed solution shall not simply repeat the Focus Area but rather provide convincing evidence that the proposed solution or potential capability fulfill a Government requirement, close capability gaps, or provide technological advancements. The following examples of convincing evidence are strongly encouraged
     - Authentic company URL or web address. Note: The Government may elect to use the information provided as part of its continuous market research. However, the government is not obligated to use the URL or web address as part of its evaluation process to determine the Selectee or Awardee.
     - Summary of product commercialization currently used in the open market.
     - Pictures, diagrams, models, or figures to depict the essence of the proposed solution.
   - Describe how the proposed solution is "innovative" and the feasibility of the solution solving an agency challenge, including examples demonstrating possible application of the proposed innovation or existing use of the solution in the commercial marketplace.

     "Innovative" is defined as any technology, process, or method, including research and development, that is new as of the date of submission of a proposal, or any application that is new as of the date of submission of a proposal of a technology, process, or method existing as of such date.
3. **ROUGH ORDER OF MAGNITUDE (ROM)** – Estimated price ONLY. Further details will be requested for full proposal if selected.

4. **SUBMISSION**

   SAM Registration: It is critical that offerors are registered in the System for Award Management (SAM), https://sam.gov/; offerors will not be eligible for an award if not registered in SAM at the time of submission. Additionally, entities are required to be registered to receive contracts (not just grants) and the address from the solution must match the registration information in SAM.

   Solution Submission: For a solution to be evaluated for possible selection, it must be submitted via the electronic form at erdcwerx.org from the Sovereign Defense Cloud (SDC) CSO Submit Solution link; submissions will be accepted through **1700` EST, 07 AUG 2026.** A hardcopy will not be accepted. Offerors may submit solution amendments any time prior to the deadline.

   When a submission is made, a confirmation email will be sent by the ERDCWERX portal to the email address supplied in the submission form.

   Please ensure that the email address listed in your proposal is current and accurate. Please contact ERDCWERX by emailing info@erdcwerx.org to share details of changed email address and/or company points of contact after proposal submission.

Due to the large amount of expected interest in this CSO, and to maintain a written record of questions, the ERDC will be accepting individual questions through the ERDCWERX portal by using their Question Submission Form. All questions must be received NLT **30 June 2026**. The questions and answers will be published on the ERDCWERX Frequently Asked Questions (FAQ) page.

5. SELECTION

Submissions will be reviewed by ERDC or other Government subject matter expert.

Solutions received in response to this announcement will be selected based upon an initial review of how innovative and feasible the solution is at solving an agency challenge, the potential to enhance the mission effectiveness of the agency, and funding availability.

If a solution is selected and funding is available, an RFP will be issued by the Contracting Officer/Agreements Officer, which shall include a request for further details or documents prior to award (i.e., contractor self-developed Performance Work Statement (PWS) or Scope of Work (SOW), delivery details… etc.). A PWS is similar to a Service Level Agreement (SLA) used in the commercial marketplace. The PWS shall detail the proposed work to be completed during the period of performance, deliverables, etc. As many solutions will likely be performed/provided at military installations, the Government will provide the applicable security requirements to be included in any award. As appropriate, the Government may engage in a collaborative process to develop the PWS/SOW, deliverables, data rights, and necessary terms and conditions for the award.

Issuance of a RFP does not guarantee award. Awards will be made once a proposal is accepted based on the proposal evaluation criteria in SECTION C.

The government reserves the right to select none of the submissions.

SECTION C: PROPOSAL EVALUATION

Proposals received in response to an RFP will be evaluated in accordance with the following evaluation criteria by scientific, technological, and/or other subject matter experts:

- **Technical requirements** will assess how innovative the solution is (as defined in this announcement) and the feasibility of the solution solving the agency's challenges.
- **Importance to agency** programs will assess the solution's potential to enhance the mission effectiveness of the agency.
- **Funds availability** will assess the availability of funding to procure the solution.

Additional evaluation criteria:

- Innovation: Novelty and creativity of the solution.
- Feasibility: Technical and operational viability.
- Scalability: Potential to scale across the HPCMP ecosystem and DoD enterprise.
- Vendor Lock-In Prevention: Adherence to open standards, modularity, and interoperability.
- Commercial Readiness: Use of commercially available technologies.
- Cost Efficiency: Demonstrated cost savings and ROI.
- Impact: Expected benefits and outcomes for the DoD.
- Utility: Ease of use by the user community.

Price Reasonableness Determination: Price shall be considered to the extent appropriate, but at a minimum, the Contracting Officer/Agreements Officer will use market research as the primary method to determine that the price is fair and reasonable. The Government may elect to use external market research in the evaluation of the proposal. The ERDC must determine the price fair and reasonable prior to award using the procedures at DFARS subpart 212.209. In some circumstances, the Contracting Officer/Agreements Officer may request information from the offeror regarding recent purchase prices paid by the Government and/or commercial customers for the same or similar commercial items.

SECTION D: AWARD

All resultant contracts will be firm-fixed price. All items, technologies, and services (including research and development) procured via this CSO are treated as commercial. **Applicants from universities and/or non-profit organizations should be aware that commercial clauses will be integrated into the award and should coordinate proposals with associated legal counsel prior to submission.**

ERDC is conducting this CSO on a full and open basis and intends to award contracts in accordance with FAR part 12 and the FAR part that is deemed most appropriate for the solution proposed (i.e., FAR part 13, 15, and/or 35).

FAR / DFAR clauses will be integrated into contracts on a case-by-case basis based on proposed scope.

Additional terms and conditions may be required as circumstances necessitate; examples of such would be data rights, security, R&D, educational institutions, etc.

The government does not plan to engage in the debrief process outlined in FAR part 15 but will provide feedback to unsuccessful offerors as appropriate and at its discretion.

Award may be made using any appropriate vehicle (e.g., FAR-based contracts and Other Transactions) in accordance with applicable authorities that are effective at the time of the award.

Other Transaction (OT) Agreement:

To qualify for an OT agreement award, an offeror must satisfy at least one of the following:

1) The prototype project includes significant participation by at least one nonprofit research institution or nontraditional defense contractor (NDC),
2) All significant participants in the transaction other than the Federal Government are small business concerns, or
3) At least one-third of the total cost of the prototype project is to be paid out of funds provided by parties other than the Federal Government

An NDC is defined as an entity that is not currently performing and has not performed, for at least the one-year period preceding the solicitation of sources by DoD for the procurement or transaction, any contract or subcontract for the DoD that is subject to full coverage under the cost accounting standards prescribed pursuant to section 1502 of title 41 and the regulations implementing such section (see 10 U.S.C. 2302(9)).

FOLLOW ON ACTIVITES/ PRODUCTION: The USACE, ERDC is using competitive procedures to select participants in a prototype transaction under 10 U.S.C 4022. If the prototype is determined successful, agencies may exercise authority under 10 U.S.C. 4022(f) to provide for, and award, a follow- on production transaction or FAR based contract without additional competitive procedures.