

Engineer Research and Development Center

Construction Engineering Research Laboratory

Commercial Solutions Openings (CSO)

Solicitation Number: W9132T21SC001

SECTION A: Introduction

The Engineer Research and Development Center (ERDC), Construction Engineering Research Laboratory (CERL) is issuing a Commercial Solutions Opening (CSO) authorized by the Department of Defense (DoD) Class Deviation 2018-00016. Under a CSO, the ERDC-CERL may competitively award proposals received in response to a general solicitation, similar to a Broad Agency Announcement (BAA), to acquire innovative commercial items, technologies, and services based on a review of proposals by scientific, technological, or other subject matter expert peers within the ERDC. Under this CSO, all items, technologies, and services shall be treated as commercial items.

The ERDC-CERL often functions as the project execution arm of the Installations of the Future program administered by the Office of the Deputy Assistant Secretary of the Army, Strategic Integration. This program is focused on many different aspects of installation modernization, specifically following the Army Installations Strategy lines of effort: take care of people, strengthen readiness and resilience, modernize and innovate, and promote stewardship.

The ERDC-CERL intends to obtain “innovative” solutions or potential new capabilities that fulfill requirements, close capability gaps, or provide potential technology advancements. Solutions may include existing technologies or procedures that are not currently in use that would enhance or streamline their mission capabilities.

“Innovative” is defined as any technology, process or method that is new as of the date of submission of a proposal. It also includes any new application of an existing technology, process, or method.

This CSO contains broadly defined areas of interest and interest in more specific requirements. While some of these areas of interest are geared toward meeting requirements at listed locations, the Government reserves the right to award contracts from this CSO to meet ERDC-CERL requirements at other locations with similar areas of interest and mission requirements.

ERDC-CERL will typically use a one-step evaluation process but does reserve the right to request a live demonstration (See Section C) that would add a second step to the evaluation process. Under the one-step evaluation process, offerors whose proposed solutions meet the need of the government and include enough detail to complete a full technical evaluation will not be asked to provide a demonstration of their solution.

SECTION B: Instructions for Preparation and Submission of Solutions

The following section outlines the solution submission requirements and timelines.

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. The Contracting Officer must determine the price fair and reasonable prior to award. ERDC-CERL 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); the government

reserves the right to award prototype agreements (e.g. Other Transaction Agreements), in accordance with 10 U.S.C. §2371b, if deemed appropriate and in the government’s best interest.

Solution contents (**Note: The Government reserves the right to not select a solution for award if it omits any of the required information below.**)

Solution Volume/Section	Requirements/Limitations
<p>COVER LETTER Must Include:</p> <ul style="list-style-type: none"> i. Area of Interest for which solution is submitted ii. Solution Team Member Names iii. Solution “Validity” Date iv. Authorized Offeror Representative or Point of Contact(s) v. An overview of the company, as it relates to the Area of Interest under which the proposed solution is submitted vi. CAGE Code, DUNS Number vii. SAM Screenshot from SAM.gov viii. Relevant NAICS code and description 	<ul style="list-style-type: none"> • Maximum of 2 pages when printed. Page limitation does not include screenshot • Offerors shall include screenshot
<p>VOLUME I – TECHNICAL</p>	<ul style="list-style-type: none"> • Solution brief shall not exceed 5 pages when printed • Pitch/Slide deck shall not exceed 15 slides • OPTIONAL: Up to five-minute video clip to narrate or demonstrate the proposed solution
<p>VOLUME II – PRICE Must include:</p> <ul style="list-style-type: none"> i. Proposed price(s) ii. Delivery Date or Period of Performance 	<ul style="list-style-type: none"> • No page limit • Flexible quantities or pricing options should be provided to maximize the ERDC-CERL’s ability to award with available funding. • Awards for supplies will be delivered Freight on Board (FOB) Destination

****Note:** Submitted documents shall not contain any classified data or sensitive information and proprietary information shall be clearly marked.**

****Note:** All prices shall be valid for a minimum of 90 days after response date.

To limit confusion, all proposal volumes must include the title of the area of interest on which the offeror is proposing a solution, and use the following naming convention:

- *Solution-W9132T21SC001-CoverLetter-<CompanyName>.pdf*
- *Solution-W9132T21SC001-Brief-<CompanyName>.pdf*
- *Solution-W9132T21SC001-PitchDeck-<CompanyName>.pdf*
- *Solution-W9132T21SC001-Price-<CompanyName>.pdf*

Technical Volume

The technical volume shall include a solution brief, a pitch/slide deck, and an OPTIONAL video clip to narrate or demonstrate the proposed solution that is no longer than 5 minutes in length. The technical volume will be reviewed holistically and there are no set format requirements for these documents. It is recommended (but not required) that more detailed information is included in the solution brief and higher-level information is included in the pitch deck.

The technical volume should address the technical importance to agency program factors: how the proposed solution is innovative and the feasibility of the solution solving the agency's challenge(s), including examples demonstrating possible application of the proposed innovation or existing use of the solution in the commercial marketplace.

The quality of the video submissions will not factor into the government's feedback. The government encourages low-cost video production, such as cell phone videos.

Video Submission Instructions – If you choose to submit a video as part of the technical volume, video submissions must be posted to a video hosting website that is accessible for the government. Videos may be marked public or private. The vendor must provide a link and password (if marked private) for the government to access the video submission. The government will not provide access to the vendor's video outside of the government evaluation team without the permission of the vendor. Do not provide a shortened URL, such as YouTube.

Technology Concept and Company Capability

Offerors shall provide the following information in sufficient detail to allow the Government to assess their capability to support the proposed solution.

- Offerors shall describe the unique aspects of their proposed solution as it “relates” to the Area of Interest.
- The proposed solution shall not repeat the Areas of Interest/Topics or contain the contents of the solution brief pasted into slides, but rather provide convincing evidence that the proposed solution will meet the Government's need.

The following examples of convincing evidence are strongly encouraged –

- a. 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.
- b. Summary of product commercialization currently used in the open market.
- c. Pictures, diagrams, models or figures to depict the essence of the proposed solution.

SAM Registration

It is critical that offerors are registered in the System for Award Management (SAM), <https://sam.gov/>; you will not be eligible for an award if not registered in SAM. Additionally, entities are required to be registered to receive contracts (not just grants) and that your address from the solution matches your registration in SAM.

- When registering in SAM.gov, be sure to select ‘YES’ to the question ‘Do you wish to bid on contracts?’ in order to be able to compete for this CSO. If you are only registered to compete for grants, you will be ineligible for award.

- The ERDC-CERL is working to move fast, please double check your CAGE codes and DUNS numbers to be sure they line up, if they are not correct at the time of submission, you may be considered ineligible for award.

Ask Me Anything (AMA)

Due to the large amount of expected interest in this CSO, and to maintain a written record of questions, the ERDC-CERL will be accepting individual questions through the ERDCWERX platform by using their [Question Submission Form](#). The questions and answers will be published and regularly updated on the ERDCWERX Frequently Asked Questions (FAQ) page.

Solution Submission

In order for your solution to be evaluated for a possible contract award, it must be submitted via the electronic form; submissions will be accepted through 31 July 2022. A hardcopy will not be accepted. No solutions will be accepted against this CSO after **5:00 PM Central Time on 3 August 2022**. Offerors may submit solution amendments any time prior to the deadline. Evaluation shall be within 10 days of the submission. However, the Government will ONLY review the final amended proposal that is submitted. To avoid any 'lost in transit' situation, offerors shall contact the Contracting Office to confirm receipt of an email or electronic delivery of a proposal immediately after submission. Please ensure that your e-mail address listed in your proposal is current and accurate. ERDC-CERL is not responsible for ensuring notifications are received by firms changing mailing address/e-mail address/company points of contact after proposal submission without proper notification to ERDC-CERL. Changes of this nature shall be annotated in the beta.sam.gov submittal or amendments. **Notes: Offerors are responsible for ensuring that **ALL Amendments** to this solicitation are reviewed carefully prior to submitting a proposal.

SECTION C: Procedures and Criteria for Selecting Solutions

ERDC-CERL will generally utilize a one-step evaluation process, and in some rare cases may request a second step that would require a virtual or in-person demonstration.

ONE-STEP CSO Evaluation Process – Direct Award (No Live Demo)

Evaluation of offeror's proposed solution: The ERDC-CERL will conduct its evaluation based on three factors: technical, importance to agency programs, and funds availability.

- The **technical factor** will assess how innovative the solution is (as defined in this announcement) and the feasibility of the solution solving the agency's challenges.
- The **importance to agency programs factor** will assess the solution's potential to enhance the mission effectiveness of the agency.
- The **funds availability factor** will assess the availability of funding to procure the solution.

Price Reasonableness Determination: Price shall be considered to the extent appropriate, but at a minimum, the Contracting 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-CERL must determine the price fair and reasonable prior to award using the procedures at DFARS subpart 212.209. In some circumstances, the Contracting 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.

Based on the results of the evaluations, the ERDC-CERL may select offerors for direct award. An award notification will be sent out, which shall include a request for further details or documents prior to award (i.e. contractor self-developed Performance Work Statement (PWS), 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, deliverables, data rights, and necessary terms and conditions for the award.

NOTE: PWS shall not contain classified data or sensitive information. Proprietary information shall be clearly marked.

TWO-STEP CSO Evaluation Process (If applicable) – ERDC-CERL reserves the right to request a virtual or in-person demonstration.

Step One: Evaluation of offerors' proposed solutions: The evaluation criteria for a two-step process is the same as the one-step process: technical, importance to agency programs, and funds availability. Price reasonableness determination is also the same.

Step Two: Virtual or In-Person Demonstration: Offerors invited to participate in a two-step CSO Evaluation Process (Demo Day) will receive an invitation that will provide all of the details for the demonstration session, request for additional information, as well as the time and date that the demo will be conducted. Offerors selected for Demo Day will have an opportunity to demonstrate (Virtually or In-Person) their solution to evaluators. The demonstrations will be evaluated using the same factors as the initial evaluation: technical, importance to agency programs, and funds availability.

After offerors demonstrate their solution to evaluators, to the greatest extent practicable, offerors will be notified if they were selected for an award immediately following their demo. Same as in the one-step process, offerors proposing service-based solutions will be required to provide a contractor self-developed PWS prior to award.

Note: The ERDC-CERL reserves the right to award to an offeror even if they are unable to demonstrate due to unexpected circumstances or circumstances beyond its control.

Site Visits/Product Demonstration

Site visits may be conducted at the discretion of the contracting officer throughout the solicitation and solution submittal/evaluation process. The purpose of the site visit is to:

- i. Allow contractors and government to discuss their concerns while observing the product demonstration.
- ii. Allow the government to determine whether the products can satisfy its needs as identified in the Area of Interest/Solicitation;

The site visit shall not be construed as a guarantee for award, and the government shall not bear any of the contractor's costs for the site visit.

Note: During any step of the CSO, the ERDC-CERL may send questions or comments for the offerors to address via email or during Demo Day.

SECTION D: Areas of Interest

See attached Areas of Interest/Topics for this CSO.

- **AOI 001 – Child Development Center**
- **AOI 002 – Data Ingestion and Management**
- **AOI 003 – Exploratory, Predictive and Scenario Development**
- **AOI 004 – Installation Digital Twin Data Modeling, Integration and Visualization**
- **AOI 005 – Installation Artificial Intelligence and Machine Learning Workflows**
- **AOI 006 – Smart Installation, Campus, and Facility Sensor Pods**
- **AOI 007 – Master Planning Modernization**

Note: The Areas of Interest/Topics listed above are subject to change at any time during the open continuous period. More Areas of Interest/Topics may be added/revised on a monthly, quarterly, or as needed basis. An amendment will be issued once such a change occurs. Offerors are encouraged to review all the Amendments to this solicitation prior to submitting a proposal.

SECTION E: Potential Terms and Conditions for Resultant Awards

****NOTE** – This list is not intended to limit the terms and conditions that may need to be in any resultant award from a proposed solution to the CSO. This is simply the most common terms and conditions anticipated by the Government for those awards.

Typical Clauses and Provisions for Commercial Items over the Simplified Acquisition Threshold

52.204-4 Printed or Copied Double-Sided on Postconsumer Fiber Content Paper MAY 2011

52.204-7 System for Award Management OCT 2018

52.204-16 Commercial and Government Entity Code Reporting AUG 2020

52.204-22 Alternative Line Item Proposal JAN 2017

52.204-9 Personal Identity Verification of Contractor Personnel JAN 2011

52.204-13 System for Award Management Maintenance OCT 2018

52.204-18 Commercial and Government Entity Code Maintenance AUG 2020

52.204-19 Incorporation by Reference of Representations and Certifications.

DEC 2014

52.212-1 Instructions to Offerors--Commercial Items JUN 2020

52.212-3 OFFEROR REPRESENTATIONS AND CERTIFICATIONS--COMMERCIAL ITEMS (AUG 2020)
ALTERNATE I (OCT 2014)

52.212-4 Contract Terms and Conditions--Commercial Items OCT 2018

52.212-5 CONTRACT TERMS AND CONDITIONS REQUIRED TO IMPLEMENT STATUTES OR
EXECUTIVE ORDERS--COMMERCIAL ITEMS (OCT 2020)

Marked in 52.212-5:

52.203-6, Restrictions on Subcontractor Sales to the Government (JUN 2020), with Alternate I (Oct 1995)
(41 U.S.C. 4704 and 10 U.S.C. 2402)

52.204-10, Reporting Executive Compensation and First-Tier Subcontract Awards (JUN 2020) (Pub.
L.109-282) (31 U.S.C. 6101 note).

52.209-6, Protecting the Government's Interest When Subcontracting with Contractors
Debarred, Suspended, or Proposed for Debarment. (JUN 2020) (31 U.S.C. 6101 note).

52.219-4, Notice of Price Evaluation Preference for HUBZone Small Business Concerns (MAR 2020)
(if the offeror elects to waive the preference, it shall so indicate in its offer) (15 U.S.C. 657a).

52.219-8, Utilization of Small Business Concerns (OCT 2018) (15 U.S.C. 637(d)(2) and (3)). 52.219-28
Post Award Small Business Program Rerepresentation (MAY 2020) (15 U.S.C. 632(a)(2)).

52.222-3, Convict Labor (JUN 2003) (E.O. 11755).
52.222-19, Child Labor--Cooperation with Authorities and Remedies (JAN 2020) (E.O. 13126).
52.222-21, Prohibition of Segregated Facilities (APR 2015).
52.222-26, Equal Opportunity (SEPT 2016) (E.O. 11246).
52.222-35, Equal Opportunity for Veterans (JUN 2020) (38 U.S.C. 4212).
52.222-36, Equal Opportunity for Workers with Disabilities (JUN 2020) (29 U.S.C. 793).
52.222-37, Employment Reports on Veterans (JUN 2020) (38 U.S.C. 4212).
52.222-40, Notification of Employee Rights Under the National Labor Relations Act (DEC 2010) (E.O. 13496).
52.222-50, Combating Trafficking in Persons (OCT 2020) (22 U.S.C. chapter 78 and E.O. 13627).
52.222-54, Employment Eligibility Verification (OCT 2015). (E. O. 12989). (Not applicable to the acquisition of commercially available off-the-shelf items or certain other types of commercial items as prescribed in 22.1803.)
52.223-13, Acquisition of EPEAT® Registered Imaging Equipment (JUN 2014) (E.O.s 13423 and 13514).
52.223-15, Energy Efficiency in Energy-Consuming Products (MAY 2020) (42 U.S.C. 8259b).
52.223-16, Acquisition of EPEAT®-Registered Personal Computer Products (OCT 2015) (E.O.s 13423 and 13514).
52.223-18, Encouraging Contractor Policies to Ban Text Messaging While Driving (JUN 2020) (E.O. 13513).
52.225-13, Restrictions on Certain Foreign Purchases (JUN 2008) (E.O.'s, proclamations, and statutes administered by the Office of Foreign Assets Control of the Department of the Treasury).
52.232-33, Payment by Electronic Funds Transfer—System for Award Management (OCT 2018) (31 U.S.C. 3332).
52.239-1, Privacy or Security Safeguards (AUG 1996) (5 U.S.C. 552a).

52.215-8 Order of Precedence--Uniform Contract Format OCT 1997
52.223-5 Pollution Prevention and Right-to-Know Information MAY 2011
52.223-6 Drug-Free Workplace MAY 2001
52.223-10 Waste Reduction Program MAY 2011
52.223-16 Acquisition of EPEAT (R) - Registered Personal Computer Products OCT 2015
52.223-18 Encouraging Contractor Policies To Ban Text Messaging While Driving JUN 2020
52.225-25 Prohibition on Contracting with Entities Engaging in Certain Activities or Transactions Relating to Iran—Representation and Certifications. JUN 2020
52.232-40 Providing Accelerated Payments to Small Business Subcontractors DEC 2013
52.237-2 Protection Of Government Buildings, Equipment, And Vegetation APR 1984
52.242-17 Government Delay Of Work APR 1984
52.246-2 Inspection Of Supplies--Fixed Price AUG 1996
52.246-16 Responsibility For Supplies APR 1984
52.247-34 F.O.B. Destination NOV 1991
52.252-1 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE (FEB 1998)
52.252-2 CLAUSES INCORPORATED BY REFERENCE (FEB 1998)
52.252-6 AUTHORIZED DEVIATIONS IN CLAUSES (APR 1984)
52.253-1 Computer Generated Forms JAN 1991

252.203-7000 Requirements Relating to Compensation of Former DoD Officials SEP 2011
252.203-7002 Requirement to Inform Employees of Whistleblower Rights SEP 2013
252.203-7005 Representation Relating to Compensation of Former DoD Officials NOV 2011
252.204-7003 Control Of Government Personnel Work Product APR 1992
252.204-7008 Compliance With Safeguarding Covered Defense Information Controls OCT 2016
252.204-7012 Safeguarding Covered Defense Information and Cyber Incident Reporting DEC 2019
252.204-7015 Notice of Authorized Disclosure of Information for Litigation Support MAY 2016
252.204-7016 Covered Defense Telecommunications Equipment or Services – Representation DEC 2019
252.204-7017 Prohibition on the Acquisition of Covered Defense Telecommunications Equipment or Services – Representation DEC 2019

252.204-7018 Prohibition on the Acquisition of Covered Defense Telecommunications Equipment or Services DEC 2019
252.204-7019 Notice of NIST SP 800-171 DoD Assessment Requirements NOV 2020
252.204-7020 NIST SP 800-171 DoD Assessment Requirements NOV 2020
252.209-7004 Subcontracting With Firms That Are Owned or Controlled By The Government of a Country that is a State Sponsor of Terrorism MAY 2019
252.211-7003 ITEM UNIQUE IDENTIFICATION AND VALUATION (MAR 2016)
252.211-7008 Use of Government-Assigned Serial Numbers SEP 2010
252.215-7013 Supplies and Services Provided by Nontraditional Defense Contractors. JAN 2018
252.223-7006 Prohibition On Storage, Treatment, and Disposal of Toxic or Hazardous Materials SEP 2014
252.223-7008 Prohibition of Hexavalent Chromium JUN 2013
252.225-7001 Buy American And Balance Of Payments Program-- Basic DEC 2017
252.225-7002 Qualifying Country Sources As Subcontractors DEC 2017
252.225-7012 Preference For Certain Domestic Commodities DEC 2017
252.225-7031 Secondary Arab Boycott Of Israel JUN 2005
252.225-7048 Export-Controlled Items JUN 2013
252.225-7972 (Dev) Prohibition on the Procurement of Foreign-Made Unmanned Aircraft Systems (DEVIATION 2020-O0015) MAY 2020
252.232-7003 Electronic Submission of Payment Requests and Receiving Reports (DEC 2018)
252.232-7006 WIDE AREA WORKFLOW PAYMENT INSTRUCTIONS (DEC 2018)
252.232-7010 Levies on Contract Payments DEC 2006
252.232-7017 Accelerating Payments to Small Business Subcontractors--Prohibition on Fees and Consideration APR 2020
252.243-7001 Pricing Of Contract Modifications DEC 1991
252.243-7002 Requests for Equitable Adjustment DEC 2012
252.244-7000 Subcontracts for Commercial Items OCT 2020
252.246-7007 Contractor Counterfeit Electronic Part Detection and Avoidance System AUG 2016
252.246-7008 Sources of Electronic Parts MAY 2018
252.247-7023 Transportation of Supplies by Sea FEB 2019
252.247-7022 Representation of Extent of Transportation by Sea. JUN 2019

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

Other Transactions are non-FAR based vehicles for which terms and conditions would be established on an individual proposal basis.