

# Engineer Research and Development Center

Construction Engineering Research Laboratory

Commercial Solutions Openings (CSO)

Solicitation Number: W9132T22SC001

## **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 2022-00007. 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 supports the full R&D lifecycle from basic research through Army implementation and subsequent support to ensure effective adoption and utilization of products arising from R&D investments. The Warfighter Engineering Branch of the ERDC-CERL focuses on operational science and engineering to integrate solutions for all phases of contingency operations. Efforts concentrate on the tools, processes, and technologies associated with planning, design, construction, operations, maintenance, and management for deployed Army Engineers (and other services).

Research is also conducted in the areas of advanced construction designs, methodologies, and materials; contingency designs for extreme/austere environments; large scale additive construction; robotic terrain shaping and construction technologies; autonomous characterization and mapping of the environment; machine control and decision-making methodologies for autonomous control of heavy Engineer equipment and multi-platform collaboration and teaming.

The ERDC-CERL intends to obtain “innovative” solutions 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, 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.

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

\*\*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 use the following naming convention:

- *Solution-CoverLetter-<CompanyName>.pdf*
- *Solution-Brief-<CompanyName>.pdf*
- *Solution-PitchDeck-<CompanyName>.pdf*
- *Solution-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 portal 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**

For your solution to be evaluated for a possible contract award, it must be submitted via the electronic form; submissions will be accepted through **5PM CST, 31 July 2023**. A hardcopy will not be accepted. Offerors may submit solution amendments any time prior to the deadline. Evaluation is generally completed within 10 days of the submission.

Amended proposals will be considered a complete replacement of any previously submitted content. Please ensure that the email address listed in your proposal is current and accurate. Please contact us by emailing [info@erdowerx.org](mailto:info@erdowerx.org) to share details of changed email address and/or company points of contact after proposal submission.

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

**\*\*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.

**The government may not have funds available for every proposal that is deemed ‘selectable’ as it relates to the ‘technical’ and ‘importance to agency program’ factors. In the event there are insufficient funds to fund all ‘selectable’ proposals, the government has broad discretion in selecting the proposals it chooses to fund.**

**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 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 and Individual Program Requirements**

*See Areas of Interest and specific Individual Program Requirements for this CSO by visiting*

<https://www.erdcerl.org/warfighter-engineering-cso.html>

AOI – Advanced Methods and Designs for Additive Construction

AOI – Robotics for Engineering Operations

**Note:** The Areas of Interest and Specific Individual Program Requirements are subject to change at any time during the open continuous period. Revisions or additions of Areas of Interest may be made on a monthly, quarterly, or as needed basis.

#### **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 an award that results from a proposed solution to this 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  
52.204-9 Personal Identity Verification of Contractor Personnel  
JAN 2011

52.204-13 System for Award Management Maintenance OCT 2018

52.204-16 Commercial and Government Entity Code Reporting AUG 2020

52.204-18 Commercial and Government Entity Code Maintenance AUG 2020

52.204-19 Incorporation by Reference of Representations and Certifications DEC 2014

52.204-22 Alternative Line Item Proposal JAN 2017

52.212-1 Instructions to Offerors--Commercial Items NOV 2021

52.212-3 OFFEROR REPRESENTATIONS AND CERTIFICATIONS--COMMERCIAL ITEMS AUG 2020  
ALTERNATE I NOV 2021

52.212-4 Contract Terms and Conditions--Commercial Items NOV 2021

52.212-5 CONTRACT TERMS AND CONDITIONS REQUIRED TO IMPLEMENT STATUTES  
OR EXECUTIVE ORDERS--COMMERCIAL ITEMS MAY 2022

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. (NOV 2021) (31 U.S.C. 6101 note).  
52.219-4, Notice of Price Evaluation Preference for HUBZone Small Business Concerns (SEPT 2021) (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 2022) (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 (NOV 2021) (22 U.S.C. chapter 78 and E.O. 13627).  
52.222-54, Employment Eligibility Verification (MAY 2022). (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 (DEC 2007) (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 (FEB 2021) (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 NOV 2021  
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 MAY 2021  
252.204-7018 Prohibition on the Acquisition of Covered Defense Telecommunications Equipment or Services JAN 2021  
252.204-7019 Notice of NIST SP 800-171 DoD Assessment Requirements MAR 2022  
252.204-7020 NIST SP 800-171 DoD Assessment Requirements MAR 2022  
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 2022  
252.211-7008 Use of Government-Assigned Serial Numbers SEP 2010  
252.215-7013 Supplies and Services Provided by Nontraditional Defense Contractors. MAR 2022  
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 MAR 2022  
252.225-7002 Qualifying Country Sources As Subcontractors MAR 2022  
252.225-7012 Preference For Certain Domestic Commodities APR 2022  
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 2020-00015) 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 JAN 2021  
252.246-7007 Contractor Counterfeit Electronic Part Detection and Avoidance System AUG 2016  
252.246-7008 Sources of Electronic Parts MAY 2018  
252.247-7022 Representation of Extent of Transportation by Sea. JUN 2019  
252.247-7023 Transportation of Supplies by Sea FEB 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.**

**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.**

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