

Commercial Solutions Opening (CSO) Solicitation

Joint Artificial Intelligence Center (JAIC) Humanitarian Assistance and Disaster Relief (HADR)

1 General Information.

1.1 Background.

1.1.1 This is a procurement action using the commercial solutions opening (CSO) procedure in accordance with section 880 of the 2017 National Defense Authorization Act and is subject to the limitations outlined in the General Services Acquisition Manual (GSAM) Part 571 and associated GSA Procurement Innovation Resource Center (PIRC) CSO Guide. This solicitation is part of the GSA PIRC CSO pilot program and is being used to competitively procure with the CSO procedure innovative commercial items, technologies, and services currently in the production/commercialization phase as well as new adaptations of existing commercial products.

1.1.2 GSA has developed this pilot program to be implemented outside the normal Federal Acquisition Regulations requirements to engage traditional and non-traditional Government contractors, including start-up companies. This pilot program is intended to promote competition in accordance with the Competition in Contracting Act with a streamlined approach to address specific needs for innovative commercial items. This pilot program offers a range of advantages to open up the field of competition so that the Government and taxpayers benefit from a large pool of solutions at a better cost and performance, including:

- Streamlined solicitation requiring only minimal corporate and technical information;
- Fast track vendor selection timelines;
- Simplified contract administration procedures and requirements; and
- Preference for the vendor retaining core intellectual property.

The maximum value of any contract award resulting from this competitive solicitation shall not exceed \$10 million for the period of performance of the resulting award.

1.2 **NAICS.** The North American Industry Classification System (NAICS) code for this announcement is NAICS 541990 -- All Other Professional, Scientific, and Technical Services.

2 Project Description.

The JAIC requires an innovative commercial software and services solution that will provide comprehensive data management, end-to-end platform integration, and model/capabilities development of still imagery and computer vision solutions for locating flood affected areas and infrastructure; ultimately identifying at-risk, in-need, and/or harmed/damaged people/infrastructure. Under the purview of the JAIC, the

Humanitarian Assistance and Disaster Relief (HADR) National Mission Initiative (NMI) leads the fielding of Artificial Intelligence/Machine Learning (AI/ML)-powered, problem solving prototypical applications to quickly identify and locate those at-risk people/infrastructures. The development of HADR AI/ML capabilities aims to streamline the processes and architecture associated with data aggregation, conditioning, and interpretation, while providing near-real-time situational awareness in order to provide operators with more time for analysis and decision-making. In turn, costs to lives/livelihood will be reduced by shrinking operational timelines associated with search and discovery, resource allocation, and rescue/relief execution efforts.

2.1 Project Objectives.

The current environment of the emergency response management community consists of state, local, and tribal government agencies, federal interagency partners, DoD components, non-governmental organizations, private industry, academia, state Incident Command Posts, and first responders on the ground. These entities require relevant, near-real-time data to:

- Efficiently and effectively deliver the right resource to the right place, at the right time.
- Measure disaster scope and impact in order to activate the right level of response.
- Effectively plan disaster response activities.
- Provide a highly-accurate, high-resolution understanding of the damage and associated impacts caused by disasters, including real-time situational awareness.
- Provide response officials with accurate, near-real-time information to understand how to respond to and recover from natural disasters and disruptive incidents.

Therefore, the Government is seeking solutions with the following desired capabilities and characteristics:

- **Models:** Provide models, which distinguish features such as flood-lines, fire-lines, unstable or dangerous surfaces or structures, damaged or obstructed infrastructure (roads, bridges, buildings, etc.), and identify the impact of disasters to communities and relief efforts.
- **Compute Environments:** Provide algorithm development and inferencing enclaves and the ability to establish a capability pipeline for AI/ML products/services.
- **Algorithms:** Provide all the pre-processing, post-processing, and integration algorithms necessary to run the above models as a cohesive, deployable and efficient capability.
- **User Interface:** Provide a user interface(s) which enables users to control the training and inferencing processes, review results, re-label/annotate false negative and false positive inference results, and feed corrections back into the system for future model revisionment.
- **Labeling/Annotation:** Provide ability to label/annotate training data at scale.

- Data Management: Ability to manage all aspects of AI/ML training and test data.
- Integration: Provide and manage end-to-end platform integration with Government systems and/or create new user interfaces/platforms capable of sharing output with current Government systems.
- Performance: Provide a capability to continuously monitor model performance in terms such as accuracy/precision/recall/etc and speed/processing/memory.
- Usage: Provide a capability to continuously track system usage and user satisfaction.

3 Solution Brief Submission Requirements.

3.1 Submission Requirements.

Written solution briefs as described in 3.2 must be sent via email submission by 11:00AM Eastern Time on July 22, 2019 to john.terrell@gsa.gov and vi.duong@gsa.gov, with subject line stating: *JAIC HADR DAMAGE Solution Brief.*

Solution briefs received after the specified due date and time will not be evaluated by the Government.

Oral presentations or other written information may be requested to supplement the written solution brief before potential award. Any oral presentations/product demonstrations requested will be coordinated directly with the offeror and may be conducted by video conference or in-person.

For planning purposes only, it is anticipated that oral presentations/product demonstrations will occur by video conference during the week of August 19, 2019.

3.2 Written Solution Brief Requirements.

3.2.1 Content of Solution Brief.

The written solution brief shall be less than or equal to five pages or, if a presentation, less than or equal to 10 slides. **Any pages or slides submitted beyond this limitation will be removed and not evaluated.** The written solution brief shall include and or address the following:

1. Title Page
 - At a minimum, please include the company name, solution name, solicitation number, date of submission, point of contact name, email address, phone number, and company address. This page will not count towards the page/slide limitation.
2. Solution Concept
 - Describe your service/solution and its potential relevance to the project description outlined in Section 2.
 - Address the potential of the service/solution meeting the project objectives in Section 2.
 - Describe ways in which the solution pushes the state-of-the-art in its respective industry/category. Please explain this using technical language rather than marketing or sales-type language.

- Provide your publicly available commercial price list (not a price proposal) as an attachment or as a link to published catalog pricing, as applicable, for the units/items/offerings that might be included in a possible solution. The price list will not count towards the solution brief page/slide limit.
3. Company Viability
- Describe your customer base and provide some examples of past contracts or sales of this service/solution from within the last five years.
 - Describe your company – e.g. How old is it? Where is it located and headquartered (e.g. multiple locations, sales in the U.S. and other countries)? Number of employees?
 - Describe the management team – e.g. Who are they? What is their background and history (e.g. previous startups, etc.)?
 - Include other relevant corporate information, as applicable.

3.2.2 Proprietary Markings.

Offerors must mark any pages of written solution brief that contain business plans, technical information, pricing or other business sensitive information as proprietary information, which the Government agrees to safeguard. To ensure that sensitive data is appropriately marked by the offeror, include the following sentences on the title page: “This solution brief includes data that shall not be disclosed outside the Government, except to non-Government personnel for evaluation purposes, and shall not be duplicated, used, or disclosed -- in whole or in part -- for any purpose other than to evaluate this submission. If, however, an agreement is awarded to this offeror as a result of -- or in connection with -- the submission of this data, the Government shall have the right to duplicate, use, or disclose the data to the extent agreed upon by both parties in the resulting agreement. The data subject to this restriction are contained in sheets [insert numbers or other identification of sheets].”

Each restricted data sheet must be marked as follows: “Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this solution brief.”

4 Evaluation of Solution Briefs.

4.1 General.

Both the written solution brief and oral presentation/product demonstration, if applicable, will be evaluated against the solicitation criteria. Each solution brief submitted may be evaluated against the evaluation criteria separately and may be evaluated against other solution briefs. More than one solution brief may be accepted. The Government reserves the right to request oral presentations, product demonstrations, or additional written information, if applicable, from one or more offerors.

4.2 Evaluation Criteria.

The following evaluation criteria shall be used to evaluate the written solution brief and oral presentation/product demonstration, if applicable. The evaluation criteria are listed below in order of precedence. If a solution brief does not meet the first evaluation criterion, the solution brief will not be further considered for award.

The first three criteria will be used to evaluate the written solution brief:

- **Criterion I: Responsiveness/Relevance of the solution to the project**
 - The solution brief is responsive to the requirements of the solicitation.
 - The solution brief and proposed service is relevant to the description and objectives in Section 2 of the solicitation.

- **Criterion II: Transition Approach of the proposed solution into the technical environment**
 - The solution brief addresses how the proposed solution can feasibly be run on various vendor agnostic compute environments.
 - The solution brief addresses how individual system components, such as annotation/labeling environment, development environment, production environment, models along with pre/post-processing stages, and user interface can be replaced and/or run independently of the rest of the system.
 - The solution brief addresses how the proposed solution can feasibly establish a data labeling and management process, an algorithm development enclave, and/or a sustainable integration environment within 60 days of award.
 - The solution brief addresses how the proposed solution can feasibly establish a production inferencing enclave along with key system integration points into external systems within 120 days of award.
 - The solution brief addresses the ability to provide engineering services for field and helpdesk support, user training, and test and evaluation.

- **Criterion III: Offeror's Capabilities and Related Experience**
 - The offeror clearly addresses prior enterprise experience (Government and/or non-Government) implementing AI/ML products.
 - The offeror clearly addresses a proven track record of developing and deploying successful performant AI/ML models and algorithms in real-world settings.
 - The offeror's previous experience presents a successful track record managing processes for software solutions to achieve Authorities to Operate (ATOs) on Government systems.

An additional fourth criterion will be used to evaluate the oral presentations, if applicable:

- **Criterion IV: Technical Merit**

The solution's technical merit with respect to the following areas:

- Model/Capabilities Development:
 - Strategy and plan for creating ML models, along with the necessary pre and post-processing steps and all other components required for delivering a functional and performant production capability.
 - Strategy and plan for establishing, or integrating into, an enclave for model development, benchmarking, ensemble methods, ML abstraction, and test and evaluation.
 - Strategy and plan for coordinating and establishing an AI/ML capability pipeline for software development acceleration.
- System Integration:
 - Strategy and plan for providing and managing end-to-end platform integration with Government systems or create new user interfaces/platforms capable of sharing output with current Government systems, mirroring the commercial integration environment for algorithm developers to access when developing AI/ML solutions.
 - Strategy and plan for enabling effective human-machine teaming through the development and maintenance of end-to-end platform integration.
- Data Management:
 - Strategy and plan for managing all aspects of AI/ML training and testing data.
 - Strategy and plan for deploying comprehensive data management solutions: movement/storage, exploration/transformation, aggregation/labeling, and augmentation.

4.3 Evaluation Panel.

An evaluation panel will be used to evaluate the solution briefs and oral presentations, if applicable, submitted in response to this solicitation. The evaluation panel will consist of U.S. Government employees.

4.4 Solution Brief Evaluation and Notification to Offerors.

Solution briefs will be evaluated in accordance with the evaluation criteria. After evaluating the offeror's written solution briefs, GSA will notify the offeror whether their solution brief is being considered for award and a proposal can be submitted, an oral presentation or other supplemental information is requested to supplement the written solution brief, or their solution brief was not selected for award. Offerors not selected for an award may request, within 5 calendar days of notification of non-selection, feedback regarding the technical review findings of their submitted solution brief.

4.5 Protests To GSA.

An offeror may file a protest to the agency in accordance with the procedures in GSAM 533.103.

5 Proposal Submission.

5.1 General.

Upon conclusion of the evaluation of the written solution briefs and/or oral presentations/product demonstrations (if applicable) in accordance with Section 4, the Government may invite one or more offerors to develop and submit a proposal in accordance with this Section 5. Offerors may discuss ideas and details of the proposal with the Government prior to submission. Each proposal submitted may consist of two parts:

- Part 1: Technical Proposal Solution
- Part 2: Price Information

The cost of preparing proposals in response to this request is not considered a direct charge to any resulting CSO award or any other contract. Proposal preparation costs are not recoverable.

5.2 Technical Proposal Solution.

The offeror must submit a technical proposal solution as part of their final proposal that identifies the work to be performed and the deliverables. Provide a detailed project schedule that outlines the various phases of work to be accomplished within the proposed period of performance. The offeror will be provided a CSO Proposal Solution Template, which may include the following sections:

- Section 1 - Background
- Section 2 - Technical Requirements
- Section 3 - Delivery Schedule
- Section 4 - Milestone Payment Schedule
- Section 5 - Period of Performance
- Section 6 - Place of Performance
- Section 7 - Government Furnished Equipment
- Section 8 - Security

The technical proposal solution may include the background and objectives of the proposed work, and the nature and extent of the anticipated results. Discuss any risks and proposed mitigation strategies to address the risks. Include ancillary and operational issues such as partnerships, protocols, financing, and non-standard business methodologies to be used. Identify the type of support, if any, the offeror requests of the Government in general such as facilities, equipment, data, and information or materials. A milestone schedule may be included which clearly indicates the completion of the priced tasks and/or priced deliverables that are required to meet each of the milestones.

Please Note: The proposals must identify any proprietary information or associated intellectual property. The proposal should discuss data rights associated with each item.

5.3 Price Information.

The offeror must submit the total price to complete the project and shall provide any other data or supporting information that the Government deems necessary for the determination of a fair and reasonable price. For Firm-Fixed-Price agreements, the milestone schedule identified in the proposal solution will serve as a payment schedule for any subsequent award.

5.4 Notification to Offeror.

GSA will notify the offeror whether their proposal has been accepted for award, further negotiation is requested, or the proposal is not accepted for award. The Government reserves the right to make multiple awards under this solicitation.

Sections 6 and 7, GSA CSO Terms and Conditions, are contained in a separate attachment located at: <https://fedsim.gsa.gov/CSOsolutions.html>