Commercial Solutions Opening (CSO) Solicitation

AFWERX/AFRL/SMC DevOps PaaS

- 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 USAF's AFWERX organization, in sponsorship of the Air Force Research Lab (AFRL) and Air Force Space and Missile Systems Center (SMC), requires an innovative adaptation of a commercially available development-to-operations (DevOps) platform-as-a-service (PaaS) that will provide the Joint Force Space Component Commander's (JFSCC) operations centers a means to efficiently identify, modify or develop, integrate, and test new capabilities, ingest and validate new space situational awareness (SSA) data sources, and quickly onboard the capabilities in support of the space command and control mission. Further, the acquired solution will establish both a cloud- and on-premise-based environment for the rapid development and large-scale operation of big data, Artificial Intelligence (AI) and the Internet of things (IoT) applications. The platform will address multiple use cases for the national security space enterprise, helping to reduce the AFRL DevOps team's software development backlog and laying the long-term foundation and the ability for responsive depot sustainment support to the warfighter. Finally, this effort will identify a construct for rapid testing and incorporation of new data sources that are routinely exposed to the greater SSA community.

2.1 Project Objectives.

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

Products:

- a) DevOps PaaS platform deployed to the government-furnished Amazon Web Services (AWS) GovCloud.
- b) Provide the following technical capabilities (solutions are still encouraged if the majority of the following product features are supported):
 - a. Provide a model driven software architecture with a serviceoriented object interface.
 - b. Delivered as a PaaS.
 - c. Provide a Data Integration Platform.
 - d. Provide a Rapid Application Development Platform.
 - e. Provide an Application Operating Platform.
 - f. Provide a Machine Learning (ML) Platform.
 - g. Provide a Massively Scalable Distributed Processing Platform.
 - h. Provide an open, extensible software platform.

- i. Ability to leverage distributed open source solutions in a modeldriven architecture.
- j. Demonstrated large scale deployments.
- c) Developer Licenses for the DevOps PaaS solution for at least thirty Government-Authorized Users (GAUs).
- d) Set up the product delivery as a "fee-to-perform" computational operations service delivery model, also known as PaaS Runtime.

Services:

- a. Conduct a brief assessment based on Air Force lessons learned to design a commercial development environment that can be integrated and tested, achieve an Authority to Operate (ATO), be deployed within the established period of performance, and is compatible with ongoing AFRL DevOps efforts.
- b. Provide full-time DevOps PaaS subject matter experts (SME) to support the AFRL/SMC team.
- Provide training/trainers to conduct on-boarding (1-3 week training class) and teach the AFRL/SMC team how to use the DevOps PaaS solution.
- d. Participate in, and provide on-site support services during, AFWERX-Vegas design sprints.
- e. Provide engineering subject matter expertise for the Government Furnished Equipment (GFE) provided application coders, and expert guidance on the overall software application architecture.
- f. Cooperatively work with, support, and assist the GAUs in addressing any development issues identified.

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 January 18, 2019 to angela.donahoo@gsa.gov, with subject line stating: AFWERX/AFRL DevOps PaaS Solution Brief.

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

Product demonstrations or other written information may be requested to supplement the written solution brief before potential award. Any product demonstrations requested will be coordinated directly with the offeror and may be conducted by videoconference or in-person. For planning purposes only, it is anticipated that product demonstrations will occur by videoconference during the week of February 4, 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 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 service/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 commercial price list, or a link to published catalog pricing for this proposed technology/solution.

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/R&D in 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 product demonstration, if applicable, will be evaluated against the solicitation criteria. Each solution brief submitted may be evaluated against the evaluation criteria separately and need not 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 product demonstration, if applicable. The evaluation criteria are listed below in order of importance from top to bottom. 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
 - o 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 proposed service can feasibly establish one or more PaaS cloud environments within four to eight weeks of award.
 - The solution brief addresses how the offeror's PaaS offering can be used to accelerate development of artificial intelligence, machine

learning, and/or big data solutions.

Criterion III: Offeror's Capabilities and Related Experience

- The offeror clearly addresses prior enterprise experience (both Government and/or non-Government) demonstrating the ability of the PaaS offering to accelerate development of artificial intelligence, machine learning, and/or big data solutions.
- Offering must have demonstrated deployed solutions showing the ability to ingest and process data from thousands to millions of sensors in near-real-time.

An additional fourth criterion will be used to evaluate the product demonstrations, if applicable:

Criterion IV: Technical Merit

- The solution's technical merit with respect to the following areas:
 - Big Data Analytics:
 - Ability to process in near real time large amounts of data with either a commercial or government entity.
 - Ability to connect to thousands to even millions of sensors at disperse geographical locations and with varying data formats.
 - o Artificial Intelligence/Machine Learning:
 - Proven track record of deploying artificial intelligence/machine learning routines that drive decisions on a multitude of programs.
 - o Integration with Legacy Software:
 - Proven track record of integrating PaaS with legacy code using non-modern languages.
 - Proven experience with software development acceleration.
 - Proven track record developing applications within the offerors' PaaS upon which software solutions were developed and deployed at scale for a variety of different applications and customers.
 - Flexibility of Deployment:
 - Ability to deploy in multiple cloud environments.
 - Ability to deploy to on-premises server infrastructure.
 - Ability to deploy a pilot solution in a test environment while simultaneously working to achieve deployment on live systems via an ATO.

4.3 Evaluation Panel.

An evaluation panel will be used to evaluate the solution briefs and product demonstrations, 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, a product demonstration 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 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 must describe the background and objectives of the proposed work. Include the nature and extent of the anticipated results. Discuss any risks and proposed mitigation strategy 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 shall 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.