

Artemis Modernization Project and Legacy System O&MN Support Services

ACTIVE

Contract Opportunity

Notice ID

693JJ921RQ000679

Related Notice

Department/Ind. Agency

TRANSPORTATION, DEPARTMENT OF

Sub-tier

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

Office

693JJ9 NHTSA OFFICE OF ACQUISITION

General Information View Changes

- **Contract Opportunity Type:** Special Notice (Updated)
- **All Dates/Times are:** (UTC-04:00) EASTERN STANDARD TIME, NEW YORK, USA
- **Updated Published Date:** Apr 23, 2021 10:26 am EDT
- **Original Published Date:** Apr 23, 2021 09:25 am EDT
- **Updated Response Date:** Apr 30, 2021 04:00 pm EDT
- **Original Response Date:** Apr 30, 2021 04:00 pm EDT
- **Inactive Policy:** 15 days after response date
- **Updated Inactive Date:** May 15, 2021
- **Original Inactive Date:** May 15, 2021
- **Initiative:**
 - None

Classification

- **Original Set Aside:** Total Small Business Set-Aside (FAR 19.5)
-
- **Product Service Code:** DA01 - IT AND TELECOM - BUSINESS APPLICATION/APPLICATION DEVELOPMENT SUPPORT SERVICES (LABOR)
- **NAICS Code:** 541512 - Computer Systems Design Services
- **Place of Performance:**

Washington , DC 20590

DescriptionView Changes

*** Amendment No. 1 ***

This amendment is issued to remove incorrect attachments and provide the corrected copies.

All Other Items Remain Unchanged.

Notice Type: Special Notice

Notice Number: 693JJ921RQ000679

Synopsis: Request for Information (RFI) for the National Highway Traffic Safety Administration (NHTSA)

NAICS Code: 541512, Computer Systems Design Services, \$30M

PSC Code: DA01, IT and Telecom – Business Application/Application Development Support Services (Labor)

Title: Artemis Modernization Project and Legacy System O&MN Support Services

I. BACKGROUND:

The National Highway Traffic Safety Administration (NHTSA) is an agency of the U.S. Department of Transportation (DOT). NHTSA's mission is to save lives, prevent injuries, and reduce traffic-related economic costs. The agency develops, promotes and implements effective educational, engineering and enforcement programs with the goal of ending preventable tragedies and reducing economic costs associated with vehicle use and highway travel.

NHTSA's Office of Defects Investigation (ODI) performs investigations to identify and investigate potential vehicle safety defects and determine whether they present an unreasonable risk to public safety. Once it is determined that a product contains a safety related defect or fails to comply with a Federal Motor Vehicle Safety Standard (FMVSS) the manufacturer must undertake a recall campaign. ODI Recall Management Division collects and distributes information related to the recall and ensures that the recall campaign is conducted in accordance with government regulations.

Artemis is a system of record and data to process and for vehicle complaints, vehicle recalls, vehicle safety early warning reports, manufacturer communications, foreign campaigns, and compliance test reports. In executing its mission, ODI collects and aggregates data from a multitude of sources. This data includes manufacturer Early

Warning Reporting (EWR) information, consumer vehicle safety complaints, manufacturer communications, investigative data, manufacturer recalls, and other information. All data related to automotive safety defects investigations, both structured and unstructured, is electronically stored and managed in several data repositories and systems for access throughout the defect investigation and recall management processes. The Artemis system is one of NHTSA's mission critical systems. The vehicle safety data collected, managed and analyzed within the Artemis system is presented to the public within the [nhtsa.gov](https://www.nhtsa.gov) and [Safercar.gov](https://www.safercar.gov) websites. Providing this congressionally mandated data to the American public is the core mission solely supported by the Artemis system. (see attached Draft SOW)

Objective:

The objective of this Contract is to provide professional support services to complete modernization efforts for the Artemis system consisting of designing, developing, and deploying a holistic system that improves data collection, data aggregation, data access and analytical capabilities and ultimately enables a consistent and effective investigative process by ODI to disseminate congressionally mandated safety information to the public.

Contract Requirements:

Contract Kickoff Meeting

A two-day meeting for senior Contractor personnel shall be held within four (4) weeks after contract award at NHTSA in Washington, DC at 1200 New Jersey Avenue, SE. The Contractor shall present an overview of their management plan, program objectives and quality control procedures to NHTSA personnel.

General Requirements

The Contractor shall conduct a modernization effort that shall consider both software and hardware solutions that shall leverage cloud technologies that inherently provide cybersecurity, reliability, scalability, high efficiency, and innovation for the agency. The modernized system shall significantly improve the user experience and effectively streamline and minimize hurdles in user's workflow and offer significant productivity and operational improvements to the agency. Lastly, the modernized system shall comply with all DOT, Department of Homeland Cybersecurity (DHS), and Office of Management and Budget (OMB) government cybersecurity policies and requirements. Alternatively,

once a functional system is released to the users, as part of the ongoing operations and maintenance, the new system architecture and components shall be suitable for an agile software development methodology to deliver incremental functionality without major refactoring and architectural changes to the new system.

II. DISCLAIMER TO PROSPECTIVE RESPONDENTS:

THIS IS A REQUEST FOR INFORMATION (RFI). This is **NOT** a solicitation for proposals, proposal abstracts, or quotations. The purpose of this RFI is to obtain knowledge and information for project planning purposes. Interested parties are advised that the U.S. Government will not pay for any information or administrative costs incurred in response to this RFI; all costs associated with responding to this RFI will be solely at the interested party's expense. Respondents are advised that the Government is under no obligation to acknowledge receipt of the information received or provide feedback to respondents with respect to any information submitted. Those not responding to this RFI are not prohibited from participation in any future RFP, if any. If a solicitation is released, it will be synopsized on the beta.SAM.gov (Beta SAM) website as the Government's official government-wide point of entry (GPE).

III. INFORMATION FROM INDUSTRY:

NHTSA is seeking information from industry regarding the following questions. Interested organizations are asked to provide their input regarding:

A. Understanding of cloud smart strategy by adopting cloud solutions: NHTSA's requirements for the new Modernization effort for Artemis calls for a cloud architecture which must comply with the DOT ECS cloud services control policy (SCP) for both the shared services and the workloads.

B. Ability to adapt to flexible deadlines: While NHTSA may estimate a data collection year, the real world of may impact data collection activities. Thus, managing coding productivity, with a minimal backlog is key to meeting flexible deadlines.

C. Experience with identifying and addressing existing inefficient design, architectural and process areas for systems such as the current Artemis system: NHTSA is seeking skilled vendors that understand and can address the complexities and nuances for addressing inefficient design, and system architectural design of the current Artemis system.

Please provide questions your organization has regarding the NHTSA's requirements. Additionally, please review and comment as appropriate regarding the CRSS Coding Resource Center.

IV. DESCRIPTION OF INFORMATION REQUESTED:

Interested parties shall furnish the following minimum information:

- Name, Address of Organization, and Organizations webpage;
 - Name, title, and email address, of Business and Technical Point(s) of Contact;
 - DUNS Number;
 - Business Size of Organization;
 - Socio-economic status of Organization;
 - Indicate whether or not your Organization is registered in System for Award Management (SAM);
 - Nature of the interested Organization (Examples include but are not limited to: University, Non-profit, General Partnership, Joint Venture, Limited Liability Company (LLC), Limited Liability Partnership (LLP), Sole Proprietorship, Corporation (C or S);
- Examples of questions include, but are not limited to:

What is your experience with cloud smart strategy for cloud based solutions?

NHTSA Q&A

What is your knowledge and experience with the public NHTSA website for Consumer safety complaints submission?

NHTSA Q&A

What is your experience addressing inefficient design, and architectural processes for IT-systems?

NHTSA Q&A

What is your experience with applying cloud native and cloud smart strategies and deploying complex, large-scale, mission critical enterprise IT solutions?

NHTSA Q&A

What is your experience in delivering value for customers' investment dollars in complex, large-scale, mission critical enterprise IT solutions?

NHTSA Q&A

What is your experience in managing and tracking cost, schedule, scope, risk and value delivery for a large-scale, software development program?

NHTSA Q&A

What is your experience generating and maintaining a work break down structure, requirements traceability matrix and relating both to cost and schedule?

NHTSA Q&A

What techniques have you employed to successfully estimate work in large-scale, enterprise wide software development projects (e.g., comprised of web front ends, APIs, backend jobs, microservices architecture, hybrid on-prem and/or cloud solutions,

integration of multiple COTS products, etc.)? What techniques have you employed that did not work?

NHTSA Q&A

What program and project management artifacts have you produced to ensure and facilitate successful management of a major software development program through its full lifecycle? Identify and detail the artifacts and their purpose/benefit at each stage of the lifecycle.

NHTSA Q&A

What is your experience in managing risks and opportunities?

NHTSA Q&A

What is your experience in employing Agile frameworks to deliver business value in software development projects?

NHTSA Q&A

What software engineering best practices have you employed to build large-scale software solutions based on scalable, extensible, loosely coupled and cohesive components and services?

NHTSA Q&A

What is your experience in leveraging various cloud deployment models (SaaS, IaaS + Infrastructure as Code, PaaS, serverless) and individual managed services to augment and accelerate software development?

NHTSA Q&A

What technology stacks do you have expertise in for building complex AWS based large-scale enterprise applications with web front ends, APIs, microservices architecture, hybrid on-prem and/or cloud solutions and integration with a variety of COTS/GOTS/GOSS/OSS technologies?

NHTSA Q&A

What is your experience in dealing with and responding to unclear or changing requirements?

NHTSA Q&A

What is your experience in migrating on-prem services to all-cloud or hybrid on-prem/cloud services, and maintaining a large-scale enterprise system that is housed both on-prem and in the cloud?

NHTSA Q&A

What is your experience in assuming a contract with mission critical software development and maintenance projects?

NHTSA Q&A

What is your experience in incumbent capture in assuming such a contract?

NHTSA Q&A

What is your experience in sustainably maintaining a >95% staffing level with well-qualified personnel?

NHTSA Q&A

What strategies have you employed to sustainably retain high achieving staff and minimize attrition?

NHTSA Q&A

What strategies have you employed to address underperforming staff?

NHTSA Q&A

How have you maintained the skills and experience of your staff through certifications, general training and professional development?

NHTSA Q&A

What experience do you have in planning, developing and delivering user training on software solutions that you build/provide?

NHTSA Q&A

What experience do you have in successfully running a responsive customer service helpdesk to field questions and provide assistance on the software solutions you build/provide?

NHTSA Q&A

What experience do you have in deploying quality assurance practices that ensure the highest quality software development products, processes and suitable toolset? What quality metrics do you collect and monitor? How do you employ the results?

NHTSA Q&A

What experience and related certifications do you have for employing industry best practices across all aspects of a software development program?

NHTSA Q&A

What experience do you have in successfully mastering a new business domain?

NHTSA Q&A

What experience do you have in successfully mastering a new technology?

NHTSA Q&A

What experience do you have in successfully learning and adopting emerging technologies into your software development solutions for your customers?

NHTSA Q&A

What experience do you have in continuous delivery of a complex, large-scale, multi-faceted enterprise software?

NHTSA Q&A

What experience do you have in automating the CI/CD pipeline and in automated testing, including high-coverage unit testing, functional testing and regression testing?

NHTSA Q&A

What software development toolset do you have expertise in?

NHTSA Q&A

What is your experience in implementing monitoring and alerting for complex, large-scale, multi-faceted enterprise software? How have you responded to alerts in such a system?

NHTSA Q&A

What is your experience in the customer needs analysis process? Details the process by which you gather requirements, refine them and incorporate into your development process?

NHTSA Q&A

What is your software development lifecycle process?

NHTSA Q&A

What is your experience in modeling, designing and optimizing extensible relational and NoSQL databases for application use?

NHTSA Q&A

What is your experience in designing extensible data models and data warehouses to optimize queries for reporting and visualization?

NHTSA Q&A

What is your experience in data analytics and data science employing machine learning techniques (e.g., using NLP), using COTS products, such as IBM Watson, and OSS, such as Anaconda, to collect and mash up related data from across a wide variety of sources in order to provide users with insights, trends, pattern identification and predictive analytics essential for their mission?

NHTSA Q&A

- *A discussion of the Organization's capabilities to perform the activities identified above in Capability Assessment Information (i.e. Corporate Capability Statement).*

*You must submit your response electronically in a MS Word or Adobe Portable Document Format (PDF) in no more than ten (10) pages, with standard 1" margins, and 12-point Times New Roman font. Any pages exceeding the page limitation designated herein may not be reviewed. **The due date for the submission of responses to this RFI is 4:00 PM EST on Friday, April 30th,***

2021.

*The RFI response must be sent via e-mail to vincent.lynch@dot.gov with subject line "Response to RFI Notice Number: **693JJ921RQ000679**". Any questions related to this RFI should be directed to vincent.lynch@dot.gov with the subject line entitled: "Question to RFI Notice Number: 693JJ921RQ000679".*

Note: *Additionally, a follow up discussion with the public concerning all of the aspects for this project and the proposed contract award will be scheduled for interested parties on **MS Teams** from **1:00p.m. to 2:30p.m. EST on Thursday, April 29th, 2021**. Furthermore, at 12:55p.m. there will be a 5-minute early systems compatibility check-in prior to the meeting; which will start promptly at 1p.m. (see meeting invite link below)*

Microsoft Teams meeting
Join on your computer or mobile app

Click here to join the meeting

Or call in (audio only)
+1 509-931-1572,,267993555# United States, Spokane
Phone Conference ID: 267 993 555#
Find a local number | Reset PIN

V. ATTACHMENTS

Attachment 1 – (Draft Statement of Work)

CONFIDENTIALITY:

No proprietary, classified, confidential, or sensitive information should be included in your response. The Government reserves the right to use information provided by respondents for any purpose(s) it deems necessary and legally appropriate.

Attachments/Links

Download All Attachments/Links

Attachments

Document	File Size	Access	Updated Date
RFI Notice-(693JJ921RQ000679)_Artemis Modernation.pdf (opens in new window)	304 KB	Public	Apr 23, 2021
Draft SOW_Artemis Modernization.pdf (opens in new window)	667 KB	Public	Apr 23, 2021
Sources Sought Notice (693JJ921RQ000546) Records-Based QC.pdf	128 KB	Public	Apr 23, 2021
Draft SOW-(693JJ921RQ000546)_Records-Based QC Coding and Trng Data Coll.pdf	464 KB	Public	Apr 23, 2021

Contact Information

Contracting Office Address

- OFFICE OF ACQUISITION MANAGEMENT 1200 NEW JERSEY AVE SE, ROOM W51-30
- WASHINGTON , DC 20590
- USA

Primary Point of Contact

- **Vincent Lynch**
- vincent.lynch@dot.gov
- Phone Number 2023669568