REQUEST FOR INFORMATION (RFI)

ROUTE CLEARANCE AND INTERROGATION SYSTEMS (RCIS) TYPE I SYSTEM

25 Aug 2015

ROUTE CLEARANCE AND INTERROGATION SYSTEMS

I. PURPOSE

This Request for Information (RFI) solicits industry input to determine industry capability to develop and produce systems that meet the requirements for the RCIS Type I System. The anticipated requirements include the draft Engineering and Manufacturing Development (EMD) Statement of Work (SOW), draft RCIS Type I Performance Specification, draft Contract Data Requirements List (CDRLs), and draft attachments. Participant's input shall include a narrative that describes a candidate system or technology, the intent of the participant's system to meet the requirements of the RCIS Type I Performance Specification, as well as the participant's ability to meet other requirements as stated in the documents, including Systems Engineering, Logistics Analyses and Technical Manual development, and producibility requirements, as well as the basis for those assertions.

This announcement is solely for research purposes; there will be no contract award as a result of this announcement. This is not a Request for Proposal (RFP) or an announcement of a forthcoming solicitation, nor does this announcement imply or guarantee one will be issued in the future. Also, this RFI is not a request seeking contractors interested in being placed on a solicitation mailing list. Response to this questionnaire is voluntary and the Government will not reimburse any costs associated with providing information in response to this market survey or for any follow-on information requests. It is not necessary to respond to this announcement in order to be eligible for future contract awards.

II. INSTRUCTIONS FOR RESPONDING TO THIS REQUEST

Responses to this request for information should be sent via e-mail usarmy.detroit.acc.mbx.robotics-team@mail.mil. The subject line of the email submission should read "RCIS EFFORT". Any request for clarifications shall also be addressed usarmy.detroit.acc.mbx.robotics-team@mail.mil.

Responses to the RFI are requested on or before 24 September 2015.

Any information that cannot be sent via email can be sent on two (2) identical CDs to the following address:

U.S. Army Contracting Command - Warren
ATTN Carrie English /CCTA-HBF-M
6501 East 11 Mile Road
Mail Stop 416 (BLDG 231)
Warren, MI 48397-5000

III. INFORMATION REQUESTED FROM INDUSTRY:

1. Manufacturer

a. Name: _____

b. Mailing Address: _____

c. Website: _____

2. Personnel Responding to RFI

a. Name: _____

b. Title: _____

c. Company Responsibility/Position:
_____

d. Telephone/Fax Numbers:
_____

e. E-Mail Address: _____

f. Commercial and Government Entity (CAGE) Code (if any):
_____

3. Survey Questions

Please review the draft RCIS Type I requirements provided by the Government, including the draft Engineering and Manufacturing Development (EMD) Statement of Work (SOW), draft RCIS Type I Performance Specification, draft Contract Data Requirements List (CDRLs), and draft attachments. The Government requests information relative to the questions below:

A. System Overview: Please describe your company's potential solution(s) to the Government's requirements. In reviewing industry's potential solutions, the Government is interested in information pertaining to the following areas:

> **1. System capabilities:** Please describe your system's design, functionality, and overall capabilities; has your system been integrated to existing military or commercial applications? If so, which ones?
>
> **2. Integration:** Please provide the system integration requirements including weight, space, and power.
>
> **3. Software:** Provide an overview of the system software development maturity model. Please provide any third party certifications (i.e. CMMI Level 3, etc.).

4. Commerciality: Is your potential solution a commercial item, or what percentage of the system would be considered commercially available?

5. Substantiating data: Provide any literature, photographs, characteristics and specifications to substantiate the capability and performance levels.

6. Testing: Provide any relevant Government or commercial testing documentation. For Government testing, please provide agency contact information.

B. RCIS Type I Requirements: The Government is interested in industry feedback relative to the draft RCIS Type I requirements, inclusive of all documents provided to date, and requests feedback from industry as follows. When providing a response, please consider the entire scope of the draft requirements provided to date, including: Design and Integration requirements; Logistics Analyses and Technical Manual requirements, and Performance Specification requirements. Please be as specific as possible.

1. Feasibility: The Government is interested in understanding areas of high risk within the technical or programmatic requirements of the program, and whether any programmatic or technical requirements may be unachievable.

2. Trade-offs: Conversely, the Government is interested in understanding if industry's current capabilities can provide capability beyond what is stated in the draft RCIS Type I requirements documents. Are there areas that can be exceeded, providing additional capability, for minimal or no cost increase? If so, please be specific. Consider both technical performance of the RCIS Type I system, as well as delivery schedule of services and hardware or software or both.

3. Interoperability Profile: Are you aware of the Unmanned Ground Vehicle (UGV) Interoperability Profile (IOP) (Attachment 0014)? Does your potential system comply with the IOP, and which versions? If not, are there plans to incorporate the IOP into future designs? The IOP specifications are publically releasable and can be requested via the contact given in section II of this RFI.

C. Production: The Government is interested in industry's ability to produce the RCIS Type I system, relative to the RCIS Type I draft requirements provided and the following pre-decisional production schedule:

Anticipated production quantity is 266 units. The following is a "pre-decisional" production schedule:

FY19: 4 RCIS Type I
FY20: 12 RCIS Type I
FY21: 26 RCIS Type I
FY22: 56 RCIS Type I
FY23: 56 RCIS Type I
FY24: 56 RCIS Type I
FY25: 56 RCIS Type I

1. Are the potential systems described in your submittal currently in production, and approximately how many systems per month are able to be produced? Would this correlate to similar production figures for an RCIS Type I system? If not in production, what is the planned timeline to begin production?

2. What is your organizations estimated production lead time for your RCIS Type I solution to include potential long lead items?

3. What would you envision the Minimum Sustainment Rate (MSR) to be for production of SAC kits, HMEE modifications, and integration of the SAC kit to the HMEE and Buffalo?

4. What would you envision the most efficient Economic Production Quantity/Rates to be for production of SAC kits, HMEE modifications, and integration of the SAC kit to the HMEE and Buffalo?

D. System Integration and Delivery: The Government is interested in industry's ability to integrate, deliver, and provide sustainment support for the RCIS Type I system, relative to the RCIS Type I draft requirements provided. Please be as specific as possible.

1. Integration: The RCIS Type I system will include a legacy High Mobility Engineer Excavators (HMEE) military vehicle, modified with changes to enable enhanced excavation and manned and unmanned operation. Describe your company's experience teaming or contracting with other companies in order to integrate new or commercial technology to legacy Government or commercial vehicles.

2. Schedule: Provide other relevant timelines necessary to deliver prototype systems for EMD or lead times for production systems.

3. Logistics: Do you have experience interfacing with the Army's IT Supply Chain Management Systems at the retail and wholesale level? If so please describe?

E. Contract Type: The Government is interested in industry feedback relative to the most advantageous procurement method for the RCIS Type I requirements. Please be as specific as possible.

1. Based on the proposed requirements would a Fixed Price Incentive Firm (FPIF) contracting mechanism be feasible for the production phase (Low Rate Initial Production (LRIP) and Full Rate Production (FRP)? If not, please provide your comments including inherent risks.

2. Do you have experience with Integrated Logistics Support (ILS) contracts? If so, describe your experience and recommended contract type for ILS efforts.

3. Do you have experience with Performance Based logistics (PBL) contracts or arrangements? If so, please describe.

4. The total contract duration including EMD and all production options based on Government estimates is expected to be 110 months (26 months for EMD, 24 months for LRIP, and 60 months for FRP). Please provide any comments relating to schedule and contract length including identifying program risks and concerns.

F. **Intellectual Property**: The U.S. Army uses drawings in conjunction with the technical manuals for fault diagnosis and trouble-shooting and acquires Technical Data Package (TDP)s for incorporation and standardization of developed technologies across multiple vehicle platforms and programs. What level of data rights would your organization be willing to sell with the TDP? What cost range do you anticipate? What would be included in the TDP and what format does your organization use? Would you be willing to provide Unlimited, Limited, or Government Purpose data use rights to enable operations and maintenance and use in future programs? Please be as specific as possible.

G. **Readiness Levels**: Please provide an assessment of your Technology, Manufacturing, and Integration Readiness Levels relative to the RCIS Type I draft requirements provided, and the following respective readiness levels charts:

What is your current self-assessment of the maturity readiness levels in each of these four indices for your system that you are offering in your response as a potential RCIS Type I solution?

_____ Technology Readiness Levels (TRL)

_____ Manufacturing Readiness Levels (MRL)

_____ Integration Readiness Levels (IRL)

Technology Readiness Levels

TRL	Definition
9	Actual System Proven Through Successful Mission Operations
8	Actual System Completed and Qualified Through Test and Demonstration
7	System Prototype Demonstration in Relevant Environment
6	System/Subsystem Model or Prototype Demonstration in Relevant Environment
5	Component and/or Breadboard Validation in Relevant Environment
4	Component and/or Breadboard Validation in Laboratory Environment
3	Analytical and Experimental Critical Function and/or Characteristic Proof-of-Concept

2	Technology Concept and/or Application Formulated
1	Basic Principals Observed and Reported

Manufacturing Readiness Levels

MRL	Definition
1	Basic Manufacturing Implications Identified
2	Manufacturing Concepts Identified
3	Manufacturing Proof of Concept Developed
4	Capability to produce the technology in a laboratory environment
5	Capability to produce prototype components in a production relevant environment
6	Capability to produce a prototype system or subsystem in a production relevant environment
7	Capability to produce systems, subsystems, or components in a production representative environment
8	Pilot line capability demonstrated; Ready to begin Low Rate Initial Production
9	Low rate production demonstrated; Capability in place to begin Full Rate Production
10	Full Rate Production demonstrated and lean production practices in place

Integration Readiness Levels

IRL	Definition
7	The integration of technologies has been ***verified and validated*** with sufficient detail to be actionable.
6	The integrating technologies can ***accept, translate, and structure information*** for its intended application.
5	There is sufficient ***control*** between technologies necessary to establish, manage, and terminate the integration.
4	There is sufficient detail in the ***quality and assurance*** of the integration between technologies.
3	There is ***compatibility*** (i.e. common language) between technologies to orderly and efficiently integrate and interact.
2	There is some level of specificity to characterize the ***interaction*** (i.e. ability to influence) between technologies through their interface.
1	An ***interface*** (i.e. physical connection) between technologies has been identified with sufficient detail to allow characterization of the relationship.

H. Other: In addition to the questions below, please provide any other information relative to the RCIS Type I system and this RFI that may benefit the Government in soliciting for a solution to meet the RCIS Type I requirement.

1. Are there any implications or risks to your organization by combining the EMD, Low Rate Initial Production (LRIP) requirements under one contract as it relates to cost, schedule, or technical performance?

2. Does your organization have an Earned Value Management (EVM) system in place to monitor cost, schedule, and technical objectives?

3. Do contractor personnel, potentially employed under the proposed RCIS requirement, have access to or maintain an Army Knowledge On-line (AKO) account?

4. Has your organization used or is it familiar with VDLS [VISION (Versatile Information Systems Integrated On-Line Nationwide) Digital Library System]? If so, please provide a brief summary on how it has been utilized.

5. Do contractor personnel, potentially employed under the proposed RCIS requirement, have a current Common Access Card (CAC) or other DoD-approved External Certification Authority (ECA) or Federal Bridge Certification Authority (FBCA) issued user certificates?

6. What Facility Clearance and Level of Safeguarding does your organization maintain (Secret, Top Secret, etc.)?