

FedBizOps Sources Sought

General Information

Document Type:	Sources Sought
Solicitation Number:	MDAFY15TCRFI03Rev3
Original Posted Date:	22 September 2015
Original Response Date:	23 November 2015
Current Posted Date:	20 July 2016
Current Response Date:	4 August 2016
Classification Code:	A – Research & Development
Set Asides:	N/A
NAICS Code:	541712 –Research and Development in the Physical, Engineering, and Life Sciences (except Biotechnology)

This notice is being published in accordance with Federal Acquisition Regulation (FAR) Part 5.101 requiring the dissemination of information for proposed contract actions. This is a request for information notice to identify capable sources to fulfill the below described requirements.

Contracting Office Address

The Missile Defense Agency/DACT, Attn: Jillian Downs, Bldg 5222, Martin Road, Redstone Arsenal, AL 35898

Description

The Missile Defense Agency (MDA) is conducting market research through this Request for Information (RFI) to determine interest and capability for production of Modified Ballistic Re-entry Vehicles (MBRV) and Re-Entry Vehicle Separation Modules (RVSM), associated Ground Support Equipment (GSE), target integration activities and flight test execution activities.

Background

The MBRV and RVSM models that are associated with this RFI are the MBRV-7, MBRV-8, RVSM-7, and RVSM-8. The MBRV is a primary testing object to emulate a threat re-entry vehicle in either exo-atmosphere or endo-atmosphere depending on the objectives of the flight test. The RVSM is a target vehicle structure that provides mechanical and electrical interfaces for the MBRV to the Launch Vehicle (LV). Figure 1 shows the notional MBRV-RVSM-LV concept. The RVSM has an interface to the LV defined in an Interface Control Document (ICD) that will be provided with this RFI package. The MBRV – RVSM joint is the separation plane and contains the MBRV separation system hardware. The current inventory MBRV and RVSM requirements will be provided as part of this RFI for review and comment. The MDA has a high interest in modifications to the current baseline design, including instrumentation, and the fabrication techniques that results in both cost efficiency and ease of producibility provided that the modifications meet the requirements and not negatively impact performance. Any proposed design, hardware and software, will be required to complete a full qualification program as

defined in the MDA Assurance Provisions (MAP), MDA Parts, Materials, and Processes Mission Assurance Plan (PMAP) and the SMC-S-016 Test Requirements for Launch, Upper-Stage, and Space Vehicles. The MAP and PMAP will be provided with the RFI

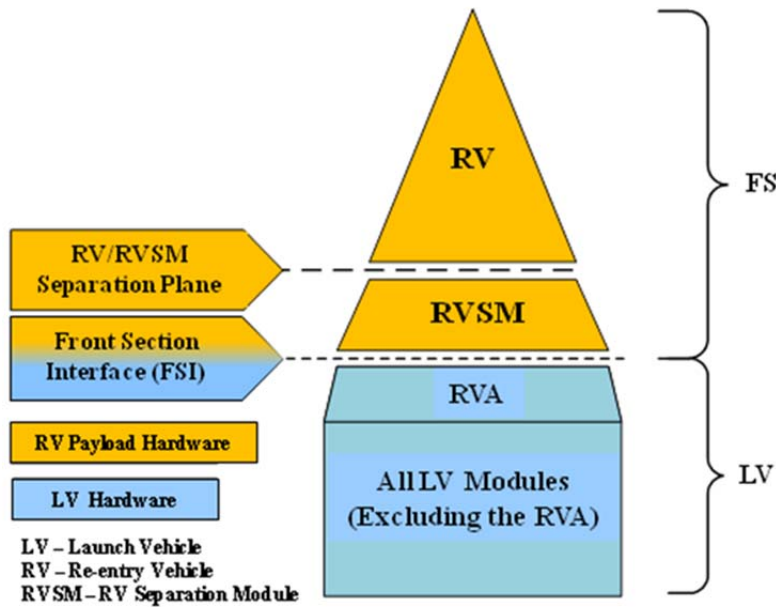


Figure 1: Notional MBRV-RVSM-RVA configuration. Not to scale.

MDA will provide the MBRV Target System Performance Specification (TSPS), the RVSM Component Performance Specification (CPS), the Target Class Capabilities & Requirements (TCC&R) and the Ballistic Missile Defense Target System (BMDS) Security Classification Guide (SCG). The list of documents available upon request is included at the end of this RFI.

Expectations for Solicitation

All hardware, software, manufacturing and development processes must be in compliance with approved MDA Quality, Safety and Mission Assurance requirements. The MBRV must comply with all requirements as provided in the TSPS. To ensure the design, development, and performance of the RVSM meets functional needs for deployment of the MBRV, the RVSM must comply with all requirements as provided in the RVSM CPS and the RVSM Interface Control Document (ICD). The MDA is seeking sources with demonstrated success and experience in ballistic missile vehicle design, development, modeling, assembling, integration and testing of MBRV vehicles. The production and delivery Concept of Operations (CONOPS) would have a performer be responsible for all aspects of an MBRV and RVSM with the following requirements being fulfilled.

1. Design, Development, Production and Integration cost and schedule must be provided for the potential MBRV/RVSM using the MBRV/RVSM TSPS and RVSM ICD provided.

2. Design, Development, Production and Integration cost and schedule must be provided for the cost effective MBRV/RVSM using the MBRV/RVSM TSPS and RVSM ICD provided. The cost and schedule submitted for the cost effective approach must include cost and schedule impacts associated with all qualification testing programs.
3. Verification and validation of the responsiveness and performance of the final products using developed flight software in a hardware in the loop facility to provide confidence in the MBRV's ability to meet the flight test requirements when integrated with Government Furnished Equipment hardware.
4. Close out integration operations and provide documentation of close out for mission assurance review and acceptance.
5. Conduct integration activities with the All Up Round (AUR) prime integrator at the integration facilities.
6. Conduct flight test execution operations at the MDA flight test facilities. This is for 3 flight tests utilizing the MBRV-7/RVSM-7 and 12 flight tests utilizing the MBRV-8/RVSM-8.
7. Evidence of compliance with the MDA Assurance Provisions (MAP) and Parts, Materials, and Processes Mission Assurance Plan (PMAP) and SMC-S-016. The latest versions of MAP, PMAP and SMC-S-016 will be provided to interested parties upon request to the Contracting Officer.

Capability Statement

Any responsible source may submit a capability statement (not-to-exceed 10 pages). Capability statements must identify all anticipated nonrecurring engineering costs and include a feasible schedule with the plan demonstrating a capability to deliver a minimum quantity of 3 MBRV-7/RVSM-7 with a first unit delivery in first quarter of FY2021 and a quantity of up to 12 MBRV-8/RVSM-8 with a first unit delivery in the first quarter of FY2019. All capability statements received by the response date will be considered. Capable sources qualified and interested in providing the RVA and or components of the MBRV – RVSM models are encouraged to respond. This RFI will be evaluated by MDA based on the contractor's ability to:

1. Show ability to manufacture and deliver hardware with minimal associated nonrecurring engineering.
2. Show a cost-effective solution that meets MDA's financial goals without negatively impacting the performance as defined in the TSPS.
3. Demonstrate the ability to provide timely upgrades and modifications without an impact to cost, schedule and scope.
4. Demonstrate the organizations ability to meet technical and functional requirements for the TSPS to meet performance requirements.
5. Demonstrate expertise in the area of MBRV planning, design, development, manufacture and integration.
6. Show the ability to perform fabrication of classified hardware.

7. Show the ability to execute a full qualification testing program of flight hardware and software associated with MBRV/RVSM development.
8. Demonstrate a quality management program that meets or exceeds what is defined in the MAP.
9. Show an established history of managing production type projects.
10. Show that the organization is capable of working with external organization(s) responsible for flight test execution.
11. Show that the organization is capable of working with external organizations to meet the overall requirements.

The response should provide the following information to ensure a timely and comprehensive evaluation using the above evaluation criteria:

1. Provide the contact information for the primary contact receiving a follow-on RFP, e.g., organization, individuals name, address, phone number and email address (not counted against the 10 page limit).
2. Provide the organizations business model or background (not counted against the 10 page limit).
3. Provide experience in the area of developing and building similar systems as the MBRV.
4. Provide all anticipated nonrecurring engineering costs and include a feasible schedule.
5. Provide an overview of the technical approach to meet the production of the MBRV and RVSM following the MBRV TSPS, and TCC&R ensuring the BMDS SCG is followed.
6. Provide a notional schedule showing all major milestone reviews (i.e. SRR, PDR, CDR), and production timelines that reflect the delivery of the first MBRV/RVSM unit. Delivery of the first MBRV-8 and RVSM-8 no later than first quarter FY2019 with delivery of all remaining units no later than first quarter FY2021. Delivery of the first MBRV-7 and RVSM-7 no later than first quarter FY2021 with delivery of remaining units no later than fourth quarter FY2021.

RFI Exchange of Information

This is not a Request for Proposal or quotation. The Government will NOT pay any costs incurred as a result of responding to this announcement. Submissions of capability statements will be separate from, and have no bearing on, submissions in response to any future Request for Proposal, if one is issued. Eligibility to participate in any future acquisition does not depend upon a response to this notice. MDA will not provide feedback on the responses to this notice. Proprietary information is neither sought nor desired by MDA. If proprietary information is submitted, it must clearly be marked "proprietary" on every sheet containing such information and the proprietary information must be segregated to the maximum extent practicable from other portions of the response (e.g., use an attachment or exhibit). Respondents are responsible for adequately marking proprietary information contained in their response. Do not send any

classified information. Respondents must include current business status (large or small), and applicable socioeconomic status.

Non-Government Support Personnel

The Government may use third party, non-Government (contractor) support personnel as subject matter experts in the review of submissions, including the review of any marked or unmarked proprietary information provided. Appropriate non disclosure agreements have been executed between the third party, non-Government (contractor) support personnel and the Government and are on file with the Government. Participation in this effort is strictly voluntary. A submission of a response to this notice constitutes the respondent's acknowledgement and agreement that the information provided in the response, including any marked or unmarked proprietary or source selection information, may be disclosed to these third party, non-Government (contractor) support personnel.

Please note that this is not a request for competitive proposals; however, all responsible sources who believe they can meet the requirements may submit a capability statement demonstrating the ability to comply with the above-stated requirements **NLT 4 August 2016 at 6:00 PM CDT**, to Ms. Jillian Downs, Contracting Officer, at jillian.downs@mda.mil. A determination by the Government not to compete this requirement based on responses to this notice is solely within the discretion of the Government. Information received will normally be considered solely for the purpose of determining whether to conduct a competitive procurement.

Government Point of Contact:

Jillian Downs, Contracting Officer,
Phone 256-450-2055
Email: jillian.downs@mda.mil

List of Documents Available Upon Request:

1. Front Section Common Interface Control Document (ICD) TC-TCE-SPEC-2013-001-Rev B (FOUO) Dated 21 January 2015
2. Ballistic Missile Defense System (BMDS) Security Classification Guide (SCG) (U) SECRET Document Updated: 19 Oct 2010 to include Admin Changes 11 July 2011.
3. Modified Ballistic Reentry Vehicle (MBRV)-8 Targets System Performance Specification, Version 1.0 (U) SECRET Document Dated 2 December 2011
4. Extended Medium Range Ballistic Missile Targets System Performance Specification, Version 3.4 (U) SECRET Document Dated 29 July 2011
5. RVSM-7 Target Component Performance Specification (TCPS), Version 1.1 SECRET Document Dated 5 November 2013
6. Missile Defense Agency Assurance Provisions (MAP) MDA-QS-001-MAP-Rev B Dated 13 June 2014

7. Missile Defense Agency Parts, Materials, and Processes Mission Assurance Plan (PMAP) MDA-QS-003-PMAP-REV B Dated 2 March 2012
8. Target Class Capabilities and Requirements (TCC&R) Version 3.1 (U) SECRET
Document Updated: 15 November 2011