

QUESTION #32

Items 7, 8, 9 and 18 of Attachment 12 require information on Vehicle Contrast, Reflectivity and armor protection be provided as part of initial M&S effort. These are aspects of Vulnerability and Survivability that are not modeled until the post CDR part of the Hardware Demo phase. If that is the case, how can the contractor provide this information before the completion of the post CDR M&S effort?

ANSWER: During the 8 month M&S phase, specification requirements will be addressed for the UV and MSV concept designs, to include survivability. At the completion of CDR, concept designs are finalized, and detailed vulnerability and survivability analyses will be completed. Please read SOW C.1 through C.1.2.2.1.6.

QUESTION #33

Paragraph 4 and Table 1 identify Verification methods and classes associated with production. Since there is no production associated with this ACTD, we cannot identify a need for this information either in the preparation of the proposal or the completion of the engineering effort. If this is not the case, please identify the purpose of Table 1.

ANSWER: The information provided in Table 1 for the preparation of the Vehicle Inspection Record (SOW C.4.2) is a demonstration phase (Post-CDR) requirement. However the proposer may want to review this when preparing a response to element 4: Demonstrator Fabrication and Testing, page 13 of the Research Announcement.

QUESTION #34

CDRL A004 indicates Post CDR M&S Data will be initially provided 8 mos after contract award. The referenced paragraph, C.1.2.2.2, indicates that it will be provided 3 mos after down select. This appears to be the correct requirement since Post CDR M&S data cannot possibly be provided at the CDR. Please advise.

ANSWER: CDRL A004 will be changed to read: "Initial submission three months after the down select Fabrication and Demonstration phase award, with final update 30 days after completion of MUA (see C.1.2.2.2)."

QUESTION #35

In the government's response, ID 312, to a draft question on Para 3.10.1.3 of the technical specifications, it was indicated that the refueling capability would be

changed to an "Objective". The actual released UV specification did not change. Please clarify.

ANSWER: The Government recognizes the oversight and the paragraph should be labeled objective and the updated specification will be included in the award document. No Threshold requirement will be added at this time.

QUESTION #36

A previous question submitted to the government, which was answered as Question #8, requested clarification of the terms "Maintenance" and "Cargo Sustainment" data required to be automatically collected by the UV CT demonstrator. The government's response was that Section 3.6 of the UV specification identifies the types of maintenance data that will need to be collected and reported. Although the response on "Cargo Sustainment" was very useful, the response does not appear to clarify the issue on "Maintenance" data. Paragraph 3.6 includes such items as MTBSA, MTBEFF, MR, MTTR, Prognostics in addition to others. Is the government directing that there be a system on the trailer that automatically collects information on CT MR, MTTR, and other such maintainability items? The response appears to be focused on the need to collect maintenance data as part of the demonstration data collection tasks. However, the use of the term "automatically collect" in 3A appears to direct an automatic system which is continuously monitoring maintainability information. Since these are capabilities that must be demonstrated, it is critical that the bidder understand exactly what hardware must be integrated into the UV CT.

ANSWER: Yes, automatic collection of information is required. The system should collect data on how the trailer operates and is maintained (maintenance actions, replacement parts) in order to build a prognostics database. Prognostics provide the ability of predicting such maintenance capabilities as MR and MTTR. Reference UV Specification, Section 3.6, 3.6.2.5 Preventative Maintenance Checks and Services (PMCS), 3.6.2.5.1 Preventative Maintenance Checks (PMC), 3.6.2.5.2 Scheduled Services, 3.6.2.9 Filters, 3.6.2.10 Prognostics & Diagnostics, 3.6.2.10.1 Prognostics, 3.6.2.10.2 Diagnostics, 3.6.2.10.6 Interactive Electronic Technical Manuals (IETM), 3.6.2.10.7 I.E.T.M Embedded Video and Maintenance Support, and SOW Section C.4.4.2.2.

QUESTION #37

Paragraph C.1.2.2.1.5 of the SOW identifies both CDRLs A005 and A006 as applicable. It appears that CDRL A006 is covered by Para C.1.2.2.2.6 and should not be referenced in this paragraph. Please advise.

Additionally, in the government's response, Question 11, to a previous question on this same paragraph, it indicated that direction as to how this UPC is to be

determined is not needed for the M&S proposal preparation. If the proposer is to supply this information under CDRL A005 five (5) days after the CDR, this will require direct labor to develop this cost and, therefore, a clear direction for developing these costs is necessary to generate the "reasonable" direct labor costs for the CDRL. Please advise.

ANSWER: Paragraph C.1.2.2.1.5 will remain in CDRLs A005 and A006. The details of how this will take place will be worked out in an IPT after award and will not be provided at this time.

QUESTION #38

Reference: Scope of Work, Page: 17, Paragraph: C.4.4.2.1., Title: Logistics Demonstration (LOG DEMO) Task Analysis

Statement: Paragraph C.4.4.2.1. discusses a detailed task analysis of all tasks required to operate, maintain, and support the system. It also discusses contractor participation and support of a Government conducted Logistics Demonstration to validate the LORA and Maintainability requirements outlined in the MSV and UV specifications (Attachments 1 & 2). No indication of the timing of the Logistics Demonstration is found in the scope of work or the CDRLs, nor is it identified on the FTTS ACTD Schedule included as Attachment 4 of the Research Announcement.

Question: Can the Government provide further clarification of the logistics demonstration task and an expected window of time they intend to conduct it so contractors can realistically incorporate their participation and support of the logistics demonstration in the program schedule to be submitted in Element 2 of the proposal?

ANSWER: The LOG DEMO will take place just after operator and maintainer training.

QUESTION #39

Reference: Research Announcement, Page: 11, Paragraph: 9.1, Title: N/A

Statement: The Research Announcement states "The offeror's proposal shall have print no smaller than pica type". Tables and graphics are more difficult to adequately display information at the Pica font (12 pt).

Question: May the offeror submit information in tables and graphics at a smaller font size, such as a 8 or 9 pt?

ANSWER: Yes a smaller but legible font may be used for tables and graphs.

QUESTION: #40

Reference: SOW, Page: 16, Paragraph: C.4.2, Title: Vehicle Inspection Record

Reference: SOW, Page: 16, Paragraph: C.4.3, Title: Acceptance Test

Reference: Exhibit A - CDRL, Page: 4, Paragraph: A012, Title: Test/Inspection Report

Statement: Paragraph C.4.2. of the scope of work discusses the Vehicle Inspection Record and requires that the Contractor shall develop a Vehicle Inspection Record (VIR) and present it to the Government representative thirty days prior to acceptance testing. CDRL A012 is listed as the corresponding CDRL for this requirement.

Block 16 of CDRL A012 states that the Draft VIR shall be submitted 90 days prior to scheduled demonstrator acceptance test and refers to scope of work paragraph C.4.3. which is titled "Acceptance Test". There is no discussion in paragraph C.4.3. pertaining to the VIR.

a) Which submittal date is correct: 30 days prior to acceptance test as stated in scope of work paragraph C.4.2 or 90 days prior to acceptance test as noted in block 16 of CDRL A012?

ANSWER: The draft VIR is due 90 days prior and final VIR 30 days prior to AT.

b) Is there more than one key date, i.e. draft VIR submission at 90 days prior to acceptance test and final VIR content at 30 days prior to acceptance test?

ANSWER: Yes, see response to a) above.

c) What is the correct paragraph reference for CDRL A012?

ANSWER: The correct reference for CDRL A012 is C.4.2. This will be updated prior to award.

QUESTION #41

We have been developing a dramatically new system of wheeled vehicles utilizing many breakthrough proprietary and patent-pending technologies and designs under our own funding. We would like to respond to this solicitation by offering a modification of one or more of our wheeled vehicles to meet the specifications under this solicitation.

Would a modification of our vehicles to meet your specifications constitute as an acceptable response to one of the three concepts to this solicitation?

It is unclear what the proposer is asking. Reference Section 9 Element 1. The Government is not asking for 3 concept vehicles or modification of concept vehicles in the proposal. Section 9.1.1 of the RA states "Identify three candidate technology solutions which the offeror considers to offer high potential for achieving threshold or objective performance specification requirements (UV and Companion Trailer or MSV and Companion Trailer)."

QUESTION #42:

If we modify one of our vehicles to meet your specifications, how would we protect our intellectual properties from other competitors?

ANSWER: The contract clauses and regulation are designed to protect limited rights data. The technical data protected relates to data such as drawings and specifications, which are delivered under the contract for which the government pays. Technical data delivered in accordance with the contract will be protected under the regulations. It will be disclosed only to Government personnel and will not be used for competitive procurement. If there is a patent on any of the technology and we decide to use the patented invention, we will conduct good faith negotiations to obtain a license. If however, we buy a vehicle, then we can make the hardware, but not the data, available to others. This is in accordance with commonly accepted commercial practice, where sale of the hardware allows the buyer to review, study, disclose, and allows to do the same so as to glean any information that may be obtained from review of the hardware.

See Q&A #18 & #19 released 2 August 2004.

QUESTION #43:

If we claim limited rights to protect our intellectual properties, then how would the Government protect access to our limited rights technology on this Government purchased vehicle?

ANSWER: See Q&A # 42 and Q&A #18 & #19 released 2 August 2004.

QUESTION #44:

Does Level 5 CAD models constitute as a requirement to include every nut, bolt, and washer in a suspension system, as an example, or can it refer to a sub-system level, such as a space claim model for the wheel-end assembly?

ANSWER: No, the intention is to not provide models down to the bolt, washer, etc. level as that level of detail would be considered level 6 or 7 in the ACTD WBS. The Government is primarily interested in the CAD model information (e.g. space claim, geometry, significant interfaces and mass properties) on the major subsystem components to support our M&S

evaluations. However, contractors are not prohibited from submitting models to a lower WBS level if they so choose, particularly if it is more efficient for them to do so (e.g. not having to construct M&S specific deliverable models).

QUESTION #45

We request clarification of the government's use of the terms "Survivability" and "Vulnerability".

a. In the SOW, Para C.1.2.2.2.3 identifies a "survivability" analysis associated with vehicle signature, as evidenced by the data in Attachment 14. Para C.1.2.2.2.5 addresses "Vulnerability" which includes the requirements for structure and armor design. At the same time, Attachment 3 identifies these same vulnerability items under the heading of "Survivability", and both of these areas are identified under Para 3.3 of Attachment 2 under the generic heading of "Survivability". Is Vulnerability intended to be a subset of Survivability? If so recommend that it be retitled "Ballistic Protection Analysis" to coincide with terminology of Para 3.3.1. Should Para C.1.2.2.2.5 be retitled as "Signature Analysis" to coincide with terminology in Para 3.3.4?

ANSWER: Paragraph C.1.2.2.2.5, Vulnerability Analysis, refers to a Government performed analysis that is not a subset of the survivability analysis in paragraph C.1.2.2.2.3. The vulnerability analysis will be a separate Government analysis which will be conducted based on the information requested in its subparagraphs. This analysis incorporates the offeror's ballistic protection approach and performance but a significant amount of other inputs as listed in the subparagraphs. As such, it will not be retitled. The ballistic performance data submitted as part of the requirements for C.1.2.2.2.5. should correspond to the ballistic requirements of paragraphs 3.3.1. and 3.3.2. in Attachment 2. Paragraph C.1.2.2.2.3. refers to the signature analysis that should correspond to the signature management requirements of paragraph 3.3.4. in Attachment 2.

b. Element 1 of the RA includes a system capability called Survivability. Does this include all items in Para 3.3 of Attachment 2?

ANSWER: See Amendment 0001.

c. Element 3 requires the contractor to address survivability modeling, but not the vulnerability analysis under Paragraph C.1.2.2.2.5. Please clarify requirement.

ANSWER: The Vulnerability analysis specified in paragraph C.1.2.2.2.5 is not required to be addressed for Element 3.

QUESTION #46

BACKGROUND: Concerning Survivability: Amendment 0001 Para 9.1.1.

You have asked to "identify one survivability technology solution for" Direct Fire, Mine protection, IED, and Infantry Anti-Tank Protection. :

Question:

Are you asking that we provide four different tech solutions that address each of the threats listed above separately?

ANSWER: Yes. Amendment 0001 states "Identify one Survivability technology solution FOR EACH of the following:"

Question:

Or are you asking for one overriding solution that addresses all four threats at once?

ANSWER: No. However, the Government has not ruled out one solution that addresses more than one threat. See response to the previous question.