T4NG TECHNICAL EVALUATION FORM – FIRM FIXED PRICE	
Task Title	
VistA Adaptive Maintenance	
	Date of Proposal
	August 17, 2017
Criteria:	Technical Rating:
	Task Title

TECHNICAL: The evaluation of the technical proposal considered the following:

- (1) Understanding of the Problem The Technical Volume of the Task Execution Plan (TEP) was evaluated to determine the extent to which it demonstrates a clear understanding of all features involved in solving the problems and meeting and/or exceeding the requirements presented in the task and the extent to which uncertainties are identified and resolutions proposed.
- (2) Feasibility of Approach –The Technical Volume was evaluated to determine the extent to which the proposed approach is workable and the end results achievable. The Technical Volume was evaluated to determine the level of confidence provided the Government with respect to the Offeror's methods and approach in successfully meeting and/or exceeding the requirements in a timely manner.

2. Proposal Summary:

The Offeror provided a technical and management approach to conducting Agile Planning through Release and Deployment Support by applying a Veteran-Focused Integration Process-Centric Scrum implementation of Agile methodology and use Test-Driven Development in conjunction with it.

The Offeror's response described its technical and management approach to the problem identified in the Performance Work Statement (PWS). The proposal describes how the Offeror would implement an integrated, micro-services architecture to compartmentalize common web services functionalities." This "micro-services architecture" consists of modification of current production VistA Massachusetts General Hospital Utility Multi-Programming System (MUMPS) and Computerized Patient Record System (CPRS) Delphi code, and addition of an Entity File to the VistA FileMan database, which is in turn wrapped as "micro-services." The Offeror's response also described the means by which it will employ automated testing. Finally, the Offeror's response outlines the staffing level of effort (LOE) by labor category and also the proposed role of the staffing resource.

The Offeror has proposed to team with three subcontractors.

After review of the entire proposal, it was determined that the Offeror's approach contained the Weaknesses and Deficiencies detailed below. The remainder of the VistA Adaptive Maintenance requirements was adequately addressed.

3. Summary of Significant Strengths and Strengths:

None identified.

Unacceptable

4. Summary of Significant Weaknesses and Weaknesses:

Significant Weakness #1 – (TEP pp 1 - 5, Section 2.1, Exhibit 7, Request for **TEP (RTEP) Instructions B.1.1.a)** In its proposed approach for developing a service layer to emulate CPRS Remote Procedure Calls (RPCs), which includes the requirement for FileMan data modeling using web-standard technologies and representation, the Offeror proposes to use FileMan logical path analysis currently provided by RPCs and MUMPS logic. Offeror A asserts multiple times that its core staff has many years of experience and in-depth knowledge of all aspects of FileMan (specifically with the FileMan23 project) however, fails to provide evidence of any actual steps, processes or procedures for Fileman data modelling. Offeror A restates the requirements for "designing a service emulation layer to replace the existing CPRS RPC interfaces" but instead of providing "web-standard representation" (i.e. modelling) as required, provides only "web-standard interfaces through Representational State Transfer web services" which has nothing to do with data modelling. The Offeror further restates the requirements that its "design ensures the legacy application functions continue to perform as before, but against single (individual) instances of centralized services, permitting the retirement of the equivalent function in the 131 VistA systems" yet does not provide any further details of its actual approach or design. Because there is no description of FileMan Data modeling of each of the 131 VistAs, the Government cannot be assured that variations in local VistA will not be identified, exposed or supported. Without the execution of FileMan data modeling on all VistA instances, a single common data model cannot be created to support Veterans Integrated Care Services (VICS). Current localized functionality cannot be supported without inclusion of local FileMan data models backwards compatible to the common centralized data model. VICS is intended to provide backward and forward compatibility between VistA and a commercial Electronic Health Record (EHR). Without ensuring local data models are reconciled with a common data model, the VICS will not meet the requirement for backward compatibility which appreciably increases the risk of successful Task Order performance.

5. Summary of Deficiencies:

Deficiency #1 (TEP pp 6-8 and pp 9-10, Sections 2.1 and 2.2, RTEP **Instructions B.1.1.g and B.1.2.f):** The Offeror demonstrated a lack of understanding of the intended final solution as explicitly described in PWS Sections 1.0, Background, 5.2, Adaptive Maintenance Services and as further emphasized in RTEP Instruction B.1.1.g and B.1.2.f, which state that, among other requirements, the "final solution has no legacy MUMPS dependencies." The Offeror proposed an approach that required the modification to/enhancement of MUMPS code and the addition of an entity file to the FileMan database and then wrapping the legacy code (rather than emulating in Javascript/Node.js as required) which locks its solution into the legacy MUMPS technology stack. The Offeror misstates how Node.js services are utilized, indicating a misunderstanding of the intended technology desired to emulate the legacy code as a new service. By modifying the legacy MUMPS code, the Offeror does not centralize the service off of VistA and cannot achieve backwards compatibility if the legacy code has been modified. A critical outcome of this project is demonstration of the ability to replicate Outpatient Pharmacy Computerized Physician Entry (CPOE) and VA patient data entry (PDE) functionality independent of VistA and MUMPS. This ensures that application functionality is clearly understood and implemented correctly to meet the required "forward compatibility." It also ensures that an interface to a commercial EHR can

be correctly specified as a centralized service without dependency on the legacy MUMPS code. Reusing existing MUMPS code hides critical implementation details and invalidates any claim that functionality is documented, implemented correctly and forward compatible. The lack of understanding of VA's requirements for the emulation of PDE and CPOE requirements would enlarge VA's reliance on MUMPS (as opposed to decreasing these dependencies) thus increasing the risk to successful migration to a cloud-based, commercial EHR. The failure to emulate the PDE and CPOE requirements and instead maintaining reliance on VistA MUMPS is a failure of the Offeror's TEP to meet a stated requirement for the final solution having no legacy MUMPS dependencies. Additionally, the Offeror demonstrates a failure to understand the objective of the intended solution by proposing changes to the CPRS Delphi code (Pg 10, Exhibit 13). PWS 5.2.2 requires that there shall be no change to CPRS or VPR clients or code. The solution objective is to provide forward and backward compatibility for CPRS by adding an emulation layer enabling CPRS to communicate to either legacy VistA or a new commercial service - with <u>no change to CPRS</u>. Simply stated, the Offeror's proposed approach is not backwards compatible with CPRS if it requires changes to CPRS to work, and thus the approach is not feasible. As this is a core objective of the solution, the approach represents an unacceptable risk of unsuccessful contract performance.

<u>6. Special Terms and Conditions / Deviation / Critical Assumptions stated in TEP:</u>

None identified.

7. Evaluation Criteria:

a. Understanding of the Problem

Overall, Offeror A's TEP demonstrates a lack of understanding of the requirements.

b. Feasibility of Approach

Overall, Offeror A's TEP demonstrates an approach that cannot be expected to meet the requirements and is considered very high risk.

8. Rating: Unacceptable

Offeror A's contains a deficiency that indicates a lack of understanding of the problems and an approach that cannot be expected to meet requirements or involves a very high risk; and none of these conditions can be corrected without a major rewrite or revision of the TEP.

Evaluator Signature

Date

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