

Attachment 2: Request for Sole Source Memo Format

DEPARTMENT OF VETERANS AFFAIRS

Justification and Approval

For

Other Than Full and Open Competition

1. **Contracting Activity:** Department of Veterans Affairs, Network Contracting Office Four (NC04) Pittsburgh. This is a request for Other Than Full and Open Competition for the Veterans Engineering Resource Center (VERC) as described in requisition number 646-14-2-4587-0013.
2. **Nature and/or Description of the Action Being Processed:** The VERC is requesting a new firm fixed price contract for essential engineering capabilities provided by their academic affiliate, Carnegie Mellon University in accordance with FAR 6.302-3 (a) (1) pursuant to 41 U.S.C. 253 (c) (3). FAR 6.302-3 (a) (2) (ii) states, "Full and Open Competition need not be provided for when it is necessary to award the contract to a particular source or sources in order to establish or maintain an essential engineering, research, or development capability to be provided by an educational or other nonprofit institution or a federally funded research and development center".
3. **Description of Supplies/Services Required to Meet the Agency's Needs:** Development of a personalized risk assessment and follow up decision support guidelines for Congestive Heart Failure (CHF). This acquisition is to establish an essential capability for engineering that, at present, cannot be performed at the VA Pittsburgh Healthcare System. The anticipated value of this firm fixed price contract is approximately \$230,000 with a base period of one year. A 2005 report by the National Academy of Engineering (NAE) and Institute of Medicine (IOM) of the National Academies, documented that the health care sector as a whole has been relatively slow to embrace Operational Systems Engineering (OSE) tools and techniques, which could help untangle the complexities and lead to a deeper understanding of the dynamics of health care systems and subsystems and could be designed to optimize system performance to meet specific quality goals in safety, patient centeredness, timeliness and, at the same time, improve prediction, measurement. Transformational advancements in the quality and productivity of VHA may require tools and techniques developed as part of OSE, a family of disciplines that includes industrial engineering, operations research, human factors engineering, and financial engineering/risk analysis, as well as from computer science and engineering and the social and behavioral sciences. All of these engineering and science disciplines are integrally involved in the design, analysis, and control of complex processes and systems and management to meet other performance goals. OSE, which combines science and mathematics to improve the operation of systems, has greatly benefited other enterprises by describing, analyzing, planning, designing, and integrating systems with complex interactions among people, processes, materials, equipment, and facilities using deterministic and probabilistic mathematics. The ultimate goal of OSE is to incorporate all of elements in the operations of a system to improve its efficiency and effectiveness. Therefore, VERCs

are tasked to provide academic opportunities for cross training and integrate OSE with health care expertise to promote cultural change and improve health care delivery. The Veterans Affairs Pittsburgh Healthcare System (VAPHS) Veterans Engineering Resource Center (VERC) collaborates with their academic affiliates to conduct healthcare process improvement projects across VHA. The VAPHS intends to procure essential engineering capabilities to develop a clinical algorithm for use in describing and visualizing readmission risk in congestive heart failure (CHF) patients. The engineering capabilities described in this contract require high fidelity health systems engineering and statistical modeling & analytic expertise. The only services found in the Pittsburgh region which meet the government's needs are through our academic affiliate - Carnegie Mellon University. Pursuant to FAR 6.302-3 and 41 U.S.C. 253(c)(3), these are essential engineering capabilities with our academic affiliate.

4. **Statutory Authority Permitting Other than Full and Open Competition:** 41 U.S.C. 253(c)(3), as implemented by FAR 6.302-3 – these are essential engineering capabilities provided by our academic affiliate.

- () (1) Only One Responsible Source and No Other Supplies or Services Will Satisfy Agency Requirements per FAR 6.302-1;
- () (2) Unusual and Compelling Urgency per FAR 6.302-2;
- (x) (3) Industrial Mobilization, Engineering, Developmental or Research Capability or Expert Services per FAR 6.302-3;
- () (4) International Agreement per FAR 6.302-4
- () (5) Authorized or Required by Statute FAR 6.302-5;
- () (6) National Security per FAR 6.302-6;
- () (7) Public Interest per FAR 6.302-7;

5. **Demonstration that the Contractor's Unique Qualifications or Nature of the Acquisition Requires the Use of the Authority Cited Above (applicability of authority):** Pursuant to FAR 6.302.3(2) Full and open competition need not be provided for when it is necessary to award the contract to a particular source in order to establish or maintain an essential engineering, research, or development capability to be provided by an education or other nonprofit institution. Carnegie Mellon University is the VA's academic, non-profit affiliate. The VA Pittsburgh VERC is a collaborative effort between the Department of Veterans Affairs and Carnegie Mellon University. A key element of this partnership is the involvement of academic engineering faculty and students who will bring expertise in operational and systems engineering (OSE) practices. This requirement is to establish essential engineering capabilities for the practical application of investigative findings of a technical nature by development of a clinical algorithm for Congestive Heart Failure that will be used on a technology platform. CMU is uniquely qualified to perform the services in the proposed acquisition as a result of previous and ongoing projects which addresses problems at the interface of healthcare, information technology and management science, particularly healthcare information systems, operational planning and management, and data mining and decision support methods. Their current research in the healthcare domain investigates data mining methods for healthcare decision support; evaluating the use and impact of information technology and systems in healthcare environments, particularly for point-of-care disease management; and, examining tradeoffs between access and confidentiality in large multidimensional public-use and healthcare databases. These topics have been funded by the National Science Foundation, National Library of Medicine, DARPA, and the Army Research Office. This developmental effort is the practical application of scientific principles and investigative findings which have previously been investigated and published.

6. **Description of Efforts Made to ensure that offers are solicited from as many potential sources as deemed practicable:** Pursuant to FAR Subpart 5.202(a)(10) the proposed contract action is an exception to FAR regulations of synopsisizing this requirement.

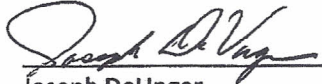
There are no additional efforts to solicit from any other sources because it has been deemed impracticable for the reasons mentioned in sections 3 and 5 of this document.

7. **Determination by the Contracting Officer that the Anticipated Cost to the Government will be Fair and Reasonable:** The Government is paying for the Vendor's actual costs plus an indirect cost that has already been deemed fair and reasonable in prior acquisition Contract VA244-12-C-0108. The anticipated cost of the acquisition is \$230,204, based on Budget/Quote submitted by CMU. The Requesting Area's Independent Government Cost Estimate (IGCE) was \$214,800. The Contracting Officer's Technical Representative (Joe DeUnger) compared CMUs costs to the IGCE, and has confirmed that CMUs proposed costs are reasonable, and acceptable to VERC. (See copies of the IGCE and Email from Joe DeUnger, dated 7/1/2014).

CMUs latest rates come from their FY14 Fixed Rate Agreement and are used for forward pricing and billing purposes for CMU's Fiscal Year 2014, and this Agreement has been signed by the Office of Naval Research (ONR) who is CMUs cognizant auditing agency.

8. **Description of the Market Research Conducted and the Results, or a Statement of the Reasons Market Research Was Not Conducted:** Pursuant to 41 U.S.C. 253 (c) (3), competition need not be provided for essential engineering provided by an education or nonprofit institution. This procurement is to provide essential engineering capabilities to develop a clinical algorithm for use in describing and visualizing readmission risk in congestive heart failure (CHF) patients. The services found in this contract require high fidelity health systems engineering and statistical modeling & analytic expertise. It was determined that CMU was uniquely qualified to perform the services in the proposed acquisition as a result of previous and ongoing research which addresses problems at the interface of healthcare, information technology and management science, particularly healthcare information systems, operational planning and management, and data mining and decision support methods.
9. **Any Other Facts Supporting the Use of Other than Full and Open Competition:** Pursuant to 41 U.S.C. 253 (c) (3), competition need not be provide for essential engineering provided by an education or nonprofit institution.
10. **Listing of Sources that Expressed, in Writing, an Interest in the Acquisition:** "See Section VI above."
11. **A Statement of the Actions, if any, the Agency May Take to Remove or Overcome any Barriers to Competition before Making subsequent acquisitions for the supplies or services required:** None—As listed in unique qualifications there are no other Vendors appropriate for this requirement.

12. **Requirements Certification:** I certify that the requirement outlined in this justification is a Bona Fide Need of the Department of Veterans Affairs and that the supporting data under my cognizance, which are included in the justification, are accurate and complete to the best of my knowledge and belief.


Joseph DeUnger
Program Specialist (VERC)
VA Pittsburgh Healthcare System

7/3/2014
Date

13. **Approvals in accordance with FAR 6.304** *This part if filled out by Contracting Staff as part of the Justification*

- a. **Contracting Officer's Certification (required):** I certify that the foregoing justification is accurate and complete to the best of my knowledge and belief.

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Digitally signed by
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Herb Byrns
Contracting Officer
NCO 4

Date

- b. **NCM/PCM (Required \$3K and above):** I certify the justification meets requirements for other than full and open competition.

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Herb Byrns
Deputy Director for Contracting
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Date