

## **REQUEST FOR INFORMATION**

### **PMW/A 170 Advanced Time Division Multiple Access Interface Processor (ATIP)**

#### **1.0 DESCRIPTION**

**1.1** The Program Executive Office Command, Control, Communications, Computers, and Intelligence (PEO C4I) PMW/A 170 Office is seeking information from industry on approaches, products and/or solutions for software design and development, hardware and software integration and system sustainment for the Advanced Time Division Multiple Access Interface Processor (ATIP) system.

**1.2** THIS IS A REQUEST FOR INFORMATION (RFI) ONLY. This RFI is issued solely for information and planning purposes and does not constitute a Request for Proposal (RFP) or a promise to issue an RFP in the future. Responses to this RFI are not offers and do not commit the Government to a contract for any supply or service whatsoever. At this time, the Navy is not seeking proposals and will not accept unsolicited proposals. Respondents are advised that the U.S. Government will not pay for any information or administrative costs incurred in response to this RFI and that all costs incurred or associated with responding to this RFI will be solely at the interested party's expense. Small businesses having the capabilities to perform the tasking below are encouraged to reply to this RFI. Not responding to this RFI does not preclude participation in any future RFP, if any is issued. If an RFP is issued, it will be synopsized on the FEDBIZOPPS website at <http://www.fbo.gov> and the SPAWAR e-Commerce Central website at <https://e-commerce.spawar.navy.mil>. It is the responsibility of the potential responders to monitor these sites for additional information pertaining to this requirement.

#### **2.0 BACKGROUND**

PEO C4I PMW/A 170 is responsible for the acquisition, fielding, and sustainment of ATIP systems to be installed on ship, shore, and submarine platforms. ATIP is a key requirement for the PMW 170/A Navy Multiband Terminal (NMT) system, which relies upon it to support a netted, bandwidth efficient IP connectivity over protected EHF/AEHF SATCOM.

The legacy Time Division Multiple Access (TDMA) Interface Processor (TIP) was developed during the period of 1997 through 2002 to provide Internet Protocol (IP) connectivity among Navy ships, submarines, and shore sites over protected Extremely High Frequency (EHF) Medium Data Rate (MDR) Satellite Communication (SATCOM). The legacy TIP solution implements Ethernet bridging among participants, requiring no changes to the attached network devices. TIP has been installed on every ship and submarine platform having EHF MDR capability as well as at a number of shore gateway facilities, including Naval Computer and Telecommunications Area Master Station (NCTAMS) sites, Submarine Broadcast Command Authority (BCA) sites, and DoD Teleport sites. TIP is widely used to support both surface and submarine fleet operations.

The Advanced TIP (ATIP) system is an updated version of TIP. It provides similar transparent Layer-2 bridging capability among Navy ships, submarines, and shore sites that are geographically dispersed and connected via Milstar Medium Data Rate (MDR), Advanced EHF MDR/Extended Data Rate (XDR), or Enhanced Polar XDR links. In addition to supporting higher XDR data rates, ATIP will provide a number of enhancements including an improved QoS capability, and easier integration into operational environment, further supporting network user access to protected MILSATCOM connectivity. The ATIP capability is necessary to meet requirements to support robust connectivity during fleet operations.

#### **2.1 Planned Procurement Action (to be contracted)**

##### **2.1.1 Functions**

The planned scope of this procurement action is to design, develop, procure, and sustain ATIP systems for installation at designated ship, shore, and submarine platforms. The main focus areas of this contract are software design and development, hardware development including Commercial Off-The-Shelf (COTS) procurement and

integration, hardware and software integration, related Testing and Evaluation (T&E) support, ATIP production, fielding support, and sustainment with a focus on software sustainment support. The contract also encompasses the tasks needed to support related areas such as Integrated Logistics Support (ILS), configuration management, and program management tasks associated with the aforementioned ATIP procurement efforts.

## **2.2 References**

ATIP development shall be in accordance with the ATIP specification and SOW and the documents referenced therein.

## **2.3 Security Requirements**

Access to classified information up to and including Secret is anticipated. All necessary security measures will be followed, and will be identified on the ATIP DD form 254 should a procurement take place.

## **3.0 REQUESTED INFORMATION**

### **3.1 Response Content**

Interested parties are required to respond in writing to each of the items below with a white paper:

1. Indicate your company's business size, socio-economic status and the extent for which your company can include Small Business, Small Disadvantaged Business, HUBZone Small Business, Women-owned, Veteran-owned, or 8(a) participation in any potential resulting procurement. The small business size standard is 500 Employees.
2. Indicate whether your company has the capability to execute all the ATIP program requirements within the scope of the draft SOW and ATIP specifications and if not, describe your company's approach to satisfy all the ATIP program requirements.
3. Describe recent experience in the following areas:
  - a. Development of embedded, real-time software applications in accordance with the software management provisions identified in the ATIP SOW.
  - b. Development of hardware/Field Programmable Gate Array (FPGA) functions and their integration within an embedded system.
  - c. Development, COTS utilization, packaging, integration, and qualification of hardware needed to meet the environmental requirements identified in the ATIP overall specification.
  - d. Software/hardware integration and test of a system and within a system of systems.
  - e. Implementation of Layer-2 bridging of IP packets including TDMA media access control and Quality of Service (QoS) over SATCOM links.
  - f. Implementation of IA controls to support meeting the requirements of the DoDI 8500.2 similar to the requirements identified in the ATIP SOW and specification.
  - g. Integrating systems with DoD Type 1 serial encryptors and your company's capability to handle COMSEC equipment and material.
  - h. Design and implementation of graphical user interfaces as a means to configure, control, monitor, and trouble-shoot a system implementation, accessed via a web browser.
4. Identify your company's experience with software development management and sustainment in accordance with the ATIP SOW.
5. Describe your company's approach and tools for requirements allocation and management.
6. Provide recommendations where appropriate regarding any suggested modification of the draft SOW and/or draft ATIP system specification requirements.

7. Describe the methods which your company has used to control costs on past comparable software development-intensive Government procurement efforts.

#### **4.0 RESPONSE SUBMITTAL**

**4.1** White papers in Microsoft Word for Office 2003-compatible format, no more than twenty (20) pages, with a font no smaller than 10 pt. Times New Roman are due no later than **21** April 2011, 1400 Pacific Standard Time (PST). Responses shall be submitted to the SPAWAR e-Commerce Central website at <https://e-commerce.spawar.navy.mil>. See the SPAWAR e-Commerce website for instructions on how to submit responses. Proprietary information shall not be included in this submittal. Please be advised that all submissions become Government property and will not be returned.

PEO C4I PMW/A 170 intend to have the following support contractors assist in the handling, reviewing and processing of white papers: Booz Allen Hamilton, LinQuest, SAIC, Califia Technologies, and TCI. These listed contractors have executed agreements not to submit a response to this RFI. By submittal of the white paper, the respondent agrees to indemnify and hold harmless the Government, its agents, and employees from every claim or liability, including attorneys fees, court costs, and expenses, arising out of, or in any way related to, the misuse or unauthorized modification, reproduction, release, display, or disclosure of any information provided by the respondent to the Government which includes the white paper submittal. If the responder chooses not to allow one or more of the above companies review their submission in response to this RFI, Section 1 of the response shall either (a) clearly indicate which of the above companies shall be prohibited from review, or (b) state that review is limited to Government employees only (see Section 4.2.1.2 below).

**4.2** The white paper shall be comprised of two (2) sections.

**4.2.1** Section 1 shall provide administrative information and shall include, at a minimum, the following information, without page limitations:

**4.2.1.1** Name, mailing address, overnight delivery address (if different from mailing address), phone number, fax number, e-mail address of designated point of contact, Cage Code, and DUNS number.

**4.2.1.2** If applicable, a statement excluding the Government support contractors identified in paragraph 4.1 from reviewing the company's submittals as specified in section 4.1. In the absence of such a statement, the Government will assume that the respondent DOES agree to the release of the information included in the response/submission to Government support contractors.

**4.2.1.3** Business type (i.e., large business, small business, small disadvantaged business, 8(a)-certified small disadvantaged business, HUBZone small business, woman-owned small business, veteran-owned small business, service-disabled veteran-owned small business) based upon North American Industry Classification System (NAICS) code 541512 Computer Systems Design Services. Please refer to Federal Acquisition Regulation (FAR) Part 19 for additional detailed information on Small Business Size Standards. The FAR is available at <http://www.acquisition.gov/comp/far/index.html>.

**4.2.2** Section 2 of the white paper shall provide the information requested in Section 3.1 of this RFI and is limited to twenty (20) pages as specified in Section 3.1.

#### **5.0 INDUSTRY EXCHANGES**

Government representatives may or may not choose to meet with potential responders in order to perform Market Research. Such exchanges, should they occur, would be solely for the purpose of obtaining further clarification of industry's potential capabilities and lessons learned (especially with respect to any development and certification risks), and to enhance the Government's ability to obtain services at reasonable prices, and increase efficiency in proposal preparation, proposal evaluation, negotiation, and contract award.