

Sources Sought Notice for Submarine Skills – Training Network (SubSkillsNet) / Virtual Interactive Shipboard Instructional Tour (VISIT)

INTRODUCTION

The Naval Air Warfare Center, Training Systems Division (NAWCTSD), Orlando FL, Undersea Program Directorate is seeking potential sources with the ability to provide the development of training software products simulations, training systems, training data products, training software configuration management, and lifecycle support for the Submarine Skills-training Network (SubSkillsNet)/Virtual Interactive Shipboard Instructional Tour (VISIT). These products and capabilities primarily support requirements originated by Naval Sea Systems Command, Undersea Warfare (SEA 07TR) and Submarine Sensor Systems Program Office (PMS 435).

This is a SOURCES SOUGHT TECHNICAL DESCRIPTION to determine the availability and technical capability of businesses to provide the required products. The responses to this Sources Sought will be used to determine if the procurement will be set-aside for a small business category.

PLACE OF PERFORMANCE

98% of the effort is to be performed at a Government site with the majority (about 95%) of the work being at NAWCTSD, De Florez building, located at 12350 Research Parkway, Orlando, Florida and about 3% at other Government sites; and about 2% at other non-Government sites as specified by the Government.

DISCLAIMER

THIS SOURCES SOUGHT IS FOR INFORMATIONAL PURPOSES ONLY. THIS IS NOT A REQUEST FOR PROPOSAL. IT DOES NOT CONSTITUTE A SOLICITATION AND SHALL NOT BE CONSTRUED AS A COMMITMENT BY THE GOVERNMENT. RESPONSES IN ANY FORM ARE NOT OFFERS AND THE GOVERNMENT IS UNDER NO OBLIGATION TO AWARD A CONTRACT AS A RESULT OF THIS ANNOUNCEMENT. NO FUNDS ARE AVAILABLE TO PAY FOR PREPARATION OF RESPONSES TO THIS ANNOUNCEMENT. ANY INFORMATION SUBMITTED BY RESPONDENTS TO THIS TECHNICAL DESCRIPTION IS STRICTLY VOLUNTARY.

CONTRACT/PROGRAM BACKGROUND

1. Current contract number is N61340-12-D-0007, a single source Indefinite Delivery Contract (IDC) for (mainly) software related products, still photography, graphics, and 2D and 3D modeling.
2. Contract type: Firm Fixed Price (FFP).
3. Incumbent contractor: Technical Support Services JV.
4. A total of 17 delivery orders from three (3) basic contracts have been issued over the last four (4) years since 2008 totalling approximately \$6.2 million. The procurements have been made to meet planned and emergent requirements.

NAWCTSD (SUBSKILLSNET-VISIT team) has been tasked to procure a full range of modeling and simulation; design; development; production; modification; documentation; test and evaluation; delivery; upgrading, and life cycle support of training systems software products for various customers. NAWCTSD's SUBSKILLSNET-VISIT suite consists of both software and hardware components that are primarily focused on submarine navigation and photo-centric virtual tour training systems for a variety of

platform types. Their development has included creation of entirely new products and components as well as incremental capability improvements as required by customers. Most of the work consists of development of software in the NAWCTSD laboratory; however several tasks also involve travel to other Government sites to support requirements clarification, integration, testing and delivery activities. Most of the travel is planned in advance, however emergent issues from time-to-time have required responsive unplanned travel (e.g., as for correction of trainer malfunctions). Occasionally, the team receives tasking to rapidly develop or expand the SubSkillsNet-VISIT product-line capabilities that requires a re-ordering of priorities and work-item delivery schedules.

SUBSKILLSNET consists of a set of networked software applications that include, but are not limited to, the following workstation simulations: Radars, Fathometers, Electrically Suspended Gyro Navigator displays, Ring Laser Gyro Navigator displays, Global Positioning System, sonar control displays, dynamic bridge view, optical periscopes and photonics imaging systems, AIS systems, Contact Evaluation Plot, and Ship's Data Displays. Additionally, SUBSKILLSNET includes a set of networked software applications that provide instructional capabilities consisting of: a scenario authoring tool, an environment authoring tool, a runtime scenario control application, an instructional exercise set-up and control tool, and a student performance monitoring and feedback display system. SUBSKILLSNET also includes software interfaces to several external simulations, commercial navigation-related systems, and tactical trainers. The work to be executed under this contract will require the development of software products including additional simulations, displays, software interfaces, instructional media, and other functional capabilities. The newly developed products shall be required to run within the existing network of training products and shall re-use existing software, libraries, databases, and data to the maximal extent. VISIT consists of software capabilities that enable the display of spherical photographs, linking of the spherical photographs to the existing virtual tour software platform (so that they may be navigated by a user), linking of instructional media throughout the tours, and spatial location and multiple choice test authoring and presentation capabilities. VISIT also consists of the software tools required to create and edit new tours. The current set of virtual tours includes a variety of military platforms. The work to be executed under this contract will require the development of additional functional capabilities of the virtual tour software and the development of virtual tours for additional platforms. Software development requirements such as product testing, hardware and software integration, hardware and software installation, and Contractor personnel travel, are some of the software applications that will be required under the IDC, which will be directed by funding sponsors. The list of software applications and supporting work above is not all-inclusive and additional primary and supporting requirements will be identified. NAWCTSD anticipates that all future SUBSKILLSNET and VISIT requirements for new training device software and trainer software modifications will be placed under the resulting IDC.

REQUIRED TECHNICAL CAPABILITIES

The contractor shall utilize Government Furnished Equipment (GFE), Government Furnished Property (GFP), and laboratory facilities (e.g., workspaces, desks, computer workstations) on NAWCTSD (Orlando) premises to accomplish the project development and maintenance objectives. The SUBSKILLSNET Software Suite requires a contractor with the following capabilities in order to be able to develop the required software items. These are not in order of importance or priority.

1. Planning, Process and Maintenance-related Capabilities
 - a. Demonstrated analysis, derivation, and documentation of system (including software and hardware components) functional requirements.
 - b. Execution of software and documentation configuration management practices and procedures scaled to support small team processes (e.g., iSETR, CMMI, Agile).
 - c. Demonstrated implementation of software development process improvement practices to support small-team software development efforts.

- d. Demonstrated authoring of training scripts and content, trainer support documents, technical manuals, and psychological and training research technical documents.
 - e. Planning and support of facility site surveys, site preparation, software and hardware integration (with COTS, GOTS, other simulation-based trainers and tactical systems), installation, delivery and on-site testing.
 - f. Demonstrated planning, implementation and maintenance of Information Assurance practices (IA) in accordance with DoD/Navy/NAVAIR directives.
 - g. Demonstrated provision of lifecycle support of training systems and training data products.
 - h. Provide administrative support sufficient to minimize administrative activities executed by training development personnel (e.g., software developers, graphic and 3D model developers).
 - i. Demonstrated development and execution of software tests, evaluations and corresponding documentation.
2. Software Development-related Capabilities
 - a. Demonstrated design and development of Microsoft Windows software applications and capabilities to meet identified requirements using Win32 API (including EWin, an open-source C++ class library), tools (including Microsoft Team Foundation System and Visual Studio) and existing SubSkillsNet libraries.
 - b. Extension and improvement of the Naiad simulation and networking library used to share simulation data among SubSkillsNet client applications.
 - c. Leveraging and re-use of existing SubSkillsNet library to develop new capabilities or to expand existing capabilities of required products.
 - d. Demonstrated design and development of networked, real-time workstation simulations and offline and real-time instructor control tools.
 - e. Demonstrated design, development and performance tuning of real-time interactive 3D applications (e.g., bridge or periscope) using the Microsoft Direct3D API.
 - f. Demonstrated design and development of database processing software for products including, Vector Product Format, Digital Nautical Chart, Tactical Ocean Data, Digital Terrain Elevation Data, and others.
 - g. Demonstrated design and development of photograph-based virtual tour training systems.
 - h. Providing Image Generation, using SubSkillsNet's IG capabilities, to external tactical and simulation systems.
 - i. Development and maintenance of software interfaces to external tactical equipment or third party simulations.
 3. Modeling, Graphics and Media Development-related Capabilities
 - a. Demonstrated production of Multimedia and video for training systems using Adobe Creative Suite CS6.
 - b. Demonstrated development of 3D models and 2D rendered graphics using 3D Studio Max.
 - c. Demonstrated production of state of the art still photography and videography, using digital media, to support training systems development.
 - d. Demonstrated design and development of photograph-based virtual tour training systems
 4. Research-related Capabilities
 - a. Substantive contribution to execution of research, including software support of research testbeds or data collection analysis and reporting to support development and enhancement of training systems.
 5. Tactical Knowledge-related Capabilities
 - a. Demonstrated technical knowledge of submarine tactical systems and familiarity with related technical documentation.
 - b. Technical knowledge of Navy mariner skills related to navigation, piloting and contact management.

- c. Technical knowledge of unmanned aerial systems training.

BUSINESS DESCRIPTIONS

Responses to this notice should include a narrative identifying the scope of the past and present (within the last 3 years), relevant experience on similar contracts (including dollar value, complexity and point of contact), and a concise capabilities statement addressing items 1 through 5 of the REQUIRED TECHNICAL CAPABILITIES above. The following shall also be included in the business description:

1. Identify your company's business size. Identify any small business certifications your company presently holds.
2. Indicate if your company is interested in being a prime contractor or a subcontractor.
3. Describe any teaming or joint venture arrangement your company would pursue to meet the TECHNICAL DESCRIPTION.
4. Registration into the System for Award Management (SAM) website is required. Please go to <https://www.acquisition.gov/> to review the functions the SAM website provides. The SAM website is located at <https://www.sam.gov/portal/public/SAM/>.

SPECIAL REQUIREMENTS

Any resulting contract is anticipated to be compliant with the following:

1. The Clinger-Cohen Act (for IT)
2. Personnel and Facility Security Clearances
 - a. All personnel are required to maintain a Secret clearance during the performance of the contract
 - b. Systems Administrators are required to have successfully completed a recent single scope background investigation (SSBI), Windows7 or Windows7 Server training (operating system that will be used), and Security Plus training .

ELIGIBILITY

The applicable NAICS code for this requirement is 541511, Custom Computer Programming Services. The Product Service Code (PSC) is 6910 Training Devices.

SUBMISSION DETAILS

1. Electronic responses must be submitted to Ricardo.L.Elias@navy.mil no later than 4:30 p.m. Eastern Standard Time on 14-DEC-2012.
2. A brief capabilities statement package (no more than fifteen (15) 8.5 X 11 inch pages and Times New Roman Font 12 point) demonstrating the ability to meet the Required Capabilities and Business Description.
3. All responses shall include the company name, address and CAGE CODE. The response shall also include the point-of-contact (POC) including name, phone number and e-mail address.
4. Information and materials submitted in response to this request WILL NOT be returned.
5. **NO PHONE OR E-MAIL SOLICITATIONS** with regards to the status of any resulting RFP will be accepted prior to its release. All activity concerning this procurement shall be posted to FEDBIZOPS.

ACRONYM LIST

2D.....	Two-Dimensional
3D.....	Three-Dimensional
AIS	Automatic Identification System
API	Application Programming Interface
CAGE.....	Commercial and Government Entity
CMMI	Capability Maturity Model Integration
COTS	Commercial Off The Shelf
DOD.....	Department of Defense
FFP	Firm Fixed Price
GFE.....	Government Furnished Equipment
GFP	Government Furnished Property
GOTS	Government Off The Shelf
IA	Information Assurance
IAW.....	In Accordance With
IT.....	Information Technology
NAICS.....	North American Industry Classification System
NAVAIR.....	Naval Air Systems Command
NAWCTSD.....	Naval Air Warfare Center Training Systems Division
POC.....	Point of Contact
PSC	Product Service Code
RFP	Request for Proposals
SAM.....	System Award Management
SubSkillsNet	Submarine Skills-training Network
VISIT	Virtual Interactive Shipboard Instructional Tour