



DEPARTMENT OF THE NAVY

NAVAL SEA SYSTEMS COMMAND
1333 ISAAC HULL AVE SE
WASHINGTON NAVY YARD DC 20376-0001

IN REPLY TO:

J&A Number: 40,851
Code: SEA 02413C
PR#: N00024-11-NR-52021

CLASS JUSTIFICATION AND APPROVAL FOR USE OF OTHER THAN FULL AND OPEN COMPETITION

1. Contracting Activity

The Naval Sea Systems Command, Fleet Support Contracts Division, SEA 024.

2. Description of the Action Being Approved

To execute a Basic Ordering Agreement (BOA), and award subsequent orders pursuant to this BOA, on a sole source basis to support the development, application, and implementation of an Automated Test and Re-Test (ATRT) capability across NAVSEA-affiliated acquisition and certification programs to Innovative Defense Technologies (IDT), 4401 Wilson Blvd., Suite 810, Arlington, VA 22203-4195. This award is a follow-on agreement to an existing Small Business Innovative Research (SBIR) Phase III Indefinite Delivery/ Indefinite Quantity (IDIQ) contract, NAVSEA Contract #N00178-07-D-2006, under Topic No. N05-163, *Tools for Rapid Insertion or Adaptation of Combat System Capabilities*. Authority to act under this Class Justification and Approval (J&A) expires 31 December 2016.

3. Description of Supplies/Services

The contractor shall expand, evolve, implement, and furnish ATRT technology previously developed under SBIR Topic N05-163 (Phases I, II, and III) to provide an automated software testing capability that is independent of operating system, technology, or software development code. The capability shall leverage commercial automated testing "best practices and tools" for use in NAVSEA programs to achieve a reduction in overall system development and integration costs, maintain or improve system product quality, and shorten system certification timeframes. The re-test capability, through early regression testing during government acceptance and developmental testing, is the primary enabler to support rapid insertion of new combat system functionality to existing software baselines or builds.

ATRT includes a common automated testing framework comprised of re-usable software tools. Also, the ATRT tool suite provides automated test procedures, test inputs, and test results suitable for use by third parties not associated with the development of the component or system. ATRT is designed so one can introduce the capability at any verification phase of a program and apply as much or as little of the testing as desired. The ATRT capability will be able to utilize the existing system interface of the system

under test and provide cost savings proportional to the current costs of the target test processes which the program desires to automate.

Budgeted funds anticipated to be received for the work described above will include the RDT&E,N appropriation category but may include other appropriation categories. The table below shows the estimated funding break down.

Estimated Funding (\$M)

	<u>FY11</u>	<u>FY12</u>	<u>FY13</u>	<u>FY14</u>	<u>FY15</u>	<u>FY16</u>	<u>Total</u>
<u>RDT&E, N</u>	<u>0.25</u>	<u>10.07</u>	<u>10.28</u>	<u>10.40</u>	<u>8.55</u>	<u>8.60</u>	<u>48.15</u>
OPN							
O&MN							
SCN							
<u>TOTAL</u>	<u>0.25</u>	<u>10.07</u>	<u>10.28</u>	<u>10.40</u>	<u>8.55</u>	<u>8.60</u>	<u>48.15</u>

FY 2011 – 2016

The first order under this Basic Ordering Agreement will serve to apply automation to the maintenance tests and procedures that are conducted shipboard for AEGIS and AEGIS Ballistic Missile Defense (BMD) on in-service fleet surface ships. Initial focus will be on the application of ATRT to the Operability of Overall Combat System (OCSOT) maintenance procedures that are in use by the Fleet today.

4. Statutory Authority Permitting Other Than Full and Open Competition

10 U.S.C. § 2304(c)(5), as authorized or required by statute, 15 U.S.C. § 638(r).

5. Rationale Justifying Use of Cited Statutory Authority

It is appropriate for the procurement described above to use other than full and open competition because, in accordance with the Federal Acquisition Regulation (FAR) 6.302-5, this proposed SBIR Phase III BOA is for work that derives from, extends, or logically concludes effort(s) regarding SBIR Topic N05-163 performed under prior SBIR funding agreements and is authorized under 15 U.S.C. § 638(r). IDT was competitively awarded an SBIR Phase I contract (N00014-06-M-0046) under SBIR Topic N05-163 titled *Tools for Rapid Insertion or Adaptation of Combat System Capabilities*. The topic supported the design, development, and demonstration of methodologies and tools that will enable rapid insertion of innovative and advanced C2 (command and control) and combat system technologies into the complex open-architecture framework of existing combat systems for naval tactical and surveillance operations. In response, IDT proposed the development of Automated Test and Re-test (ATRT) software for combat systems by way of a proposal titled *“The Innovative Application of Commercial Automated Testing Tools for Rapid Insertion or Adaptation of Combat System Capabilities.”*

IDT was one of 4 selectees to proceed to SBIR Phase I for Topic N05-163. Under the Phase I contract (N00014-06-M-0046), IDT developed and demonstrated working ATRT prototype methodologies to enable the desired rapid insertion of innovative and advanced command, control, and combat system technologies into complex operations in the timeframes needed to address rapidly emerging threats. The prototype ATRT configuration was demonstrated with a sample application and benchmarked a 90% time savings gained from automation over manual testing. This proved that the ATRT concept was feasible and offered high payoff in reducing delivery time for Navy applications. IDT also developed validation criteria and approaches, as well as milestones, for a Phase II award.

IDT was one of 2 selectees to proceed to SBIR Phase II for Topic N05-163. Under the Phase II contract (N00178-07-C-3026), IDT implemented the tools and methodologies from the Phase I prototype and demonstrated the technology for rapid testing of new combat system capability with the Ship Self Defense System (SSDS) and Single Integrated Air Picture (SIAP) programs. The result of this work was the implementation and further development of an automated test and analysis capability to meet objectives of SBIR Topic N05-163 by reducing testing and certification timeframes for new combat systems capabilities.

IDT was selected by the Naval Sea Systems Command (NAVSEA) to proceed to SBIR Phase III under contract (N00178-07-D-2007) to apply ATRT technology in programs across the NAVSEA surface, undersea, littoral, and mine warfare domains. IDT's SBIR Phase III work has enabled implementation of the ATRT capability to the AEGIS warfare system, Littoral Combat Ship (LCS) Mission Modules (MM), BYG-1 Submarine Combat System, and Virginia-class Submarine. All work has resulted in extending the ATRT capability and demonstrating the ability, across the NAVSEA warfare domains, to meet objectives from SBIR Topic N05-163 to enable rapid insertion of combat system capability. IDT will continue to support the Navy and prime contractors with the continued implementation of successful automated test and analysis approaches to ongoing program developments.

The establishment of this BOA will use the prototype products, processes, and methodologies developed by IDT under all of the SBIR Phase I, II, and III efforts described above. The procurement of the development efforts from IDT covered by this justification is consistent with 15 U.S.C. § 638(r). IDT is entitled to special acquisition preference, which includes sole source award, for the development of the technology described above. In addition, under the SBIR program, the Government may not release or disclose SBIR data to any persons other than its support services contractors during the period commencing with contract award and ending five years after completion of the project under which the SBIR data was generated.

6. Description of Efforts Made to Solicit Offers from as Many Offerors as Practicable

Not required per FAR 5.202(a) (7), as the proposed SBIR Phase III BOA action results from acceptance of a proposal under the Small Business Innovation Development Act of 1982.

Market research was not conducted because it is not practical to establish further competition for the reasons stated in the paragraph 5.

7. Determination of Fair and Reasonable Cost

The Contracting Officer has determined that the anticipated cost to the Government for the services covered by the J&A is fair and reasonable.

8. Actions to Remove Barriers to Future Competition

For the reasons set forth in Paragraph 5, the Naval Sea Systems Command, Fleet Support Contracts Division (SEA 02) has no plans at this time to compete future contracts for the types of supplies/services covered by this document. If another potential source emerges, the Naval Sea Systems Command, Fleet Support Contracts Division (SEA 024), will assess whether competition for future requirements is feasible.

CERTIFICATIONS AND APPROVAL

TECHNICAL/REQUIREMENTS CERTIFICATION (FAR 6.303-2(b))

I certify that the facts and representations under my cognizance, which are included in this justification and its supporting acquisition planning data, including Acquisition Plan No. 11-012 dated 15 August 2011, except as noted herein, are complete and accurate to the best of my knowledge and belief.

COMBINED TECHNICAL AND REQUIREMENTS COGNIZANCE:

	<u>ANURAG KATIYAR SEA 05H3, ATRT PM</u>	<u>202-781-5205</u>	<u>20 sep 2011</u>
Signature	Name (Print) and Title (Code)	Phone No.	Date

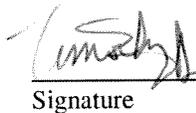
LEGAL SUFFICIENCY REVIEW (NMCAG 5206.303(90))

I have determined this justification is legally sufficient.

	<u>Jonathan D. Zischkau SEA 00L Associate Counsel</u>	<u>202-781-4414</u>	<u>9/20/2011</u>
Signature	Name (Print) and Title (Code)	Phone No.	Date

CONTRACTING OFFICER CERTIFICATION (FAR 6.303-2(a)(12))

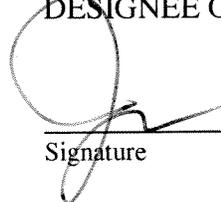
I certify that this justification is accurate and complete to the best of my knowledge and belief.

	<u>Timothy A. Starker 02425</u>	<u>(202) 781-3944</u>	<u>9/20/11</u>
Signature	Name (Print) and Title (Code)	Phone No.	Date

APPROVAL BLOCK (FAR 6.304 for Approving Official)

Upon the basis of the above justification, I hereby approve, as Designee of the Head of the Procuring Activity, the solicitation of the proposed procurement(s) described herein using other than full and open competition, pursuant to the authority of 10 U.S.C. 2304(c)(5).

DESIGNEE OF THE HEAD OF THE PROCURING ACTIVITY

	<u>Jerome Ponder 02</u>	<u>213915</u>	<u>9/21/11</u>
Signature	Name (Print) and Title (Code)	Phone No.	Date