



DEPARTMENT OF THE NAVY
NAVAL AIR WARFARE CENTER WEAPONS DIVISION
1 ADMINISTRATION CIRCLE 575 1 AVENUE SUITE 1
CHINA LAKE, CA 93042-8100 POINT MUGU, CA 93042-8049

IN REPLY REFER TO:
J&A_11_2947

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

1. Contracting Activity.

Naval Air Warfare Center Weapons Division (NAWC-WD) - China Lake, CA

2. Description of the Action Being Approved.

This justification and approval authorizes the award of a Cost Plus Fixed Fee (CPFF), Level of Effort (LOE) contract for a three (3) year period to ComGlobal Systems, Inc., a wholly owned subsidiary of QinetiQ North America, Inc. (QNA) for systems engineering activities related to the Navy's full-spectrum Research, Development Test and Evaluation (RDT&E) and In-service Engineering Center for Aegis Ballistic Missile Defense (BMD) and Theater High Altitude Area Defense (THAAD) Programs in support of Integrated Systems Evaluation, Experimentation and Test Department, Weapons Evaluation Division (5.1) and Naval Air Warfare Center Weapons Division (NAWCWD), Point Mugu, CA.

3. Description of Supplies/Services.

The proposed contract is for range surveillance using the Intelligence Situation Awareness Tool (ISAT) to provide situational awareness; Systems Engineering Support; Systems Integration including ISAT Software Updates and maintenance to the internal source code and Installation on the TCIP; Mission Support including Pre-Test Site Surveys; Test Planning Support including test Monitoring and Real-Time Mission Support to improve range safety during missile intercept tests; Training; Management Support; and Reporting. The contractor shall provide the most current build of the ISAT, load into the system, ensure communications are working and deliver reports containing the results of missions. The estimated value of this acquisition is \$3,580,191. This acquisition will be funded with FY12 through FY15 (b)(2)High

See Appendix A for Estimated Dollar Value

4. Statutory Authority Permitting Other Than Full and Open Competition.

10 U.S.C. 2304(c)(1), Only one responsible source and no other supplies or services will satisfy agency requirements.

5. Rationale Justifying Use of Cited Statutory Authority.

The ISAT software currently being utilized in the Pacific Missile Range Facility (PMRF) Battle Management Interoperability Center (BMIC) in support of Aegis BMD Flight Test Mission conduct focuses on providing PMRF Range Safety Officer critical surveillance information in order to conduct these missions safely. It

was developed by ComGlobal Systems, Inc., a wholly owned subsidiary of QinetiQ North America, Inc. (QNA). The ISAT source code is proprietary to QNA. The ISAT software source code has embedded algorithms that enable ISAT to have the functionality to perform the unique, real time processing tasks of reading multiple, various formatted sensor information data sources that contain positional information on contact reports. These reports are then utilized to generate a high confidence contact track that can be displayed in real time with positional information in hazard/keep out range safety areas in support of these critical surveillance tasks missions. The ISAT software and source code/algorithms have been validated, tested, and used to support range safety at the PMRF during a variety of missile tests held over the past 10 years. The ISAT software receives, reads, and processes contact report data from multiple formatted Navy and US Coast Guard sensor information sources. Due to the amount of current systems the ISAT integrates with in order to provide the mission/positional data, it is cost prohibitive to the Government to update or change. The positional information data is correlated and fused using the ComGlobal Systems, Inc. algorithms to produce a coherent ocean surveillance picture in a wide maritime area (~ 1000 nautical miles) around PMRF. This information is used to determine if vessels are violating the Notices to Mariners (NOTMAR) areas before each flight test mission to develop tracks and to project the positions of critical surface contacts in hazard areas. ISAT provides a variety of unique and proprietary tools coordinating range surveillance with the P-3 or HC-130 aircraft by providing cueing information to help aircraft locate vessels in the hazard areas. The analysis and display tools available in ISAT are used to create an accurate maritime picture, predict movement and location of vessels in the test area, and provide an audible alarm when vessels cross into or remain in the hazard areas. All data processed by ISAT is archived and can be re-played to perform post-mission analysis. Queries can be executed to retrieve track details or reconstruct the entire PMRF range status for any given time. The validated ISAT algorithms that are part of the proprietary ISAT software have been in development over the past twelve years, and have been utilized at PMRF, enabling over 80 target/missile launches to be conducted safely without incidents, harm or injury to ships/aircraft or humans. The Government has not paid for the development of the ISAT software or any of the updates to the software. The updates to the software are provided to the Government on a classified CD and are compiled in the ISAT with the most current software at the PMRF. The updates to the software are due to changes in the format and are required by specific National Strategic Government Facilities. The proprietary ISAT software is the only tool on the market that can support the PMRF Range Safety Mission requirements. ComGlobal Systems, Inc. is the developer of the ISAT software and maintains the only complete source code baseline. ComGlobal Systems, Inc. employs experts in the data content from the Integrated Broadcast System (IBS), Officer in Tactical Command Information Exchange System (OTCIXS), and Automated Identification System (AIS) broadcasts, as well as in the network protocols and communications connectivity necessary to receive the broadcasts. As the data content on the broadcasts changes over time, ComGlobal Systems, Inc. is funded by a number of Department of Defense Programs and other sources to evaluate the impact of the changes and enhance the ISAT software to maintain the correct processing. ComGlobal Systems, Inc. can duplicate the situational awareness capabilities of the BMIC at its facility in Campbell, CA. The identical classified and unclassified data sources that are received in the BMIC are also accessible at ComGlobal Systems, Inc. This allows them to serve as a backup to the BMIC and conduct range surveillance remotely if the BMIC is unable to receive data or is non-operational. If ComGlobal were willing to sell the Government the ISAT Software tool, it would cost approximately ^{(p)(2)High} The Government does not have the additional funding to purchase the data rights or the resources to take over the upgrades and maintenance.

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

Ongoing market research is being conducted through surveys, conferences, symposiums and meetings, such as the Signal Intelligence (SIGINT) Working Group meeting in December 2009, the Joint Intelligence Operations Center (JIOC) U.S. Pacific Command (PACOM) Meeting in December 2009, the Hawaii Security Operation Center (HSOC)/PACOM meeting in December 2009, the U.S. Pacific Command Electronics Intelligence Conference (PACOM ELINT Conference) in March 2010, the U.S. Pacific Command, Pearl Harbor, Hawaii, Intelligence, Surveillance, and Reconnaissance Conference, U.S. Pacific Command (USPACCOM ISR Conference) in April 2010, the Integrated Broadcast Service Common Message Format (IBS CMF) Technical Exchange meeting in June 2010, and the Integrated Broadcast Service (IBS) Stakeholders meeting in October 2010. This market research also includes reviews of published technical literature, obtaining information through competitive procurements in related technical areas, and discussions with several experts in the field. Based on this market research, the Government has confirmed that ComGlobal Systems, Inc. developed the ISAT and TCIP software and maintains the only complete and proprietary source code baselines. At this time, the Government has not been able to identify a source with similar situational awareness technological capabilities. As a result of this market research the Government has determined that a competitive environment does not exist and that ComGlobal Systems, Inc. is the only source who can provide the service.

7. Determination of Fair and Reasonable Cost.

In accordance with FAR Part 15.402, the Contracting Officer will ensure that all supplies and services provided under this contract are procured at a fair and reasonable price. The contractor will submit a cost proposal with certified cost and pricing data and sufficient information to support the accuracy and reliability of the estimate. ComGlobal's proposal will be reviewed by experienced technical analysts, cost analysts and contract specialists with the aid of necessary field pricing support. The contracting officer will utilize cost and price analysis as the basis for negotiating a fair and reasonable price.

8. Actions to Remove Barriers to Future Competition.

If a follow-on procurement is required, further market research will be conducted to determine if any other vendors can provide a situational awareness tool with comparable capabilities. Competitors would be identified and investigated to determine the applicability of comparable products to meet the unique set of requirements imposed by range safety and test asset identification and geo-spatial location requirements specific to each Ballistic Missile Defense test mission.

Appendix A

Estimated Dollar Value in Thousands

	FY12	FY13	FY14	FY15	FY16	FY17	FY18	Total
		(b)(2)High						
	(b)(2)High							
Total	(b)(2)High			0	0	0	0	\$ 3580k