

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>		1. CONTRACT ID CODE	PAGE OF PAGES 1 7
2. AMENDMENT/MODIFICATION NO. A0006	3. EFFECTIVE DATE 08/23/01	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)
6. ISSUED BY COMMANDANT (G-ACS-4/CEM) U.S. COAST GUARD 2100 SECOND STREET, SW WASHINGTON, DC 20593-0001		7. ADMINISTERED BY (If other than Item 6)	CODE
8. NAME AND ADDRESS OF CONTRACTOR (No. Street, county, State and ZIP+ Code)		(4)	9A. AMENDMENT OF SOLICITATION NO. DTCG23-01-R-D0001
			9B. DATED (SEE ITEM 11) 6/29/01
			10A. MODIFICATION OF CONTRACT/ORDER NO.
			10B. DATED (SEE ITEM 13)
CODE	FACILITY CODE		

**11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS**

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers  is extended,  is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:

(a) By completing Items 8 and 15, and returning one (1) copy of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATA SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and data specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

**13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.**

(4)	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER Specify type of modification and authority

E. IMPORTANT: Contractor  is not,  is required to sign this document and return \_\_\_ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

See the attached replacement pages.

END BLOCK 14

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) CATHERINE A. MARTINDALE	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA BY  (Signature of Contracting Officer)	16C. DATE SIGNED 08/23/01
(Signature of person authorized to sign)			

information assurance properties of the proposed IDS C4ISR systems and modification to legacy systems.

2.6.3 DATA INTEGRATION AND FUSION

The C4ISR Architecture Plan shall describe the Contractor’s approach to data fusion. Where appropriate, data will be seamlessly integrated from disparate sources (sensors, computational reports, user goals, and fusion engines) at the lowest possible level so that differences in resolution and coverage treatment of a theme, character, and artifacts of data collection methods are eliminated. Sufficient data shall be consolidated or fused with minimal watchstander/operator intervention so as to enable the creation of common operational and tactical pictures, as well as common logistics and administrative information. Where appropriate, information from sensors, subsystems, asset or application components should be distributed and re-used in a modular, integrated manner to eliminate redundant or stovepipe architectures.

2.6.4 INTEROPERABILITY

The C4ISR Architecture Plan shall describe the Contractor’s approach for creating C4ISR System Interoperability Performance Objectives, compliance goals, standards, and benchmarks to be employed. Where applicable, the plan shall address levels of compliance with the Coast Guard Common Operating Environment (CG COE), the Defense Information Infrastructure Common Operating Environment (DII COE), the National Information Infrastructure (NII), the Global Information Infrastructure and Grid (GII and GIG), and the Navy’s IT-21 architecture. It is stressed that IDS Command and Control (C2) systems shall be DII COE compliant to the maximum level possible while ensuring interoperability with other Coast Guard and other Government agency systems. The Contractor shall specify the level of DII COE compliance for each proposed IDS C2 system in the system design documentation and provide a summary at the technical reviews. If the Contractor specifies a C2 system that is below DII COE level 5 compliance, Contractor shall explain the performance and cost tradeoffs made in selecting the specified solution vice using existing GOTS/COTS level 5+ compliant systems with newly developed software.

The Contractor shall pursue interoperable, integrated, and cost-effective business practices and capabilities with respect to IT as required by the Information Technology Management Reform Act (ITMRA), also known as the Clinger-Cohen Act of 1996 and the Government Performance and Results Act of 1993 (GPRA). The Contractor shall identify a method or tool to measure interoperability between agencies, assets, systems, and subassemblies. The results of the testing will be provided to the government for review.

To facilitate defining required levels of interoperability, the Contractor shall define a system’s roles, missions, high-level operational concepts, operational architectures, types and attributes of information needed, interfaces and information exchanges. For each external interface, the Contractor shall provide information regarding Activities, organizations, or activities involved; networks or other means used to exchange information; transmission types (i.e. Landline, line-of-sight (LOS) communications, satellite communications); communication needs (spectrum certification, bandwidth requirements, supportability); databases and software; and critical interfaces.

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Specific IERs should be identified using the OV-3 (Operational Information Exchange Matrix).

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### 2.6.5 RADIO FREQUENCY SPECTRUM MANAGEMENT

As part of the C4ISR Architecture management process, the Contractor shall address Radio Frequency (RF) spectrum management including use of the RF spectrum and forecasting additional needed RF spectrum capacity. The C4ISR Architecture Plan shall identify any C4ISR system that will require new Coast Guard authorization to transmit in the RF spectrum. The Contractor shall begin to consider frequency management when preparing the C4ISR architectures, early in the asset development life-cycle, due to the 2-4 year lead time for spectrum authorization requests. The Contractor shall process on behalf of the Government necessary requests for RF spectrum additions or modifications required for implementation of the IDS.

### 2.6.6 NETWORK AND BANDWIDTH MANAGEMENT

Considering the Government's information technology implementation and migration strategy, the Contractor shall implement as part of the C4ISR Architecture Plan a methodology to manage applicable Coast Guard's Deepwater networks, computer systems, databases, legacy data migration, and other computer resources and support facilities. The Contractor shall provide processes and plans to manage the Coast Guard's Deepwater bandwidth requirements and cost drivers associated with necessary technology improvements to the network, computer systems, and related technology infrastructure. The Contractor shall provide recommendations based on research, analysis, and system design for network and bandwidth management, indicating any responsibility boundaries.

### 2.6.7 COMMERCIAL AND NON-DEVELOPMENTAL ITEMS (CANDI)

The Contractor shall incorporate CANDI hardware and software products into their IDS and asset development as appropriate. The C4ISR Architecture Plan shall specifically describe the Contractor's approach for leveraging Commercial-Off-The-Shelf (COTS), Government-Off-The-Shelf (GOTS) and Non-Developmental Items (NDI).

### 2.6.8 OPEN SYSTEMS

The C4ISR Architecture Plan shall describe the Contractor's approach for managing open systems requirements. The Contractor shall consider utilization of open systems principles and design as an aid to modernization upgrades and mitigation of problems associated with diminishing manufacturing sources.

### 2.6.9 MODULAR SYSTEMS

The C4ISR Architecture Plan shall describe the Contractor's approach for the implementing modular systems during IDS development. The Contractor shall consider utilization of modular systems principles and design as an aid to modernization upgrades and mitigation of problems associated with diminishing manufacturing sources. The plan shall address methods for

fixed price CLIN prices, fixed-price-incentive CLIN ceiling prices, cost-plus-incentive-fee CLIN target costs plus target fees, ~~estimated costs plus base and award fees for cost plus award fee CLINs,~~ and time-and-materials ceiling prices.

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At the time of definitization of an award term period, the negotiated CLIN prices may vary up or down from the provisional prices, but the total of the definitized CLIN prices, expressed in March 2002 dollars, cannot exceed the NTE amount.

When the provisional prices for an award term period have been superseded by definitive prices, the respective NTE no longer has any effect.

- (i) The following is provided to complete the blanks of FAR Clause 52.216-10. Insert in the first blank "10 cents." Insert in the second blank "10 cents." Third blank - The maximum fee for each CPIF CLIN shall be determined by dividing the proposed target fee by the proposed target cost and adding 5% to the resulting percentage. Fourth blank - The minimum fee for each CPIF CLIN shall be determined by dividing the proposed target fee by the proposed target cost and subtracting 5% from the resulting percentage.
- (j) The following is provided to complete the blanks of FAR clause 52.216-16. First blank - The supplies and services identified in the schedule as FPIF are subject to price revision in accordance with this FAR clause 52.216-16. Second and third blanks - The ceiling price for each FPIF CLIN shall be determined by multiplying the proposed target cost by 125%. Insert in the fourth blank "90." Insert in the fifth blank "20%." Insert in the sixth blank "20%."
- (k) For each T&M sub-CLIN, the Contractor shall submit, as an attachment to Section B, a schedule containing the labor categories proposed to perform the work under the CLIN as well as fixed hourly rates for the categories that shall include wages, overhead, general and administrative expenses, and profit. The categories shall be taken from the Contractor's approved cost accounting system and must have documented education and/or experience standards. The Contractor shall also submit the estimated cost of any material required plus any reasonable and allocable material handling costs. The ceiling price for the CLIN shall be the sum of the labor cost (the hours for each category times the respective fixed hourly rate) plus material and material handling costs.
- (l) For each CPAF CLIN, the Contractor shall insert amounts for Estimated Cost, Base Fee, and Available Award Fee. The Base Fee shall equal 3 percent of the Estimated Cost. The Available Award Fee shall equal 10 percent of the Estimated Cost.

provision. The knowledge and information of an Offeror is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

(e) The certification in paragraph (a) of this provision is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Offeror knowingly rendered an erroneous certification, in addition to other remedies available to the Government, the Contracting Officer may terminate the contract resulting from this solicitation for default.

(End of provision)

**K.4 52.215-6 PLACE OF PERFORMANCE (OCT 1997)**

(a) The offeror or respondent, in the performance of any contract resulting from this solicitation, \* intends, \* does not intend [*check applicable block*] to use one or more plants or facilities located at a different address from the address of the offeror or respondent as indicated in this proposal or response to request for information.

(b) If the offeror or respondent checks "intends" in paragraph (a) of this provision, it shall insert in the following spaces the required information:

Place of Performance Name and Address of Owner

(Street Address, City, and Operator of the Plant

State, County, Zip Code) or Facility if Other than

Offeror or Respondent

\_\_\_\_\_  
\_\_\_\_\_

(End of provision)

**K.5 52.219-1 SMALL BUSINESS PROGRAM REPRESENTATIONS (MAY 1999)**

(a)(1) The standard industrial classification (SIC) code for this acquisition is 8711.

(2) The small business size standard is \$2.5 M.

(3) The small business size standard for a concern which submits an offer in its own name, other than on a construction or service contract, but which proposes to furnish a product which it did not itself manufacture, is 500 employees.

(b) *Representations.* (1) The offeror represents as part of its offer that it \* is, \* is not a small business concern.

Phase I, it may not need to be repeated; if no Contractor support is proposed, operations and support tasks may not apply.

### 3.1 C4ISR CONCEPT AND TECHNOLOGY DEVELOPMENT

The objective of this phase is for the Contractor to develop a concept design for the asset at a level that demonstrates solid technical feasibility. The Contractor shall mature the concept of technology to a level that provides robust assessment of the design considerations, alternatives, and risks and bounds the parameters of the design or impact on existing assets and the IDS. The concept shall be fully integrated with the IDS and other IDS assets.

#### 3.1.1 GENERAL

The Contractor shall perform all tasks identified in Section 2, General Requirements, in a manner consistent with the objectives of this phase of C4ISR Asset acquisition when concept and technology development is required for a specified C4ISR Asset. For concept exploration, the Contractor shall, in addition to the general C4ISR program management, conduct analysis and studies of alternative concepts for meeting a needed operational capability. For component-advanced development, the Contractor shall plan and execute proof of concept of subsystems and components that must be developed before integration into a system.

#### 3.1.2 C4ISR REQUIREMENTS DEFINITION AND ANALYSIS

Using requirements specified in the System Performance Spec (SPS) and IDS and Asset C4ISR Architectures, the Contractor shall derive C4ISR requirements to the asset level, achieving a balance between performance and cost within affordability constraints. Requirements analysis shall be conducted to define asset level functional and performance requirements, external interfaces, and to demonstrate traceability of operational and technical requirements.

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#### 3.1.3 C4ISR ASSET AND ASSET COMPONENT ALTERNATIVES

The Contractor shall provide alternatives with analysis of performance, cost and risk to enable design decisions to be made. In general, at the concept level there will be many alternatives and only limited quantification of the benefits and costs of each, but sufficient to down-select to a few promising candidates. Tradeoff analysis of C4ISR Asset requirements and CANDI product features, performance, and life cycle costs shall be presented to the Government. The Contractor shall provide the alternatives, analysis and recommendations to enable Government decisions.

#### 3.1.4 C4ISR CONCEPT AND TECHNOLOGY DESIGN REVIEW

The Contractor shall conduct a final concept and technology design review to include, but not limited to the maturity or completion of the following items:

- a) C4ISR Asset architectures
- b) System and software requirements and traceability to high level requirements

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- c) Concept exploration and alternative analysis
- d) Component advanced development
- ~~e) Affordability analysis~~
- ~~f) Risk identification and mitigation~~
- ~~g) Initial C4ISR Asset Integrated Support Plan~~

Deleted: e) Traceability to Operational Requirements Document (ORD)  
f

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**3.2 C4ISR SYSTEM DEVELOPMENT AND DEMONSTRATION**

The objective if this phase is for the Contractor to demonstrate that the proposed design is technically feasible and capable of meeting applicable requirements and specifications with acceptable risks.

**3.2.1 GENERAL**

The Contractor shall perform all tasks identified in Section 2, General Requirements, in a manner consistent with the objectives of this phase of C4ISR Asset acquisition when System Development and Demonstration is required for a C4ISR Asset. The Contractor shall build upon the work of the concept and technology development phase and complete the C4ISR Asset design for the development and integration into the IDS. The Contractor shall provide initial system demonstration using various options of modeling, simulation, production of a beta version, prototype, or the development of a preliminary baseline in accordance with the schedule approved by the Government. The Contractor shall, at the conclusion of system development and demonstration at the very latest, have a single baseline design for the asset, in readiness for production and deployment if and when so authorized.

The Contractor shall perform the technical and engineering functions necessary to transfer operational or functional needs into a system enhancement through design modification of an existing system, or through new design of system hardware and/or software. This includes all engineering activities relative to the design, development, fabrication, testing, and integration of hardware and software configuration items being developed by the Contractor as specified by the Task or Delivery Order. The Contractor shall also analyze emergent technology system/equipment designs for potential application.

The Contractor shall provide system development and demonstration data to the Government for review, in an iterative methodology that spirals to increasing levels of detail and definition, evolving over time to a balanced (technical, performance, cost, risk, etc.) design.

**3.2.2 C4ISR REQUIREMENTS ANALYSIS**

The Contractor shall document and deliver the C4ISR Asset design requirements to the Government for review. Following system requirements analysis, the Contractor shall recommend a feasible design that integrates with the rest of IDS in all areas of technical, operational and fiscal constraints, with background information on the reasoning behind the recommendation and the reasons for prime alternatives not taken. Utilizing the IPDE, the