AMENDMENT OF SOLICITATION/MOD	IFICATION OF CONTRA	CT	1. CONTI	RACT ID CODE U		PAGE OF PAGES 1 2			
2. AMENDMENT/MODIFICATION NO. 41	3. EFFECTIVE DATE 23-Feb-2016			PURCHASE REQ. NO. 00553620	5. PR	OJECT NO. (If applicable) N/A			
6. ISSUED BY CODE	N00164	7. ADM	INISTERE	D BY (If other than Item 6)	COL	S4801A			
NSWC, CRANE DIVISION			DCMA SEATTLE						
300 Highway 361 - Building 3373			188 1	06TH AVE NE, STE	660				
Crane IN 47522-5001			BELL	EVUE WA 98004					
tori.kern@navy.mil 812-854-1410									
8. NAME AND ADDRESS OF CONTRACTOR (No., stre	et, county, State, and Zip Code)	<u> </u>		9A. AMENDMENT OF S	OLICITATI	ON NO.			
Applied Technical Systems, Inc.									
3505 NW Anderson Hill Rd., Suite 200				OD DATED (OCC. ITC.)	441				
Silverdale WA 98383				9B. DATED (SEE ITEM	11)				
				10A. MODIFICATION OF	CONTRA	CT/ORDER NO			
		[X]	1071. WIGBII 1071 TIGHT OF	OONTO	ONORDER NO.				
			[/]	N00178-06-D-4	684-FC0	1			
				10B. DATED (SEE ITEM	A 13)				
CAGE 2T143 FACILIT	TY CODE			29-Jun-2009					
	ITEM ONLY APPLIES TO	AMENDI	//ENTS	DF SOLICITATIONS					
(a) By completing Items 8 and 15, and returning one (1) separate letter or telegram which includes a reference to PLACE DESIGNATED FOR THE RECEIPT OF OFFERS amendment you desire to change an offer already submit and this amendment, and is received prior to the openin 12. ACCOUNTING AND APPROPRIATION DATA (If required)	o the solicitation and amendment n PRIOR TO THE HOUR AND DAT itted, such change may be made b g hour and date specified.	numbers. Fa E SPECIFII by telegram	AILURE O ED MAY R	F YOUR ACKNOWLEDGE! ESULT IN REJECTION OF	MENT TO I YOUR OF	BE RECEIVED AT THE FER. If by virtue of this			
13. THIS ITEM	APPLIES ONLY TO MOD	IFICATIO	NS OF	CONTRACTS/ORDE	ERS,				
	S THE CONTRACT/ORD								
(*) A. THIS CHANGE ORDER IS ISSUED PUF ITEM 10A.	SUANT TO: (Specify authority)	THE CHAN	GES SET I	FORTH IN ITEM 14 ARE M	ADE IN TH	E CONTRACT ORDER NO. IN			
B. THE ABOVE NUMBERED CONTRACT/C date, etc.)SET FORTH IN ITEM 14, PURSU.	ORDER IS MODIFIED TO REFLEC ANT TO THE AUTHORITY OF FAI	CT THE ADN R 43.103(b)	MINISTRA	TIVE CHANGES (such as o	changes in	paying office, appropriation			
[] C. THIS SUPPLEMENTAL AGREEMENT IS	S ENTERED INTO PURSUANT TO	O AUTHORI	TY OF:						
[] D. OTHER (Specify type of modification and	d authority)								
E. IMPORTANT: Contractor [X] is not, [] is req					-				
14. DESCRIPTION OF AMENDMENT/MODIFICATION (C SEE PAGE 2	Organized by UCF section heading	gs, includin	g solicitati	on/contract subject matter	where feas	ible.)			
15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAM	IE AND TI	TLE OF CONTRACTING O	FFICER (T)	pe or print)			
		Mich	ael S M	iller Contracting Offi	cer				
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED		Michael S Miller, Contracting Officer 6B. UNITED STATES OF AMERICA 16C. DATE SIGN						
		BY /	/s/Michae	I S Miller		24 Feb 2016			
(Signature of person authorized to sign)	<u>-</u>		ure of Contracting Officer)		24-Feb-2016				
NSN 7540-01-152-8070 PREVIOUS EDITION UNUSABLE	30)-105		Presci	IDARD FO ribed by GS 48 CFR) 53				

CONTRACT NO.	DELIVERY ORDER NO.	AMENDMENT/MODIFICATION NO.	PAGE	FINAL
N00178-06-D-4684	FC01	41	2 of 2	

GENERAL INFORMATION

The purpose of this modification is to (1) Provide Incremental Funding and (2) Update Deliverables or Performance. Accordingly, said Task Order is modified as follows:

(1) OBLIGATION OF FUNDS

The funded amounts available for this task order are as follows:

Please see section's B and G for funding information.

The total funded amount available for this task order is hereby increased by

This task order is incrementally funded and the amount currently available for payment hereunder is limited to inclusive of fee, profit, and all other charges.

(2) UPDATE DELIVERABLES OR PERFORMANCE

Please see Section F.

CLIN/SLIN

The clause entitled, Limitation of Funds (FAR 52.232-22), applies. The Government is not obligated to reimburse the Contractor for costs incurred in excess of unless additional funds are made available and are incorporated as a modification to this task order.

A conformed copy of this Task Order is attached to this modification for informational purposes only.

The Line of Accounting information is hereby changed as follows:

The total amount of funds obligated to the task is hereby increased from

CLIN/SLIN Type Of Fund From (\$) By (\$) To (\$) 7001AS RDT&E

The total value of the order is hereby increased from

CLIN/SLIN From (\$) By (\$) To (\$) 7000 7001AS

The Period of Performance of the following line items is hereby changed as follows:

To

7001AS 2/23/2016 - 3/10/2016

From

CONTRACT NO.	DELIVERY ORDER NO.	AMENDMENT/MODIFICATION NO.	PAGE	FINAL
N00178-06-D-4684	FC01	41	1 of 58	

SECTION B SUPPLIES OR SERVICES AND PRICES

CLIN - SUPPLIES OR SERVICES

For Cost Type Items:

Item	PSC	Supplies/Services	Qty	Unit	Est.	Cost	Fixed F	ee	CPFF	
4000	R425	Labor - Engineering and Technical Suppport Services for CDSA core system. (Fund Type - TBD)	1.0	LO					300000000000000000000000000000000000000	
400001	R425	Incremental funding in the amount of n support of Labor only. (RDT&E)								
400002	R425	Incremental funding in the amount of in support of TI 001 (ACRN A1) (RDT&E)								
400003	R425	Incremental funding in the amount of in support of TI 001 (ACRN A1) (RDT&E)								
400004	R425	Incremental funding in the amount of in support of TI 001 (ACRN A2) (RDT&E)								
400005	R425	Incremental funding in the amount of in support of TI 001 (ACRN A1) (RDT&E)								
400006	R425	Incremental funding in the amount of in support of TI 001 (ACRN A2) (RDT&E)								
400007	R425	Incremental funding in the amount of in support of TI 004 (ACRN A3) (RDT&E)								
400008	R425	Incremental funding in the amount of in support of TI 004 (ACRN A3) (RDT&E)								
4.00009	R425	Incremental funding in the amount of in support of TI 004 (ACRN A4) (RDT&E)								
400010	R425	Incremental funding in the amount of in support of TI 004 (ACRN A3) (RDT&E)								
400011	R425	Incremental funding in the amount of in support of TI 004 (ACRN A5) (WCF)								
400012	R425	Incremental funding in the amount of in support of TI 05 (ACRN A6) (RDT&E)								

CONTRACT NO.	DELIVERY ORDER NO.	AMENDMENT/MODIFICATION NO.	PAGE	FINAL
N00178-06-D-4684	FC01	41	2 of 58	

Item	PSC	Supplies/Services	Qty	Unit	Est.	Cost	Fixed	Fee	CPFF
400013	R425	Incremental funding in the amount of in support of TI 05 (ACRN A6) (RDT&E)							
400014	R425	Incremental funding in the amount of ' in support of TI 05 (ACRN A7) (RDT&E)							
4400	R425	Labor - Engineering and Technical Support Services for CDSA core system. (RDT&E)	1.0	LO				•	
440001	R425	Incremental funding in the amount of in support of TI 005 (ACRN A8) (RDT&E)							
440002	R425	Incremental funding in the amount of in support of TI 005 (ACRN A9) (RDT&E)							
440003	R425	This SLIN intentially not used. (Fund Type - OTHER)							
4500	R425	Labor - Engineering and Technical Support Services for CDSA core system. CLIN 4500 Extension applicable to only SLIN 450006. (Fund Type - TBD)	1.0	LO					
450001	R425	Incremental funding in the amount of in support of TI 005 (ACRN B1) (RDT&E)							
450002	R425	Incremental funding in the amount of in support of TI 005 (ACRN B2) (WCF)							
450003	R425	Incremental funding in the amount of in support of TI 005 (ACRN B3) (RDT&E)							
450004	R425	Incremental funding in the amount of in support of TI 005 (ACRN B4). Funding for labor to design and develop the Total Life Cycle Systems Management (TLCSM) environment for Program Executive Office Integrated Warfare Systems, CDSA, SEWIP, and SLQ-32 Programs. (RDT&E)							
450005	R425	Incremental funding in the amount of , in support of TI 005 (ACRN B5). Funding for Integrated Logistics Support, Systems Engineering, and Test and Evaluation Support for SEWIP							

Block 3/NSSC (RDT&E)

CONTRACT NO.	DELIVERY ORDER NO.	AMENDMENT/MODIFICATION NO.	PAGE	FINAL
N00178-06-D-4684	FC01	41	3 of 58	

CPFF

Item	PSC	Supplies/Services	Qty	Unit	Est.	Cost	Fixed Fee
450006	R425	Incremental funding in the amount of in support of TI 005 (ACRN B6). Funding for Integrated Logistics Support, Systems Engineering, and Test and Evaluation Support for SEWIP Block 3/NSSC (RDT&E)					
4600	R425	Technical Support Services for CDSA core system. (Fund Type - TBD)	1.0	LO			
460001	R425	Incremental Funding in Support of TI.05(PEO-IWS/AN/SLQ32/TLCM Environment Support Solution) (WCF)					
460002	R425	Incremental Funding in Support of TI.05(PEO-IWS/AN/SLQ32/TLCM Environment Support Solution) (RDT&E)					
460003	R425	Incremental Funding in Support of TI.05(PEO-IWS/SEWIP/BLK 1/TLCM Environment Support Solution) (RDT&E)					
460004	R425	Incremental Funding in Support of TI.05(PEO-IWS/SEWIP/BLK 3/TLCSM Environment Support Solution) (RDT&E)					
460005	R425	Incremental Funding in Support of TI.06(PEO-IWS/SEWIP/BLK 3/Performance and Functional Environment Modeling) (RDT&E)					
460006	R425	Incremental Funding in Support of TI.05(PEO-IWS/SEWIP/BLK 3/TLCSM Environment Support Solution. Note: MOD 34					
460007	R425	(RDT&E) Incremental Funding in Support of TI.06(PEO-IWS/AN-SLQ-32/Performance and Functional Environment Modeling Support) (SCN)					
460008	R425	Incremental Funding in Support of TI.06(PEO-IWS/Decoy Development Efforts) (O&MN,N)					
460009	R425	Incremental Funding in Support of TI.06(PEO-IWS/Engineering and ILS Support).					
		: 4)					
460010	R425	Incremental Funding in Support of TI.06(PEO-IWS/AN/SLQ-32 V4 ESE). Note:					

(OPN)

CONTRACT NO.	DELIVERY ORDER NO.	AMENDMENT/MODIFICATION NO.	PAGE	FINAL
N00178-06-D-4684	FC01	41	4 of 58	

Item	PSC	Supplies/Services	Qty	Unit	Est.	Cost
6000	R425	ODCs - Engineering and Technical Suppport Services for CDSA core system. (Fund Type - TBD)	1.0	LO		١
600001	R425	Incremental funding in the amount of . in support of Material only (RDT&E)				
600002	R425	Incremental funding in the amount of in support of Travel only (RDT&E)				
600003	R425	Incremental funding in the amount of in support of TI 001 (ACRN A1) Deobligated in its entirety by Modification 05 (RDT&E)				
600004	R425	Incremental funding in the amount of in support of TI 001 (ACRN A2) Deobligated in its entirety by Modification 05 (RDT&E)				
600005	R425	Incremental funding in the amount of in support of TI 001 (ACRN A2) Deobligated in its entirety by Modification 05 (RDT&E)				
600006	R425	Incremental funding in the amount of in support of TI 004 (ACRN A3). NOTE: FUNDS IN THE AMOUNT OF ARE DEOBLIGATED VIA MODIFICATION 10 RESULTING IN A BALANCE OF ON NOTE: MOD 26 from On to CRDT&B				
600007	R425	Incremental funding in the amount of) in support of TI 004 (ACRN A3). Deobligated in its entirety by Mod 10. (RDT&E)				
600008	R425	Incremental funding in the amount of 'in support of TI 004 (ACRN A5). Note: MOD 26 ; from) to (WCF)				
600009	R425	Incremental funding in the amount of in support of TI 05 (ACRN A7). Note: MOD 26 from) to . (RDT&E)				
6400	R425	ODCs - Engineering and Technical Support Services for CDSA core system. (Fund Type - TBD)	1.0	LO		
640001	R425	Incremental funding in the amount of in support of TI 005 (ACRN A8). NOTE: FUNDS IN THE AMOUNT OF ARE DEOBLIGATED VIA MODIFICATION 19 RESULTING IN A BALANCE OF . (RDT&E)				
6500	R425	ODCs - Engineering and Technical Support Services for CDSA core system. (Fund Type - TBD)	1.0	LO		
650001	R425	10 USC 2410(a) Authority is hereby invoked. Incremental funding in the amount of in support of TI 05 (ACRN B3 INCREASE). (RDT&E)				
650002	R425	Incremental funding in the amount of in support of TI 05 (ACRN B4). Funding for ODC to design and develop the Total Life cycle Systems Management (TLCSM) environment for Program Executive Office Integrated Warfare Systems, CDSA, SEWIP, and SLQ-32 Programs. Note: MOD 34 from to (RDT&E)				
6600	R425	ODCs - Engineering and Technical Support Services for CDSA core system. (Fund Type - TBD)	1.0	LO		
		Option				

CONTRACT NO.	DELIVERY ORDER NO.	AMENDMENT/MODIFICATION NO.	PAGE	FINAL
N00178-06-D-4684	FC01	41	5 of 58	1

For Cost Type Items:

Item	PSC	Supplies/Services	Qty	Unit	Est.	Cost	Fixed	Fee	CPFF
7000	R425	Technical Support Services for CDSA core system. (Fund Type - TBD)	1.0	LO					<u> </u>
7001		Contractor shall invoice the following priced SLINs in accordance with invoicing instructions in Section G.							
7001AA	R425	2410A AUTHORITY IS HEREBY INVOKED: Incremental Funding in Support of TI 7.7 (PEO-IWS 2/Data management/MK 36 Decoy System) (O&MN,N)	1.0	LO		}			
7001AB	R425	Incremental Funding in Support of TI 5.7 (PEO-IWS/Total Life Cycle management Environment Support Solution/CVN Installations in Support of SLQ-59) (WCF)	1.0	LO					
7001AC	R425	Incremental Funding in Support of TI 5.7 (PEO-IWS/Total Life Cycle management Environment Support/SLQ-32, SEWIP, and Decoy Development Efforts for AOEW) (RDT&E)	1.0	LO			:		
7001AD	R425	Incremental Funding in Support of TI 7.7 (PEO-IWS 2/Subtask F/Data Management in support of BLK1 (V1-5) (SCN)	1.0	LO					
7001AE	R425	Incremental Funding in Support of TI 7.7 (PEO-IWS 2/Subtask F/Data Management in support of BLK1 (V1-5) (SCN)	1.0	LO	•			· -	
7001AF	R425	Incremental Funding in Support of TI 7.7 (PEO-IWS 2/Subtask F/Data Management in support of BLK1 (V1-5) (SCN)	1.0	LO				į	
7001AG	R425	Incremental Funding in Support of TI 7.7 (PEO-IWS 2/Subtask F/Data Management in support of BLK1 (V1-5) (O&MN,N)	1.0	LO					
7001AH	R425	Funding in support of (TI-5.7/NAVSEA /IWS2/Data Management and Accuracy Support). (O&MN,N)	1.0	LO					
7001AK	R425	Funding in support of (TI-5.7/NAVSEA /IWS2/Total Life Cycle Management Environment Solution Support). (RDT&E)	1.0	LO					
7001AL	R425	Funding in support of (TI-5.7/NAVSEA /IWS2/Data Management and Accuracy Support). (RDT&E)	1.0	LO					
7001AM	R425	Funding in support of (TI-5.7/NAVSEA /IWS2/Data Management and Accuracy Support). (RDT&E)	1.0	LO					

CONTRACT NO.	DELIVERY ORDER NO.	AMENDMENT/MODIFICATION NO.	PAGE	FINAL
N00178-06-D-4684	FC01	41	6 of 58	

Item	PSC	Supplies/Services	Qty	Unit	Est.	Cost	Fixed Fee	CPFF
7001AN	R425	Funding in support of (TI-5.7/NAVSEA/PEO IWS2/Total Lift Cycle Systems Management Support for SEWIP Block 3 and SLQ-32 programs). (RDT&E)	1.0	LO				
7001AP	R425	Funding in support of (TI-7.7, Subtask B/NAVSEA/PEO-IWS/PBL in support of TLCSM, data mining, physical date management). (WCF)	1.0	LO				
7001AQ	R425	Incremental Funding in Support of TI 5.7 (PEO-IWS/Total Life Cycle management Environment Support/SLQ-32, SEWIP, and Decoy Development Efforts for AOEW) (RDT&E)	1.0	LO			1	
7001AR	AC34	Funding in support of (TI-5.7/NAVSEA /IWS2/Total Life Cycle Management Support for SEWIP Block 3). (RDT&E)	1.0	LO				;' ,
7001AS	AC34	Funding in support of (TI-5.7, NAVSEA/PEO IWS2/SEWIP Blk3 efforts). (RDT&E)	1.0	LO				
7200	R425	Labor - Engineering and Technical Support Services for CDSA core system. Extension Year 2 (Year 7). (Fund Type - TBD)	1.0	LO		r		
7201		Contractor shall invoice the following priced SLINs in accordance with invoicing instructions in Section G.						

For ODC Items:

Item	PSC	Supplies/Services	Qty	Unit	Est.	Cost
9000	R425	ODCs - Engineering and Technical Support Services for CDSA core system. (Fund Type - TBD)	1.0	LO	3800/2012/2012/38 \$60 Pc	MI I I I I I I I I I I I I I I I I I I
9001		Contractor shall invoice the following priced SLINs in accordance with invoicing instructions in Section G.				
9001AA	R425	Funding in support of (TI-5.7/NAVSEA/IWS2/Total Life Cycle Management Environment Solution Support). (RDT&E)	1.0	LO		
9200	R425	ODCs - Engineering and Technical Support Services for CDSA core system. Extension Year 2 (Year 7). (Fund Type - TBD)	1.0	LO		
9201		Contractor shall invoice the following priced SLINs in accordance with invoicing instructions in Section G.				

CONTRACT NO.	DELIVERY ORDER NO.	AMENDMENT/MODIFICATION NO.	PAGE	FINAL
N00178-06-D-4684	FC01	41	7 of 58	

SECTION C DESCRIPTIONS AND SPECIFICATIONS

1.0 Introduction

Total life-cycle systems management (TLCSM) establishes clear lines of responsibility and accountability for meeting warfighter support performance and sustainment requirements for the life of the system from acquisition to disposal. Under TLCSM there is no longer a transition of management from the program manager (PM) to a sustainment command after production and fielding. The PM is the life-cycle manager (LCM) for assigned program(s) and will retain the responsibility for managing, sustaining, upgrading, and disposing of system(s) throughout the service life. The PM will ensure supportability is equally considered with cost, schedule, and performance throughout the life cycle of the assigned system(s). Throughout this policy, we will refer to the TLCSM as the PM to be consistent with Navy acquisition policy.

1.1 Scope

This statement of work (SOW) identifies the tasks that the contractor shall accomplish to manage, design, and build the Common Digital Sensor Architecture (CDSA) core system. This includes system program goals, cost and schedule reporting requirements, documentation, logistics, engineering, and test requirements.

1.2 Background

The Program Executive Office Integrated Warfare System above water sensor directorate (PEO IWS 2.0) has determined that the historical approach for design, development, and sustainment of deployed above water sensors for the United States Navy (USN), where each above water sensor is developed and procured in relative isolation, should be consolidated within a single total life cycle system management (TLCSM) approach using a common architecture and support process across all above water sensors. This decision is intended to eliminate multiple procurement programs, reduce duplication of support infrastructures, and harmonize resource requirements in order to sustain long-term system operational effectiveness including lower overall total ownership cost (TOC) among deployed USN above water sensors. The sensors targeted for CDSA will be in service for the next forty years.

As a key facet of this unified TLCSM approach, the CDSA Program was initiated to procure a common computing platform for above water sensors with the objective to eliminate all unique processing elements, to establish a common human machine interface (HMI), reduce the knowledge and skills required to operate and maintain the sensor systems, and to improve the quality, quantity, and compatibility of collected field data. The TLCSM approach will also implement a common product data management (PDM) capability to collect, process, and manage relevant engineering, logistics support, and all other associated data required to implement an effective sustainment strategy across all designated above water sensor lifecycles. This document defines the proposed concept of operation for a unified above water sensor TLCSM approach to address the overarching PEO IWS 2.0 program objectives of sustained operational effectiveness at reduced TOC across deployed above water sensors.

This statement of work is for the design and development of the CDSA core system. Integration of CDSA into targeted sensor systems will be performed through other contracts at a later date.

2.0 Applicable Documents

The following documents of the revision or issue in effect at the date of this task order (TO) award form a part of this SOW for the convenience of reference. In the event of conflict between the documents referenced herein and the contents of this SOW, the contents of this SOW shall prevail.

CONTRACT NO.	DELIVERY ORDER NO.	AMENDMENT/MODIFICATION NO.	PAGE	FINAL
N00178-06-D-4684	FC01	41	8 of 58	

89 SPC 09 9003	CDSA System Requirements Document
89 SPC 09 9002	CDSA Statement of Objectives (SOO)
89 SPC 09 9004	CDSA Concept of Operations (CONOPS)
89 SPC 09 9007	CDSA to AN/SPS-49 Integration Statement of
	Objectives (SOO)
89 SPC 09 9008	CDSA to AN/SPQ-9B Integration Statement of
	Objectives (SOO)
89 SPC 09 9009	CDSA to AN/SPS-74 Integration Statement of
	Objectives (SOO)
89 SPC 09 9001	CDSA Product Data Management Statement of
	Objectives (SOO)
89 SPC 09 9013	CDSA Test Philosophy
MIL-STD-882D	Systems Safety Program Requirements
PEOIWSINST 3058.1	Guidance, policy, and definition for the PEO IWS
	Risk Management Process
MIL-STD-461F	Requirements for the Control of Electromagnetic
	Interference Characteristics of Subsystems and
	Equipment
DOD Directive 8500.1D (E)	Information Assurance (IA)
DODD 8510.1-M	DOD Information Technology Security
	Certification and Accreditation Process (DITSCAP
GEIA STD 0009	Reliability Program Standard for Systems Design,
	Development and Manufacturing
ISO-9000-3	Guideline for Application of ISO 9001 to the
	Development, Supply, and Maintenance of
	Software
MIL-STD-1472 F	DOD Design Criteria Standard, Human
	Engineering
DD-254	Security Form
MIL-HDBK-759C	Human Engineering Design Guidelines
MIL-HDBK-46855 A	Human Engineering Guidelines for Military
	Systems
EIA/IS-632	Systems Engineering, September 2003
MIL-HDBK-502 Notice 1	Acquisition Logistics, 20 Jan 2005
ANSI/ASQ Q9001	Quality Management Systems – Requirements
IEEE/EIA 12207.0	Standard for Information Technology, Software
	Lifecycle Processes
IEEE/EIA 12207.1	Standard for Information Technology, Software
	Lifecycle Processes, Lifestyle Data
IEEE/EIA 12207.2	Standard for Information Technology, Software
	Lifecycle Processes, Implementation
	Considerations
NAVSEA 06 INST	Technical Review Manual (TRM) April 2003
ANSI/EIA-748 B	Earned Value Management
MIL-HDBK-881 A	DoD Handbook Work Breakdown Structure 30
	JULY 2005
OPNAVINST 1500.76	Navy Training System Requirements, Acquisition
	and Management
	Maintainability Program Requirements (for
MIL-HDBK-470	
MIL-HDBK-470	Systems and Equipment

CONTRACT NO.	DELIVERY ORDER NO.	AMENDMENT/MODIFICATION NO.	PAGE	FINAL
N00178-06-D-4684	FC01	41	9 of 58	

GEIA-649-A	National Consensus Standard for Configuration
	Management
GEIA-HB-649	Implementation Guide for Configuration
	Management
ISO 15288	Systems and software engineering - System life
	cycle processes
NAVSEA TRM	Naval Sea Systems Command (NAVSEA)
	Technical Review Manual (TRM) dated August
	2006
ISO 10303	Industrial Automation Systems, Data exchange
NAVSEA INST 9040.3A	Standard for Exchange of Product Data
MIL-PRF-49506	Logistics Management Information
GEIA-STD-0007	Logistics Product Data Handbook
S9081-AB-GIB-010/MAINT	RCM Handbook
ICAPS-PC Application	Interactive Computer Aided Provisioning System-
	Personal Computer
NAVSEA 4423/3NAVSEA	Provisioning Data Cover Page
DOD 5220.22-M	National Industrial Security Program Operating
	Manual
OPNAVINST 5102.1	Navy and Marine Corps Mishap and Safety
	Investigation Reporting and Record Keeping
	Manual
NAVWPNSUPPCENINST 5510.1	Information, Personnel, and Industrial Security
	Manual
SECNAVINST 5370.2J	Standards of Conduct
NAVFAC P-1021	Smoking Policy, NSWC Crane
DFARS 252.227-7026	Delivery of items
MIL-DTL-31000C	Technical Data Packages
ASN RAM Policy Memo	Reliability, Availability, and Maintainability Policy
	Dated August 25, 2008

3.0 Requirements

3.1 CDSA General Requirements

3.1.1

The CDSA Core System shall meet all requirements in the CDSA System Requirements Document (SRD) 89 SPC 09 9003 and specifications developed under this TO.

3.1.2

The contractor shall deliver seven (7) CDSA Core System Form, Fit, and Function Engineering Development Models (EDM). The EDMs shall utilize production representative hardware.

3 1 3

The contractor shall provide a build-to-print Technical Data Package (TDP) in accordance with MIL-DTL-31000C for third party production.

3.1.4

The contractor shall implement Capability Maturity Model Integration (CMMI) V1.2 like processes to develop the CDSA Core System. The contractor shall utilize metrics with associated contingency plans, and report against the Government-approved cost, schedule, performance, and risk baseline.

CONTRACT NO.	DELIVERY ORDER NO.	AMENDMENT/MODIFICATION NO.	PAGE	FINAL
N00178-06-D-4684	FC01	41	10 of 58	

The contractor shall calculate all metrics in a timely manner so that contingencies can be executed to effectively reduce cost, performance, or risk impacts of adverse situations. This management approach shall support flexible and innovative management of program cost, schedule, performance, risks, contracts, subcontracts, and data to deliver an effective and affordable system.

3.1.5

The contractor shall develop, document, and implement software development plans, processes, and capabilities necessary to achieve program objectives and provide for through-life software support in accordance with the Institute of Electrical and Electronic Engineers (IEEE)/Electronic Industries Alliance (EIA) Standard 12207.0 and ISO 15288. The contractor shall be in full compliance with Software Engineering Institute (SEI) CMMI LEVEL III for software development.

3.1.6

The contractor shall develop, document, and implement effective hardware development and production plans and processes necessary to achieve program objectives and provide for through-life hardware support.

3.1.7

The contractor shall implement an Integrated Product Team (IPT) construct for program structure using MIL-HDBK-502, section 9 as guidance.

3.1.8

The contractor shall update design documentation based on government-contractor agreements during technical interchange meetings (TIMs) and program decision points. The contractor shall demonstrate technical and design maturity at program decision points including the System Requirements Review (SRR), Preliminary Design Review (PDR), Critical Design Review (CDR), Test Readiness Review (TRR), First Article Testing (FAT), Functional Configuration Audit (FCA), Physical Configuration Audit (PCA) milestones, utilizing the Naval Sea Systems Command (NAVSEA) TRM dated August 2006 as guidance.

3.1.9

The contractor shall define, document, coordinate, manage, and verify all interface/integration requirements applicable to the CDSA Core System. The contractor shall identify, document, coordinate, verify, and support development of all interface/integration requirements from the CDSA Core System to external Sensor Systems and Distance Support. The contractor shall provide traceability of all requirements and interfaces to the CDSA Core System performance specifications.

3.1.10

The contractor shall plan and implement a robust and disciplined hardware and software test and evaluation program to validate the designed sub-system against CDSA Core System performance specifications.

3.1.11

The contractor shall ensure development and evolution of a supportable system design that enables future implementation of the affordable, comprehensive integrated logistics support capability necessary to support program objectives as verified at program milestone points.

3.1.12

Development of the CDSA Core System software and hardware shall be via an iterative development, which shall include the development and delivery of requirements, design, and test documentation for each stage of the development process. The contractor, in the case of utilization of off the shelf (OTS) components, shall determine through analysis that the OTS component achieves mission requirements.

CONTRACT NO.	DELIVERY ORDER NO.	AMENDMENT/MODIFICATION NO.	PAGE	FINAL
N00178-06-D-4684	FC01	41	11 of 58	

3.1.13

The contractor shall adhere to approved budget as designated with each approved Rough Order of Magnitude (ROM)

, schedule, and development goals.

3.1.14

The contractor shall utilize a model based design, development, and sustainment strategy.

3.1.15

The contractor shall provide technical reports and/or technical data packages as requested by the government via technical instructions (TIs), TIMs, and program decision points.

3.1.16

The contractor shall maintain the EDMs through the life of the TO. The contractor may be required to travel to facilities throughout CONUS, including U. S. Navy Ships, to maintain the EDMs.

3.2 Product Data Management (PDM)

3.2.1

The contractor shall implement and maintain a PDM framework that will manage and control all data pertinent to the CDSA program including management, financial, engineering, design, test, technical, and logistics support data and program documentation. The PDM shall transfer data in accordance with ISO 10303. The contractor shall also maintain all briefing materials, memoranda, engineering notebooks, and technical reports used in Interim Program Reviews (IPRs) and TIMs in the PDM environment specified in this order. The PDM framework shall use commercially available tools and industry-standard communication and data management protocols. Data objects in the PDM framework shall be web-enabled and accessible using a commercial off the shelf (COTS) browser (CDRL A001). The contractor shall document the structure, access methods, toolset and related information in a PDM Plan (CDRL A002) and obtain PEO IWS 2RI17 approval prior to PDM activation.

3.2.1.1 PDM Plan Detail.

The PDM plan shall include processes necessary to enable and maintain Maintenance CONOPS at each level of repair. Additionally, the plan shall designate/define data configuration items, data flows, authorities, data stores and their associated applications, data elements, data exchanges, and data synchronization processes. The plan shall include data update mechanisms within logistics/maintenance/diagnostics applications and associated algorithms and firmware. PDM actions, tasks, and subtasks shall be fully defined in the PDM plan.

3.2.2

The contractor shall provide the Government (and/or Government support contractors) electronic access to its PDM throughout the term of the contract.

3.2.3

The contractor shall have their PDM operational prior to the SRR Milestone.

3.2.4

The contractor shall notify the Government CDSA project manager (or their designee) via email each time new data is placed in PDM. The PDM tool may perform this action automatically to satisfy this requirement. Notification frequency shall be established by TI.

3 2 5

Teamcenter software will be provided by the Government at no cost to the contractor if required to assist in the development of the PDM.

CONTRACT NO.	DELIVERY ORDER NO.	AMENDMENT/MODIFICATION NO.	PAGE	FINAL
N00178-06-D-4684	FC01	41	12 of 58	

3.3 Program Management

3.3.1

The principal management vehicle for this development shall be integrated product teams. The teams shall be led by a program management team with PEO IWS 2RI17 assigned participation on the teams. The contractor shall recommend teams to be established and present the teams in their response to the Request for Proposal (RFP) with further discussion at the post award conference.

3.3.2

These functional IPTs and their associated working groups shall provide specific and detailed management oversight and administrative support throughout the development period. Each of the IPTs shall be in full partnership between the Government and contractor. Integrating IPTs shall synchronize the activities of the functional IPTs and shall be responsible for overall program planning, coordination, and reporting to the Program Management IPT.

3.3.3

The contractor shall designate a project manager who shall have complete responsibility to PEO IWS 2RI17 for planning, execution, control, and reporting all aspects of the program, and for directing the contractor and subcontractor efforts. The contractor's project manager shall be authorized to deal directly with the PEO IWS 2RI17 Project Manager and other Government representatives authorized by the PEO IWS 2RI17 CDSA Project Manager on programmatic issues. The contractor shall utilize a Program Management Plan.

3.3.3.1

The Program Management Plan shall be an integrated document showing technical, cost and schedule data to a common base, the contract work breakdown structure (CWBS). It shall also provide information on the contractor's organization and practices and techniques to be used in managing the program, specifically management of subcontracts. The plan shall also include milestones for the program in linear time phasing. The plan shall identify equipment and facilities to be utilized. The plan shall include purchase charts depicting major subcontracts and equipment or material purchases. The program management plan shall also include labor loading information depicting the estimated labor hours for each major task. A cost chart shall be part of the plan showing by month, the estimated cost, including any subcontractor cost. The plan shall explain the methods the contractor will use to measure performance. The program management plan shall be maintained in the contractor's PDM.

3.3.4

The contractor shall maintain and update program schedules showing all major events and milestones. Schedule deviations affecting product delivery dates (interim or final) or major milestones and events shall require PEO IWS 2RI17 concurrence.

3.3.5

The contractor shall conduct IPRs and TIMs as required.

3.3.6

The contractor shall identify design risks and issues and present them to the Government for resolution in a team environment.

3.3.7

The contractor shall not prohibit subcontractors from working tasks from multiple prime contractors.

3.4 Program Planning, Scheduling and Reporting Requirements

CONTRACT NO.	DELIVERY ORDER NO.	AMENDMENT/MODIFICATION NO.	PAGE	FINAL
N00178-06-D-4684	FC01	41	13 of 58	

3.4.1

The contractor shall provide quarterly program status reports (CDRL A003), which will include an updated index of technical memoranda and reports and a listing of data delivered to date under the contract and data planned to be delivered within the next quarter. The contractor shall report all deficiencies or errors in government furnished information (GFI) (CDRL A004).

3.4.2

The contractor shall develop and maintain a product-oriented CWBS. The CWBS shall be used for defining tasks associated with the project, maintaining traceability of all contractor efforts to the elements of the CWBS, identifying critical technologies used to meet program objectives, and to prepare applicable project progress and management reports. MIL-HDBK-881A shall be used for CWBS guidance.

3.4.3

The contractor shall develop and maintain an Integrated Master Schedule (IMS) tied to the program management plan. Schedule deviations affecting production product interim or final delivery dates or major milestones and events shall require PEO IWS 2RI17 approval.

3.4.3.1

The schedule shall contain the TO milestones, accomplishments, and discrete tasks/activities (including planning packages) from TO award to the completion of the TO. The schedule shall be an integrated, logical network-based schedule that correlates to the CWBS, and is vertically and horizontally traceable to the cost/schedule reporting instrument used to address variances. The schedule shall have a numbering system that provides traceability to management plans and the SOW. It shall contain contractual milestones and descriptions and display summary, intermediate, and detailed schedules, and periodic analysis of progress to date. It shall include fields and data that enable the user to access the information by product, process, or organizational lines.

3.4.4

The contractor shall develop and maintain a test plan. The test plan shall outline the plans and performance objectives at every level of testing on systems or equipment. The plan shall provide the test concept, objectives and requirements to be satisfied, test methods, elements, responsible activities associated with the testing, measures required and recording procedures to be used. PEO IWS 2RI17 reserves the right to assign government witnesses to all tests and demonstrations

3.4.5

The contractor shall develop and maintain a cost baseline for the program. The contractor shall develop a set of tools and metrics for tracking and reporting progress and expenditures against the cost baseline. The contractor shall use management systems consistent with Earned Value (EV) Management Systems Standard EIA-748-B as a management tool for integrating cost, schedule and technical performance. The contractor shall include EV as an integral part of periodic reviews and reports. Relevant performance monitoring/reporting metrics shall include Cost Performance Index (CPI), Schedule Performance Index (SPI), staffing vs. plan, material purchases vs. plan, radar set design verification testing (DVT), integration and test, requirements volatility, software lines of code, software trouble reports (severity, open/closed, trends, etc.), product trouble reports (severity, open/closed, trends, etc.), Design To Unit Production Cost (DTUPC) data, assumptions, and rationale. The contractor shall provide a description of the tools and metrics, which are to be used to maintain and report progress against the program baseline.

3.4.6

The contractor shall report program cost, schedule and EV status in a Contractor Performance Report (CDRL A005).

3.5 Reviews and Milestones

CONTRACT NO.	DELIVERY ORDER NO.	AMENDMENT/MODIFICATION NO.	PAGE	FINAL
N00178-06-D-4684	FC01	41	14 of 58	

3.5.1

The contractor shall conduct formal program reviews covering program progress and problems. The contractor shall use NAVSEA Technical Review Manual dated April 2003 as guidance for conducting reviews. The contractor can combine reviews to the extent practical and with PEO IWS 2RI17 concurrence. The contractor shall coordinate all reviews (scheduling, location, entrance and exit criteria, and agenda) with PEO IWS 2RI17 approval. Presentation materials and minutes from the program and technical reviews shall be provided and maintained by the contractor. The contractor shall utilize an action item data base tool for use at meetings and reviews. Following is a minimum list of program reviews and milestones:

- a. Post Award Conference (PAC) for the CDSA Core System b. System Requirements Review (SRR) for the CDSA Core System Initial Baseline Review (IBR) for the CDSA Core System C. d. Preliminary Design Review (PDR) for the CDSA Core System Critical Design Review (CDR) for the CDSA Core System e.
- Test Readiness Reviews (TRR) f.
- Functional Configuration Audit (FCA) g.
- h. Physical Configuration Audit (PCA)

3.6 Systems Engineering

3.6.1 General.

The contractor shall provide the systems engineering effort to design and develop the CDSA Core System. The contractor shall develop a System Engineering Management Plan (SEMP) (CDRL A006). EIA/IS-632 shall be used as guidance to generate the plan. The plan shall be maintained in the contractor's PDM.

3.6.2

The contractor shall provide a 3D technical data package (TDP) of sufficient detail and content to support design, development, logistics support, manufacturing, and TLCSM. It shall be based on fully parametric, computer based solid models. TDPs shall be maintained in the contractor's PDM.

3.6.3

Product drawings/models and associated lists shall be prepared to provide the design, engineering, manufacturing, and quality assurance requirements information necessary to enable the procurement or manufacture of an item essentially identical to the original item. The product shall be defined to the extent necessary for a competent manufacturer to produce an item that duplicates the physical, interface, and functional characteristics of the original product, without additional design engineering effort or recourse to the current design activity. Product data shall reflect the approved, tested, and accepted configuration of the defined delivered item. Product drawings/models and associated lists shall be maintained in the contractor's PDM.

3.6.4

The contractor shall provide a Software Development Plan (SDP) (CDRL A020). The contractor shall follow this SDP for all computer software to be developed or maintained under this effort. The SDP shall identify the proposed life cycle model, as defined in IEEE/EIA STD 12207.0. The SDP shall describe the overall life cycle and shall include primary, supporting, and organizational processes based on the work content of this solicitation. The SDP shall define the processes, the activities to be performed as a part of the processes, the tasks which support the activities, and the techniques and tools to be used to perform the tasks. The SDP shall be maintained in the contractor's PDM.

3.6.5 Functional Allocation.

CONTRACT NO.	DELIVERY ORDER NO.	AMENDMENT/MODIFICATION NO.	PAGE	FINAL
N00178-06-D-4684	FC01	41	15 of 58	

The contractor shall perform required analyses, functional allocation, and flow-down of program requirements to meet and sustain the long-term reliability, maintainability, availability, and supportability goals of the CDSA Core System. This shall be achieved through a system engineering design that upgrades technology, incorporates open architecture, improves maintainability and logistics processes to accommodate future upgrades, and reduces total ownership costs over the system's extended lifecycle.

3.6.6 System Specification.

The contractor shall develop and deliver a CDSA Core System-Subsystem Specification. The CDSA Core System-Subsystem specification shall contain the detail required to achieve full requirements traceability for the system. This specification shall be presented to PEO IWS 2RI17 for review and approval. The CDSA system-subsystem specification shall be maintained in the contractor's PDM and delivered to the Government in accordance with contract requirements. The contractor shall update the CDSA System Requirements Document through findings in the research and development effort and as directed by the Government.

3.6.7 System Architecture.

The contractor shall deliver a System Architecture. This architecture shall be presented to PEO IWS 2RI17 for review and approval.

3.6.8 Traceability Database.

The database shall include system, design, software/hardware, interface, and test requirements. The database shall provide the traceability flow-down for requirements, which includes the source of each requirement. The contractor shall also develop and maintain traceability for assembly, subassembly, and component level requirements in this database. The traceability database shall be integrated into and managed in the PDM.

3.6.9 Requirements Flow Down.

Based on the system requirements contained in the CDSA System Requirements Document and the System-Subsystem Specification, the contractor shall flow the requirements down to the affected subsystems, and shall document these requirements in the traceability database. The contractor shall baseline CDSA Core System requirements and traceability into the PDM at SRR. The contractor shall update and maintain requirements allocation to hardware and software configuration items throughout the life of the contract.

3.6.10 Analysis and Trade Studies.

The contractor shall perform Engineering Analysis and Trade Studies consistent with its systems engineering approach. These shall include, but not be limited to, a Technology Refresh Plan, and Reliability and Availability Models. The results of these analyses shall be presented to PEO IWS 2RI17 at the regularly scheduled program reviews.

3.6.10.1

The contractor shall develop a Technology Refresh Plan (CDRL A021). The contractor shall include the planned approach to meet all requirements in the CDSA Core SRD. This includes identification of risks with and overview of the mitigation planned. A schedule for achieving these requirements shall also be provided in the tech refresh plan. The plan shall include planned technology insertion and a technology roadmap. The plan shall explain the architectural approach and shall support the rapid and affordable insertion and refreshment of technology through the use of open standards and open interfaces. The plan also shall include, but not be limited to, software and hardware architecture; and system recertification risks and the associated risk mitigation plans.

3.6.10.2

The contractor shall perform an engineering analysis to recommend power, weight, moment, cooling, and Heating, Ventilation, and Air Conditioning (HVAC) allocations for the CDSA Core

CONTRACT NO.	DELIVERY ORDER NO.	AMENDMENT/MODIFICATION NO.	PAGE	FINAL
N00178-06-D-4684	FC01	41	16 of 58	

System. The contractor shall also perform engineering analysis to recommend input/output and processing requirements for the CDSA Core System computing environment. These allocations shall be driven by an effort to minimize overall system life cycle cost. The results of these analyses shall be presented to PEO IWS 2RI17 for approval prior to establishing the results as system design requirements and managed in the requirements management tool.

3.6.10.3

The contractor shall develop CDSA Core System Reliability and Availability Models (RAMs). The contractor shall use ASN RAM policy dated 25 August, 2008 as guidance to develop RAMs.

3.6.10.4

All data for analysis and trade studies shall be maintained in the contractor's PDM.

3.6.11 Design and Integration.

The contractor shall design and develop the CDSA Core System in a manner that eliminates a long-term dependence on closed or proprietary interface standards or architectures. The contractor shall use an IPT environment, with Government representation, to develop the format and content of reports and forms that are generated by the CDSA Core System

3.6.11.1 Design Information Documentation.

The contractor shall document and model the system using industry standard formats (e.g., Unified Modeling Language(UML)). The contractor shall identify the proposed standards and formats to be used. The contractor shall maintain the design information, including any models used, so that it is current with the as-built system. This design information shall be maintained in the contractor's PDM.

3.6.11.2 Interfaces.

The contractor shall develop and/or analyze interface design documents as necessary to meet the requirements of this order. The contractor shall develop an Interface Design and Management Report that clearly defines all component and system interfaces. Some interfaces may be developed by other contractors working on the CDSA tasking. The Government will be responsible for collecting third party interface data and providing this information to the contractor for inclusion in the management report and subsequent interface documents. The report shall also define and document all subsystem and configuration item (CI) level interfaces to provide full functional, logical, and physical specifications. The report shall identify the interface and data exchange standards between the component, module or system and the interconnectivity or underlying information exchange medium. Interfaces described shall include, but not be limited to, mechanical, electrical (power and signal wiring), software, firmware, and hardware. The Contractor shall eliminate the use of proprietary, vendor-unique or closed components or interfaces. All interface information shall be maintained in the contractor's PDM. The following Interface Design Descriptions shall be developed.

3.6.11.2.1

The contractor shall develop and deliver the HMI Interface Design Description (IDD).

3.6.11.2.2

The contractor shall develop and deliver the Integrated Data Environment (IDE) IDD.

3.6.11.2.3

The contractor shall develop and deliver Supply Support IDD.

3.6.11.2.4

The contractor shall develop and deliver the Distance Support IDD.

CONTRACT NO.	DELIVERY ORDER NO.	AMENDMENT/MODIFICATION NO.	PAGE	FINAL
N00178-06-D-4684	FC01	41	17 of 58	

3.6.11.2.5

The contractor shall develop and deliver the Timing Services IDD.

3.6.11.3 Third Party Development.

The contractor shall prepare a technical report to address how it will provide to the Government information needed to support third-party development and delivery of competitive alternatives of designs for software or other components or modules. The contractor shall include a list of those proprietary, vendor-unique elements that it requests be exempt from this review.

3.6.11.4 Hardware Detailed Design.

The contractor shall provide the hardware detailed design using computer aided design (CAD) modeling tools for developed hardware. The hardware detailed design shall contain the as-designed drawings, Build-To Lists, design documents, interface specifications, and other technical data necessary to support the fabrication, integration, and testing of the subsystems and overall CDSA Core System. All hardware detailed design data shall be maintained in the contractor's PDM.

3.6.11.5 Software Detailed Design.

The contractor shall develop software detailed design achieving the highest level of abstraction using software modeling toolset which support all of the element requirements contained in the CDSA specifications, the software subsystem Item Specifications, and the Interface Design Descriptions. All software detailed design data shall be maintained in the contractor's PDM.

3.6.11.6 Firmware.

Firmware required by hardware subsystems shall be maintained as Software Configuration Items within the respective hardware items, and shall be treated as part of the overall software configuration for each CDSA. The contractor shall apply the same analysis, design and document process to the firmware as is applied to other Software Configuration Items within the CDSA. The contractor shall be required to develop a Firmware Support Manual (FSM) (CDRL A007). The FSM shall identify and record information needed to program and reprogram any firmware devices. The information shall include all applicable items in the FSM. The FSM shall be maintained in the contractor's PDM.

3.7 Human Systems Integration (HSI)

3.7.1

The contractor shall develop a CDSA Core System design that conforms to standard HSI engineering practices in accordance with MIL-STD-1472. MIL-HDBK-46855 and MIL-HDBK-759 shall be used as guidance.

3.7.2 HSI Program Plan.

The contractor shall develop a HSI Program Plan. This plan shall describe in detail the various actions and analyses required to baseline the Human Factors approach for CDSA Core System. This plan shall provide detailed instructions on how the various analyses will be performed, data requirements needed for the completion of these analyses, and how the analysis results will be validated. The HSI program plan shall be maintained in the contractor's PDM.

3.7.3 HSI Report.

The contractor shall generate a HSI Final Report. This report shall consist of the results of the analyses identified in the HSI Program Plan. The report shall be maintained in the contractor's PDM.

3.8 Embedded Data Capabilities

CONTRACT NO.	DELIVERY ORDER NO.	AMENDMENT/MODIFICATION NO.	PAGE	FINAL
N00178-06-D-4684	FC01	41	18 of 58	

3.8.1

The contractor shall embed all organizational level maintenance and operational data.

3.8.2

The contractor shall develop common operator controls, common operator displays, common content areas for display of sensor specific tactical operational information, and common maintenance displays in an IPT environment with the Government and its assigned representatives. The contractor shall document the design of these common areas in a software detailed description (CDRL A024). The contractor shall also maintain this design in PDM.

3.9 Test and Evaluation

3.9.1

The contractor shall plan, schedule, conduct, support, and document all tests necessary to demonstrate compliance with CDSA System Requirements Document and CDSA System-Subsystem Specification as specified in the Requirements Traceability Verification Matrix (RTVM). The contractor shall develop a Test Plan (CDRL A008). The plan shall incorporate all concepts of the CDSA Test Philosophy (89 SPC 09 9013). PEO IWS 2RI17 shall be kept advised of all test schedules. The test plan shall be delivered to the government and maintained in the contractor's PDM.

3.9.2 Software Testing.

The contractor shall develop a Software Test Plan to supplement the System Test Plan. The Software Test Plan shall describe the plan for qualification testing of Computer Software Configuration Items (CSCIs) and software systems. The plan shall describe the software test environment to be used for the testing, identify the tests to be performed, and provide schedules for test activities. The contractor shall develop Software Test Procedures. The contractor shall plan and conduct testing at the contractor's facility to meet the verification requirements and objectives listed in the CDSA System Requirements Document and CDSA System-Subsystem Specification. This testing shall be conducted on each incremental development build to permit early testing to verify requirements and design implementation. The contractor shall analyze test failures and implement corrective measures. All failures that occur shall be separately identified, analyzed, recorded, and correlated with previous failures reported by the contractor. The contractor shall document the results of developmental testing in a Software Test Report. The software test plan, software test procedures and software test reports shall be maintained in the contractor's PDM.

3.9.3 Hardware Testing.

The contractor shall include Hardware Test plans in the System Test Plan. The contractor shall develop Hardware Test Procedures required for production and factory acceptance testing. The contractor shall conduct hardware testing on engineering development models (production representative hardware). The contractor shall have prior approval from the Government to conduct hardware testing. The contractor shall plan and conduct testing at the contractor's facility to meet the verification requirements and objectives listed in the CDSA System Requirements Document and CDSA System-Subsystem Specification. This testing shall verify requirements and design implementation. The contractor shall analyze test failures and implement corrective measures. All failures that occur shall be separately identified, analyzed, recorded, and correlated with previous failures reported by the contractor. The contractor shall document the results of testing in a Hardware Test Report. Hardware testing shall include any environmental tests. The hardware test procedures and test reports shall be maintained in the contractor's PDM.

3.9.3.1

The contractor shall include Hardware Configuration Item (HWCI) Design Qualification testing requirements for all new or modified hardware to ensure compliance with HWCI design specifications.

CONTRACT NO.	DELIVERY ORDER NO.	AMENDMENT/MODIFICATION NO.	PAGE	FINAL
N00178-06-D-4684	FC01	41	19 of 58	

3.9.4 First Article Testing (FAT).

The contractor shall prepare first article test documentation as defined in this paragraph. The contractor shall include FAT plans in the System Test Plan. The contractor shall develop FAT Procedure(s). The first article test procedures shall be maintained in the contractor's PDM. Any software required to support these tests shall be controlled and managed in the contractor's PDM. Note: First article testing will be performed via other contracts on production hardware.

3.9.5 Government Participation in Testing.

PEO IWS 2RI17 will witness all testing using assigned representatives. The contractor shall notify PEO IWS 2RI17 in writing thirty (30) calendar days in advance of all test events.

3.9.6 Deviations.

Any deviations in testing or test procedures, substitution of test equipment, modification of unit under test, or any other exception(s) to the test, shall be approved in advance, by PEO IWS 2RI17, and shall be explained by the contractor and documented in the contractor's test logs, on the official test record, and in the test report.

3.9.7 Test Resources.

The contractor shall ensure that all test equipment, test facilities, other supporting equipment, spare assemblies and parts, test procedures, data logs, and other contractual items necessary for testing are available for the start of testing. The contractor shall maintain test logs throughout all testing and they shall be managed and controlled for the respective test report and PDM.

3.10 Transition to Production

3.10.1

The contractor shall develop the transition process to production using MIL-HDBK-727 as guidance. This process shall include the product definition in the form of a technical data package verified through the Functional and Physical Configuration Audits.

3.10.2 Functional Configuration Audit.

The contractor shall conduct a functional configuration audit using MIL-HDBK-61 as guidance.

3.10.3 Physical Configuration Audit.

The contractor shall conduct a Physical Configuration Audit using MIL-HDBK-61 as guidance.

3.11 Risk Management

3.11.1

The contractor shall develop and maintain a Risk Management Plan (CDRL A009) using PEOIWSINST 3058 as guidance to assess risks associated with achievement of program objectives within cost and schedule constraints. Specific risk management functions shall identify known and potential risks, including the associated risk drivers. The risk management plan shall assess the risks and provide a relative ranking by program impact, and establish critical thresholds. The plan shall also define methods or alternatives to mitigate or minimize risks, including the identification of criteria upon which programmatic decisions can be made. The plan shall explain how risk will be tracked and reported.

3.12 Integrated Logistics Support (ILS)

3.12.1 General.

The contractor shall coordinate logistics/systems engineering activities that affect redesign of system hardware and software to achieve and sustain mission support requirements and system reliability, maintainability, and availability (RM&A), supportability, accessibility, and cost objectives.

CONTRACT NO.	DELIVERY ORDER NO.	AMENDMENT/MODIFICATION NO.	PAGE	FINAL
N00178-06-D-4684	FC01	41	20 of 58	

3.12.2

The Contractor shall support the CDSA Supportability IPT in developing an ILSP (CDRL A010) that responds to the development objectives and achieves the logistics support objectives of this program. Using the Interim ILSP and data gathered, the contractor shall expand upon the entire document with specific focus on the ILS milestone schedule; LSA Strategy; maintenance concept and planning, the logistics management process; the data management environment; the defined goals for the logistics support elements; obsolescence planning; operational support requirements.

3.12.3 Through Life Costs/Life Cycle Costs (LCC).

The contractor shall establish a CDSA Core System life cycle cost program that achieves the cost goals of the program. The contractor shall obtain a Cost Analysis Strategy Assessment (CASA) tool at no cost from the Government.

3.12.3.1

Key elements pertaining to contractor's LCC program shall include determination of cost drivers in acquisition, operation and support, identification of risk areas relative to LCC, early identification of system design problems, and determination of the optimum logistics support program. The LCC tasks shall be integrated into the Logistics Support Analysis Record as a decision-making tool.

3.12.4 Logistics Product Data (LPD).

The contractor shall generate LPD as a result of the supportability analysis conducted during the design, development, and initial fielding of a system or end item using MIL-HDBK-502 as guidance. LPD shall capture information related to logistics design requirements, reliability and maintainability, system safety, maintenance engineering, support and test equipment, training and training devices, manpower and skills, facilities, transportation, supply support, and parts packaging IAW GEIA-STD-0007. LPD shall be used to demonstrate the operational effectiveness requirements of the program are met. All LPD shall be maintained in the contractors PDM.

3.12.4.1

PowerLOG-J software will be provided by the Government at no cost to the contractor if required to assist in the development of the LPD.

3.12.4.2

A PGC shall be held at the contractor facility no later than 60 days after the contract award date. The Provisioning Requirements Statement (PRS) and Provisioning Performance Schedule (PPS) will be discussed and finalized during the provisioning guidance conference (PGC). The resulting PRS and PPS tasks will be identified in a technical instruction (TI).

3.12.4.3

A PGC shall be held at the contractor no later than 60 days after contract award date. The Provisioning Technical Data (PTD) requirements will be discussed during the PGC. The requirement and criteria for a Provisioning Conference will be addressed during the PGC.

3.12.4.4 Configuration Management.

The contractor shall establish, implement, and maintain a configuration management program for the hardware and software configuration items in accordance with GEIA-EIA-649-A. The contractor shall use GEIA-HB-649 as guidance for the configuration management program. The contractor's shall develop a Configuration Management Plan (CDRL A014). The plan shall describe processes required to establish and manage As-Built As-Delivered Baselines with transition strategy to manage As-Maintained Baselines.

3.12.5 Life Cycle Management and Open Systems.

The contractor's architecture shall provide for insertion of COTS into the system and demonstrate that COTS, reusable non-developmental item (NDI), and other components are logistically

CONTRACT NO.	DELIVERY ORDER NO.	AMENDMENT/MODIFICATION NO.		FINAL
N00178-06-D-4684	FC01	41	21 of 58	

supported throughout the life cycle.

3.12.5.1

The contractor shall develop a Life-Cycle Management Plan. The plan shall be maintained in the contractor's PDM. The plan shall address the following:

3.12.5.1.1

Describe and demonstrate the strategy for reducing product or system and associated supportability costs through insertion of COTS and other reusable COTS or NDI products.

3.12.5.1.2

Establish a process to logistically support COTS or NDI products.

3.12.5.1.3

Describe the availability of commercial repair parts and repair services, facilities, and manpower required for life cycle support and demonstrate they are adequate to ensure long term support for COTS or NDI products.

3.12.5.1.4

Provide the proposed methodology for pass through of COTS warranties to the Government.

3.12.6 Reliability Program.

The contractor shall establish and implement a reliability program in accordance with GEIA-STD-0009. The reliability program shall include reliability monitoring, control, evaluation, and testing tasks. MIL-HDBK-217 may used as guidance for reliability calculations. The reliability program shall consider the results of the Alternative Maintenance, Logistics Support Analysis (LSA), and Integrated Data Environment (IDE) requirements.

4.0 GOVERNMENT FURNISHED ITEMS

4.1 Government Furnished Information (GFI).

The contractor shall identify and request any GFI deemed necessary to complete SOW requirements. PEO IWS will assist the contractor in obtaining information. This includes technical manuals, training materials and information, drawings, specifications, procedures, processes, and quality system documents required for the performance of engineering, logistics, and technical support. GFI will be furnished as determined with individual TIs.

4.2 Government Furnished Material (GFM) and Government Furnished Equipment (GFE).

The Government will furnish "as built" electronic components/ modules/assemblies as required to allow the Contractor to establish the data packages and perform software and interface development specified in Section 3.0 of this SOW. Additional GFM and GFE may be provided when the contractor has a requirement for special or specific Government material in the performance of specific tasking. GFM and GFE will be identified during major milestone reviews and specified with individual TIs.

4.2.1

The contractor shall obtain Teamcenter and PowerLOG-J software from the Government at no cost as required to develop and implement the PDM and LPD environment.

4.2.2

The Government will provide local telephone service for the contractor when performing onsite. Long distance and Federal Telephone System (FTS) calls shall be made only when necessary for the performance of work under this SOW. The contractor is advised that the Government requires certification of toll calls and FTS calls as being official under the terms of this TO. Non-official calls

CONTRACT NO.	DELIVERY ORDER NO.	AMENDMENT/MODIFICATION NO.	PAGE	FINAL
N00178-06-D-4684	FC01	41	22 of 58	

will be billed back to the contractor. GFE will be identified on each specific TI.

4.3 Government Furnished Facilities (GFF).

The Government and contractor will jointly determine facility requirements and locations for meetings and program reviews to manage program requirements to support the scope of activities.

4.4 Return of Government Furnished Items.

All GFI, GFE, and GFM provided to or acquired by the contractor shall be returned to PEO IWS 2RI17 upon completion of assigned tasking.

5.0 DATA DELIVERABLES

All data deliverables shall be made as specified and in contractor format unless otherwise directed. All deliverables shall be delivered in contractor format, and after approval by PEO IWS 2RI17, shall be posted on iPDM located at https://ipdm.navy.mil/PMS473/cm.cfm. If unable to submit electronically, data shall be provided by U.S.P.S. mail to: NSWC Crane, Ms. Naydine Armstrong, address: 300 Hwy 361, Code GXL, Bldg. 3168, Crane, IN 47522, telephone: 812-854-8526.

5.1 Contract Data Requirements Lists

Below is a list of Contract Data Requirement Lists (CDRLs) which shall be submitted by the Contractor documenting activities accomplished to date. As a minimum, CDRL A003 (Contractor's Status Report) shall contain a summary of activity during the past month, including a running summary of man-hours and expenditures, work performed status relative to work scheduled, and any issues or concerns.

CDRL:	A001
DID Number:	No DID
DID Title:	CDSA Product Data Management
SoW Paragraph:	Sec. 3.2.1
CDRL:	A002
DID Number:	DI-MGMT-80004A
DID Title:	Product Data Management Plan (PDM Plan)
SoW Paragraph:	Sec. 3.2.1
CDRL:	A003
DID Number:	DI-MGMT-80227
DID Title:	Contractor's Status Report
SoW Paragraph:	Sec. 3.4.1
CDRL:	A004
DID Number:	DI-MGMT-80596
DID Title:	Government Furnished Information Deficiency Report
SoW Paragraph:	Sec. 3.4.1
CDRL:	A005
DID Number:	DI-NDTI-81466A
DID Title:	Contractor Performance Report
SoW Paragraph:	Sec. 3.4.6
CDRL:	A006
DID Number:	DI-MGMT-81024
DID Title:	Systems Engineering Management Plan (SEMP)

CONTRACT NO.	DELIVERY ORDER NO.	AMENDMENT/MODIFICATION NO.	PAGE	FINAL
N00178-06-D-4684	FC01	41	23 of 58	

SoW Paragraph:	Sec. 3.6.1
CDRL:	A007
DID Number:	DI-IPSC-81448A
DID Title:	Firmware Support Manual
SoW Paragraph:	Sec. 3.6.11.6
CDRL:	A008
DID Number:	DI-NDTI-80566
DID Title:	Test Plan
SoW Paragraph:	Sec. 3.9.1
CDRL:	A009
DID Number:	DI-MGMT-80004A
DID Title:	Risk Management Plan
SoW Paragraph:	Sec. 3.11.1
Sorr i diagrapii.	1 555. 5
CDRL:	A010
DID Number:	DI-ILSS-80095
DID Title:	Integrated Logistics Support Plan (ILSP)
SoW Paragraph:	Sec. 3.12.2
CDRL:	A011
DID Number:	DI-CMAN-80858B
DID Title:	Configuration Management Plan
SoW Paragraph:	Sec. 3.12.4.3
CDRL:	A012
DID Number:	DI-SESS-81343A
DID Title:	Information Assurance Plan
SoW Paragraph:	Sec. 6.1
CDRL:	A013
DID Number:	DI-CMAN-80776
DID Title:	Technical Data Package
SoW Paragraph:	Sec. 3.1.16
CDRL:	A014
DID Number:	DI-MISC-80508B
DID Title:	Technical Report Study Services
SoW Paragraph:	Sec. 3.1.16
CDRL:	A015
DID Number:	DI-IPSC-81436A
DID Title:	Interface Design Description (HMI)
SoW Paragraph:	Sec. 3.6.11.3.1
2377 i diagrapii.	000,000,1110,11
CDRL:	A016
DID Number:	DI-IPSC-81436A
DID Title:	Interface Design Description (IDE)

CONTRACT NO.	DELIVERY ORDER NO.	AMENDMENT/MODIFICATION NO.	PAGE	FINAL
N00178-06-D-4684	FC01	41	24 of 58	

SoW Paragraph:	Sec. 3.6.11.3.2	_
CDRL:	A017	
DID Number:	DI-IPSC-81436A	_
DID Title:	Interface Design Description (SUPPLY SUPPORT)	-
	Sec. 3.6.11.3.4	\dashv
SoW Paragraph:	Sec. 3.6.11.3.4	\dashv
CDRL:	A018	_
DID Number:	DI-IPSC-81436A	
DID Title:	Interface Design Description (DISTANCE SUPPORT)	\neg
SoW Paragraph:	Sec. 3.6.11.3.5	
CDRL:	A019	
DID Number:	DI-IPSC-81436A	
DID Title:	Interface Design Description (TIMING SERVICES)	
SoW Paragraph:	Sec. 3.6.11.3.6	_
CDRL:	A020	-
DID Number:	DI-IPSC-81427A	\dashv
		_
DID Title:	Software Development Plan	
SoW Paragraph:	Sec. 3.6.4	-
CDRL:	A021	
DID Number:	DI-CMAN-80776	
DID Title:	Technical Data Package (Technology Refresh Plan)	
SoW Paragraph:	Sec. 3.6.10.1	
CDRL:	A022	_
DID Number:	DI-CMAN-80776	
DID Title:	Technical Data Package (XML Schema)	_
SoW Paragraph:	Sec. 3.6.10.1.1	
CDRL:	A023	-
DID Number:	DI-CMAN-80640C	_
DID Title:	Request for Deviation	_
SoW Paragraph:	Sec. 3.9.6	_
COTT LITERIA DIL	000.0.0	
CDRL:	A024	
DID Number:	DI-IPSC-81435A	
DID Title:	Software Design Description	
SoW Paragraph:	Sec. 3.8.2	
CDRL:	A025	
DID Number:	DI-MISC-80508A	
DID Title:	Technical Report: Trip Report	
SoW Paragraph:	6.2	1

CDRL:	B011	
DID Number:	DI-FNCL-80331	
DID Title:	TO Funding NotificationLetter	

		FINAL
N00178-06-D-4684 FC01 41	25 of 58	3

SoW Paragraph:	N/A
----------------	-----

6.0 SPECIAL CONDITIONS.

The following special conditions shall apply to the contractor in the performance of the tasks of this TO.

6.1 Security Requirements

A Security Clearance: DD FORM 254 is required. A SECRET Clearance may be required to perform certain tasks of this SOW. The Contractor may have access to Department of Defense classified drawings. However, the Contractor shall not input classified data into any personal computer either linked or not linked to a Government Defense network.

The work performed under this SOW may involve access to, handling of, and generation of classified material up to and including SECRET. The contractor shall appoint a Security Officer, who shall (1) be responsible for all security aspects of the work performed under this SOW, (2) assure compliance with all DOD and U.S. Navy regulations regarding security, and (3) assure compliance with any written instructions from the Security Officer of the activity issuing SOW. The contractor shall conform to the provisions of DOD 5220.22-M, and shall provide for obtaining SECRET security clearances for contractor employees requiring access to classified information and/or entry to controlled areas. Only those persons who have a "need-to-know" shall be given application for security clearances. Visit requests will be provided to the Crane Division Security Department on all employees requiring access to classified information.

The contractor shall coordinate the requirement to access the SIPRNET or other appropriately encrypted link(s). Access to classified data will be on a need-to-know basis.

The contractor shall develop an Information Assurance Plan in accordance with DOD 8500.1D (E) CDRL A015) that identifies critical program information and describes the approach for protecting that information. The contractor shall mark and treat data according to appropriate security classification guides.

In the event that any individual tasking requires a higher level of clearance, a separate DD Form 254 will be prepared and issued. The Contractor may be required to have access to live data during the performance of this TO. Any records and data or information the Contractor may have access to may be highly sensitive and confidential. The Contractor must not divulge any information about files, data processing activities or functions, user ids or passwords or any other knowledge that may be gained to anyone not authorized to have access to such information. It is the Contractor's responsibility to ensure that all required employees have proper authority. All classified material shall be processed and protected in accordance with the provisions of this performance work statement and all required instructions and directives in effect concerning the processing of classified material. U.S. Citizenship is required for all positions.

6.2 Travel

The contractor may be required to travel throughout the continental United States (CONUS) and to locations outside of the continental United States (OCONUS). When required to obtain access to a Government facility, ship, aircraft, or other duty station, the contractor shall initiate requests for Need-to-Know Certification and submit these requests to the COR for appropriate action.

6.2.1 Travel Authorization

All travel undertaken by the contractor for performance of tasking must have prior authorization by

CONTRACT NO.	DELIVERY ORDER NO.	AMENDMENT/MODIFICATION NO.	PAGE	FINAL
N00178-06-D-4684	FC01	41	26 of 58	

the Contracting Officer or the Contracting Officer's Representative (COR) and will be issued with a specific TI and/or Travel Authorization (TA).

6.3 Place of Performance

The majority of the tasking will take place at the contractor's facility. All CDSA design and EDM manufacture shall be performed at the contractor's facility. Minimal tasking may be performed at Naval Surface Warfare Center, Cane IN and at other radar integration facilities.

6.4 Contracting Officer's Representative (COR)

The COR is the point of contact for non-substantiative communications of a technical nature. Only the Contracting Officer has the authority to change the requirements of this order(s). The COR for this task order is: Debbie Lemons, NSWC Crane, IN, Code CWXML; phone: 812-854-3595; and, email: debbie.lemons@navy.mil

6.5 Requiring Technical Activity (RTA)

The RTA contact is: Jeff E. Grannan, NSWC Crane, IN, Code WXM; telephone: 812-854-5838; and, email: jeff.grannan@navy.mil

6.6 Contracting Point of Contact (POC)

The POC for the Contracting Division is: Brandon E. Zipperle, NSWC Crane, IN, Code 0242; telephone:

812-854-4140; and email: brandon.zipperle@navy.mil

6.7 Incremental Funding

This task order will be funded incrementally as required. Each project will be identified with a specific TI and funded on separate Sub-Contract Line Item Numbers (SLINs).

6.8 Safety and Health

The requirements of this order may require contractor personnel to come in contact or be exposed to hazardous conditions. The Contractor shall abide by all applicable federal, local and state occupational safety and health requirements. The Government will provide Standard Operating Procedures (SOP) when applicable and identify hazardous conditions. The contractor must have on record a corporate safety plan and shall provide a copy to the COR when instructed. The Contractor shall ensure all employees have appropriate Personal Protection Equipment (PPE). The Contractor shall ensure employees have all required training and certifications related to Occupational Safety and Health Requirements. The contractor shall maintain an accurate record of and shall report all accidents to the COR and/or the Crane Division Security Department as prescribed by OPNAVINST 5102.1.

6.9 Period of Performance

The initial award will result in a three (3) year base period of performance which will include one (1) year for Phase One and two (2) years for Phase Two. Phase Two of this tasking also includes the possibility of two additional years in the form of 1-year option periods. These two 1-year option periods are in addition to the awarded 3-year base period. The total Period of Performance, including option periods, is 5-years.

6.10 Control of Contractor Personnel

The contractor shall comply with the requirements of NAVWPNSUPPCENINST 5510.1 and NAVWPNSUPPCENINST 5910.1. All persons engaged in work while on Government property shall be subject to search of their persons (no bodily search) and vehicles at any time by the Government, and shall report any known or suspected security violations to the Crane Division Security Department. Assignment, transfer, and reassignment of contractor personnel shall be at the discretion of the contractor. However, when the Government directs, the contractor shall remove from contract performance any person who endangers life, property, or national security through

CONTRACT NO.	DELIVERY ORDER NO.	AMENDMENT/MODIFICATION NO.	PAGE	FINAL
N00178-06-D-4684	FC01	41	27 of 58	

improper conduct. All contractor personnel engaged in work while on Government property shall be subject to the Standards of Conduct contained in SECNAVINST 5370.2J. Prior to conducting work under this contract, the contractor shall provide a list of employees that will be working on site. The employee list shall contain full names, security clearance levels, social security numbers, and job titles. This list shall be updated within forty-eight hours after changes occur.

6.11 Identification Badges

The contractor shall be required to obtain identification badges from the Government for contractor personnel to be located on Government property. The identification badge shall be visible at all times while employees are on Crane Division property. The contractor shall furnish all requested information required to facilitate issuance of identification badges and shall conform to applicable regulations concerning the use and possession of the badges. The contractor shall be responsible for ensuring that all identification badges issued to contractor employees are returned to the Crane Division Security Department within forty-eight hours following the completion of the contract, relocation or termination of an employee issued an identification badge, and upon request by the Contracting Officer.

6.12 Accident Reporting

The contractor shall maintain an accurate record of and shall report all accidents to the COR and/or the Crane Division Security Department as prescribed by OPNAVINST 5102.1.

6.13 Smoking Regulations

Smoking on Crane Division, Crane, IN premises shall be in approved areas only in accordance with NAVFAC P-1021. Smoking in vehicles is prohibited.

6.14 Hours of Operation

The following hours of operation shall apply to the contractor's on-site personnel and the contractor's liaison facility personnel.

6.14.1 Normal Hours on-site

The Government's hours of operation at NSWC Crane in the Radar Systems Division are between the hours of 6:00 a.m. to 5:00 p.m. Eastern Daylight Time Monday through Friday except Federal Holidays or pre-planned closed days. Hours before or beyond 5:00 p.m., Monday through Friday are dependent upon availability of Government employees on-site. A 30-minute lunch break is allowed between the hours of 1030-1230. The contractor may be required to respond to an emergency requirement and work outside of regular working hours to perform the work required by the TI.

6.14.2 Closed Days

All closed days will be designated by the Commander, NSWC, Crane Division. Closed days will be associated with holidays, National Security and/or inclement weather/dangerous conditions. The Contractor will not be allowed to work on NSWC, Crane Division during designated closed days, unless they are deemed to be essential personnel. Essential personnel will be identified by the Government, and communicated to the contractor prior to the designated closed day, and will be authorized by COR/KO and specified on individual TI. In the event the Contractor is prevented from performance as the result of an Executive Order or an administrative leave determination applying to the using activity, such time may be charged to leave or indirect charges in accordance with the company policy.

6.14.3 Inclement Weather

When Crane Division, Crane, IN, is closed by the Commander because of inclement weather conditions (per current Inclement Weather Plan), notification of closing will be broadcast over local radio and television stations.

6.14.4 Holidays

CONTRACT NO.	DELIVERY ORDER NO.	AMENDMENT/MODIFICATION NO.	PAGE	FINAL
N00178-06-D-4684	FC01	41	28 of 58	

A list of Government Agency observed holidays and/or closed days in conjunction with holidays will be published at the beginning of each calendar year. Contractor employees will not be allowed to work on Government property on a holiday and/or closed day unless they are deemed to be essential personnel. The contractor is advised that access to the Government installation may be restricted on these holidays:

New Year's Day	Birthday of Martin Luther King, Jr.
Washington's Birthday	Memorial Day
Independence Day	Labor Day
Columbus Day	Veteran's Day
Thanksgiving Day	Christmas Day

In the event any of the above holidays occur on a Saturday or a Sunday, then such holiday shall be observed by the Contractor in accordance with the practice as observed by the assigned Government employees at the using activity.

6.14.5 Overtime

Overtime shall be performed as required but only to the extent authorized by Chief of Contracting Office (CCO). The definition of overtime is as follows: work in excess of forty hours per week or work performed on Saturday, Sunday, and holidays.

6.15 Certification, Training, and Licensing Requirements

The contractor shall provide personnel with the correct certification, training, and licenses to perform the mission work safely and correctly. The following types of certification or training may be required to complete tasking. Each TI will identify the certification, training, and licensing requirements. Contractor employees shall obtain the necessary training/certifications required in the performance of their assigned tasks. Certification training specific to the Government may be funded/provided by the Government. This includes certifications such as Electrostatic Discharge. Contractor shall successfully complete other Government specific training courses such as Government contracting, procurement, Government business/financial, funding, etc. The following training is considered to be employee development and shall not be provided/funded by the Government:

CPR Certification AED Certification Forklift Operator

6.16 Data Rights

Products shall open in the appropriate software without regeneration errors or warnings. All data/documentation delivered/created in support of this effort becomes the property of the US Government and will be delivered without proprietary markings.

6.17 Safety Program

The Contractor shall ensure that all work shall be conducted in a safe manner and while on Center, the contractor shall abide by all federal safety, security, and environmental regulations and be authorized use of NMCI equipment and IT services. If the Contractor fails to promptly comply with safety requirements, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken.

The contractor shall establish, implement, and maintain a System Safety Program (SSP) in accordance with MIL-STD-882. The contractor shall develop the documentation below (as required) in accordance with MIL-STD-882. The contractor shall recommend corrective actions for

CONTRACT NO.	DELIVERY ORDER NO.	AMENDMENT/MODIFICATION NO.	PAGE	FINAL
N00178-06-D-4684	FC01	41	29 of 58	

all safety issues. The PEO IWS 2RI17 Program Manager shall have final determination of the hazard classification and the risk acceptance level as defined in the SSP. PEO IWS 2RI17 shall have the right to review internal contractor information related to system safety hazard classification and risk levels. The contractor shall generate and log Hazard Action Reports (HARs) for any observed or detected, actual or potential hazard. HAR format shall be as identified in the SSP.

6.18 Release of Information

All technical data provided to the Contractor shall be protected from the public. All other information relating to the items to be delivered and services to be performed under this SOW may not be disclosed by any means without prior approval of the authorized representative of the Contracting Officer. Dissemination or public disclosure includes but is not limited to permitting access to such information by foreign nationals by any other person or entity or publication of technical or scientific papers or advertising or any other proposed public release. The Contractor shall provide adequate physical protection to such information so as to preclude access by any person or entity not authorized such access.

6.19 Privacy Act

Under US Code Title 5, Section 552, information accessed in completing this SOW is subject to the Privacy Act.

6.21 Damage Reporting

The Contractor shall maintain an accurate record of and shall report to the COR all damages to Government Furnished Equipment and Facilities as prescribed by OPNAVINST 5102.1.

6.22 Non-Personal Services

The Government will not supervise contractor employees. Under no circumstances shall the Government assign tasks to, or prepare work schedules for, individual contractor employees. It shall be the responsibility of the contractor to manage its employees and to guard against any actions that are of the nature of personal services, or give the perception of personal services. If the contractor feels that any actions constitute, or are perceived to constitute personal services, it shall be the contractor's responsibility to notify the Contracting Officer (KO) immediately. These services shall not be used to perform work of a policy/decision making or management nature, i.e., inherently Governmental functions. All decisions relative to programs supported by the contractor shall be the sole responsibility of the Government.

6.23 Quality Assurance

The contractor shall establish, implement, maintain, and document a value-added Quality Assurance System (QAS) that is integral to the overall development process. This system shall be comprised of management, technical resources, plans, procedures, schedules, and controls necessary to ensure conformance to contractual requirements. The QAS shall address the requirements of ANSI/ASQ Q9001, or an equivalent model. IEEE/EIA 12207.0, 12207.1, and 12207.2 shall be used as guidance for software lifecycle processes. The software design, documentation, and review process shall be in accordance with current standard business practices that represent the approved processes for the SEI level III or better.

6.23.1 Procuring Activity Verification

All quality assurance (QA) operations performed by the contractor will be subject to procuring activity verification at any tmie. Verification will consist of, but not limited to, (a) surveillance of the operations to determine that practive, methods, and procedures of the written quality assurance program are being properly applied, and (b) Government inspection of delivered items to assure compliance with the CDSA System Requirements Document and CDSA System-Subsystem Specification.

6.23.2 Production Screening

CONTRACT NO.	DELIVERY ORDER NO.	AMENDMENT/MODIFICATION NO.	PAGE	FINAL
N00178-06-D-4684	FC01	41	30 of 58	

A series of tests shall be designed and conducted to disclose weak parts, workmanship problems, and design deficiencies. These tests shall be applied at the part, module, unit, equipment, and systems level for delivered hardware and manufactured to the CDSA System Requirements Document and the CDSA System-Subsystem Specification in accordance with an approved QAS developed in accordance with this SOW.

CNIN-NOTICE-0003 Enterprise-wide Contractor Manpower Reporting Application (ECMRA) (NOV 2013)

The contractor shall report contractor labor hours (including subcontractor labor hours) required for performance of services under this contract for the Naval Surface Warfare Center, Crane Division via a secure data collection site. Contracted services excluded from reporting are based on Product Service Codes (PSCs). The excluded PSCs are:

- (1) W, Lease/Rental of Equipment;
- (2) X, Lease/Rental of Facilities;
- (3) Y, Construction of Structures and Facilities;
- (4) S, Utilities ONLY;
- (5) V, Freight and Shipping ONLY. The contractor is required to completely fill in all required data fields using the following web address https://doncmra.nmci.navy.mil

The contractor is required to completely fill in all required data fields using the following web address https://doncmra.nmci.navy.mil.

Reporting inputs will be for the labor executed during the period of performance during each Government fiscal year (FY), which runs October 1 through September 30. While inputs may be reported any time during the FY, all data shall be reported no later than October 31 of each calendar year. Contractors may direct questions to the help desk, linked at https://doncmra.nmci.navy.mil.

CONTRACT NO.	DELIVERY ORDER NO.	AMENDMENT/MODIFICATION NO.	PAGE	FINAL
N00178-06-D-4684	FC01	41	31 of 58	

SECTION D PACKAGING AND MARKING

SECTION D PACKAGING AND MARKING

All provisions and clauses in SECTION D of the basic contract apply to this task order, unless otherwise specified in this task order.

DATA PACKAGING LANGUAGE (5503)

All unclassified data shall be prepared for shipment in accordance with best commercial practice. Classified reports, data, and documentation shall be prepared for shipment in accordance with National Industrial Security Program Operating Manual (NISPOM), DOD 5220.22-M dated January 1995.

MARKING OF REPORTS (NAVSEA) (SEP 1990) (5506)

All reports delivered by the Contractor to the Government under this task order shall prominently show on the cover of the report:

- 1) Name and business address of the Contractor
- 2) Contract number
- 3) Task order number
- 4) Sponsor:

Name of Individual Sponsor)	
(Name of Requiring Activity)	
City and State)	

PROHIBITED PACKING MATERIALS (5512)

The use of asbestos, excelsior, newspaper or shredded paper (all types including waxed paper, computer paper and similar hygroscopic or non neutral material) is prohibited. In addition, loose fill polystyrene is prohibited for shipboard use.

INSTRUCTIONS FOR MARKING DISTRIBUTION STATEMENT (5513)

The Contractor shall comply with the instructions cited below for placement of the distribution statement associated with data. The applicable distribution statement is identified on each Contract Data Requirements List (DD Form 1423-1). The distribution statement shall be displayed conspicuously on technical documents so as to be recognized readily by receipts. The distribution statement shall appear on each front cover and title page of a report. If the technical document does not have a cover or title page, the applicable distribution statement shall be stamped or typed on the front page in a conspicuous position.

All Deliverables shall be packaged and marked IAW Best Commercial Practice.

CONTRACT NO.	DELIVERY ORDER NO.	AMENDMENT/MODIFICATION NO.	PAGE	FINAL
N00178-06-D-4684	FC01	41	32 of 58	

SECTION E INSPECTION AND ACCEPTANCE

INSPECTION AND ACCEPTANCE LANGUAGE FOR DATA (5602)

Inspection and acceptance of all data shall be as specified in the Contract Data Requirements List as described within the SOW.

GOVERNMENT FURNISHED MATERIAL (NAVSEA) (MAY 1995)

Government Furnished Material: When material is furnished by the Government, the contractor's procedures shall include at least the following:

- Examination upon receipt, consistent with practicality, to detect damage in transit;
- · Inspection for completeness and proper type;
- · Periodic inspection and precautions to assure adequate storage conditions and to guard against damage from handling and deterioration during storage;
- Functional testing, either prior to or after installation, or both, as required by task order to determine satisfactory operation:
- · Identification and protection from improper use or disposition; and
- · Verification of quantity.

SECTION E INSPECTION AND ACCEPTANCE

All provisions and clauses in SECTION E of the basic contract apply to this task order, unless otherwise specified in this task order.

INSPECTION AND ACCEPTANCE TERMS

Supplies/services will be inspected/accepted at DESTINATION.

Damaged Government Furnished Material: The contractor shall report to the COR any Government-furnished property found damaged, malfunctioning, or otherwise unsuitable for use. In event of damage or malfunction during or after installation, the contractor shall determine and record probable cause and necessity for withholding material from use.

Bailed Property: The contractor shall, as required by the terms of the Bailment Agreement, establish procedures for the adequate storage, maintenance, and inspection of bailed Government property. Records of all inspections and maintenance performed on bailed property shall be maintained. These procedures and records shall be subject to review by the Government representative.

[As used in the foregoing, the term "material" applies to Government-furnished equipment to be installed in or furnished with the end item. The term "property" is Government equipment that is used in the fabrication or assembly of the end item, and is not delivered as part of the end item.]

CLAUSES INCORPORATED BY REFERENCE

52.246-3 Inspection of Supplies-Cost Reimbursement MAY 2001 52.246-5 Inspection of Services-Cost Reimbursement APR 1984

252.246-7000 Material Inspection and Receiving Report MAR 2003

CONTRACT NO.	DELIVERY ORDER NO.	AMENDMENT/MODIFICATION NO.	PAGE	FINAL
N00178-06-D-4684	FC01	41	33 of 58	

SECTION F DELIVERABLES OR PERFORMANCE

The periods of performance for the following Items are as follows:

4000	6/29/2009 - 9/15/2012
4400	9/16/2012 - 9/30/2013
4500	6/29/2013 - 7/22/2014
4600	7/23/2014 - 6/28/2015
6000	6/29/2009 - 9/15/2012
6400	9/16/2012 - 9/30/2013
6500	6/29/2013 - 7/22/2014
7000	6/29/2015 - 3/10/2016
7001AA	6/29/2015 - 3/10/2016
7001AB	6/29/2015 - 9/30/2015
7001AC	7/16/2015 - 3/10/2016
7001AD	7/16/2015 - 3/10/2016
7001AE	7/16/2015 - 3/10/2016
7001AF	7/16/2015 - 3/10/2016
7001AG	7/16/2015 - 9/30/2015
7001AH	9/14/2015 - 9/30/2015
7001AK	9/14/2015 - 3/10/2016
7001AL	9/23/2015 - 9/30/2015
7001AM	9/25/2015 - 9/30/2015
7001AN	10/30/2015 - 3/10/2016
7001AP	12/8/2015 - 3/10/2016
7001AQ	12/18/2015 - 3/10/2016
7001AR	2/11/2016 - 3/10/2016
7001AS	2/23/2016 - 3/10/2016
7200	3/11/2016 - 3/10/2017
9000	6/29/2015 - 3/10/2016
9001AA	9/14/2015 - 3/10/2016
9200	3/11/2016 - 3/10/2017

CLIN - DELIVERIES OR PERFORMANCE

The periods of performance for the following Items are as follows:

4000	6/29/2009 - 9/15/2012
4400	9/16/2012 - 9/30/2013
4500	6/29/2013 - 7/22/2014
4600	7/23/2014 - 6/28/2015
6000	6/29/2009 - 9/15/2012
6400	9/16/2012 - 9/30/2013
6500	6/29/2013 - 7/22/2014

CONTRACT NO.	DELIVERY ORDER NO.	AMENDMENT/MODIFICATION NO.	PAGE	FINAL
N00178-06-D-4684	FC01	41	34 of 58	
7000		6/29/2015 - 3/10/2016		
7001AA		6/29/2015 - 3/10/2016		
7001AB		6/29/2015 - 9/30/2015		
7001AC		7/16/2015 - 3/10/2016		
7001AD		7/16/2015 - 3/10/2016		
7001AE		7/16/2015 - 3/10/2016		
7001AF		7/16/2015 - 3/10/2016		
7001AG		7/16/2015 - 9/30/2015		
7001AH		9/14/2015 - 9/30/2015		
7001AK		9/14/2015 - 3/10/2016		
7001AL		9/23/2015 - 9/30/2015		
7001AM		9/25/2015 - 9/30/2015		
7001AN		10/30/2015 - 3/10/2016		
7001AP		12/8/2015 - 3/10/2016		
7001AQ		12/18/2015 - 3/10/2016		
7001AR		2/11/2016 - 3/10/2016		
7001AS		2/23/2016 - 3/10/2016		
7200		3/11/2016 - 3/10/2017		
9000		6/29/2015 - 3/10/2016		
9001AA		9/14/2015 - 3/10/2016		
9200		3/11/2016 - 3/10/2017		

The periods of performance for the following Option Items are as follows:

6600 7/23/2014 - 6/28/2015

Services to be performed hereunder will be provided at (insert specific address and building etc.)

CONTRACT NO.	DELIVERY ORDER NO.	AMENDMENT/MODIFICATION NO.	PAGE	FINAL
N00178-06-D-4684	FC01	41	35 of 58	

SECTION G CONTRACT ADMINISTRATION DATA

SECURITY ADMINISTRATION

The highest level of security required under this task order is SECRET as designated on DD Form 254 attached hereto and made a part hereof. The Commander, Defense Security Service, Director of Industrial Security, Western Region, is designated Security Administrator for the purpose of administering all elements of military security hereunder.

All provisions and clauses in SECTION G of the basic contract apply to this task order, unless otherwise specified in this task order.

CONTRACTING OFFICER'S REPRESENTATIVE (COR)

Debra Lemons Code WXML 300 Highway 361; B-3330 Crane, IN 47522-5001 debbie.lemons@navy.mil Phone: 812-854-3595

HQ G-2-0009 SUPPLEMENTAL INSTRUCTIONS REGARDING ELECTRONIC INVOICING (NAVSEA) (SEP 2012)

- (a) The Contractor agrees to segregate costs incurred under this contract/task order (TO), as applicable, at the lowest level of performance, either at the technical instruction (TI), sub line item number (SLIN), or contract line item number (CLIN) level, rather than on a total contract/TO basis, and to submit invoices reflecting costs incurred at that level. Supporting documentation in Wide Area Workflow (WAWF) for invoices shall include summaries of work charged during the period covered as well as overall cumulative summaries by individual labor categories, rates, and hours (both straight time and overtime) invoiced; as well as, a cost breakdown of other direct costs (ODCs), materials, and travel, by TI, SLIN, or CLIN level. For other than firm fixed price subcontractors, subcontractors are also required to provide labor categories, rates, and hours (both straight time and overtime) invoiced; as well as, a cost breakdown of ODCs, materials, and travel invoiced. Supporting documentation may be encrypted before submission to the prime contractor for WAWF invoice submittal. Subcontractors may email encryption code information directly to the Contracting Officer (CO) and Contracting Officer Representative (COR). Should the subcontractor lack encryption capability, the subcontractor may also email detailed supporting cost information directly to the CO and COR; or other method as agreed to by the CO.
- (b) Contractors submitting payment requests and receiving reports to WAWF using either Electronic Data Interchange (EDI) or Secure File Transfer Protocol (SFTP) shall separately send an email notification to the COR and CO on the same date they submit the invoice in WAWF. No payments shall be due if the contractor does not provide the COR and CO email notification as required herein. (End of Text)

CONTRACT NO.	DELIVERY ORDER NO.	AMENDMENT/MODIFICATION NO.	PAGE	FINAL
N00178-06-D-4684	FC01	41	36 of 58	
(a) <i>Definitions</i> . As us	sed in this clause—			
"Department of Defe		ode (DoDAAC)" is a six positio	n code th	at
	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		.1 1 1 6	,•
"Document type" me Wide Area WorkFlov		request or receiving report avai	llable for	creation

"Local processing office (LPO)" is the office responsible for payment certification when

- (b) *Electronic invoicing*. The WAWF system is the method to electronically process vendor payment requests and receiving reports, as authorized by DFARS <u>252.232-7003</u>, Electronic Submission of Payment Requests and Receiving Reports.
- (c) WAWF access. To access WAWF, the Contractor shall—

payment certification is done external to the entitlement system.

- (1) Have a designated electronic business point of contact in the System for Award Management at https://www.acquisition.gov; and
- (2) Be registered to use WAWF at https://wawf.eb.mil/ following the step-by-step procedures for self-registration available at this web site.
- (d) *WAWF training*. The Contractor should follow the training instructions of the WAWF Web-Based Training Course and use the Practice Training Site before submitting payment requests through WAWF. Both can be accessed by selecting the "Web Based Training" link on the WAWF home page at https://wawf.eb.mil/
- (e) WAWF methods of document submission. Document submissions may be via web entry, Electronic Data Interchange, or File Transfer Protocol.
- (f) WAWF payment instructions. The Contractor must use the following information when submitting payment requests and receiving reports in WAWF for this contract/order:
- (1) Document type. The Contractor shall use the following document type(s).

_	Invoice,	Receiving	Report, or	r Combo	

(Contracting Officer: Insert applicable document type(s).

Note: If a "Combo" document type is identified but not supportable by the Contractor's business systems, an "Invoice" (stand-alone) and "Receiving Report" (stand-alone) document type may be used instead.)

(2) *Inspection/acceptance location*. The Contractor shall select the following inspection/acceptance location(s) in WAWF, as specified by the contracting officer.

Not Applicable	

CONTRACT NO.	DELIVERY ORDER NO.	AMENDMENT/MODIFICATION NO.	PAGE	FINAL
N00178-06-D-4684	FC01	41	37 of 58	

(Contracting Officer: Insert inspection and acceptance locations or "Not applicable.")

(3) *Document routing*. The Contractor shall use the information in the Routing Data Table below only to fill in applicable fields in WAWF when creating payment requests and receiving reports in the system.

Routing Data Table*

Field Name in WAWF	Data to be entered in WAWF
Pay Official DoDAAC	HQ 0339
Issue By DoDAAC	N00164
Admin DoDAAC	S4801A
Inspect By DoDAAC	N/A
Ship To Code	N/A
Ship From Code	N/A
Mark For Code	N/A
Service Approver (DoDAAC)	N00164
Service Acceptor (DoDAAC)	N00164
Accept at Other DoDAAC	N/A
LPO DoDAAC	N/A
DCAA Auditor DoDAAC	HAA480
Other DoDAAC(s)	N/A

(*Contracting Officer: Insert applicable DoDAAC information or "See schedule"

if multiple ship to/acceptance locations apply, or "Not applicable.")

- (4) Payment request and supporting documentation. The Contractor shall ensure a payment request includes appropriate contract line item and subline item descriptions of the work performed or supplies delivered, unit price/cost per unit, fee (if applicable), and all relevant back-up documentation, as defined in DFARS Appendix F, (e.g. timesheets) in support of each payment request.
- (5) WAWF email notifications. The Contractor shall enter the e-mail address identified below in the "Send Additional Email Notifications" field of WAWF once a document is submitted in the system.

debbie.lemons@navy.mil

(Contracting Officer: Insert applicable email addresses or "Not applicable.")

- (g) WAWF point of contact.
- (1) The Contractor may obtain clarification regarding invoicing in WAWF from the following contracting activity's WAWF point of contact.

CONTRACT NO.	DELIVERY ORDER NO.	AMENDMENT/MODIFICATION NO.	PAGE	FINAL
N00178-06-D-4684	FC01	41	38 of 58	111405
N00178-00-D-4084	[FC01	141	36 01 36	
Not A	pplicable			
(Contracting Officer: In	sert applicable inform	ation or ''Not applicable.'')		
(2) For technical WAWI	F help, contact the WA	WF helpdesk at 866-618-5988	•	
	(End	l of clause)		
CONTRA LON LINE STATE	D. (WYON) D. (W) Y. (NIGY)			
CONTRACT ADMINIST		` ,		
•		y, state and zip code) of the Contracto	•	which will
administer the task order if s	uch address is different fro	m the address shown on the proposal.		
Address:				
Street & number:				
City & State:				
County:				
Zip Code:				

CONTRACTOR PERFORMANCE ASSESSMENT RATING SYSTEM (CPARS) (JAN 2001)

- a) Pursuant to FAR 42.1502, this task order is subject to DoD's Contractor Performance Assessment Rating System (CPARS). CPARS is an automated centralized information system accessible via the Internet that maintains reports of contractor performance for each contract/task order. CPARS is located at http://www.cpars.navy.mil/. Further information on CPARS is available at that web-site.
- b) Under CPARS, the Government will conduct annual evaluations of the contractor's performance. The contractor has thirty (30) days after the Government's evaluation is completed to comment on the evaluation. The opportunity to review and comment is limited to this time period and will not be extended. Failure to review the report at this time will not prevent the Government from using the report.
- c) The contractor may request a meeting to discuss the CPAR. The meeting is to be requested via e-mail to the CPARS Program Manager no later than seven days following receipt of the CPAR. A meeting will then be held during the contractor's 30-day review period.
- d) The CPARS system requires the Government to assign the contractor a UserID and password in order to view and comment on the evaluation. Provide the name(s) of at least one individual (not more than three) that will be assigned as your Defense Contractor Representative for CPARS.

PURCHASING OFFICE REPRESENTATIVE LANGUAGE

PURCHASING OFFICE REPRESENTATIVE:

Brandon E. Zipperle 300 Highway 361, B-121 Crane, IN 47522 <u>brandon.zipperle@navy.mil</u> 812-854-4140

EXPEDITING CONTRACT CLOSEOUT (NAVSEA) (DEC 1995)

- a) As part of the negotiated fixed price or total estimated amount of this contract, both the Government and the Contractor have agreed to waive any entitlement that otherwise might accrue to either party in any residual dollar amount of \$500 or less at the time of final contract closeout. The term "residual dollar amount" shall include all money that would otherwise be owed to either part at the end of the contract except that, amounts connected in any way with taxation, allegations of fraud and/or antitrust violations shall be excluded. For purposes of determining residual dollar amounts, offsets of money owed by one party against money that would otherwise be paid by that party may be considered to the extent permitted by law.
- This agreement to waive entitlement to residual dollar amounts has been considered by both parties. It is agreed that the administrative costs for either part associated with collected such small dollar amounts could exceed the amount to be recovered.

CONTRACT NO.	DELIVERY ORDER NO.	AMENDMENT/MODIFICATION NO.	PAGE	FINAL
N00178-06-D-4684	FC01	41	39 of 58	

Each SLIN that provides funding designates a specific project area/work area/Technical Instruction (TI)/Work Breakdown Structure (WBS) item. Tracking and reporting shall be accomplished at the project/work area/TI/WBS item level. Each identified project/work area/TI/WBS shall be invoiced by its associated SLINs and ACRNs as identified in Sections B, F & G.

CNIN-G-0001 Invoicing Documentation for Cost Vouchers (JULY 2015)

Supporting cost voucher documentation in Wide Area Workflow (WAWF) shall be provided in contractor specified format and shall include the following information. This level of detail is required at both the job order (JO) or task order (TO) level and Technical Instruction (TI) level. The supporting data should clearly reflect the JO/TO and TI number for which it applies. For other than firm fixed price subcontracts, subcontractors are also required to provide the same level of supporting detail as the prime contractor. Supporting documentation may be encrypted before submission to the prime contractor for WAWF cost voucher submittal. Subcontractors may email encryption code information directly to the Contracting Officer (CO) and Contracting Officer Representative (COR) as required. Failure to comply may result in an unfavorable CPARS rating in the area of regulation compliance.

	Cost Elements
Direct Labor	Total direct labor costs billed for current billing period and cumulative. This includes sub-contractor direct labor. If there are different labor pools, they should be included separately (e.g., on-site, off-site, prime, subK, etc).
Other Direct Costs	Total ODC costs billed for current billing period and cumulative
Indirect Costs	Total indirect costs billed for current billing period and cumulative. If there are different indirect pools, they should be included separately (e.g., Fringe, OH, G&A, etc.). The indirect pool percentage shall be included.
Fee	Total fee billed for current billing period and cumulative.
Invoice Subtotal	Sub-total costs billed for current billing period and cumulative.
Adjustments	Any adjustments to billed costs for current billing period and cumulative.
Invoice Total	Total costs billed for current billing period and cumulative.
	Labor Detail (Prime and Subcontractor)
Employee name	
Labor category	
Direct labor rate by	employee
Loaded labor rate	by employee
Current period hou	rs (OT hours identified separately)
Current period dire	ct labor costs
	OT hours identified separately)
Cumulative direct l	abor costs
Noi	n-Labor Detail – detail provided for current billing period only
Travel D	Pestination, dates, traveler name, total trip costs (includes subK travel)
	letailed description of item and total item costs (includes subK material)
I	covers items that are not material or travel (e.g., training, conference costs, tc). Detailed description of item and total item costs (includes subK ODC)
*Copies of invoices	and/or receipts for Material/ODC purchases shall be included.
CLIN/SLIN Detail -	- Information should be a cumulative total invoiced against each CLIN/SLIN
CLIN/SLIN S	iLIN being billed
	CRN being billed
TO/TI T	O and/or TI number

CONTRACT NO.	DELIVERY ORDER NO.	AMENDMENT/MODIFICATION NO.	PAGE	FINAL
N00178-06-D-4684	FC01	41	40 of 58	

Amount	Amount funded on each SLIN
Funded	
Current	Amount billed in current billing period
Cumulative	Cumulative amount billed against SLIN
Balance	Remaining balance on SLIN

Accounting Data

SLINID PR Number

Amount

400001 9174-0433

LLA :

A1 1791319 A5BJ 253 SASWS 0 068342 2D 159180 9D79A000CON0

~-----

Standard Number: N0002409WX11708 (AA)

600001 9174-0434

LLA :

A1 1791319 A5BJ 253 SASWS 0 068342 2D 159180 9D79A000CON0

Standard Number: N0002409WX11708 (AA)

600002 9174-0436

LLA :

A1 1791319 A5BJ 253 SASWS 0 068342 2D 159180 9D79A000CON0

Standard Number: N0002409WX11708 (AA)

BASE Funding

Cumulative Funding

MOD 01

400002 9216 0645

LLA :

A1 1791319 A5BJ 253 SASWS 0 068342 2D 159180 9D79A000CON0

Standard Number: N0002409WX11708 (AA)

In support of TI 001

600003 9216 0664

LLA

A1 1791319 A5BJ 253 SASWS 0 068342 2D 159180 9D79A000CON0

Standard Number: N0002409WX11708 (AA)

In support of TI 001

600004 9223 3045

LLA :

A2 1791319 A5BJ 255 SASWS 0 068342 2D 159180 9D77A000CON0 (AA)

Standard Number: N0002409WX11707

In support of TI 001

600005 9223 3044

LLA :

A2 1791319 A5BJ 255 SASWS 0 068342 2D 159180 9D77A000CON0 (AA)

Standard Number: N0002409WX11707

In support of TI 001

MOD 01 Funding

Cumulative Funding

MOD 02

400003 9243 5366

T.T.A ·

A1 1791319 A5BJ 253 SASWS 0 068342 2D 159180 9D79A000CON0

Standard Number: N0002409WX11708 (AA)

In support of TI 001

400004 9245 8334

 CONTRACT NO.
 DELIVERY ORDER NO.
 AMENDMENT/MODIFICATION NO.
 PAGE
 FINAL

 N00178-06-D-4684
 FC01
 41
 41 of 58

LLA :

A2 1791319 A5BJ 255 SASWS 0 068342 2D 159180 9D77A000CON0 (AA)

Standard Number: N0002409WX11707

In support of TI 001

MOD 02 Funding '

Cumulative Funding

MOD 03 Funding Cumulative Funding

MOD 04 Funding Cumulative Funding

MOD 05

400005 01051942

LLA :

A1 1791319 A5BJ 253 SASWS 0 068342 2D 159180 9D79A000CON0

Standard Number: N0002409WX11708 (AA)

In support of TI 001.

Note: The Contractor may incur costs for work performed against this SLIN through 30 SEP 2010.

400006 01051922

LLA

A2 1791319 A5BJ 255 SASWS 0 068342 2D 159180 9D77A000CON0 (AA)

Standard Number: N0002409WX11707 (AA)

In support of TI 001.

Note: The Contractor may incur costs for work performed against this SLIN through 30 SEP 2010.

600003 9216 0664

LLA

A1 1791319 A5BJ 253 SASWS 0 068342 2D 159180 9D79A000CON0

Standard Number: N0002409WX11708 (AA)

In support of TI 001

600004 9223 3045

LLA :

A2 1791319 A5BJ 255 SASWS 0 068342 2D 159180 9D77A000CON0 (AA)

Standard Number: N0002409WX11707

In support of TI 001

600005 9223 3044

LLA :

A2 1791319 A5BJ 255 SASWS 0 068342 2D 159180 9D77A000CON0 (AA)

Standard Number: N0002409WX11707

In support of TI 001

MOD 05 Funding Cumulative Funding

MOD 06

400007 01179786

LLA :

A3 1701319 A5BJ 253 SASWS 0 068342 2D 159180 9D79A000CON0

Standard Number: N0002410WX11922 (AA)

In support of TI 004.

600006 01179793

LLA :

A3 1701319 A5BJ 253 SASWS 0 068342 2D 159180 9D79A000CON0

Standard Number: N0002410WX11922 (AA) In support of TI 004. (ACRN increase)

MOD 06 Funding

Cumulative Funding

 CONTRACT NO.
 DELIVERY ORDER NO.
 AMENDMENT/MODIFICATION NO.
 PAGE
 FINAL

 N00178-06-D-4684
 FC01
 41
 42 of 58

MOD 07

400008 02173741

LLA :

A3 1701319 A5BJ 253 SASWS 0 068342 2D 159180 9D79A000CON0

Standard Number: N0002410WX11922 (AA) In support of TI 004. (ACRN increase)

600007 02173743

LLA:

A3 1701319 A5BJ 253 SASWS 0 068342 2D 159180 9D79A000CON0

Standard Number: N0002410WX11922 (AA) In support of TI 004. (ACRN increase)

MOD 07 Funding Cumulative Funding

MOD 08 Funding Cumulative Funding

MOD 09

400009 11089132

LLA :

A4 97X4930. NH1J 000 77777 0 000164 2F 000000 G5200GG5R358

In support of TI 004.

Note: 10 U.S.C. 2410a Authority is applicable. Contractor may incur costs for work performed against this SLIN for 365 days from effective date of above modification, or through the end date of the period of performance for CLIN 4000, whichever occurs first. Contractor may continue to invoice after this date, but only for work performed during the applicable period.

MOD 09 Funding Cumulative Funding

MOD 10

600006 01179793

LLA

A3 1701319 A5BJ 253 SASWS 0 068342 2D 159180 9D79A000CON0

Standard Number: N0002410WX11922 (AA) In support of TI 004. (ACRN increase)

600007 02173743

LLA :

A3 1701319 A5BJ 253 SASWS 0 068342 2D 159180 9D79A000CON0

Standard Number: N0002410WX11922 (AA) In support of TI 004. (ACRN increase)

MOD 10 Funding Cumulative Funding

MOD 11

400010 12245571

LLA

A3 1701319 A5BJ 253 SASWS 0 068342 2D 159180 9D79A000CON0

Standard Number: N0002410WX11922 (AA)

Funding in support of TI-004. (ACRN increase) Note: 10 U.S.C. 2410a Authority is applicable. Contractor may incur costs for work performed against this SLIN for 365 days from the effective date of modification 011, or through the end date of the period of performance for CLIN 4000, whichever occurs first. Contractor may continue to invoice after the ending date, but only for work performed during the applicable period.

MOD 11 Funding Cumulative Funding

CONTRACT NO.	DELIVERY ORDER NO.	AMENDMENT/MODIFICATION NO.	PAGE	FINAL
N00178-06-D-4684	FC01	41	43 of 58	

MOD 1.2

400011 12699125

LLA :

A5 97X4930 NH1E 000 77777 0 000178 2F 000000 21WA911B1PD2

Standard Number: N0017811WX00610 (AA)

Funding in support of TI-004. Note: 10 U.S.C. 2410a Authority does NOT apply. Funds expire at the end date of the period of performance for CLIN 4000. Contractor may continue to invoice after this date, but only for work performed up through and including the end date of the period of performance for CLIN 4000.

600008 12699242

LLA:

A5 97X4930 NH1E 000 77777 0 000178 2F 000000 21WA911B1PD2

Standard Number: N0017811WX00610 (AA)

Funding in support of TI-004. (ACRN increase) Note: 10 U.S.C. 2410a Authority does NOT apply. Funds expire at the end date of the period of performance for CLIN 6000. Contractor may continue to invoice after this date, but only for work performed up through and including the end date of the period of performance for CLIN 6000.

MOD 12 Funding Cumulative Funding

MOD 13

400012 1300257270

LLA :

A6 97X4930 NH1J 251 77777 0 050120 2F 000000 A00001108279
Funding in support of TI-05. Note: 10 U.S.C. 2410a Authority does NOT apply. Funds (RDT&E) expire 30 September 2013 or at the end date of the period of performance for CLIN 4000, whichever occurs first. Contractor may continue to invoice after this date, but only for work performed up through and including 30 September 2013 or the end date of the period of performance for CLIN 4000.

400013 1300257270

LLA :

A6 97X4930 NH1J 251 77777 0 050120 2F 000000 A10001108279 Funding in support of TI-05. Note: 10 U.S.C. 2410a Authority does NOT apply. Funds (RDT&E) expire 30 September 2013 or at the end date of the period of performance for CLIN 4000, whichever occurs first. Contractor may continue to invoice after this date, but only for work performed up through and including 30 September 2013 or the end date of the period of performance for CLIN 4000.

MOD 13 Funding . Cumulative Funding

MOD 14

400014 1300265021

LLA :

A7 97X4930 NH1J 252 77777 0 050120 2F 000000 A00001162169
Funding in support of TI-05. Note: 10 U.S.C. 2410a Authority does NOT apply. Funds (RDT&E) expire 30 September 2013 or at the end date of the period of performance for CLIN 4000, whichever occurs first. Contractor may continue to invoice after this date, but only for work performed up through and including 30 September 2013 or the end date of the period of performance for CLIN 4000.

600009 1300265021

LLA :

A7 97X4930 NH1J 252 77777 0 050120 2F 000000 A00001162169
Funding in support of TI-05. Note: 10 U.S.C. 2410a Authority does NOT apply. Funds (RDT&E) expire 30 September 2013 or at the end date of the period of performance for CLIN 6000, whichever occurs first. Contractor may continue to invoice after this date, but only for work performed up through and including 30 September 2013 or the end date of the period of performance for CLIN 6000.

CONTRACT NO. DELIVERY ORDER NO. AMENDMENT/MODIFICATION NO. PAGE FINAL N00178-06-D-4684 FC01 41 44 of 58

Cumulative Funding

MOD 15 Funding Cumulative Funding

MOD 16

440001 1300281103

LLA :

A8 1721319 A5HA 251 WS020 0 050120 2D 000000 A00001269479
Funding in support of TI-005. Note: 10 U.S.C. 2410a Authority does NOT apply.
Funds expire 30 September 2013, or through the end date of the period of
performance for CLIN 4400, whichever occurs first. Contractor may continue to
invoice after this date, but only for work performed up through and including 30
September 2013.

640001 1300281103

LLA :

A8 1721319 A5HA 252 WS020 0 050120 2D 000000 A00001269479 Funding in support of TI-005. Note: 10 U.S.C. 2410a Authority does NOT apply. Funds expire 30 September 2013, or through the end date of the period of performance for CLIN 6400, whichever occurs first. Contractor may continue to invoice after this date, but only for work performed up through and including 30 September 2013.

MOD 16 Funding Cumulative Funding

MOD 1.7

440002 1300339780

LLA

A9 1731319 A5HA 251 WS020 0 050120 2D 000000 A00001651792 Funding in support of TI-005. Note: 10 U.S.C. 2410a Authority does NOT apply. Funds expire 30 September 2013, or through the end date of the period of performance for CLIN 4400, whichever occurs first. Contractor may continue to invoice after this date, but only for work performed up through the end date of the period of performance.

MOD 17 Funding Cumulative Funding

MOD 18

450001 1300357162

LLA :

B1 1731319 A5HA 251 WS020 0 050120 2D 000000 A00001774387 Funding in support of TI-005. Note: 10 U.S.C. 2410a Authority does NOT apply. Funds expire 30 September 2014, or through the end date of the period of performance for CLIN 4500, whichever occurs first. Contractor may continue to invoice after this date, but only for work performed up through the end date of the period of performance.

MOD 18 Funding Cumulative Funding

MOD 19

450002 1300359154

LLA :

Part of the period of performance.

Part of the period of performance.

640001 1300281103

LLA :

CONTRACT NO.	DELIVERY ORDER NO.	AMENDMENT/MODIFICATION NO.	PAGE	FINAL
N00178-06-D-4684	FC01	41	45 of 58	

A8 1721319 A5HA 252 WS020 0 050120 2D 000000 A00001269479 Funding in support of TI-005. Note: 10 U.S.C. 2410a Authority does NOT apply. Funds expire 30 September 2013, or through the end date of the period of performance for CLIN 6400, whichever occurs first. Contractor may continue to invoice after this date, but only for work performed up through and including 30 September 2013.

MOD 19 Funding Cumulative Funding

MOD 20

450003 130038001100003

LLA :

B3 1731319 A5HA 251 WS020 0 050120 2D 000000 A00001927773

Standard Number: N0002413WX05498

Funding in support of TI-005. Note: 10 U.S.C. 2410a Authority does NOT apply. Funds expire 30 September 2014, or through the end date of the period of performance for CLIN 4500, whichever occurs first. Contractor may continue to invoice after this date, but only for work performed up through the end date of the period of performance.

650001 130038001100004

LLA :

B3 1731319 A5HA 251 WS020 0 050120 2D 000000 A00001927773

Standard Number: N0002413WX05498

2410(a) funds expire for this SLIN 365 days from effective date of above modification, or through POP date identified in Section F, whichever occurs first. Contractor may continue to invoice after this date, but only for work performed during the applicable period.

MOD 20 Funding Cumulative Funding

MOD 21

450004 130040032500001

LLA :

B4 1741319 A5HA 251 WS020 0 050120 2D 000000 A00002099922

Standard Number: N0002414WX02836

Contractor may NOT perform against this SLIN after 28 June 2014. Contractor may continue to invoice after this date, but only for work performed through and including the aforementioned date.

650002 130040032500002

LLA :

B4 1741319 A5HA 251 WS020 0 050120 2D 000000 A00002099922 Contractor may NOT perform against this SLIN after 28 June 2015. Contractor may continue to invoice after this date, but only for work performed through and including the aforementioned date.

MOD 21 Funding Cumulative Funding

MOD 22

450005 130041752000001

LLA :

D5 97X4930 NH1J 253 77777 0 050120 2F 000000 A00002234844

Contractor may NOT perform against this SLIN after 28 June 2014. Contractor may continue to invoice after this date, but only for work performed through and including the aforementioned date.

MOD 22 Funding Cumulative Funding
 CONTRACT NO.
 DELIVERY ORDER NO.
 AMENDMENT/MODIFICATION NO.
 PAGE | FINAL |

 N00178-06-D-4684
 FC01
 41
 46 of 58

450006 13

130042004200001

LLA :

B6 1741319 A5HA 251 WS020 0 050120 2D 000000 A00002253148

Standard Number: N0002414WX02836

Contractor may NOT perform against this SLIN after 22 July 2014. Contractor may continue to invoice after this date, but only for work performed through and including the aforementioned date.

MOD 23 Funding Cumulative Funding

MOD 24 Funding Cumulative Funding

MOD 25

460001 130043537500001

LLA :

B7 97X4930 NH4A 000 77777 0 000173 2F 4X0049 N00173Z45000 Contractor may NOT perform against this SLIN after 30 Sept 2014. Contractor may continue to invoice after this date, but only for work performed through and including the aforementioned date.

460002 130043071300001

LLA :

B8 1731319 A5HA 251 WS020 0 050120 2D 000000 A00002327000 Contractor may NOT perform against this SLIN after 30 Sept 2014. Contractor may continue to invoice after this date, but only for work performed through and including the aforementioned date.

MOD 25 Funding Cumulative Funding

MOD 26

460003 130044492700001

LLA :

B9 1741319 A5HA 251 WS020 0 050120 2D 000000 A00002426680 Contractor may NOT perform against this SLIN after POP date identified in Section F. Contractor may continue to invoice after this date, but only for work performed through and including the aforementioned date.

600006 01179793

LLA :

A3 1701319 A5BJ 253 SASWS 0 068342 2D 159180 9D79A000CON0 Standard Number: N0002410WX11922 (AA)

In support of TI 004. (ACRN increase)

600008 12699242

LLA :

A5 97X4930 NH1E 000 77777 0 000178 2F 000000 21WA911B1PD2

Standard Number: N0017811WX00610 (AA)

Funding in support of TI-004. (ACRN increase) Note: 10 U.S.C. 2410a Authority does NOT apply. Funds expire at the end date of the period of performance for CLIN 6000. Contractor may continue to invoice after this date, but only for work performed up through and including the end date of the period of performance for CLIN 6000.

600009 130026502100002

LLA :

A7 97X4930 NH1J 252 77777 0 050120 2F 000000 A00001162169 Funding in support of TI-05. Note: 10 U.S.C. 2410a Authority does NOT apply. Funds (RDT&E) expire 30 September 2013 or at the end date of the period of performance for CLIN 6000, whichever occurs first. Contractor may continue to invoice after this date, but only for work performed up through and including 30 September 2013 or the end date of the period of performance for CLIN 6000.

MOD 26 Funding Cumulative Funding CONTRACT NO. DELIVERY ORDER NO. AMENDMENT/MODIFICATION NO. PAGE FINAL N00178-06-D-4684 FC01 41 47 of 58

MOD 27 Funding Cumulative Funding

MOD 28

460004 130046428400001

LLA :

C1 1751319 A5HA 251 WS020 0 050120 2D 000000 A00002611799 Contractor may NOT perform against this SLIN after 28 June 2015. Contractor may continue to invoice after this date, but only for work performed through and including the aforementioned date.

MOD 28 Funding Cumulative Funding (

MOD 29

460005 130048399000001

LLA :

C2 97X4930 NH1J 253 77777 0 050120 2F 000000 A00002769407 Contractor may NOT perform against this SLIN after POP date identified in Section F. Contractor may continue to invoice after this date, but only for work performed through and including the aforementioned date.

460006 130047498500001

LLA :

C3 1741319 A5HA 251 WS020 0 050120 2D 000000 A00002701929 Contractor may NOT perform against this SLIN after POP date identified in Section F. Contractor may continue to invoice after this date, but only for work performed through and including the aforementioned date.

460007 130048400100001

LLA :

C4 97X4930 NH1J 253 77777 0 050120 2F 000000 A00002769462 Contractor may NOT perform against this SLIN after POP date identified in Section F. Contractor may continue to invoice after this date, but only for work performed through and including the aforementioned date.

460008 130048400200001

LLA

C5 97X4930 NH1J 253 77777 0 050120 2F 000000 A00002769463 Contractor may NOT perform against this SLIN after POP date identified in Section F. Contractor may continue to invoice after this date, but only for work performed through and including the aforementioned date.

MOD 29 Funding Cumulative Funding

MOD 30

460009 130048657600001

LLA :

C6 97X4930 NH1J 251 77777 0 050120 2F 000000 A00002786821 Contractor may NOT perform against this SLIN after 28 June 2015. Contractor may continue to invoice after this date, but only for work performed through and including the aforementioned date.

460010 130048775100001

LLA :

C7 97X4930 NH1J 251 77777 0 050120 2F 000000 A00002795319 Contractor may NOT perform against this SLIN after 28 June 2015. Contractor may continue to invoice after this date, but only for work performed through and including the aforementioned date.

MOD 30 Funding Cumulative Funding

MOD 31 Funding

 CONTRACT NO.
 DELIVERY ORDER NO.
 AMENDMENT/MODIFICATION NO.
 PAGE 48 of 58
 FINAL 48 of 58

Cumulative Funding

MOD 32

7001AA 130050781500001

LLA :

C8 97X4930 NH1J 252 77777 0 050120 2F 000000 A00002937150

Contractor may NOT perform against this SLIN after POP date identified in Section F. Contractor may continue to invoice after this date, but only for work performed through and including the aforementioned date.

7001AB 130050586000001

LLA :

C9 97X4930 NH1J 251 77777 0 050120 2F 000000 A00002924375

Contractor may NOT perform against this SLIN after POP date identified in Section F. Contractor may continue to invoice after this date, but only for work performed through and including the aforementioned date.

MOD 32 Funding Cumulative Funding

MOD 33

7001AC 130050205300001

LLA

D1 1751319 A5HA 251 WS020 0 050120 2D 000000 A00002900388

Contractor may NOT perform against this SLIN after POP date identified in Section F. Contractor may continue to invoice after this date, but only for work performed through and including the aforementioned date.

7001AD 130051011500001

LLA :

D2 97X4930 NH1J 251 77777 0 050120 2F 000000 A00002952007

Contractor may NOT perform against this SLIN after POP date identified in Section F. Contractor may continue to invoice after this date, but only for work performed through and including the aforementioned date.

7001AE 130051011700001

LLA

D3 97X4930 NH1J 251 77777 0 050120 2F 000000 A00002952081

Contractor may NOT perform against this SLIN after POP date identified in Section F. Contractor may continue to invoice after this date, but only for work performed through and including the aforementioned date.

7001AF 130051022200001

LLA :

D4 97X4930 NH1J 251 77777 0 050120 2F 000000 A00002952381

Contractor may NOT perform against this SLIN after POP date identified in Section F. Contractor may continue to invoice after this date, but only for work performed through and including the aforementioned date.

7001AG 130051011200001

LLA :

D5 1751804 8C2C 251 WS020 0 050120 2D 000000 A00002951885

Contractor may NOT perform against this SLIN after POP date identified in Section F. Contractor may continue to invoice after this date, but only for work performed through and including the aforementioned date.

MOD 33 Funding Cumulative Funding

MOD 34

460006 130047498500001

T.T.A

C3 1741319 A5HA 251 WS020 0 050120 2D 000000 A00002701929

Contractor may NOT perform against this SLIN after POP date identified in Section F. Contractor may continue to invoice after this date, but only for work performed through and including the aforementioned date.

CONTRACT NO.	DELIVERY ORDER NO.	AMENDMENT/MODIFICATION NO.	PAGE	FINAL
N00178-06-D-4684	FC01	41	49 of 58	

460009 130048657600001

LLA :

C6 97X4930 NH1J 251 77777 0 050120 2F 000000 A00002786821 Contractor may NOT perform against this SLIN after 28 June 2015. Contractor may continue to invoice after this date, but only for work performed through and including the aforementioned date.

460010 130048775100001

LLA:

C7 97X4930 NH1J 251 77777 0 050120 2F 000000 A00002795319 Contractor may NOT perform against this SLIN after 28 June 2015. Contractor may continue to invoice after this date, but only for work performed through and including the aforementioned date.

650002 130040032500002

LLA :

B4 1741319 A5HA 251 WS020 0 050120 2D 000000 A00002099922 Contractor may NOT perform against this SLIN after 28 June 2015. Contractor may continue to invoice after this date, but only for work performed through and including the aforementioned date.

7001AH 130052245200001

LLA:

D6 1751804 8C2C 251 WS020 0 050120 2D 000000 A00003032179 Contractor may NOT perform against this SLIN after POP date identified in Section F. Contractor may continue to invoice after this date, but only for work performed through and including the aforementioned date.

7001AK 130052047800001

LLA :

D7 1751319 A5HA 251 WS020 0 050120 2D 0000000 A00003020805 Contractor may NOT perform against this SLIN after POP date identified in Section F. Contractor may continue to invoice after this date, but only for work performed through and including the aforementioned date.

9001AA 130052047800002

LLA :

D7 1751319 A5HA 251 WS020 0 050120 2D 000000 A00003020805 Contractor may NOT perform against this SLIN after POP date identified in Section F. Contractor may continue to invoice after this date, but only for work performed through and including the aforementioned date.

MOD 34 Funding Cumulative Funding

MOD 35

7001AL 130052949200001

LLA

D9 1741319 A5HA 251 WS020 0 050120 2D 000000 A00003090756 Contractor may NOT perform against this SLIN after POP date identified in Section F. Contractor may continue to invoice after this date, but only for work performed through and including the aforementioned date.

MOD 35 Funding Cumulative Funding

MOD 36

7001AM 130052949800001

LLA

E1 1741319 A5HA 251 WS020 0 050120 2D 000000 A00003090754 Contractor may NOT perform against this SLIN after POP date identified in Section F. Contractor may continue to invoice after this date, but only for work performed through and including the aforementioned date.

MOD 36 Funding . Cumulative Funding

CONTRACT NO. DELIVERY ORDER NO. AMENDMENT/MODIFICATION NO. PAGE FINAL N00178-06-D-4684 FC01 41 50 of 58

MOD 37

7001AN 130053290100001

LLA

E2 1751319 A5HA 251 WS020 0 050120 2D 000000 A00003129808 Contractor may NOT perform against this SLIN after POP date identified in Section F. Contractor may continue to invoice after this date, but only for work performed through and including the aforementioned date.

MOD 37 Funding 83000.00 Cumulative Funding 9324876.75

MOD 38

7001AP 130054024400001

LLA :

E3 97X4930 NH1J 251 77777 0 050120 2F 000000 A00003197020 Contractor may NOT perform against this SLIN after POP date identified in Section F. Contractor may continue to invoice after this date, but only for work performed through and including the aforementioned date.

MOD 38 Funding Cumulative Funding

MOD 39

7001AQ 130054085100001

T.T.A

E4 1751319 A5HA 251 WS020 0 050120 2D 000000 A00003202630 Contractor may NOT perform against this SLIN after POP date identified in Section F. Contractor may continue to invoice after this date, but only for work performed through and including the aforementioned date.

MOD 39 Funding Cumulative Funding

MOD 40

7001AR 130054887700001

LLA

E5 97X4930 NH1J 255 77777 0 050120 2F 000000 A00003268840 Contractor may NOT perform against this SLIN after POP date identified in Section F. Contractor may continue to invoice after this date, but only for work performed through and including the aforementioned date.

MOD 40 Funding Cumulative Funding

MOD 41

7001AS 130055362000001

LLA :

E6 97X4930 NH1J 255 77777 0 050120 2F 000000 A00003306706 Contractor may NOT perform against this SLIN after POP date identified in Section F. Contractor may continue to invoice after this date, but only for work performed through and including the aforementioned date

MOD 41 Funding ... Cumulative Funding

CONTRACT NO.	DELIVERY ORDER NO.	AMENDMENT/MODIFICATION NO.	PAGE	FINAL.
N00178-06-D-4684	FC01	41	51 of 58	

SECTION H SPECIAL CONTRACT REQUIREMENTS

GOVERNMENT FURNISHED PROPERTY (SEP 1990) (NAVSEA 5252,245-9108)

The Government will provide only that property set forth below, notwithstanding any term or condition of this task order to the contrary. Upon Contractor's written request to the cognizant Contracting Officer's Representative, via the cognizant Procuring Contract Office (NSWC Crane), the Government will furnish the following for use in the performance of this task order:

* To be identified upon issuance of each Technical Instruction (TI).

TECHNICAL INSTRUCTIONS (MAY 1993)(NAVSEA 5252.242-9115)

- (a) Performance of the work hereunder shall be subject to written technical instructions signed by the Contracting Officer's Representative specified in Section G of this task order. As used herein, technical instructions are defined to include the following:
 - 1. Directions to the contractor which suggest pursuit of certain lines of inquiry, shift work emphasis, fill-in details or otherwise serve to accomplish the contractual statement of work.
 - 2. Guidelines to the contractor which assist in the interpretation of drawings, specifications or technical portions of work description.
- (b) Technical instructions must be within the general scope of work stated in the task order. Technical Instructions may not be used to:
 - 1. Assign additional work under the task order
 - 2. Direct a charge as defined in the "CHANGES" clause of this task order
 - 3. Increase or decrease the task order price or estimated task order amount (including fee), as applicable, the level of effort, or the time required for task order performance
 - 4. Change any of the terms, conditions or specifications of the task order.
- (c) If, in the opinion of the contractor, any technical instruction calls for effort outside the scope of the task order or is inconsistent with this requirement, the contractor shall notify the Procuring Contracting Officer (NSWC Crane) in writing within ten (10) working days after the receipt of any such instruction. The contractor shall not proceed with the work affected by the technical instruction unless and until the contractor is notified by the Procuring Contracting Officer (NSWC Crane) that the technical instruction is within the scope of the task order.
- (d) Nothing in the foregoing paragraph shall be construed to excuse the contractor from performing that portion of the contractual work statement, which is not affected by the disputed technical instruction.

CONFORMANCE WITH THE ENVIRONMENTAL MANAGEMENT SYSTEM

The Contractor shall perform work under this contract, at the installation or at the Contractor site, consistent with the policy and objectives identified in the installation's Environmental Management System (EMS) and applicable rules and regulations provided to the contractor as Government Furnished Information (GFI). The Contractor shall perform work in a manner that conforms to objectives and targets, environmental programs and operational controls identified by the EMS. The Contractor shall provide monitoring and measurement information as required by the EMS coordinator (Environmental Protection Manager) to address environmental performance relative to environmental, energy, and transportation management goals.

In the event an EMS nonconformance or environmental noncompliance associated with the contracted services, tasks, or actions occurs, the Contractor shall be responsible for coordinating with the installation's Environmental Protection office on proposed corrective and/or preventive actions and for completing all corrective/preventative actions as required by the EMS coordinator or the Environmental Protection Office. In addition, the Contractor shall ensure its employees are aware of their roles and responsibilities under the EMS and Environmental laws and regulations, and how these EMS roles and responsibilities affect work performed under the contract.

The Contractor shall be responsible for ensuring their employees receive applicable environmental and occupational health and safety training, and maintain regulatory required specific training for the type of work to be conducted. All Contractor personnel, and their subcontractor personnel, performing tasks that have the potential to cause an

CONTRACT NO.	DELIVERY ORDER NO.	AMENDMENT/MODIFICATION NO.	PAGE	FINAL
N00178-06-D-4684	FC01	41	52 of 58	

environmental impact shall be competent on the basis of appropriate education, training, or experience. Upon contract award, the Government will provide EMS Awareness and Environmental Awareness training on CD to the Contractor. The Contractor shall provide the EMS coordinator with all training records required by the EMS coordinator or the Environmental Protection Office (including but not limited to EMS training, waste water treatment certifications, asbestos certifications, etc.) for all Contractor personnel and subcontractor personnel within 30 days prior to performance or at a time of contract award whichever comes first and annually thereafter. The installation EMS Coordinator will retain associated records.

H20S INSURANCE - WORK ON A GOVERNMENT INSTALLATION

The following types of insurance are required in accordance with the clause entitled. Insurance - Work On A Government Installation (FAR 52.228-5), and shall be maintained in the minimum amounts shown:

- 1. Comprehensive General Liability: \$200,000 per person and \$500,000 per accident for bodily injury.
- 2. Automobile Insurance: \$200,000 per person and \$500,000 per accident for bodily injury and \$20,000 per accident for property damage.
- 3. Standard Workmen's Compensation and Employer's Liability Insurance (or, where maritime employment is involved, Longshoremen's and Harbor Worker's Compensation Insurance) in the minimum of \$100,000.

ALLOTMENT OF FUNDS (MAY 1993) (NAVSEA 5252.232-9104)

This task order is incrementally funded with respect to both cost and fee. The amount(s) presently available and allotted to this contract for payment of fee for incrementally funded contract line item number/contract sub-line item number (CLIN/SLIN), subject to the clause entitled "FIXED FEE" (FAR 52.216 8) or "INCENTIVE FEE" (FAR 52.216 10), as appropriate, is specified below. The amount(s) presently available and allotted to this contract for payment of cost for incrementally funded CLINs/SLINs is set forth below. As provided in the clause of this contract entitled "LIMITATION OF FUNDS" (FAR 52.232 22), the CLINs/SLINs covered thereby, and the period of performance for which it is estimated the allotted amount(s) will cover is as follows:

* See Section G

H30S LIMITATION OF LIABILITY - INCREMENTAL FUNDING (JUN 2004)

This task order is incrementally funded and the amount currently available for payment hereunder is limited to *\$ inclusive of fee, profit and all other charges. The clause entitled, Limitation of Funds (FAR 52.232-22) applies. The Government is not obligated to reimburse the Contractor for costs incurred in excess of this amount unless additional funds are made available and are incorporated as a modification to this task order.

*Refer to the General Information Section.

(End of Clause)

H83S SERVICE CONTRACT ACT WAGE DETERMINATION (JUN 2004)

The applicable Service Contract Wage Determinations by the Secretary of Labor are provided as attachment J-1 in Section J.

HC25S ACCESS TO GOVERNMENT SITE (JUN 2004)

- 1. Contractor personnel shall comply with all current badging and security procedures required to gain access to any Government site.
- 2. The contractor shall ensure that contractor personnel employed on any Government site become familiar with and obey Activity Regulations.
- 3. Contractor personnel shall not enter restricted areas unless required to do so and until cleared for such entry.
- 4. The contractor shall request permission to interrupt any activity roads or utility services in writing a minimum of 15 calendar days prior to the date of interruption.
- 5. Contractor personnel shall bear personal protective equipment in designated areas.
- 6. All contractor equipment shall by conspicuously marked for identification.
- 7. The contractor shall strictly adhere to Federal Occupational Safety and Health Agency (OSHA) Regulations, Environmental Protection Agency (EPA) Regulations, and all applicable state and local requirements.

(End of Clause)

CONTRACT NO.	DELIVERY ORDER NO.	AMENDMENT/MODIFICATION NO.	PAGE	FINAL
N00178-06-D-4684	FC01	41	53 of 58	

- (a) Except as specified in subparagraph (b) below, no order, statement, or conduct of any Government personnel who visit the contractor's facilities or in any other manner communicates with contractor personnel during the performance of this task order shall constitute a change under the Changes clause of this task order.
- (b) The contractor shall not comply with any order, direction or request of Government personnel unless it is issued in writing and signed by the Contracting Officer, or is pursuant to specific authority otherwise included as a part of this task order.
- (c)The Contracting Officer is the only person authorized to approve changes in any of the requirements of this task order and, notwithstanding provisions contained elsewhere in this task order, the said authority remains solely the Contracting Officer's. In the event the contract effects any change at the direction of any person other than the Contracting Officer, the change will be considered to have been made without authority and no adjustment will be made in the task order price to cover any increase in charges incurred as a result thereof.

HP10S OPTION TO EXTEND THE TERM OF THE TASK ORDER

This task order is renewable at the prices stated in Section B of the Contractor's proposal upon written modification to authorize performance under Option Terms 1 and 2 of the task order as provided for elsewhere herein. The total duration of this task order, including Option Terms, shall not exceed 60 months.

HQ B-2-0020 TRAVEL COSTS - ALTERNATE I (NAVSEA) (DEC 2005)

- (a) Except as otherwise provided herein, the Contractor shall be reimbursed for its reasonable actual travel costs in accordance with FAR 31.205-46. The costs to be reimbursed shall be those costs accepted by the cognizant DCAA.
- (b) Reimbursable travel costs include only that travel performed from the Contractor's facility to the worksite, in and around the worksite, and from the worksite to the Contractor's facility.
- (c) Relocation costs and travel costs incident to relocation are allowable to the extent provided in FAR 31.205-35; however, Contracting Officer approval shall be required prior to incurring relocation expenses and travel costs incident to relocation.
- (d) The Contractor shall not be reimbursed for the following daily local travel costs: (i) travel at U.S. Military Installations where Government transportation is available, (ii) travel performed for personal convenience/errands, including commuting to and from work, and (iii) travel costs incurred in the replacement of personnel when such replacement is accomplished for the Contractor's or employee's convenience.

(End of Clause)

HQ-C-2-0014 CONTRACTORS PROPOSAL (NAVSEA)(SEP 1990)

- (a) Performance of this task order by the contractor shall be conducted and performed in accordance with detailed obligations to which the contractor committed itself in proposal dated 22 May 2009in response to NSWC Crane solicitation N00024-09-R-3295.
- (b) The technical volume(s) of the contractor's proposal is incorporated by reference and hereby made subject to the provisions of the "ORDER OF PRECEDENCE" (FAR 52.215-08) clause of this task order. Under the "ORDER OF PRECEDENCE" clause, the technical volume of the contractor's proposal referenced herein is hereby designated as item (f) of the clause following "The Specifications" in order of precedence.

H-XX NOTIFICATION CONCERNING DETERMINATION OF SMALL BUSINESS SIZE STATUS

For the purposes of FAR clauses 52.219-6, NOTICE OF TOTAL SMALL BUSINESS SET-ASIDE, 52.219-3, NOTICE OF TOTAL HUBZONE SET-ASIDE, 52.219-18, NOTIFICATION OF COMPETITION LIMITED TO ELIGIBLE 8(A) CONCERNS, and 52.219-27 NOTICE OF TOTAL SERVICE-DISABLED VETERAN-OWNED SMALL BUSINESS SET-ASIDE, the determination of whether a small business concern is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the size standards in this solicitation, and further, meets the definition of a HUBZone small

CONTRACT NO.	DELIVERY ORDER NO.	AMENDMENT/MODIFICATION NO.	PAGE	FINAL
N00178-06-D-4684	FC01	41	54 of 58	

business concern, a small business concern certified by the SBA for participation in the SBAs 8(a) program, or a service disabled veteran-owned small business concern, as applicable, shall be based on the status of said concern at the time of award of the SeaPort-e MACs and as further determined in accordance with Special Contract Requirement H-19.

(End of Clause)

H - SPECIAL REQUIREMENTS:

RAPIDGate NSA/NSWC CRANE INSTALLATION ACCESS (May 2012)

If this contract includes the clause "FAR 52.204-9 Personal Identity Verification of Contractor Personnel" or will otherwise require frequent access to NSA/NSWC Crane site, the Contractor shall consider taking advantage of the benefits available from the following RAPIDGate program:

NSA/NSWC Crane is implementing the Navy Commercial Access Control System (NCACS) projects. The NCACS is the standard identity management and perimeter installation access control solution for the access management of vendors, contractors, suppliers and service providers who are not authorized a Common Access Card (CAC). The rationale for implementation of this system is to increase security while reducing impacts to the contractor community by improving efficiencies for base entry.

The new protocol being implemented to fulfill this NCACS requirement is the RAPIDGate system. The system meets Presidential Directive (HSPD-12) requirements by providing background checks of contractor personnel. A personal badge that affords base access (and/or multiple base access) for one year will be issued to each Contractor employee that meets background check criteria. While Contractors are not required to participate in this program, those Contractors who choose not to participate will be required to obtain daily passes for base access.

There are costs for contractors to participate in the RAPIDGate program which include a fee for the Contractor's form and a fee per Contractor employee. Costs to participating Contractor's are recaptured through increased productivity of their employees due to the reduction in waiting times at the Pass and Identification Office and Entry Control Point (ECP). Costs shall not be directly billed to the Government. The costs to participate in the RAPIDGate program are identified in the table below.

A Government Sponsor is required to validate a Contractor's request for RAPIDGate access, and shall be the Contracting Officer's Representative (COR). If there is no COR, then the Government Sponsor is the Contracting Officer (KO).

The Government does not guarantee the contractor's successful enrollment or the successful enrollment of any contractor employees in the RAPIDGate program. Significant delays may result from choosing to access the installation by obtaining a one day pass. The Government will not be held responsible for any access delays associated with using the daily pass process. Please address any questions or concerns regarding RAPIDGate to the COR or the local Base Security Office personnel listed below.

NSA/NSWC Crane RAPIDGate Primary Program Point of Contact is Jon Thomas, and can be reached at <u>Jon.M.Thomas@Navy.mil</u> or at 812-854-5624. NSA/NSWC Crane RAPIDGate Secondary Program Point of Contact is Larry Patterson, and can be reached at <u>Larry.Patterson@Navy.mil</u> or 812-854-5642.

Additional information is available at http://www.rapidgate.com/rapidgate

RAPIDGate Pricing—(Subject to change without notice):

<u> </u>	E 1 4	- .
Program	l Enroilment	Price
<u>i iogiain</u>	<u> </u>	1 1100
		

CONTRACT NO.	DELIVERY ORDER NO.	AMENDMENT/MODIFICATION NO.	PAGE	FINAL
N00178-06-D-4684	FC01	41	55 of 58	

Single Installation	Company	\$199.99 annually
Single Installation	Employee	\$159.00 annually
Enterprise (Multiple installations)	Company	\$249.00 annually - 2 or more installations
Enterprise (Multiple installations)	Employee	\$199.00 annually 2 or more installations
90 day Option	Employee	\$59.00 per 90 days
Replacement Credential	Employee	\$30.00 per credential

(end of clause)

52.219-6 NOTICE OF TOTAL SMALL BUSINESS SET-ASIDE (JUNE 2003)

- (a) Definition. "Small business concern" as used in this clause, means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the size standards in this solicitation.
- (b) General. (1) Offers are solicited only from small business concerns. Offers received from concerns that are not small business concerns shall be considered nonresponsive and will be rejected. (2) Any award resulting from this solicitation will be made to a small business concern.
- (c) Agreement. A small business concern submitting an offer in its own name shall furnish, in performing the contract, only end items manufactured or produced by small business concerns in the United States or its outlying areas. If this procurement is processed under simplified acquisition procedures and the total amount of this contract does not exceed \$25,000, a small business concern may furnish the product of any domestic firm. This paragraph does not apply to construction or service contracts.

CONTRACT NO.	DELIVERY ORDER NO.	AMENDMENT/MODIFICATION NO.	PAGE	FINAL
N00178-06-D-4684	FC01	41	56 of 58	

SECTION I CONTRACT CLAUSES

FAR 52.222-41 Service Contract Act (1965)

FAR 52-227-14 Data Rights (DEC 2007)

DFARS 252-227-7013 Rights in technical data – Noncommercial items (NOV 1995)

CLAUSES INCORPORATED BY FULL TEXT

252.222-7999 Additional Requirements and Responsibilities Restricting the Use of Mandatory Arbitration Agreements

(DEVIATION)

Use the following clause in all contracts in excess of \$1 million utilizing funds appropriated by the Fiscal Year 2010 Defense Appropriations Act (Pub. L. 111-118), except in contracts for the acquisition of commercial items and commercially available off-the-shelf items.

ADDITIONAL REQUIREMENTS AND RESPONSIBILITIES RESTRICTING THE USE OF MANDATORY ARBITRATION AGREEMENTS (DEVIATION) (FEB 2010)

(a) Definitions.

"Covered subcontract," as used in this clause, means any subcontract, except a subcontract for the acquisition of commercial items or commercially available off-the-shelf items, that is in excess of \$1 million and uses Fiscal Year 2010 funds.

(b) The Contractor-

(1) Agrees not to-

- (i) Enter into any agreement with any of its employees or independent contractors that requires, as a condition of employment, that the employee or independent contractor agree to resolve through arbitration any claim under title VII of the Civil Rights Act of 1964 or any tort related to or arising *out* of sexual assault or harassment, including assault and battery, intentional infliction of emotional distress, false imprisonment, or negligent hiring, supervision, or retention; or
- (ii) Take any action to enforce any provision of an existing agreement with an employee or independent contractor that mandates that the employee or independent contractor resolve through arbitration any claim under title VII of the Civil Rights Act of 1964 or any tort related to or arising out of sexual assault or harassment, including assault and battery, intentional infliction of emotional distress, false imprisonment, or negligent hiring, supervision, or retention; and
- (2) Certifies, by signature of the contract, for contracts awarded after June 17, 2010, that it requires each covered subcontractor to agree not to enter into, and not to take any action to enforce any provision of any agreements, as described in paragraph (b)(1) of this clause, with respect to any employee or independent contractor performing work related to such subcontract.
- (c) The prohibitions of this clause do not apply with respect to a Contractor's or subcontractor's agreements with employees or independent contractors that may not be enforced in a court of the United States.
- (d) The Secretary of Defense may waive the applicability of the restrictions of paragraph (b) to the

CONTRACT NO.	DELIVERY ORDER NO.	AMENDMENT/MODIFICATION NO.	PAGE	FINAL
N00178-06-D-4684	FC01	41	57 of 58	

Contractor or a particular subcontractor for the purposes of the contract or a particular subcontract if the Secretary or the Deputy Secretary personally determines that the waiver is necessary to avoid harm to national security interests of the United States, and that the term of the contract or subcontract is not longer than necessary to avoid such harm. This determination will be made public not less than 15 business days before the contract or subcontract addressed in the determination may be awarded.

(End of clause)

CONTRACT NO.	DELIVERY ORDER NO.	AMENDMENT/MODIFICATION NO.	PAGE	FINAL
N00178-06-D-4684	FC01	41	58 of 58	

SECTION J LIST OF ATTACHMENTS

Attachment 1 - DD254, Rev 1

Attachment 2 - CDRLs A001 - A002, A004 - A024

Attachment 3 - 89 SPC 09 9001

Attachment 4 - 89 SPC 09 9002

Attachment 5 - 89 SPC 09 9003

Attachment 6 - 89 SPC 09 9004

Attachment 7 - 89 SPC 09 9007

Attachment 8 - 89 SPC 09 9008

Attachment 9 - 89 SPC 09 9009

Attachment 10 - CDSA Test Philosophy

Attachment 11 - CDRL B011

Attachment 12 - Updated Wage Determination

Attachment 13 - CDRL A003, Rev. A

Attachment 14 - CDRL A025 Trip Report