

ORDER FOR SUPPLIES OR SERVICES

PAGE 1 OF 12

1. CONTRACT/PURCH ORDER/ AGREEMENT NO. HC1047-07-D-0001	2. DELIVERY ORDER/ CALL NO. 1001	3. DATE OF ORDER/ CALL (YYYYMMDD) 2015 Apr 29	4. RFQ / PURCH. REQUEST NO. DOSMC50116	5. PRIORITY
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6. ISSUED BY DISA/PL63 P.O. BOX 549 FORT MEADE MD 20755-0549	CODE: HC1047	7. ADMINISTERED BY (if other than 6) SEE ITEM 6	CODE
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8. DELIVERY FOB
 DESTINATION
 OTHER
 (See Schedule if other)

9. CONTRACTOR EXELIS INC. NAME ANNE HASSELBRACK AND 12975 WORLDGATE DR STE 700 ADDRESS HERNDON VA 20170-6008	CODE: 9M715	FACILITY	10. DELIVER TO FOB POINT BY (Date) (YYYYMMDD) SEE SCHEDULE	11. MARK IF BUSINESS IS <input type="checkbox"/> SMALL <input type="checkbox"/> SMALL DISADVANTAGED <input type="checkbox"/> WOMEN-OWNED
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12. DISCOUNT TERMS
Net 30 Days

13. MAIL INVOICES TO THE ADDRESS IN BLOCK
See Item 15

14. SHIP TO DISA JOINT OPERATIONAL CENTER <i>BC</i> 2104 TURBOT LANDING ANNAPOLIS MD 21402-5064	CODE: H98294	15. PAYMENT WILL BE MADE BY DFAS CO/JAO ATTN: CAPSW/GRP2 P.O. BOX 369016 COLUMBUS OH 43236-9016	CODE: HQ0131
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MARK ALL PACKAGES AND PAPERS WITH IDENTIFICATION NUMBERS IN BLOCKS 1 AND 2.

16. TYPE OF ORDER	DELIVERY/ CALL	X	This delivery order/call is issued on another Government agency or in accordance with and subject to terms and conditions of above numbered contract. Reference your quote dated _____ Furnish the following on terms specified herein. REF: T3813 & 1/25/2015
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ACCEPTANCE. THE CONTRACTOR HEREBY ACCEPTS THE OFFER REPRESENTED BY THE NUMBERED PURCHASE ORDER AS IT MAY PREVIOUSLY HAVE BEEN OR IS NOW MODIFIED, SUBJECT TO ALL OF THE TERMS AND CONDITIONS SET FORTH, AND AGREES TO PERFORM THE SAME.

NAME OF CONTRACTOR	SIGNATURE	TYPED NAME AND TITLE	DATE SIGNED (YYYYMMDD)
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If this box is marked, supplier must sign Acceptance and return the following number of copies:

17. ACCOUNTING AND APPROPRIATION DATA/ LOCAL USE
See Schedule

18. ITEM NO.	19. SCHEDULE OF SUPPLIES/ SERVICES	20. QUANTITY ORDERED/ ACCEPTED*	21. UNIT	22. UNIT PRICE	23. AMOUNT
SEE SCHEDULE					

* If quantity accepted by the Government is same as quantity ordered, indicate by X. If different, enter actual quantity accepted below quantity ordered and encircle.

<i>BC</i>	25. TOTAL	\$92,374.00
26. DIFFERENCES		

27a. QUANTITY IN COLUMN 20 HAS BEEN
 INSPECTED RECEIVED ACCEPTED, AND CONFORMS TO THE CONTRACT EXCEPT AS NOTED

b. SIGNATURE OF AUTHORIZED GOVERNMENT REPRESENTATIVE	c. DATE (YYYYMMDD)	d. PRINTED NAME AND TITLE OF AUTHORIZED GOVERNMENT REPRESENTATIVE
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e. MAILING ADDRESS OF AUTHORIZED GOVERNMENT REPRESENTATIVE	28. SHIP NO.	29. DO VOUCHER NO.	30. INITIALS
--	--------------	--------------------	--------------

f. TELEPHONE NUMBER	g. E-MAIL ADDRESS	<input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL	32. PAID BY	33. AMOUNT VERIFIED CORRECT FOR
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36. I certify this account is correct and proper for payment.

a. DATE (YYYYMMDD)	b. SIGNATURE AND TITLE OF CERTIFYING OFFICER
--------------------	--

37. RECEIVED AT	38. RECEIVED BY	39. DATE RECEIVED (YYYYMMDD)	40. TOTAL CONTAINERS	41. S/R ACCOUNT NO.	42. S/R VOUCHER NO.
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Section B - Supplies or Services and Prices

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0013	Sprint on Ft Bliss Engineering Support on Fort Bragg FFP Engineering Electromagnetic Support /E3 Analysis and support as specified in Performance Work Statement (13813). The contractor's proposal titled "Sprint Nextel on Fort Bliss with Exelis Corp dated 1 January 2015 is incorporated by reference FOB: Destination PURCHASE REQUEST NUMBER: DOSMC50116	1	Each	\$92,374.00	\$92,374.00
				NET AMT	\$92,374.00
	ACRN AA CIN: DOSMC501160013				\$92,374.00

Section C - Descriptions and Specifications

PWS

PERFORMANCE WORK STATEMENT (PWS)
SPONSOR PROGRAM
as of 5/Jan/2015

Contract Number:	HC1047-07-D-0001
JSC Tracking Number:	T3813
Task Order Number:	1001

Type of Task Order	<input type="checkbox"/> Cost Plus Incentive Fee	(Check one box)
	<input checked="" type="checkbox"/> Firm Fixed Price	(Double click on a box to check it.)
Key Words	Sprint Nextel, Fort Bliss, E3 Analysis, RADHAZ, SMR, LTE, PCS, MW, MSP	
SPONSOR		
Sprint Nextel 3270 Chancellor Dr. Woodbridge, VA 22192		

1. Contracting Officer's Representative (COR).

a. Primary COR.

Name:	<i>86</i>
Organization:	Joint Spectrum Center (JSC)/OS351
Department of Defense Activity Address Code (DODAAC):	H98294
Address:	2004 Turbot Landing Annapolis, MD 21012-5064
Phone Number:	<i>86</i>
Fax Number:	(410) 293-9268
E-Mail Address:	<i>86</i>

b. Alternate COR.

Name:	TBD
Organization:	JSC/OS351
DODAAC:	H98294
Address:	2004 Turbot Landing Annapolis, MD 21012-5064
Phone Number:	
Fax Number:	(410) 293-9268
E-Mail Address:	

2. Task Order (TO) Title. Sprint Nextel on Fort Bliss E3 Analysis Support

3. Background. The Telecommunications Act of 1996 directed the heads of all Federal Government departments and agencies to facilitate access by mobile service providers (MSPs) to Federal property for the purpose of siting equipment and mobile service antennas (MSAs). In response, the Department of Defense (DoD) Chief Information Officer (CIO) [formerly the Assistant Secretary of Defense for Command, Control, Communications, and

Intelligence (ASD C3I)] issued a policy memorandum regarding placement of commercial antennas on DoD property.¹

The DoD CIO policy memorandum requires that Commanders and/or Agency Directors coordinate requests for the placement of new telecommunications services on Federal property with the DoD Joint Spectrum Center (JSC), and that the JSC evaluate the proposed antenna siting/telecommunication service for potential electromagnetic interference to the existing or planned telecommunications operations of the affected government facility. The memorandum further states that the requestor will reimburse the JSC for the cost of the evaluation.

Sprint Nextel, hereafter referred to as the purchaser, has requested permission to install and operate a Specialized Mobile Radio (SMR) system, two Long Term Evolution (LTE) systems, and a Personal Communications Service (PCS) system on four sites and a Microwave (MW) system on two sites at Fort Bliss, TX.

4. Objectives. The objectives of this effort are to:

- Determine the potential for electromagnetic interference (EMI) from the proposed system transmitters to existing and planned military, government, and commercial communications-electronics (C-E) systems.
- Determine the potential for electromagnetic radiation hazards (RADHAZ) from the proposed system transmitters to personnel, fuel, and ordnance with electrically initiated devices (EIDs).

5. Scope. This PWS addresses tasking to be performed by the Electromagnetic Spectrum Engineering Services (ESES) contractor in the area of:

Electromagnetic Environmental Effects (E3) and Spectrum Engineering – coordinating electromagnetic compatibility (EMC) standards; analyzing equipment and systems for potential E3 problems and recommending solutions; performing radio frequency (RF) measurements; developing and conducting E3 training; assisting the acquisition community by assessing E3; determining operational frequency bands; and providing assistance in acquiring host nation approval for equipment operation.

6. Performance Requirements. The contractor shall provide electromagnetic environmental effects (E3) and RADHAZ analysis of the proposed installation. The results of the analysis will be documented in a memorandum followed by a Consulting Report (CR).

6.1 Task 1 – E3 Analysis.

Preliminary information from the sponsor will be used to conduct a search of military, government, and commercial frequency assignment databases to identify systems operating on government facilities in the vicinity of the site of interest. The electromagnetic environment (EME) will be compiled from the Frequency Resource Record System (FRRS), the Government Master File (GMF), and the Federal Communications Commission (FCC) frequency assignment databases at the JSC. For the analysis of linear EMI effects, the EME will include FRRS and GMF assignments for systems within 75 miles of the proposed site in co-channel or adjacent-channel frequency bands (within ± 10 MHz of the SMR, LTE, and PCS base station transmit frequency bands and within ± 20 MHz of the MW transmitter frequency) and assignments for systems within 30 miles, operating in second and third harmonically related frequency bands. FCC assignments for systems within 10 miles operating in co channel, adjacent-channel, or second and third harmonically related frequency bands, will also be identified. The 75 mile radius will be used to include C-E equipment at other DoD and government facilities that could possibly receive signals from the proposed commercial transmitters.

For the analysis of non-linear EMI effects (intermodulation), the cosite EME will include FRRS, GMF, and FCC frequency assignments between 300 MHz and 30 GHz for systems within a two mile radius of the proposed site. The two mile radius is a conservative boundary for the analysis of non-linear EMI effects.

¹ Anthony M. Valletta, DoD CIO (formerly OASD (C3I)) Memorandum to Secretaries of the Military Departments, et al., Subject: *Placement of Commercial Telecommunications Services on Federal Property*, Washington, DC: DoD CIO (formerly ASD (C3I)), 15 December 1997.

A site survey will not be required. Coordination will be conducted with the purchaser, US Government Spectrum Management, and Base Safety personnel at the proposed site. Proposed system information will be verified with the sponsor. Environmental frequency assignment data will be reviewed and validated with the installation spectrum manager. Any data for frequency assignments not listed in the FRRS, GMF, or FCC databases will be used to augment the project EME.

The augmented frequency assignment data, along with the system characteristics of the introduced commercial telecommunications equipment, will be used to perform the EMI analysis. EMI analysis techniques will be used to determine the potential for inband, adjacent band, harmonically related, and intermodulation interference. These techniques are designed to eliminate from further consideration those systems for which interference is not predicted using conservative analysis parameters.

For systems not eliminated in the conservative analysis, the Electromagnetic Spectrum Engineering Services (ESES) Contractor will conduct additional, more-detailed, analyses using additional JSC environmental analysis techniques. These techniques predict the effective on-tune received power levels considering the effects of transmitter power levels, harmonic levels, additional filtering provided by duplexers, etc., in the transmit path, transmitter antenna gain (in the direction of the victim receiver), receiver antenna gain (in the direction of the interfering transmitter), and receiver signal-filtering loss (frequency-dependent rejection).

The interference thresholds used in the EMI analysis will be based on interference-to-noise ratios (I/N) required for compatible operation as dictated by the specific modulation types involved in the interference interactions.

Deliverables: Results Memorandum followed by a CR

6.2 Task 2 – RADHAZ Analysis.

Upon verification of the characteristics data of the proposed commercial telecommunications system, an analysis will be performed using applicable DoD thresholds to determine distance separation requirements to avoid the potential for RADHAZ to personnel, fuel, and ordnance using EIDs.

Deliverables: To be delivered in the Task 1 Results Memorandum and CR

7. Performance Standards. Not Applicable.

8. Incentives. Not Applicable.

9. Place of Performance. The primary efforts associated with this TO PWS shall be performed at the government and the ESES Contractor facility. A site survey will not be performed as described in item 6.1.

Alternate Place of Performance - Contingency Only. As determined by the COR, contractor employees may be required to work at an alternate place of performance (e.g., home, the contractor's facility, or another approved activity within the local travel area) in cases of unforeseen conditions or contingencies (e.g., pandemic conditions, exercises, government closure due to inclement weather, etc.). Non-emergency/non-essential contractors should not report to a closed government facility. Contractor shall prepare all deliverables and other contract documentation utilizing contractor resources. To the extent possible, the contractor shall use best efforts to provide the same level of support as stated in the PWS. In the event the services are impacted, reduced, compromised, etc., the Contracting Officer or the contractor may request an equitable adjustment pursuant to the Changes clause of the contract.

10. Period of Performance. 240 calendar days after contract award.

11. Delivery Schedule.

Schedule of Deliverables

Title	Schedule of Deliverables
Results Memorandum	22 Weeks after TO Award
Consulting Reports	4 weeks after the Results Memorandum is distributed

12. Security. Work performed under this TO will include the following classifications of work: UNCLASSIFIED, PROPRIETARY, FOR OFFICIAL USE ONLY, CONFIDENTIAL, and SECRET. A SECRET clearance will be required to perform daily duties. Periodic meetings will be held where individuals are often required to share data and gather information in a classified environment. Individuals must be able to obtain and maintain a SECRET Clearance.

13. Government-Furnished Equipment (GFE)/Government-Furnished Information (GFI). Historical project files and reports will be provided. Site and system characteristics information for the installation proposed by the purchaser will be provided.

14. Other Pertinent Information or Special Considerations.

a. Identification of Possible Follow-on Work. Not applicable.

b. Identification of Potential Conflicts of Interest (COI). The ESES contractor shall identify any possible organizational conflict of interest (OCI) as defined in Subpart 9.5 of the Federal Acquisition Regulation. If there is an OCI, the ESES contractor must inform the COR and provide an OCI Mitigation Plan that identifies how the OCI is to be mitigated.

c. Identification of Non-Disclosure Requirements. Not applicable.

d. Packaging, Packing and Shipping Instructions. Not Applicable, provided in the base contract.

e. Inspection and Acceptance Criteria. Not Applicable, provided in the base contract.

f. Property Accountability. Not applicable.

15. Section 508 Accessibility Standards. Not applicable.

16. External Support. None.

17. Pricing Information. Information is obtained from Price List for MSP Support.

Section E - Inspection and Acceptance

INSPECTION AND ACCEPTANCE TERMS

Supplies/services will be inspected/accepted at:

CLIN	INSPECT AT	INSPECT BY	ACCEPT AT	ACCEPT BY
0013	Destination	Government	Destination	Government

Section F - Deliveries or Performance

DELIVERY INFORMATION

CLIN	DELIVERY DATE	QUANTITY	SHIP TO ADDRESS	UIC
0013	POP 30-APR-2015 TO 29-DEC-2015	N/A	DISA JOINT SPECTRUM CENTER <i>86</i> 2104 TURBOT LANDING ANNAPOLIS MD 21402-5064 <i>86</i> FOB: Destination	H98294

Section G - Contract Administration Data

ACCOUNTING AND APPROPRIATION DATA

AA: 97X4930.5F20 000 C1013 0 068142 2F 257020 DOSMC50116

AMOUNT: \$92,374.00

CIN DOSMC501160013: \$92,374.00

Section I - Contract Clauses

CLAUSES INCORPORATED BY FULL TEXT

52.204-9000 Points of Contact (AUG 2005)

Contracting Officer

Name: *BC*

Organization/Office Symbol: PI.63

Phone No.: *BC*

E-Mail Address: *BC*

Contract Specialist

Name: *BC*

Organization/Office Symbol: PL63

Phone No. *BC*

E-Mail Address: *BC*

Customer/COR/TM Point of Contact

Name: *BC*

Organization/Office Symbol: DSO/JSC/0S351

Phone No.: *BC*

E-Mail Address: *BC*

Contractor Point of Contact

Contractor Legal Business Name:

DUNS: 0833655498

CAGE CODE: 9M715

Contractor POC: Anne Hasselbrack

E-Mail Address: anne.hasselbrack@exelisinc.com

Phone Number: 301-867-2985

OR

Contractor POC:

Name: Michael Hayes

Email: michael.hayes@exelisinc.com

Phone: 301-867-2956

(End of clause)

252.232-7006 WIDE AREA WORKFLOW PAYMENT INSTRUCTIONS (MAY 2013)

(a) Definitions. As used in this clause--

Department of Defense Activity Address Code (DoDAAC) is a six position code that uniquely identifies a unit, activity, or organization.

Document type means the type of payment request or receiving report available for creation in Wide Area WorkFlow (WAWF).

Local processing office (LPO) is the office responsible for payment certification when payment certification is done external to the entitlement system.

(b) Electronic invoicing. The WAWF system is the method to electronically process vendor payment requests and receiving reports, as authorized by DFARS 252.232-7003, Electronic Submission of Payment Requests and Receiving Reports.

(c) WAWF access. To access WAWF, the Contractor shall--

(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).

Combo

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

Destination

(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	HQ0131
Issue By DoDAAC	HC1047
Admin DoDAAC	HC1047
Inspect By DoDAAC	HC1047
Ship To Code	N/A

Ship From Code	N/A
Mark For Code	N/A
Service Approver (DoDAAC)	H98294
Service Acceptor (DoDAAC)	H98294
Accept at Other DoDAAC	N/A
LPO DoDAAC	N/A
DCAA Auditor DoDAAC	N/A
Other DoDAAC(s)	N/A

(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 email address identified below in the "Send Additional Email Notifications" field of WAWF once a document is submitted in the system.
Deborah.L.murphy37.civ@mail.mil

(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.

86

86

(2) For technical WAWF help, contact the WAWF helpdesk at 866-618-5988.

(End of clause)

ORDER FOR SUPPLIES OR SERVICES

1. CONTRACT/PURCH. ORDER/ AGREEMENT NO. HC1047-07-D-0001		2. DELIVERY ORDER/ CALL NO. 1002		3. DATE OF ORDER/CALL (YYYYMMDD) 2015 Apr 30		4. REQ/ PURCH. REQUEST NO. DOSMC60108		5. PRIORITY			
6. ISSUED BY DISA/PL63 P.O. BOX 549 FORT MEADE MD 20755-0549			CODE HC1047		7. ADMINISTERED BY (if other than 6) SEE ITEM 6			CODE			
9. CONTRACTOR EXELIS INC. NAME ANNE HASSELBRACK AND 12975 WORLDGATE DR STE 700 ADDRESS HERNDON VA 20170-6008			CODE 9M715		FACILITY		10. DELIVER TO FOB POINT BY (Date) (YYYYMMDD) SEE SCHEDULE		11. MARK IF BUSINESS IS <input type="checkbox"/> SMALL <input type="checkbox"/> SMALL DISADVANTAGED <input type="checkbox"/> WOMEN-OWNED		
							12. DISCOUNT TERMS Net 30 Days		13. MAIL INVOICES TO THE ADDRESS IN BLOCK See Item 15		
14. SHIP TO DISA JOINT SPECTRUM CENTER <i>bc</i> 2104 TURBOW LANDING ANNAPOLIS MD 21402-5064			CODE H98294		15. PAYMENT WILL BE MADE BY DFAS-CO/JAQ ATTN: CAPSW/ORP2 P.O. BOX 369016 COLUMBUS OH 43236-9016			CODE HQ0131		MARK ALL PACKAGES AND PAPERS WITH IDENTIFICATION NUMBERS IN BLOCKS 1 AND 2.	

16. TYPE OF ORDER	DELIVERY/ CALL	<input checked="" type="checkbox"/>	This delivery order/call is issued on another Government agency or in accordance with and subject to terms and conditions of above numbered contract. Reference your quote dated Furnish the following on terms specified herein. REF:
	PURCHASE	<input type="checkbox"/>	

ACCEPTANCE. THE CONTRACTOR HEREBY ACCEPTS THE OFFER REPRESENTED BY THE NUMBERED PURCHASE ORDER AS IT MAY PREVIOUSLY HAVE BEEN OR IS NOW MODIFIED, SUBJECT TO ALL OF THE TERMS AND CONDITIONS SET FORTH, AND AGREES TO PERFORM THE SAME.

NAME OF CONTRACTOR	SIGNATURE	TYPED NAME AND TITLE	DATE SIGNED (YYYYMMDD)
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If this box is marked, supplier must sign Acceptance and return the following number of copies:

17. ACCOUNTING AND APPROPRIATION DATA/ LOCAL USE
See Schedule

18. ITEM NO.	19. SCHEDULE OF SUPPLIES/ SERVICES	20. QUANTITY ORDERED/ ACCEPTED*	21. UNIT	22. UNIT PRICE	23. AMOUNT
SEE SCHEDULE					

* If quantity accepted by the Government is same as quantity ordered, indicate by X. If different, enter actual quantity accepted below quantity ordered and encircle.		24. UNITED STATES OF AMERICA <i>bc</i>	25. TOTAL \$127,650.00
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27a. QUANTITY IN COLUMN 20 HAS BEEN
 INSPECTED RECEIVED ACCEPTED, AND CONFORMS TO THE CONTRACT EXCEPT AS NOTED

b. SIGNATURE OF AUTHORIZED GOVERNMENT REPRESENTATIVE	c. DATE (YYYYMMDD)	d. PRINTED NAME AND TITLE OF AUTHORIZED GOVERNMENT REPRESENTATIVE
--	-----------------------	---

e. MAILING ADDRESS OF AUTHORIZED GOVERNMENT REPRESENTATIVE	28. SHIP NO.	29. DO VOUCHER NO.	30. INITIALS
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f. TELEPHONE NUMBER	g. E-MAIL ADDRESS	<input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL	32. PAID BY	33. AMOUNT VERIFIED CORRECT FOR
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36. I certify this account is correct and proper for payment.

a. DATE (YYYYMMDD)	b. SIGNATURE AND TITLE OF CERTIFYING OFFICER	31. PAYMENT <input type="checkbox"/> COMPLETE <input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL	34. CHECK NUMBER
			35. BILL OF LADING NO.

37. RECEIVED AT	38. RECEIVED BY	39. DATE RECEIVED (YYYYMMDD)	40. TOTAL CONTAINERS	41. S/R ACCOUNT NO.	42. S/R VOUCHER NO.
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Section B - Supplies or Services and Prices

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
0013 EXERCISED OPTION	Electromagnetic Engineering Support FFP	1	Each	\$127,650.00	\$127,650.00

Electromagnetic Spectrum Engineering/E3 Analysis and support as specified in the Performance Work Statement (T3806). The contractor's proposal titled "Sprint Nextel on Camp Pendleton E3 Analysis Support" dated 15 December 2014 is incorporated by reference.

Period of Performance: May 05 2015 through February 04 2016

FOB: Destination

PURCHASE REQUEST NUMBER: DOSMC50108

MAX NET AMT	\$127,650.00
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ACRN AA CIN: DOSMC501080013	\$127,650.00
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Section C - Descriptions and Specifications

PERFORMANCE WORK STATEMENT (PWS)
SPONSOR PROGRAM
As of 20 November 2014

Contract Number:	HC1047-07-D-0001
JSC Tracking Number:	T3806
Task Order Number:	1002

Type of Task Order	<input type="checkbox"/> Cost Plus Incentive Fee	(Check one box)
	<input checked="" type="checkbox"/> Firm Fixed Price	(Double click on a box to check it.)
Key Words	Sprint Nextel, Camp Pendleton, E3 Analysis, CTS, LTE, PCS, MW, MSP	
SPONSOR		
Sprint Nextel 3270 Chancellor Dr. Woodbridge, VA 22192		

1. Contracting Officer's Representative (COR).

a. Primary COR.

Name:	<i>Be</i>
Organization:	Joint Spectrum Center (JSC)/J8
Department of Defense Activity Address Code (DODAAC):	H98294
Address:	2004 Turbot Landing Annapolis, MD 21012-5064
Phone Number:	<i>Be</i>
Fax Number:	(410) 293-9268
E-Mail Address:	<i>Be</i>

b. Alternate COR.

Name:	<i>Be</i>
Organization:	JSC/J8
DODAAC:	H98294
Address:	2004 Turbot Landing Annapolis, MD 21012-5064
Phone Number:	<i>Be</i>
Fax Number:	(410) 293-9268
E-Mail Address:	<i>Be</i>

2. Task Order (TO) Title. Sprint Nextel on Camp Pendleton E3 Analysis Support

3. Background. The Telecommunications Act of 1996 directed the heads of all Federal Government departments and agencies to facilitate access by mobile service providers (MSPs) to Federal property for the purpose of siting equipment and mobile service antennas (MSAs). In response, the Department of Defense (DoD) Chief Information Officer (CIO) [formerly the Assistant Secretary of Defense for Command, Control, Communications, and

Intelligence (ASD C3I)] issued a policy memorandum regarding placement of commercial antennas on DoD property.¹

The DoD CIO policy memorandum requires that Commanders and/or Agency Directors coordinate requests for the placement of new telecommunications services on Federal property with the DoD Joint Spectrum Center (JSC), and that the JSC evaluate the proposed antenna siting/telecommunication service for potential electromagnetic interference to the existing or planned telecommunications operations of the affected government facility. The memorandum further states that the requestor will reimburse the JSC for the cost of the evaluation.

Sprint Nextel, hereafter referred to as the purchaser, has requested permission to install and operate a Cellular Telephone System (CTS) and a Long Term Evolution (LTE) system at sixteen sites and an additional Personal Communications Service (PCS) system and LTE system at one of the sites and a Microwave (MW) system at two sites on Camp Pendleton, CA.

4. Objectives. The objective of this effort is to determine the potential for electromagnetic interference (EMI) from the proposed system transmitters to existing and planned military, government, and commercial communications-electronics (C-E) systems.

5. Scope. This PWS addresses tasking to be performed by the Electromagnetic Spectrum Engineering Services (ESES) contractor in the area of: Electromagnetic Environmental Effects (E3) and Spectrum Engineering – coordinating electromagnetic compatibility (EMC) standards; analyzing equipment and systems for potential E3 problems and recommending solutions; performing radio frequency (RF) measurements; developing and conducting E3 training; assisting the acquisition community by assessing E3; determining operational frequency bands; and providing assistance in acquiring host nation approval for equipment operation.

6. Performance Requirements. The contractor shall provide an E3 analysis of the proposed installation. The results of the analysis will be documented in a memorandum followed by a Consulting Report (CR).

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Preliminary information from the sponsor will be used to conduct a search of military, government, and commercial frequency assignment databases to identify systems operating on government facilities in the vicinity of the site of interest. The electromagnetic environment (EME) will be compiled from the Frequency Resource Record System (FRRS), the Government Master File (GMF), and the Federal Communications Commission (FCC) frequency assignment databases at the JSC. For the analysis of linear EMI effects, the EME will include FRRS and GMF assignments for systems within 75 miles of the proposed site in co-channel or adjacent-channel frequency bands (within ± 10 MHz of the CTS, LTE, and PCS base station transmit frequency bands and within ± 20 MHz of the MW transmit frequency at one site and transmit frequency band at the second site) and assignments for systems within 30 miles, operating in second and third harmonically related frequency bands. FCC assignments for systems within 10 miles operating in co channel, adjacent-channel, or second and third harmonically related frequency bands, will also be identified. The 75 mile radius will be used to include C-E equipment at other DoD and government facilities that could possibly receive signals from the proposed commercial transmitters.

¹ Anthony M. Valletta, DoD CIO (formerly OASD (C3I)) Memorandum to Secretaries of the Military Departments, et al., Subject: *Placement of Commercial Telecommunications Services on Federal Property*, Washington, DC: DoD CIO (formerly ASD (C3I)), 15 December 1997.

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A site survey will not be required. Coordination will be conducted with the purchaser and US Government Spectrum Management at the proposed site. Proposed system information will be verified with the purchaser. Environmental frequency assignment data will be reviewed and validated with the installation spectrum manager. Any data for frequency assignments not listed in the FRRS, GMF, or FCC databases will be used to augment the project EME.

The augmented frequency assignment data, along with the system characteristics of the introduced commercial telecommunications equipment, will be used to perform the EMI analysis. EMI analysis techniques will be used to determine the potential for inband, adjacent band, harmonically related, and intermodulation interference. These techniques are designed to eliminate from further consideration those systems for which interference is not predicted using conservative analysis parameters.

For systems not eliminated in the conservative analysis, the ESES Contractor will conduct additional, more-detailed, analyses using additional JSC environmental analysis techniques. These techniques predict the effective on-tune received power levels considering the effects of transmitter power levels, harmonic levels, additional filtering provided by duplexers, etc., in the transmit path, transmitter antenna gain (in the direction of the victim receiver), receiver antenna gain (in the direction of the interfering transmitter), and receiver signal-filtering loss (frequency-dependent rejection).

The interference thresholds used in the EMI analysis will be based on interference-to-noise ratios (I/N) required for compatible operation as dictated by the specific modulation types involved in the interference interactions.

Deliverables: Results Memorandum followed by a CR

7. Performance Standards. Not Applicable.

8. Incentives. Not Applicable.

9. Place of Performance. The primary efforts associated with this TO PWS shall be performed at the government and the ESES Contractor facility. As noted in paragraph 6.1, a site survey will not be performed.

Alternate Place of Performance - Contingency Only. As determined by the COR, contractor employees may be required to work at an alternate place of performance (e.g., home, the contractor's facility, or another approved activity within the local travel area) in cases of unforeseen conditions or contingencies (e.g., pandemic conditions, exercises, government closure due to inclement weather, etc.). Non-emergency/non-essential contractors should not report to a closed government facility. Contractor shall prepare all deliverables and other contract documentation utilizing contractor resources. To the extent possible, the contractor shall use best efforts to provide the same level of support as stated in the PWS. In the event the services are impacted, reduced, compromised, etc., the Contracting Officer or the contractor may request an equitable adjustment pursuant to the Changes clause of the contract.

10. Period of Performance. 240 calendar days after contract award.

11. Delivery Schedule.

Title	Schedule of Deliverables
Results Memorandum	24 Weeks after TO Award
Consulting Report	4 weeks after the Results Memorandum is distributed

12. Security. Work performed under this TO will include the following classifications of work: UNCLASSIFIED, PROPRIETARY, FOR OFFICIAL USE ONLY, CONFIDENTIAL, and SECRET. A SECRET clearance will be required to perform daily duties. Periodic meetings will be held where individuals are often required to share data and gather information in a classified environment. Individuals must be able to obtain and maintain a SECRET Clearance.

13. Government-Furnished Equipment (GFE)/Government-Furnished Information (GFI). Historical project files and reports will be provided. Site and system characteristics information for the installation proposed by the purchaser will be provided.

14. Other Pertinent Information or Special Considerations.

a. Identification of Possible Follow-on Work. Not applicable.

b. Identification of Potential Conflicts of Interest (COI). The ESES contractor shall identify any possible organizational conflict of interest (OCI) as defined in Subpart 9.5 of the Federal Acquisition Regulation. If there is an OCI, the ESES contractor must inform the COR and provide an OCI Mitigation Plan that identifies how the OCI is to be mitigated.

c. Identification of Non-Disclosure Requirements. Not applicable.

d. Packaging, Packing and Shipping Instructions. Not Applicable, provided in the base contract._

e. Inspection and Acceptance Criteria. Not Applicable, provided in the base contract.

f. Property Accountability. Not applicable.

15. Section 508 Accessibility Standards. Not applicable.

16. External Support. None.

17. Pricing Information. Information is obtained from Price List for MSP Support.

Section E - Inspection and Acceptance

INSPECTION AND ACCEPTANCE TERMS

Supplies/services will be inspected/accepted at:

CLIN	INSPECT AT	INSPECT BY	ACCEPT AT	ACCEPT BY
0013	Destination	Government	Destination	Government

Section F - Deliveries or Performance

DELIVERY INFORMATION

CLIN	DELIVERY DATE	QUANTITY	SHIP TO ADDRESS	UIC
0013	POP 05-MAY-2015 TO 04-FEB-2016	N/A	DISA JOINT SPECTRUM CENTER : <i>AC</i> 2104 TURBOT LANDING ANNAPOLIS MD 21402-5064 <i>56</i> FOB: Destination	H98294

Section G - Contract Administration Data

ACCOUNTING AND APPROPRIATION DATA

AA: 97X4930.5F20 000 C1013 0 068142 2F 255020 DOSMC50108
AMOUNT: \$127,650.00
CIN DOSMC501080013: \$127,650.00

CLAUSES INCORPORATED BY FULL TEXT

52.204-9000 Points of Contact (AUG 2005)

Contracting Officer

Name: *B6*
Organization/Office Symbol: PL63
Phone No.: *B6*
E-Mail Address: *B6*

Contract Specialist

Name: *B6*
Organization/Office Symbol: PL63
Phone No.: *B6*
E-Mail Address: *B6*

Customer/COR/TM Point of Contact

Name: *B6*
Organization/Office Symbol: DISA/Defense Spectrum Organization (DSO) JSC/18
Phone No.: *B6*
E-Mail Address: *B6*

Contractor Point of Contact

Contractor Legal Business Name: ITT
DUNS: 083655498
CAGE CODE: 9M715

Contractor POC:

Anne Hasselbrack
E-Mail Address: anne.hasselbrack@exelisinc.com
Phone Number: 301.867.2985

Technical POC:

Michael Hayes
E-mail: Michael.hayes@exelisinc.com
Phone Number: 301.867.2956

(End of clause)

Section I - Contract Clauses

CLAUSES INCORPORATED BY FULL TEXT

252.232-7006 WIDE AREA WORKFLOW PAYMENT INSTRUCTIONS (MAY 2013)

(a) Definitions. As used in this clause--

Department of Defense Activity Address Code (DoDAAC) is a six position code that uniquely identifies a unit, activity, or organization.

Document type means the type of payment request or receiving report available for creation in Wide Area WorkFlow (WAWF).

Local processing office (LPO) is the office responsible for payment certification when payment certification is done external to the entitlement system.

(b) Electronic invoicing. The WAWF system is the method to electronically process vendor payment requests and receiving reports, as authorized by DFARS 252.232-7003, Electronic Submission of Payment Requests and Receiving Reports.

(c) WAWF access. To access WAWF, the Contractor shall--

(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.

(2) Inspection/acceptance location. The Contractor shall select the following inspection/acceptance location(s) in WAWF, as specified by the contracting officer.
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	HQ0131
Issue By DoDAAC	HC1047
Admin DoDAAC	HC1047
Inspect By DoDAAC	H98294
Ship To Code	H98294
Ship From Code	_____
Mark For Code	_____
Service Approver (DoDAAC)	H98294
Service Acceptor (DoDAAC)	H98294
Accept at Other DoDAAC	_____
LPO DoDAAC	_____
DCAA Auditor DoDAAC	_____
Other DoDAAC(s)	_____

(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 email address identified below in the "Send Additional Email Notifications" field of WAWF once a document is submitted in the system.

Name:
E-mail: *BL*

(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.

ORDER FOR SUPPLIES OR SERVICES

1. CONTRACT/PURCH ORDER/AGREEMENT NO HC1047-07-D-0001	2. DELIVERY ORDER/ CALL NO 1003	3. DATE OF ORDER/CALL (YYYYMMDD) 2015 May 05	4. RIQ/ PURCH REQURSTNO DOSMC50113	5. PRIORITY
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6. ISSUED BY DISA/PL63 P.O. BOX 549 FORT MEADE MD 20755-0549	CODE: HC1047	7. ADMINISTERED BY (if other than 6) SEE ITEM 6	CODE:
---	---------------------	---	-------

9. CONTRACTOR EXELIS INC NAME ANNE HASSELBRACK AND 12975 WORLDGATE DR STE 700 ADDRESS HERNDON VA 20170-6008	CODE: 9M715	FACILITY	10. DELIVER TO FOB POINT BY (Date) (YYYYMMDD) SEE SCHEDULE	11. MARK IF BUSINESS IS <input type="checkbox"/> SMALL <input type="checkbox"/> SMALL DISADVANTAGED <input type="checkbox"/> WOMEN-OWNED
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14. SHIP TO DISA JOINT SPECTRUM CENTER <i>86</i> 2104 JUREKI LANDING ANNAPOLIS MD 21402-5064	CODE: H98294	15. PAYMENT WILL BE MADE BY DFAS-COJJAQ ATTN: CAPSWORP2 P.O. BOX 369016 COLUMBUS OH 43236-9016	CODE: HQ0131	13. MAIL INVOICES TO THE ADDRESS IN BLOCK See Item 15	MARK ALL PACKAGES AND PAPERS WITH IDENTIFICATION NUMBERS IN BLOCKS 1 AND 2.
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16. TYPE OF ORDER	DELIVERY/ CALL	<input checked="" type="checkbox"/>	X	This delivery order/call is issued on another Government agency or in accordance with and subject to terms and conditions of above numbered contract.
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ACCEPTANCE. THE CONTRACTOR HEREBY ACCEPTS THE OFFER REPRESENTED BY THE NUMBERED PURCHASE ORDER AS IT MAY PREVIOUSLY HAVE BEEN OR IS NOW MODIFIED, SUBJECT TO ALL OF THE TERMS AND CONDITIONS SET FORTH, AND AGREES TO PERFORM THE SAME.

NAME OF CONTRACTOR	SIGNATURE	TYPED NAME AND TITLE	DATE SIGNED (YYYYMMDD)
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17. ACCOUNTING AND APPROPRIATION DATA/ LOCAL USE
See Schedule

18. ITEM NO.	19. SCHEDULE OF SUPPLIES/ SERVICES	20. QUANTITY ORDERED/ ACCEPTED*	21. UNIT	22. UNIT PRICE	23. AMOUNT
SEE SCHEDULE					

* If quantity accepted by the Government is same as quantity ordered, indicate by X. If different, enter actual quantity accepted below quantity ordered and encircle.	24. UNITED STATES OF AMERICA <i>B6</i>	25. TOTAL \$41,491.00	26. DIFFERENCES
--	---	--------------------------	-----------------

27a. QUANTITY IN COLUMN 20 HAS BEEN
 INSPECTED RECEIVED ACCEPTED, AND CONFORMS TO THE CONTRACT EXCEPT AS NOTED

b. SIGNATURE OF AUTHORIZED GOVERNMENT REPRESENTATIVE	c. DATE (YYYYMMDD)	d. PRINTED NAME AND TITLE OF AUTHORIZED GOVERNMENT REPRESENTATIVE
--	-----------------------	---

e. MAILING ADDRESS OF AUTHORIZED GOVERNMENT REPRESENTATIVE	28. SHIP NO.	29. DO VOUCHER NO.	30. INITIALS
--	--------------	--------------------	--------------

f. TELEPHONE NUMBER	g. E-MAIL ADDRESS	<input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL	32. PAID BY	33. AMOUNT VERIFIED CORRECT FOR
---------------------	-------------------	--	-------------	---------------------------------

36. I certify this account is correct and proper for payment.

a. DATE (YYYYMMDD)	b. SIGNATURE AND TITLE OF CERTIFYING OFFICER
-----------------------	--

37. RECEIVED AT	38. RECEIVED BY	39. DATE RECEIVED (YYYYMMDD)	40. TOTAL CONTAINERS	41. SR ACCOUNT NO.	42. SR VOUCHER NO.
-----------------	-----------------	---------------------------------	----------------------	--------------------	--------------------

Section B - Supplies or Services and Prices

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
0013 EXERCISED OPTION	Electromagnetic Engineering Support FFP	1	Each	\$41,498.00	\$41,498.00

Electromagnetic Spectrum Engineering/E3 Analysis and support as specified in the Performance Work Statement (T3807). The contractor's proposal titled "Verizon Wireless on Fort Leonard Wood E3 Analysis Support" dated 20 January 2015 is incorporated by reference.

Period of Performance: May 05 2015 through February 04 2016

FOB: Destination

PURCHASE REQUEST NUMBER: DOSMC50113

MAX NET AMT	\$41,498.00
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ACRN AA CIN: DOSMC501130013	\$41,498.00
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Section C - Descriptions and Specifications

PERFORMANCE WORK STATEMENT

PERFORMANCE WORK STATEMENT (PWS)
SPONSOR PROGRAM
As of 12/Dec/2014

Contract Number:	HC1047-07-D-0001
JSC Tracking Number:	T3807
Task Order Number:	1003

Type of Task Order	<input type="checkbox"/> Cost Plus Incentive Fee	(Check one box)
	<input checked="" type="checkbox"/> Firm Fixed Price	(Double click on a box to check it.)
Key Words	Verizon Wireless, Fort Leonard Wood, E3 Analysis, RADHAZ, LTE, AWS, MSP	
SPONSOR		
Verizon Wireless 10740 Nall Ave, Suite 400 Overland Park, KS 66211		

1. Contracting Officer's Representative (COR).

a. Primary COR.

Name:	<i>BL</i>
Organization:	Joint Spectrum Center (JSC)/OS351
Department of Defense Activity Address Code (DODAAC):	H98294
Address:	2004 Turbot Landing Annapolis, MD 21012-5064
Phone Number:	<i>BL</i>
Fax Number:	(410) 293-9268
E-Mail Address:	<i>BL</i>

b. Alternate COR.

Name:	<i>BL</i>
Organization:	JSC/OS351
DODAAC:	H98294
Address:	2004 Turbot Landing Annapolis, MD 21012-5064
Phone Number:	<i>BL</i>
Fax Number:	(410) 293-9268
E-Mail Address:	<i>BL</i>

2. Task Order (TO) Title. Verizon Wireless on Fort Leonard Wood E3 Analysis Support

3. Background. The Telecommunications Act of 1996 directed the heads of all Federal Government departments and agencies to facilitate access by mobile service providers (MSPs) to Federal property for the purpose of siting

equipment and mobile service antennas (MSAs). In response, the Department of Defense (DoD) Chief Information Officer (CIO) [formerly the Assistant Secretary of Defense for Command, Control, Communications, and Intelligence (ASD C3I)] issued a policy memorandum regarding placement of commercial antennas on DoD property.¹

The DoD CIO policy memorandum requires that Commanders and/or Agency Directors coordinate requests for the placement of new telecommunications services on Federal property with the DoD Joint Spectrum Center (JSC), and that the JSC evaluate the proposed antenna siting/telecommunication service for potential electromagnetic interference to the existing or planned telecommunications operations of the affected government facility. The memorandum further states that the requestor will reimburse the JSC for the cost of the evaluation.

Verizon Wireless, hereafter referred to as the purchaser, has requested permission to install and operate an Advanced Wireless Services (AWS) system and two Long Term Evolution (LTE) systems at two sites on Fort Leonard Wood, MO.

4. Objectives. The objectives of this effort are to:

- Determine the potential for electromagnetic interference (EMI) from the proposed system transmitters to existing and planned military, government, and commercial communications-electronics (C-E) systems.
- Determine the potential for electromagnetic radiation hazards (RADHAZ) from the proposed system transmitters to personnel, fuel, and ordnance with electrically initiated devices (EIDs).

5. Scope. This PWS addresses tasking to be performed by the Electromagnetic Spectrum Engineering Services (ESES) contractor in the area of:

Electromagnetic Environmental Effects (E3) and Spectrum Engineering – coordinating electromagnetic compatibility (EMC) standards; analyzing equipment and systems for potential E3 problems and recommending solutions; performing radio frequency (RF) measurements; developing and conducting E3 training; assisting the acquisition community by assessing E3; determining operational frequency bands; and providing assistance in acquiring host nation approval for equipment operation.

6. Performance Requirements. The contractor shall provide an electromagnetic environmental effects (E3) and RADHAZ analysis of the proposed installation. The results of the analysis will be documented in a memorandum followed by a Consulting Report (CR).

6.1 Task 1 – E3 Analysis.

Preliminary information from the sponsor will be used to conduct a search of military, government, and commercial frequency assignment databases to identify systems operating on government facilities in the vicinity of the site of interest. The electromagnetic environment (EME) will be compiled from the Frequency Resource Record System (FRRS), the Government Master File (GMF), and the Federal Communications Commission (FCC) frequency assignment databases at the JSC. For the analysis of linear EMI effects, the EME will include FRRS and GMF assignments for systems within 75 miles of the proposed site in co-channel or adjacent-channel frequency bands (within ± 10 MHz of the AWS and LTE base station transmit frequency bands) and assignments for systems within 30 miles, operating in second and third harmonically related frequency bands. FCC assignments for systems within 10 miles operating in co channel, adjacent-channel, or second and third harmonically related frequency bands,

¹ Anthony M. Valletta, DoD CIO (formerly OASD (C3I)) Memorandum to Secretaries of the Military Departments, et al., Subject: *Placement of Commercial Telecommunications Services on Federal Property*, Washington, DC: DoD CIO (formerly ASD (C3I)), 15 December 1997.

will also be identified. The 75 mile radius will be used to include C-E equipment at other DoD and government facilities that could possibly receive signals from the proposed commercial transmitters.

For the analysis of non-linear EMI effects (intermodulation), the cosite EME will include FRRS, GMF, and FCC frequency assignments between 300 MHz and 30 GHz for systems within a two mile radius of the proposed site. The two mile radius is a conservative boundary for the analysis of non-linear EMI effects.

A site survey will not be required. Coordination will be conducted with the purchaser, US Government Spectrum Management, and Base Safety personnel at the proposed site. Proposed system information will be verified with the sponsor. Environmental frequency assignment data will be reviewed and validated with the installation spectrum manager. Any data for frequency assignments not listed in the FRRS, GMF, or FCC databases will be used to augment the project EME.

The augmented frequency assignment data, along with the system characteristics of the introduced commercial telecommunications equipment, will be used to perform the EMI analysis. EMI analysis techniques will be used to determine the potential for inband, adjacent band, harmonically related, and intermodulation interference. These techniques are designed to eliminate from further consideration those systems for which interference is not predicted using conservative analysis parameters.

For systems not eliminated in the conservative analysis, the Electromagnetic Spectrum Engineering Services (ESES) Contractor will conduct additional, more-detailed, analyses using additional JSC environmental analysis techniques. These techniques predict the effective on-tune received power levels considering the effects of transmitter power levels, harmonic levels, additional filtering provided by duplexers, etc., in the transmit path, transmitter antenna gain (in the direction of the victim receiver), receiver antenna gain (in the direction of the interfering transmitter), and receiver signal-filtering loss (frequency-dependent rejection).

The interference thresholds used in the EMI analysis will be based on interference-to-noise ratios (I/N) required for compatible operation as dictated by the specific modulation types involved in the interference interactions.

Deliverables: Results Memorandum followed by a CR

6.2 Task 2 – RADHAZ Analysis.

Upon verification of the characteristics data of the proposed commercial telecommunications system, an analysis will be performed using applicable DoD thresholds to determine distance separation requirements to avoid the potential for RADHAZ to personnel, fuel, and ordnance using EIDs.

Deliverables: To be delivered in the Task 1 Results Memorandum and CR

7. Performance Standards. Not Applicable.

8. Incentives. Not Applicable.

9. Place of Performance. The primary efforts associated with this TO PWS shall be performed at the government and the ESES Contractor facility. A site survey will not be performed as described in item 6.1.

Alternate Place of Performance - Contingency Only. As determined by the COR, contractor employees may be required to work at an alternate place of performance (e.g., home, the contractor's facility, or another approved activity within the local travel area) in cases of unforeseen conditions or contingencies (e.g., pandemic conditions, exercises, government closure due to inclement weather, etc.). Non-emergency/non-essential contractors should not report to a closed government facility. Contractor shall prepare all deliverables and other contract documentation utilizing contractor resources. To the extent possible, the contractor shall use best efforts to provide the same level of support as stated in the PWS. In the event the services are impacted, reduced, compromised, etc., the Contracting Officer or the contractor may request an equitable adjustment pursuant to the Changes clause of the contract.

10. Period of Performance. 240 calendar days after contract award.

11. Delivery Schedule.

Schedule of Deliverables	
Title	Schedule of Deliverables
Results Memorandum	10 Weeks after TO Award
Consulting Reports	4 weeks after the Results Memorandum is distributed

12. Security. Work performed under this TO will include the following classifications of work: UNCLASSIFIED, PROPRIETARY, FOR OFFICIAL USE ONLY, CONFIDENTIAL, and SECRET. A SECRET clearance will be required to perform daily duties. Periodic meetings will be held where individuals are often required to share data and gather information in a classified environment. Individuals must be able to obtain and maintain a SECRET Clearance.

13. Government-Furnished Equipment (GFE)/Government-Furnished Information (GFI). Historical project files and reports will be provided. Site and system characteristics information for the installation proposed by the purchaser will be provided.

14. Other Pertinent Information or Special Considerations.

a. Identification of Possible Follow-on Work. Not applicable.

b. Identification of Potential Conflicts of Interest (COI). The ESES contractor shall identify any possible organizational conflict of interest (OCI) as defined in Subpart 9.5 of the Federal Acquisition Regulation. If there is an OCI, the ESES contractor must inform the COR and provide an OCI Mitigation Plan that identifies how the OCI is to be mitigated.

c. Identification of Non-Disclosure Requirements. Not applicable.

d. Packaging, Packing and Shipping Instructions. Not Applicable, provided in the base contract.

e. Inspection and Acceptance Criteria. Not Applicable, provided in the base contract.

f. Property Accountability. Not applicable.

15. Section 508 Accessibility Standards. Not applicable.

16. External Support. None.

17. Pricing Information. Information is obtained from Price List for MSP Support.

Section E - Inspection and Acceptance

INSPECTION AND ACCEPTANCE TERMS

Supplies/services will be inspected/accepted at:

CLIN	INSPECT AT	INSPECT BY	ACCEPT AT	ACCEPT BY
0013	Destination	Government	Destination	Government

Section F - Deliveries or Performance

DELIVERY INFORMATION

CLIN	DELIVERY DATE	QUANTITY	SHIP TO ADDRESS	UIC
0013	POP 05-MAY-2015 TO 04-FEB-2016	N/A	DISA JOINT SPECTRUM CENTER <i>56</i> 2104 TURBOT LANDING ANNAPOLIS MD 21402-5064 <i>66</i> FOB: Destination	H98294

Section G - Contract Administration Data

ACCOUNTING AND APPROPRIATION DATA

AA: 97X4930.5F20 000 c1013 068142 2F 257020 DOSMC50113
AMOUNT: \$41,498.00
CIN DOSMC501130013: \$41,498.00

CLAUSES INCORPORATED BY FULL TEXT

52.204-9000 Points of Contact (AUG 2005)

Contracting Officer

Name: . *BC*
Organization/Office Symbol: PL63
Phone No. *BC*
E-Mail Address: *BC*

Contract Specialist

Name: *BC*
Organization/Office Symbol: PL63
Phone No.: *BC*
E-Mail Address: | *BC*

Customer/COR/TM Point of Contact

Name: *BC*
Organization/Office Symbol: DISA/Defense Spectrum Organization (DSO) JSC/J8
Phone No. *BC*
E-Mail Address *BC*

Contractor Point of Contact

Contractor Legal Business Name: ITT
DUNS: 083655498
CAGE CODE: 9M715

Contractor POC:

Anne Hasselbrack
E-Mail Address: anne.hasselbrack@exelisinc.com
Phone Number: 301.867.2985

Technical POC:

Michael Hayes
E-mail: Michael.hayes@exelisinc.com
Phone Number: 301.867.2956

(End of clause)

Section I - Contract Clauses

CLAUSES INCORPORATED BY FULL TEXT

252.232-7006 WIDE AREA WORKFLOW PAYMENT INSTRUCTIONS (MAY 2013)

(a) Definitions. As used in this clause--

Department of Defense Activity Address Code (DoDAAC) is a six position code that uniquely identifies a unit, activity, or organization.

Document type means the type of payment request or receiving report available for creation in Wide Area WorkFlow (WAWF).

Local processing office (LPO) is the office responsible for payment certification when payment certification is done external to the entitlement system.

(b) Electronic invoicing. The WAWF system is the method to electronically process vendor payment requests and receiving reports, as authorized by DFARS 252.232-7003, Electronic Submission of Payment Requests and Receiving Reports.

(c) WAWF access. To access WAWF, the Contractor shall--

(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).
Combo

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

(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	HQ0131
Issue By DoDAAC	HC1047
Admin DoDAAC	HC1047
Inspect By DoDAAC	H98294
Ship To Code	H98294
Ship From Code	_____
Mark For Code	_____
Service Approver (DoDAAC)	H98294
Service Acceptor (DoDAAC)	H98294
Accept at Other DoDAAC	_____
LPO DoDAAC	_____
DCAA Auditor DoDAAC	_____
Other DoDAAC(s)	_____

(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 email address identified below in the "Send Additional Email Notifications" field of WAWF once a document is submitted in the system.

Name:

E-mail:

B6

(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.

(2) For technical WAWF help, contact the WAWF helpdesk at 866-618-5988.

ORDER FOR SUPPLIES OR SERVICES

PAGE 1 OF 12

1. CONTRACT/PURCH ORDER/ AGREEMENT NO. HC1047-07-D-0001	2. DELIVERY ORDER/ CALL NO. 1004	3. DATE OF ORDER/ CALL (YYYYMMDD) 2015 May 07	4. REQ/ PURCH REQUEST NO. DOBMC60101	5. PRIORITY
--	-------------------------------------	---	---	-------------

6. ISSUED BY DISA/PL63 P.O. BOX 549 FORT MEADE MD 20755-0549	CODE HC1047	7. ADMINISTERED BY (if other than 6) SEE ITEM 6	CODE	8. DELIVERY FOB <input checked="" type="checkbox"/> DESTINATION <input type="checkbox"/> OTHER (See Schedule if other)
---	----------------	---	------	---

9. CONTRACTOR EMELIS INC. NAME ANNE HASSELBRACK AND 12975 WORLDGATE DR STE 700 ADDRESS HERNDON VA 20170-0006	CODE 9M715	FACILITY	10. DELIVER TO FOB POINT BY (Date) (YYYYMMDD) SEE SCHEDULE	11. MARK IF BUSINESS IS <input type="checkbox"/> SMALL <input type="checkbox"/> SMALL DISADVANTAGED <input type="checkbox"/> WOMEN-OWNED
			12. DISCOUNT TERMS	
13. MAIL INVOICES TO THE ADDRESS IN BLOCK See item 15				

14. SHIP TO DISA JOINT SPECTRUM CENTER <i>BC</i> 2104 TURBOT LANDING ANNAPOLIS MD 21402-8064	CODE H00204	15. PAYMENT WILL BE MADE BY DFAS-CO/JAO ATTN: CAPSW/ORP2 P.O. BOX 389016 COLUMBUS OH 43230-9016	CODE HQ0131	MARK ALL PACKAGES AND PAPERS WITH IDENTIFICATION NUMBERS IN BLOCKS 1 AND 2.
--	----------------	---	----------------	---

16. TYPE OF ORDER	DELIVERY/ CALL <input checked="" type="checkbox"/>	PURCHASE <input type="checkbox"/>	This delivery order/call is issued on another Government agency or in accordance with and subject to terms and conditions of above numbered contract. Reference your quote dated _____ Furnish the following on terms specified herein, REF: _____
-------------------	--	-----------------------------------	--

ACCEPTANCE. THE CONTRACTOR HEREBY ACCEPTS THE OFFER REPRESENTED BY THE NUMBERED PURCHASE ORDER AS IT MAY PREVIOUSLY HAVE BEEN OR IS NOW MODIFIED, SUBJECT TO ALL OF THE TERMS AND CONDITIONS SET FORTH, AND AGREES TO PERFORM THE SAME.

NAME OF CONTRACTOR	SIGNATURE	TYPED NAME AND TITLE	DATE SIGNED (YYYYMMDD)
--------------------	-----------	----------------------	---------------------------

If this box is marked, supplier must sign Acceptance and return the following number of copies:

17. ACCOUNTING AND APPROPRIATION DATA/ LOCAL USE
See Schedule

18. ITEM NO.	19. SCHEDULE OF SUPPLIES/ SERVICES	20. QUANTITY ORDERED/ ACCEPTED*	21. UNIT	22. UNIT PRICE	23. AMOUNT
SEE SCHEDULE					

* If quantity accepted by the Government is same as quantity ordered, indicate by X. If different, enter actual quantity accepted below quantity ordered and encircle.	24. UNITED STATES OF AMERICA <div style="font-size: 2em; text-align: center;">86</div>
	25. TOTAL 326 729.00
	26. DIFFERENCES

27a. QUANTITY IN COLUMN 20 HAS BEEN
 INSPECTED RECEIVED ACCEPTED, AND CONFORMS TO THE CONTRACT EXCEPT AS NOTED

b. SIGNATURE OF AUTHORIZED GOVERNMENT REPRESENTATIVE	c. DATE (YYYYMMDD)	d. PRINTED NAME AND TITLE OF AUTHORIZED GOVERNMENT REPRESENTATIVE
--	-----------------------	---

e. MAILING ADDRESS OF AUTHORIZED GOVERNMENT REPRESENTATIVE	28. SHIP NO.	29. DO VOUCHER NO.	30. INITIALS
--	--------------	--------------------	--------------

f. TELEPHONE NUMBER	g. E-MAIL ADDRESS	<input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL	32. PAID BY	33. AMOUNT VERIFIED CORRECT FOR
---------------------	-------------------	--	-------------	---------------------------------

36. I certify this account is correct and proper for payment.

a. DATE (YYYYMMDD)	b. SIGNATURE AND TITLE OF CERTIFYING OFFICER
-----------------------	--

37. RECEIVED AT	38. RECEIVED BY	39. DATE RECEIVED (YYYYMMDD)	40. TOTAL CONTAINERS	41. S/R ACCOUNT NO.	42. S/R VOUCHER NO.
-----------------	-----------------	---------------------------------	----------------------	---------------------	---------------------

Section C - Descriptions and Specifications

PERFORMANCE WORK STATEMENT

PERFORMANCE WORK STATEMENT (PWS)
SPONSOR PROGRAM
as of 23/July/2014

Contract Number:	HC1047-07-D-0001
JSC Tracking Number:	T3761
Task Order Number:	

Type of Task Order	<input type="checkbox"/> Cost Plus Incentive Fee <input checked="" type="checkbox"/> Firm Fixed Price	(Check one box) (Double click on a box to check it.)
Key Words	Verizon Wireless, Fort Story, E3 Analysis, RADHAZ, PCS, CTS, AWS, MSP	
SPONSOR		
Verizon Wireless 15001 Jefferson Avenue Newport News, VA 23603		

1. Contracting Officer's Representative (COR).

a. Primary COR.

Name:	86
Organization:	Joint Spectrum Center (JSC)/J8
Department of Defense Activity Address Code (DODAAC):	H98294
Address:	2004 Turbot Landing Annapolis, MD 21012-5064
Phone Number:	86
Fax Number:	(410) 293-9268
E-Mail Address:	86

b. Alternate COR.

Name:	86
Organization:	Joint Spectrum Center (JSC)/J8
DODAAC:	H98294
Address:	2004 Turbot Landing Annapolis, MD 21012-5064
Phone Number:	86
Fax Number:	(410) 293-9268
E-Mail Address:	86

2. Task Order (TO) Title. Verizon Wireless on Fort Story E3 Analysis Support

3. Background. The Telecommunications Act of 1996 directed the heads of all Federal Government departments and agencies to facilitate access by mobile service providers (MSPs) to Federal property for the purpose of siting equipment and mobile service antennas (MSAs). In response, the Department of Defense (DoD) Chief Information Officer (CIO) [formerly the Assistant Secretary of Defense for Command, Control, Communications, and

Intelligence (ASD C31)] issued a policy memorandum regarding placement of commercial antennas on DoD property.¹

The DoD CIO policy memorandum requires that Commanders and/or Agency Directors coordinate requests for the placement of new telecommunications services on Federal property with the DoD Joint Spectrum Center (JSC), and that the JSC evaluate the proposed antenna siting/telecommunication service for potential electromagnetic interference to the existing or planned telecommunications operations of the affected government facility. The memorandum further states that the requestor will reimburse the JSC for the cost of the evaluation.

Verizon Wireless, hereafter referred to as the purchaser, has requested permission to install and operate a Personal Communications Service (PCS) system,, a Cellular Telephone System (CTS), and an Advanced Wireless Services (AWS) system at Fort Story, VA.

4. Objectives. The objectives of this effort are to:

- Determine the potential for electromagnetic interference (EMI) from the proposed system transmitters to existing and planned military, government, and commercial communications-electronics (C-E) systems.
- Determine the potential for electromagnetic radiation hazards (RADHAZ) from the proposed system transmitters to personnel, fuel, and ordnance with electrically initiated devices (EIDs).

5. Scope. This PWS addresses tasking to be performed by the Electromagnetic Spectrum Engineering Services (ESES) contractor in the area of:

Electromagnetic Environmental Effects (E3) and Spectrum Engineering – coordinating electromagnetic compatibility (EMC) standards; analyzing equipment and systems for potential E3 problems and recommending solutions; performing radio frequency (RF) measurements; developing and conducting E3 training; assisting the acquisition community by assessing E3; determining operational frequency bands; and providing assistance in acquiring host nation approval for equipment operation.

6. Performance Requirements. The contractor shall provide E3 and RADHAZ analyses of the proposed installation. The results of the analysis will be documented in a memorandum followed by a Consulting Report (CR).

6.1 Task 1 – E3 Analysis.

Preliminary information from the sponsor will be used to conduct a search of military, government, and commercial frequency assignment databases to identify systems operating on government facilities in the vicinity of the site of interest. The electromagnetic environment (EME) will be compiled from the Frequency Resource Record System (FRRS), the Government Master File (GMF), and the Federal Communications Commission (FCC) frequency assignment databases at the JSC. For the analysis of linear EMI effects, the EME will include FRRS and GMF assignments for systems within 75 miles of the proposed site in co-channel or adjacent-channel frequency bands (within ± 10 MHz of the PCS, CTS, and AWS base station transmit frequency bands) and assignments for systems within 30 miles, operating in second and third harmonically related frequency bands. FCC assignments for systems within 10 miles operating in co channel, adjacent-channel, or second and third harmonically related frequency bands, will also be identified. The 75 mile radius will be used to include C-E equipment at other DoD and government facilities that could possibly receive signals from the proposed commercial transmitters.

For the analysis of non-linear EMI effects (intermodulation), the cosite EME will include FRRS, GMF, and FCC frequency assignments between 300 MHz and 30 GHz for systems within a two mile radius of the proposed site. The two mile radius is a conservative boundary for the analysis of non-linear EMI effects.

¹ Anthony M. Valletta, DoD CIO (formerly OASD (C31)) Memorandum to Secretaries of the Military Departments, et al., Subject: *Placement of Commercial Telecommunications Services on Federal Property*, Washington, DC: DoD CIO (formerly ASD (C31)). 15 December 1997.

A site survey will not be required. Coordination will be conducted with the purchaser, US Government Spectrum Management, and Base Safety personnel at the proposed site. Proposed system information will be verified with the sponsor. Environmental frequency assignment data will be reviewed and validated with the installation spectrum manager. Any data for frequency assignments not listed in the FRRS, GMF, or FCC databases will be used to augment the project EME.

The augmented frequency assignment data, along with the system characteristics of the introduced commercial telecommunications equipment, will be used to perform the EMI analysis. EMI analysis techniques will be used to determine the potential for inband, adjacent band, harmonically related, and intermodulation interference. These techniques are designed to eliminate from further consideration those systems for which interference is not predicted using conservative analysis parameters.

For systems not eliminated in the conservative analysis, the ESES Contractor will conduct additional, more-detailed, analyses using additional JSC environmental analysis techniques. These techniques predict the effective on-tune received power levels considering the effects of transmitter power levels, harmonic levels, additional filtering provided by duplexers, etc., in the transmit path, transmitter antenna gain (in the direction of the victim receiver), receiver antenna gain (in the direction of the interfering transmitter), and receiver signal-filtering loss (frequency-dependent rejection).

The interference thresholds used in the EMI analysis will be based on interference-to-noise ratios (I/N) required for compatible operation as dictated by the specific modulation types involved in the interference interactions.

Deliverables: Results Memorandum followed by a CR

6.2 Task 2 – RADHAZ Analysis.

Upon verification of the characteristics data of the proposed commercial telecommunications system, an analysis will be performed using applicable DoD thresholds to determine distance separation requirements to avoid the potential for RADHAZ to personnel, fuel, and ordnance using EIDs.

Deliverables: To be delivered in the Task 1 Results Memorandum and CR

7. Performance Standards. Not Applicable.

8. Incentives. Not Applicable.

9. Place of Performance. The primary efforts associated with this TO PWS shall be performed at the government and the ESES Contractor facility. A site survey will not be performed as described in item 6.1.

Alternate Place of Performance - Contingency Only. As determined by the COR, contractor employees may be required to work at an alternate place of performance (e.g., home, the contractor's facility, or another approved activity within the local travel area) in cases of unforeseen conditions or contingencies (e.g., pandemic conditions, exercises, government closure due to inclement weather, etc.). Non-emergency/non-essential contractors should not report to a closed government facility. Contractor shall prepare all deliverables and other contract documentation utilizing contractor resources. To the extent possible, the contractor shall use best efforts to provide the same level of support as stated in the PWS. In the event the services are impacted, reduced, compromised, etc., the Contracting Officer or the contractor may request an equitable adjustment pursuant to the Changes clause of the contract.

10. Period of Performance. 240 calendar days after contract award.

11. Delivery Schedule.

Schedule of Deliverables	
Title	Schedule of Deliverables
Results Memorandum	14 Weeks after TO Award
Consulting Reports	4 weeks after the Results Memorandum is distributed

12. Security. Work performed under this TO will include the following classifications of work: UNCLASSIFIED, PROPRIETARY, FOR OFFICIAL USE ONLY, CONFIDENTIAL, and SECRET. A SECRET clearance will be required to perform daily duties. Periodic meetings will be held where individuals are often required to share data and gather information in a classified environment. Individuals must be able to obtain and maintain a SECRET Clearance.

13. Government-Furnished Equipment (GFE)/Government-Furnished Information (GFI). Historical project files and reports will be provided. Site and system characteristics information for the installation proposed by the purchaser will be provided.

14. Other Pertinent Information or Special Considerations.

a. Identification of Possible Follow-on Work. Not applicable.

b. Identification of Potential Conflicts of Interest (COI). The ESES contractor shall identify any possible organizational conflict of interest (OCI) as defined in Subpart 9.5 of the Federal Acquisition Regulation. If there is an OCI, the ESES contractor must inform the COR and provide an OCI Mitigation Plan that identifies how the OCI is to be mitigated.

c. Identification of Non-Disclosure Requirements. Not applicable.

d. Packaging, Packing and Shipping Instructions. Not Applicable, provided in the base contract.

e. Inspection and Acceptance Criteria. Not Applicable, provided in the base contract.

f. Property Accountability. Not applicable.

15. Section 508 Accessibility Standards. Not applicable.

16. External Support. None.

17. Pricing Information. Information is obtained from Price List for MSP Support.

Section E - Inspection and Acceptance

INSPECTION AND ACCEPTANCE TERMS

Supplies/services will be inspected/accepted at:

CLIN	INSPECT AT	INSPECT BY	ACCEPT AT	ACCEPT BY
0013	Destination	Government	Destination	Government

Section F - Deliveries or Performance

DELIVERY INFORMATION

CLIN	DELIVERY DATE	QUANTITY	SHIP TO ADDRESS	UIC
0013	POP 07-MAY-2015 TO 07-JAN-2016	N/A	DISA JOINT SPECTRUM CENTER <i>BL</i> 2104 TURBOT LANDING ANNAPOLIS MD 21402-5064 <i>BL</i> FOB: Destination	H98294

Section G - Contract Administration Data

ACCOUNTING AND APPROPRIATION DATA

AA: 97X4930.5F20 000 C1013 0 068142 2F 257020 DOSMC50101

AMOUNT: \$28,729.00

CIN DOSMC501010013: \$28,729.00

Section I - Contract Clauses

CLAUSES INCORPORATED BY REFERENCE

252.201-7000 Contracting Officer's Representative

DEC 1991

CLAUSES INCORPORATED BY FULL TEXT

52.204-9000 Points of Contact (AUG 2005)

Contracting Officer

Name: *B6*
Organization/Office Symbol: PSD/63
Phone No.: *B6*
E-Mail Address *B6*

Contract Specialist

Name: *B6*
Organization/Office Symbol: PSD/63
Phone No. *B6*
E-Mail Address: *B6*

Customer/COR/TM Point of Contact

Name: *B6*
Organization/Office Symbol: JSC/J8
Phone No.: *B6*
E-Mail Address *B6*

Contractor Point of Contact

Contractor Legal Business Name: Exelis, Inc.
DUNS: 083655498
CAGE CODE: 9M715
Contractor POC: Anne Hasselbrack
E-Mail Address: anne.hasselbrack@exelisinc.com
Phone Number: 301.867.2985
Fax Number:

252.232-7006 WIDE AREA WORKFLOW PAYMENT INSTRUCTIONS (MAY 2013)

(a) Definitions. As used in this clause--

Department of Defense Activity Address Code (DoDAAC) is a six position code that uniquely identifies a unit, activity, or organization.

Document type means the type of payment request or receiving report available for creation in Wide Area WorkFlow (WAWF).

Local processing office (LPO) is the office responsible for payment certification when payment certification is done external to the entitlement system.

(b) Electronic invoicing. The WAWF system is the method to electronically process vendor payment requests and receiving reports, as authorized by DFARS 252.232-7003, Electronic Submission of Payment Requests and Receiving Reports.

(c) WAWF access. To access WAWF, the Contractor shall--

(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).

Combo

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

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	HQ0131
Issue By DoDAAC	HC1047
Admin DoDAAC	HC1047
Inspect By DoDAAC	H98294
Ship To Code	H98294
Ship From Code	N/A
Mark For Code	N/A
Service Approver (DoDAAC)	H98294
Service Acceptor (DoDAAC)	H98294
Accept at Other DoDAAC	N/A
LPO DoDAAC	N/A

DCAA Auditor DoDAAC
Other DoDAAC(s)

N/A
N/A

(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 email address identified below in the "Send Additional Email Notifications" field of WAWF once a document is submitted in the system.

NAME:
EMAIL: *BC*

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.

Not Applicable

(2) For technical WAWF help, contact the WAWF helpdesk at 866-618-5988.

(End of clause)

ORDER FOR SUPPLIES OR SERVICES

PAGE 1 OF 12

1. CONTRACT/PURCH ORDER/ AGREEMENT NO. HC1047-07-D-0001		2. DELIVERY ORDER/ CALL NO. 1005		3. DATE OF ORDER/CALL (YYYYMMDD) 2015 May 07		4. REQ /PURCH REQUEST NO. DOSMCS0079		5. PRIORITY	
6. ISSUED BY DISA/PL63 P O BOX 549 FORT MEADE MD 20755-0549			CODE HC1047		7. ADMINISTERED BY (if other than 6) SEE ITEM 6			CODE	
9. CONTRACTOR EXELIS INC NAME ANNE HASSELBRACK AND 12975 WORLDGATE DR STE 700 ADDRESS HERNDON VA 20170-6008				CODE 9M715		FACILITY		10. DELIVER TO FOB POINT BY (Date) (YYYYMMDD) SEE SCHEDULE	
						12. DISCOUNT TERMS		11. MARK IF BUSINESS IS <input type="checkbox"/> SMALL <input type="checkbox"/> SMALL DISADVANTAGED <input type="checkbox"/> WOMEN-OWNED	
						13. MAIL INVOICES TO THE ADDRESS IN BLOCK See Item 15			
14. SHIP TO DISA COMMUNICATIONS CENTER 2104 TURBOT LANDING ANNAPOLIS MD 21402-5084			CODE H98294		15. PAYMENT WILL BE MADE BY DFAS-CO/JAG ATTN: CAPSW/ORP2 P.O. BOX 369016 COLUMBUS OH 43236-9016			CODE HQ0131	
								MARK ALL PACKAGES AND PAPERS WITH IDENTIFICATION NUMBERS IN BLOCKS 1 AND 2.	
16. TYPE OF ORDER									
DELIVERY/ CALL		X	This delivery order/call is issued on another Government agency or in accordance with and subject to terms and conditions of above numbered contract.						
PURCHASE			Reference your quote dated Furnish the following on terms specified herein. REF.						
<p>ACCEPTANCE. THE CONTRACTOR HEREBY ACCEPTS THE OFFER REPRESENTED BY THE NUMBERED PURCHASE ORDER AS IT MAY PREVIOUSLY HAVE BEEN OR IS NOW MODIFIED, SUBJECT TO ALL OF THE TERMS AND CONDITIONS SET FORTH, AND AGREES TO PERFORM THE SAME.</p>									
NAME OF CONTRACTOR			SIGNATURE			TYPED NAME AND TITLE			DATE SIGNED (YYYYMMDD)
<input type="checkbox"/> If this box is marked, supplier must sign Acceptance and return the following number of copies:									
17. ACCOUNTING AND APPROPRIATION DATA/ LOCAL USE									
See Schedule									
18. ITEM NO.	19. SCHEDULE OF SUPPLIES/ SERVICES				20. QUANTITY ORDERED/ ACCEPTED*	21. UNIT	22. UNIT PRICE	23. AMOUNT	
	SEE SCHEDULE								
* If quantity accepted by the Government is same as quantity ordered, indicate by X. If different, enter actual quantity accepted below quantity ordered and encircle.					24. UNITED STATES OF AMERICA <i>Be</i>		25. TOTAL	554 012 00	
27a. QUANTITY IN COLUMN 20 HAS BEEN					CONTRACTING / ORDERING OFFICER		26.	DIFFERENCES	
<input type="checkbox"/> INSPECTED <input type="checkbox"/> RECEIVED <input type="checkbox"/> ACCEPTED, AND CONFORMS TO THE CONTRACT EXCEPT AS NOTED									
b. SIGNATURE OF AUTHORIZED GOVERNMENT REPRESENTATIVE				c. DATE (YYYYMMDD)		d. PRINTED NAME AND TITLE OF AUTHORIZED GOVERNMENT REPRESENTATIVE			
e. MAILING ADDRESS OF AUTHORIZED GOVERNMENT REPRESENTATIVE					28. SHIP NO.	29. DO VOUCHER NO.	30. INITIALS		
f. TELEPHONE NUMBER		g. E-MAIL ADDRESS			<input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL	32. PAID BY	33. AMOUNT VERIFIED CORRECT FOR		
36. I certify this account is correct and proper for payment.					31. PAYMENT		34. CHECK NUMBER		
a. DATE (YYYYMMDD)	b. SIGNATURE AND TITLE OF CERTIFYING OFFICER				<input type="checkbox"/> COMPLETE <input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL		35. BILL OF LADING NO.		
37. RECEIVED AT		38. RECEIVED BY		39. DATE RECEIVED (YYYYMMDD)	40. TOTAL CONTAINERS	41. S/R ACCOUNT NO.	42. S/R VOUCHER NO.		

Section B - Supplies or Services and Prices

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0013	Option Year 6 - FFP Engineering FFP Electromagnetic Spectrum Engineering/E3 Analysis and support as specified in the Performance Work Statement (T3730). The Contractor's Proposal titled "Sprint Nextel on Fort Stewart E3 Analysis Support" dated 18 September 2014 is incorporated by reference. FOB: Destination PURCHASE REQUEST NUMBER: DOSMC50079	1	Each	\$56,662.00	\$56,662.00
				NET AMT	\$56,662.00
	ACRN AA CIN: DOSMC500790013				\$56,662.00

Section C - Descriptions and Specifications

CLAUSES INCORPORATED BY FULL TEXT

52.204-9000 Points of Contact (AUG 2005)

Contracting Officer
Name: BC
Organization/Office Symbol: PL63
Phone No.: BC
E-Mail Address: BC

Contract Specialist
Name: BC
Organization/Office Symbol: PL63
Phone No.: BC
E-Mail Address: BC

Customer/COR/TM Point of Contact
Name: BC
Organization/Office Symbol: BC
Phone No.: BC
E-Mail Address: BC

Contractor Point of Contact
Contractor Legal Business Name: Exelis
DUNS: 083655498
CAGE CODE: 9M715
Contractor POC: Anne Hasselbrack
E-Mail Address: anne.hasselbrack@exelisinc.com
Phone Number: 301.867.2995

Technical POC
Michael Hayes
E-mail: Michael.hayes@exelisinc.com
Phone Number: 301.867.2956

252.201-7000 CONTRACTING OFFICER'S REPRESENTATIVE (DEC 1991)

(a) "Definition. Contracting officer's representative" means an individual designated in accordance with subsection 201.602-2 of the Defense Federal Acquisition Regulation Supplement and authorized in writing by the contracting officer to perform specific technical or administrative functions.

(b) If the Contracting Officer designates a contracting officer's representative (COR), the Contractor will receive a copy of the written designation. It will specify the extent of the COR's authority to act on behalf of the contracting officer. The COR is not authorized to make any commitments or changes that will affect price, quality, quantity, delivery, or any other term or condition of the contract.

(End of clause)

252.232-7006 WIDE AREA WORKFLOW PAYMENT INSTRUCTIONS (MAY 2013)

(a) Definitions. As used in this clause--

Department of Defense Activity Address Code (DoDAAC) is a six position code that uniquely identifies a unit, activity, or organization.

Document type means the type of payment request or receiving report available for creation in Wide Area WorkFlow (WAWF).

Local processing office (LPO) is the office responsible for payment certification when payment certification is done external to the entitlement system.

(b) Electronic invoicing. The WAWF system is the method to electronically process vendor payment requests and receiving reports, as authorized by DFARS 252.232-7003, Electronic Submission of Payment Requests and Receiving Reports.

(c) WAWF access. To access WAWF, the Contractor shall--

(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).

Combo

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

Destination

(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 0131
Issue By DoDAAC	HC 1047
Admin DoDAAC	HC1047
Inspect By DoDAAC	H98294
Ship To Code	H98294
Ship From Code	N/A
Mark For Code	N/A
Service Approver (DoDAAC)	H98294
Service Acceptor (DoDAAC)	H98294
Accept at Other DoDAAC	N/A
LPO DoDAAC	N/A
DCAA Auditor DoDAAC	N/A
Other DoDAAC(s)	HAA031

(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 email address identified below in the "Send Additional Email Notifications" field of WAWF once a document is submitted in the system.

NAME: 86
 E-mail: 86

(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.

(2) For technical WAWF help, contact the WAWF helpdesk at 866-618-5988.

(End of clause)

PWS

PERFORMANCE WORK STATEMENT (PWS)
 SPONSOR PROGRAM
 as of 21/August/2014

Contract Number:	HC1047-07-D-0001
JSC Tracking Number:	T3765
Task Order Number:	1005

Type of Task Order	<input type="checkbox"/> Cost Plus Incentive Fee	(Check one box) (Double click on a box to check it.)
	<input checked="" type="checkbox"/> Firm Fixed Price	
Key Words	Sprint Nextel, Fort Stewart, E3 Analysis, RADHAZ, LTE, MW, MSP	
SPONSOR		
Sprint Nextel 3270 Chancellor Dr. Woodbridge, VA 22192		

1. **Contracting Officer's Representative (COR).**

a. **Primary COR.**

Name:	B6
Organization:	Joint Spectrum Center (JSC)/J8
DODAAC:	H98294
Address:	2004 Turbot Landing Annapolis, MD 21012-5064
Phone Number:	B6
Fax Number:	(410) 293-9268
E-Mail Address:	B6

2. **Task Order (TO) Title.** Sprint Nextel on Fort Stewart E3 Analysis Support

3. **Background.** The Telecommunications Act of 1996 directed the heads of all Federal Government departments and agencies to facilitate access by mobile service providers (MSPs) to Federal property for the purpose of siting equipment and mobile service antennas (MSAs). In response, the Department of Defense (DoD) Chief Information Officer (CIO) [formerly the Assistant Secretary of Defense for Command, Control, Communications, and Intelligence (ASD C3I)] issued a policy memorandum regarding placement of commercial antennas on DoD property.¹

The DoD CIO policy memorandum requires that Commanders and/or Agency Directors coordinate requests for the placement of new telecommunications services on Federal property with the DoD Joint Spectrum Center (JSC), and that the JSC evaluate the proposed antenna siting/telecommunication service for potential electromagnetic interference to the existing or planned telecommunications operations of the affected government facility. The memorandum further states that the requestor will reimburse the JSC for the cost of the evaluation.

Sprint Nextel, hereafter referred to as the purchaser, has requested permission to install and operate a Long Term Evolution (LTE) system at three sites, an LTE and one Microwave (MW) System at two sites, and an LTE and two MW Systems at another site on Fort Stewart, GA.

4. **Objectives.** The objectives of this effort are to:

- Determine the potential for electromagnetic interference (EMI) from the proposed system transmitters to existing and planned military, government, and commercial communications-electronics (C-E) systems.
- Determine the potential for electromagnetic radiation hazards (RADHAZ) from the proposed system transmitters to personnel, fuel, and ordnance with electrically initiated devices (EIDs).

5. **Scope.** This PWS addresses tasking to be performed by the Electromagnetic Spectrum Engineering Services (ESES) contractor in the area of:

¹ Anthony M. Valletta, DoD CIO (formerly OASD (C3I)) Memorandum to Secretaries of the Military Departments, et al., Subject: *Placement of Commercial Telecommunications Services on Federal Property*, Washington, DC: DoD CIO (formerly ASD (C3I)), 15 December 1997.

Electromagnetic Environmental Effects (E3) and Spectrum Engineering – coordinating electromagnetic compatibility (EMC) standards; analyzing equipment and systems for potential E3 problems and recommending solutions; performing radio frequency (RF) measurements; developing and conducting E3 training; assisting the acquisition community by assessing E3; determining operational frequency bands; and providing assistance in acquiring host nation approval for equipment operation.

6. Performance Requirements. The contractor shall provide E3 and RADHAZ analyses of the proposed installation. The results of the analysis will be documented in a memorandum followed by a Consulting Report (CR).

6.1 Task 1 – E3 Analysis.

Preliminary information from the purchaser will be used to conduct a search of military, government, and commercial frequency assignment databases to identify systems operating on government facilities in the vicinity of the site of interest. The electromagnetic environment (EME) will be compiled from the Frequency Resource Record System (FRRS), the Government Master File (GMF), and the Federal Communications Commission (FCC) frequency assignment databases at the JSC. For the analysis of linear EMI effects, the EME will include FRRS and GMF assignments for systems within 75 miles of the proposed site in co-channel or adjacent-channel frequency bands (within ± 10 MHz of the LTE base station transmit frequency bands and within ± 20 MHz of the MW frequency) and assignments for systems within 30 miles, operating in second and third harmonically related frequency bands. FCC assignments for systems within 10 miles operating in co channel, adjacent-channel, or second and third harmonically related frequency bands, will also be identified. The 75 mile radius will be used to include C-E equipment at other DoD and government facilities that could possibly receive signals from the proposed commercial transmitters.

For the analysis of non-linear EMI effects (intermodulation), the cosite EME will include FRRS, GMF, and FCC frequency assignments between 300 MHz and 30 GHz for systems within a two mile radius of the proposed site. The two mile radius is a conservative boundary for the analysis of non-linear EMI effects.

A site survey will not be required. Coordination will be conducted with the purchaser, US Government Spectrum Management, and Base Safety personnel at the proposed site. Proposed system information will be verified with the purchaser. Environmental frequency assignment data will be reviewed and validated with the installation spectrum manager. Any data for frequency assignments not listed in the FRRS, GMF, or FCC databases will be used to augment the project EME.

The augmented frequency assignment data, along with the system characteristics of the introduced commercial telecommunications equipment, will be used to perform the EMI analysis. EMI analysis techniques will be used to determine the potential for inband, adjacent band, harmonically related, and intermodulation interference. These techniques are designed to eliminate from further consideration those systems for which interference is not predicted using conservative analysis parameters.

For systems not eliminated in the conservative analysis, the ESES Contractor will conduct additional, more-detailed, analyses using additional JSC environmental analysis techniques. These techniques predict the effective on-tune received power levels considering the effects of transmitter power levels, harmonic levels, additional filtering provided by duplexers, etc., in the transmit path, transmitter antenna gain (in the direction of the victim receiver), receiver antenna gain (in the direction of the interfering transmitter), and receiver signal-filtering loss (frequency-dependent rejection).

The interference thresholds used in the EMI analysis will be based on interference-to-noise ratios (I/N) required for compatible operation as dictated by the specific modulation types involved in the interference interactions.

Deliverables: Results Memorandum followed by a CR

6.2 Task 2 – RADHAZ Analysis.

Upon verification of the characteristics data of the proposed commercial telecommunications system, an analysis will be performed using applicable DoD thresholds to determine distance separation requirements to avoid the potential for RADHAZ to personnel, fuel, and ordnance using EIDs.

Deliverables: To be delivered in the Task 1 Results Memorandum and CR

7. Performance Standards. Not Applicable.

8. Incentives. Not Applicable.

9. Place of Performance. The primary efforts associated with this TO PWS shall be performed at the government and the ESES Contractor facility. A site survey will not be performed as described in item 6.1.

Alternate Place of Performance - Contingency Only. As determined by the COR, contractor employees may be required to work at an alternate place of performance (e.g., home, the contractor's facility, or another approved activity within the local travel area) in cases of unforeseen conditions or contingencies (e.g., pandemic conditions, exercises, government closure due to inclement weather, etc.). Non-emergency/non-essential contractors should not report to a closed government facility. Contractor shall prepare all deliverables and other contract documentation utilizing contractor resources. To the extent possible, the contractor shall use best efforts to provide the same level of support as stated in the PWS. In the event the services are impacted, reduced, compromised, etc., the Contracting Officer or the contractor may request an equitable adjustment pursuant to the Changes clause of the contract.

10. Period of Performance. 240 calendar days after contract award.

11. Delivery Schedule.

Schedule of Deliverables	
Title	Schedule
Results Memorandum	20 Weeks after TO Award
Consulting Report	4 weeks after the Results Memorandum is distributed

12. Security. Work performed under this TO will include the following classifications of work: UNCLASSIFIED, PROPRIETARY, FOR OFFICIAL USE ONLY, CONFIDENTIAL, and SECRET. A SECRET clearance will be required to perform daily duties. Periodic meetings will be held where individuals are often required to share data and gather information in a classified environment. Individuals must be able to obtain and maintain a SECRET Clearance.

13. Government-Furnished Equipment (GFE)/Government-Furnished Information (GFI). Historical project files and reports will be provided. Site and system characteristics information for the installation proposed by the purchaser will be provided.

14. Other Pertinent Information or Special Considerations.

a. Identification of Possible Follow-on Work. Not applicable.

b. Identification of Potential Conflicts of Interest (COI). The ESES contractor shall identify any possible organizational conflict of interest (OCI) as defined in Subpart 9.5 of the Federal Acquisition Regulation. If there is an OCI, the ESES contractor must inform the COR and provide an OCI Mitigation Plan that identifies how the OCI is to be mitigated.

c. Identification of Non-Disclosure Requirements. Not applicable.

- d. Packaging, Packing and Shipping Instructions. Not Applicable, provided in the base contract.
 - e. Inspection and Acceptance Criteria. Not Applicable, provided in the base contract.
 - f. Property Accountability. Not applicable.
15. Section 508 Accessibility Standards. Not applicable.
 16. External Support. None.
 17. Pricing Information. Information is obtained from Price List for MSP Supp

Section E - Inspection and Acceptance

INSPECTION AND ACCEPTANCE TERMS

Supplies/services will be inspected/accepted at:

CLIN	INSPECT AT	INSPECT BY	ACCEPT AT	ACCEPT BY
0013	Destination	Government	Destination	Government

Section F - Deliveries or Performance

DELIVERY INFORMATION

CLIN	DELIVERY DATE	QUANTITY	SHIP TO ADDRESS	UIC
0013	POP 07-MAY-2015 TO 06-JAN-2016	N/A	DISA JOINT SPECTRUM CENTER 66 2104 TURBOT LANDING ANNAPOLIS MD 21402-5064 66 FOB: Destination	H98294

Section G - Contract Administration Data

ACCOUNTING AND APPROPRIATION DATA

AA: 97X4930.5F20 000 C1013 0 068142 2F 257020 DOSMC50079
AMOUNT: \$56,662.00
CIN DOSMC500790013: \$56,662.00