

# ORDER FOR SUPPLIES OR SERVICES

PAGE 1 OF 12

1. CONTRACT/PURCH. ORDER/ AGREEMENT NO. <b>HC1047-07-D-0001</b>		2. DELIVERY ORDER/ CALL NO. <b>0996</b>		3. DATE OF ORDER/CALL (YYYYMMDD) <b>2015 Apr 29</b>		4. REQ/ PURCH. REQUEST NO. <b>DOSMC50090</b>		5. PRIORITY	
6. ISSUED BY DISA/PL63 P.O. BOX 549 FORT MEADE MD 20755-0549			CODE <b>HC1047</b>		7. ADMINISTERED BY (if other than 6) CODE			8. DELIVERY FOB <input checked="" type="checkbox"/> DESTINATION <input type="checkbox"/> OTHER  (See Schedule if other)	
9. CONTRACTOR EXELIS INC. NAME ANNE HASSELBRACK AND 12975 WORLDGATE DR STE 700 ADDRESS HERNDON VA 20170-6008			CODE <b>9M715</b>		FACILITY		10. DELIVER TO FOB POINT BY (Date) (YYYYMMDD) <b>SEE SCHEDULE</b>		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 <b>See Item 15</b>
14. SHIP TO DISA JOINT SPECTRUM CENTER 2101 TURBUL LANDING ANNAPOLIS MD 21402-5064			CODE <b>H98294</b>		15. PAYMENT WILL BE MADE BY CODE <b>HQ0131</b> DFAS-CO/JAQ ATTN: CAPSW/ORP2 P.O. BOX 369016 COLUMBUS OH 43236-9016			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.
	PURCHASE	<input type="checkbox"/>	
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)
<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
<b>SEE SCHEDULE</b>					

* 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. TOTAL	<b>\$87,585.00</b>
<b>27a. QUANTITY IN COLUMN 20 HAS BEEN</b> <input type="checkbox"/> INSPECTED <input type="checkbox"/> RECEIVED <input type="checkbox"/> ACCEPTED, AND CONFORMS TO THE CONTRACT EXCEPT AS NOTED	CONTRACTING / ORDERING OFFICER	

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		

f. TELEPHONE NUMBER	g. E-MAIL ADDRESS	28. SHIP NO.	29. DO VOUCHER NO.	30. INITIALS
		32. PAID BY <input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL		33. AMOUNT VERIFIED CORRECT FOR
		31. PAYMENT <input type="checkbox"/> COMPLETE <input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL		
36. I certify this account is correct and proper for payment.				
a. DATE (YYYYMMDD)	b. SIGNATURE AND TITLE OF CERTIFYING OFFICER			
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	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0013	Engineering Electromagnetic Support FFP Electromagnetic Spectrum Engineering/E3 Analysis and support as specified in the Performance Work Statement (T3770). The contractor's proposal titled " AT&T Mobility on Fort Benning E3 Analysis Support" 02 October 2014 is incorporated by reference.  FOB: Destination PURCHASE REQUEST NUMBER: DOSMC50090	1	Each	\$87,585.00	\$87,585.00
				NET AMT	\$87,585.00
	ACRN AA CIN: DOSMC500900013				\$87,585.00

Section C - Descriptions and Specifications

CLAUSES INCORPORATED BY FULL TEXT

Contracting Officer

Name *BC*  
Organization/Office Symbol: PL 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  
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](mailto:anne.hasselbrack@exelisinc.com)  
Phone Number: 301.867.2995

Technical POC

Michael Hayes  
E-mail: [Michael.hayes@exelisinc.com](mailto: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.**

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

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

**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	HAA0131
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.

NAME: *SL*

E-mail: *SL*

(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)

DESCRIPTIONS AND SPECIFICATION

PERFORMANCE WORK STATEMENT (PWS)  
SPONSOR PROGRAM  
as of 04/24/2015

<b>Contract Number:</b>	HC1047-07-D-0001
<b>JSC Tracking Number:</b>	T3770
<b>Task Order Number:</b>	0996

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	AT&T Mobility, Fort Benning, E3 Analysis, RADHAZ, PCS, LTE, AWS, WCS, MSP	
SPONSOR		
AT&T Mobility LLC 660 Hembree Parkway Rosewell, GA 30076		

1. Contracting Officer's Representative (COR).

a. Primary COR.

Name:	Bc
Organization:	Joint Spectrum Center (JSC)/J8
Department of Defense Activity Address Code (DODAAC):	H98294
Address:	2004 Turbot Landing Annapolis, MD 21012-5064
Phone Number:	8c
Fax Number:	(410) 293-9268
E-Mail Address:	5c

2. Task Order (TO) Title. AT&T Mobility on Fort Benning 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.<sup>1</sup>

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.

AT&T Mobility, hereafter referred to as the purchaser, has requested permission to install and operate a Personal Communications Service (PCS) system, a Long Term Evolution (LTE) system, and an Advanced Wireless Services (AWS) System on four sites and a PCS, LTE, AWS and a Wireless Communications Service (WCS) system on another site at Fort Benning.

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  $\pm 10$  MHz of the PCS, AWS, WCS, 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, 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.

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<sup>1</sup> Anthony M. Valletta, OASD (C31) Memorandum to Secretaries of the Military Departments, et al., Subject: *Placement of Commercial Telecommunications Services on Federal Property*, Washington, DC: Assistant Secretary of Defense, Command, Control, Communications, and Intelligence, 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 Tasks and Deliverables	
Title	Schedule of Deliverables
Results Memorandum	20 Weeks after Task Order 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>Sc</i> 2104 TURBOT LANDING ANNAPOLIS MD 21402-5064 <i>Sc</i> FOB: Destination	H98294

Section G - Contract Administration Data

ACCOUNTING AND APPROPRIATION DATA

AA: 97X4930.5F20 000 c1013 068142 2F 257020 DOSMC50090  
AMOUNT: \$87,585.00  
CIN DOSMC500900013: \$87,585.00

**ORDER FOR SUPPLIES OR SERVICES**

PAGE 1 OF 13

1. CONTRACT/PURCH. ORDER/ AGREEMENT NO. HC1047-07-D-0001	2. DELIVERY ORDER/ CALL NO. 0997	3. DATE OF ORDER/CALL (YYYYMMDD) 2015 Apr 28	4. REQ./ PURCH. REQUEST NO. MIPRDSMC60074	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) CODE	<b>SEE ITEM 6</b>
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8. DELIVERY FOR  
 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) <b>SEE SCHEDULE</b>	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 COMM. SPECTRUM CENTER 2104 TURBOT LANDING ANNAPOLIS MD 21402-5064 CODE H98294	15. PAYMENT WILL BE MADE BY CODE HQ0131 DFAS-CO/JAQ ATTN: CAPSW/ORP2 P.O. BOX 369016 COLUMBUS OH 43236-9016	<b>MARK ALL PACKAGES AND PAPERS WITH IDENTIFICATION NUMBERS IN BLOCKS 1 AND 2.</b>
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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.
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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
<b>SEE SCHEDULE</b>					

* 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 <b>B6</b>	25. TOTAL \$96,363.00
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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
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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
--------------------	--

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	Option Year 6 - FFP Engineering FFP Electromagnetic Spectrum Engineering/E3 Analysis and Support as specified in the Performance Work Statement (T3782). The contractor's proposal titled "AT&T Mobility on Fort Stewart E3 Analysis Support" dated 27 October 2014, is incorporated by reference. Period of Performance is 28 April 2015 to 27 December 2015.	1	Each	\$96,363.00	\$96,363.00
	FOB: Destination PURCHASE REQUEST NUMBER: MIPRDOSMC50074				

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NET AMT	\$96,363.00
ACRN AA CIN: DOSMC500740013	\$96,363.00

CLAUSES INCORPORATED BY FULL TEXT

52.204-9000 Points of Contact (AUG 2005)

Contracting Officer

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

Contract Specialist

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

Customer/COR/TM Point of Contact

Name: *BC*  
Organization/Office Symbol: DSO  
Phone No.: *BC*

E-Mail Address: B6

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

Technical POC  
Michael Hayes  
E-mail: [Michael.hayes@exelisin.com](mailto:Michael.hayes@exelisin.com)  
Phone Number: 301.867.2956

DESCRIPTIONS AND SPECIFICATION

**PERFORMANCE WORK STATEMENT (PWS)  
SPONSOR PROGRAM  
as of 04/27/2015**

Contract Number:	HC1047-07-D-0001
JSC Tracking Number:	T3782
Task Order Number:	0997

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	AT&T Mobility, Fort Stewart, E3 Analysis, RADHAZ, CTS, PCS, LTE, MSP	
<b>SPONSOR</b>		
AT&T Mobility LLC 660 Hembree Parkway Rosewell, GA 30076		

1. Contracting Officer's Representative (COR).

a. **Primary COR.**

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

b. **Alternate COR.**

Name:	
Organization:	
DODAAC:	
Address:	
Phone Number:	
Fax Number:	
E-Mail Address:	

2. Task Order (TO) Title. AT&T Mobility 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.<sup>1</sup>

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.

AT&T Mobility, 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 four Long Term Evolution (LTE) systems on three sites at Fort Stewart.

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

<sup>1</sup> Anthony M. Valletta, OASD (C3I) Memorandum to Secretaries of the Military Departments, et al., Subject: *Placement of Commercial Telecommunications Services on Federal Property*, Washington, DC: Assistant Secretary of Defense, Command, Control, Communications, and Intelligence, 15 December 1997.



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  $\pm 10$  MHz of the PCS, CTS, 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, 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 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 Tasks and Deliverables	
Title	Schedule of Deliverables
Results Memorandum	20 Weeks after Task Order 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 C - Descriptions and Specifications

CLAUSES INCORPORATED BY FULL TEXT

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**

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

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

**GOVERNMENT**

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

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

**Routing Data Table\***

<b>Field Name in WAWF</b>	<b>Data to be entered in WAWF</b>
<b>Pay Official DoDAAC</b>	<b>HQ 0131</b>
<b>Issue By DoDAAC</b>	<b>HC 1047</b>
<b>Admin DoDAAC</b>	<b>HC1047</b>
<b>Inspect By DoDAAC</b>	<b>H98294</b>
<b>Ship To Code</b>	<b>H98294</b>
<b>Ship From Code</b>	<b>N/A</b>
<b>Mark For Code</b>	<b>N/A</b>
<b>Service Approver (DoDAAC)</b>	<b>H98294</b>
<b>Service Acceptor (DoDAAC)</b>	<b>H98294</b>
<b>Accept at Other DoDAAC</b>	<b>N/A</b>
<b>LPO DoDAAC</b>	<b>N/A</b>
<b>DCAA Auditor DoDAAC</b>	<b>N/A</b>
<b>Other DoDAAC(s)</b>	<b>HAA031</b>

(\*Contracting Officer: Insert applicable DoDAAC information or "See schedule" if multiple ship to/acceptance locations apply, or "Not applicable.")

(4) Payment request and supporting documentation. The Contractor shall ensure a payment request includes appropriate contract line item and subline item descriptions of the work performed or supplies delivered, unit price/cost per unit, fee (if applicable), and all relevant back-up documentation, as defined in DFARS Appendix F, (e.g. timesheets) in support of each payment request.

(5) WAWF email notifications. The Contractor shall enter the email address identified below in the "Send Additional Email Notifications" field of WAWF once a document is submitted in the system.

NAME: · *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.

E-mail: *B6*

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

(End of clause)

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 28-APR-2015 TO 27-DEC-2015	N/A	DISA JOINT SPECTRUM CENTER B6 2104 TURBOT LANDING ANNAPOLIS MD 21402-5064 L6 FOB: Destination	H98294



Section G - Contract Administration Data

ACCOUNTING AND APPROPRIATION DATA

AA: 97X4930.5F20 000 C1013 0 068142 2F 257020 DOSMC50074  
AMOUNT: \$96,363.00  
CIN DOSMC500740013: \$96,363.00

# ORDER FOR SUPPLIES OR SERVICES

PAGE 1 OF 8

1. CONTRACT/PURCH ORDER/AGREEMENT NO <b>HC1047-07-D-0001</b>		2. DELIVERY ORDER/ CALL NO <b>0998</b>		3. DATE OF ORDER/CALL (YYYYMMDD) <b>2015 May 04</b>		4. REQ / PURCH REQUEST NO <b>DOSMC60087</b>		5. PRIORITY			
6. ISSUED BY DISA/PL63 P O BOX 549 FORT MEADE MD 20755-0549			CODE <b>HC1047</b>		7. ADMINISTERED BY (if other than 6)  <b>SEE ITEM 6</b>			CODE			
9. CONTRACTOR EXPLIS INC NAME ANNE HASSELBRACK AND 12975 WORLDGATE DR STE 700 ADDRESS HERNDON VA 20170-6008			CODE <b>9M715</b>		FACILITY		10. DELIVER TO FOB POINT BY (Date) (YYYYMMDD) <b>SEE SCHEDULE</b>		11. MARK IF BUSINESS IS <input type="checkbox"/> SMALL <input type="checkbox"/> SMALL DISADVANTAGED <input type="checkbox"/> WOMEN-OWNED		
14. SHIP TO DISA JOINT SPECTRUM CENTER <i>B6</i> 2104 TURBOT LANDING ANNAPOLIS MD 21402-5064			CODE <b>H98294</b>		15. PAYMENT WILL BE MADE BY DFAS-COJQA ATTN: CAPSWORP2 P.O. BOX 369016 COLUMBUS OH 43236-9016			CODE <b>HQ0131</b>		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"/>			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 term 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)		
<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 <b>See Schedule</b>											
18. ITEM NO.		19. SCHEDULE OF SUPPLIES/ SERVICES				20. QUANTITY ORDERED/ ACCEPTED*		21. UNIT	22. UNIT PRICE		23. AMOUNT
<b>SEE SCHEDULE</b>											
24. UNITED STATES OF AMERICA											
* 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.										<b>TOTAL</b>	
										<i>B6</i>	
27a. QUANTITY IN COLUMN 20 HAS BEEN <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.											
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.	

Section B - Supplies or Services and Prices

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0013		1	Each	\$64,343.00	\$64,343.00
EXERCISED OPTION	Option Year 6 - FFP Engineering FFP Electromagnetic Spectrum Engineering/E3 Analysis and support as specified in the Performance Work Statement (T3801). The contractor's proposal titled "Verizon Wireless on Camp Pendleton E3 Analysis Support" dated 24 November 2014 is incorporated by reference.  Period of Performance: May 06, 2015 through January 05, 2016 FOB: Destination PURCHASE REQUEST NUMBER: DOSMC50087				
				NET AMT	\$64,343.00
	ACRN AB CIN: DOSMC500870013				\$64,343.00

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 06-MAY-2015 TO 05-JAN-2016	N/A	DISA JOINT SPECTRUM CENTER <i>HC</i> 2104 TURBOT LANDING ANNAPOLIS MD 21402-5064 <i>HC</i> FOB: Destination	H98294

Section G - Contract Administration Data

ACCOUNTING AND APPROPRIATION DATA

AB: 97X4930.5F20 000 C1013 0 068142 2F 255020 DOSMC50087  
AMOUNT: \$64,343.00  
CIN DOSMC500870013: \$64,343.00

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: *BC*  
Organization/Office Symbol: DISA/PSD 63  
Phone No.: *BC*  
E-Mail Address: *BC*

Contract Specialist

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

Customer/COR/TM Point of Contact

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

Contractor Point of Contact

Contractor Legal Business Name: Excelis, Inc  
DUNS: 08365498  
CAGE CODE: 9M715  
Contractor POC: Anne Hasselbrack  
E-Mail Address: [anne.hasselbrack@excelisinc.com](mailto:anne.hasselbrack@excelisinc.com)  
Phone Number: 301.867.2985  
Fax Number:

(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).

**2 in 1**

(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		N/A
Other DoDAAC(s)	N/A	

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(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: *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.

**Not Applicable**

(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. 0999	3. DATE OF ORDER/CALL (YYYYMMDD) 2015 May 04	4. REQ/ PURCH. REQUEST NO. DOSMC60068	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) CODE  <b>SEE ITEM 6</b>	8. DELIVERY FOB <input checked="" type="checkbox"/> DESTINATION <input type="checkbox"/> OTHER  (See Schedule if other)
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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) <b>SEE SCHEDULE</b>	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 2104 TURBOT LANDING ANNAPOLIS MD 21402-5064	CODE H98294	15. PAYMENT WILL BE MADE BY CODE DFAS-CO/JAQ ATTN: CAPSW/ORP2 P.O. BOX 369016 COLUMBUS OH 43236-9016	CODE HQ0131	<b>MARK ALL PACKAGES AND PAPERS WITH IDENTIFICATION NUMBERS IN BLOCKS 1 AND 2.</b>
---	----------------	--	----------------	--

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:

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)
<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
<b>SEE SCHEDULE</b>					

* 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  <b>BE</b>	5. TOTAL \$33,517.00
		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
--------------------	--

31. PAYMENT	34. CHECK NUMBER
<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.
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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 (T3760). The contractors proposal titled "Verizon Wireless on Vandenberg AFB E3 Analysis Support" dated 23 September 2014 is incorporated by reference.	1	Each	\$33,517.00	\$33,517.00
FOB: Destination PURCHASE REQUEST NUMBER: DOSMC50068					
					NET AMT
					\$33,517.00
ACRN AA					\$33,517.00
CIN: DOSMC500680013					

PWS

PERFORMANCE WORK STATEMENT (PWS)  
SPONSOR PROGRAM  
as of 4/28/2015

Contract Number:	HC1047-07-D-0001
JSC Tracking Number:	T3760
Task Order Number:	0999

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	Verizon Wireless, Vandenberg AFB, E3 Analysis, RADHAZ, PCS, CTS, LTE, MSP	
SPONSOR		
Verizon Wireless 2785 Mitchell Drive Walnut Creek, CA 94598		

1. Contracting Officer's Representative (COR).

Name:	<i>BS</i>
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 Vandenberg AFB 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.<sup>1</sup>

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 three Long Term Evolution (LTE) systems at one site and a Cellular Telephone System (CTS) and two LTE systems at the other site on Vandenberg AFB, CA.

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

<sup>1</sup> 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.

(within  $\pm 10$  MHz of the LTE and CTS 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.

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	20 Weeks after TO Award
Consulting Reports	7 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 C - Descriptions and Specifications

CLAUSES INCORPORATED BY FULL TEXT

**52.204-9000 Points of Contact (AUG 2005)**

**Contracting Officer**

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

**Contract Specialist**

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

**Customer/COR/TM Point of Contact**

Name: *BL*  
Organization/Office Symbol: DSO  
Phone No.: *BL*  
E-Mail Address: *BL*

**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](mailto:anne.hasselbrack@exelisinc.com)  
Phone Number: 301.867.2995

**Technical POC**

Michael Hayes  
E-mail: [Michael.hayes@exelisinc.com](mailto: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)	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: *BC*

E-mail: *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.

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

(End of clause)

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 04-MAY-2015 TO 03-JAN-2016	N/A	DISA JOINT SPECTRUM CENTER 86 2104 TURBOT LANDING ANNAPOLIS MD 21402-5064 86 FOB: Destination	H98294

Section G - Contract Administration Data

ACCOUNTING AND APPROPRIATION DATA

AA: 97X4930.5F20 000 c1013 0 068142 2F 257020 DOSMC50068  
AMOUNT: \$33,517.00  
CIN DOSMC500680013: \$33,517.00

**ORDER FOR SUPPLIES OR SERVICES**

PAGE 1 OF 12

1. CONTRACT/PURCH. ORDER/ AGREEMENT NO. HC1047-07-D-0001	2. DELIVERY ORDER/ CALL NO. 1000	3. DATE OF ORDER/CALL (YYYYMMDD) 2015 May 06	4. REQ/ PURCH. REQUEST NO. DOSMC50067	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)  <b>SEE ITEM 6</b>	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) <b>SEE SCHEDULE</b>	11. MARK IF BUSINESS IS <input checked="" 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 2104 TURBOT LANDING ANNAPOLIS MD 21402-5064	CODE H98294	15. PAYMENT WILL BE MADE BY DFAS-CO/JAO 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.
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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.
	PURCHASE	<input type="checkbox"/>	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)
<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
<b>SEE SCHEDULE</b>					

* 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	<b>BK</b>	25. TOTAL	\$53,269.00
			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	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	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 (T3767). The contractor's proposal titled "Sprint Nextel on Fort Bragg E3 Analysis Support dated 18 September 2014 is incorporated by reference. FOB: Destination PURCHASE REQUEST NUMBER: DOSMC50067	1	Each	\$53,269.00	\$53,269.00
				NET AMT	\$53,269.00
	ACRN AA CIN: DOSMC500670013				\$53,269.00

Section C - Descriptions and Specifications

CLAUSES INCORPORATED BY FULL TEXT

52.204-9000 Points of Contact (AUG 2005)

Contracting Officer  
Name: 66  
Organization/Office Symbol: PL63  
Phone No.: 66  
E-Mail Address: 66

Contract Specialist  
Name: 66  
Organization/Office Symbol: PL63  
Phone No.: 66  
E-Mail Address: 66

Customer/COR/TM Point of Contact  
Name: 66  
Organization/Office Symbol: DSO  
Phone No.: 66  
E-Mail Address: 66

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)

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(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.

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

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(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.

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Admin DoDAAC	HC1047	
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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.

**NAME:** *Be*

(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.

**E-mail:** *Be*

(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/Aug/2014**

<b>Contract Number:</b>	HC1047-07-D-0001
<b>JSC Tracking Number:</b>	T3767
<b>Task Order Number:</b>	1000

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 Bragg E3 Analysis, RADHAZ, LTE, MSP	
SPONSOR		
Sprint Nextel 3270 Chancellor Dr. Woodbridge, VA 22192		

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

**a. Primary COR.**

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

**2. Task Order (TO) Title. Sprint Nextel on Fort Bragg 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.<sup>1</sup>

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.

<sup>1</sup> 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.

Sprint Nextel, hereafter referred to as the purchaser, has requested permission to install and operate a Long Term Evolution (LTE) system at nine sites on Fort Bragg, NC.

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  $\pm 10$  MHz of the LTE base station transmit frequency band) 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 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	20 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 06-MAY-2015 TO 05-JAN-2016	N/A	DISA JOINT SPECTRUM CENTER <i>66</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 0 068142 2F 257020 DOSMC50067  
AMOUNT: \$53,269.00  
CIN DOSMC500670013: \$53,269.00