

ORDER FOR SUPPLIES OR SERVICES

PAGE OF PAGES

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IMPORTANT: Mark all packages and papers with contract and/or order numbers.

BPA NO.

1. DATE OF ORDER JUN 15 2009		2. CONTRACT NO. (If any) GS35F0785J		6. SHIP TO:	
3. ORDER NO. NRC-DR3307317T005		4. REQUISITION/REFERENCE NO. 33-07-317T005 Task Order 5		a. NAME OF CONSIGNEE U.S. Nuclear Regulatory Commission	
5. ISSUING OFFICE (Address correspondence to) U.S. Nuclear Regulatory Commission Div. of Contracts, CMB3 Attn: Manon Butt, Cont Spc, 301-492-3629 Mail Stop TWB-01-B10M Washington, DC 20555				b. STREET ADDRESS Attn: Roy Choudhury, OIS/ICOD Mail Stop T-5-D-14 11545 Rockville Pike	
		c. CITY Rockville		d. STATE MD	e. ZIP CODE 20852
7. TO:				f. SHIP VIA	
a. NAME OF CONTRACTOR FORCE 3, INC.				6. TYPE OF ORDER	
b. COMPANY NAME				<input type="checkbox"/> a. PURCHASE <input checked="" type="checkbox"/> b. DELIVERY	
c. STREET ADDRESS 2151 PRIEST BRIDGE DR				REFERENCE YOUR Please furnish the following on the terms and conditions specified on both sides of this order and on the attached sheet, if any, including delivery as indicated.	
d. CITY CROFTON		e. STATE MD	f. ZIP CODE 211142478		
9. ACCOUNTING AND APPROPRIATION DATA B&R: 910-15-5E1-330 JCN: J1193 BOC: 252A APP: 31X0200.910 FFS # 10970702 DUNS # 556054591				10. REQUISITIONING OFFICE OIS Office Of Information Services	

11. BUSINESS CLASSIFICATION (Check appropriate box(es))						12. F.O.B. POINT Destination	
<input checked="" type="checkbox"/> a. SMALL	<input type="checkbox"/> b. OTHER THAN SMALL	<input type="checkbox"/> c. DISADVANTAGED	<input type="checkbox"/> g. SERVICE-DISABLED VETERAN-OWNED				
<input type="checkbox"/> d. WOMEN-OWNED	<input type="checkbox"/> e. HUBZone	<input type="checkbox"/> f. EMERGING SMALLBUSINESS					
13. PLACE OF			14. GOVERNMENT B/L NO.		15. DELIVER TO F.O.B. POINT ON OR BEFORE (Date) 6/15/2009-12/14/2009		16. DISCOUNT TERMS Net 30
a. INSPECTION		b. ACCEPTANCE					

17. SCHEDULE (See reverse for Rejections)

See CONTINUATION Page

ITEM NO. (a)	SUPPLIES OR SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	DUNS # 556054591 Issuance of Task Order No. 005 under Delivery Order DR-33-07-317. Title: "Network Infrastructure Quality of Service (QoS) and Multicasting Research, Analysis and Recommendations" Period of Performance: June 15, 2009 through Dec 14, 2009. See attached pages for description of the task order. Reference Force 3 Inc.'s proposal dated May 26, 2009, revised June 10, 2009. NRC Project Officer: Achyutananda Roy Choudhury, phone 301-415-7226; email Roy.Choudhury@nrc.gov. Force 3 Federal Serv: Cynthia Hamilton, 410-774-7104, fx 410-721-5624, mo 410-570-4564, cindy.hamilton@force3.com Force 3 Project Manager: Lynval Smith, 240-426-1085, Lynval.Smith@force3.com					

SEE BILLING INSTRUCTIONS ON REVERSE	18. SHIPPING POINT		19. GROSS SHIPPING WEIGHT		20. INVOICE NO.		17(h) TOTAL (Cont. pages)
	21. MAIL INVOICE TO:						
	a. NAME Department of Interior / NBC email NRCPayments@nbc.gov						
	b. STREET ADDRESS (or P.O. Box) Attn: Fiscal Services Branch - D2770 7301 W. Mansfield Avenue						
	c. CITY Denver		d. STATE CO	e. ZIP CODE 80235-2230		\$124,944.97	

22. UNITED STATES OF AMERICA
BY (Signature)

Michael A. Turner

23. NAME (Typed)
Eleni Jernell
Contracting Officer
TITLE: CONTRACTING/ORDERING OFFICER

AUTHORIZED FOR LOCAL REPRODUCTION
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JUL 1 2009

OPTIONAL FORM 347 (REV. 4/2006)
PRESCRIBED BY GSA/FAR ACPR 53.213(f)

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ORDER FOR SUPPLIES OR SERVICES SCHEDULE - CONTINUATION

PAGE NO.
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IMPORTANT: Mark all packages and papers with contract and/or order numbers.


DATE OF ORDER

CONTRACT NO.

ORDER NO.

GS35F0785J

NRC-DR3307317T005

ITEM NO. (A)	SUPPLIES OR SERVICES (B)	QUANTITY ORDERED (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)	QUANTITY ACCEPTED (G)
	<p>Please indicate your acceptance of Task Order No. 5 by having an official authorized to bind your organization execute three copies of this document in the space provided below and return two copies to the U.S. Nuclear Regulatory Commission, Attn: Manon L. Butt, Division of Contracts, Mail Stop TWB-01-B10M, 11555 Rockville Pike, Rockville, MD 20852. Please retain the third copy for your records.</p> <p>Accepted: Task Order No. 5 under DR-33-07-317:</p> <p> Signature</p> <p><u>Jeremy Leahy</u> Name Contracts Administrator</p> <p><u>6/17/05</u> Title</p> <p><u>6/17/05</u> Date</p> <p>Enclosure: Statement of Work</p>					

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H))

In accordance with the task order procedures of Delivery Order DR-33-07-317, Infrastructure Design and Development Support, this definitizes Task Order No. 5 titled "Network Infrastructure Quality of Service (QoS) and Multicasting Research, Analysis and Recommendations." This effort shall be performed in accordance with the enclosed Statement of Work, the terms and conditions of Delivery Order DR-33-07-317, and GSA Schedule No. GS-35F-0785J.

Period of Performance and Cost

Task Order No. 5 shall be in effect from June 15, 2009 through December 14, 2009 (six months). The task order ceiling is \$124,944.97. This is a labor hour task order. The Government will not reimburse costs for any local travel for this task order.

Price Schedule – Task Order No. 5 under DR-33-07-317

Name	Position Title	Labor Category	Hourly Rate	Hours	Cost
Lynval Smith	Program Manager	Program Manager			\$42,100.00
Jason Oh	Technical Expert	Consultant Principal			\$54,175.61
Bart Robinson	Project Architect	Senior Technical Consultant			\$24,962.00
Carol Bryant	Technical Writer	Technical Writer II			\$3,707.36
Total					\$124,944.97

Consideration and Obligation

FY 2009 funding in the amount of \$124,944.97 is obligated to fully fund this task order.

Key Personnel

The following individuals are considered to be essential to the successful performance of work hereunder and are key personnel: [REDACTED], Program Manager; [REDACTED], Technical Expert; [REDACTED], Project Architect; and [REDACTED], Technical Writer. The Contractor agrees that such personnel shall not be removed from the effort under the task order without compliance with Section A.4, Key Personnel, in basic Delivery Order DR-33-07-317.

The issuance of Task Order No. 5 does not change any terms and conditions of the subject delivery order.

NRC contacts during the course of this task order are:

Technical Matters:

Achyutananda Roy Choudhury, Project Officer, phone 301-415-7226, OIS/ICOD/DDB, Mail Stop T-5-D-14, email Roy.Choudhury@nrc.gov.

Antonio M. Wilkins, Project Lead, phone 301-415-8736, OIS/ICOD/DDB, Mail Stop T-5-D-14, email Antonio.Wilkins@nrc.gov.

Contractual Matters:

Manon L. Butt, Contract Specialist, phone 301-492-3629, ADM/DC/CMB3, Mail Stop TWB-01-B10M, email Manon.Butt@nrc.gov.

**STATEMENT OF WORK
IDDS TASK ORDER NO. 5
UNDER DELIVERY ORDER NO. DR-33-07-317
INFRASTRUCTURE DESIGN AND DEVELOPMENT SUPPORT**

Task Order No. 5 Title:

Network Infrastructure Quality of Service (QoS) and Multicasting Research,
Analysis and Recommendations

C.1 Objective:

The purpose of this task is to research, develop and document the required modifications to the Agency's network infrastructure (i.e. routers, switches, etc.) to support various media streaming technologies (i.e. Media Streaming (MS), Virtual Meeting (VM), Instant Messaging (IM), Presence Management (PM), etc.). The outcome is a clear and concise recommendation on the network settings, configurations, upgrades and/or additional components required to implement and optimize the network infrastructure for these technologies, e.g. Quality of Service (QoS) and multicasting shall be presented. The research and recommendations shall be based on the requirements gathered after a review of the current agency network infrastructure architecture.

The following items shall be considered during the research and recommendation phase:

- The impact to the current production network.
- The compatibility with existing infrastructure, products and services.
- Any additional hardware and software needed or required.
- Any additional support services and infrastructure needs or requirements.

Additionally, an examination of the current NRC network architecture, inventory and bandwidth utilization shall be done. Any additional services and/or configuration changes required to support these new technologies shall be identified and documented. Recommendations on how to adequately prepare the infrastructure to support the new capabilities shall be provided. These recommendations will include any components that are required to be upgraded, replaced and/or added, any bandwidth that needs to be increased, and general device configurations for each Cisco unique network device model.

C.2 NRC Environment:

Network Environment

The following is a high-level review of the NRC wired network enterprise. Each environment presents its own set of challenges for ensuring compliance, standardization, security, usability, and supportability. All these environments in varying degrees share common security requirements, software applications, and other traits. This set of common traits allows for the development of an agency-wide program that includes the technologies, policies and procedures to ensure compliance, standardization, security, usability, and supportability. Additional information on the NRC enterprise network is available and can be requested.

The NRC network encompasses:

- Headquarters (HQ) White Flint campus buildings located in Rockville Maryland;
- Headquarters Executive Boulevard building located in Rockville, Maryland;
- Headquarters Twinbrook building located in Rockville, Maryland;
- Headquarters Church Street building located in Rockville, Maryland;
- Headquarters Gateway building located in Bethesda, Maryland;
- Gude Drive contractor building located in Rockville, MD;
- Taft Street contractor building located in Rockville, MD;
- Region I regional office located in King of Prussia, Pennsylvania;
- Region II regional office located in Atlanta, Georgia;
- Region III regional office located in Lyle, Illinois;
- Region IV regional office located in Arlington, Texas;
- The Technical Training Center (TTC) in Chattanooga, Tennessee;
- Sixty-nine Resident Inspector Sites.

The NRC's network is primarily comprised of Cisco equipment. The NRC HQ campus in Rockville, Maryland currently has an extensive Layer 2 switch environment. The environment consists of a gigabit Ethernet core, a combination of switched 10/100 Mbps and switched gigabit Ethernet connectivity for core servers, and switched 10/100 Mbps Ethernet-connected workstations and network devices. Both NRC HQ buildings have a DS3 connection to the WAN.

The Ethernet backbone is comprised of eight (8) Cisco 6509E switches, located in the data centers in One White Flint North (OWFN) and Two White Flint North (TWFN). Four switches are located in each building.

In each campus building, two 6509 switches are employed for core routing and for providing uplinks to the edge switches located in wire closets on each floor of the building, and the remaining two 6509 switches are employed for server connectivity. The core switches provide redundant fiber gigabit Ethernet uplinks to each of the floors, as well as channelized gigabit Ethernet connectivity between the two campus buildings.

The current edge/access switches are a combination of Cisco Catalyst 3750, 2960, 4506, and 4510 switches running IOS (Internetwork Operating System) which provide connections to the network for the workstations and printers.

The Firewall and Internet connections are located at HQ; this serves as the sole conduit for Internet connectivity for the entire NRC production network, encompassing all remote office locations.

The Regional Offices, TTC, and most of the local NRC sites have a Layer 2 switch environment, including a fiber Ethernet backbone and access switches utilizing some combination of Cisco

3750 and 4500 switches which are connected to HQ via the Verizon very high-speed backbone Network Service (vBNS+) which provides fully meshed WAN connectivity between the two HQ campus buildings, the four Regional Offices, the Technical Training Center (TTC), and all of the Resident Inspector Sites. Each Regional Office and the TTC has a DS3 (approximately 45 Mbps) connection to the WAN.

The Resident Inspector Sites located at the nuclear power plants have a Cisco 2811 router which provides a T1 (approximately 1.544 Mbps) connection to the WAN, with a switch module providing sixteen ports of 10/100 Mbps Ethernet.

C.3 Task Requirements:

Note that the following general requirements are included for this task:

- a) The contractor shall fully and clearly address all requirements mentioned in the objective.
- b) The contractor shall record the minutes of all scheduled project meetings and provide electronic copies to the Project Officer and Project Lead. The minutes shall include the following:
 - The names and titles of all parties attending the meeting
 - The date of the meeting
 - Discussion points relative to the project
 - Any action items or follow-up commitments and assignments

The NRC expects the following activities to be performed by the contractor to satisfy the requirements of this Task

I. Task Kickoff Meeting:

The contractor shall meet with the NRC Project Officer and NRC Contracting Officer to discuss project requirements, responsibilities, and expectations. Review of the requirements and deliverables shall be discussed to solidify clarity and scope. This meeting shall occur within one week after the start of the task.

II. Regular Project Status Meetings:

The contractor shall meet with the Project Officer and/or Project Lead once every week to discuss project status and issues. The contractor shall begin a continuing weekly status review document that shall include the minutes of each status review meeting plus a list of accomplishments, issues/topics for discussion, up-coming events, and action items to be included for each meeting. Additional task oriented meetings may be requested by the Project Officer or Project Lead.

III. Task Plan:

The contractor shall develop and provide a Task Plan based on the Infrastructure and

Computer Operations Division (ICOD) provided template to the Project Officer which includes a Task Schedule and a description of the activities required to satisfy each deliverable identified in this Statement of Work. The Task Plan shall be developed with input from and discussions with the Project Officer.

IV. **Deliverables:**

a. A Task Plan shall be provided by the contractor to the Project Officer within 5 business days of the kick-off meeting. The NRC shall review and comment on the draft Task Plan within 5 business days from receipt. The contractor shall provide the final Task Plan within 5 business days. The Task Plan shall be updated weekly by the contractor throughout the task.

b. An Infrastructure Preparedness Review Report, including a detailed design (drawing and narrative) of the recommendations for the NRC HQ Campus and a comprehensive list of hardware/software/services, hardware upgrades, purchases and configuration, as well as cabling that would be required to implement the solution that encompasses media streaming, virtual meeting, instant messaging, and presence management services for the NRC. This Report shall encompass the items discussed in section C.1 of this document. A draft Report shall be provided by the contractor to the Project Officer within 45 business days of task order award. The NRC shall review and comment on the draft Report within 5 business days from receipt. The contractor shall provide the final Report within 5 business days.

c. Three (3) Summary Project Presentations shall be required to various NRC staff.

V. **Project Contacts:**

- i) Project Lead: Antonio Wilkins
- ii) Project Officer: Roy Choudhury

VI. **Period of Performance:**

Six (6) months from the date of Task Order Number 5 award.

VII. **Project Closeout:**

The contractor shall submit to the Project Officer three (3) hard copies of all project deliverables and the electronic documents (Microsoft Office 2003 compatible). All documents are due one week before the end of the task.