

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT			1. CONTRACT ID CODE	PAGE OF PAGES 1 4
2. AMENDMENT/MODIFICATION NO. 82	3. EFFECTIVE DATE See Block 16C	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)	
6. ISSUED BY John F. Kennedy Space Center, NASA Procurement Office – ODIN –OP-OS-ODIN Kennedy Space Center, FL 32899	CODE	7. ADMINISTERED BY (If other than Item 6)	CODE	
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State, and Zip Code) OAO Corporation 7375 Executive Place Seabrook, MD 20706-2278		(x)	9A. AMENDMENT OF SOLICITATION NO.	
			9B. DATED (SEE ITEM 11)	
			10A. MODIFICATION OF CONTRACT/ORDER NO. NAS5-98144/CC90300B	
			10B. DATED (SEE ITEM 13) December 1, 2001	
CODE	FACILITY CODE			
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS				
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended, <input type="checkbox"/> is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning ___ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.				
12. ACCOUNTING AND APPROPRIATION DATA (If required)				

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.	
A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.	
B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).	
XX C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: FAR CLAUSE 52.212-4 CONTRACT TERMS AND CONDITIONS-COMMERCIAL ITEMS, (c) CHANGES	
D. OTHER (Specify type of modification and authority)	

E. IMPORTANT: Contractor is not, is required to sign this document and return **1** copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) KENNEDY SPACE CENTER --- ODIN SERVICES Technology Infrastructure Upgrade: Support of VoIP Implementation in SERPL Building Change in Delivery Order Price: \$161,370.00 (INCREASE)
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Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print) Keith L. Spencer Sr. Contracts Manger	16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Penelope A. Ebright Contracting Officer
15B. CONTRACTOR/OFFEROR <i>Keith L. Spencer</i> (Signature of person authorized to sign)	16B. UNITED STATES OF AMERICA BY <i>Penelope A. Ebright</i> (Signature of Contracting Officer)
15C. DATE SIGNED 1 Aug 2003	16C. DATE SIGNED 8/4/03

1. This modification incorporates the ODIN support required for the VoIP implementation in the SERPL building as part of the SERPL building activation. This effort shall be accomplished as described in the attached Statement of Work (Attachment 1 of this modification) and as further defined in OAO Proposal dated May 14, 2003 at an increase of \$161,370.00 in the firm fixed price of this delivery order.
2. In performance of this effort the contractor shall utilize the Government Furnished Property (hardware and software) listed in Attachment 2 of this modification.
3. To ensure compatibility with the existing NASA networks hardware, NASA determined Cisco Architecture for Voice, Video and Integrated Data (AVVID) would be utilized in the SERPL facility. As a result OAO Corporation is not responsible for the compatibility of the Cisco system. OAO is responsible for the installation of the selected equipment and the acquisition of the required training to perform the designated tasks.
4. Following installation of the IP telephones into the facility, the telephone instrument shall be included as a PH2 seat with no instrument in the monthly seat entitlement database.
5. Delivery Order Part II, Item 4 is revised to include the increase of \$161,370.00 for this infrastructure upgrade:

ESTIMATED TOTAL (Contract Item 4) through Mod 81

Ordered Seats and Services	\$ 15,125,545.17
Catalog Services	\$ 1,494,942.56
Specialized Services	\$ 16,350.00
Infrastructure upgrades	\$ 1,545,962.03
Other Efforts	\$ -
Fast Track Mods Authorized	\$ -
Subtotal	\$ 18,182,799.76
Less credits	\$ (168,825.06)
Less outages	\$ (3,645.01)
Less retainage not earned	\$ (76,486.64)
Subtotal	\$ 17,933,843.05
Seats/service levels projected through 11/30/04	\$ 13,966,775.91
Catalog Projections	\$ 2,705,057.44
Specialized Services Projections	\$ 33,650.00
Total Estimated Delivery Order Value	\$ 34,639,326.40

- 6. Delivery Order Part V "Technology Infusion (Infrastructure Upgrades)", Item 2 is modified to include subject infrastructure upgrade:

Mod. No.	Description Of Work	Date Signed	Completion Date	Modification Value
81	Support of VoIP Implementation in SERPL			\$161,370.00

- 7. The contractor shall complete this effort no later than ten (10) business days after the last communication room is completed and turned over the Contractor to perform the work required by this modification.

The work performed under this modification is a phased approach. The Contractor shall complete the telephone deployment for each communication room within ten (10) business days from the time that the communication room is completed. A completed communication room is defined as one that has all network equipment, appropriate network drop wiring and Circuit Face Plates (CFP) and required cross-connects installed and completed, and the network equipment activated.

- 8. Payment Schedule: Invoicing and Payment for this modification will be made in accordance with Master Contract NAS5-98144, FAR 52.212-4 (Commercial Items (May 1997) (Modified).
- 9. As reflected in Block 8 of Page 1, the address of OAO Corporation has been changed to:

OAO Corporation
7375 Executive Place
Seabrook, MD 20706-2278

- 10. In consideration of the modification agreed to herein as complete equitable adjustment for the changes set forth, the Contractor hereby releases the Government from any and all liability under this delivery order for further equitable adjustment attributable to such fact or circumstances giving rise to these changes.
- 11. All other terms and conditions remain unchanged.

ODIN SUPPORT TO IMPLEMENT VOICE OVER IP (VoIP) IN SERPL STATEMENT OF WORK

NASA will provide the hardware and software (Attachment 2) to equip SERPL with voice over IP telephone services. To integrate with the current network hardware, Cisco's Architecture for Voice, Video, and Integrated Data (AVVID) VOIP solution has been selected.

As part of the SERPL activation task a CSOC consultant will verify the design and setup of the SERPL voice over IP system which will include the initial server setup for NASA KSC baseline configuration. ODIN will be required to operate and maintain the voice over IP system. The consultant will provide ODIN with minimal configuration training.

ODIN shall complete the following tasks:

PRI Connection

1. Provide hardware, software, and configuration to connect four (4) PRI circuits into the existing CD&SC phone switch.
2. Connect four (4) PRI circuits (GFE) from the SERPL gateway to the CD&SC phone switch.

Call Manager Installation

1. Install primary Call Manager server (GFE) in CD&SC.
2. Install secondary Call Manager server (GFE) in SERPL.
3. Monitor the setup as the CSOC consultant builds and configures the baseline Call Manager for call processing.
4. Complete the Call Manager configuration for remaining 300 IP phones utilizing training provided by the CSOC consultant.
5. Complete Cisco formal training as required to support Call Manager.

Unity Voice Messaging Installation

1. Install Unity Voice Messaging server (GFE) in CD&SC.
2. Monitor the setup as the CSOC consultant configures the baseline KSC Unity Voice Messaging.
3. Complete the Unity Voice Messaging configuration for the remaining 300 IP phones utilizing training provided by the CSOC consultant.
4. Complete Cisco formal training as required to support Unity Voice Messaging.

Emergency Responder Installation

1. Install Emergency Responder server (GFE) in CD&SC.
2. Monitor the setup as the CSOC consultant configures the baseline KSC Emergency Responder configuration to gather IP phone locations as required for E911.
3. Complete the Emergency Responder configuration for the remaining 300 IP phones utilizing training provided by the CSOC consultant.
4. Coordinate with KSC emergency services for the users' location per E911 requirements.
5. Complete Cisco formal training as required to support Emergency Responder, if available

IP Telephony Environmental Monitor Installation

1. Install IP Telephony Environmental Monitor server (GFE) in CD&SC.
2. Monitor the setup as the CSOC consultant configures the baseline IP Telephony Environmental Monitor to provide data necessary for troubleshooting voice over IP system.
3. Complete the IP Telephony Environmental Monitor configuration to monitor the voice over IP telephony system utilizing training provided by the CSOC consultant.
4. Complete Cisco formal training as required to support IP Telephony Environmental Monitor, if available.

IP Phone implementation

1. Coordinate with the SERPL IT point of contact for the locations of IP phones in SERPL.
2. Install up to 290 IP phones in SERPL.
3. Coordinate with KSC/IT-D2 for locations of IP test phones in CIF and HQ.
4. Install up to 10 IP phones in CIF and HQ.

GOVERNMENT FURNISHED PROPERTY (GFP)

ODIN SUPPORT TO IMPLEMENT VOICE OVER IP (VoIP) IN SERPL

<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
MCS-7835H-2.4-EVV	2 Call Manager Servers, 1 Emergency Responder Server MCS 7835H-2400 Server With P4 2.4, 1GB SDRAM, 2-36.4GB SCSI	3
CON-SNT-MCS-7835	Maintenance - 2 Call Manager Servers and 1 Emergency Responder Server 8x5xNBD Svc, Cisco Media Convergence Server 7835	3
MCS-7835H-2.4-DAT=	Backup Tape Drive, Primary Call Manager 20/40GB Hot Plug DAT Drive for MCS-7835H-2400	1
CON-SNT-MCSMLDAT	Maintenance for Call Manager Backup Tape Drive 8x5xNBD Svc, Hot-Swap tape drive for MCS7837, MCS7847	1
SW-CCM-3.2-7835=	2 Call Manager Server Licenses Call Manager 3.2 - MCS-7835H-2400, 2500 Svr User License	2
CON-SAU-CCM-MCS	Maintenance for 2 Call Manager licenses SW APP SUPP + UPGR CM 3.2 on MCS-7835-1266	2
MCS-7845H-2.4-ECS1	Unity Voice Mail Server MCS 7845-HP; VM-6HDD; rack; 1GB; RAID 1(x3) DUAL CPU; Win2K	1
CON-SNT-7825HECS1	Maintenance - Unity Voice Mail Server SMARTNET 8X5XNBD MCS 7825 Unity; 512M	1
UNITYU31-300USR16	Unity Voice Mail Server License UNITYV31-300USR16 Unity Voice Messaging, 300 users (includes 16 sessions)	1
CON-SAU-UNITYVM16	Unity Voice Mail License Maintenance SAU SVC., Unity Voice Messaging - 16 Port	1
SW-ER1.1-Svr	Emergency Responder Server, w/License for 100 users Emergency Responder, includes 100 user licenses	1
SW-ER1.1-User	Emergency Responder License ER1.1 single user license	200
CON-SAU-ER1.1-SVR	Emergency Responder License Maintenance SAU SVC., CISCO ER1.1 SINGLE USER LICENSE	1
CON-SAU-ER1.1-USR	Emergency Responder License Maintenance SAU SVC., ER1.1 SINGLE USER LICENSE	200
CWITEM-1.3-WIN-K9	IP Telephony Environmental Monitor S/W License IP Telephony Environmental Monitor 1.3 for WIN; incl DFM,VHM, CV	1
CON-SAS-CWITEMWIN	IP Telephony Environmental Monitor License Maintenance SAS SVC IP TELEPHONY ENVIRONMENT MONITOR 1.3 FOR WIN	1
	Workstation for Environmental Monitor	1
<u>IP PHONES</u>		
SW-CCM-UL-7940	Call Manager Unit license for single 7940 IP phone	300
CP-7940G	Cisco IP Phone 7940G, Global	300
CON-SNT-7940	8x5xNBD Svc, Med-hi traffic multi line phone + 1 User License	300