

NNG13451284R

ATTACHMENT B

MANDATORY DELIVERABLES

AUG 2013

Attachment B Mandatory Deliverables

The following list of deliverables provides a description of each Mandatory Deliverable line item as identified in Attachment A: Technical Specifications.

Items which are listed under Mandatory Add-ons are mandatory deliverable items which the technical specifications indicate must be provided on the contract, but which may be separately orderable from the required base systems.

Group A (Computer Servers) deliverable items

Note: pricing shall be inclusive of all necessary cabling, trays, enclosures, racks, cooling, etc. to provide for a fully operational system. The container based systems must include all required items listed in 3.2.3. as part of a fully enclosed system.

- 36 node mid-range cluster: 2 Head Nodes; 34 Data Nodes with all necessary cables and racks, OS Drives, Storage, etc.
- C++ compiler - mid-range cluster
- Fortran 2008 compiler - mid-range cluster
- Unlimited OS license - - mid-range cluster
- Smart PDU- mid-range cluster
- Management Network GbE switch- mid-range cluster
- KVM switch - mid-range cluster
- Storage system / media for 10 PB
- HSM software
- AutoDesk Maya (or equivalent)
- RenderMan Studio 4 (or equivalent)
- RenderMan Pro Server (or equivalent)
- Oracle database server (or equivalent)
- 484 node high end cluster - 2 Management Nodes, 2 Service Nodes, 480 Compute Nodes with all necessary cables and racks, NIC, motherboards, processors, RAM, cooling, disk controller, HCA, OS drives, disk storage, etc
- C++ compiler - hi end cluster
- Fortran 2008 compiler - hi end cluster
- Unlimited OS license - hi end cluster
- Smart PDU - hi end cluster
- Management Network GbE - hi end cluster
- LAN 10 GbE switch - hi end cluster
- Infiniband Network QDR GbE switch - hi end cluster
- KVM capable of supporting 484 nodes - hi end cluster
- Class 3a container system – 32 nodes
- Class 3b container system – 16 nodes

- Class 3a: – upgrade to 256 GB memory
- Class 3a: – upgrade to 1 TB internal storage
- Class 3a: – upgrade to 3.6 PB storage
- Class 3b: – upgrade to 128 GB memory
- Class 3b: – upgrade to 500 GB internal storage
- Class 3b: – upgrade to 1.8 PB storage

Group B (Mass Storage Devices) deliverable items

Blu-Ray
DVR
DAT 72 external drive
STK T9840D external drive
STK T10000C external drive
LTO Ultrium drive
40 slot / tape drive LTO Ultrium desktop library system
200 slot / 8 drive LTO Ultrium enterprise library system
2 PB Large robotic device (64 drives)
7 TB RAID Blade array
6 TB Scalable RAID
HSM Software – 1 PB
10 TB Virtual Storage (monthly rate)
Small Office UPS
Small Server Room UPS
On-site disk drive destruction
On-site tape degaussing

Group C (Server Support and Multi-Functional Devices) deliverable items

21 inch LCD Monitor
Portable LCD Projector
Manual Screen
Interactive Whiteboard
Monochrome Laser Printer
High Speed Monochrome Printer
Color Printer
Color Large-Format Plotter
High Speed/High Performance Scanner
Large Format Scanner
Small format tablet
Ergonomic Mouse
Ergonomic Keyboard
Motion detector solution
All-inclusive Office Video Conferencing
Point of Sale System
High volume monochrome MFD
Medium volume color MFD
5,000 Staples
Toner – supply for medium volume monochrome printer
Case of 5,000 sheets - 8x11" White
Case of 2,500 sheets - 11x17" White

Group D (Network Devices, Computer Security Tools and Advanced Video and Conference Tools) deliverable items

NOTE: where OEM 1, OEM 2 are noted the equipment must be from 2 different OEMs; but the same OEM may have proposed equipment in other groupings. Groupings are separated by '***'

Network management software

Wireless Access Point

Wireless LAN Manager

Wireless Bridge

High End LAN switch chassis (OEM 1)

High End LAN switch chassis (OEM 2)

Medium Network Router (OEM 1)

Medium Network Router (OEM 2)

Large Network Router

2- Way Radio

IP Telephony System

Cell Phone

Portable Hardware based network protocol analyzer

Anti-spam appliance (OEM 1)

Anti-spam appliance (OEM 2)

Anti-spyware software (Windows PC) – enterprise based, 25 clients

Server level intrusion protection and detection software – 25 servers

Vulnerability assessment software – 2500 seats

VPN Appliance – unlimited client

Fingerprint based biometric scanning device

Smart card reader

HD Studio Camera System

Digital Single Lens Reflex (SLR) Camera with bag

Conference room double bay multimedia lectern

Studio lighting - 750 watts of high impact strobe

High-output dynamic vocal microphone

Stereo Speakers

Wall mountable 46" Wide LED Display

42" digital signage monitor

Document Kiosk

Tactile glove haptic device

Medical Exam Station

Medical grade computer carts

Cable Tray straight sections

Ratchet

Cable Tray Cutter

Computer Rack Enclosure