PUBLIC TENDER: For the best IT equipment procurement bid

Time-frame for tender applications: 18 November 2004, 12:00.

1. Tender subject:

The subject of this tender is the selection of best bidders for the delivery of IT equipment for the needs of the War Crimes Court , by particular LOTs as follows:

- LOT 1 PC desktops and laptops (procurement)
- LOT 2 Servers (procurement and installation)
- LOT 3 Network equipment (procurement and installation)

The tender bids should include at least one LOT.

The bidders may present their bids for particular or all the lots. Assessing the bids and allocating the contracts will be carried out on a LOT-by-LOT basis.

2. Eligibility

Eligible to participate at the public tender are all legal entities that:

- 2.1 have been registered to do the business and activities subject of the lot competition (to be proven by presenting a registration certificate)
- 2.2 have presented their bid according to the requirements set forth in the tender invitation.

3. Bidding content

Tender bids shall be presented in two sealed envelopes:

Envelope no. 1 (mark on the front side) "NON-PRICED OFFER" should include the following:

- 3.1 Name and address of the bidder with phone and fax numbers, e-mail address and a contact person;
- 3.2 A copy of the bidder's company registration decision;

3.3 Itemized specification of the tender equipment with a description and technical characteristics of the equipment

- 3.4 Delivery deadline
- 3.5 Bid validity deadline (a minimum of 60 days as from the tender presentation deadline)
- 3.6 A reference list and previous experience in sales business (and installations for LOT 2 and 3) regarding the requested equipment.

Envelope no. 2 (marked on the front side of the envelope) "PRICED OFFER" should include the following:

3.7 Total price and price per unit for the equipment specified under Item 3.3

The total price and price per unit is given per LOTs on the DDU parity, in accordance with the tender documentation.

The price should include all expenses related to the equipment sale and installation (where required), except for the tax and customs expenses.

(As the OHR has a diplomatic status, the supplier who has signed a contract with the OHR will be provided with all the necessary papers to be exempted from paying taxes and customs duties. The price of freight forwarding services should be included in the price of equipment sale and will be organized and paid by the supplier).

The prices need to be given in KM or EURO.

Besides the price, also an important criterion in assessing the tender bids will be the time-frames for the equipment delivery.

The ordering party may reject the bid if it has established by double-checking that a presented document is of a false or incomplete content.

The bid must include all the aforementioned documents.

All the documents must be sorted and marked with a number, as stipulated (3.1 through 3.7).

In case of any violation of the aforementioned requirements, the bid may be eliminated from the further assessment procedure due to formal-legal flaws.

4. The tender selection criterion

Tender applications by those bidders who meet the criteria set forth in Items 3.1 - 3.6:

- 1. Equipment quality as provided in the specification, Item 3.3
- 2. Ability of the supplier to carry out the equipment installation works for LOT 2 and 3
- 3. The supplier's reference list, Item 3.6
- 4. Delivery deadline, Item 3.4

will go into the second round of bid evaluation, in which the contract allocation criterion will be the **Price, Item 3.7**.

5. Terms of payment:

30 days following the equipment delivery and completion of equipment installation works. Advance payment not to exceed 30 % can authorized upon receipt of the Bank guarantee.

6. Bidding

Sealed tender applications (which will include two separate envelopes), marked: PUBLIC TENDER APPLICATION – (with the LOT NAME AND NUMBER) and the bidder's address, should be sent to the following address:

Head of Procurement - WCC, OHR, Emerika Bluma 8, Sarajevo

Tender Application Deadline: 18 November 2004, 12:00

There will be a special commission established to open the tender applications and select the best bidder (consisting of OHR employees), whose task will be to open the incoming tender applications and propose the best bidder.

7. Public tender results:

The bidders will be duly informed about the public bidding results by the lapse of the bid validity.

8. Tender costs

In the public tender procedure, the OHR, WCC shall not bear any bidding costs, while retaining the right to accept the bid in its entirety or in part, or to reject the bid altogether, annul the public tender or dismiss all bids at any time before the contract has been concluded.

9. Additional tender explanation:

The OHR, WCC preserves the right, with the aim of specifically and precisely establishing the validity of bid elements, to request further explanation and documentation related to the delivered bid.

We believe you have all the information necessary to prepare your bid, but any questions or requirements for clarification, should be in writing only to the Head of Logistics on e-mail tender@ohr.int, and not to other officers of OHR. It is in all bidders interest to register their intention to bid so that everyone may receive answers to any questions put by other bidders. Please address this registration to e-mail tender@ohr.int.

LOT 1: WORKSTATIONS

Generally Applicable Specifications

- Brand name workstation equipment
- Minimum 36 months warranty for workstations and minimum 12 months warranty for laptops

Timeline

• Equipment shall be delivered partially (approximately 3 partial deliveries) within the period of one year.

First delivery (ASAP after signing the contract):
50 regular workstations, 10 IT level, 10 Power users, 10 Laptops
Second delivery:
40 regular workstations, app. delivery time: end of April 2005
Third delivery:
35 regular workstations, app. delivery time: end of July 2005

Specifications

1. IT Level Users

Quantity: 10 **Software:**

Windows XP Professional

MS Office 2003 Basic Edition (MS Word, MS Excel, MS Outlook, MS PowerPoint)

Chassis: SmallTower

Processor: 1x CPU Unit - Intel P4 3.0GHz/800MHz FSB

Memory: 1GB DDR2, Max. memory supported 4GB DDR2 PC3200 on motherboard

Hard Disc: 80GB Hard Drive ATA 150 (7200 rpms)

DVD/CDRW: Combo DVD / CDRW Drive

DVD Software Decode Solution **Floppy:** 3.5" (1.44MB) diskette drive

Video: Intel Extreme Graphics 2 or ATI Radeon X300 SE, and Direct AGP with minimum

64MB (DVI/TV output is optional)

Monitor: 17 inch CRT Flat Screen Monitor with external speakers

I/O Ports:

One parallel port IEEE 1284 compatible, One serial ports 16550 compatible

Four to eight USB ports (ideally two front and six rear access for easy connection of

peripherals) 3 audio

Audio: 16 bit audio

Keyboard: Keyboard (BH layout)

Mouse: PS/2 or USB Optical Mouse with Scroll

Network: Up to Gigabit Net adapter (10/100/1000Mbps)

2. Power Users

Quantity: 10 **Software:**

Windows XP Professional

MS Office 2003 Basic Edition (MS Word, MS Excel, MS Outlook, MS PowerPoint)

Chassis:

Desktop or small tower

Processor: 1x CPU Unit - Intel P4 3.0GHz/800MHz FSB

Memory: 1GB DDR2, Max. memory supported 4GB DDR2 PC3200 on motherboard

Hard Disc: 40GB minimum Hard Drive ATA 150 (7200 rpms)

DVD/CDRW: Combo DVD / CDRW Drive **Floppy:** 3.5" (1.44MB) diskette drive

Video: Intel Extreme Graphics 2 or ATI Radeon X300 SE, and Direct AGP with minimum

64MB (DVI/TV output is optional)

Monitor: 17 inch CRT Flat Screen Monitor with external speakers

I/O Ports:

One parallel port IEEE 1284 compatible, One serial ports 16550 compatible

Four to eight USB ports (ideally two front and six rear access for easy connection of

peripherals) 3 audio

Audio: 16 bit audio

Kevboard: Keyboard (BH layout)

Mouse: PS/2 or USB Optical Mouse with Scroll

Network: Up to Gigabit net adapter (10/100/1000Mbps)

3. Users workstations

Quantity: 125 **Software:**

Windows XP Professional

MS Office 2003 Basic Edition (MS Word, MS Excel, MS Outlook)

Chassis:

Desktop or small tower

Processor: 1x CPU Unit - Intel P4 3.0GHz/800MHz FSB

Memory: 512MB DDR2, Max. memory supported 4GB DDR2 PC3200 on motherboard

Hard Disc: 40GB minimum Hard Drive ATA 150 (7200 rpms)

DVD/CDRW: 56x CD-ROM Drive **Floppy:** 3.5" (1.44MB) diskette drive

Video: Intel Extreme Graphics 2 or ATI Radeon X300 SE, and Direct AGP with minimum

64MB (without DVI/TV)

Monitor: 17 inch CRT Flat Screen monitor with external speakers

I/O Ports:

One parallel port IEEE 1284 compatible, One serial ports 16550 compatible

Four USB ports (ideally two front and six rear access for easy connection of peripherals)

3 audio ports **Audio:** 16 bit audio

Keyboard: Keyboard (BH layout)

Mouse: PS/2 or USB Optical Mouse with Scroll

Network: Up to Gigabit Net adapter (10/100/1000Mbps)

4. Laptops

Quantity: 10 **Software:**

Windows XP Professional

MS Office 2003 Basic Edition (MS Word, MS Excel, MS Outlook)

Chassis: Laptop

Processor: 1x CPU Unit – Intel Centrino – minimum speed 1.6GHz or P4 2.6GHz **Memory**: 512MB DDR2 PC3200 in two modules, Max. memory supported 2GB DDR2

PC3200 on motherboard

Hard Drive: 60GB minimum Hard Drive ATA (minimum 5400 rpms)

DVD/CDRW: DVD/ CDRW Drive CR-ROM Software Solution

Video: Intel Extreme Graphics 2 or ATI Radeon X300 SE, and Direct AGP with minimum

64MB (without DVI/TV)

Monitor: Laptop embedded with 15" Viewable area

Speakers: Embedded

I/O Ports:

One parallel port IEEE 1284 compatible, One serial ports 16550 compatible,

One infrared port,

Three USB ports (ideally two front and six rear access for easy connection of

peripherals) 3 audio ports PS/2 port

Audio: 16 bit audio

Keyboard: Keyboard (BH layout)

Mouse: embedded, Touch pad or Trackball **Network**: Up to 100Mb Net adapter (10/100Mbps)

Wireless 802.11b is optional addition

Warranty Provision

All equipment must be covered with the warranty period of minimum 12 months (36 months for workstations).

The vendor shall outline the procedure for immediate replacement without any cost to the purchaser if purchased equipment is not operational at the time of installation or within the warranty period.

If the workstation could not be operational for longer than 5 working days, the supplier will provide the purchaser with an adequate replacement of equipment.

LOT 2: SERVERS

Generally Applicable Specifications

- Only brand name server equipment and software that is used in solutions.
- Include cost of installation

Specifications

1. Virus Protection (Enterprise wide)

Symantec Antivirus Enterprise edition – 200 licenses

2. Exchange Servers

Quantity: 2 **Chassis:**

Rack Mountable

Durable steel chassis design

Processor: minimum of 2 x Intel® Xeon™ Processor @ 3.0GHz (upgradeable to 4 CPUs)

533 MHz frontside bus / supports Hyper-Threading

Memory: minimum **4** GB DDR SDRAM / 32GB max/ 2-way interleaving / PC2100 DDR SDRAM with Advanced ECC functionality (indicate ability to upgrade)

Controller:

Dual SCSI channels, Ultra 320 Battery Backed Write Cache module 128MB RAID Controller

Six hot-swap PCI-X slots, 2 X FC Host Bus Adapter **Hard Disc:** 2 x 36GB 15K RPM Ultra 320 SCSI Drive

DVD/CD: DVD drive /CD-ROM drive combo **Floppy:** 3.5" (1.44MB) diskette drive

Video: Intel Extreme Graphics 2 or ATI Radeon X300 SE, and Direct AGP with

minimum 64MB I/O Ports:

One parallel port IEEE 1284 compatible,

One serial ports 16550 compatible

Four USB ports (for easy connection of peripherals) **Power Supply:** Two redundant power supplies

Four hot-swap, redundant, multi-speed fans one additional fan in each power supply Predictive Failure Analysis alerts on processors, Server Accelerator Cache, memory,

fans,

power supplies, and optional disks.

Supervisor Adapter: Remote Supervisor Adaptor

Keyboard: Keyboard (BH layout)

Mouse: PS/2 or USB Optical Mouse with Scroll

Network: Dual 10/100/1000 Ethernet Net controller / full duplex / Wake on LAN

3. CLUSTER

Cluster Software:

(The vendor should provide separate price for cluster installation and cost of the software)

4. FILE, PRINT, FAX, BACKUP Server(s)

Estimated Quantity: 6

Chassis:

Rack Mountable

Durable steel chassis design

Processor: minimum of 2 x Intel® Xeon[™] Processor @ 3.0GHz (upgradeable to 4 CPUs)

400MHz frontside bus / supports Hyper-Threading

Memory: minimum **2** GB DDR SDRAM / 32GB max/ 2-way interleaving / PC2100 DDR SDRAM with Advanced ECC functionality (indicate ability to upgrade)

Controller:

Ultra 320 Battery Backed Write Cache module 128MB RAID Controller Dual SCSI channels, Two on-board channels to support RAID 0, 00, 1, 1E, 1E0, 10, 5 & 50

Hard Drive: 2 x 36GB 15K RPM Ultra 320 SCSI Drive

DVD/CD: DVD drive /CD-ROM drive combo **Floppy:** 3.5" (1.44MB) diskette drive

Video: Intel Extreme Graphics 2 or ATI Radeon X300 SE, and Direct AGP with

minimum 64MB (DVI/TV output is optional)

I/O Ports:

One parallel port IEEE 1284 compatible, One serial ports 16550 compatible

Four USB ports (for easy connection of peripherals)

Power Supply: Two redundant power supplies

Four hot-swap, redundant, multi-speed fans one additional fan in each power supply Predictive Failure Analysis alerts on processors, Server Accelerator Cache, memory, fans,

power supplies, and optional disks.

Supervisor Adaptor: Remote Supervisor Adaptor

Kevboard: Keyboard (BH layout)

Mouse: PS/2 or USB Optical Mouse with Scroll

Network: Dual 10/100/1000 Ethernet Net controller / full duplex / Wake on LAN

5. Racks

Quantity: 2 UPS 5000 VA

Rack Mounted + 7Port Power Distribution Unit

Flat Panel Monitor Console Kit (includes 15" monitor, keyboard, mouse)

 2×8 Console Switch - supports up to 8 servers from 1 or 2 consoles

All Cables and Connectors

6. SAN Solution

Quantity: 1x Unit

Capacity: Min. 4TB, but must allow growth up to 8TB of storage Support of Servers: Must support IBM, DELL, HP server hardware

Chassis: rack mountable preferred

DPE chassis:3U rack-mountable chassis with rapid rack rails **Performance:** at least 600MB/s; 50,000 cached I/Os per second

RAID Support: Must support RAID 0,1, 1/0, 3, 5

OS Support: Windows 2003 Server, Windows 2000 Server, LINUX **Direct Connect:** Allow for minimum of four servers in direct connect.

In SAN: Allow for minimum of up to 30 servers connected to a single SAN array

Cache: Minimum 2GB, Automatic write cache
Front Connect: Allow minimum of four servers

Back End Connect: A single full 2Gb bandwidth back-end Fibre Channel loops per

SP for a total of 2 2Gb back-end loops per array

Controller: Fiber Channel

Hard Drives: 30x 146GB FC2 10000 rpms

Capacity: to allow up to 60x 2GB Fiber Channel of raw storage capacity (8TB)

Specify number of 1 inch FC drives per enclosure.

Disaster Recovery Software: Snapshot functionality included in Storage server

Servers Direct Attach: at least 4.

SAN Fiber Optic Switch:

Quantity: 2 for high availability

- · Minimum of 16 Ports Fiber Channels (in a switch)
- · Based on third generation of Brocade ASIC Technology
- · All ports capable to operate at 2Gb/s at full duplex to enable uncongested switch throughput
- · Redundant components (e.g. power supply)
- · All ports scalable

Warranty: Preferred Same Day On-Site 24x7x4hr

All necessary cables needed.

SAN Software (including installation):

Software support for Storage Server functionality (Network Manager, Configuration Manager, Performance Manager)

- · To provide the tools you need for managing your volumes.
- · One Console to manage storage products
- \cdot Discovers, monitors SAN server(s), SAN switches, and SAN storage systems
- · GUI
- · Easy installation
- · Visualizes performance data in topology map, live and historical graphs
- · Automated threshold-based performance alerts
- multi-path and path-failover support included

Software support for Storage Switches

- In-band and out-of-band access
- GUI
- switch management

The Vendor should indicate separately the cost of SAN Software installation.

7. Backup Software & Hardware Solution

Quantity: 1

Chassis: Rack Mountable Server

Processor:

1 x Intel® Xeon™ Processor @ 3.0GHz (up to 2 CPU) 533MHz frontside bus / supports Hyper-Threading **Memory**: 2 GB PC2100 266MHz ECC DDR-SDRAM DIMM

Video: Intel Extreme Graphics 2 or ATI Radeon X300 SE, and Direct AGP with

minimum 64MB

Hard Disc: 2 x 36GB 15K RPM Ultra 320 SCSI Drive

Controller:

Dual SCSI channels, Two on-board channels to support RAID 0, 00, 1, 1E, 1E0, 5 & 5E

I/O Ports:

One parallel port IEEE 1284 compatible, One serial ports 16550 compatible,

One infrared port, Two – three USB ports

DVD/CD-ROM: Combo DVD/CD-ROM drive

Floppy: 3.5-inch diskette drive

Network:

Dual 10/100/1000 Ethernet controller / full duplex / Wake on LAN

Host Adapter FC: 2 X FC Host Bus Adapter

Power Supply:

Two redundant power supplies Eight Redundant Fans installed

Predictive Failure Analysis alerts on processors, Server Accelerator Cache, memory,

fans, power supplies, and optional disks.

Keyboard: Keyboard (BH layout)

Mouse: embedded, Touch pad or Trackball

BACKUP STORAGE

Quantity: 1

Tape BACKUP Library LTO 2, Rack mounted,

FC SAN connection required,

Automated cartridge movement mechanism

40 x LTO2 Tape Media to provide Min. 4TB Storage Capacity

BACKUP Software and Installation

Quantity needed: Vendor should offer licensing to cover the following equipment: 9 servers, 134 working stations.

Required functions:

Data Backup/Restore, Data Archive/Retrieve

Progressive Backup, Backup directly to disk

Off-site copies

LAN-free backup/restore, Server-free backup/restores

Policy-based automation, Central administration

Backup software configuration:

The Vendor should indicate separately the cost of Backup Software installation.

8. Patch Management Software

The vendor shall specify a patch management software to manage automated deployment of operating system updates and patches.

9. Microsoft software

MS Windows Server 2003 Enterprise Edition - 2 licenses

MS Windows Server 2003 Standard Edition - 7 licenses

MS Exchange Server 2003 Enterprise Edition - 2 licenses

MS Exchange 2003 CAL - 124 licenses

Warranty Provision

All equipment must be covered with the warranty period of minimum 12 months.

LOT 3: NETWORK EQUIPMENT

Specifications

	<u>it</u>	
Catalyst 6509		
PN#	Description	Qty.
WS-X6K-S720-6408A	Catalyst 6509 Bundle	1
WS-C6509	9 slot chassis w/2x3000WAC PS, Fan Tray,	
WS-CAC-3000W	2 x Supervisor Engine 720,	
WS-C6K-9SLOT-FAN2	2 x 8-port Gigabit Ethernet Module (GBIC)	1
WS-X6196-X2-RJ-45	Catalyst 6500 96-port 10/100 Fast Ethernet Module, RJ-45	1
WS-SVC-FWM-1-K9	Firewall blade for Catalyst 6500	1
WS-SVC-IDS2-BUN-K9 WS-G5484	Catalyst 6500 IDSM-2 Module 1000BASE-SX Short Wavelength GBIC (Multimode only)	6
W5-G3464	<u> </u>	
	FO LC/SC Cable	4 10
2. Nt	FO SC/SC Cable	10
2. Network SW2 Poin	<u>(C</u>	
Catalyst 4506	Description.	
PN#	Description	Qty.
WS-C4506	Catalyst 4500 Chassis (6-Slot), Fan	1
WS-X4013+	Catalyst 4500 Supervisor II-Plus (IOS), 2GE	1
PWR-C45-1300ACV	Catalyst 4500 1300W AC Power Supply with Inline Power	1
PWR-C45-1300ACV/2 WS-X4302-GB	Catalyst 4500 1300W AC Power Supply with Inline Power	1
	Catalyst 4500 Gigabit Ethernet Module, 2-Ports (GBIC)	1
WS-X4548-X2-RJ45	Catalyst 4500 48-Port 10/100 Base-T (RJ-45) Fast Ethernet	2 2
WS-G5484	1000BASE-SX Short Wavelength GBIC (Multimode only)	Z
3. Network SW3 Poin	<u>(T</u>	
Catalyst 4506	<u></u>	
PN#	Description	Qty.
WS-C4506	Catalyst 4500 Chassis (6-Slot), Fan	1
WS-X4013+	Catalyst 4500 Supervisor II-Plus (IOS), 2GE	1
PWR-C45-1300ACV	Catalyst 4500 1300W AC Power Supply with Inline Power	1
D\\\\D_(/\S_1 \R\\\\ (\\/)	Catalyst 4500 1300W AC Power Supply with Inline Power	1
PWR-C45-1300ACV/2		la
WS-X4302-GB	Catalyst 4500 Gigabit Ethernet Module, 2-Ports (GBIC)	1
WS-X4302-GB WS-X4548-X2-RJ45	Catalyst 4500 48-Port 10/100 Base-T (RJ-45) Fast Ethernet	1
WS-X4302-GB WS-X4548-X2-RJ45 WS-G5484	Catalyst 4500 48-Port 10/100 Base-T (RJ-45) Fast Ethernet 1000BASE-SX Short Wavelength GBIC (Multimode only)	
WS-X4302-GB WS-X4548-X2-RJ45 WS-G5484 1. Network Point SW	Catalyst 4500 48-Port 10/100 Base-T (RJ-45) Fast Ethernet 1000BASE-SX Short Wavelength GBIC (Multimode only)	
WS-X4302-GB WS-X4548-X2-RJ45 WS-G5484 4. Network Point SW Catalyst 2970G	Catalyst 4500 48-Port 10/100 Base-T (RJ-45) Fast Ethernet 1000BASE-SX Short Wavelength GBIC (Multimode only) 4 and SW 5	1
WS-X4302-GB WS-X4548-X2-RJ45 WS-G5484 4. Network Point SW Catalyst 2970G PN#	Catalyst 4500 48-Port 10/100 Base-T (RJ-45) Fast Ethernet 1000BASE-SX Short Wavelength GBIC (Multimode only) 4 and SW 5 Description	1 1 Qty.
WS-X4302-GB WS-X4548-X2-RJ45 WS-G5484 4. Network Point SW Catalyst 2970G PN# WS-C2970G-24TS-E	Catalyst 4500 48-Port 10/100 Base-T (RJ-45) Fast Ethernet 1000BASE-SX Short Wavelength GBIC (Multimode only) 4 and SW 5 Description Catalyst 2970 24 10/100/1000T + 4 SFP, Enhanced Image	1 1 Qty. 2
WS-X4302-GB WS-X4548-X2-RJ45 WS-G5484 4. Network Point SW- Catalyst 2970G PN# WS-C2970G-24TS-E GLC-SX-MM	Catalyst 4500 48-Port 10/100 Base-T (RJ-45) Fast Ethernet 1000BASE-SX Short Wavelength GBIC (Multimode only) 4 and SW 5 Description Catalyst 2970 24 10/100/1000T + 4 SFP, Enhanced Image Gigabit Ethernet SFP, LC connector SX transceiver	1 1 Qty.
WS-X4302-GB WS-X4548-X2-RJ45 WS-G5484 4. Network Point SW- Catalyst 2970G PN# WS-C2970G-24TS-E GLC-SX-MM	Catalyst 4500 48-Port 10/100 Base-T (RJ-45) Fast Ethernet 1000BASE-SX Short Wavelength GBIC (Multimode only) 4 and SW 5 Description Catalyst 2970 24 10/100/1000T + 4 SFP, Enhanced Image	1 1 Qty. 2
WS-X4302-GB WS-X4548-X2-RJ45 WS-G5484 4. Network Point SW- Catalyst 2970G PN# WS-C2970G-24TS-E GLC-SX-MM	Catalyst 4500 48-Port 10/100 Base-T (RJ-45) Fast Ethernet 1000BASE-SX Short Wavelength GBIC (Multimode only) 4 and SW 5 Description Catalyst 2970 24 10/100/1000T + 4 SFP, Enhanced Image Gigabit Ethernet SFP, LC connector SX transceiver ration, Monitoring & Control Software	1 1 Qty. 2
WS-X4302-GB WS-X4548-X2-RJ45 WS-G5484 4. Network Point SW- Catalyst 2970G PN# WS-C2970G-24TS-E GLC-SX-MM 5. Network Administration	Catalyst 4500 48-Port 10/100 Base-T (RJ-45) Fast Ethernet 1000BASE-SX Short Wavelength GBIC (Multimode only) 4 and SW 5 Description Catalyst 2970 24 10/100/1000T + 4 SFP, Enhanced Image Gigabit Ethernet SFP, LC connector SX transceiver ration, Monitoring & Control Software	1 1 Qty. 2
WS-X4302-GB WS-X4548-X2-RJ45 WS-G5484 4. Network Point SW- Catalyst 2970G PN# WS-C2970G-24TS-E GLC-SX-MM 5. Network Administr CiscoWorks LAN Man PN# Des	Catalyst 4500 48-Port 10/100 Base-T (RJ-45) Fast Ethernet 1000BASE-SX Short Wavelength GBIC (Multimode only) 4 and SW 5 Description Catalyst 2970 24 10/100/1000T + 4 SFP, Enhanced Image Gigabit Ethernet SFP, LC connector SX transceiver ration, Monitoring & Control Software magement Solution	1 1 Qty. 2 4
WS-X4302-GB WS-X4548-X2-RJ45 WS-G5484 4. Network Point SW- Catalyst 2970G PN# WS-C2970G-24TS-E GLC-SX-MM 5. Network Administr CiscoWorks LAN Man PN# Des	Catalyst 4500 48-Port 10/100 Base-T (RJ-45) Fast Ethernet 1000BASE-SX Short Wavelength GBIC (Multimode only) 4 and SW 5 Description Catalyst 2970 24 10/100/1000T + 4 SFP, Enhanced Image Gigabit Ethernet SFP, LC connector SX transceiver ration, Monitoring & Control Software hagement Solution scription	1 1 Qty. 2 4
WS-X4302-GB WS-X4548-X2-RJ45 WS-G5484 4. Network Point SW- Catalyst 2970G PN# WS-C2970G-24TS-E GLC-SX-MM 5. Network Administration CiscoWorks LAN Man PN# CWLMS-2.2-K9 LAN	Catalyst 4500 48-Port 10/100 Base-T (RJ-45) Fast Ethernet 1000BASE-SX Short Wavelength GBIC (Multimode only) 4 and SW 5 Description Catalyst 2970 24 10/100/1000T + 4 SFP, Enhanced Image Gigabit Ethernet SFP, LC connector SX transceiver ration, Monitoring & Control Software hagement Solution scription	1 1 Qty. 2 4
WS-X4302-GB WS-X4548-X2-RJ45 WS-G5484 4. Network Point SW- Catalyst 2970G PN# WS-C2970G-24TS-E GLC-SX-MM 5. Network Administration CiscoWorks LAN Man PN# CWLMS-2.2-K9 LAN	Catalyst 4500 48-Port 10/100 Base-T (RJ-45) Fast Ethernet 1000BASE-SX Short Wavelength GBIC (Multimode only) 4 and SW 5 Description Catalyst 2970 24 10/100/1000T + 4 SFP, Enhanced Image Gigabit Ethernet SFP, LC connector SX transceiver ration, Monitoring & Control Software nagement Solution scription Management 2.2 for WIN/SOL; CM, DFM, RME, RTM, CV	1 1 Qty. 2 4

Device	Description	Qty.
Catalyst 6509	Installation and configuration of central switch Catalyst 6509	1
Catalyst 4506	Installation and configuration of access switches Catalyst 4506	
Catalyst 2970G	Installation and configuration of access switches Catalyst 2970G	2
Software installation	on and configuration	
Product	Description	Qty.
CW LAN Management	Software installation, configuration and initial administration	1
CW VMS	Software installation, configuration and initial administration	1
Maintenance		
System	Description	Qty.
Specified Configuration	Vendors should offer different Service and Maintenance packages with detailed information related to various packages.	1

Option

Product	Description	Qty.
Cisco Catalyst 6506 Wireless Module (WLSM)	Roaming Module for layer 3 switching	1
	AironetWirelessBridge	1
1200 Series	Aironet Wireless Access Point	5

Warranty Provision

All equipment must be covered with the warranty period of minimum 12 months.