

**E – GOVERNANCE
MISSION MODE PROJECT
(MMP)**

**CRIME & CRIMINAL TRACKING
NETWORK AND SYSTEMS
(CCTNS)**



RFP FOR SELECTION OF SYSTEM INTEGRATOR

CORRIGENDUM – I

Released By:

JK Police

Government of Jammu & Kashmir



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1. REQUEST FOR PROPOSAL DATASHEET

S.No	Information	Details
1	RFP Reference number and date	CHQ/CCTNS/2011/856
2	Non Refundable Tender Cost	10,000/-
3	Issuance of RFP Document	17 th Dec, 2011
4	Earnest Money Deposit (EMD/ Bid Security)	1 Crore
5	Last date and Time for submission of written queries for clarifications	28 th Dec, 2011; 05:00 PM
6	Date, Time and Venue of pre-proposal conference	29 th Dec, 2011; 11300 AM; Crime HQ, Jammu
7	Release of response to clarifications	2 nd JAN, 2012
8	Last date, Time (deadline) and Venue for submission of proposals in response to RFP notice	16 th Jan, 2012; 05:00 PM; Crime HQ, Jammu
9	Date, Time and Venue of opening of Technical proposals received in response to the RFP notice	To be Intimated later
10	Place, Time and Date of Technical Presentations by the bidders	To be Intimated later
11	Place, Time and Date of opening of Financial proposals received in response to the RFP notice	To be Intimated later
12	Contact Person for queries	Deputy Inspector General of Police ,Crime
13	Addressee and Address at which proposal in response to RFP notice is to be submitted:	IGP Crime, Crime HQ, Old PHQ Complex, Panjtirthi - Jammu

Note: All pre bid queries would be accepted in written format only on below address:

Inspector General of Police, Crime J&K

Old PHQ Complex, CPO Chowk

Panjtirthi, Jammu

Jammu and Kashmir- 180001

Phone Number: 0191-2564210; 0191-2561694

Email Address: scrbjmu-jk@nic.in; cctns_jk@ncrb.nic.in



2. RFP Volume 1

A. ANNEXURE XII – INDICATIVE TECHNICAL SPECIFICATIONS

Minimum Technical Specifications for Data Center and Recovery Center:

Stands Amended as:

1. Server Load Balancer

- 10/ 100/ 1000Mbps Ethernet Ports – minimum 2 ports upgradeable to 4 ports
- Memory: Minimum 4 GB
- Minimum of 2 Gbps throughput
- Minimum of 1 Gbps SSL throughput
- Minimum of 4000 SSL connections scalable to 7500 SSL connections
- Server Load Balancing Mechanism
 - Cyclic, Hash, Least numbers of users
 - Weighted Cyclic, Least Amount of Traffic
 - NT Algorithm/ Private Algorithm/ Customizable Algorithm/ Response Time
- Redundancy Features
 - Supports Active-Active and Active-Standby Redundancy
 - Segmentation/ Virtualization support along with resource allocation
- Server Load Balancing Features
 - Server and Client process coexist
 - UDP Stateless
 - Service Failover
 - Backup/ Overflow
 - Direct Server Return
 - Client NAT
 - Port Multiplexing-Virtual Ports to Real Ports Mapping
 - DNS Load Balancing
- Load Balancing Applications
 - Application/ Web Server, MMS, RTSP, Streaming Media
 - DNS, FTP- ACTIVE & PASSIVE, REXEC, RSH,
 - LDAP, RADIUS
- Content Intelligent SLB
- SLB should provide protection against DoS/ DDoS attack
- HTTP Header Super Farm
- URL-Based SLB
- SLB should support below Management options
 - Secure Web Based Management
 - SSH
 - TELNET
 - SNMP v1, 2, 3 Based GUI
 - Command Line

2. Link Load Balancer (may be proposed if State has to build own DC in case SDC's is not operational)



- 10/100/1000Mbps Ethernet Ports – minimum 2 ports upgradeable to 4 ports
- Memory: Minimum 2 GB
- Minimum of 2 Gbps throughput
- Link Load Balancing Algorithm
 - Round robin, weighted round robin, response time, shortest response etc.
- Link Load Balancer should support below Management options
 - Secure Web Based Management
 - SSH
 - TELNET
 - SNMP v1, 2, 3 Based GUI
 - Command Line

3. Production CAS (State) Application Services related servers (Web, Portal, Application, Database, Directory, etc)

Blade Chassis Specification

- Single blade chassis should accommodate minimum 9 (Quad core Processor)/ 18 (Dual core Processor) or higher hot pluggable blades.
- Processor should be latest series/ generation for the server model being quoted (Xeon processor Preferred)
- 6U to 12U Rack-mountable
- Dual network connectivity for each blade server for redundancy should be provided. Backplane should be completely passive device. If it is active, dual backplane should be provided for redundancy.
- Should accommodate latest high speed processor in compatible with the OEM's of blade servers.
- Should have the capability for installing industry standard flavors of Windows, Linux and Unix Operating environments.
- Single console for all blades in the enclosure or KVM Module.
- DVD ROM can be internal or external, which can be shared by all the blades allowing remote installation of S/W and OS.
- Should provide external USB port.
- Two hot-plug, redundant Ethernet modules with minimum (8 – 10) x 1Gbps Ethernet ports (cumulative) having L2/ L3 functionality.
- Two hot-plugs/ hot Swap redundant 4 Gbps Fiber Channel for connectivity to the external Fiber channel Switch and ultimately to the storage device.
- Power Supplies
 - Hot Swap/ hot plug redundant power supplies to be provided.
 - Power supplies should have N+N. All Power Supplies modules should be populated in the chassis.
- Hot Swappable/ hot pluggable and redundant Cooling Unit.
- Management
 - Systems Management and deployment tools to aid in Blade Server configuration and OS deployment.
 - Remote management capabilities through internet browser.



- It should provide Secure Sockets Layer (SSL) 128 bit encryption and Secure Shell (SSH) version 2 and support VPN for secure access over internet.
- Ability to measure power historically for servers or group of servers for optimum power usage.
- Blade enclosure should have provision to connect to display console/central console for local management like trouble shooting, configuration, system status/ health display.
- Built in KVM switch or Virtual KVM feature over IP.
- Dedicated management network port should have separate path for management.
- Support heterogeneous environment: AMD, Xeon and RISC/ EPIC CPU blades must be in same chassis with scope to run Win2003/ 2008 Server, Red Hat Linux/ 64 Bit UNIX, SUSE Linux /64 Bit UNIX /Solaris x86.

Blade Servers (Web, Portal, Application, Directory, etc...)

- Blade can be half/ full height with I/O connectivity to backplane.
- 2 Quad core @ 2.0 GHz or above with 4 MB shared L2 cache, 1066 MHz / 2000MT/s FSB
- Processor should be latest series/ generation for the server model being quoted (Xeon processor Preferred)
- Min 32 GB FBD/ DDR3 RAM with minimum 8 no. free slots for future expandability.
- Minimum Memory: 32 GB scalable to 192 GB or Higher per blade.
- The Blade should have redundant 4 Gbps Fiber Channel HBA (only for database server)
- Min 2 X (1000BASE-T) Tx Gigabit/ equivalent or better LAN ports with TCP/ IP offload engine support/ dedicated chipset for network I/O on blade server.
- Or
- 2 x 10 G multifunction network ports with support for FC/iSCSI, FCoE protocols 1 Additional NIC for remote management.
- 2 x 146GB HDD or more hot plug/ hot swap system disk with mirroring using integrated raid 0,1 on internal disks or min 16 GB compact flash card to be provided. It should be possible to hot swap the drives without shutting down the server.
- VGA/ Graphics Port/ Controller.
- Should support heterogeneous OS platforms.

Blade Servers for Infrastructure Services (EMS, Backup, DNS, Antivirus, etc...)

- Blade can be half/ full height with I/O connectivity to backplane.
- 2 Quad core @ 2.0 GHz or above with 4 MB shared L2 cache, 1066 MHz/ 2000MT/s FSB
- Processor should be latest series/ generation for the server model being quoted (Xeon processor Preferred)
- Min 16 GB FBD/ DDR3 RAM with min 8 Nos. free slots for future expandability.
- Minimum Memory: 16 GB scalable to 128 GB per blade.
- The Blade should have redundant 4 Gbps Fiber Channel HBA
- Min 2 X (1000BASE-T) Tx Gigabit/ equivalent or better LAN ports with TCP/ IP offload engine support/ dedicated chipset for network I/O on blade server.
- 2 x 146GB HDD or more hot plug/ hot swap system disk with mirroring using integrated raid 0,1 on internal disks or min 16 GB compact flash card to be provided. It should be possible to hot swap the drives without shutting down the server.



- VGA/ Graphics Port/ Controller
- Should support heterogeneous OS platforms

Database Server

- Minimum 4x Quad core processor with 2.1 GHz or above with 1066 MHz FSB/ 2000MT/s is scalable up to 8 processors 8 physical processor with minimum 4 MB L3 cache per processor within the same chassis.
- Processor should be latest series/ generation for the server model being quoted (Xeon processor Preferred)
- OS support: Microsoft® Windows Server 2003/ 2008, Enterprise Edition/ Red Hat® Enterprise Linux 5 & 4 AP/ SUSE® Linux Enterprise Server 9/ Solaris for x86.
- Memory (RAM): Min 64 GB scalable to 256 GB.
- RAID controller with RAID 0, 1, 5, 6 with 256 MB cache.
- HDD hot pluggable: 4 x 146 GB 2.5" 10K RPM HDD or more.
- Disk bays: Support for min 8 small form factor hot plug SAS/ SCSI hard drives in disk drive carriers.

Or

Support for min 8 small form factor hot plug SAS / SCSI and hot plug SSD hard drives in disk drive carriers.

- At least 4 x 10/ 100/ 1000 Mbps Ethernet ports or more.
- 2 x 4 Gbps Fiber Channel Ports.
- Ports Rear: Two USB ports (Ver 2.0); RJ-45 Ethernet; keyboard and mouse;
Front: One USB (Ver 2.0)
- Graphics controller: SVGA/ PCI bus/ ATI® ES 1000/ min 16MB SDRAM std/max/ 1280x1024 at 16M colors
- Optical/ diskette: 8X/ 24X slim-line DVD ROM drive shared across chassis
- Security: Power-on password/ boot without keyboard.
- Power supplies: Hot Plug/ Swap redundant power supply to be provided
- Management feature to identify failed components even when server is switched off.
- Rack Mountable
- It should provide Secure Sockets Layer (SSL) 128 bit.
- Encryption and Secure Shell (SSH) version 2 and support VPN for secure access over internet.
- Should be able to manage systems through a web-browser.



4. Storage and Backup Solution

SAN Switches

- Min 16 Active Ports (each with minimum port speed 4 GB) within same switch upgradeable to 24 port with minimum 2 Nos. of additional 10/ 8 GBBS FC ports.
- All cable of length of 10 meter each and accessories for connecting Servers/ Devices to SAN.
- Should have capability of ISL trunking of minimum 8 ports.
- Should support multiple OS.
- Non disruptive subsystem maintenance.
- Should have dual hot plug/ hot swap fans and hot plug/ hot swap power supplies switching and service modules
- Should have web based management software for administration and configuration.
- Non disruptive microcode/ firmware upgrades and hot code activation.
- Switch shall support in built diagnostics, power on self test, command level diagnostics, online and offline diagnostics.
- Should support hardware ACL based Port security, Port Zoning and LUN Zoning.
- Should support Secure Shell (SSH) encryption to provide additional security for Telnet sessions to the switch.
- Should support multilevel security on console access prevent unauthorized users from altering the switch configuration
- Should support Fiber Channel trace route and Fiber Channel Ping for ease of troubleshooting and fault isolation
- Should support the following diagnostics:
 - Online Diagnostics
 - Internal Loopbacks
 - FC Debug
 - Syslog
 - Online system health
 - Power on self test (POST) diagnostics
- Should support Applications for device management and full fabric management. The management software shall be able to perform following:
 - Fabric View
 - Summary View
 - Physical View
 - Discovery and Topology Mapping
 - Network Diagnostics
 - Monitoring and Alerts



Storage Area Network

- SAN controller
 - Dual Active Controller or Four Active Controllers
- Cache
 - 8 GB Total Mirrored Cache for Disk IO Operations scalable to min 16 GB
- Host interface
 - 4 host ports per controller, Fibre Channel (FC), 4 Gbps per port
- Drive interface
 - 4 drive ports per controller—Fibre Channel (FC) Switched or FC Arbitrated Loop (FC-AL) standard per controller, 4 Gbps per port
Or 16 SAS lanes per controller of 6Gbps for backend
- RAID levels Supported 0, 1, 5, 6
- Fans and power supplies
 - Dual redundant, hot-swappable/ hot pluggable
- SAN support
 - Box should be compatible of SAN environment
- SAN specifications shall have the following:
 - The storage supplied should be capable of supporting a Zero Data Loss deployment.
 - The storage array shall be configured with at least 8 GB cache scalable to min 16GB mirrored/ protected across two storage controllers for disk I/O operations.
 - Storage subsystem shall support 300 GB/ 450/ 600 or higher FC/ SAS 15K RPM disks. 750 GB/ 1TB or higher SATA/ FATA/ equivalent 7200 RPM drives in the same storage array.
 - Presently, the storage sub system shall be configured with 300 GB of Performance drives and 750 GB or higher on SATA/ equivalent for archiving purpose.
 - The storage system must provide upgrade path to larger or future array controller and software technology by controller upgrade or data migration.
 - The storage array proposed should have an upgrade path from the earlier generation product to the current generation product. Hence the bidder should provide the solution data migration from existing array to new array or upgrade the array.
 - All the necessary software to configure and manage the storage space, RAID configuration, logical drives allocation, virtualization, snapshots (including snap clones and snap mirrors) for entire capacity etc.
 - Redundant power supplies, batteries and cooling fans and data path and storage controller.
 - Load balancing must be controlled by system management software tools.
 - The Multi-path software should support supplied or heterogeneous storage and operating.
 - The storage array must have complete cache protection mechanism either by de-staging data or providing complete cache data protection with battery backup for up to 72 hours or more.
 - The Storage should have at least 2ports of 4 Gbps Frontend ports and 2 nos of back end ports of 4Gbps”
Or the storage should have at least 2 ports of 4Gbps frontend ports and 2 no of SAS backend ports of 6Gbps



- The storage array must have the capability to do array based remote replication using FCIP or IP technology.
- The storage array should support block level Synchronous and Asynchronous replication on homogenous or heterogeneous storage arrays.
- The storage array should support Operating System Platforms & Clustering including: Windows Server 2003 (Enterprise Edition), Sun Solaris, HP-UX, IBMAIX, Linux / Solaris for x86. Any software or license required to enable connectivity to all these OS should be included.
- Storage should support non-disruptive online firmware upgrade for both Controllers and disk drives.
- The storage array should support hardware based data replication at the Block level across all models of the offered family.
- The storage should provide automatic rerouting of I/O traffic from the host in case of primary path failure.
- Should provision for LUN masking, fiber zoning and SAN security.
- Should support storage virtualization, i.e. easy logical drive expansion & automated load leveling across new drives to minimize performance bottleneck.
- Should support hot-swappable physical drive raid array expansion with the addition of extra hard disks
- The storage system should be scalable from 20TB to 60TB of raw capacity using 40% on SAS or Fiber Channel drives and 60% on SATA/ equivalent drives using the same configuration
- Should be able to support clustered and individual servers at the same time.
- Should be able to take "snapshots" of the stored data to another logical drive on a different Disk/ RAID Group for backup purposes
- Should be configured with "snapshots and clone (local and remote)", licenses for the storage & clone features should support resync.
- Vendor should also offer storage performance monitoring and management software.
- The vendor must provide the functionality of proactive monitoring of Disk drive and Storage system for all possible hard or soft disk failure
- The storage should be scalable to 240 drives of 15K RPM.



Tape Library

- Tape drives
 - Minimum 2 latest generation LTO drives. The State can size for more as per their requirements.
- Interface
 - Fiber Channel Interface

Other Specifications

- Should have sufficient speed backup to Tape Library in High Availability for backing up data from the SAN without any user intervention.
- Should be able to backup 50% of the entire production landscape in 8 hours window.
- Should support latest generation LTO drives or latest technology based library with at least 2 latest generation LTO drives tape drives (≥ 4), rack mountable with redundant power supplies.
- Cartridges should have physical capacity up to 1600 GB per cartridges compressed; 800 GB native.
- At least 50 latest generation LTO drive Media Cartridges with 5 Cleaning Cartridges, Barcode labels shall also be provided.

Backup Software

- The proposed Backup Solution should be available on various OS platforms such as Windows and UNIX platforms and be capable of supporting SAN based backup/ restore from various platforms including UNIX, Linux, and Windows etc.
- Centralized, web-based administration with a single view of all back up servers within the enterprise. Single console must be able to manage de-duplicated and traditional backups.
- The proposed backup solution should allow creating tape clone facility after the backup process.
- The proposed Backup Solution has in-built frequency and calendar based scheduling system.
- The proposed backup Solution supports the capability to write multiple data streams to a single tape device or multiple tape devices in parallel from multiple clients to leverage the throughput of the Drives using Multiplexing technology.
- The proposed backup solution support de-multiplexing of data cartridge to another set of cartridge for selective set of data for faster restores operation to client/ servers
- The proposed backup solution should be capable of taking back up of SAN environment as well as LAN based backup.
- The proposed backup solution shall be offered with 4 Nos. UNIX based licenses, 26 Nos. Windows based licenses and the rest 20 Nos. LINUX based licenses for both SAN based backup and the LAN based backup.
- The proposed solution also supports advanced Disk staging.
- The proposed Backup Solution has in-built media management and supports cross platform Device & Media sharing in SAN environment. It provides a centralized scratched pool thus ensuring backups never fail for media.



- Backup Software is able to rebuild the Backup Database/ Catalog from tapes in the event of catalog loss/ corruption.
- The proposed Backup Software should offer online backup for all the Operating Systems i.e. UNIX, Windows & Linux etc
- The proposed Backup Solution has online backup solution for different type of Databases such as Oracle, MS SQL, and Sybase/ DB2 etc. on various OS.
- The Proposed backup solution shall provide granularity of single file restore.
- The Proposed backup solution shall be designed in such a fashion so that every client/ server in a SAN can share the robotic tape library.
- Backup Solution shall be able to copy data across firewall.
- The backup software must also be capable of reorganizing the data onto tapes within the library by migrating data from one set of tapes into another, so that the space available is utilized to the maximum. The software must be capable of setting this utilization threshold for tapes
- The backup software should be able to support versioning and should be applicable to individual backed up objects.
- Should have the ability to retroactively update changes to data management policies that will then be applied to the data that is already being backed up or archived.

FC – IP Router

- Fibre Channel Ports
 - Min 4 FC ports
- FC Port Speed
 - Autosensing 1/ 2/ 4 Gb/s
- iSCSI (Ethernet) Ports
 - Min 8 Ethernet ports
- iSCSI (Ethernet) Ports speed
 - 1 Gigabit Ethernet
- Aggregate Bandwidth
 - Min 125 MB/s
- Protocol Support
 - FC
 - iSCSI
- High Availability Features
 - Two way active/ clustering with failover and failback capabilities
 - Multiple iSCSI connections provide multi-pathing support from a single gateway to as many as 100 servers
- Management Features
 - CLI (by Telnet, SSH or console)
- iSCSI Gateway Manager
 - SNMP
 - Allow for monitoring traffic statics on each storage and network interface, fan and temperature and iSCSI session details.



5. Appliance based HSM for PKI Security and Encryption

S. No	Specification
1	Should support windows 2000/ 2003/ 2008, Linux, Solaris, HP-UX 11i, VMWARE, AIX 5.3
2	Should comply to standards like FIPS 140-2 Level-3, CC EAL4+, ROHS, FCC part 15 Class B
3	Key Exchange Mechanism: DES/ Triple DES, AES Algorithm
4	Hash/ HMAC algorithm: MD5, SHA 1, SHA 2, SHA 256
5	Symmetric Algorithm : AES, MD5, SHA 1, SHA 2, SHA-256 , DES, Triple DES
6	Support for various cryptographic algorithms: Asymmetric Key with Diffie-Hellman (1024-4096 bit), RSA (512-4096 bit) and (PKCS#1 v1.5, OAEP PKCS#1 v2.0), Digital Signing via RSA (1024-4096-bit), DSA (512-1024-bit), EC Brain pool Curves (named and user-defined), Suite B Algorithm Support and ARIA support.
7	Published API for various above functionalities for integrating with the Application software.
8	Signing speed: 5000 S/S
9	Remote PED Support for Authentication
10	Onboard key generation, Digital Signing & Verification process to be done inside the HSM only for better performance and security
11	HSM should be integrated with the applications running inside the Data Center
12	Complete hardware based storage of key material for entire Life cycle
13	24/ 7 telephonic/ email support infrastructure based out of India
14	TCP/ IP Network based appliance
15	Key Length Supported (1024 to 4096)
16	Public Key Algorithm RSA encrypt/ decrypt, RSA sign/ verify, ECC (Electric Curve cryptography)
17	Keys are always in Hardware and never stored in Software in any form
18	Compatibility: PKCS#11 , CAPI, Open SSL, JCE/ JCA
19	Scalable Up to more than 15 unique partitions
20	Private key generation and import: Archival and duplication mechanism to be specified. Give the procedure for key transportation from one HSM card to other HSM card.
21	Contents can be securely stored on Backup Tokens to simplify backup, cloning, and disaster recovery.
22	Onboard key generation, Digital Signing & Verification process to be done inside the HSM only for better performance and security.
23	Additional/ specific software's if any, required supporting multiple HSM appliances to be provided.



6. KVM Switch

Keyboard, Video Display Unit and Mouse Unit (KVM) and/ or other Control Devices/ PCs may be used for the IT Infrastructure Management for which the necessary consoles/ devices shall be placed by MPSEDC in the location earmarked. The KVM unit should provide the following functionalities:

- Rack-mountable.
- Minimum 8 ports scalable upto 24 ports.
- Should support local user port for rack access.
- Support for USB and PS/2 connections.
- Capability of storing username and profiles.
- Should support high resolution of minimum 1280 x 1024
- Capability to auto scan servers
- Should work on CAT 6/ CAT 7 cables.
- Rack Mountable LCD Monitor with In-built Keyboard & Mouse
 - 1 U Rack Mount.
 - Display size: 17 inches diagonal.
 - Contrast Ratio: 700:1
 - Display colors: 16 million.
 - Resolution: SXGA 1280 x 1024.
 - Brightness: 300 nit.
 - Compatible to both PS/2 and USB based inputs.



7. Networking Equipments (SDC/ DR/ all other Police Locations)

Router

a) General Architecture:

- High speed CPU
- Rack mountable configuration
- Health LED for all modules to indicate status

b) Router Port Requirements:

- 10/ 100 Mbps Ethernet - 2 Nos
- WAN Ports E1 - 2 Nos
- Packet Forwarding Speed - Minimum 160 Kpps

c) Router Features:

- Support for router redundancy protocol
- Router software must have on line reconfiguration facilities
- High MTBF
- Capable of booting from a remote system where router image is present
- Support for standard routing protocols like OSPF, RIP & BGP
- Should have adequate memory and flash for proper functioning of all features with no performance degradation.
- Minimum of 256 MB RAM
- Configurationally changes should be done without rebooting the router or modules
- Stateful firewall functionality.

d) Software features:

- **Following standard IP routing protocols:**

- Static
- RIP, OSPF
- OSPF Over Demand Circuits
- Policy Routing
- IP version 6 Support
- Support for IPSec& 3DES through a simple software upgrade as and when required.

- **Following WAN protocols:**

- PPP
- Multilink PPP
- Compression-Payload and TCP/IP Header

- **Following Multicasting and Quality of Service (QoS):**

- Resource Reservation Protocol (RSVP) as per RFP 2205 and Internet Group Management Protocol version 2 (IGMPv2) as per RFC 2236.
- Support for IP Precedence, Committed Access Rate (CAR),
- DiffServQoS



- The router shall support Application recognition and it should be possible to frame policies based on the applications or equivalent functionality.

e) Security Features:

- Support DES/ 3 DES/ AES
- PPP PAP or CHAP support.
- VPN support
- Time based Access Lists
- Multiple Privilege Levels.
- Support for RADIUS or AAA.

f) Power: 230 V AC, 50 Hz

Switches:

a) 16 Port Switch:

- 16 x 10/ 100BASE-TX, auto-negotiation ports
- Interface: RJ-45 10BASE-T, 100BASE-TX
- LED indicators: Power, Link/ Act
- Transfer Method: Store and Forward
- MAC Address Learning: Automatically learning, automatically Update
- Power Supply: 100 – 240 VAC, 50/60Hz
- 16-Port 10/100 Switch
- Safety & Emission: FCC, CE
- Rack mount Kit
- IEEE 802.3 10Base-T Ethernet, IEEE 802.3u 100Base-TX Fast Ethernet, IEEE 802.3 Nway Auto-negotiation, IEEE 802.3x Flow Control, IEEE 802.1p Qos Prioritization

b) 48 port Layer 3 Switch:

- Layer 3 stackable switch
- 48 x 10/ 100/ 1000 ports, auto-negotiating
- 4 No SFP-based Gigabit Ethernet ports, with future scalability for 4 No 10G ports.
- Non-blocking architecture
- 32 Gbps or higher switching fabric capacity and 38 mpps or higher forwarding rate.
- Support IGMP Snooping with Broadcast Control IGMP v3.
- Support for minimum 16000 MAC addresses.
- Ethernet, Fast Ethernet support
- Spanning tree/ Rapid Spanning Tree support
- Per VLAN Spanning Tree or Equivalent.
- Support for dynamic VLAN Registration
- Dynamic Trunking Protocol or equivalent.
- VLAN Trunking Protocol or equivalent
- Traffic classification should be based on user-definable application types: TOS, DSCP, Port based, Mac address, IP address, TCP/ UDP port number
- Multicast filtering per port should be supported
- Support SNMP upto version 3
- Prioritization support



- Minimum 250 VLAN
- SNMP and Telnet support
- Web-based and CLI management
- Four RMON groups (1,2,3&9)
- Additional features: Advanced QoS, Rate limiting
- L3 Features : Static routes & RIP
- Mounting: 19" Rack mountable
- Source power supply: 230V AC Single phase 50Hz

Perimeter Firewall

- a) Physical Attributes
 - Rack Mountable
 - Modular Chassis
 - Redundant Power Supply
- b) Interfaces
 - 4xGE Upgradable to 8 with future scalability for 10G ports
 - 1xConsole Port
- c) Performance
 - Firewall Throughput: Min 2 Gbps
 - Concurrent Connections: Min 500K
 - Simultaneous VPN tunnels: Min 2K
- d) Routing Protocols
 - Static Routes
 - RIP v1, RIP v2
 - OSPF v2 & v3
- e) Protocols
 - TCP/IP, PPTP
 - RTP, L2TP
 - IPSec / GRE, DES/ 3DES/ AES
 - PPPoE, EAP-TLS, RTP
 - FTP, HTTP, HTTPS
 - SNMP, SMTP
 - DHCP, DNS
 - Support of IPv6
- f) Other Support
- g) 802.1Q, NAT, PAT, IP Multicast Support, Remote Access VPN, Time based ACLs, URL filtering, Support VLAN, Layer 2 Firewall, Virtual Firewall, RADIUS/ TACACS
- h) Management
- i) Console, Telnet, SSHv2, Browser based configuration
- j) SNMP v1, SNMP v2



8. Minimum Technical Specifications Requirement at Police Units:

Minimum Technical specifications for Desktops at Police Stations		
Desktop Configuration		
1	Processor:	Intel Core2Duo/ AMD Phenom II X4 975 processor or any higher
2	Motherboard:	OEM Motherboard
3	Memory Type:	4 GB DDR3 expandable to 8 GB
4	Cache:	6 MB
5	Internal Hard Disk:	320 GB SATA (7200 RPM) or higher
6	Optical Drive:	DVD ROM Drive
7	Display size:	18.5 inch (measured diagonally)
8	Graphics Controller:	Integrated graphic Controller
9	Form Factor:	Convertible Minitower
10	External I/O ports:	Stereo in, stereo out (back) & stereo out (front), Headphone and microphone; Expansion slots: 1 full-height PCI, 2 full-height PCI Express x1, 1 full-height PCI Express x16
11	Rear:	6 USB 2.0, 1 serial port (optional), 1 parallel port (optional), 1 PS/2 (Keyboard), 1 PS/2 (Mouse), 1 RJ-45, 1 VGA, audio in/out.
12	Front:	2 USB
13	Network interface:	Integrated 10/100 Mbps Ethernet Adapter (RJ-45),
14	Management:	Desktop Management Tool
15	Bilingual Keyboard:	PS/2 or USB Standard Keyboard
16	Pointing device:	USB 2-Button Optical Scroll Mouse
17	Security management: (Optional)	TPM 1.2 TPM Security Chip (except for Russia), TPM Pre-Boot
18	Authentication: (Optional)	Smartcard Pre-boot Authentication (via BIOS), Stringent
19	Software Including:	Preloaded Windows 7 Business/ Professional Edition or higher Preloaded MS-Office Preloaded Antivirus
20	Software Security	Security Software, Serial, Parallel, USB Enable/Disable (via BIOS), Write/Boot Control, Power-On and Setup Password (via BIOS)
21	Warranty:	3 Years Part, 3 Years Labor, 3 Years On-Site
Minimum Technical Specifications for Multi-Function Laser Printer		
Multi-Function Laser (Print/ Scan/ Copy)		
1	Printer	High-speed printing, Black-and-white: 23 - 35ppm, Duty Cycle: Min7, 500 pages per month. Automatic two-sided printing, 250-sheet input tray, Print, scan and copy unattended with the Automatic Document feeder, monitoring and troubleshooting in the network, from anywhere on the network.
2	Scanner	Flatbed with automatic document feed, upto 1200 dpi; Enhanced upto 19200 dpi; Scan size max (flatbed): 215.9 x 297 mm (8.5" x11.7"), front panel scan
3	Copier	Black-white - min 600x600 dpi, Copy speed (black, draft quality, A4):Up to 23 - 35 ppm, Copy resolution (black graphics): Up to 1200 x 600 dpi, Copier resize: 25 to 400%, Maximum number of copies: Up to 99, Copier smart software features: Up to 99 multiple copies, reduce/enlarge from 25 to 400%, 2-up or 4-up allowing 2 or 4 pages to be copied onto 1 page, contrast (lighter/darker), resolution (copy quality), tray select, collate, margin, shift.



Minimum Technical Specifications for Duplex Laser Printer

Duplex Laser Printer – all Police Units/ Offices

1	Laser Printer	<p>Speed:</p> <ul style="list-style-type: none"> • 28 PPM (A4) or higher <p>Processor:</p> <ul style="list-style-type: none"> • 400 Mhz or higher <p>Resolution:</p> <ul style="list-style-type: none"> • Min. 1200 x 1200 dpi <p>Duty Cycle:</p> <ul style="list-style-type: none"> • Min. 30,000 page/ month <p>Memory:</p> <ul style="list-style-type: none"> • 64 MB or higher <p>Interface:</p> <ul style="list-style-type: none"> • USB 2.0 (High Speed) with USB Cable <p>Duplex:</p> <ul style="list-style-type: none"> • Automatic <p>Paper support:</p> <ul style="list-style-type: none"> • A4, Legal <p>Compatibility:</p> <ul style="list-style-type: none"> • Windows XP/Windows Vista/Windows 7/ Linux
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Minimum Technical Specifications for UPS

SNMP Based 2kVA UPS - all Police Units/ Offices

1	SNMP	<ul style="list-style-type: none"> • ISO 9001 certified brand • True On Line Type • Backup period should be at least 2 Hr • IGBT with High Frequency PWM (Pulse with Modulation) Technology • Output wave form should be Sine wave • Compatible with local Electricity Power Generator. • Total Harmonic Distortion should be less than 3%. • Support input voltage range of 160 V to 270 V. • Output Voltage should be 230 Volt AC (+/- 1%) • Output frequency should be 50 Hz +/- 0.05 Hz (Crystal Controlled) • Closed housing for batteries with suitable stand. • Inherent protection should be provided for over loading, low battery, over temperature, short circuits, over and under input voltage. • LED indicators should be provided for at least load indication, load on battery, low battery, overload, Mains ON. • Audible indicator should be provided for at least load on battery, low battery, Mains failure, Overload. • Galvanic Isolation to be provided through inbuilt double wound transformer at output.
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Minimum Technical Specifications for DG Set

2.5 KVA DG Set - all Police Units/ Offices

1		<p>The proposed DG set should be able to support the Police Unit equipments, in absence of primary power source. Engine shall be vertical multi cylinder 4 stroke type in accordance with IS 10002-1981 with latest amendments.</p> <p>Type: Multi cylinder Method of starting: Electric start 12 V DC Type of cooling: Water cooled/ Air cooled Type of governor: Mechanical/ Electronic Type of fuel: Petrol Start/Kerosene. Rating: Continuous Output: Suitable HP rated to match the alternator Rated speed: 1500/ 3000 RPM Over load capacity: 10% overload – minimum 1 hour 50% overload – minimum 1 minute</p> <ul style="list-style-type: none"> • Flywheel to suitable diameter and fuel injection equipment • Air cleaner • Lubricating oil cooler • Electric motor starting equipment like motor, battery, charging generator with voltage regulator etc. • Heavy duty radiator with fan • Residential type silencer with exhaust piping with vibration isolator • Fuel tank suitable for 8 Hrs of continuous running with necessary piping and fuel gauge, drain valve, inlet and outlet connections. • Anti vibration mounting pads (Dunlop) • Speed controlling governor • Suitable coupling system to the Alternator • Tachometer • Lubricating oil pressure gauge • Hour meter to indicate number of Hrs of operation • Auto trip on low oil pressure • Over speed alarm with trip • Thermal insulation for exhaust line with glass wool, Aluminum sheet, chicken mesh, Diesel line 12 mm dia including beads flanger etc • Battery 12 V with lead and terminal • Battery charger. • Protection: Protection against low lubricating oil pressure, high water temperature and over speed shall be provided for engine with alarm and fuel shut off.
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Minimum Technical Specifications for Digital Pen

Digital Pen- all Police Stations

1		<p>Average battery life:</p> <ul style="list-style-type: none"> • Min. 2.5 hours continuous writing use <p>Average usage life:</p> <ul style="list-style-type: none"> • 3 – 4 years <p>Approximate battery recharge time:</p> <ul style="list-style-type: none"> • 2 hours <p>Battery type:</p> <ul style="list-style-type: none"> • Lithium-ion polymer rechargeable battery: <p>Standard Connectivity:</p> <ul style="list-style-type: none"> • USB 1.1 (also called High Speed USB 2.0) <p>Humidity non operating:</p> <ul style="list-style-type: none"> • 0 to 95% RH (excluding rain, non-operating) <p>Humidity range:</p> <ul style="list-style-type: none"> • 0 to 95% RH (excluding rain) <p>Operating range:</p> <ul style="list-style-type: none"> • 0 to 90% RH (non-condensing, operating) <p>Operating temperature maximum:</p> <ul style="list-style-type: none"> • 104°F <p>Operating temperature recommended range:</p> <ul style="list-style-type: none"> • 32 to 104°F <p>Storage temperature range:</p> <ul style="list-style-type: none"> • -4 to 104°F <p>Storage life:</p> <ul style="list-style-type: none"> • 3 – 4 years <p>Image compression:</p> <ul style="list-style-type: none"> • Pattern images to X, Y coordinate samples with relative time of capture <p>Image processing rate:</p> <ul style="list-style-type: none"> • 75 Hz <p>Image resolution:</p> <ul style="list-style-type: none"> • At least 500 dpi <p>Image scaling:</p> <ul style="list-style-type: none"> • Perspective, rotation, tilt, and error correction <p>Internal fixed memory:</p> <ul style="list-style-type: none"> • At least 10 MB (1.3 MB available for user strokes)
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Minimum Technical Specifications for Digital Camera

Digital Camera - all Police Stations

1		<ul style="list-style-type: none"> • At least 14 Mega Pixels • Sensor size: 1/2.3-inch • Sensor type: CCD • Optical Zoom: 4x • Precision Digital Zoom: Yes, needed • Lens: Carl Zeiss or equivalent • Min aperture wide f3.1 - 3.5 • Min aperture tele f5.8 - 8.0 • Auto Focus Range (W: Approx. 4cm to Infinity, T: Approx. 60cm to Infinity)
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		<ul style="list-style-type: none">• Compatible Recording Media Memory Stick Duo/ Memory Stick PRO Duo/ Memory Stick PRO Duo (High Speed)/ Memory Stick PRO-HG Duo/ SD Memory Card/ SDHC Memory Card• LCD: 2.7 (6.9 cm) (230K pixels), Clear Photo LCD• Battery Life: 240 shots or 120mins• Battery System: Lithium ION Battery• USB 2.0 Hi-Speed
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B. ANNEXURE XIII – INDICATIVE HARDWARE BILL OF MATERIAL

Hardware Distribution at Non-CIPA, CIPA and all other Higher Office's:

Description	Indicative Quantity at Non- CIPA P/S (167)	Indicative Quantity at CIPA P/S (23)	Indicative Quantity at SDPO/ ASP (67)	Indicative Quantity at DPO (25)	Indicative Quantity at Range Office (7)	Indicative Quantity at Zone Office (2)	Indicative Quantity at PHQ (2)	Indicative Quantity at SCRB (1)	TOTAL
Desktops									
Desktop with pre-loaded OS, MS-Office & Antivirus	668	-	201	250	28	8	60	10	1225
Other Hardware									
Printer (Duplex Laser)	167	-	-	-	-	-	-	-	167
Multi Function Printer (Print/ Scan/ Copy)	167	-	67	25	7	2	2	1	271
UPS (2.5KV)	167	-	67	75	7	2	16	3	337
Generator (2KV)	167	23	-	-	-	-	-	-	190
16 Port Switch	167	23	67	25	7	2	2	1	294
HDD 160 GB (External)	167	23	-	-	-	-	-	-	190
Digital Camera	167	23	-	-	-	-	-	-	190
Electronic Pen	167	23	-	-	-	-	-	-	190
Fingerprint Reader	167	23	-	-	-	-	-	-	190
Site Preparation ¹	167	23	67	25	7	2	2	1	294
Other Software									
Operating System (Win 7)	0	92	0	0	0	0	0	0	92

CRIME & CRIMINAL TRACKING NETWORK AND SYSTEMS (CCTNS)



Microsoft Office Suit	0	92	0	0	0	0	0	0	92
Antivirus Software	0	92	0	0	0	0	0	0	92
Operational Expenses for 3 Years	167	23	67	25	7	2	2	1	294

Site Preparation¹: Include Adequate Furniture, Electric Cabling with suitable Earthing & Earth Pit, Cat 6 Cable with Cabling (In Meters), Patch Cords 2 Mtr. CAT 6 & Information Outlet CAT 6

Note:

Quoted price should include Licensed OS, MS-Office Suite and Antiviru (Symantec/ Trend Micro/ McAfee enterprise solution can be quoted for antivirus)

Quoted price should include 3 Years ATS i.e. 3 Years Part, 3 Years Labour, 3 Years On-Site warranty



Hardware Distribution at Data Centre and Disaster Recovery Site:

The details pertaining to the proposed DC and DR the Police Department

Items	Qty at DC	Qty at DR	Make	Model
Network Server Racks 42 U	1	1		
Application Server (Rack Server)	2	1		
Test & Development Server (Rack Server)	1	0		
Database Server (Rack Server)	2	1		
Web Server (Blade Server)	2	1		
Portal Server (Blade Server)	2	1		
Backup Server (Blade Server)	1	0		
Directory & Access Server	1	1		
Communication & Mail Server	2	0		
EMS Server	-	-		
Antivirus Server	1	0		
Blade Chassis	1	1		
Storage Box (SAN)	1	1		
Storage Area Switch	1	1		
SAN Storage Management Software	1	1		
Automated Tape Library	1	1		
DR Recovery Storage	0	1		
Back-up Software	1	1		
HSM for PKI Security and Encryption (2No at DC and 1 at DR)	2	1		



Router	1	1		
FC – IP Router	1	1		
Load Balancer	2	0		
Link load Balancer	2	0		
Core Switch L3 Gigabit 48 Port	1	1		
KVM Switch	1	1		
Patch Panel 24 Ports CAT 6	2	1		
CAT 6 Cable (305 Mtr. Box)	2	1		
Information Outlet CAT 6	30	15		
Patch Cord 2 Mtr CAT 6	30	15		
UTM Firewall with VPN and IPS	1	1		
Data Center Software (Server OS with CAL, Server Management, Intranet Portal, MIS & Reporting Dashboard etc.)	19			
Database Software (Processor Based for unlimited users)	4	2		
Antivirus Software for Servers	19			
Email Security Software Required features;	2	0		
Anti-spam				
Anti-virus				
Anti-spoofing				
Anti-phishing				
Anti-spyware (Attachments)				
Denial of Service				
Data Leak Prevention				
Enterprise Management System (EMS)	1			
Out Sourced manpower for datacenter 2 nos. × 3 shifts for 3 Years	-			



ATS for three (3) years	<i>Quoted price should include 3 Years ATS i.e. 3 Years Part, 3 Years Labour, 3 Years On-Site warranty</i>
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Note: System Integrator shall provide necessary service support and assistance to JK Police for taking the bandwidth for WAN connectivity from BSNL and/ or SWAN and also provide and subsequent, required and related maintenance/ support services.

DR hardware and software should operate 50% replica of DC except storage



Handholding Support:

S. No.	Items	No. of Police Station	For the period of 6 Months
1.	Handholding Support	190	

Data Digitization:

S. No.	Items	No. Of Case Files to be Digitized (For last 10 Years)
1.	Digitization	102857

Capacity Building:

Expenditure Head	No. Of Units
SCRB _x Infrastructure	1
District Training Centre ,Site preparation	25
District Training Centre	25
RTC/ PTC/ Academy	6
Training for Police Personal	42441



3. RFP Volume 2

A. **3. BIDDING PROCESS DETAILS – General Instruction to Bidders:**

Stand amended as:

3.2.9 Earnest Money Deposit

1. **Point 1**, Bidders shall submit, along with their Bids, EMD of Rs. 1 Crore only, in the form of a Bank Guarantee/ Demand Draft issued by the scheduled bank pledged in favor of 'Managing Director of PHC (SDA)' payable at Jammu and will remain current till completion of the Project. Bid security in any other form will not be accepted. This shall be submitted along with the format provided in the Annexure as specified in this RFP.
2. **Point 2**, Bank Guarantees are to be issued by Indian public banks authorized by Govt. to conduct Government transactions

B. **3. BIDDING PROCESS DETAILS – Bid Opening and Evaluation Process:**

Stand amended as:

3.4.4 Pre-Qualification Criteria

1. **Point 7(a)**, The Bidder should be an Information Technology System Integrator with a registered office and operations in India. The company should be operational in India for at least the last five financial years as on 31st March 2011. The Bidder has to be a single legal entity.
2. **Point 7(b)**, The Bidder must have an Office in the J&K State or should furnish an undertaking that the same would be established within two months of signing the contract.
3. **Point 7(c)**, The Bidder, a single legal entity registered in India, should be a profitable vendor for the last three years as on 31st March 2011, from IT services (IT Infrastructure procurement and commissioning, IT Application Customization, Integration with legacy systems, Deployment and Maintenance).
4. **Point 7(d)**, The Bidder must have a proven track record of providing a successful 'Turnkey Solution' for at least five (5) IT-projects¹ in last 5 years as on 31st March 2011. At least one of the 5 quoted projects should be an integrated turnkey project of a value of not less than Rs. 10 Crore or above in India including setting up and configuring the hardware (Servers, Desktop, Network Clients) and implementing software solution including Operating Systems, Infrastructure Management Software, RDBMS, establishment of LAN / WAN



including Firewalls, IPS, PKI, etc. and providing life cycle support. Bidder must provide as a supporting documentary proof in form of work orders confirming year and Area of activity, value of services to be delivered for each of the five projects, Completion/Partial Completion Certificate from Client confirming year and value of Bidder's scope of work, scope of work completed by the Bidder and its value along with Reference details of the Client.

5. **Point 7(e)**, The Bidder must have a proven track record of implementing at least two (2) e-Governance projects to summing up to a value of Rs. 10 Crore or above in last 2 years as on 31st March 2011. Bidder must provide as a supporting documentary proof in form of work orders confirming year and Area of activity, value of services to be delivered for each of the two projects, Completion/ Partial Completion Certificate from Client confirming year and value of Bidder's scope of work, scope of work completed by the Bidder and its value along with reference details of the Client.
6. **Point 7(f)**, The bidder must have prior experience of working on at least 1 Software Services Project for Government of India, any of the State/ UT governments or Public Sector Units. The project must be worth at least Rs. 1 Crore. Bidder must provide as a supporting documentary proof in form of work order confirming year and Area of activity, value of services to be delivered for the project, Completion/ Partial Completion Certificate from Client confirming year and value of Bidder's scope of work, scope of work completed by the Bidder and its value along with reference details of the Client.
7. **Point 7(g)**, The bidder must have been assessed and must possess a valid certification for CMMi Level 3 as on the date of contract signing and the certificate should be valid for at least a period of one year from the date of submission of the bid. It is clarified that if the CMMi Level 3 certification of a company is under renewal, the bidder may submit the following with his Bid:
 - i. The last valid CMMi Level 3 certificate of the company
 - ii. A proof from the certifying agency stating that the renewal of the certification is under progress and the date when such renewal was applied for by the company. Such a Bidder will however be required to produce the renewed and active CMMi Level 3 certification of the company before the opening of Commercial Bid. If the Bidder fails to do so, his Bid will be declared technically disqualified and not considered for further evaluation.
8. **Point 7(h)**, The bidder must have been assessed and must possess a valid ISO 9001 or above certificate as on the date of contract signing and the certificate should be valid for at least a period of one year from the date of submission of the bid.



Notes:

1. IT-projects relates to projects involving IT Infrastructure procurement and commissioning, IT Application Customization, Integration with legacy systems, Deployment and Maintenance
2. 'e-Governance projects' is defined as 'deployment of IT systems for Central/ State Government Departments or Government Undertakings.
3. 'Software Services Project' relates to projects involving development or deployment of a IT application and Maintenance of the same.
4. In respect of both 1 and 2 above, the respondent should have been directly responsible for the implementation of the projects and not just a member of a consortium.
5. For items such as Site Preparation, Data digitization/ migration, Capacity Building (Training Personnel) and Handholding the bidder may sub-contract the work; however JK Police would be required to provide written approval of such agency. The bidder strictly cannot sub-contract the core activities such as application development and roll-out of application. It is clarified that the System Integrator shall be the Principal employer for all the claims arising from the liabilities statutory or otherwise, concerning the sub-contractors. The System Integrator undertakes to indemnify the JK Police or its nominated agencies from any claims on the grounds stated hereinabove.



System Software Licensing Terms:

Note: Following points are added to this corrigendum:

- 1) All the Licenses shall have to be procured by the selected SI for the successful implementation of the project. The system software licenses mentioned in the bill of materials shall be genuine, perpetual, full use and should provide updates, patches, fixes, security patches and updates directly from the OEM. All license and support (updates, patches, and bug fixes) should be in the name of JK Police.
- 2) The SI shall provide with a full use database license. All the licenses and support (updates, patches, and bug fixes) should be in the name of JK Police.
- 3) The software proposed should be from an OEM with presence in India (and easy availability of skilled resources for the product in India).
- 4) SI shall provide a comprehensive warranty that covers all components after the issuance of the final acceptance by JK Police department. The warranty should cover all materials, licenses, services and support for both hardware and software. SI shall administer warranties with serial number and warranty period. SI shall transfer all the warranties to the department at no additional charge at the time of termination of the project. All warranty documentation (no expiry) will be delivered to the department.



3.4.7 Evaluation of Commercial Bids

The Commercial Bids of only the technically qualified bidders will be opened for evaluation. Since the payments to the SI will be made over a period of over four years (a minimum of 12 months for the Implementation Phase followed by three years for Operations and Maintenance Services), the DCF (Discounted Cash Flow) method will be used to compare different payment terms, including advance payments and progressive stage payments to the SI so as to bring them to a common denomination for determining lowest bidder. The State will evaluate the offers received by adopting DCF method with a discounting rate in consonance with the existing government borrowing rate. The DCF is defined in the Glossary of Management and Accounting Terms, published by the Institute of Cost and Works Accountants of India. DCF method would be used for evaluation of bids. The bid with the lowest Net Present Value (NPV) determined using the DCF method will be selected.

Detailed modalities for applying DCF technique are as below:

- 1) Net Present Value (NPV) method will be used for evaluation of the Commercial Offer. The Net Present Value of a contract is equal to the sum of the present values of all the cash flows associated with it. The formula for calculating NPV of a Commercial Offer is illustrated in Para (6) below.
- 2) Discounting rate to be used under the method is to be the Government of India's lending rate on loans given to State Governments. These rates are notified by Budget Division of Ministry of Finance annually. The latest one is Ministry of Finance OM No F5 (3) PD/2008 dated 30 October 2008 (as per which the borrowing rate is 9%). The State will evaluate the offers received by adopting Discounted Cash Flow (NPV) method with a discounting rate of 9%.
- 3) NPV will be calculated on the annual cash outflows.
- 4) Standard software for example 'Excel', 'Lotus 1-2-3' or any other spreadsheet, which comes preloaded as part of a personal computer will be used for NPV analysis.
- 5) The blended person month cost for 300 person months will be considered in the cash flows in the first year



6) The NPV will be calculated using the formula below:

$$NPV = C_0 + C_1/(1+r)^1 + C_2/(1+r)^2 + C_3/(1+r)^3 + \dots + C_n/(1+r)^n$$

Where,

$C_0 \dots C^n$ are the yearly cash outflows as illustrated below

- a) C_0 is the Sum of the below components
 - i. Sub-total for Services Provided During Implementation Phase (Sum of items 1 – 8, refer to Pricing Summary Sheet)
 - ii. Blended Person Month Cost for 300 Person Months (refer to Pricing Summary Sheet)
- b) C_1 is Cost of Operations and Maintenance Services for the 1st year after “Go-Live”
- c) C_2 is Cost of Operations and Maintenance Services for the 2nd year after “Go-Live”
- d) C_3 is Cost of Operations and Maintenance Services for the 3rd year after “Go-Live”
- e) r is the annual discounting rate as specified in Para (2) above

For Quality and Cost based Evaluation (QCBS), the following formula will be used for the evaluation of the bids.

The scores will be calculated as:

$$B_n = 0.3 * T_n + (0.7) * (C_{min} / C_b * 100)$$

Where

B_n = overall score of bidder under consideration (calculated up to two decimal points)

T_n = Technical score for the bidder under consideration

C_b = NPV (as calculated above) for the bidder under consideration

C_{min} = Lowest NPV (as calculated above) among the financial proposals under consideration.

The bidder achieving the highest overall score will be invited for negotiations for awarding the contract. In case of a tie where two or more bidders achieve the same highest overall score, the bidder with the higher technical score will be invited first for negotiations for awarding the contract.



C. 6. Annexure

6.4 Earnest Money Deposit:

Stand amended as:

1. In consideration of _____ (hereinafter called the "Government") represented by _____, on the first part and M/s _____ of _____ (hereinafter referred to as "Bidder") on the Second part, having agreed to accept the Earnest Money Deposit of Rs. _____ (Rupees _____) in the form of Bank Guarantee for the Request for Proposal for procurement of _____ we _____ (Name of the Bank), (hereinafter referred to as the "Bank"), do hereby undertake to pay to the Government forthwith on demand without any demur and without seeking any reasons whatsoever, an amount not exceeding _____ (Rupees _____) and the guarantee will remain valid till completion of the project. It will, however, be open to the Government to return the Guarantee earlier than this period to the System Integrator, in case the System Integrator does not qualify for the commercial negotiations by the Commercial Negotiations Committee (CNC) as constituted by the Government after a recommendation is made by the CNC on the bid(s) after an evaluation.

2. In the event of the System Integrator withdrawing the tender before the completion of the stages prior to the Commercial negotiations or during the Commercial negotiations, as the case may be, the Guarantee deposited by the System Integrator stands forfeited to the Government. We also undertake not to revoke this guarantee during this period except with the previous consent of the Government in writing and we further agree that our liability under the Guarantee shall not be discharged by any variation in the term of the said tender and we shall be deemed to have agreed to any such variation.

3. No interest shall be payable by the Government to the System Integrator on the guarantee for the period of its currency.

Dated this _____ day of _____ 2012

For the Bank of _____
(Agent/Manager)



6.6 Formats for the Pre-Qualification Response

Bidders are requested to submit their responses for the pre-qualification requirements in (5) parts mentioned in this RFP.

1. Details of the Organization
2. Financial details
3. Relevant IT- Experience
4. Relevant E-governance project experience
5. Relevant software services project experience

1. Details of the Organization.

Details of the organization	
Details of the organization	
Name of the Company	
Nature of the legal status in India	
Nature of the Business in India	
Date of incorporation	
Date of Commencement of Business	
Address of the Headquarters	
Address of the Registered Office in India	
Other Relevant Information	
Mandatory Supporting Documents:	
a) Certificate of Incorporation from Registrar Of Companies(ROC)	
b) Relevant sections of Memorandum of Association of the company or filings to the stock exchanges to indicate the nature of business of the company	

2. Financial information

Financial Information			
	FY-2008-09	FY 2009-10	FY 2010-11
Revenue (in INR Crores)			
Profit before Tax(in INRCrores)			
Other relevant information			
Mandatory Supporting Documents:			
a) Auditor Certified financial statements for the Last three financial years; 2008-09, 2009-10, and 2010-11 (Please include only the sections on P&L, revenue and the assets, not the entire balance sheet.)			



D. 6. Annexure – Formats for the Commercial Bid Responses:

Stand amended as:

6.8.2 Form 1: Pricing Summary

S.No	Description	Total price (in INR)	Taxes and other duties(in INR)	Total Amount (in INR)	Total amount in words
Services Provided During Implementation Phase					
1	Systems Study and Configuration Customization and Extension (New Modules) of CAS (State) and Integration with CAS (Center) and External Agencies and Support to 3rd party acceptance testing, audit and certification				
2	Infrastructure at the District Training Centers including computers, networking, components, projectors & UPS.				
3	Site preparation at the Client site locations (police stations, circle offices, Range offices, Zones, SCRB, SDPOs, District HQ and State HQ), Training Centers and Data Center.				
4	Network connectivity for Police Stations/ Higher Offices				
5	IT infrastructure at the Data Center and Disaster Recovery Center including the Necessary hardware, software and other networking components.				
6	IT Infrastructure at the Client site locations (police stations, circle offices, Range offices, Zones, SCRB, SDPOs, District HQ and State HQ).				
7	Data migration and Digitization of Historical Data				



8	Change Management , Capacity Building, and Handholding Support				
A	Sub-total for Services Provided During Implementation Phase (Sum of items 1 – 8):				
Services Provided During Post Implementation Phase					
9	Operations and Maintenance Services for the 1st year “Go live”				
10	Operations and Maintenance Services for the 2nd year “Go live”				
11	Operations and Maintenance Services for the 3rd year “Go live”				
B	Sub-total for Services Provided During Post Implementation Phase (Sum of items 9 – 11):				
C	Blended Person Month Cost for 300 Person Months				
	Grand Total for Consideration of L1 (A + B + C)				



6.8.3 Form 2 Detailed Location Wise – Pricing Formats:

Hardware & Site Preparation Cost – Police Stations (Non-CIPA)			
Office Location	Qty	Cost Per Location (In Rs)	Total Cost (In Rs)
Non-CIPA Police Stations			
Hardware	167		
Site Preparation	167		
Operational Expenses	167		
Non-CIPA Police Stations (Software & ATS)			
Software and ATS should be included in the above mentioned cost.	<i>Note:</i> Quoted price should include Licensed OS, MS-Office Suite and Antivirus Quoted price should include 3 Years ATS i.e. 3 Years Part, 3 Years Labour, 3 Years On-Site warranty		
Total			

Hardware & Site Preparation Cost – Police Stations (CIPA)			
Office Location	Qty.	Cost Per Location (In Rs)	Total Cost (In Rs)
CIPA Police Stations			
Hardware	23		
Site Preparation	23		
Operational Expenses	23		
CIPA Police Stations (Software & ATS)			
Software	Licensed OS, MS-Office Suite and Antivirus		
ATS	<i>Note:</i> Quoted price should include 3 Years ATS i.e. 3 Years Part, 3 Years Labour, 3 Years On-Site warranty		
Total			

Hardware & Site Preparation Cost – Higher Offices			
Office Location	Qty.	Cost Per Location (In Rs)	Total Cost (In Rs)
Higher Offices Hardware			
PHQ	2		
Range	7		
Zones	2		
SCRB	1		
District	25		
Sub Division (SDPO)/ ASP	67		
Total			



Higher Offices Site Preparation			
PHQ	2		
Range	7		
Zones	2		
SCRB	1		
District	25		
Sub Division (SDPO)/ ASP	67		
Total			
Higher Offices Operational Expenses			
PHQ	2		
Range	7		
Zones	2		
SCRB	1		
District	25		
Sub Division (SDPO)/ ASP	67		
Total			
Higher Offices (Software & ATS)			
Software and ATS should be included in the above mentioned cost.		<i>Note:</i> <i>Quoted price should include Licensed OS, MS-Office Suite and Antivirus</i> <i>Quoted price should include 3 Years ATS i.e. 3 Years Part, 3 Years Labour, 3 Years On-Site warranty</i>	
Total			



6.8.4 Form 3 – Detailed Component Wise – Pricing Formats:

Hardware & Site Preparation Gap for Non – CIPA Police Stations 167 Locations			
Item Description	Qty.	Unit Rate (In Rs)	Amount (In Rs)
Detailed Hardware List for Each PS			
Desktop System	4		
HDD 160 GB	1		
Duplex Laser Printer	1		
Multi Function Laser (Print/ Scan/ Copy)	1		
UPS for 120 min back (2KVA)	1		
DG Set (2.5 KVA)	1		
Network Switch 16 Port	1		
Digital Camera	1		
Electronic Pen	1		
Total			
Site Preparation at Each PS			
Adequate Furniture	-		
Electric Cabling with suitable Earthing & Earth Pit	-		
Information Outlet CAT 6	6		
Cat 6 cable with cabling (In meters)	-		
Patch Cords 2 Mtr. CAT 6	6		
Total			
Operational Expenses At Each PS (In years)	3		
Software & ATS at Each PS			
MS Windows -7 Professional MS Office 2010 Std. Suite Antivirus ATS	<p><i>Note:</i> Quoted price should include Licensed OS, MS-Office Suite and Antivirus Quoted price should include 3 Years ATS i.e. 3 Years Part, 3 Years Labour, 3 Years On-Site warranty</p>		
Grand Total			



Hardware & Site Preparation Gap for Police Stations Covered under CIPA 23 Locations			
Item Description	Qty.	Unit Rate (In Rs)	Amount (In Rs)
Detailed Hardware List for Each PS			
HDD 160 GB	1		
DG Set (2.5 KVA)	1		
Network Switch 16 Port	1		
Digital Camera	1		
Electronic Pen	1		
Total			
Site Preparation at Each PS			
Information Outlet CAT 6	6		
Cat 6 cable with cabling (In meters)	-		
Patch Cords 2 Mtr. CAT 6	6		
Total			
Operational Expenses At Each PS (In years)	3		
Software & ATS at Each PS			
MS Windows -7 Professional			
MS Office 2010 Std. Suite			
Client Antivirus			
ATS	<i>Note: Quoted price should include 3 Years ATS i.e. 3 Years Part, 3 Years Labour, 3 Years On-Site warranty</i>		
Grand Total			



Hardware & Site Preparation Gap at SDPO/ ASP 67 Locations			
Item Description	Qty.	Unit Rate (In Rs)	Amount (In Rs)
Detailed Hardware List at Each SDPO			
Desktop System	3		
Multi Function Laser (Print/ Scan/ Copy)	1		
UPS for 120 min back (2KVA)	1		
Network Switch 16 Port	1		
Site Preparation at Each SDPO			
Adequate Furniture	-		
Electric Cabling with suitable Earthing & Earth Pit	-		
Information Outlet CAT 6	6		
Cat 6 cable with cabling (In meters)	-		
Patch Cords 2 Mtr. CAT 6	6		
Operational Expenses at Each SDPO (In years)			
	3		
Software & ATS at Each SDPO/ ASP			
MS Windows -7 Professional MS Office 2010 Std. Suite Client Antivirus ATS		<i>Note:</i> <i>Quoted price should include Licensed OS, MS-Office Suite and Antivirus</i> <i>Quoted price should include 3 Years ATS i.e. 3 Years Part, 3 Years Labour, 3 Years On-Site warranty</i>	
Grand Total			



Hardware & Site Preparation Gap at DPO 25 Locations

Item Description	Qty.	Unit Rate (In Rs)	Amount (In Rs)
Detailed Hardware List at Each DPO			
Desktop System	10		
Multi Function Laser (Print/ Scan/ Copy)	1		
UPS for 120 min back (2KVA)	3		
Network Switch 16 Port	1		
Site Preparation at Each DPO			
Adequate Furniture	-		
Electric Cabling with suitable Earthing & Earth Pit	-		
Information Outlet CAT 6	12		
Cat 6 cable with cabling (In meters)	-		
Patch Cords 2 Mtr. CAT 6	12		
Operational Expenses at Each DPO (In years)			
	3		
Software & ATS at Each DPO			
MS Windows -7 Professional MS Office 2010 Std. Suite Client Antivirus ATS	<i>Note: Quoted price should include Licensed OS, MS-Office Suite and Antivirus Quoted price should include 3 Years ATS i.e. 3 Years Part, 3 Years Labour, 3 Years On-Site warranty</i>		
Grand Total			



Hardware & Site Preparation Gap at Range Office (RPHQ) 7 Locations			
Item Description	Qty.	Unit Rate (In Rs)	Amount (In Rs)
Detailed Hardware List at Each Range Office			
Desktop System	4		
Multi Function Laser (Print/ Scan/ Copy)	1		
UPS for 120 min back (2KVA)	1		
Network Switch 16 Port	1		
Site Preparation at Each Range Office			
Adequate Furniture	-		
Electric Cabling with suitable Earthing & Earth Pit	-		
Information Outlet CAT 6	6		
Cat 6 cable with cabling (In meters)	-		
Patch Cords 2 Mtr. CAT 6	6		
Operational Expenses at Each Range Office (In years)			
	3		
Software & ATS at Each Range Office			
MS Windows -7 Professional MS Office 2010 Std. Suite Client Antivirus ATS	<i>Note: Quoted price should include Licensed OS, MS-Office Suite and Antivirus Quoted price should include 3 Years ATS i.e. 3 Years Part, 3 Years Labour, 3 Years On-Site warranty</i>		
Grand Total			



Hardware & Site Preparation Gap at Zone Office (ZPHQ) 2 Locations

Item Description	Qty.	Unit Rate (In Rs)	Amount (In Rs)
Detailed Hardware List at Each Zone Office			
Desktop System	4		
Multi Function Laser (Print/ Scan/ Copy)	1		
UPS for 120 min back (2KVA)	1		
Network Switch 16 Port	1		
Site Preparation at Each Zone Office			
Adequate Furniture	-		
Electric Cabling with suitable Earthing & Earth Pit	-		
Information Outlet CAT 6	6		
Cat 6 cable with cabling (In meters)	-		
Patch Cords 2 Mtr. CAT 6	6		
Operational Expenses at Each Zone Office (In years)			
	3		
Software & ATS at Each Zone Office			
MS Windows -7 Professional MS Office 2010 Std. Suite Client Antivirus ATS		<i>Note: Quoted price should include Licensed OS, MS-Office Suite and Antivirus Quoted price should include 3 Years ATS i.e. 3 Years Part, 3 Years Labour, 3 Years On-Site warranty</i>	
Grand Total			



Hardware & Site Preparation Gap at SCRB			
Item Description	Qty.	Unit Rate (In Rs)	Amount (In Rs)
Detailed Hardware List at SCRB			
Desktop System	10		
Multi Function Laser (Print/ Scan/ Copy)	1		
UPS for 120 min back (2KVA)	3		
Network Switch 16 Port	1		
Site Preparation at SCRB			
Adequate Furniture	-		
Electric Cabling with suitable Earthing & Earth Pit	-		
Information Outlet CAT 6	12		
Cat 6 cable with cabling (In meters)	-		
Patch Cords 2 Mtr. CAT 6	12		
Operational Expenses at SCRB (In years)			
	3		
Software & ATS at SCRB			
MS Windows -7 Professional MS Office 2010 Std. Suite Client Antivirus ATS	<i>Note:</i> Quoted price should include Licensed OS, MS-Office Suite and Antivirus Quoted price should include 3 Years ATS i.e. 3 Years Part, 3 Years Labour, 3 Years On-Site warranty		
Grand Total			



Hardware & Site Preparation Gap at PHQ 2 Locations			
Item Description	Qty.	Unit Rate (In Rs)	Amount (In Rs)
Detailed Hardware List at PHQ			
Desktop System	30		
Multi Function Laser (Print/ Scan/ Copy)	1		
UPS for 120 min back (2KVA)	8		
Network Switch 16 Port	1		
Site Preparation at PHQ			
Adequate Furniture	-		
Electric Cabling with suitable Earthing & Earth Pit	-		
Information Outlet CAT 6	36		
Cat 6 cable with cabling (In meters)	-		
Patch Cords 2 Mtr. CAT 6	36		
Operational Expenses at PHQ (In years)			
	3		
Software & ATS at Each PHQ			
MS Windows -7 Professional MS Office 2010 Std. Suite Client Antivirus (3 Years) ATS		<i>Note: Quoted price should include Licensed OS, MS-Office Suite and Antivirus Quoted price should include 3 Years ATS i.e. 3 Years Part, 3 Years Labour, 3 Years On-Site warranty</i>	
Grand Total			

CAS Customization & Integration Cost			
Items	Estimated Man Months	Unit Rate (In Rs)	Amount (In Rs)
Integration/ Migration of Legacy Application			
CAS Customization			
Including Maintenance of Software for 3 Years			
Total			



Items	Qty at DC	Qty at DR	Make	Model
Network Server Racks 42 U	1	1		
Application Server (Rack Server)	2	1		
Test & Development Server (Rack Server)	1	0		
Database Server (Rack Server)	2	1		
Web Server (Blade Server)	2	1		
Portal Server (Blade Server)	2	1		
Backup Server (Blade Server)	1	0		
Directory & Access Server	1	1		
Communication & Mail Server	2	0		
EMS Server	-	-		
Antivirus Server	1	0		
Blade Chassis	1	1		
Storage Box (SAN)	1	1		
Storage Area Switch	1	1		
SAN Storage Management Software	1	1		
Automated Tape Library	1	1		
DR Recovery Storage	0	1		
Back-up Software	1	1		
HSM for PKI Security and Encryption (2No at DC and 1 at DR)	2	1		
Router	1	1		
FC – IP Router	1	1		
Load Balancer	2	0		
Link load Balancer	2	0		
Core Switch L3 Gigabit 48 Port	1	1		
KVM Switch	1	1		
Patch Panel 24 Ports CAT 6	2	1		
CAT 6 Cable (305 Mtr. Box)	2	1		
Information Outlet CAT 6	30	15		
Patch Cord 2 Mtr CAT 6	30	15		
UTM Firewall with VPN and IPS	1	1		
Data Center Software (Server OS with CAL, Server Management, Intranet Portal, MIS & Reporting Dashboard etc.)	19			
Database Software (Processor Based for unlimited users)	4	2		



Antivirus Software for Servers	19			
Email Security Software Required features; Anti-spam Anti-virus Anti-spoofing Anti-phishing Anti-spyware (Attachments) Denial of Service Data Leak Prevention	2	0		
Enterprise Management System (EMS)	1			
Out Sourced manpower for datacenter 2 nos. × 3 shifts for 3 Years	-			
ATS for three (3) years	<i>Quoted price should include 3 Years ATS i.e. 3 Years Part, 3 Years Labour, 3 Years On-Site warranty</i>			

Handholding Support for (6) Months				
S. No.	Items	No. of Police Station	Unit Rate for 6 Months (In Rs.)	Amount (In Rs.)
1.	Handholding Support at Police Station	190		

Data Digitization			Unit Rate for 6 Months (In Rs.)	Amount (In Rs.)
S. No.	Items	No. Of Case Files to be Digitized (For last 10 Years)		
1.	Digitization	102857		

Strengthening of Institutions/ Capacity Building (Training)			
Expenditure Head	No. Of Units	Unit Rate for 6Months (In Rs.)	Amount (In Rs.)
RTC/ PTC/Academy	6		
Training for Police Personal	42441		