

E-Governance Mission Mode Project (MMP)
Crime & Criminal Tracking Network and Systems
(CCTNS)

Request for proposal for Selection of System Integrator
for
Implementation, Commissioning & Maintenance of
CCTNS in Maharashtra state

CORRIGENDUM

Released By : Maharashtra Police

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1. VOLUME I: TECHNO-FUNCTIONAL REQUIREMENTS

CALENDAR OF EVENTS AND OTHER RELEVANT DETAILS

The revised timelines are as follows

S. No	Information	Details
1.	RFP Reference No and Date	DGP/XVII/6162/CCTNS2011-12/RFP/SI/2011 5 th April 2011
2	Non Refundable Tender Cost	Rs. 10,000 /-
3	Sale of RFP Document	5 th April 2011
4	EMD	Rs. 2,00,00,000 / -
5	Tender Preparation Deadline	18 th May 2011 by 5:00 PM
6	Tender Submission Deadline	19 th May 2011 by 5:00 PM
7	Opening of Technical proposals received in response to the RFP notice	20th May 2011 at 12:00 PM at DGP Office, Mumbai
8	Opening of Financial proposals received in response to the RFP notice	To be declared later
9	Contact Person for queries	Shri. Pankaj Gupta, Addl. Director General of Police, P & C
10	Addressee and Address at which proposal in response to RFP notice is to be submitted:	Addl. Director General of Police, P & C, Maharashtra Police Mukhyalaya, Shahid Bhagat Singh Marg, Colaba, Mumbai – 400001 Email : adg.pc@mahapolice.gov.in , cctns_mh@ncrb.nic.in Tel: +91 22 22023399 Fax: +91 22 22023399

Note:

- All bid related activities (Process) like Tender Document Download, Bid Preparation and Hash Submission, Bid Submission and submission of EMD and other documents will be governed by the time schedule mentioned on the e-tendering website (<http://mapo.maharashtra.etenders.in/>).
- A crossed **Demand Draft for Rs. 10,000/-** as tender fee drawn on any Nationalised Bank in favour of the Director General of Police, Maharashtra, payable at Mumbai at par should be **submitted manually before the last time and date of Bid submission** without which tender will be taken as incomplete and non responsive and shall not be considered. The D.D. shall be kept in separate envelope. The tender fee shall be non refundable.
- Bidders shall submit **manually before the last time and date of Bid submission, EMD of Rs. 2,00,00,000 (Rs. Two Crores)** only, in the form of a Demand Draft/ Bank Guarantee issued by any Nationalised bank or Private Sector Banks authorized by the Government to conduct Government transaction, in favour of Director General of Police, Maharashtra and should be valid for 180 days from the due date of the tender. Bid security in any other form will not be accepted. **The envelope containing the EMD shall be sealed and super scribed "Earnest Money Deposit – Maharashtra CCTNS"**.

SECTION 3.6 EXISTING CLIENT SITE INFRASTRUCTURE (PAGE NO. 33)

SERVERS INFRASTRUCTURE INFORMATION									
S. No	Server Name (Utility of the server)	Location	Make & Model	Operating System	No. of Processors (with processor information)	Memory		Other Server configuration	No. of Components
						HDD	RAM		
1.	CIPA Server	Districts	HCL	Windows 2003	-	120 GB	1 GB	-	44

Stands amended as

SERVERS INFRASTRUCTURE INFORMATION									
S. No	Server Name (Utility of the	Location	Make & Model	Operating System	No. of Processors (with processor	Memory		Other Server configuration	No. of Components
						HD	RAM		

	server)				information)	D		n	
1.	CCIS Server	Districts	HCL	Windows 2003	-	120 GB	1 GB	-	44

SECTION 4.2 FUNCTIONAL SCOPE

4.2.2 Solution & Technology Architecture (Page No. 53)

The 'User' Layer: This layer forms the internal departmental users accessing the applications over Internet or through the Maharashtra State Wide Area Network. Role based access would be defined for the internal users for having accessibility to the respective application modules, such as HRMS, which would be accessed by all the Police Officers but higher Police authorities would essentially be accessing reporting modules which would help them in decision making and monitoring the overall Policing at various levels. Integrated database structure would ensure a one point stop search available to all the police units.

Stands amended as

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SECTION 4.6 INFRASTRUCTURE AT THE CLIENT LOCATIONS

The Section 4.6, Page No. 67 **is amended as**

The premises for offices will be provided by the department at respective locations. The list of Police Stations, Circle offices, and other locations where the infrastructure is required is provided under the Geographical Scope Section. SI shall procure the CCTNS infrastructure required at the locations statewide.

At each such location the following shall be carried out.

1. Supply of the hardware, software, networking equipments, UPS, DG set to the location as per the requirements
2. Installation, Testing and Commissioning of UPS, DG-Set
3. Physical Installation of Desktops, Printer, Scanner, /MFD, Switch, Connecting peripherals, devices, Plugging in
4. Operating System Installation and Configuration
5. Installation of Antivirus and other support software if any
6. Configuring the security at the desktops, switch and broadband connection routers
7. Network and browser Configuration

8. Test accessibility and functionality of CCTNS application from the desktops
9. Ensuring all the systems required are supplied, installed, configured, tested and commissioned and declaring the site to be operational.
10. In addition to the above supply and fixing of furniture like computer tables, chairs and other items shall be carried out to ensure successful site preparation and installation of CCTNS at every location

CCTNS application will be accessed and used at various access locations across the state like Police Stations, Circle Office, Sub Division office, District Office and other higher offices.

Police Station Hardware / Site Preparation for non-CIPA and CIPA (Phase 1) police stations (802 nos.)	
Items	Qty
Client Systems (Including Antivirus, Operating Systems and Office Suite)	4
HDD 160GB	1
Duplex Laser Printer	1
Multi-Function Laser (Print/Scan/Copy)	1
UPS for 120min backup	1
2KVA Generator Set	1
24-Port Unmanaged Switch	1
Fingerprint Reader	1
Digital Camera	1
Electronic Pen	1
Site Preparation	
Adequate furniture	1
Electrical Cabling	1
Earthing and Earth Pit	1
Wall mountable network rack – 9U	1
Patch panel – 12 ports CAT 6	1
Information Outlet CAT 6	6
CAT 6 cable with cabling (in meters)	120

Patch Cords 2 Meters CAT 6	6
Operational Expenses per location (Paper, Toner in years)	3

Police Station Hardware / Site Preparation for CIPA (Phase 2 & 3) police stations (231 nos.)	
Items	Qty
HDD 160GB	1
2KVA Generator Set	1
Fingerprint Reader	1
Digital Camera	1
Electronic Pen	1
24-Port Unmanaged Switch	1
Site Preparation	
Wall mountable network rack – 9U	1
Patch panel – 12 ports CAT 6	1
Patch Cords 1 Meters CAT 6	6
Operational Expenses per location (Paper, Toner in years)	3

The infrastructure required at Higher Offices includes:

Higher Offices	Sub-Division	Range	ACP	SCRB	DCP	Addl. SP	Jt. CP and Addl. CP	Special Offices	Commissionerate	Districts	Police Headquarters	Police Control Rooms	Forensics Lab	Finger Print Bureau
No of Offices	229	9	160	1	55	44	24	13	10	36	1	55	1	1
Unit of Measurement	Qty/ Off	Qty/ Off	Qty/ Off	Qty/ Off	Qty/ Off	Qty/ Off	Qty/ Off	Qty/ Off	Qty/ Off	Qty/ Off	Qty/ Off	Qty/ Off	Qty/ Off	Qty/ Off
PC	3	4	3	10	1	3	4	4	25	10	50	1	1	1
UPS	1	1	1	2	1	1	1	1	25	10	50	1	1	1
MFP	1	1	1	1	1	1	1	1	25	10	50	1	1	1
UPS with 120 Mins Backup (1 KVA)	1	1	1	NA	1	1	1	1	NA	NA	NA	1	1	1
UPS with 120 Mins Backup (5 KVA)	NA	NA	NA	1	NA	NA	NA	NA	NA	1	NA	NA	NA	NA
UPS with 120 Mins Backup (15 KVA)	NA	NA	NA	NA	NA	NA	NA	NA	1	NA	1	NA	NA	NA
24-Port Unmanaged Switch	1	1	1	NA	1	1	1	1	NA	NA	NA	NA	NA	NA
24-Port Managed Switch	NA	NA	NA	1	NA	NA	NA	NA	1	1	NA	NA	NA	NA
48-Port Managed Switch	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1	NA	NA	NA
Operational Expenses per location (Paper, Toner in years)	3 Yr	3 Yr	3 Yr	3 Yr	3 Yr	3 Yr	3 Yr	3 Yr	3 Yr	3 Yr	3 Yr	3 Yr	3 yr	3 Yr
Adequate furniture	1	1	1	1	1	1	1	1	1	1	1	NA	NA	NA
Electrical Cabling	1	1	1	1	1	1	1	1	1	1	1	NA	NA	NA

Earthing and Earth Pit	1	1	1	1	1	1	1	1	1	1	1	1	NA	NA	NA
Wall mountable network rack – 9U	1	1	1	1	1	1	1	1	1	1	1	1	NA	NA	NA
Patch panel – 12 ports CAT 6	1	1	1	1	1	1	1	1	1	1	1	1	NA	NA	NA
Information Outlet CAT 6	6	6	6	6	6	6	6	6	6	50	20	100	NA	NA	NA
CAT 6 cable with cabling (in meters)	120	120	120	220	120	120	120	120	120	550	220	1150	NA	NA	NA
Patch Cords 2 Meters CAT 6	6	6	6	6	6	6	6	6	6	50	20	100	NA	NA	NA

Note: Adequate Furniture: SI is supposed to provide 4 Computer table, 4 Chairs and 1 Printer table to each Police Station, where furniture is provisioned under this project. At all other locations where furniture is provisioned under this project, one computer table and one chair to be supplied against each Desktop computer provisioned and one printer table for each printer provisioned.

The indicative bill of Materials for Police Stations -

Bill of materials for police stations (CIPA and non CIPA)		
Item	Unit of measurement	Quantity # (units)
Client System (PC- including Antivirus, Operating System and Office Suite)	Nos.	3208
Duplex laser printer	Nos.	802
Multi-Function Laser(Print/Scan/Copy)	Nos.	802
UPS for 120min backup (1KVA)	Nos.	802
2KVA Generator Set	Nos.	1033

OPE (Paper/toner)	Years	3
24- Port Unmanaged switch	Nos.	1033
Fingerprint Reader	Nos.	1033
Digital Camera	Nos.	1033
Electronic Pen	Nos.	1033
Hard Disk Drive 160 GB	Nos.	1033
Site Preparation		
Adequate furniture	Nos.	802
Electrical Cabling	Nos.	802
Earthing and Earth Pit	Nos.	802
Wall mountable network rack – 9U	Nos.	1033
Patch panel – 12 ports CAT 6	Nos.	1033
Information Outlet CAT 6	Nos.	4812
CAT 6 cable with cabling (in meters)	Meters	96420
Patch Cords 2 Meters CAT 6	Nos.	4812
Patch Cords 1 Meters CAT 6	Nos.	1386

Indicative Bill of Material for higher offices:

Bill of materials for Sub-Division Offices		
Item	Unit of measurement	Quantity# (units)
Client System (PC – including Antivirus, Operating System and Office Suite)	Nos.	687
Multi-Function Laser	Nos.	229

(Print/Scan/Copy)		
UPS for 120min backup (1KVA)	Nos.	229
OPE (Paper/toner)	Years	3
24-Port Unmanaged switch	Nos.	229
Site Preparation		
Adequate furniture	Nos.	229
Electrical Cabling	Nos.	229
Earthing and Earth Pit	Nos.	229
Wall mountable network rack – 9U	Nos.	229
Patch panel – 12 ports CAT 6	Nos.	229
Information Outlet CAT 6	Nos.	1374
CAT 6 cable with cabling (in meters)	Meters	27480
Patch Cords 2 Meters CAT 6	Nos.	1374

Bill of materials for Ranges		
Item	Unit of measurement	Quantity# (units)
Client System (PC – including Antivirus, Operating System and Office Suite)	Nos.	36
Multi-Function Laser (Print/Scan/Copy)	Nos.	9
UPS for 120min backup (1KVA)	Nos.	9
OPE (Paper/toner)	Years	3
24-Port Unmanaged switch	Nos.	9

Site Preparation		
Adequate furniture	Nos.	9
Electrical Cabling	Nos.	9
Earthing and Earth Pit	Nos.	9
Wall mountable network rack – 9U	Nos.	9
Patch panel – 12 ports CAT 6	Nos.	9
Information Outlet CAT 6	Nos.	54
CAT 6 cable with cabling (in meters)	Meters	1080
Patch Cords 2 Meters CAT 6	Nos.	54

Bill of materials for ACP Offices		
Item	Unit of measurement	Quantity # (units)
Client System (PC – including Antivirus, Operating System and Office Suite)	Nos.	480
Multi-Function Laser (Print/Scan/Copy)	Nos.	160
UPS for 120min backup (1KVA)	Nos.	160
OPE (Paper/toner)	Years	3
24-Port unmanaged switch	Nos.	1
Site preparation		
Adequate furniture	Nos.	160
Electrical Cabling	Nos.	160

Earthing and Earth Pit	Nos.	160
Wall mountable network rack – 9U	Nos.	160
Patch panel – 12 ports CAT 6	Nos.	160
Information Outlet CAT 6	Nos.	960
CAT 6 cable with cabling (in meters)	Meters	19200
Patch Cords 2 Meters CAT 6	Nos.	960

Bill of materials for SCRB Office		
Item	Unit of measurement	Quantity # (units)
Client System (PC – including Antivirus, Operating System and Office Suite)	Nos.	10
Multi-Function Laser (Print/Scan/Copy)	Nos.	1
UPS for 120min backup (5 KVA)	Nos.	2
OPE (Paper/toner)	Years	3
24-Port managed switch	Nos.	1
Site preparation		
Adequate furniture	Nos.	1
Electrical Cabling	Nos.	1
Earthing and Earth Pit	Nos.	1
Wall mountable network rack – 9U	Nos.	1
Patch panel – 12 ports CAT 6	Nos.	1

Information Outlet CAT 6	Nos.	6
CAT 6 cable with cabling (in meters)	Meters	220
Patch Cords 2 Meters CAT 6	Nos.	6

Bill of materials for DCP Offices		
Item	Unit of measurement	Quantity # (units)
Client System (PC – including Antivirus, Operating System and Office Suite)	Nos.	165
Multi-Function Laser (Print/Scan/Copy)	Nos.	55
UPS for 120min backup (1KVA)	Nos.	55
OPE (Paper/toner)	Years	3
24-Port unmanaged switch	Nos.	55
Site preparation		
Adequate furniture	Nos.	55
Electrical Cabling	Nos.	55
Earthing and Earth Pit	Nos.	55
Wall mountable network rack – 9U	Nos.	55
Patch panel – 12 ports CAT 6	Nos.	55
Information Outlet CAT 6	Nos.	330
CAT 6 cable with cabling (in meters)	Meters	6600
Patch Cords 2 Meters CAT 6	Nos.	330

Bill of materials for Addl. SP Offices		
Item	Unit of measurement	Quantity # (units)
Client System (PC – including Antivirus, Operating System and Office Suite)	Nos.	132
Multi-Function Laser (Print/Scan/Copy)	Nos.	44
UPS for 120min backup (1KVA)	Nos.	44
OPE (Paper/toner)	Years	3
24-Port unmanaged switch	Nos.	44
Site Preparation		
Adequate furniture	Nos.	44
Electrical Cabling	Nos.	44
Earthing and Earth Pit	Nos.	44
Wall mountable network rack – 9U	Nos.	44
Patch panel – 12 ports CAT 6	Nos.	44
Information Outlet CAT 6	Nos.	264
CAT 6 cable with cabling (in meters)	Meters	5280
Patch Cords 2 Meters CAT 6	Nos.	264

Bill of materials for Jt. CP & Addl. CP Offices		
Item	Unit of measurement	Quantity # (units)
Client System (PC – including Antivirus, Operating System and Office Suite)	Nos.	96
Multi-Function Laser	Nos.	24

(Print/Scan/Copy)		
UPS for 120min backup (1KVA)	Nos.	24
OPE (Paper/toner)	Years	3
24-Port unmanaged switch	Nos.	24
Site Preparation		
Adequate furniture	Nos.	24
Electrical Cabling	Nos.	24
Earthing and Earth Pit	Nos.	24
Wall mountable network rack – 9U	Nos.	24
Patch panel – 12 ports CAT 6	Nos.	24
Information Outlet CAT 6	Nos.	144
CAT 6 cable with cabling (in meters)	Meters	2880
Patch Cords 2 Meters CAT 6	Nos.	144

Bill of materials for Special Offices		
Item	Unit of measurement	Quantity # (units)
Client System (PC – including Antivirus, Operating System and Office Suite)	Nos.	52
Multi-Function Laser (Print/Scan/Copy)	Nos.	13
UPS for 120min backup (1KVA)	Nos.	13
OPE (Paper/toner)	Years	3

24-Port unmanaged switch	Nos.	13
Site Preparation		
Adequate furniture	Nos.	13
Electrical Cabling	Nos.	13
Earthing and Earth Pit	Nos.	13
Wall mountable network rack – 9U	Nos.	13
Patch panel – 12 ports CAT 6	Nos.	13
Information Outlet CAT 6	Nos.	78
CAT 6 cable with cabling (in meters)	Meters	1560
Patch Cords 2 Meters CAT 6	Nos.	78

Bill of materials for Commissionerates		
Item	Unit of measurement	Quantity # (units)
Client System (PC – including Antivirus, Operating System and Office Suite)	Nos.	250
Multi-Function Laser (Print/Scan/Copy)	Nos.	250
UPS for 120min backup (15KVA)	Nos.	250
OPE (Paper/toner)	Years	3
24 Port Managed switch	Nos.	10
Site Preparation		
Adequate furniture	Nos.	10

Electrical Cabling	Nos.	10
Earthing and Earth Pit	Nos.	10
Wall mountable network rack – 9U	Nos.	10
Patch panel – 12 ports CAT 6	Nos.	10
Information Outlet CAT 6	Nos.	500
CAT 6 cable with cabling (in meters)	Meters	5500
Patch Cords 2 Meters CAT 6	Nos.	500

Bill of materials for Districts HQs		
Item	Unit of measurement	Quantity # (units)
Client System (PC PC – including Antivirus, Operating System and Office Suite)	Nos.	360
Multi-Function Laser (Print/Scan/Copy)	Nos.	360
UPS for 120min backup (5 KVA)	Nos.	36
OPE (Paper/toner)	Years	3
24 Port Managed switch	Nos.	36
Site Preparation		
Site Preparation		
Adequate furniture	Nos.	36
Electrical Cabling	Nos.	36
Earthing and Earth Pit	Nos.	36
Wall mountable network rack – 9U	Nos.	36
Patch panel – 12 ports CAT 6	Nos.	36

Information Outlet CAT 6	Nos.	720
CAT 6 cable with cabling (in meters)	Meters	7920
Patch Cords 2 Meters CAT 6	Nos.	720
Bill of materials for Maharashtra Police HQs		
Item	Unit of measurement	Quantity # (units)
Client System (PC – including Antivirus, Operating System and Office Suite)	Nos.	50
Multi-Function Laser (Print/Scan/Copy)	Nos.	50
UPS for 120min backup (15 KVA)	Nos.	50
OPE (Paper/toner)	Years	3
48 Port Managed switch	Nos.	1
Site Preparation		
Adequate furniture	Nos.	1
Electrical Cabling	Nos.	1
Earthing and Earth Pit	Nos.	1
Wall mountable network rack – 9U	Nos.	1
Patch panel – 12 ports CAT 6	Nos.	1
Information Outlet CAT 6	Nos.	100
CAT 6 cable with cabling (in meters)	Meters	1150
Patch Cords 2 Meters CAT 6	Nos.	100

Bill of materials for Police Control Rooms (PCRs)		
Item	Unit of measurement	Quantity # (units)
Client Systems (Including Antivirus, Operating System and Office Suite)	Nos.	55
UPS for 120min backup (1 KVA)	Nos.	55
OPE (Paper/toner)	Years	3
Multi-Function Laser (Print/Scan/Copy)	Nos.	55

Bill of materials for Forensic Lab (FSL)		
Item	Unit of measurement	Quantity # (units)
Client Systems (Including Antivirus, Operating System and Office Suite)	Nos.	2
UPS for 120min backup (1 KVA)	Nos.	2
OPE (Paper/toner)	Years	3
Multi-Function Laser (Print/Scan/Copy)	Nos.	2

Bill of materials for Finger Print Bureau (FPB)		
Item	Unit of measurement	Quantity # (units)
Client Systems (Including Antivirus, Operating System and Office Suite)	Nos.	2
UPS for 120min backup (1 KVA)	Nos.	2
OPE (Paper/toner)	Years	3
Multi-Function Laser (Print/Scan/Copy)	Nos.	2

SECTION 4.8 IT INFRASTRUCTURE AT THE DATA CENTER AND THE DISASTER RECOVERY CENTER

The Section 4.8, Page No. 71 ***is amended as***

The SI shall provide system integration services to procure and commission the required software and infrastructure at the State Data Centre and Disaster Recovery Centre, deploy the configured and customized CAS (State), addition modules developed if any, and integrate with CAS (Centre) and any External Agencies as provided in the functional scope.

The SI shall be completely responsible for the sourcing, installation, commissioning, testing and certification of the necessary software licenses and infrastructure required to deploy the Solution at the State Data Centre and at the Disaster Recovery Centre (DRC).

SI shall ensure that support and maintenance, performance and up-time levels are compliant with SLAs. SI shall coordinate with SDC in isolating the issues between solution stack and common infrastructure provided by SDC; and in ensuring that they are reported to concerned parties so that they are resolved in timely manner.

To ensure redundancy requirements are met, SI shall ensure that infrastructure procured by the SI has redundancy built in. SI shall also provide descriptive 'Deployment Model, Diagrams and Details' so that redundancy requirements for the common Data Center infrastructure can be addressed

CAS (State) will be developed in two distinct technology stacks by the SDA at the Center. The SI is expected to bid with one of the technology stacks in the response to this RFP. SI shall procure all the necessary underlying solution components required to deploy the CAS (State) solution for the State.

State will provide the premises for Primary Data Centre (DC) for hosting the solution as well as the Disaster Recovery Centre (DRC). The SI is responsible for sizing the hardware to support the scalability and performance requirements of the solution. The SI shall ensure that the servers and storage are sized adequately and redundancy is built into the architecture that is required meet the service levels mentioned in the RFP.

- The SI shall be responsible for the sizing of necessary hardware and determining the specifications of the same in order to meet the requirements of State.
- SI shall provide a Bill of Material that specifies all the hardware, software and any additional components of solution for the State Data Centre and DRC, in detail so as to facilitate sizing of common Data Centre and DRC infrastructure such as Racks, Power and Cooling, Bandwidth among other components. The common DC and DRC infrastructure shall be provided by State.
- SI shall ensure that effective Remote Management features exist in solution so that issues can be addressed by the SI in a timely and effective manner; and frequent visits to Data Centre /DRC can be avoided.
- After commissioning and testing of the entire system at State Data Center / DRC, the SI shall support the State in getting the system certified by a 3rd party agency identified by State.

- State will provide the premises for Primary Data Centre (DC) and Disaster Recovery Centre (DRC) for hosting the solution. The solution shall be hosted in a collocation model in the Data Centers.

The following common data Centre services will be available to the SI through the Data Centre Operator / Data Centre Service Provider (DCO):

1. Power and Cooling
2. UPS, DG set power backup
3. Internet Bandwidth and SWAN Connectivity
4. LAN
5. Firewall
6. Intrusion Protection System
7. Common Data Centre facility Maintenance and Support

The SI is responsible for the below at the Data Centre / DRC:

1. Servers for database, application, web services, directory services, backup and communication and email services.
2. Storage and Backup solution which includes Storage Area Network (SAN), SAN switches, Tape Library, Backup software, FC-IP Router
3. All necessary software components including but not limited to Operating System.

The indicative specifications for different Servers are provided as Annexure VI of Vol I of this RFP.

Note - SI is responsible for sizing the hardware to support the scalability and performance requirements of the solution. The SI shall ensure that the servers are sized adequately and redundancy is built into the architecture that is required to meet the service levels mentioned in the RFP.

SECTION 4.11 CAPACITY BUILDING

Identification of Trainers (Internal) (Page No. 83)

The System integrator is responsible for providing the following trainings for CCTNS

1. Awareness and sensitization of benefits of IT
2. Basic Computer Awareness & Role based training for application users
3. Trainers Training
4. Administration & Support Training

Stands amended as

The System integrator is responsible for providing the following trainings for CCTNS

1. Role based training for application users
2. Trainers Training
3. Administration & Support Training

Develop training material - Para 3 (Page No. 86)

SI shall ensure that the training content meets all the objectives of the training course. The material shall be developed in English, Hindi and vernacular language. SI shall also develop the training material for delivery through Computer Based Training, Instructor Led Training, Online User Material/Help Manuals and Job Aids. SI shall provide detailed training material providing step-by-step approach in soft and hard copies to all police stations and offices for reference.

Stands amended as

SI shall ensure that the training content meets all the objectives of the training course. The material shall be developed in **English and Marathi**. SI shall also develop the training material for delivery through Computer Based Training, Instructor Led Training, Online User Material/Help Manuals and Job Aids. SI shall provide detailed training material providing step-by-step approach in soft and hard copies to all police stations and offices for reference.

SECTION 4.12 HANDHOLDING SUPPORT

*The section 4.12, Page No.91 **is amended as below***

System Integrator would be required to provide Handholding support to the department once the department has commissioned CCTNS solution in the entire state of Maharashtra. As part of handholding support the System Integrator will provide one qualified and trained person exclusively per two police stations for a period of 1 year to handhold the staff in the police station and ensure that the staffs in that police station are able to use CCTNS on their own by the end of the handholding period. Handholding support would be required only after the successful commissioning of Core Application and the necessary infrastructure and completion of capacity building and change management initiatives in respective police stations. The deployed qualified trained person should support the office for 12 hours on all weekdays and may remain off from duty on Sundays. However, if situation demands the trained person shall remain present late during the day or on the holidays (including Sundays).

As part of handholding the SI will be required to provide training to the concerned staff members of the Police Station and other concerned officers regarding implemented CCTNS solution on continuous basis for a period of one year and help them to resolve their issues with the new system on a day to day basis to meet the Service Levels mentioned for Handholding supporting in the Annexure II to this RFP document. The training should be focused on providing knowledge transfer to the staff members of the Police Stations so as to increase their awareness and acceptability of the application and the new computerized system as a whole. The scope in terms of providing training shall include the following:

- The SI will be required to provide training to the staff members of the Police Station and other concerned officers (as required by conducting workshops) on the software applications to be developed as a part of this project. The training should cover both the general aspects of the computer educations as well as about the application software.
- The SI will bear the cost of providing the training; supply of course material, any consumables, and IT infrastructure required for training etc. while Maharashtra Police will provide the training premises.
- The SI will carry out all the major amendments required by Maharashtra Police in the

CCTNS application. It is important to mention that the requests for amendments during Handholding support, i.e. for one year post Go-Live of complete system in the State shall not be eligible for any type of Change requests by SI.

- Continuity of operations
 - As and when newer versions of system or application software are introduced within the currency of handholding support, SI will provide required training documentation along with each release of patch / upgrade and will provide training to the concerned police officers.
 - In case of new additions to the staff members in the Police Station, the SI will be required to provide the aforementioned training to them as well, during the occurrence of handholding support (i.e. one year).

The desired qualification of the handholding staff has been specified below –

Handholding Staff	
Desired Qualification / Experience	<ul style="list-style-type: none"> • M. Sc (IT/CS) / PGDCA / BCA /B.Sc (IT/CS) • Overall experience of 1-2 year of Application Software/LAN/WAN/PC troubleshooting, Data Entry on Computer Applications, Working proficiency on office suite. • Full computer literacy and excellent communication fluency in Marathi language.
Location	Police Stations
Manpower	Approximately 517 Persons
Service Window	12 (8:30 am to 8:30 pm) X 6

Information of all Police locations regarding engagement of handholding personnel has been provided in Geographical scope in this RFP.

The SI should provide resource deployment chart as per the format below, for the entire handholding period of 1 year covering all locations.

Sr. No.	Name of Police Station	Name of person deployed for handholding support	Responsibility	Qualification/ Certification	Period of deployment

SECTION 4.15 SCOPE OF SERVICES DURING POST-IMPLEMENTATION PHASE**Para 2 (Page No.96)**

SI shall provide the Operations and Maintenance Services for period of 5 years following the deployment and “Go-Live” of the solution in the State. In case each District is declared as “Go-Live” at different instances during the project roll-out, the Operations and Maintenance Services for the District will start following the deployment and “Go-Live” of the solution in the District and SI shall continue to provide the Operations and Maintenance Support for a period of 5 years following the deployment and “Go-Live” of the solution in the last District.

Stands amended as

SI shall provide the Operations and Maintenance Services for period of 5 years following the deployment and “Go-Live” of the solution in the State. In case each District is declared as “Go-Live” at different instances during the project roll-out, the Operations and Maintenance Services for the District will start following the deployment and “Go-Live” of the solution in the District and SI shall continue to provide the Operations and Maintenance Support for a period of 5 years following the deployment and “Go-Live” of the solution in the last District. **Operations and Maintenance services for CIPA police stations shall also be part of the scope of services during post implementation phase. Kindly note that for CIPA phase III police stations the existing warranty support is till February 2014.**

SECTION 7. ANNEXURE II: POST IMPLEMENTATION SUPPORT SERVICES**As part of Warranty Support (Page No. 106)**

As part of the warranty services SI should provide:

2. SI shall obtain the five year product warranty and five year onsite free service warranty on all licensed software, computer hardware and peripherals, networking equipments and other equipment

Stands amended as

2. SI shall obtain the five year product warranty and five year onsite free service warranty on all licensed software, computer hardware and peripherals, networking equipments and other equipment. **SI shall also be responsible for warranty support of all the CIPA police stations. Kindly note that for CIPA phase III police stations the existing warranty support is till February 2014.**

SECTION 5 IMPLEMENTATION AND ROLL-OUT PLAN

Para 3 (Page No.98) -

One of the important factors that would determine the success of the CCTNS implementation in the Maharashtra Police is the continuous availability of domain experts to the implementation team. SI shall put together a team of domain experts with a minimum of 10 years of experience in the State Police Department who will work on this project on a full time basis during the entire duration of the project.

Stands amended as -

One of the important factors that would determine the success of the CCTNS implementation in the Maharashtra Police is the continuous availability of domain experts to the implementation team. SI shall put together a team of domain experts in the State Police Department who will work on this project on a full time basis during the entire duration of the project.

*In the overall timelines table (Page No. 99), the **handholding support at the police stations** to be provided by the SI after the Go-live of the project will be for **One (1) year**.*

Time lines for the Deliverables have been added to the section as given below -

Sr. No.	Deliverable	Time Line (Weeks)
1.	Overall Project Plan	T+3
2.	CAS Configuration / Customization / Extension	
a.	Requirements Traceability Matrix	T+3
b.	Refined Functional Requirements Specification	T+4
c.	Systems Requirement Specification	T+4
d.	Design Document (High Level Design and Low Level Design)	T+4
e.	Test Plans	T+8
f.	CAS Configuration / Customization / Extension Document	T+12
g.	Change / Reference Document documenting changes to the base version of CAS (State)	T+24
3.	Data Migration Strategy and Methodology including Detailed Data Migration Plan	T+6
4.	Change Management and Capacity Building	

Sr. No.	Deliverable	Time Line (Weeks)
a.	Overall Change Management Plan	T+4
b.	Content for Change Management including Awareness and Communications Program	T+6
c.	Overall Capacity Building Plan and District-wise Training Schedule and Curriculum	T+9
d.	Training Material	T+13
5.	District-wise Roll-out / Implementation Plans	T+25

SECTION 7 ANNEXURE II: POST IMPLEMENTATION SUPPORT SERVICES

3. Handholding Services (Page No. 106)

- c. Support for the end users at each of the locations including deployment of one competent person at each police station for a period of six months to handhold the staff after the Core application and the necessary infrastructure are successfully commissioned in the police stations.

Stands amended as

3. Handholding Services

- c. Support for the end users at each of the locations including deployment of one competent person per two police stations for a period of **one year** to handhold the staff after the Core application and the necessary infrastructure are successfully commissioned in the police stations.

SECTION 8 ANNEXURE III: SERVICE LEVELS

3. Interpretations (Page No. 114)

- a. The business hours are 8:30AM to 5:30PM on all working days (Mon-Sat) excluding Public Holidays or any other Holidays observed by the Maharashtra Police. The SI however recognizes the fact that the Maharashtra Police offices will require to work beyond the business hours on need basis.

Stands amended as

- a. The business hours are **8:30AM to 8:30PM** on all working days (Mon-Sat) excluding Public Holidays or any other Holidays observed by the Maharashtra Police. The SI however recognizes

the fact that the Maharashtra Police offices will require to work beyond the business hours on need basis.

Section: Implementation Phase SLAs

Delivery Related Service Level Agreement (SLA) Criteria: -

1. Service Metrics Parameter: Capacity building (Page No.118)

Delivery Related Service Level Agreement (SLA) Criteria								
Explanation: The deduction mentioned in this table shall be made from the next due payment to the vendor for services provided on Statewide basis.								
Sr. No.	Service Metrics	Baseline	Lower Performance		Violation of Service level agreement		Basis of Measurement	Remarks
		Metric	Metric	Deduction	Metric	Deduction		
3	Capacity building	Atleast 80% of the Audience should give a rating of satisfactory and above	Less than 80% and more than 60% attendees finding the	Rs.500 / trainee	Less than 60% Marks obtained by a trainee	Rs. 1,000 per trainee	Result of examination, post training	The feedback of the attendees must be taken after every training session and this feedback should be leveraged for

The above Service Level Agreement (SLA) criterion has been amended as below -

Delivery Related Service Level Agreement (SLA) Criteria								
Explanation: The deduction mentioned in this table shall be made from the next due payment to the vendor for services provided on Statewide basis.								
Sr. No.	Service Metrics	Baseline	Lower Performance		Violation of Service level agreement		Basis of Measurement	Remarks
		Metric	Metric	Deduction	Metric	Deduction		
	Capacity building	Atleast 80% of the Audience should give a rating of satisfactory and above	Less than 80% and more than 60% attendees finding the training satisfactory	Rs.15000 / training session	Less than 60% attendees finding the training satisfactory	Rs.25000 /training session	Feedback survey to be provided to each attendee	The feedback of the attendees must be taken after every training session and this feedback should be leveraged for improving the capacity building program

Section: Post Implementation Phase SLAs**Service Level Description : Infrastructure Availability (Page No. 122)**

Service Level Description	Measurement
Infrastructure Availability	<p>Recovery Point Objective (RPO) (Zero data loss in case of failure at Primary DC) should be zero minutes</p> <p>Severity of Violation: High</p> <p>Each instance of non-meeting this service level will be treated as two (2) Violations.</p>

Stands amended as

Service Level Description	Measurement
Infrastructure Availability	<p>Recovery Point Objective (RPO) should be less than sixty minutes</p> <p>Severity of Violation: High</p> <p>Each instance of non-meeting this service level will be treated as two (2) Violations.</p>

Network Uptime related Service Level Agreement (SLA) Criteria: - (Page No.131)

Note - SLA for network uptime specified in RFP Vol I, Annexure III: Service Levels, Post Implementation Phase SLA's, Sec 5 : Network Uptime Detailed SLAs has been removed.

SECTION 11 ANNEXURE VI: INDICATIVE TECHNICAL SPECIFICATIONS**Technical Specifications for Multi-Function Laser (Print/Scan/Copy) (Page No. 151) is amended as**

Multi-Function Laser (Print/Scan/Copy)	<ul style="list-style-type: none"> • Mini. Resolution of 600X600 dpi • Mini. duty cycle of 8000 sheets/month • Interface: USB 2.0 and Ethernet 10/100 Mbps • Flatbed scanning and copying • Mini. 64 mb memory • Mini. print speed 25 ppm • Fax • Linux. Windows XP, Vista, 7 compatible • A4, Executive, Legal, Letter, custom sizes • Three years onsite warranty
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Technical Specification of UPS for 120 min backup (15KVA) (Page No. 155) has been amended as:

<p>UPS for 120min backup (15KVA)</p>	<ul style="list-style-type: none"> • Battery backup: mini. 120 minutes at full load • Rating: 15KVA • PWM Technology using Microprocessor Controlled, True On-Line Double Conversion Technology, switching frequency : 20KHz or higher • Crest Factor: Minimum 3:1 at full load • Output Wave Form: Sine wave • Cold Start feature (DC Power on)Should be provided • Input Power Factor at Full Load>0.90 • Input: Three Phase 4 Wire • Input voltage: 228 V AC to 478 V AC • Input frequency: 50 Hz +/- 3Hz • Output Voltage: 230V AC, Single Phase,+/- 2% from no load to full load and over entire input voltage/frequency range) • Output Frequency: 50Hz+/- 0.5% (Free running); +/- 3% (Sync. Mode) • Inverter efficiency: >85% • Over All AC-AC Efficiency: >85% • Static Switch(Bidirectional): Should be provided and should take care of 100% load transfer • Load Power Factor: Should be at least 0.7lagging (i.e. 5KVA = 3.5KW or better) • Overload Capacity: 105%-infinite, 125%-1 Minute,150%- 1 second • UPS Shutdown: UPS should shutdown with an alarm and indication on following conditions 1)Output over voltage 2)Output under voltage 3)Battery low 4)Inverter overload 5)Over temperature 6)Output short • Protections: Input should have MCB and output should be electronically protected, also battery connection should have MCB/MCCB/Fuse, surge protection, battery low warning • Bypass Switch: Required for all ratings • Total Harmonic Distortion: <3% for linear load and <8% for Non-Linear Load • Indicators: AC Mains, Load on Battery, Load Level, Battery Low Warning, Inverter On, UPS on Bypass, Overload, etc • Metering: Input Voltage, Output Voltage and frequency, battery voltage, output current etc (LCD /LED or through Software) • Battery: Sealed Maintenance Free • Battery housings: Closed housing in a cubicle with suitable louvers or racks • Audio Alarm: Battery low, Mains Failure, over temperature, Inverter overload, Fault, etc. • Operating Temperature: 0 to 45 degrees centigrade • Humidity: 10-90% Relative humidity • Warranty: OEM Warranty on site for three years for UPS and
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	battery <ul style="list-style-type: none"> • Short Circuit Protection: MCB/MCCB should trip or UPS should shutdown without blowing any fuses • Input Over Voltage: UPS should be absolutely safe in case of high voltage at input
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Following technical specifications have been added to the Annexure VI : Indicative Technical Specifications: -

Technical Specifications for Digital Camera

Items	Specifications
Pixels	12 mega pixels or higher
LCD Monitor Type	TFT
Display size	2.7 Inches or Higher
Recording Format	JPEG
Zoom	4X or Higher
ISO sensitivity setting	Auto / 80 / 100 / 200 / 400 / 800 / 1600 / High
Recording Media	SD memory card, SDHC memory card, SDXC memory card, Multimedia Card – min. 4 GB size
Optical Zoom During Movie Recording	Yes
Auto Focus Range	Approx: (W)=3 cm to infinity, (T)= 80 cm to infinity
Self Timer	Yes
Shooting Modes	Auto, Portrait, Landscape, Night Snapshot, Indoor, Face self-timer, Low Light, Beach, Underwater, Foliage, Snow, Fireworks, Long Shutter, Movie, Documents

White Balance	Auto / Daylight / Cloudy / Fluorescent / Incandescent / Flash
Flash Function	Auto/ Red Eye Reduction/Off/Face detection/noise reduction
USB Connectivity	Yes (Hi- Speed)
Battery Backup	Min. 120 Minutes
Operating system Support	Window XP / Vista / 7/ Linux

Technical Specifications for Finger Print Scanner

Items	Specifications
Resolution	Minimum 500 ppi or above
Dynamic Range	8 bit 256 level Grey Scale
Sensor Type	Optical
Sensing Area	46 mm X 46 mm or better
Image Capture Ability	Minimum 10 frames / second
Computer Interface / Power Interface	USB 2.0 (500 mA @ 5V)
Operating Temperature	0 degrees to 55 degrees Centigrade
System requirements	Windows XP and Linux
Humidity Range	10-90% Non Condensing /Splash Resistant
Uniform Illumination	Less than 30% Variation from Center to corners
Active Platen Area	800 x 750 pixels
Finger Print Image Quality	Forensic – Quality Flat Fingerprint Image

Light Rejection	Should have Ambient Light Rejection
Auto Capture & brightness	Should be enable with auto capture & Adjustable brightness
Certifications	ISO-IEC 19794-4: 2005 FBI PIV-071006 Single Finger Cap FIPS 201 PIV EN 55022:2006, EN 55024:1998 + A1:2001+ A2: 2003

Technical Specifications for Electronic Pen

Items	Specifications
Data Communication	USB 1.1 standard (also supports USB 2.G standard), Bluetooth 1.2 standard
Built-in battery	Rechargeable battery
Continuous writing time	2 hours or longer Standby time : 1 hour minimum without cap
Charging time	Approx. 2 hours (from 0 to100% charge)
Charging method	Dock cradle or USB adapter
Operating system Support	Window XP/ Vista/ 7/ Linux

Technical Specifications for 160 Gb HDD

Items	Specifications
Type	Internal – Serial ATA
Speed	5400 RPM or higher
Hard disk size	160 Gb

Technical specifications for Electric Cabling:

Scope of Electrical cabling, is to provide power supply for devices installed. System Integrator is responsible for supply, install, testing, commissioning and maintenance of electrical cabling for supplying power to run installed devices at police locations.

- Total 5 Electrical Points Including 3 Switches & 3 Sockets in Each Point, (2 No. 5-Amps and 1 No. 15 Amps.) - Point wiring using ISI approved PVC Conduit / Casing Capping, 1.1 KV grade 2.5 square meter FRLS Cu flexible wire including supply of wire, switch, socket and GI Box. Including all necessary hardware & accessories complete, material and labor as per requirement of the Maharashtra Police. For point wiring having Average Point length is 12 to 18 Meters.
- UPS & Generator Set Cabling: Electrical Cabling for Network Rack, Four Computer Points, separate cabling for Two Printers from main input and and all other accessories as per requirement

Technical specifications for Earthing and Earth Pit:

Adequate earthing through underground earth pit should be prepared that prevent causes generated from improper power supply. Separate Copper Plate Earthing (With Plate Size 300X300X3 MM), The Earth resistance should not exceed 2.5 Ohms, and Ground to earth Voltage should not be more than 3 volts.

Technical specifications for Wall mounted network rack – 9U

- 19" Wall mount, 9 U height
- Minimum Powder coated steel Body with front door of glass.
- Completely covered & have security locks.
- Proper ventilated with One Fan, One Cable Manager, Power Distribution Unit of 6
- No. (5 and 5 Amp) Sockets with surge protection, mounting Accessories,
- Fitted with Copper Strip for earthing the equipments

Technical Specifications for Cat- 6 Patch Panel

Items	Specifications
Type	24 or 12 port patch panel as per requirement, Unshielded Twisted Pair, Category 6, ANSI/TIA/EIA 568- B.2.1
Category	Category 6
Circuit identification scheme	Port Labeling for port identification on each of 24-ports

Port identification	Labels on each of 24/48-ports (to be included in supply)
Height	1 U (1.75 inches)
Modular jack	750 mating cycles

Technical Specifications for Information Outlet Cat 6(Single Port wall mounted)

Items	Specifications
Type	24 or 12 port patch panel as per requirement, Unshielded Twisted Pair, Category 6, ANSI/TIA/EIA 568- B.2.1
Material	Category 6
No. of ports	Port Labeling for port identification on each of 24-ports
Protection	Labels on each of 24/48-ports (to be included in supply)
Identification	1 U (1.75 inches)

Technical Specifications for Cat-6 Patch Cord (1-Meter & 2-Meter)

Items	Specifications
Length	1 meter & 2 meter
Conductor	24 AWG 7 / 32, stranded copper
Cable type	UTP CAT 6 ANSI/TIA/EIA 568-B.2.1
Plug protection	Matching colored boot to maintain bend radius
Warranty	20-year component warranty
Category	Category 6
Terminals	Phosphor Bronze with gold plating
Jacket	PVC
Insulation	Flame retardant

Technical Specifications for 24 Port 10/100/1000 Unmanaged Switch

- **OEM Make: Top 5 in IDC /Gartner reports (quarter ending December '10 or March '11) in terms of market share of units sold**
- 24 auto sensing 10/100/1000 Ethernet ports
- All ports to have 10/100/1000 Base-Tx / RJ45 Media Interface
- Ethernet Switching features like, store and forward; Full and Half duplex auto negotiation;
- LED Indicators which spot faults and check status of individual ports
- Automatic Sensing of link speed, duplex mode and cable type
- 802.3X congestion control
- Accessories like Power cord, User guide etc to be supplied with the switch
- Warranty Certificate

Technical Specifications for 24 Port 10/100/1000 and 2 Fibre Uplinks Managed Switch

- **OEM Make - Top 5 in IDC /Gartner reports (quarter ending December '10 or March '11) in terms of market share of units sold**
- 24 10/100/1000 Base-TX Ethernet ports and extra 2 nos 1000Base-SX/LX (shared or combo)
- All ports can auto-negotiate between 10Mbps /100Mbps/ 1000Mbps, half-duplex or full duplex and flow control for half-duplex ports.
- Support 8K MAC address.
- 32 Gbps or more switching fabric capacity
- Packet Forwarding Rate should be 35.0 Mpps
- The switch must support Port Mirroring, Port Trunking and 802.3ad LACP Link Aggregation port trunks to allow creation of Ethernet channeling with other devices
- Support IEEE 802.3x flow control for full-duplex mode ports.
- Support 802.1D Spanning Tree Protocol (STP), 802.1S, 802.1w, Rate Limiting, 802.1Q VLAN encapsulation, Up to 255 VLANs per switch and up to 4000 VLAN Ids
- Support IGMP v1, v2 and v3 snooping
- 802.1p Priority Queues, port mirroring, DiffServ
- Support based on 802.1p priority bits with at least 8 queues
- DHCP support & DHCP snooping /relay/optional 82/server support

Shaped Round Robin (SRR) or WRR scheduling support

- Support for Strict priority queuing & Sflow
- Support for IPv6 ready features with dual stack

Access control

- Support port security
- Support 802.1x (Port based network access control).
- Support for MAC filtering.
- Should support TACACS+ and RADIUS authentication

VLAN

- Support 802.1Q Tagged VLAN and port based VLANs and Private VLAN
- The switch must support dynamic VLAN Registration or equivalent

Protocol and Traffic

- Network Time Protocol or equivalent Simple Network Time Protocol support
- Switch should support traffic segmentation
- Traffic classification should be based on user-definable application types: TOS, DSCP, Port based, TCP/UDP port number

Management

- Switch needs to have RS-232 console port for management via a console terminal or PC
- Must have support SNMP v1, v2 and v3.
- Should support 4 Groups of RMON
- Should have accessibility using Telnet, SSH, Console access, easier software upgrade through network using TFTP etc. Configuration management through CLI, GUI based software utility and using web interface

Technical Specifications for 48 port 10/100/1000 and 2 fibre uplinks managed switch

- **OEM Make: Top 5 in IDC /Gartner reports (quarter ending December '10 or March '11) in terms of market share of units sold**
- 48 10/100/1000 Base-TX Ethernet ports and extra 2 nos 1000Base-SX/LX ports (shared or combo)
- All ports can auto-negotiate between 10Mbps /100Mbps/ 1000Mbps, half-duplex or full duplex and flow control for half-duplex ports.
- Support 8K MAC address.
- 32 Gbps or more switching fabric capacity
- Packet Forwarding Rate should be 70.0 Mpps
- The switch must support Port Mirroring, Port Trunking and 802.3ad LACP Link Aggregation port trunks to allow creation of Ethernet channeling with other devices
- Support IEEE 802.3x flow control for full-duplex mode ports.
- Support 802.1D Spanning Tree Protocol (STP), 802.1S, 802.1w, Rate Limiting, 802.1Q VLAN encapsulation, Up to 255 VLANs per switch and up to 4000 VLAN Ids
- Support IGMP v1, v2 and v3 snooping
- 802.1p Priority Queues, port mirroring, DiffServ
- Support based on 802.1p priority bits with at least 8 queues
- DHCP support & DHCP snooping /relay/optional 82/server support
- Shaped Round Robin (SRR) or WRR scheduling support.
- Support for Strict priority queuing & Sflow
- Support for IPv6 ready features with dual stack

Access control

- Support port security
- Support 802.1x (Port based network access control).
- Support for MAC filtering.
- Should support TACACS+ and RADIUS authentication

VLAN

- Support 802.1Q Tagged VLAN and port based VLANs and Private VLAN

- The switch must support dynamic VLAN Registration or equivalent

Protocol and Traffic

- Network Time Protocol or equivalent Simple Network Time Protocol support
- Switch should support traffic segmentation
- Traffic classification should be based on user-definable application types: TOS, DSCP, Port based, TCP/UDP port number

Management

- Switch needs to have RS-232 console port for management via a console terminal or PC
- Must have support SNMP v1, v2 and v3.
- Should support 4 Groups of RMON
- Should have accessibility using Telnet, SSH, Console access, easier software upgrade through network using TFTP etc. Configuration management through CLI, GUI based software utility and using web interface

Following Specifications of furniture required are added-

Type	Details
Computer Table Size: L 910 x W 610 x H 728 mm	Top: Size 910 x 610 mm made of 18 mm thick pre laminated medium density fiber (MDF) board ISI Marked (IS: 14587-1998). The top shall be firmly screwed on 25x25x1 mm square iron/steel tube frame.
	Upper side of laminated board shall be in natural teak shade while the bottom side shall be white/cream shade.
	Sliding key Board tray: A Sliding key Board tray shall be made of 18mm pre laminated medium density fiber board of size 725x450 mm. The gap between top and tray shall be 100mm.
	Key board tray shall slide smoothly on sliding channel duly powder coated having nylon roller arrangement.
	The storage shelf for CVT : A storage shelf made of 18 mm particle board shall be provided along with the length of the table at bottom about 100 mm above from the ground level. Shelves shall be screwed on frame work of 25x25x1 mm square tube. The shelf shall be covered from back side with 18mm pre laminated medium density fiber board
	Steel Structure: The rigid steel structure shall consist of two nos. rectangular base tubes of size 50x25x1.25 mm about 520 mm length placed along the width on vertical tubes of size 25x25x1 mm shall be

Type	Details
	<p>welded for fixing up of side panels. A supporting frame of 25x25x1 mm square tube shall be welded on the top of the tubes for the side panels as shown for supporting the top of the table.</p> <p>The base tube shall be provided with adjustable shoes 2 nos. on each side.</p> <p>Painting: Complete steel structure shall be pretreated and powder coated with minimum thickness of 60 microns coating.</p>
<p>Printer Table</p> <p>Size: L 610 x W 610 x H 660 mm</p>	<p>Shelves : 3 no. made of 18mm thick pre laminated Medium Density Fiber Board(MDF) ISI marked (IS 14587 – 1998)</p> <p>Top shelve size 610x610 mm for placing printing unit.</p> <p>Middle Shelve size 460x330 mm for placing feet on stationary.</p> <p>Bottom shelve size 460x380 mm for collecting print out.</p> <p>The top faces of the shelf shall be natural teak wood shade.</p> <p>The bottom faces shall be in plain white/cream shades.</p> <p>Structure: The structure shall be made from square and rectangular steel tubes duly welded finished and powder coated.</p> <p>Vertical tubes shall be welded in two rectangular bottom tubes 50x25x1.25</p> <p>The horizontal tube 25x25x1 mm thick 330 m long shall be welded over vertical tubes 25 mm off the center width /depth wise.</p> <p>Panels made of 18 mm pre laminated particle board shall be screwed rigidly between vertical tubes on both sides.</p> <p>Two nos. bottom support tubes 50x25x1.25mm thick shall also be provided with two nos. of adjustment shoes.</p> <p>A rectangular slot of size 455x25 mm shall be provided on top shelve along with length for feeding stationary. A slot shall be covered with PVC insertion for safely of paper.</p> <p>The ends of bottom and top shall be plugged with PVC/ plastic caps.</p> <p>Painting: Complete steel structure shall be pretreated and powder coated with minimum thickness of 60 microns coating.</p>

Type	Details
Computer Chair with Handle	Seat size shall be 430x430 mm on 10 mm. thick molded comm. ply with 60 mm thick 40 density molded PU foam
	Back rest size shall be 400x300 mm on 10 mm thick molded comm. ply with 40 mm thick 32 density molded PU foam covered with tapestry
	The height of back rest shall be 900x500 mm for top and bottom edges respectively. The back rest shall be provided with lifting arrangement on flat iron & helical spring.
	Two nos. suitable PU handles shall be provided. The base stand should be made up of 5 prongs duly pressed welded together centrally with a pedestal bush with good quality twin wheel castors. The stand and other metal parts excluding central spindle shall be powder coated. Complete steel structure shall be pretreated and powder coated with minimum thickness of 60 microns coating.
	A central spindle of 25mm diameter rod without threads shall be provided with revolving arrangements. The adjustable height of chair shall be from 530 to 570 mm.
	A good quality tapestry cloth shall be provided on seat & back in attractive color/ shade.

Additional components with technical Specifications required for Data Centre / Disaster Recovery (DR) site**Server load balancer**

- 10/100/1000Mbps Ethernet Ports – minimum 2 ports upgradeable to 4 ports
- Memory: Minimum 1 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
- 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

Blade Servers for Infrastructure Services (Backup 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 / 2000 MT/s FSB
- Processor should be latest series/generation for the server model being quoted
- Min 16 GB FBD 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
- 2 X (1000BASE-T) Tx Gigabit LAN ports with TCP / IP offload engine support / dedicated chipset for network I/O on blade server

- 2 X 146GB HDD or more hot swappable 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

Storage and Backup Solution

SAN Switches - 2 Nos

- Minimum 16 Active ports (each with minimum port speed 4 GB) within same switch upgradeable to 32 ports with minimum 2 Nos. of additional 10 Gbps 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 Fans and Hot plug 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 Fibre Channel trace route and Fibre 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) – 1 no

- **SAN controller**
 - Dual Active Active Controller

- **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
- **RAID levels Supported**
 - 0, 1, 5 / 6
- **Fans and power supplies**
 - Dual redundant, hot-swappable
- **SAN support**
 - Box should be compatible of SAN environment
- **SAN specifications shall have the following**
 - The storage array shall be configured with at least 8 GB cache scalable to min 16 GB mirrored across two storage controllers for disk I/O operations.
 - Storage subsystem shall support 146GB, 300GB 15K RPM disks and 400GB or higher 10 K RPM Fiber channel drives & 750GB, 1TB SATA or higher SATA / equivalent drives in the same device 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 while maintaining the existing investment.
 - The storage array proposed should have an upgrade path from the earlier generation product to the current generation product.
 - 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 not only support the supplied storage and operating systems but should also support heterogeneous storage and operating systems from different OEMs.
 - The storage array must have complete cache protection mechanism either by destaging data or providing complete cache data protection with battery backup for up to 72 hours or more.
 - The storage system should be scalable from 10 to50 TB of raw capacity using 40% on Fiber Channel drives and 60% on SATA / equivalent drives using the same configuration as Quoted in this tender”. The Storage should have at least 2ports of 4 Gbps Frontend ports and 2 no’s of back end ports of 4Gbps”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 across heterogeneous storage arrays from different OEMs.
 - The storage array should support Operating System Platforms & Clustering including: Windows Server 2003 (Enterprise Edition), Sun Solaris, HP-UX, IBMAIX, Linux / Solaris for x86.

- 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 (as disk based encryption).
- Should support storage virtualization, i.e. Easy logical drive expansion.
- Should support hot-swappable physical drive raid array expansion with the addition of extra hard disks
- The storage system should be scalable from 10 TB to 50 TB of raw capacity using 40% on 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"
- 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

Tape Library - 1 no

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 cartridge 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 object's
- 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
- All software licenses should be in the name of Maharashtra Police and should be a perpetual license, i.e. the software license should not expire after the contract period. The software Licenses should be comprehensive and no further licenses should be required for DC/DR operations. The software installed should necessarily be the latest version at the time of actual implementation.

FC-IP Router – 2 nos.

- **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) Port Speed**
 - 1 Gigabit Ethernet
- **Aggregate Bandwidth**
 - min 125 MB/s
- **Protocol Support**
 - FCP
 - iSCSI
- **High-Availability Features**
 - Two-way active/active clustering with failover and failback capabilities
 - Multiple iSCSI connections provide multipathing support from a single gateway to as many as 100 servers.
- **Management Features**
 - CLI (by Telnet, SSH, or console)
- **iSCSI Gateway Manager**
 - SNMP
 - Allows for monitoring traffic statistics on each storage and network interface, fan and temperature and iSCSI session details.

ANNEXURE XI – INTEGRATED INVESTIGATION FORMS (1-7)

The integrated investigation forms have been added as an annexure XI to Volume I of the RFP. The Annexure is appended at the last of this corrigendum document.

2. VOLUME II: EVALUATION AND PAYMENT TERMS

SECTION 2.4 PRE-QUALIFICATION CRITERIA

Sr.No. (h), Point no. (vii) (Page no. 19 of Vol II of RFP)

The bidder (System Integrator) must have been assessed and must possess a valid certification for **CMMi Level 3 or above** as on the date of contract signing and the certificate should be valid for atleast 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:

1. The last valid CMMi Level 3 or above certificate of the company
2. 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 or above 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.

Stands amended as

The bidder (System Integrator) must have valid certification for CMMi Level 3 or above, as on the date of submission of the bid.

Sr.No. (h), Point no. (viii) (Page no. 20 of Vol II of RFP)

The bidder (System Integrator) 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 atleast a period of one year from the date of submission of the bid.

Stands amended as

The bidder (System Integrator) must have valid ISO 9001 or above certificate, as on the date of submission of the bid.

SECTION 4 PAYMENT TERMS AND SCHEDULE

4.3. PAYMENT SCHEDULES AND MILESTONES (Page No. 40 of Vol II)

The successful bidder will sign a Service Level Agreement (SLA) with Maharashtra Police covering all the required services.

The payment schedule and milestones are divided into **two phases**:

A. Implementation Phase

B. Operations and Maintenance Phase

4.3.1. MILESTONES AND PAYMENT SCHEDULES FOR IMPLEMENTATION PHASE

S. No.	Payment Milestones for the Implementation phase	% Payment
A. Implementation Phase		
1.	M1: Advance against submission of Bank Guarantee	10 %
2.	M2: Pre – Go Live Readiness* at all Police Stations & higher offices in all Districts	30 %
3.	M3: Go-Live** at all Police Stations & higher offices in all Districts	50 %
4.	M4: Successful integration with CAS (Center) and successful transfer of the data for three months in succession	10 %

Note: All payments to the Implementation Vendor shall be made upon submission of invoices along with relevant sign-offs from Maharashtra Police.

1. *Pre – Go Live Readiness of Districts requires Completion and Acceptance of the following activities in at least 50% of the Police Stations / Higher Offices in each of the Districts
 - SRS, design documents, test cases and test plan
 - Data Migration / Digitization
 - Capacity Building Program covering the targeted personnel
 - Change Management Initiatives covering the targeted personnel
 - Site Preparation
 - Delivery and Commissioning of Client Side Infrastructure
 - Networking
2. **Go-Live requires Completion and Acceptance of the following activities in at least 85% of the Police Stations / Higher Offices in each of the Districts
 - SRS, design documents, test cases and test plan
 - Data Migration / Digitization
 - Capacity Building Program covering the targeted personnel
 - Change Management Initiatives covering the targeted personnel
 - Site Preparation
 - Delivery and Commissioning of Client Side Infrastructure
 - Networking
 - Commission of the Configured, Customized, and Extended CAS (State)

The PS / HO have completely migrated to the new application and the police station and the higher offices' personnel are successfully conducting the intended functions through the application.

The above payments are subject to meeting of SLA's failing which the appropriate deductions as mentioned in the SLA section of Vol 1 of this RFP.

4.3.2. Milestones and payment Schedules for Operations and Maintenance Phase

The operations and maintenance phase is for a period of five years post Go-Live in the last district. The lump-sum cost quoted for the Operations and Maintenance Phase will be divided into 10 equated instalments and made as 10 equal payments upon satisfactorily adhering to the SLAs. The payments during the Operations and Maintenance Phase will be made at the end of every six months after the delivery of the services upon satisfactorily adhering to the SLAs defined in the volume 1 of this RFP. The successful bidder will be required to submit a compliance report at the end of every month and a consolidated compliance report at the end of 6 months based on which these payments would be made.

Please note:

- The above payments are subject to meeting of SLA's failing which the appropriate deductions as mentioned in the SLA section of Vol. 1 of this RFP
- All the hardware proposed under this project should be along with an AMC for 5 years post Successful Go-Live of the project
- The successful bidder will also be responsible to maintain the AMC for the existing hardware that bidder will use during the implementation of this project.
- The payment will be made on the basis of the actual quantity of the items procured. CLIENT will have the right for reduction / addition in the quantity proposed. Any payments will be done on the basis of the unit rates quoted by the bidder in the Commercial bid.
- The cost for the manpower will also be done on the actual basis i.e. category of the manpower deployed and the period of deployment.
- For the payment purposes, price reduction shall be applied on pro rata basis on all head, sub heads and items of the commercial bid.
- Any fluctuation in prices due to inflation, tax regulations, will be borne by the bidder and not be passed on to CLIENT
- Whenever the penalty is levied on System Integrator for failing to meet the required SLA, the half year instalment shall be paid and the penalty (if any) will be adjusted in the subsequent half yearly instalment (s)
- Any delay on account of CLIENT officials (and not attributable to the SI) shall not be taken into account while computing adherence to service levels for the SI. While CLIENT will ensure that any Sign off / Comments are provided within a period of 15 working days from the submission of deliverables by the SI.
- Any monetary figure in decimal shall be rounded off to the nearest INR

SECTION 7 FORMAT FOR BID RESPONSE – COMMERCIAL BID

B. Form 1 – Pricing Summary (Page No. 69 of Vol II)

The following clause has been added –

- 1. Bid would be liable for rejection if the total price quoted for the IMPLEMENTATION PHASE (i.e. CAPEX) is more than 50 % of the overall bid value..**
- 2. Maharashtra Police reserves its right to alter the scope (increase / reduce quantity of items or remove certain items / components)**

The forms *have been amended as:*

Form 1 – Pricing Summary –

Sr. No.	Description	Total Price (INR)	Taxes and Other Duties	Total Amount (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 3 rd party acceptance testing, audit and certification				
2.	Site preparation at the Client site locations (police stations, Sub-divisions, Ranges, ACP Offices, SCRB, DCP Offices, Addl. SP Offices, Jt. CP and Addl. CP Offices, Special Offices, Commissionerates, Police HQ & District HQ).				
3.	IT Infrastructure at the Client site locations (police stations, Sub-divisions, Ranges, ACP Offices, SCRB, DCP Offices, Addl. SP Offices, Jt. CP and Addl. CP Offices, Special Offices, Commissionerates, Police HQ, District HQ, Police control rooms, FSL and FPB)				
4.	IT infrastructure at Data centre and Disaster recovery site including the necessary hardware and software				
5.	Data Digitization, Cleansing and migration of Historical Data				
6.	Change Management , Capacity Building				
7.	Handholding Support (One person for two Police stations for One year)				
A	Sub-total for Services Provided During Implementation Phase (Sum of items 1 – 7):				
Services Provided During Post Implementation Phase					

Sr. No.	Description	Total Price (INR)	Taxes and Other Duties	Total Amount (INR)	Total Amount in Words
8.	Operations and Maintenance Services for the 1 st year after "Go-Live"				
9.	Operations and Maintenance Services for the 2 nd year after "Go-Live"				
10.	Operations and Maintenance Services for the 3 rd year after "Go-Live"				
11.	Operations and Maintenance Services for the 4 th year after "Go-Live"				
12.	Operations and Maintenance Services for the 5 th year after "Go-Live"				
B	Sub-total for Services Provided During Post Implementation Phase (Sum of items 8 – 12):				
C	Blended Person Month Cost for 300 Person Months				
	Grand Total for Consideration of L1 (A + B + C)				

Note : Bid is liable to be rejected if the total price quoted for the IMPLEMENTATION PHASE is more than 50 % of the overall bid value.

Form 2: Detailed Component-Wise Pricing

Note : Maharashtra Police reserves its right to alter the scope (increase quantity / remove certain items / components)

Sr. No.	Category	Component	No. of Components / Units of Service (X)	Rate (Per unit) (Y)	Total Cost (=X*Y)
A: Hardware Related Costs with the AMC for the period of 5 years from the Go-Live of the project					
1.	Infrastructure / Hardware	PCs	5583		
		HDD 160GB	1033		
		Duplex Laser Printer	802		

	Multi-Function Laser (Print/Scan/Copy)	2054		
	UPS for 120min backup (1KVA)	1393		
	UPS for 120min backup (5 KVA)	37		
	UPS for 120min backup (15 KVA)	12		
	2 KVA Generator Set	1033		
	Fingerprint Reader	1033		
	Digital Camera	1033		
	Electronic Pen	1033		
	24-Port Unmanaged Switch	1567		
	24-Port Managed Switch	47		
	48-Port Managed Switch	1		
	OPE for 3 years (Paper/Toner)	Across 1672 Locations (Police Stations & Higher Offices)		
	Adequate furniture	1384		
	Electrical Cabling	1384		
	Earthing and Earth Pit	1384		
	Wall mountable network rack – 9U	1615		
	Patch panel – 12	1615		

		ports CAT 6			
		Information Outlet CAT 6	9342		
		CAT 6 cable with cabling (in meters)	175110		
		Patch Cords - 1 Meters CAT 6	1386		
		Patch Cords - 2 Meters CAT 6	9342		
2.	Infrastructure Installation and Testing / Miscellaneous Charges				

Total A.

B : Application Development

Sr. No.	Category	Component	No. of Components / Units of Service (X)	Rate (Per unit) (Y)	Total Cost (=X*Y)
1.	Application and Portal Development				

Total B.

C: Operations and Maintenance Costs (Quarterly Expenses for 5 years of contract after "Go-Live") – as detailed in RFP Volume 1

Sr. No.	Category	Component	No. of Components / Units of Service (X)	Rate (Per unit) (Y)	Total Cost (=X*Y)
1.	Application Maintenance & Operational Expense including upgradation, deployment of patches, fixes etc.				

2.	Infrastructure Maintenance Expense (Helpdesk, deployed hardware etc.)				
Total C.					
D: Support Manpower					
Sr. No.	Category	Component	No. of Components / Units of Service (X)	Rate (Per unit) (Y)	Total Cost (=X*Y)
1.	Programmer				
2.	System Analyst				
3.	Database Administrator				
4.	Project Manager				
5.	Any other				
Total D.					
E. Data Digitization, Data Cleansing and Data Migration					
Sr. No.	Category	Component	Approximate No. of Records (X)	Rate per Record (Y)	Total Cost (=X*Y)
E.1. Cost of digitization of data(IIF 1-7 forms)					
1.	IIF 1		562,752		
2.	IIF 2		820,680		
3.	IIF 3		633,096		
4.	IIF 4		1,805,496		
5.	IIF 5		1,242,744		
6.	IIF 6		2,161,906		

7.	IIF 7		2,274,456		
	Total (E1)		9,501,130		
E.2. Data Cleansing and Data Migration: Cost of data cleansing and migrating data from existing system to new system. Following data has already been digitized.					
1.	IIF 1		1,782,048		
2.	IIF 2		1,524,120		
3.	IIF 3		1,711,704		
4.	IIF 4		539,304		
5.	IIF 5		1,102,056		
6.	IIF 6		182,894		
7.	IIF 7		70,344		
	Total (E2)		6,912,470		
	Grand Total (E1 + E2)		16,413,600		

F. Training Cost

Sr. No.	Category	Component	No. of Components / Units of Service (X)	Rate (Per unit) (Y)	Total Cost (=X*Y)
1.	Capacity Building & Change Management	Role based training for application users	Approx - 110000 Personnel		
2.		Trainers Training	Approx - 8200 Personnel		
3.		System Administration	Approx - 7100 Personnel		
Total F.					

G. Data Centre Related Costs					
Sr. No.	Category	Component	No. of Components / Units of Service (X)	Rate (Per unit) (Y)	Total Cost (=X*Y)
1.	Deployment and AMC of requisite infrastructure at Data Centre	Data Centre Storage Cost			
2.		Disaster recovery (DR) storage cost			
3.		Data Center Servers Cost			
4.		DR Center Servers Cost			
5.		Automated Tape Library (ATL) for Data Center			
6.		Software for Data Center and DR Center			
7.		Manpower for Data Centers 2nos. x 3shifts for 5 yrs.			
8.		AMC for Hardware and System Software provided by SI for DC and DR			
Total G.					

3. VOLUME III: MASTER SERVICE AGREEMENT

(II) SERVICE LEVEL AGREEMENT

ARTICLE I: General Provisions of the Service Level Agreement

1.10 Annexure: Detailed SLAs

Delivery Related Service Level Agreement (SLA) Criteria: -

1. Service Metrics Parameter : Capacity building (Page 62 of Vol III of RFP)

Delivery Related Service Level Agreement (SLA) Criteria								
Explanation: The deduction mentioned in this table shall be made from the next due payment to the vendor for services provided on Statewide basis.								
Sr.No.	Service Metrics Parameters	Baseline	Lower Performance		Violation of Service level agreement		Basis of Measurement	Remarks
		Metric	Metric	Deduction	Metric	Deduction		
3	Capacity building	Atleast 80% of the Audience should give a rating of satisfactory and above	Less than 80% and more than 60% attendees finding the training satisfactory	Rs.500 / trainee	Less than 60% Marks obtained by a trainee	Rs. 1,000 per trainee	Result of examination,post training	The feedback of the Attendees must be taken after every training session and this feedback should be leveraged for improving the capacity building program

The above Service Level Agreement (SLA) criterion has been amended as below -

Delivery Related Service Level Agreement (SLA) Criteria								
Explanation: The deduction mentioned in this table shall be made from the next due payment to the vendor for services provided on Statewide basis.								
Sr.No.	Service Metrics Parameters	Baseline	Lower Performance		Violation of Service level agreement		Basis of Measurement	Remarks
		Metric	Metric	Deduction	Metric	Deduction		
3	Capacity building	Atleast 80% of the Audience should give a rating of satisfactory and above	Less than 80% and more than 60% attendees finding the training satisfactory	Rs.15000 / training session	Less than 60% attendees finding the training satisfactory	Rs.25000/ training session	Feedback survey to be provided to each attendee	The feedback of the attendees must be taken after every training session and this feedback should be leveraged for improving the capacity building program

Section: Post Implementation Phase SLAs

Service Level Description : Infrastructure Availability (Page No. 68 of Vol III of RFP)

Service Level Description	Measurement
Infrastructure Availability	Recovery Point Objective (RPO) (Zero data loss in case of failure at Primary DC) should be zero minutes Severity of Violation: High Each instance of non-meeting this service level will be treated as two (2) Violations.

Stands amended as

Service Level Description	Measurement
Infrastructure Availability	Recovery Point Objective (RPO) should be less than sixty minutes Severity of Violation: High Each instance of non-meeting this service level will be treated as two (2) Violations.

Network Uptime related Service Level Agreement (SLA) Criteria: - (Page No.76 of Vol III of RFP)

Note - SLA for network uptime specified on RFP Vol III Annexure 1.10 Detailed SLAs Pg. No. 76-77 has been removed.

(I) LIST OF SCHEDULES**(II) SCHEDULE VI: TERMS OF PAYMENT SCHEDULE****Section 6.6 Payment Schedule, (Page No. 111 of Vol III of RFP)****6.6.1. Milestones and Payment Schedules for Implementation Phase**

S. No.	Payment Milestones for the Implementation phase	% Payment
1.	M1: Advance against submission of Bank Guarantee	10%
2.	M2: Pre – Go Live Readiness ¹ at all Police Stations & higher offices in all Districts	30%
3.	M3: Go-Live ² at all Police Stations & higher offices in all Districts	50%
4.	M4: Successful integration with CAS (Center) and successful transfer of the data for three months in succession	10%

SCHEDULE VII: IMPLEMENTATION PLAN AND DELIVERABLES

The section (Page No, 113 of Vol III of RFP) has been amended as follows -

<i>Phase 1</i>	Timelines (Weeks)
Kick off meeting with System Integrator (SI)	T ¹
Process & System study by the SI	T+3
Site preparation	T+18
Procurement and installation of hardware	T +21
Customization of core modules of CAS	T+25 ²
"Integration of CAS with External Agencies such as Courts, Jails etc."	T+25
Data Centre commissioning	T+26
Inter-connectivity of police offices and police stations	T+29
Preparation of data digitization templates/application	T+8
Data entry into the templates/application	T+26
Final acceptance and Roll out of CAS at Police Stations and Supervisory Offices	T+30
Capacity building (Training of personnel)	T+39 (Ongoing Activity)
Handholding	T+39 (Ongoing Activity after Final Acceptance for 1 year)

¹ Actual Start from the date of signing of Contract between Maharashtra Police and System Integrator

² Subject to receipt of CAS (State) from NCRB

Phase 2 – Ongoing Activities	
Release of subsequent versions of CAS (if available) and customization if any at the state level	T+51
Capacity building (Training of personnel)	T+51 (Ongoing Activity)
Handholding	T+57 (Ongoing Activity after Final Acceptance for 1 year)

List of Indicative Deliverables:

1. Overall Project Plan
2. CAS Configuration / Customization / Extension
 - a. Requirements Traceability Matrix
 - b. Refined Functional Requirements Specification
 - c. Systems Requirement Specification
 - d. Design Document (High Level Design and Low Level Design)
 - e. Test Plans
 - f. CAS Configuration / Customization / Extension Document
 - g. Change / Reference Document documenting changes to the base version of CAS (State)
3. Data Migration Strategy and Methodology including Detailed Data Migration Plan
4. Change Management and Capacity Building
 - a. Overall Change Management Plan
 - b. Content for Change Management including Awareness and Communications Program
 - c. Overall Capacity Building Plan and District-wise Training Schedule and Curriculum
 - d. Training Material
5. District-wise Roll-out / Implementation Plans

Time lines for the Deliverables have been given below -

Sr. No.	Deliverable	Time Line (Weeks)
1.	Overall Project Plan	T+3
2.	CAS Configuration / Customization / Extension	
a.	Requirements Traceability Matrix	T+3
b.	Refined Functional Requirements Specification	T+4

c.	Systems Requirement Specification	T+4
d.	Design Document (High Level Design and Low Level Design)	T+4
e.	Test Plans	T+8
f.	CAS Configuration / Customization / Extension Document	T+12
g.	Change / Reference Document documenting changes to the base version of CAS (State)	T+24
3.	Data Migration Strategy and Methodology including Detailed Data Migration Plan	T+6
4.	Change Management and Capacity Building	
a.	Overall Change Management Plan	T+4
b.	Content for Change Management including Awareness and Communications Program	T+6
c.	Overall Capacity Building Plan and District-wise Training Schedule and Curriculum	T+9
d.	Training Material	T+13
5.	District-wise Roll-out / Implementation Plans	T+25

SCHEDULE VIII: PROJECT FINANCIALS SCHEDULE

Sec 8.1, Form 1 – Pricing Summary, Page No. 116 of Vol III of RFP

The following clause has been added –

- 1. Bid is liable to be rejected if the total price quoted for the IMPLEMENTATION PHASE is more than 50 % of the overall bid value.**
- 2. Maharashtra Police reserves its right to alter the scope (increase quantity / remove certain items / components)**

The forms ***have been amended as:***

Form 1 – Pricing Summary

Sr. No.	Description	Total Price (INR)	Taxes and Other Duties	Total Amount (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 3 rd party acceptance testing, audit and certification				
2.	Site preparation at the Client site locations (police stations, Sub-divisions, Ranges, ACP Offices, SCRB, DCP Offices, Addl. SP Offices, Jt. CP and Addl. CP Offices, Special Offices, Commissionerates, Police HQ & District HQ).				
3.	IT Infrastructure at the Client site locations (police stations, Sub-divisions, Ranges, ACP Offices, SCRB, DCP Offices, Addl. SP Offices, Jt. CP and Addl. CP Offices, Special Offices, Commissionerates, Police HQ, District HQ, Police control rooms, FSL and FPB).				
4.	IT infrastructure at Data centre and Disaster recovery site including the necessary hardware and software				
5.	Data Digitization, Cleansing and migration of Historical Data				
6.	Change Management , Capacity Building				
7.	Handholding Support (One person for two Police stations for One year)				
A	Sub-total for Services Provided During Implementation Phase (Sum of items 1 – 7):				
Services Provided During Post Implementation Phase					
8.	Operations and Maintenance Services				

Sr. No.	Description	Total Price (INR)	Taxes and Other Duties	Total Amount (INR)	Total Amount in Words
	for the 1 st year after “Go-Live”				
9.	Operations and Maintenance Services for the 2 nd year after “Go-Live”				
10.	Operations and Maintenance Services for the 3 rd year after “Go-Live”				
11.	Operations and Maintenance Services for the 4 th year after “Go-Live”				
12.	Operations and Maintenance Services for the 5 th year after “Go-Live”				
B	Sub-total for Services Provided During Post Implementation Phase (Sum of items 8 – 12):				
C	Blended Person Month Cost for 300 Person Months				
	Grand Total for Consideration of L1 (A + B + C)				

Note : Bid is liable to be rejected if the total price quoted for the IMPLEMENTATION PHASE is more than 50 % of the overall bid value.

Form 2 – Details of Cost Component

Note : Maharashtra Police reserves its right to alter the scope (increase quantity / remove certain items / components)

Sr. No.	Category	Component	No. of Components / Units of Service (X)	Rate (Per unit) (Y)	Total Cost (=X*Y)
A: Hardware Related Costs with the AMC for the period of 5 years from the Go-Live of the project					
1.	Infrastructure / Hardware	PCs	5583		
		HDD 160GB	1033		
		Duplex Laser Printer	802		

	Multi-Function Laser (Print/Scan/Copy)	2054		
	UPS for 120min backup (1KVA)	1393		
	UPS for 120min backup (5 KVA)	37		
	UPS for 120min backup (15 KVA)	12		
	2 KVA Generator Set	1033		
	Fingerprint Reader	1033		
	Digital Camera	1033		
	Electronic Pen	1033		
	24-Port Unmanaged Switch	1567		
	24-Port Managed Switch	47		
	48-Port Managed Switch	1		
	OPE for 3 years (Paper/Toner)	Across 1672 Locations (Police Stations & Higher Offices)		
	Adequate furniture	1384		
	Electrical Cabling	1384		
	Earthing and Earth Pit	1384		
	Wall mountable network rack – 9U	1615		
	Patch panel – 12	1615		

		ports CAT 6			
		Information Outlet CAT 6	9342		
		CAT 6 cable with cabling (in meters)	175110		
		Patch Cords - 1 Meters CAT 6	1386		
		Patch Cords - 2 Meters CAT 6	9342		
2.	Infrastructure Installation and Testing / Miscellaneous Charges				
Total A.					
B : Application Development					
Sr. No.	Category	Component	No. of Components / Units of Service (X)	Rate (Per unit) (Y)	Total Cost (=X*Y)
1.	Application and Portal Development				
Total B.					
C: Operations and Maintenance Costs (Quarterly Expenses for 5 years of contract after "Go-Live") – as detailed in RFP Volume 1					
Sr. No.	Category	Component	No. of Components / Units of Service (X)	Rate (Per unit) (Y)	Total Cost (=X*Y)
1.	Application Maintenance & Operational Expense including upgradation, deployment of				

	patches, fixes etc.				
2.	Infrastructure Maintenance Expense (Helpdesk, deployed hardware etc.)				

Total C.

D: Support Manpower

Sr. No.	Category	Component	No. of Components / Units of Service (X)	Rate (Per unit)(Y)	Total Cost (=X*Y)
1.	Programmer				
2.	System Analyst				
3.	Database Administrator				
4.	Project Manager				
5.	Any other				

Total D.

E. Data Digitization, Data Cleansing and Data Migration

Sr. No.	Category	Component	Approximate No. of Records (X)	Rate per Record(Y)	Total Cost (=X*Y)
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E.1. Cost of digitization of data(IIF 1-7 forms)

1.	IIF 1		562,752		
2.	IIF 2		820,680		
3.	IIF 3		633,096		
4.	IIF 4		1,805,496		

5.	IIF 5		1,242,744		
6.	IIF 6		2,161,906		
7.	IIF 7		2,274,456		
	Total (E1)		9,501,130		

E.2. Data Cleansing and Data Migration: Cost of data cleansing and migrating data from existing system to new system. Following data has already been digitized.

1.	IIF 1		1,782,048		
2.	IIF 2		1,524,120		
3.	IIF 3		1,711,704		
4.	IIF 4		539,304		
5.	IIF 5		1,102,056		
6.	IIF 6		182,894		
7.	IIF 7		70,344		
	Total (E2)		6,912,470		
	Grand Total (E1 + E2)		16,413,600		

F. Training Cost

Sr. No.	Category	Component	No. of Components / Units of Service (X)	Rate (Per unit) (Y)	Total Cost (=X*Y)
1.	Capacity building and change management	Role based training for application users	Approx - 110000 Personnel		
2.		Trainers Training	Approx - 8200 Personnel		
3.		System Administrati	Approx -		

		on	7100 Personnel		
Total F.					
G. Data Centre Related Costs					
Sr. No.	Category	Component	No. of Components / Units of Service (X)	Rate (Per unit)(Y)	Total Cost (=X*Y)
1.	Deployment and AMC of requisite infrastructure at Data Centre	Data Center Storage Cost			
2.		Disaster Recovery (DR) Storage Cost			
3.		Data Center Servers Cost			
4.		DR Center Servers Cost			
5.		Automated Tape Library (ATL) for Data Center			
6.		Software for Data Center and DR Center			
7.		Manpower for Data Centers 2nos. x 3shifts for 5 yrs.			
8.		AMC for Hardware and System Software provided by SI for DC and DR.			
Total G.					