CRIME & CRIMINAL TRACKING NETWORK AND SYSTEM (CCTNS)

CORRIGENDUM No. 03, DATED 18-JUNE-2011

To

REQUEST FOR PROPOSAL

FOR

SELECTION OF SI FOR

IMPLEMENTATION OF CCTNS

IN ODISHA

DEPARTMENT OF HOME, GOVERNMENT OF ODISHA

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I.   Request for Proposal Volume I

Please note that all the components, equipment and materials to be supplied under this assignment, should be Brand New.

1.1 Section 4 : Geographocal Scope of the project

1.   Clause 4.1 table 5 *stands amended as*

Table 1 Geographical coverage

Sr. No.	Districts in Phase I	No. of Offices
1.	STATE POLICE HEAD QUARTER	1
2.	Commissioners Office	1
3.	RANGE Offices	9
4.	District HQs	36
5.	Sub Divisional Police Offices (SDPO)	96
6.	Assistant Commissioner of Police offices & Deputy Commissioner of Police Offices	16
7.	State Crime Records Bureau (SCRB)	1
8.	Crime Branch	1
9.	Human Rights Protection Cell (HRPC)	1
10.	State Forensic Science Laboratories (SFSL)	1
11.	Police Stations	579
12.	District Control Room	36
13.	State Control Room	1
14.	Finger Print Bureau (FPB)	1
15.	Additional Higher Offices (to be decided by the State and executed at maximum of Rs. 2.46 Lakhs per Office)	4

1.2 Section 5: Scope of Services During Implementation Phase

1.   **Clause 5.3 : Data Migration**

   a)   The Hardware supplied under CIPA purchased during the year 2007-08

   b)   Data digitization of 10 years records with Odisha Police is mentioned in the below.

Table 10 stands amended as

Table 2 Digitization

Sr. No	Register/Forms Name	Number of Records/pages(in lakhs)
1.	FIR	7.95715
2.	Case Diary	7.95715
3.	Final Form	7.95715
4.	Modus Operandi Register	0.6369
5.	Alphabetical Register	0.6369
6.	Crime Index	0.8685
7.	History sheet	0.2895
8.	Non FIR Cases	3
9.	UD Cases	1.7
10.	Malkhana Register	1.737

Non FIR cases, UD Cases & Malkhana Register is to be digitized at maximum of Rs. 39.6 Lakhs

2. **Clause 5.5: Site preparation at Police Stations and Higher Offices**

   a) Table 14 as mentioned in Clause 5.5 *stands amended as*

Table 3 Client Site-Bill of Material

Sr. No.	Items	Quantity (Indicative only)
1.	Client Systems	3216
2.	Operating System-Pre Loaded Windows 7 Professional	3216
3.	Licenses for MS Office	869
4.	Free Open Offices (All Desktops excluding ones with MS Offices)	2347
5.	HDD 160 GB	579
6.	Duplex Laser Printer	579
7.	Multi-Function Laser	1177
8.	UPS for 120min backup	742
9.	Generator	579
10.	16-Port Switch	742
11.	Fingerprint Reader	579
12.	Digital Camera	579
13.	Electronic Pen	579
14.	LAN Cabling	Average cable length per point 15 meter, other accessories as required.

b) Ensuring acceptance testing, audit and certification through 3rd party Agency to be decided by Govt of Odisha

c) Table 13: LAN Cabling stands amended as

Table 4 LAN Cabling

Items	Total Quantity	Specifications
LAN Cabling	Average cable length per point 15 meter, other accessories as required.	As per the details below

d) Fixing and maintenance of furniture like computer tables, chairs and other item shall be carried out to ensure successful site preparation and installation of CCTNS at every access location

Stands amended as
Procurement, Fixation and maintenance of furniture like computer tables, chairs is not in scope of work of SI

3. **5.7 Co-ordination and Management of Network Connectivity**
NOC and central Helpdesk would be set up in the SCRB premise in Bhubaneswar by the SI, sitting space for which (for 5-10 persons) would be provided by the Government. The responsibility of commissioning and management of these would be to SI; however Government would provision the connectivity - SI to suggest the required bandwidth for the same.

4. **Clause 5.8 Point 2: IT Infrastructure at the Data Center And Disaster Recovery Center**
The disaster recovery site shall have the Storage, Servers and other related infrastructure

1. **UTP CABLE**

Table 5 UTP Cable

Sr. No.	Details	Specification	Complied / Not Complied
1	Type	Unshielded Twisted Pair, Category 6, TIA / EIA 568-C.2 & ISO/IEC 11801	
2	Conductors	23 AWG solid bare copper	
3	Insulation	Polyethylene	
4	Jacket	Flame Retardant PVC	
	Pair Separator	Cross-member (+) fluted Spline.	
5	Approvals	(a) UL Listed / UL Verified	
		(b) ETL verified to TIA / EIA Cat 6	
6	Operating temperature	-20 Deg. C to +60 Deg. C	

Sr. No.	Details	Specification	Complied / Not Complied
	Storage Temperature	-20 Deg. C to +80 Deg. C	
7	Frequency tested up to	Minimum 600 MHz	
8	Packing	Box of 305 meters	
9	Cable Outer Diameter	.23 inches	
10	ROHS Compliant	ROHS/ELV Compliant	
11	Warranty	25 year systems warranty; Warranty to cover Bandwidth of the specified and installed cabling system, and the installation costs	
12	Performance characteristics to be provided along with bid	(a) Attenuation, Pair-to-pair and PS NEXT, ELFEXT and PSELFEXT, Return Loss, ACR and PS ACR for 4-connector channel	
		(b) Should perform to CAT6 with short channel	
		(c) 4-Connectors channel testing to the Cat 6 Cabling system as per the ANSI/TIA 568 C.2 & as well as the ISO 11801 standards up to 600 MHz	
		(d)Should have a PSNEXT margin of 7.5 dB over CAT6	
		(e) CAT6 cabling system should be tested and verified by the Independent third party laboratories for Zero BER (Bit Error Rate) testing at the data transmission speed of 1 Gbit/s.	

2. **UTP JACKS**

Table 6 UTP Jacks

Sr No.	Details	Specification	Complied / Not Complied
1	Type	PCB based, Unshielded Twisted Pair, Category 6, TIA /EIA 568-C.2 and ISO/IEC 11801	
2	Modular Jack	750 mating cycles	
3	Wire terminal	200 termination cycles	
4	Accessories	Integrated bend-limiting strain-relief unit for cable entry	

Sr No.	Details	Specification	Complied / Not Complied
		Integrated hinged dust cover	
		Support cable pair termination process on the jacks at 90 degree angle.	
		Bidder should have a mechanism to maintain the quality of the termination ir-respective of the skill level of the termination staff.	
5	Housing	Polyphenylene oxide, 94V-0 rated.	
	Approvals	(a) UL Listed / CSA Approved	
		(b) ETL verified to TIA / EIA Cat 6	
6	Performance Characteristics to be provided with bid	Attenuation, NEXT, PS NEXT, FEXT and Return Loss	
7	ROHS Compliant	ROHS/ELV Compliant	
8	Jack contacts	Beryllium copper, plated with 1.27 mm [.000050] thick gold in localized area and 3.81 mm [.000150] minimum thick tin-lead in solder area over 1.27 mm [.000050] minimum thick nickel under plate	
9	Wiring blocks	Polycarbonate, 94V-0 rated	

3.   **UTP JACK PANELS 24 PORT**

Table 7 UTP Jack Panels 24 Port

Sr. No.	Details	Specification	Complied / Not Complied
1	Type	24-port, Unloaded Modular, PCB based, Unshielded Twisted Pair, Category 6, TIA / EIA 568-C.2 and ISO/IEC 11801	
2	Ports	24	
3	Port arrangement	Configured as 6 Port Module with individually replaceable CAT-6 Jacks	
4	Circuit Identification	Front of each module shall be capable of accepting 9 mm to 12 mm labels	
5	Port Identification	9mm or 12mm Labels on each of 24-ports (to be included in supply	
6	Modular Jack	750 mating cycles	
7	Wire terminal	200 termination cycles	
10	Approvals	UL listed / ETL Verified	

11	Termination Pattern	TIA / EIA 568 A and B;	
12	ROHS Compliant	ROHS/ELV Compliant	
13	Jack contacts	Beryllium copper, plated with 1.27 mm [.000050] thick gold in localized area and 3.81 mm [.000150] minimum thick tin-lead in solder area over 1.27 mm [.000050] minimum thick nickel under plate	
14	Wiring blocks	Polycarbonate, 94V-0 rated	

4. PATCH CORDS

Table 8 Patch Cords

Sr No.	Details	Specification	Complied / Not Complied
1	Type	Unshielded Twisted Pair, Category 6, TIA / EIA 568-C.2 & ISO/IEC 11801	
2	Conductor	24 AWG 7 / 32, stranded copper conductors 100 Ohm	
3	Length	4 feet, 7 feet, 10 feet	
4	Plug Protection	Transparent Slim boot	
5	Warranty	25-year component	
6	Insulation	Flame Retardant Polyethylene	
7	ROHS Compliant	ROHS/ELV Compliant	

5. FACE PLATE

Table 9 Face Plate

Sr No.	Details	Specification	Complied / Not Complied
1	Type	Single Gang	
2	Material	ABS / UL 94 V-0	
3	No. of ports	One/Two/Four	
4	ROHS Compliant	ROHS/ELV Compliant	

5. 5.7 Co-ordination and Management of Network Connectivity

The SI should liaison with network service provider (Primary & Secondary) for successful implementation of the project

5.   **Section 5.8: IT Infrastructure at the Data Center And Disaster Recovery Center**

Table 20: BoM at DC and DR _stands amended as_

Table 10 BoM at DC and DR

Sr. No.	Items	QTY at Data Center	QTY at Disaster Recovery
1.	Application Server	2	1
2.	Database Server	2	1
3.	Web Server	2	1
4.	Management Server	2	2
5.	Mail/Messaging Server	2	
6.	Servers for Staging / Testing / Training Environment/Back up/Others.	3	
7.	Firewalls & IPS	2	1
8.	SAN Storage	1	1
9.	SAN Switch	2	1
10.	Tape Library along with the tapes	1	1
11.	Server Load Balancer	2	1
12.	KVM over IP	2	1
13.	Core Switch	2	1
14.	Router	2	1
15.	Back UP Software for Data Centre and DR	1	1
16.	Enterprise Management System (EMS)	1	-
17.	Appliance based Hardware Security Module (HSM) for PKI Security and Encryption.	2	1
18.	OS and Application – as per the Stack	-	-

1.3 Section 6: Scope of Services During Post-Implementation (Operation & Management) Phase

Fuel for generators will be provided by the Odisha Police. The pricing for fuel should not be included in the costing.

1.4 Section 7: Implementation And Roll-Out Plan
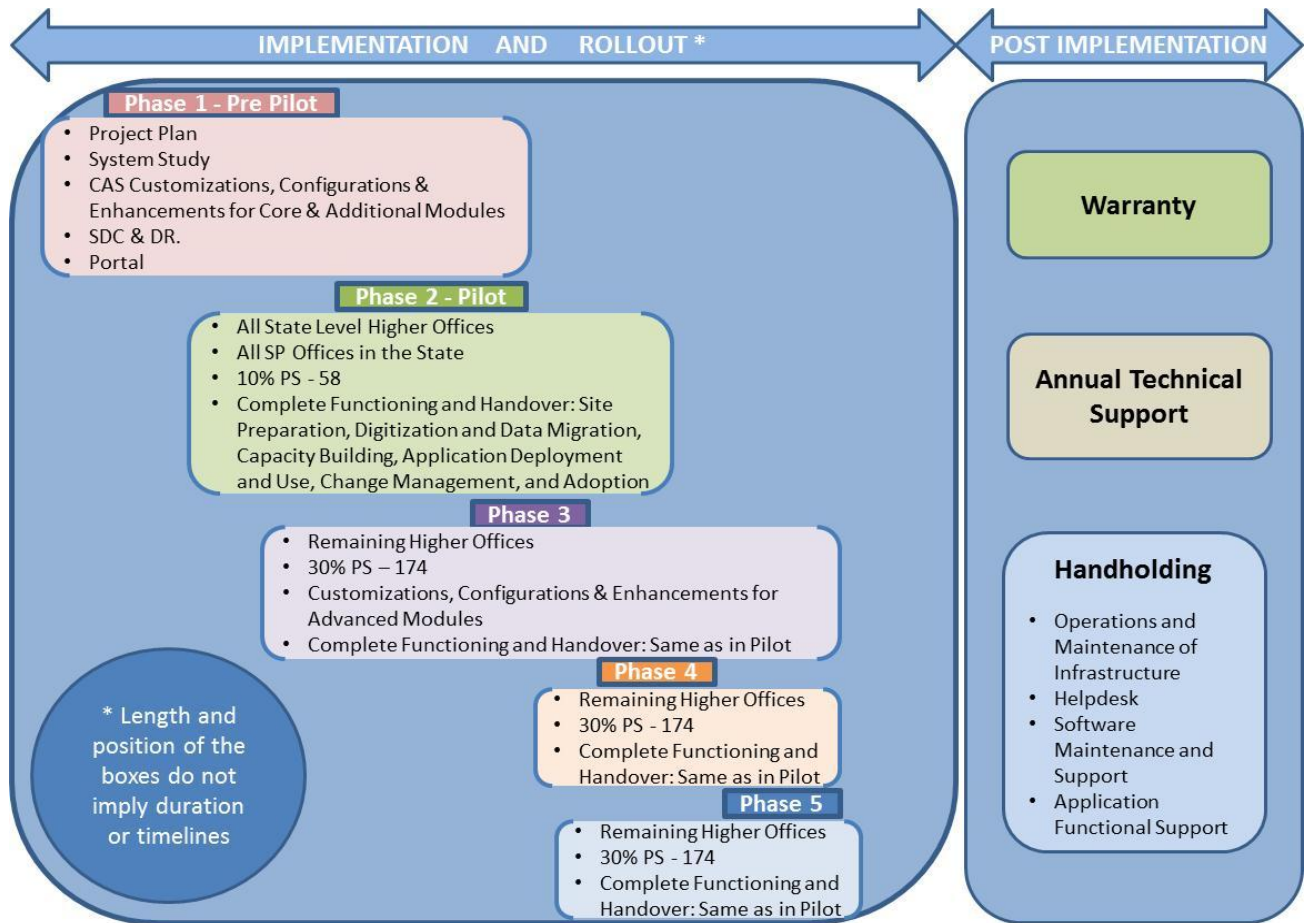
INDICATIVE PLAN _stands amended as_

The Geographic Implementation and Rollout Plan will follow the following template:

a. Pre Pilot (Phase 1):
    i.   Project Plan (Work Plan, Resource Plan, Risk Plan)
    ii.   System Study
    iii. CAS Configuration, Customizations and Enhancements of Core and Additional Modules.
    iv.   CCTNS Setup at State Data Center and Disaster Recovery Site

b. Pilot (Phase 2)
    i.   To cover 58 (10%) of the Police Stations as detailed below:
        • Bhubaneswar-Cuttack Commissionerate, Bhubaneswar: 23 Police Stations
        • Bhubaneswar-Cuttack Commissionerate, Cuttack: 22 Police Stations
        • Puri District: 3 Police Stations
        • Khurda District: 3 Police Stations
        • Cuttack District: 7 Police Stations
    ii.   To cover all District SP Offices.
    iii. To cover all State Level Higher Offices.
    iv.   For this phase the Payment Milestone includes complete functioning and handover of the requisite number of Police Stations including but not limited to Site Preparation of these Police Stations and Higher Offices, Digitization and Data Migration of the data at these Police Stations, Capacity Building of the personnel at these Police Stations, Application Deployment at these Police Stations and Use of the application by the personnel at these Police Stations, Change Management at these Police Stations, and Adoption and of the system at these Police Stations.

c. Phase 3 – 30% of the Police Stations and remaining higher offices.
    i.   CAS Configuration, Customizations and Enhancements of Advanced Modules.
    ii.   For this phase the Work and Payment Milestone includes complete functioning and handover of the requisite number of Police Stations including but not limited to Site Preparation of these Police Stations, Digitization and Data Migration of the data at these Police Stations, Capacity Building of the personnel at these Police Stations, Application Deployment at these Police Stations and Use of the application by the personnel at these Police Stations, Change Management at these Police Stations, and Adoption and of the system at these Police Stations.

d. Phase 4 – 30% of the Police Stations and remaining higher offices.

    For this phase the Work and Payment Milestone includes complete functioning and handover of the requisite number of Police Stations including but not limited to Site Preparation of these Police Stations, Digitization and Data Migration of the data at these Police Stations, Capacity Building of the personnel at these Police Stations, Application Deployment at these Police Stations and Use of the application by the personnel at these Police Stations, Change Management at these Police Stations, and Adoption and of the system at these Police Stations.

e. Phase 5 – 30% of the Police Stations and remaining higher offices.
    For this phase the Work and Payment Milestone includes complete functioning and handover of the requisite number of Police Stations including but not limited to Site Preparation of these Police Stations, Digitization and Data Migration of the data at these Police Stations, Capacity Building of the personnel at these Police Stations, Application Deployment at these Police Stations and Use of the application by the personnel at these Police Stations, Change Management at these Police Stations, and Adoption and of the system at these Police Stations

Geographic Implementation Plan

IMPLEMENTATION   AND   ROLLOUT *   POST IMPLEMENTATION

Phase 1 - Pre Pilot
- Project Plan
- System Study
- CAS Customizations, Configurations & Enhancements for Core & Additional Modules
- SDC & DR.
- Portal

Phase 2 - Pilot
- All State Level Higher Offices
- All SP Offices in the State
- 10% PS - 58
- Complete Functioning and Handover: Site Preparation, Digitization and Data Migration, Capacity Building, Application Deployment and Use, Change Management, and Adoption

Phase 3
- Remaining Higher Offices
- 30% PS – 174
- Customizations, Configurations & Enhancements for Advanced Modules
- Complete Functioning and Handover: Same as in Pilot

Phase 4
- Remaining Higher Offices
- 30% PS - 174
- Complete Functioning and Handover: Same as in Pilot

Phase 5
- Remaining Higher Offices
- 30% PS - 174
- Complete Functioning and Handover: Same as in Pilot

* Length and position of the boxes do not imply duration or timelines

Warranty

Annual Technical Support

Handholding
- Operations and Maintenance of Infrastructure
- Helpdesk
- Software Maintenance and Support
- Application Functional Support

SI to carry out rectification of the defects pointed out and / or enhancements suggested by the SPMU during the O&M period.

Indicative Activity Based Timelines for Deliverables *

Indicative Activity Based Timelines mentioned in Table 22 _stands amended as_

Table 11 Timelines of Deliverables

1.	Preparation of detailed Project plan	T1
1.1.	Work Plan	T1+2 Weeks
1.2.	Resource Plan	T1+4 Weeks
1.3.	Risk Plan	T1+5 Week
2.	Capacity Building in State	T2
2.1.	Preparation of the Training and knowledge transfer Plan	T2+3 Weeks
2.2.	Preparation of training material	T2+9 Weeks
2.3.	Conducting training for Police personnel	T2+62 Weeks
3.	Phase One: Implementation in Pilot District	T3
3.1.	Customisation of CAS(State)	

3.1.1.	Refinement of Functional Requirements Specifications (FRS)	T3+2 Weeks
3.1.2.	Preparation of Software Requirement Specification of customisation of CAS(State)(SRS)	T3+3.5 Weeks
3.1.3.	Design Document for Customisation of CAS(State) (HLD, LLD)	T3+6.5 Weeks
3.1.4.	Parametric Customisation of Odisha CAS	
3.1.5.	Preparation of Test plan	T3+7.5 Week
3.1.6.	Preparation of Test cases	T3+9.5 Weeks
3.1.7.	Preparation of Test report	T3+10.5 Week
3.1.8.	Integration testing of CAS(State)	T3+13.5 Weeks
3.1.9.	User Acceptance testing	T3+14.5 Week
3.1.10.	Acceptance testing, Audit and certification	T3+16.5 Weeks
3.1.11.	Release of CAS(State)	T3+17 Weeks
3.2.	Setting of Data Centre	T4
3.2.1.	Site preparation for setting up of Data Centre	T4+2 Weeks
3.2.2.	Setting up of Hardware & Networking infrastructure for data Centre	T4+6 Weeks
3.2.3.	Installation of Database server, Application server etc	T4+8 Weeks
3.2.4.	Testing of functioning of DC	T4+10 Weeks
3.3.	Setting up of Disaster Recovery	T5
3.3.1.	Setting up of Hardware & Networking infrastructure for DR	T5+2 Weeks
3.3.2.	Installation of Database server, Application server etc	T5+5 Weeks
3.3.3.	Testing of functioning of DR	T5+7 Weeks
3.4.	Supply & Commissioning of Hardware at Pilot District	T6
3.4.1.	Preparation of Distribution list for Hardware to the PS	T6+1.5 Weeks
3.4.2.	Identification of Site Preparation need at remote & dilapidated PS	T6+2.5 Week
3.4.3.	Site Preparation at PS	T6+6.5 Weeks
3.4.4.	Setting up of LAN and connectivity at PS	T6+8 Weeks
3.4.5.	Distribution of hardware to PS	T6+10 Weeks
3.4.6.	Testing of functioning of PC & its connectivity	T6+10.5 Weeks
3.5.	Rollout of CAS(State) in district (Roll out plan)	T6+ 20 Weeks
3.6.	Testing of connectivity & resolution of performance issues	3 Weeks
3.7.	Data Digitization at Pilot Districts	2 Weeks
4.	**Phase Two: Implementation across the state**	**T7**
4.1.	Supply & Commissioning of Hardware at Police Station	T7+20 Weeks
4.1.1.	Preparation of Distribution list for Hardware to the PS	T7+21.5 Weeks
4.1.2.	Distribution of hardware to PS	T7+30.5 Weeks
4.1.3.	Site Preparation at PS	T7+34.5 Weeks
4.1.4.	Setting up of LAN and connectivity at PS	T7+37.5 Weeks
4.1.5.	Testing of functioning of PC & its connectivity	T7+40.5 Weeks
4.2.	Rollout of CAS(State) in district	1.5 Weeks
4.3.	Testing of connectivity & resolution of performance issues	1 Week
4.4.	Data Digitization at Pilot Districts	9 Weeks
4.5.	Maintenance of hardware	From Procurement to End of AMC/Contract (Whichever is later)

* Timelines above are indicative duration for each activity. Some activities above could overlap and hence these do not imply precedence/succession.

1.5 Annexure 5: Configuration & Customisation

1.   Clause 5.3.2 Sr No. 1

The System should have the facility to pay the Challan money. Integration with payment systems is required. UI development for kiosks is in the scope of the SI work

1.6 Annexure 6: Capacity Building and Change Manegement

All training to be provided twice by System Integrator (SI) except IT Basic 1, 2, 3 which will be provided once as it will also be provided once by the training provider.

1.7 Annexure 7: Client Side Computing Infrastructure

Technical Specification of Client Site Infrastructure _stands amended as_

1.   Desktop

Table 12 Specification-Desktop

Sr. No.	Make & Model - (To be filled by the Supplier)	Complied / Not Complied
1.	Processor: Latest generation multicore 64 bit CPU with 3.2 GHz or higher clock speed, 4MB L3 cache, Memory support DDR3 Motherboard & Chipset: OEM Motherboard	
2.	Memory Type: 4 GB DDR-III @ 1333 MHZ or higher	
3.	Memory Slot: 4 DIMM Slots	
4.	Internal Hard Disk/Speed: 250 GB SATA (7200 RPM) or higher	
5.	Optical Drive: SATA DVD Writer Drive	
6.	Display size: 18.5" TFT or more LCD Monitor, 1300 x 768 resolution with 5 ms or better response time, TCO 05 Certification	
7.	Graphics Controller: Integrated HD graphics	
8.	Form Factor: Small Form Factor	
9.	External I/O ports: Rear: 6 USB 2.0, 1 standard serial port, 2 PS/2, 1 RJ-45, 1 VGA, 1 Display Port, audio in/out; Front: 2 USB 2.0, headphone and microphone	
10.	Expansion slots: 1 half-height PCI, 2 half -height PCI Express x1, 1 half -height PCI Express x16	
11.	Network interface: Integrated Gigabit Network Connection (Intel 82567LM or equivalent or higher)	
12.	Power requirements: Indian Standard with energy star certified	
13.	Management: Desktop Management Tool	
14.	Bilingual Keyboard: PS/2 or USB Standard Keyboard (OEM approved brand)	
15.	Pointing device: USB 2-Button Optical Scroll Mouse (Same make as of pc)	

Sr. No.	Make & Model - (To be filled by the Supplier)	Complied / Not Complied
16.	System with Power management features & Desktop Management Interface implementation	
17.	Write/Boot Control, Power-On Password (via BIOS), Setup Password (via BIOS)	
18.	OS Support: Windows 7 / Linux /Centos 5.5/Ubuntu (Latest Version) Drivers should be freely available on OEM's web site	
19.	Certification: FCC, UL, Energy Star	
20.	CPU Lock with every desktop	
21.	Warranty: 5 years Comprehensive onsite warranty	
22.	**Preloaded Software:** Above configuration preloaded with Windows OS (Latest Version), Office Suite with Odiya Unicode fonts, Antivirus with all necessary Plugins/ utilities and driver software including bundled in DVD Media. For the four desktops in each Police Station, One should have MS Office and other three should have open office	

2. **Electronic Pen**

Table 13 Electronic Pen

SL	Parameters	Specifications	Complied / Not Complied
1	Technology	Ultrasound IR Technology or any other technology which is equivalent or higher. Should able to write on any surface/on any normal paper	
2	Input	Paper	
3	Input Area	A4 size and modifiable up to A3 size	
4	Pen Size	12mm diameter and 130 mm length	
5	OS	Windows, Linux	
6	SDK/APIs	All API/SDK for any OS to be given free	
7	Optional	Customisable form filling application	
8	Pen Battery Life	Not less than 60-80 hrs. of continuous writing should give XY coordinates impressions through the SDK/APIs	
9	Output files	File formats	
10	Memory	Able to store over 100 A4 fully handwritten pages	

3. On-Line UPS (2KVA) Single Phase Input & Single Phase Output

Table 14 Specifications-UPS (2KVA)

Sr. No.	Parameters	Specifications	Complied / Not Complied
1	Capacity	Minimum 2 KVA	
	Battery Backup	120minutes	
2	General		
	Inverter Technology	Pulse Width Modulation (PWM) using IGBTs, double conversion	
	Switching frequency	20 KHz or higher	
	Total Harmonic Distortion (THD) Voltage	< 2% for 100% linear load < 3% for 100% non-linear load	
	Noise level	Less than 55 dB at 1 Meter	
	Operating Temperature	0°- 50° C	
	Output Wave Form	Pure sine wave	
	Cooling	Air Cooled	
	Quality	ISO 9001 & ISO 14001 Certified	
	Compatibility	UPS to be compatible with DG Set supply	
3	Input		
	Voltage Range	160 V AC to 280 V AC	
	Frequency range	50 ± 6% Hz	
	D/G set comp ability	Required	
	Input Power Factor	0.9 or better at full output load leading to Unity with power factor correction (PFC)	
4	Output		
	Voltage	230V AC +1 %, single phase	
	Regulation	Less than + 1% in the following conditions 1. No load to full load/Full load to no load 2. 0.6 lag to Unity PF 3. During Entire Backup time. 4. Complete Input Voltage Range	
	Frequency	50 Hz + 0.5 %	
5	Efficiency		
	Overall	Efficiency 80 % or better on rated full load of 0.8 PF & 230V, 50Hz AC output	
	Inverter Efficiency	90% or better on rated full load of 0.8 PF & 230V, 50Hz AC output	
6	Overload Capacity	110% for 2 min. & 125% overload for 30sec.	
7	Load Power Factor	0.8 lagging	
8	Protection	Required for: Short Circuits / Over Loading/ Over Temperature / Input low/ high voltage control/ DC low/high voltage trip	

Sr. No.	Parameters	Specifications	Complied / Not Complied
9	Battery Make	Complying with JIS C 8702 test. Battery make: Rocket Global Yuasa / Index/ AMARARAJA(Quanta) / Relicell/ Exide Battery type: Sealed Maintenance Free, valve regulated.	
	Battery recharge time (after complete discharge to 100% charge) & charge rating	Battery recharge time should not exceed 8 hours and charger should be capable to charge battery on C10 rating.	
11	Battery Capacity		
	Capacity of UPS	At least 120 minutes back up with minimum 4000 VAH	
	UPS & Battery Housing	Powder coated UPS & battery cabinet with caster wheel should be of minimum 1mm thick good quality material and should be free from sharp edge, scratches, nicks, & burs etc. Enclosure should conform to protection requirement of IPL21 to IS13947 (Part 1)/1993 (reaffirmed 2004).	
12	L.C.D. meter	To measure and monitor input voltage, output voltage, output current, DC current, DC voltage, input / output frequency	
13	Indications	Mains on/ Load on Battery/ Inverter/ Battery level/ Load level/ Inverter over load	
14	Audible Alarm	Over Temperature / Main failure/ Battery low/ Inverter Overload	
15	Switches	Main ON/OFF MCB/ Battery ON/OFF MCB/ Inverter push button with reset.	
16	Output Connection	O/P Terminals of standard quality should be provided. 03 Nos. of 5/15A/230V female ISI/ IEC Mark socket and all 3 sockets should	
17	Isolation	Transformer Isolation (internal/external) should be provided in both input and output end.	
Note -More than two battery banks should not be used in parallel in the configuration.			

4. Generators 2KVA

<div align="right">Table 15 Generator 2KVA</div>

S. No.	Parameter	Required Specifications	Complied / Not Complied
The proposed DG set should be able to support the Police Unit computing equipment along with at least 1 fan and 1 tube light, in absence of primary power source. Engine shall be vertical Single/multi cylinder 4 stroke type in accordance with IS10002-1981 with latest amendments.			
1	CAPACITY	Minimum 2.25 - 3 KVA	

2	**ENGINE:**		
	Type	Single/Multi cylinder	
	Method of starting	Electric start 12 V DC	
	Type of cooling	Water cooled /Air cooled	
	Type of governor:	Mechanical/Electronic	
	Type of fuel:	Petrol	
	Rating:	Continuous	
	Rated Output/HP:	Minimum 4.5 HP at 3000 rpm	
	Alternator rated speed:	3000 RPM	
	Over load capacity	10% overload – minimum 1 hour	
	Makes of engine:	Honda/ Mahindra/ Kirloskar / Birla-Yamaha/ Briggs & Stratton / Greaves/ Eicher	
	Ignition Type	Magnetron Electric	
	General	Engine should be four stroke with Double ball bearing on PTO & Flywheel with Over Head Valves and should have Cast Iron Sleeve	
3	**ACCESSORIES:**		
		• Flywheel to suitable diameter and fuel injection equipment • Air cleaner • Lubricating oil cooler • Electric motor starting equipment like motor, battery, charging generator with voltage regulator etc. • Heavy duty radiator with fan • Residential type silencer with exhaust piping with vibration isolator • Fuel tank suitable for 8 Hrs of continuous running with necessary piping and fuel gauge, drain valve, inlet and outlet connections. • Anti-vibration mounting pads • Speed controlling governor • Suitable coupling system to the Alternator • Tachometer • Lubricating oil pressure gauge • Hour meter to indicate number of Hrs of operation • Auto trip on low oil pressure • Over speed alarm with trip • Thermal insulation for exhaust line with glass wool, Aluminium sheet, chicken mesh, Diesel line 12 mm dia including beads flanger etc • Battery 12 V with lead and terminal • Battery charger. • Protection: Protection against low lubricating oil and over heat shall be provided for engine.	

5. 16 Port Managed Switch

Table 16 Specification-16 Port Managed Switch

Sr .No	Parameters	Specifications	Complied / Not Complied
1.	Network Ports	The switch should have minimum 16 x 100/1000 Mbps Ports	
		It should have two shared open SFP ports for Gigabit Fibre connection/UTP RJ-45 ports	
2.	Protocol	CSMA/CD	
3.	Standards Compliance	IEEE 802.3 10 Base-T Ethernet	
		IEEE 802.3u 100BASE-TX Fast Ethernet	
		IEEE/ANSI 802.3 Auto Negotiation	
		IEEE standard protocol - SNMPv1/v2c/v3	
		IEEE 802.3x Full duplex Flow Control	
4.	Data Transfer Rates	Ethernet 10 Mbps(Half-duplex, 20 Mbps Full duplex)	
		Fast Ethernet 100 Mbps(Half Duplex), 200 Mbps(Full-Duplex), Giga Ethernet 1000Mbps	
5.	Performance	802.1q VLAN, SNMP managed	
		Static Routing/Gateway and advance Access control list.	
		RSTP/MSTP support	
		LLDP and UDLD and L4 prioritization	
6.	Specifications	Bandwidth: 32 Gbps or above	
		Mac Address Database 8k	
7.	Power Supply	100V-240VAC	
8.	General	Should support RMON (Remote monitoring) and RADIUS	
		Software updates: Free downloads from the Web	
		OEM Make - Top 5 in IDC /Gartner reports (quarter ending December '10 or March '11) in terms of revenue market share	

6. Server Load Balancer

Table 17 Specification- Server Load Balancer

Make & Model Offered - (To be filled by the Supplier)	Complied / Not Complied
Architecture	
Should have minimum 6 x 10/100/1000 BaseT Ports plus 2 x 1000Base-Lx Port.	
Should have dedicated 10/100/1000 BaseT port for out-of-band management.	
Should have minimum 8 GB RAM and upgrade-able	
Support minimum 2,000,000 Concurrent L4 TCP connections	
Should capable to handle 100,000 L4 connections per second	
Should provide minimum 2 Gbps Layer-7 throughput and can be scalable to 4-Gbps throughput.	

Make & Model Offered - (To be filled by the Supplier)	Complied / Not Complied
Should have non-blocking 50 Gbps backplane	
Should provide minimum 5000 SSL TPS for SSL offloading scalable to 15,000 TPS for future requirement.	
Should provide minimum 1Gbps server-side hardware/software based http compression.	
Should provide minimum SSL throughput equal to the compression throughput i.e. 1Gbps	
Should provide minimum hardware based SSL offloading	
Should support Dynamic routing protocols like OSPF, RIP1, RIP2	
Load Balancing Features	
Support for 2000 servers	
Support for minimum 512 Virtual IP	
Should support load balancing algorithms: Least amount of Bytes,	
Least number of users/session, Cyclic, weighted Cyclic, SNMP Parameters; like Server CPU utilization, memory utilization and combination of both.	
In case of Server / Application failure device should detect it in not more than 30 seconds	
In case of Server failure traffic should be diverted to another Server automatically	
Should support content based Load balancing features: HTTP Header based redirection, URL-Based Redirection, Browser Type Based Redirection, Preferential Treatment (Cookie-Based)	
Should Support session persistency Based on: IP, DNS, Cookie-based, URL Parameters, SSL Session ID-based etc.	
Should support Client NAT & Server NAT	
Should support TCP optimization and TCP Multiplexing	
Should support HTTP 1.1 protocol based caching	
Should support hardware/software based web compression	
Server Management Feature	
Should support Graceful shutdown of Servers	
Should support Graceful Activation of Servers	
Should able to redirect traffic based on Source IP, Destination IP & TCP PORT	
Redundancy	
Should Support standard VRRP (RFC - 2338) or alternate industry standard protocols with equivalent functionality	
Should support transparent failover between 2 devices	
Support for Global Server Load Balancing Algorithms	
Should support DNS based redirection	
Should support HTTP redirection	
Should support RTSP Redirection	
Should support VIP advertisement via Dynamic Routing	
Health Monitoring	
Should provide individual health check for each Server & Application	
Should be able to do health check on protocols like HTTP, SMTP, POP etc	
Should able to check the health of Server OS, Application & contents as well	
Should provide AND & OR Grouping mechanism between health check for granular	

Make & Model Offered - (To be filled by the Supplier)	Complied / Not Complied
approach for detecting path failure in multi-tier application architecture like core banking solution	
Health Check configuration should be via simple GUI interface and easy to understand, it should not require any scripting or CLI configuration.	
Device Management & Reporting	
Should provide GUI interface for configuration & reporting	
Should provide HTTP / HTTPS interface management	
Should provide SSH / Telnet / CLI interface	
Should support SNMP V1, V2c, V3	
Should provide Detailed LIVE reporting for traffic on each farm	
Should provide detailed historic reporting for server traffic	

7. Core Switch

Table 18 Core Switch

Sr. No	Equipment Specification	Compliance Yes / No
1	**Common Features**	
	Rack mountable	
	Redundant Supervisor / Switching / Routing engine. All the relevant hardware should be loaded to achieve the required switching & routing performance.	
	Internal Redundant Power Supply	
	Switching Capacity: Minimum 480Gbps or above	
	Hot swappable Fan Modules Tray	
	All switches must be capable of full distributed architecture, with all necessary hardware (including memory, "daughter cards", etc.) and software included.	
	Must include (be equipped with) all necessary GBIC and/or SFP connectors/ports/modules	
	Power supply 230 Volt 50Hz input sufficient to drive all modules populated in the switch.	
	Switch should have minimum 3 I/O modules apart from the switching fabric modules	
	Modular Chassis with passive backplane	
	Should support RIPv2, OSPF, BGP protocols for both IPv4 and IPv6 suites with dual stack support.	
	DHCP Snooping, ARP Inspection	
2	**Interfaces / Slots per chassis**	
	• 48 ports 10/100/1000 Mbps UTP Ports (RJ-45) for connecting servers. • 8 ports x 10G-SR transceivers for uplinking between Edge/Distribution Switch to Core switch • 2 ports x 10G-SR transceivers for interconnecting core switches	
	All service/payload cards/modules must be hot swappable	

		Support for 10GbE Ports for uplinking the distribution switches	
3		Advance Service Modules support	
		• Firewall module • IPS module • Wireless LAN services module	
4		Performance	
		a. Proposed switching fabric/supervisor engine should support for minimum 480 Gbps with virtual distributed architecture.(The virtual distribution architecture allows for the combination of two switches into a single logical network entity from the network control-plane and management perspectives. To the neighbouring devices, the Virtual Switching System appears as a single, logical switch or router.)	
		High speed backplane capable to handle the current switching capacity and also scalable to support system bandwidth of 480Gbps or better.	
		The switch fabric/Supervisor engine should be configurable in Active/Active and or Active/Backup modes.	
		Switch should be loaded with required hardware to provide forwarding rate of minimium 270 Mpps (for IPV4)	
5		Indicators	
		a. Per-port status LEDs: link integrity, disabled, activity, speed, and full-duplex indications	
		b. System-status LEDs: system, RPS, and bandwidth-utilization indications	
6		High-Availability Features Support	
		• Router redundancy Protocol namely HSRP or equivalent • Multimodule EtherChannel technology or equivalent Link Aggregation technology • Rapid Spanning Tree Protocol (RSTP) • Multiple Spanning Tree Protocol (MSTP) with 10 plus instances support • Rapid convergence Layer 3 protocols • Shall support hitless or graceful restart of OSPF and IS-IS BGP	
7		L2 Features	
		a. IEEE 802.1Q VLAN encapsulation	
		b. 802.1s	
		c. 802.1w	
		d. Port VLAN, protocol VLAN, subnet VLAN, and MAC VLAN support	
		e. Should support minimum 4000 nos of 802.1Q vlans	
8		Multicast support	
		a. IGMPv1/v2/v3 MLDv2/MLDv2 Snooping	
		b. IGMPv1/v2/v3	
		c. PIM-SM/PIM-DM/PIM-SSM / IPv6 PIM	
		d. Ingress/Egress CAR with the granularity of 64 kbps	
9		IP Routing Protocols	
		• Static Routing, Policy based routing	
		• OSPF v2 and OSPF v3	

	• RIP v1, RIP v2, RIPng	
	• BGP4 / ISIS	
	• HSRP /VRRP	
	• IPv4, IPv6 with dual stack support	
	• IPv6 addressing architecture	
	• IPv6: DNS resolver for AAAA over an IPv6 transport	
	• IPv6: Extended ACL	
	• IPv6: ICMP Rate Limiting	
	• IPv6: ICMPv6	
	• IPv6: ICMPv6 Redirect	
	• IPv6: IP MIB	
	• IPv6 over IEEE 802.1Q	
	• IPv6: OSPFv3	
	• IPv6: Ping	
	• IPv6: Router Alert Option	
	• IPv6: SSH over an IPv6 Transport	
	• IPv6: Stateless Autoconfiguration	
	• IPv6: Static routes within IPv6	
10	**Security**	
	a. Standard and extended ACL's on all ports	
	b. AAA and RADIUS authentication	
	c. Secure Shell (SSH) Protocol	
	d. Should support NAC enabled functionality like MAC/802.1x Authentications.	
	e. Should support Policy based routing for NAC web redirections.	
	f. Should support multiple 802.1x session per ports.	
	g. IP+MAC+VLAN ID, and port binding	
	h. Support 128K Mac address	
11	**Manageability & Up gradation**	
	a. Console port for administration & management	
	b. Support SNMP v1, v2	
	c. Support management using CLI, GUI using Web interface	
	d. Support FTP/TFTP for upgrading the operating System	
	e. Should support graceful restart of major protocols like OSPF etc..	
	f. Fault alarm and automatic fault recovery	
	g. Hot patching of Software upgrades	
	h. AAA/Radius	
	i. Traffic statistics and analysis via Netflow / sflow or equivalent	
12	**QoS**	
	a. DSCP - trust policies	
	b. Queuing policies	
	c. Traffic shaping and queuing	
	d. Traffic classification	
	e. Should be capable of identifying Class of service	

	f. Ingress/Egress CAR with the granularity of 64 kbps	
	g. VLAN trunking CAR and MAC trunking CAR	
	h. 802.1P/DSCP priority marking and remarking	
	i. SP, WRR, SP+WRR and CBWFQ	
	j. 8 queues per port	
	k. N:2 mirroring	
13	**Standards**	
	a. IEEE 802.1s	
	b. IEEE 802.1w	
	c. IEEE 802.1x	
	d. IEEE 802.3ad	
	e. IEEE 802.3af	
	f. IEEE 802.3x full duplex on 10BASE-T, 100BASE-TX, and 1000BASE-T ports	
	g. IEEE 802.1D Spanning Tree Protocol	
	h. IEEE 802.1p CoS Prioritization	
	i. IEEE 802.1Q VLAN	
	j. IEEE 802.3 10BASE-T specification	
	k. IEEE 802.3u 100BASE-TX specification	
	l. IEEE 802.3ab 1000BASE-T specification	
	m. IEEE 802.3z 1000BASE-X specification	
14	**Efficiency**	
	All proposed switching Hardware namely the supervisor engines, Line Module, power supplies should be energy efficient in design3	
	General	
15	All the Switches and Routers should be from single OEM	
16	OEM Make - Top 5 in IDC /Gartner reports (quarter ending December "10 or March „11) in terms of revenue market share	
17	Software updates: Free downloads from the Web	

8. Router

Table 19 Router

Make & Model Offered - (To be filled by the Supplier)	Complied / Not Complied
Interfaces	
2 x 10/100Base-T WAN interfaces	
2 x v.35 WAN Interface Cards	
5 x 10/100Base-T switched LAN ports	
1 x Asynchronous port / Modem Port	
Should support minimum 6 service slots	
Rack mountable	
Should support IP, MPLS etc.	
The modules, power supply should have support for hot swappable functionality.	

Make & Model Offered - (To be filled by the Supplier)	Complied / Not Complied
Modular Chassis	
Router performance should be minimum of 1100 Kpps	
Power supply for 230 V AC 50 Hz with Redundant power supply	
Security	
IP Filtering	
802.1x	
Authentication: RADIUS,TACACS, MD5, PAP, CHAP VPN/Encryption	
NAT-T	
AES, DES, 3DES encryption	
AES, DES, 3DES encryption	
VPN, L2TP, GRE, IPSec, IKE	
Encryption: DES, 3DES, AES	
Internal security encryption engine	
QoS	
IP: IP source/destination address, TOS & DiffServ	
Ethernet: MAC source/destination, 802.1q	
TCP/UDP: Port numbers	
VoIP: RTP source & destination	

Queuing:
    Low latency queuing (LLQ)
    Class-based weighted fair queuing (CBWFQ)	

Features	
Time based ACLs (ACLs can be activated based of time of day, Monday etc)	
ICMP based virtual interface for device reach ability detection & monitoring	
Router should have option to creates automated scripts for commonly repetitive task like backup etc; and activate these scripts based on any link going down, or time of day, period, link status etc.	
Routers operating system should be able to give direct access to Flash file system	
Router OS should have option to store multiple config files & activate any one of them at any time, automatically or manually.	
Protocols	
RIPv1 and v2	
OSPFv1 and v2	
GRE, L2TP	
VRRP	
BGP-4	
IPv6	
RIPng IPv6 RFC 2460 Neighbour discovery RFC 2461 Stateless address auto configuration RFC 2462	

Make & Model Offered - (To be filled by the Supplier)	Complied / Not Complied
ICMPv6 RFC 2463 Transmission of IPv6 packets RFC 2464 Connection of IPv6 domains via IPv4 clouds RFC 3056 DHCPv6	
RIPng PIM-DM, PIM-SM DVMRP IGMPv2 IGMP Snooping PIM6 MLD IPv6 Multicast X.25	
Frame Relay	
Approvals & Certifications	
UL	
TUV	
UL60950	
EN60950	
EN55022 class A	
FCC class A	
VCCI class A	
AS/NZS CISPR22 class A	
CE	
RoHS compliant	
EAL2	
Environmental	
Operating Temp: 0oC to 40oC	
Storage Temp: -25oC to 70oC	
Operating relative humidity: 5 to 80% non-condensing	
Manageability	
Web based GUI	
CLI management	
SNMPv3	
IP QoS	
Power Characteristics	
Input Voltage: 100-240 VAC, 50-60 Hz	
Max Power Consumption: 350W	
Dual hot-swappable AC or DC redundant power supplies	

9. **Appliance based Hardware Security Module (HSM)**

Sr. No.	Make & Model – (To be filled by the Supplier)	Complied / Not Complied
1.	Should support Windows 2000,2003,2008,Linux,Solaris,HP-UX 11i,VMWARE,AIX 5.3	
2.	TCP/IP Network based appliance	
3.	Should comply to standards like FIPS 140-2 Level-3, CC EAL4+,ROHS,FCC part 15 Class B	
4.	Key Length Supported (1024 to 4096)	
5.	Public Key Algorithm RSA encrypt/decrypt, RSA sign/verify, ECC (Electric Curve cryptography)	
6.	Keys are always in Hardware and never stored in Software in any form	
7.	Key Exchange Mechanism: DES / TripleDES, AES Algorithm	
8.	Hash/HMAC algorithm: MD5, SHA 1, SHA 2, SHA 256	
9.	Symmetric Algorithm : AES, MD5, SHA 1, SHA 2, SHA-256 , DES, TripleDES	
10.	Compatibility: PKCS#11 , CAPI, OpenSSL, JCE/JCA	
11.	Scalable Up to more than 15 unique partitions	
12.	Private key generation and import: Archival and duplication mechanism to be specified. Give the procedure for key transportation from one HSM card to other HSM card.	
13.	Support for various cryptographic algorithms: Asymmetric Key with Diffie-Hellman (1024-4096 bit), RSA (512-4096 bit) and (PKCS#1 v1.5, OAEP PKCS#1v2.0), Digital Signing via RSA (1024-4096-bit), DSA (512-1024-bit),EC Brainpool Curves (named and user-defined), Suite B Algorithm Support and ARIA support	
14.	Published API for various above functionalities for integrating with the Application software	
15.	Signing speed : 5000 S/S	
16.	Remote PED Support for Authentication	
17.	Contents can be securely stored on Backup Tokens to simplify backup, cloning, and disaster recovery	
18.	Onboard key generation, Digital Signing & Verification process to be done inside the HSM only for better performance and security	
19.	Complete hardware based storage of key material for entire Life cycle	
20.	Additional / specific software's if any, required to support multiple HSM appliances to be provided	
21.	24/7 tel/email support infrastructure based out of India	

II. Request for Proposal Volume II

2.1 Section 3: Bidding Process Details

1. Clause 3.1 Tentative Calendar of Events

The table enlists important milestones and timelines for completion of bidding activities as mentioned in Clause 3.1 *stands amended as*

Table 21 Milestones and timelines for bidding activity

Sr. No	Milestone	Time for Completion
1.	Document/Tender Reference Number	SCRB-CCTNS-1/2011
2.	Release of Request For Proposal (RFP)	16th April 2011
3.	Last date for submission of written questions by bidders	27th April 2011 5:00 PM
4.	Pre-Bid Conference (Explanation of the RFP)	3rd May 2011
5.	Corrigendum	18th June 2011
6.	Last date for Submission of bids	30th June 2011, 05:00 PM
7.	Date and Time of opening of pre-qualification	To be intimated in due course
8.	Date and Time of opening of Technical bid	
9.	Date and Time of opening of Financial bid	
10.	Cost of RFP document (Demand Draft issued by any Nationalized Bank in favour of **"DG & IG of Police, Odisha"**, payable at **Cuttack.**)	**Rs 50,000/-**

2. Clause 3.2.10: Earnest Money Deposit

Bank Guarantee format for EMD

Bank Guarantee to be executed on Non Judicial Stamp Paper of Rs.100/- (Rs. One hundred only)

[Date]
To,
DG & IG of Police, Odisha

Dear Sir,

Ref: Request for Proposal (RFP)for Selection of System Integrator for implementation of CCTNS in Odisha

Sub: Bank Guarantee for BID Security of CCTNS Project for Department of Police, Government of Odisha

Guarantee No.＿＿＿＿＿＿＿ Amount of
Guarantee (amount) Guarantee cover
from (Start Date to End date, valid for 180
days from the date of submission of offer)
Last date for　lodgement of claim (End
date)

In consideration of ''DG & IG of Police, Odisha'' , hereinafter called "Odisha Police Department" which expression shall, unless repugnant to the context or contrary to the meaning thereof, include its successors and assigns having invited / floated Tender to＿＿＿＿＿Company registered under the Indian Companies Act, 1956, having its office at＿＿＿＿＿＿＿＿＿＿＿＿＿＿, (hereinafter called "the Bidder" which expression shall, unless repugnant to the context or contrary to the meaning thereof, include its successors and assigns vide NIT No.＿＿＿＿＿ dated＿(hereinafter called "the Tender" which expression shall include any amendments / alterations to the Tender by the Department for the supply of goods to / execution of services for the Department having agreed not to insist upon immediate payment of Earnest Money for the fulfilment and the performance of the said Tender in terms thereof on production of an acceptable Bank Guarantee for an amount of Rs. 2,50,00,000 Crore (Rupees Two Crore and Fifty lakhs only). We, ＿＿having office at……….. and Head Office at…………………………………. (hereinafter referred to as "The Bank" which expression shall, unless repugnant to the context or contrary to the meaning thereof, include its successors and assigns at the request and on behalf of the Bidder hereby agree to pay to Department without any demur on first demand an amount not exceeding Rs. 2,50,00,000 Crore (Rupees Two Crore and Fifty lakhs only) against any loss or damage, costs, charges and expenses caused to or suffered by the Department by reason of non-performance and non-fulfilment or for any breach on the part of the <Bidder Name> of any of the terms and conditions of the said Tender.

1)　We＿＿＿＿＿further agree that Department shall be the Sole Judge whether the <Bidder Name> has failed to perform or fulfil the said Tender in Terms thereof or committed breach of any of the terms and conditions of the Tender and the extent of loss, damage, costs, charges and expenses suffered or incurred or would be suffered or would be incurred by the Department on account thereof.

2)　We＿＿＿＿＿Bank further agree that the amount demanded by the Department as such shall be final and binding on the Bank and the Bank undertake to pay to the Department the amount so demanded on first demand and without any demur notwithstanding any dispute raised by the Bidder or any suit or other legal proceedings including Arbitration pending before any Court, Tribunal or Arbitrator relating thereto and our liability under this guarantee being absolute and unconditional.

3)　We,＿＿＿＿＿Bank, further agree with the Department that the Department shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Tender or extend time for awarding the contract from time to time or to postpone for any time any of the powers exercisable by the Department against the bidder and to forbear to enforce any of the terms and conditions relating to the Tender and we shall not be relieved from our liability by reason of any such variation or extension being granted to

the bidder or for any forbearance, act or omission on the part of the Department or any indulgence by the Department to the Bidder or by any such matter or things whatsoever which under the law relating to sureties would but for this provision have the effect of relieving us.

4) NOTWITHSTANDING anything herein before contained, our liability under this guarantee is restricted to Rs. 2,50,00,000 Crore (Rupees Two Crore and Fifty lakhs only). Our liability under this guarantee shall remain in force until expiration of six months from the date of opening of the said Tender. Unless a demand or claim under this guarantee is made on us in writing within the said period, that is, on or before_<last date of lodging the claim>all rights of the Department under the said guarantee shall be forfeited and we shall be relieved and discharged from all liabilities thereunder.

5) We, ____Bank, further undertake not to revoke this guarantee during its currency except with the previous consent of the Department in writing.

6) This guarantee shall not be affected by any change in the constitution of the Bidder or the Bank or the Department and shall remain in full force and effect until the liabilities of the Bank are discharged by the Department.

Any payment made here under shall be free and clear of and without deduction for or on account of taxes, levies, imports, charges, duties, fees, deductions or withholding of any nature imposts.

This guarantee shall be governed by and construed in accordance with the Indian Laws and we hereby submit to the exclusive jurisdiction of courts of Justice in India for the purpose of any suits or action or other proceedings arising out of this guarantee or the subject matter hereof brought by you may not be enforced in or by such count.

Yours faithfully,

For and on behalf of the ....Bank,

(Signature)
Designation

(Address of the Bank) Note:
A duly certified copy of the requisite authority conferred on the official/s to execute the guarantee on behalf of the bank should be annexed to this guarantee for verification andretention thereof as documentary evidence.

3.   Clause 3.4.5 point f) Pre-Qualification Requirements Proposal

Assessment and Certification of the required certification (CMMi Level 5)

Stands amended as

Assessment and Certification of the required certification (CMMi Level 3)

2.2 Section 5: Payment Terms and Schedule

1.   Clause 5.3.1: Milestones and Payment Schedules for Implementation Phase

Payment Milestones for the Implementation phase as mentioned in Clause 5.3.1 *stands amended as*

Table 22 Payment Milestones

S. No.	Payment Milestones for the Implementation phase	% Payment of Sub-total for Services Provided During Implementation Phase .Refer to Component A (Sum of items 1 – 9) in the Pricing Summary Table
1.	M1: Completion of Preparatory Activities i. Project Plan and setup of Program Management Office ii. Configuration, Customization, and Enhancement of CAS (State) for **Core and Additional** modules including Systems Study & Assessment, UAT Performance Testing & Intensive Field Testing iii. Procure, Commission and maintain Project Management, Configuration Management and Issue Tracker Tools iv. Site preparation, commissioning, operationalization of IT infrastructure of District Training Centres and Regional Training Centre v. Setup and management of IT infrastructure at the Data Center and DR Site	5%
2.	M2: Pre – Go Live Readiness in the Phase I Districts	5%
3.	M3: Go-Live in the Phase I Districts	10%
4.	M4: Pre – Go Live Readiness in the Phase II Districts	10%
5.	M5: i. Go-Live in the Phase II Districts ii. Customization, and Enhancement of CAS (State) for **Advanced modules** including Systems Study & Assessment, UAT Performance Testing & Intensive Field Testing	5%
6.	M6: Pre – Go Live Readiness in the Phase III Districts	15%

S. No.	Payment Milestones for the Implementation phase	% Payment of Sub-total for Services Provided During Implementation Phase .Refer to Component A (Sum of items 1 – 9) in the Pricing Summary Table
7.	M7: Go-Live in the Phase III Districts	5%
8.	M8: Pre – Go Live Readiness in the Phase IV Districts	10%
9.	M9: Go-Live in the Phase IV Districts	5%
10.	M10: Go-Live in all the remaining 10% of Police Stations Higher Offices	15%
11.	M11: Go-Live in all the remaining Police Stations / Higher Offices	5%
12.	M12: Successful integration with CAS(Center) and successful transfer of the data for three months in succession	10%

2.3 Formats for the Pre-Qualification Response

1. **Clause 6.6.27: Technical Bill of Materials for Client Side Infrastructure.**

Bills of Material of Client site Infrastructure as mentioned in Table no.20 of _stands amended as_

Table 23 BOM Client Site Infrastructure

Client Side Infrastructure	Quantity	Make and Model	Year of Introduction	Operating System along with version (if applicable)	Additional Information required to indicate th compliance to the requirements in the RF (ex, Capacity, Disk Space,....)	Compliance Matrix Provided as per the form given in the the RFP (Yes/No)	Data Sheets Provided in th Proposal (Yes/No)
Desktops							
HDD 160GB							
Duplex Laser Printer							
Multi-function Laser(Print/Scan/Copy)							
UPS(2KVA) for 120 minute back-up							
2 KVA Generator Set							
16-Port Switch							
Fingerprint Reader							
Digital Camera							

Client Side Infrastructure	Quantity	Make and Model	Year of Introduction	Operating System along with version (if applicable)	Additional Information as required to indicate the compliance to the requirements in the RFP (ex, Capacity, Disk Space,….)	Compliance Matrix Provided as per the format given in the the RFP (Yes/No)	Data Sheets Provided in the Proposal (Yes/No)
LAN Cabling							
Printer Cartridges and Printing Paper							
Electronic Pen							
Any Other Item as Required							

All the components, equipment and materials to be provided should be Brand New

Technical BOM – H/W (Data Centre & Disaster Recovery Centre)

Table 24 Technical BOM for DC & DR Centre

	Services proposed to be hosted on the Server	Quantity	Make and Model	Year of Introduction	Operating System along with version (if applicable)	Processor and Number of Cores Offered (if applicable)	Architecture (RISC/EPIC/CISC) (if applicable)	RAM (if applicable)	HDD (if applicable)	LAN Ports (if applicable)	HBA (if applicable)	as required to indicate the compliance to the requirements in the RFP (ex, Capacity, Disk	Compliance Matrix Provided as per the format given in the the RFP (Yes/No)	Data Sheets Provided in the Proposal (Yes/No)
Disaster Recovery Site														
Production CAS (State) Application Services Related Servers (Web, Portal, Application, Database, Directory….)														
Insert each item in a separate row as required														

	Services proposed to be hosted on the Server	Quantity	Make and Model	Year of Introduction	Operating System along with version (if applicable)	Processor and Number of Cores Offered (if applicable)	Architecture (RISC/EPIC/CISC) (if applicable)	RAM (if applicable)	HDD (if applicable)	LAN Ports (if applicable)	HBA (if applicable)	as required to indicate the compliance to the requirements in the RFP (ex, Capacity, Disk	Compliance Matrix Provided as per the format given in the the RFP (Yes/No)	Data Sheets Provided in the Proposal (Yes/No)
CAS (State) Infrastructure Services Related Servers (EMS, AntiVirus, Backup, DNS,…)														
Insert each item in a separate row as required														
Server 1														
Server n														
SAN Storage (List the total capacity offered on FC and SATA disks)														

	Services proposed to be hosted on the Server	Quantity	Make and Model	Year of Introduction	Operating System along with version (if applicable)	Processor and Number of Cores Offered (if applicable)	Architecture (RISC/EPIC/CISC) (if applicable)	RAM (if applicable)	HDD (if applicable)	LAN Ports (if applicable)	HBA (if applicable)	as required to indicate the compliance to the requirements in the RFP (ex, Capacity, Disk	Compliance Matrix Provided as per the format given in the the RFP (Yes/No)	Data Sheets Provided in the Proposal (Yes/No)
SAN Switch														
Router														
Tape Library														
Core switch														
Hardware Security Module (HSM)														

All the components, equipment and materials to be provided should be Brand New

Form 2: Procurement, Delivery, Commissioning of IT Infrastructure at Police Stations and Higher Offices

Details of Procurement, Delivery, Commissioning of IT Infrastructure at Police Stations and Higher Offices as mentioned in Table 26, clause in 6.7.3 *stands amended as*

Table 25 Details of Procurement,Delivery,Commisioning of IT Infrastructure at PS and Higher Offices.

	Original supplier	Item Desc.	Unit of measurement	# (units)	Price per unit	Total price	Taxes and other duties	Total amount (INR)
Desktops								
Client Side Software Licenses (OS, Office, Anti-virus,…)								
Please Insert Details as required.								
HDD 160GB								
Duplex Laser Printer								
Multi-function Laser(Print/Scan/Copy)								
UPS for 120 minute back-up								
2 KVA Generator Set								
16-Port Switch								
Fingerprint Reader								
Digital Camera								
Electronic Pen								
UPS 2KVA(for District SP Offices)								
UPS 2KVA(For DGP and Police Headquarters)								
Switch for Higher Offices								
LAN Cabling								

	Original supplier	Item Desc.	Unit of measurement	# (units)	Price per unit	Total price	Taxes and other duties	Total amount (INR)
Any Other Item as Required								
Please insert detail as required								
Total amount (INR)								

All the components, equipment and materials to be provided should be Brand New

Form 3: Setup and management of IT infrastructure at the Data Center and Disaster Recovery Center

Table 26 Setup and management of IT Infrastructure at DC and DR

	Original supplier	Item Desc.	Unit of measurement	# (units)	Price per unit	Total price	Taxes and other duties	Total amount (INR)
Application Server								
Database Server								
Web Server								
Management Server								
Mail/Messaging Server								
Servers for Staging / Testing / Training Environment/Back up/Others.								
Firewalls & IPS								
SAN Storage								
SAN Switch								
Tape Library along with the tapes								
Server Load Balancer								
KVM over IP								
Core Switch								

	Original supplier	Item Desc.	Unit of measurement	# (units)	Price per unit	Total price	Taxes and other duties	Total amount (INR)
Router								
Back UP Software for Data Centre and DR								
Enterprise Management System (EMS)								
Appliance based Hardware Security Module (HSM) for PKI Security and Encryption.								
OS and Application – as per the Stack								
Total (INR)								

All the components, equipment and materials to be provided should be Brand New