

**CRIME & CRIMINAL TRACKING NETWORK & SYSTEMS
(CCTNS)
IMPLEMENTATION
IN
UTs OF DAMAN & DIU AND DADRA & NAGAR HAVELI**

CORRIGENDUM

**RELEASED BY
GOVERNMENT OF DAMAN & DIU AND DADRA & NAGAR HAVELI
27-May-2011**

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PLEASE NOTE:

Bidders are expected to take note of all CORRIGENDUMS / CLARIFICATIONS / ADDENDUMS / NOTIFICATIONS issued by the UT before submitting their proposals. All such documents issued by the UT shall be deemed as part of the original RFP & shall be binding on the bidders. Modifications have been made to all three volumes of the RFP. Changes made to each Volume of the RFP shall be found under the respective heads in this Corrigendum. Certain clauses from the previous corrigenda have been retained in this corrigendum for the continuity/clarity purpose.

1. REQUEST FOR PROPOSAL REVISED SCHEDULES

Sl.	INFORMATION	DETAILS
1	Last date (deadline) for receipt of proposals in response to RFP notice	04-06-2011 at 17:00 hours at PHQ Daman
2	Place, Time and Date of opening of Technical proposals received in response to the RFP notice	04-06-2011 at 17:30 hours (Tentative) at PHQ Daman
3	Place, Time and Date for Technical Presentations	13-06-2011 (Tentative)
4	Place, Time and Date of opening of Financial proposals received in response to the RFP notice	23-06-2011 at 11:00 hours at PHQ Daman (Tentative)
5	Contact Person for queries	Mr. Atul Kumar Thakur, IPS Chief of Police, Silvassa Phone: 0260 2642002 Fax: 0260 2642057, 2643023 Email: police-daman-dn@nic.in police-daman-dd@nic.in
6	Addressee and Address at which proposal in response to RFP notice is to be submitted	The Inspector General of Police Nodal Officer – CCTNS, Police Headquarters, Dunetha, Daman Pin Code: 396210

2. REQUEST FOR PROPOSAL VOLUME - I

A: SCOPE OF THE PROJECT

5.12 Handholding Support

Page No.102:

The SI will bear the cost of providing the training; supply of course material, any consumables, and IT infrastructure required for training, training kits, snacks / refreshments, etc. while Police Department will provide the training premises.

Stands amended as

The SI will bear the cost of providing the training; supply of course material, any consumables, and IT infrastructure required for training, training kits, etc., while Police Department will provide the training premises.

Page No.102:

The SI will carry out all the major amendments required by Police Department 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

Stands amended as

The SI will carry out all the major amendments required by Police Department in the CCTNS application. It is important to mention that the Requests for amendments during Handholding support, i.e. for one year period post Go-Live including change in design, look and feel, workflow etc. as they will be UT specific.

Page No.113:

5.15 Scope of Services during Post Implementation Phase

SI shall provide the Operations and Maintenance Services for a period of **5 years** following the deployment and "Go-Live" of the solution in the U.T. 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 a period of **3 years** following the deployment and Go-Live of the solution in the U.T. 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 **3 years** following the deployment and "Go- Live" of the solution in the last District.

5.6 Infrastructure at the Client Site Locations

At each such location the following shall be carried out.

The following clause stands deleted:

- Redundant Network Connectivity - Ensuring last mile connectivity and testing.

5.7 Network Connectivity for Police Stations, Higher Offices, and DTC

The following clause stands deleted:

Note: The process of finalization for signing of contract with BSNL as Service provider for CCTNS project is in progress and detailed guidelines on implementation of Networking and Connectivity will be sent to all States/UTs.

5.8 - IT Infrastructure at the Data Center and Disaster Recovery Center

CAS (UT) will be developed in two distinct technology stacks by the SDA at the Center. In the response to this RFP, the SI is expected to bid with Open Source stack for the Data Center and Disaster Recovery Center. However, for the end user systems in police stations and higher offices, the SI is expected to bid with Microsoft technology stack. SI shall procure all the necessary underlying solution components required to deploy the CAS (U.T) solution for the U.T.

Stands amended as

CAS UT will be developed in two distinct technology stacks by the Software Development Agency at the Center. The details of the Technology Stacks are provided in Annexure 6. The SI is expected to bid with one of the technology stacks in response to this RFP. SI shall procure all necessary underlying solution components required to deploy the CAS (UT) solution.

B: ANNEXURE: 1 - BILLS OF MATERIAL & TECHNICAL SPECIFICATIONS

Annexure 10 - Indicative Bill of Material and the Technical Specifications, Volume - I of this RFP, is revised as

BILL OF MATERIAL

Note: It is to be emphasized here that Daman & Diu and Dadra & Nagar Haveli Police is looking at this engagement as asset of complete services to be provided by the selected agency and not as a supply of hardware & software. To that end the specifications laid out in RFP are indicative requirement and Bill of material is minimum, whereas the bidders are expected to focus on the objectives and SLAs of this project and formulate their solution offering in a manner that enables achieving those objectives both in letter as well as spirit

SI is requested to put due diligence while responding to this RFP and shall be responsible for proposing other hardware (like racks etc)/ software components as part of their Bill of Material for the successful implementation of this project

DETAILED BREAKUP OF THE HARDWARE IN POLICE STATIONS

SI	Equipment	Qty /PS	Total Qty
1.	Desktop with table and chair	4	20
2.	Duplex Laser Printer	1	5
3.	Multi Functional Laser Printer	1	5
4.	Online UPS - 5KVA with 2 hours backup	1	5
5	Finger print reader	1	5
6	Digital Camera	1	5
7	Electronic Pen	1	5
8	Generator Set 5 KVA	1	5
9	16-Port Switch	1	5
10	Site Preparation	1	5

DETAILED BREAKUP OF THE HARDWARE IN TRAINING LABS

SI	Infrastructure needed	Qty/Lab	Total Qty
1	Training Server	1	2
2	Desktops	20	40
3	Multi Function Printer	4	8
4	LCD Projector	1	2
5	UPS (15 KVA)	1	2
6	24-Port Switch	1	2

DETAILED BREAKUP OF THE HARDWARE IN HIGHER OFFICES

SI	Higher Offices	QUANTITY REQUIRED				
		Desktop with table and chair	Online UPS - 5KVA with 2 hours backup + 5 KVA Genset	MFP	16 port -Switch	Site Preparation
1	SCRB	4 (2+2)	2	2	2	2
2	Police Head Quarters (Daman & Silvassa)	15 (8+7)	4 (2+2)	15 (8+7)	4 (2+2)	2 (1+1)
3	Districts (CoP / SDPO / ASP / SP office)	10	2	10	8	8
4	Total	29	8	27	14	12

DATA CENTER AND DR FOR CCTNS DAMAN & DIU AND DADRA & NAGAR HAVELI

	Qty
Storage at DC, DR and Nearline	
SAN Storage	1 x 2
SAN Switch	2 x 2
Servers at DC and DR	
Database Server	2 x 2
Blade Enclosure	1 x 2
Blade Server	13 x 2
Automated Tape Library only for DC	1
Networking and Security items for DC and DR	
Passive Cabling + Site Preparation (Temp DC)	1 x 1
Core Switch	2 x 1
DMZ Switch	2 x 1
UTM Device	2 x 2
MPLS Core Router	2 x 1
Internet Router	1 x 1
16 port Access Switch for NOC Users	2 x 1
Server Load Balancer	2 x 2
Appliance based Hardware Security Module for PKI Security and Encryption.	2 x 2
Software for DC and DR	
Database Server	Server license
Application and Portal Server	Server license
DMS and Workflow	250 Users
EMS (including Helpdesk management system)	1 set x 2
Back-up and Replication Software	1 set
Operating System for Server	Bundle with Server
Antivirus and Antispam	250 Users

	Qty
Digital Signature (USB)	250 Users
UPS and Genset for DC and DR	
30 KVA Genset	1 x 2
15 KVA Online UPS with 2 hour backup	2 x 2

Please Note:

- Temporary DC – Silvassa (Fresh Site)
- Permanent DC – SDC Surat (Tentative)
- DR - Default DR of SDC Surat (Tentative)
- Zero Data Loss - It is preferred to have software based replication than array based replication

DETAILED BREAKUP OF THE BLADE SERVER FOR DC

SI No.	Equipment	Location	Qty
1.	Database Server	Data Center	2
2.	Application Server	Data Center	2
3.	Portal/Web Server	Data Center	2
4.	Mail Messaging Server	Data Center	2
5	Directory and Proxy Server	Data Center	2
6	DMS and Workflow	Data Center	2
7	EMS Server	Data Center	2
8	Antivirus and Antispam Server (can be appliance based)	Data Center	1

INDICATIVE TECHNICAL SPECIFICATIONS

(SYSTEM INTEGRATOR CAN QUOTE EQUIVALENT OR BETTER SPECIFICATIONS)

TECHNICAL SPECIFICATIONS OF HSM FOR PKI SECURITY AND ENCRYPTION

To ensure integrity and confidentiality, the data collected (both online and offline) at the police location should be digitally signed and encrypted before it is sent from one location to other / central data center. Hardware Security module should be integrated with applications at Data Center in high availability mode and should be able to endure the security and integrity of the signing key, key management and multifactor authentication to access the key and most *Crime & Criminals Tracking Network and Systems* Significantly. It should be able to enhance the performance of the complete system by offloading the complete cryptography process to a dedicated appliance. Digital Certificates in addition to the HSM appliance may be used for further enhancing the security and integrity of the information.

- Should support Windows 2000,2003,2008,Linux,Solaris,HP-UX 11i,VMWARE,AIX 5.3
- Should comply to standards like FIPS 140-2 Level-3, CC EAL4+,ROHS,FCC part 15 Class B
- Signing speed : 5000 S/S
- Remote PED Support for Authentication
- Onboard key generation, Digital Signing & Verification process to be done inside the HSM only for better performance and security
- HSM should be integrated with the applications running inside the Data Center
- Complete hardware based storage of key material for entire Life cycle

TECHNICAL SPECIFICATIONS FOR POLICE STATIONS HARDWARE COMPONENTS

REVISED DESKTOP SPECIFICATIONS

Features	Specifications
Processor	Intel i5 or higher
Motherboard	OEM mother board
Bus Architecture	Integrated Graphics, Integrated (on board) High Definition Audio controller with internal speaker, 2 PCI slots
Bays	2x Internal 3.5" bays, 2xExternal 5.25" bays & 2xExternal 3.5" bays
Memory	4 GB DDR3 SDRAM expandable to 8 GB
Hard Drive	160 GB SATA-II.
Removable drive	DVD ROM drive
Network	Integrated 10/100 Mbps Ethernet Adapter (RJ-45), PXE support
Key board	Standard USB keyboard
Mouse	2 button optical wheel mouse
Monitor	19 " TFT (Wide Screen) TCO 05 Certified Same make of PC
Interface	1 serial, 1 Parallel, 6 USB (Minimum 2 in front), 1 PS/2 Keyboard, 1 PS/2 Mouse, VGA, audio ports for Microphone & headphones in front.
OS	Bundled with the PC

FURNITURE

Make and Model - (To be filled by bidder)	
Computer Table	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 tube frame.
	Upper side of laminated board shall be in natural teak shade while the bottom side shall be white/cream shade.
Size: L 910 x W 610 x H 728 mm	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 as shown in drawing.
	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 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.
	The base tube shall be provided with adjustable shoes 2 nos. on each side.
	Painting: Complete frame of tubes shall be powder coated.
Printer Table	Printer table shall be good quality
	Shelves : 3 no. made of 18mm thick pre laminated Medium Density Fiber Board(MDF) ISI marked (IS 14587 – 1998)
Size: L 610 x W 610 x H 660 mm	Top shelf size 610x610 mm for placing printing unit.
	Middle Shelf size 460x330 mm for placing feet on stationary.
	Bottom shelf size 460x380 mm for collecting print out.
	The top faces of the shelf shall be natural teak wood shade.
	The bottom faces shall be in plain white/cream shades.

	Structure: The structure shall be made from square and rectangular steel tubes duly welded finished and powder coated.
	Vertical tubes shall be welded in two rectangular bottom tubes 50x25x1.25 mm as shown in drawing.
	The horizontal tube 25x25x1 mm thick 330 m long shall be welded over vertical tubes 25 mm off the center width / depth wise.
	Panels made of 18 mm pre laminated particle board shall be screwed rigidly between vertical tubes on both sides.
	Two nos. bottom support tubes 50x25x1.25mm thick shall also be provided with two nos. of adjustment shoes.
	A rectangular slot of size 455x25 mm shall be provided on top shelf along with length for feeding stationary. A slot shall be covered with PVC insertion for safety of paper.
	The ends of bottom and top shall be plugged with PVC/ plastic caps.
	Painting Complete steel structure shall be pretreated and powder coated with minimum thickness of 60 microns coating
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 black rest shall be provided with lifting arrangement on flat iron & helical spring.
	Two nos. suitable PU handles shall be proved.
	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 dia 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.

Electric Cabling:

Make and Model Offered(To be filled by bidder)
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 Daman & Diu and Dadra & Nagar Haveli Police. For point wiring having Average Point length is 12 to 18 Meters.
UPS Electrical Cabling for Network Rack, Four Computer Points, separate cabling for Two Printers from main input and Generator set to UPS Including change-over, MCB and all other accessories as per requirement.

5KVA UPS SYSTEMS

Technical Specifications	
Make & Model Offered	
Manufacturer	ISO 9001 & ISO 14001 Certified
TECHNOLOGY	IGBT based PWM Technology
	Microprocessor Controlled Digital Design
	Double Conversion True On-line UPS
Overall Efficiency (AC-AC)	≥ 85%
INPUT	
Voltage range	160V – 270V
Frequency range	47 to 53 Hz
Phase	Single Phase with ground
Power Factor	>0.9 or better
OUTPUT	
Voltage	220VAC-230VAC
Voltage regulation	+/-2% (or better)
Frequency regulation	50 Hz +/- 0.1% (free Run Mode)
Harmonic Distortion (THD)	< 3% (linear load)
Waveform	Pure Sinewave
Crest Factor	3:1
Load power factor	0.8 lag
Galvanic Isolation	Provided through Inbuilt transformer
Battery Backup	2 Hour (Min. VAH 13500 VAH)
Battery Type	Sealed Lead Maintenance Free VRLA type (Lead Calcium SMF batteries NOT acceptable)
DC Bus Voltage	≥ 120 V

Technical Specifications	
Transfer Time	0 ms
Battery Enclosure	Powder Coated Cabinets matching with color of UPS.
Battery Brands	Reputed & Reliable brands like Exide, Panasonic, Rocket, Hitachi, Quanta, Luminous, CSB
General Operating Temperature	0 to 40 Degree C
Audible Noise	<55 dB at 1 mtr distance
Alarms & Indications	All necessary alarms & indications essential for performance monitoring of UPS like mains fail, low battery & fault detection
Bypass	Automatic, Manual Bypass Switch
Compatibility	UPS to be compatible with DG Set supply
Communication Interface Standard	RS 232 port for software interface
Optional	SNMP interface support
Certifications	For Safety & EMC as per international standards

30 KVA Genset

Engine

- Engine to be confirming to IS 10001, BS 5514,DG set confirming to ISO 85 28
- Emission complaint approved by ARAI
- Air cooled
- Four Strokes
- Double cylinder
- Mounting Arrangement – Engine and alternator should be mounted on a common Mild
- Steel (MS) fabricated base frame with AVM pads
- Starting system-12 VDC electric starter, battery charging alternator
- Quality Fuel pump with mechanical Governor -A2 class
- Quality Fuel Filter
- Residential Silencer
- Air Cleaner-Paper element type-Mahle
- Shut off coil with safeties for LLOP/HCT
- Flywheel Housing
- First fill of lube oil
- Fuel feed pump with mechanical governor as per IS 10001

Control Panel The genset control panel shall be of 14 Gauge CRCA sheet, powder coated for a weather proof long last finish. The panel shall be provided with Standard Engine Instrumentation, AMF logic, Battery charger, Voltmeter, Ammeter, Frequency meter, Current transformers, Hour meter, instrument fuses duly wired and ferruled with MCB of suitable Capacity.

Fuel Tank Suitable for 4 Hrs of continuous running provided with drain valve, air vent and outlet connection underneath the DG, draw out type for 5 kVA-Min 50 Ltr, 30 kVA-Min 100 Ltr.

Acoustic Enclosure Made of 16 Gauge CRCA sheet on sides and 14 gauge on top .The Acoustic enclosure should be modular in construction with integral in construction,IP22 enclosure ,made on CNC machines,

sheet metal components should be hot dip seven tank pretreated before powder coating, enclosure should be powder coated with a special pure polyester based powder, all nuts and bolts should be made of stainless steel, doors should be gasketed with high quality EPDM gaskets to prevent leakage of sound, door handles should be lockable type., sound proofing of the enclosure should be done with high quality fire Retardant foam, specially designed attenuators should be provided to control sound at air entry and exit points, adequate ventilation should be provided to meet total air requirement, temperature of enclosure should not be beyond 5 -7 Deg Celsius of ambient temperature, arrangement for emergency shutdown from outside of the enclosure, noise level 75 dBA at 1 meter distance thus meeting CPCB norms., type approval certification from CPCB.

Alternator

- Output: 30 kVA
- Power factor: .8 pf lagging suitable for 50 Hz
- Voltage : 240 V, Single phase
- Type: Synchronous alternator of continuous operation
- Speed: 1500 rpm
- Overload capacity: Permissible overload 10 % for 1 Hr in 12 Hrs of duration
- Excitation: Self excited, self regulated through an AVR
- Permissible voltage
- Variation: +/- 1.5% voltage regulation (Max)
- Enclosure: IP23 enclosure
- Insulation: Class H

Battery Uncharged with Battery leads -1 No

15 KVA Online UPS with 2 hour backup

Sl.	Specifications	
1.	Technology	IGBT/ PWM, Dual Microprocessor Controlled Double Conversion with Active Power Factor Correction.
2.	Input	
	Voltage	
	1. Nominal	415 V AC
	2. Range	330V AC to 470 V AC
	Frequency	
	1. Nominal	50 Hz +/- 10 %
	2. Range	47-53 Hz
	Phase	Three phase, 4 wire
	Power Factor	> 0.9
3.	Over Volt Protection	Should be provided
	Under Volt Protection	Should be provided
	Over voltage cut-off	Should Be Provided
	Battery Charger/ Backup Period	Constant Voltage / Constant Current, Charger must be of

Sl.	Specifications	
		minimum 10% of the battery rating. Batteries should be quoted separately and must give 4 hours battery backup
	Recharge Time	Should not exceed 12 Hrs. Please mention maximum charging current (15 AMP)
	Intermediate DC Voltage	Minimum 240 VDC
	DC Bus Ripple	< 1%
	Cabling	To connect the UPS System with Batteries. Supplier Should provide cable Length of 10 Meters, without dropping the DC Voltage.
	Cold Start	The facility to start the UPS even if mains power is not there at the time of starting. The system should draw current from the batteries and start. This should be demonstrated at the time of installation.
4.	Output	
	Voltage	230V AC
	Voltage Regulation	
	1. Steady State	+ 2%
	2. Transient Response	+ 5% with 100% non-linear step load
	Frequency	50 Hertz +/- 0.1 % Free run mode.
	Under Volt Protection	Should be provided
	Phase	Single phase
	Overload capacity	a. 150% of rated load for 60 secs. b. 125% of rated load for
		10mins.
	Waveform	Pure Sine wave
	Total Harmonic Distortion	< 3% for linear load < 5% for non-linear load
	Crest Factor	Minimum 3:1 at full load
	Power factor	0.8
	Short Circuit Protection	Electronic Protection. Soft shutdown should occur without blowing any fuse
5.	Static Switch (automatic)	Should be provided and should

Sl.	Specifications	
		take care of 100% Uninterrupted transfer of load from UPS. (Synchronous bi directional static switch with max. 4 ms. Transfer time.
6.	<u>Manual Bypass Time</u>	Should be provided
7.	<u>Efficiency</u>	
	a. Inverter Efficiency	93 or better
	b. Overall Efficiency (AC to AC)	89 or better
8.	<u>Isolation</u>	
	a. Isolation of Power at Input and Output	Both I/P and O/P to have MCB/MCCB. Also battery connection to have MCB/MCCB or equivalent or better circuitry
	b. Isolation Transformer	Isolation Transformer should be at Input and Output.
9.	<u>Audible Alarm for</u>	
	Battery low	Should be provided
	Mains failure	Should be provided
	UPS failure	Should be provided
10.	<u>Display Panel</u>	Built in LED/ LCD Display Input Voltage, Output Voltage, Battery Voltage, Input Frequency, Output Frequency, Output load (%) and UPS Status
11.	<u>Protection for</u> (Audible Alarm should be provided for important protections)	Input MCB, Rectifier Over Voltage, Battery MCB, Battery Low, Battery Charging Current limit, output under/ over Voltage, Inverter over temperature, output overload, output Short Circuit etc.
12.	<u>Communication</u>	RS – 232 Serial port, and Power management software for Windows' NT/ 2000, Windows 95/ 98, Solaris and Linux
13.	<u>Environmental</u> Operating temp. Storage temperature Humidity Noise level Cooling	0 – 45 degree cent. 0 – 75 degree cent. 10 – 90 % RH (Non Cond.) < 55 db at full load at 1 meter Forced air cooling
14.	<u>Approvals</u>	ISO – 9001 and above

UTM Device

UTM security appliances should offer unified threat management solutions to secure the network, including security protections, updates and management and hardware warranty.

The proposed UTM solution should be able to provide the following functionalities:

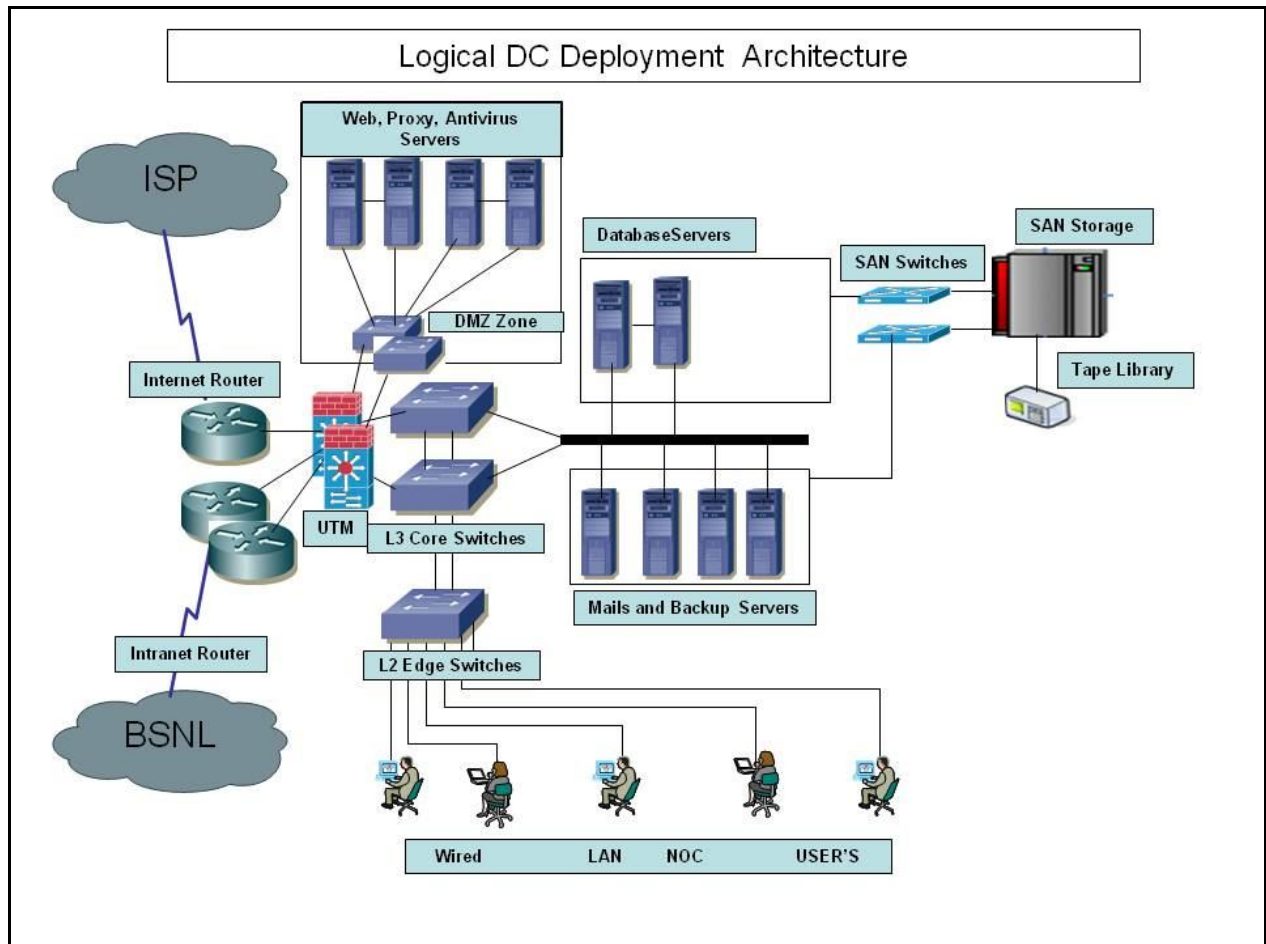
- Firewall
- IPSEC VPN
- IPS
- URL Filtering
- Antivirus & Anti-Malware
- Anti-Spam & Email Security
- Web Security

UTM device should meet the following specification:

Ports	Minimum of 4* 10/100/1000
Firewall Throughput	Minimum 6 GBPs
VPN Throughput	Minimum 300 Mbps
Concurrent Sessions	Minimum 500,000
IPS Throughput	Minimum 1 GBPs
Licensed Users	Unlimited
VLANs	Minimum 1024
Storage	Minimum 60 GB

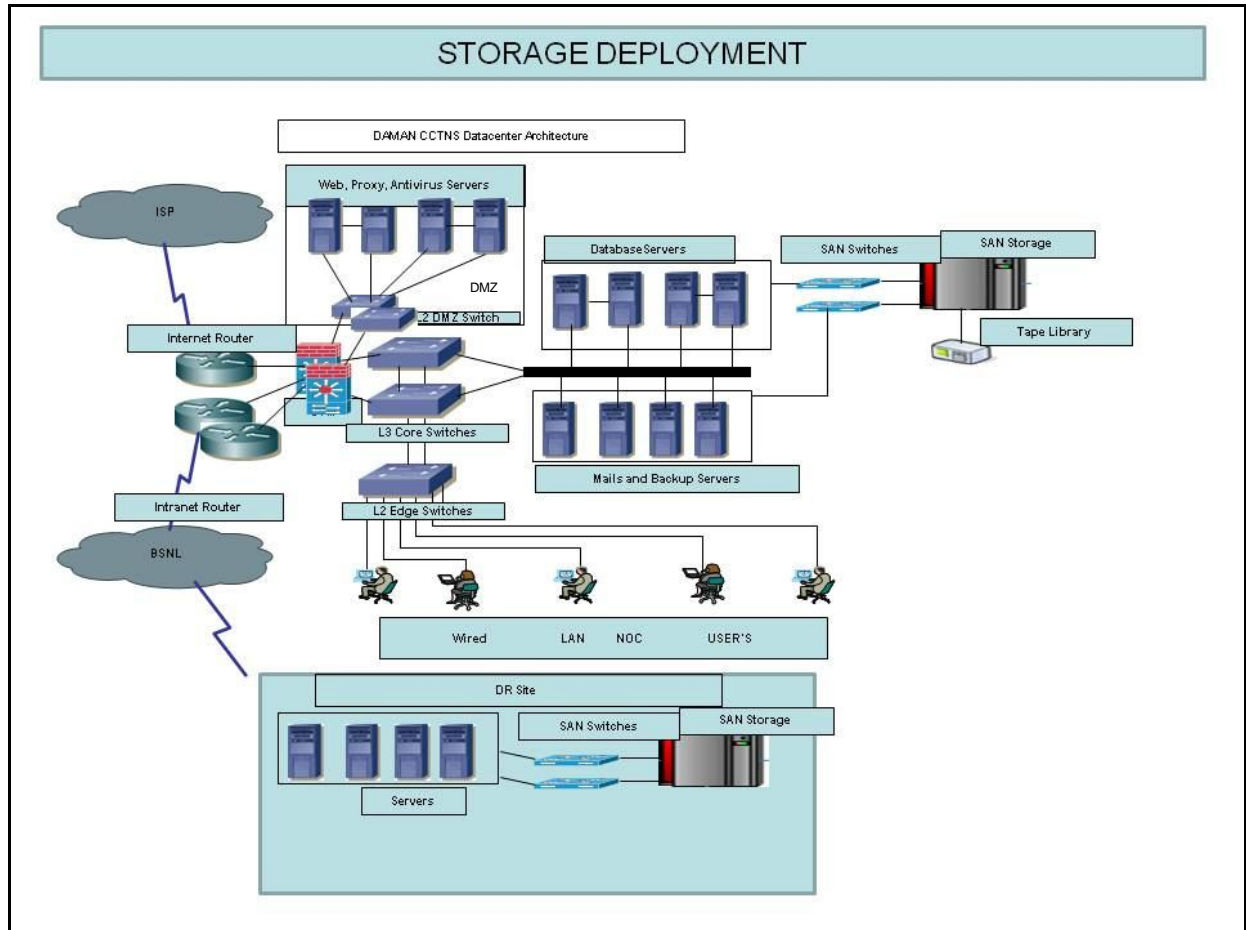
Deployment Architecture:

- Diagram for Network, Security, Servers and Storage Deployment
- Information Security Measures diagram



Storage Deployment:

- **STORAGE DEPLOYMENT**



Technical Requirements

Technical Specifications for Solution Components

The CAS architecture should be at least 3-tiered and must include all necessary software components including but not limited to Web Servers, Application servers, Database and Operating system. The CAS architecture shall allow for future scalability and scope addition by way of defining new services.

The SDA shall propose the solution and technology stack / platform that is based on the open standards, provide interoperability with other operating systems and application servers, guarantee portability of data and content and that best meets the CAS (UT) functional, non-functional, and technical specifications provided in the RFP. CCTNS system must be designed following open standards in order to provide for good inter-operability with multiple platforms and avoid any technology or technology provider lock-in. Since the CAS (UT) will be customized at the State Level and deployed at the State Data Center by the System Integrator at the State, the SDA shall propose two additional stacks and port the solution to the two proposed additional stacks (where each of the licensed/proprietary solution / technology component proposed in one stack is distinct from the ones proposed in the other stack) in order to provide the flexibility to the State to select the platform that fits the existing infrastructure in the State and that best meets the State's requirements. At least one of the three stacks proposed must be an open source stack (definition of open source: <http://www.opensource.org/docs/osd>). The Open Source licenses should be one of the approved licenses by OSI as provided at <http://www.opensource.org/licenses/category>. It is recommended to use components with open source licenses that are standard, widely used and supported and enhanced through strong communities. The SI at State level should be able to deploy on any one of the technology/platform for one or more components in the proposed technology stack by the SDA. The solution should also be inter-operable with the other modules that will be developed and deployed by the State SI. The SDA shall have the CAS certified on all the proposed stacks by a 3rd party agency that will be identified by NCRB. However, the CAS (Center) shall be developed and deployed on only one homogenous solution and technology stack/platform that is based on open standards and widely used and that best meets the functional, non-functional and technical specifications of the solution as detailed in this RFP.

Stands amended as

The CAS architecture should be at least 3-tiered and must include all necessary software components including but not limited to Web Servers, Application servers, Database and Operating system. The CAS architecture shall allow for future scalability and scope addition by way of defining new services.

The SI shall propose the solution and technology stack/platform that is based on the interoperability with other operating systems and application servers guarantee portability of data and content and that best meets the CAS (UT) functional, non-functional and technical specifications provided in the RFP. Since the CAS (UT) will be customized at the State/UT Level and deployed at the State Data Center by the SI at the State/UT, the SI shall be expected to bid with one of the stacks. The SI at State/UT level should be able to deploy on the selected technology/platform for one or more components in the proposed technology stack. The solution should also be inter-operable with the other modules that will be developed and

deployed by the State/UT. The SI shall have the CAS certified on all the proposed stacks by a 3rd party agency that will be identified by State/UT.

Annexure 10 – Technical Specifications (Indicative)

Technical Specification for Server for Data Center and DR Site Components:

- **Specification of Database Server**

Hard Drive - 2 X 146 GB SAS minimum 15K RPM SAS or better Hot Plug Drives with RAID1

May be read as

Hard Drive - 2 X 300 GB SAS minimum 15K RPM SAS or better Hot Plug Drives with RAID1

- **Specifications for Application Server, Intranet Web Server, Mail Messaging Server, Directory server at DC and DR**

Hard Disk Drives - Two 146 GB 2.5" SAS Hard Disk Drive hot swappable system disk with mirroring using integrated RAID 0,1 on internal disks

May be read as

Hard Disk Drives - Two 300 GB 2.5" SAS Hard Disk Drive hot swappable system disk with mirroring using integrated RAID 0,1 on internal disks

- **Specifications for Internet Web Server, Proxy & web filtering server, EMS & Helpdesk server , Antivirus server, Backup Server at DC and DR**

Hard Disk Drives – Two 146 GB 2.5" SAS Hard Disk Drive hot swappable system disk with mirroring using integrated RAID 0,1 on internal disks

May be read as

Hard Disk Drives – Two 300 GB 2.5" SAS Hard Disk Drive hot swappable system disk with mirroring using integrated RAID 0,1 on internal disks

3. REQUEST FOR PROPOSAL VOLUME - 2

C. PRE-QUALIFICATION CRITERIA:

5.1.1 Criteria

vii The bidder (System Integrator) must meet at least one of the below criteria:

- a. The bidder must have been assessed and certified for CMMi Level 4 or above. The certificate should be valid for at least a period of one year from the date of submission of the bid.
- b. The bidder must have been assessed and certified for ISO 9001 in IT Services and ISO 27001.

Stands amended as

vii The bidder (System Integrator) must meet all of the below criteria:

- a. The bidder (System Integrator) must have been assessed and certified for CMMi Level 3 or above. The certificate should be valid for at least a period of one year from the date of submission of the bid.
- b. The bidder must have been assessed and certified for ISO 9001 or above.
- c. The bidder must have been assessed and certified for ISO 27001.

iii The Bidder (System Integrator), a single legal entity registered in India, should be a profitable vendor for the last three years and must have an annual turnover from System Integration business (not h/w or n/w component sales) of not less Rs. 100 crores for the last three financial years (as on 31-03-2010).

Stands amended as

iii The Bidder (System Integrator), a single legal entity registered in India, should be a profitable vendor for the last three years and must have an annual turnover from System Integration business (not h/w or n/w component sales) of not less Rs. 100 crores for the last three financial years.

7. Payment Terms and Schedule

In the event of the Bidder's failure to submit the Bonds, Guarantees and Documents and supply the solution / equipment as per schedule specified in this RFP, UT may at its discretion withhold any payment until the completion of the contract. UT may also deduct from the Bidder as agreed, liquidated damages to the sum of 0.5% of the contract price of the delayed / undelivered services (as detailed in Volume I of this RFP) for every week of delay or part of a week, subject to the maximum value of the Liquidated Damages being not more than 10% of the value of delayed services. This right to claim any liquidated damages shall be without prejudice to other rights and remedies available to UT under the contract and law.

Stands amended as

In the event of the Bidder's failure to submit the Bonds, Guarantees and Documents and supply the solution / equipment as per schedule specified in this RFP, UT may at its discretion withhold any payment until the completion of the contract. UT may also deduct from the Bidder as agreed, liquidated damages to the sum of 0.5% of the contract price of the delayed / undelivered services (as detailed in Volume I of this RFP) for every week of delay or part of a week, subject to the maximum value of the Liquidated Damages being not more than 10% of the value of delayed services. This right to claim any liquidated damages shall be without prejudice to other rights and remedies available to UT under the contract and law. Penalty shall not be invoked upon delay as a result of (i) Delay caused due to Force Majeure conditions, or (ii) reasons attributable partially/wholly to the owner. The liquidated damage shall be sole and exclusive remedy for delays, penalties, damage or other claims/rights. Paid liquidated damages should be offset against any actual damage

8. Formats for Response – Pre-Qualification Bid

5. Part V – Proof of Certification:

- a. Assessment and Certification of the required certification (CMMi Level 4 , ISO 9001 or above and ISO 27002)

Stands amended as

- a. Assessment and Certification of the required certification (CMMi Level 3 , ISO 9001 or above and ISO 27001)

9. Formats for Response - Technical Bid

9.1.1 Profiles of Previous Project Experience

Relevant Project experience (Provide no more than 3 projects in the last 5 years)

May be read as

Relevant Project experience (Provide no more than 5 projects in the last 5 years)

4. FORMAT FOR BID RESPONSE – COMMERCIAL BID

10. Format for Bid Response – Commercial Bid

10.1.2 - Form 1 – Pricing Summary Services Provided During Post Implementation Phase

B. Sub-total for Services Provided During Post Implementation Phase (Sum of items 9 – 13):

May be Read as

B. Sub-total for Services Provided During Post Implementation Phase (Sum of items 1 – 5):

10.1.2 Form 1 – Pricing Summary Services Provided During Post Implementation Phase

Amended as:

Operations and Maintenance Services Shall be quoted for **“3 Years only”** i.e. for

1. Operations and Maintenance Services for the 1st year after “Go-Live”
2. Operations and Maintenance Services for the 2nd year after “Go-Live”
3. Operations and Maintenance Services for the 3rd year after “Go-Live”

C. Blended Person Month Cost for 300 Person Months

Clarification:

The bidders for SI RFP are expected to quote blended man month rate for 300 Person Months which is used for evaluation of commercial bids. This blended man-month rate would be considered for pricing man-month cost for future requirements of change requests/change orders to be taken up by the system integrator as per the contract. This blended rate shall be in addition to the quotes to be made by the bidder for the implementation and maintenance of services in its financial proposal and will be considered in the cash flows in the first year. However the 300 person man-months is only an estimate of the resource personnel costs to be quoted by the bidder for finalizing the man-month rates for resource personnel required for change requests and change orders of CCTNS project.

11.1.16 Undertaking on Support to Certification

Clarification:

The certification expenses will be borne by UT, the responsibility to ensure successful certification lies with the System Integrator.