Meghalaya Information Technology Society (MITS)

Department of Information Technology Government of Meghalaya

REQUEST FOR PROPOSAL
FOR
SELECTION OF SYSTEM INTEGRATOR
FOR

SUPPLY, INSTALLATION, COMMISSIONING, MANAGEMENT AND MAINTENANCE OF COMPUTING INFRASTRUCTURE, DATA ENTRY ETC FOR

STATE-WIDE ROLLOUT OF E-DISTRICT MISSION MODE PROJECT IN MEGHALAYA

Ref No: ITR.49/2010/Pt/539

CORRIGENDUM IVDated 12th August, 2014





Further to RFP Document [Ref No.: ITR.49/2010/Pt/539] and all subsequent Corrigenda thereof, amendments are notified as below. All other requirements / specifications / information / Terms and Conditions remain unchanged except as given below.

	Note: MITS encourages bidders to leverage the existing IT infrastructure at SDC wherever possible and quote accordingly.				
SI. No.	RFP Document Reference(s) (Section & Page Number(s)	Original Clause	Modified Clause		
1.	5.5.3. Venue & Deadline for Submission of Proposals, Page 11,RFP Vol 1	a) Proposals, in its complete form in all respects as specified in the RFP, must be submitted to MITS at the address specified in Section 2 above.	a) Proposals, in its complete form in all respects as specified in the RFP, must be submitted to MITS at the address specified in Section 2 above before 3 p.m. on 22 nd September 2014.		
2.	5.6.1 Tender Opening, Page 12,RFP Vol 1	5.6.1 Tender Opening I. The Proposals submitted up to 3:00 pm on 10th January 2014 will be opened at 3:30 pm on 10th January 2014 by Member Secretary, Meghalaya Information Technology Society or any other officer authorized by MITS, in the presence of such of those Bidders or their representatives who may be present at the time of opening. II. The representatives of the bidders should be advised to carry the identity card or a letter of authority from the tendering firms to identify their bonafides for attending the opening of the proposal.	5.6.1 Tender Opening I. The Proposals submitted up to 3:00 pm on 22 nd September 2014 will be opened at 3:30 pm on 22 nd September 2014 by Member Secretary, Meghalaya Information Technology Society or any other officer authorized by MITS, in the presence of such of those Bidders or their representatives who may be present at the time of opening. II. The representatives of the bidders should be advised to carry the identity card or a letter of authority from the tendering firms to identify their bonafides for attending the opening of the proposal.		



Note: MITS encourages bidders to leverage the existing IT infrastructure at SDC wherever possible and quote accordingly. **RFP Document** SI. Reference(s) **Original Clause Modified Clause** No. (Section & Page Number(s) Description of Item: 8. SATA (2 TB) HDD for existing SAN IBM DS 5100 (OPTIONAL)* -Quantity: 8 9. Additional Tapes - LTO4 (800 GB compressed, 1.6 TB raw) (OPTIONAL)* - Quantity: 10 10. 8 port SFP module compatible with existing SAN switch (CISCO MDS 9134) (OPTIONAL)* - Quantity: 2 (OPTIONAL)* - Bidders are suggested to quote for these items and provide Description of Item: the details in Form 2A: Details of 8. SATA (1 TB) HDD for existing SAN Financial Bid. However, the same IBM DS 5100 shall not be added to the overall Form B: Bill of 9. DAE (Disk Attached Enclosure) financial proposal Form 2, S. No. g, Material with power cord for existing SAN Deployment of requisite 3. infrastructure for Data Center(G) (Infrastructure at **IBM DS 5100** SDC),Page 10. 24 port SAN switch compatible **Note:** 1. MITS encourages bidders to 80,RFP Vol 1 with existing CISCO MDS 9134 along leverage the existing IT infrastructure with OFC Patch cord. at SDC wherever possible and quote 11. Additional Tape Drives - LTO4 accordingly. (800 GB compressed, 1.6 TB raw) **Note: 2.** The items DAE (Disk Attached Enclosure) with power cord for existing SAN IBM DS 5100 and 24 port SAN switch compatible with existing CISCO MDS 9134 along with OFC Patch cord have been removed from the BoM. Note: 3. Bidders should note that there is 1 SFP slot for 8 ports available each on the primary and

secondary SAN switch (CISCO MDS 9134) and the solution provided should be in line with this. No new SAN switch will be purchased.



Note: MITS encourages bidders to leverage the existing IT infrastructure at SDC wherever possible and quote accordingly.

quote	quote accordingly.				
SI. No.	RFP Document Reference(s) (Section & Page Number(s)	Original Clause	Modified Clause		
4.	Form A: Bill of Material (Software),Page 79,RFP Vol 1	Item: 1. Port License for existing SAN Switch Model CISCO MDS 9134 7. HIPS license for the servers planned to be deployed (IBM ISS)	Item: 1. Port License for existing SAN Switch Model CISCO MDS 9134 (OPTIONAL)* - Quantity - Bidder to suggest 7. HIPS license for the servers planned to be deployed (IBM ISS) (OPTIONAL)* - Quantity - Bidder to suggest (OPTIONAL)* - Bidders are suggested to quote for these items and provide the details in Form 2A: Details of Financial Bid. However, the same shall not be added to the overall financial proposal Form 2, S. No. g, Deployment of requisite infrastructure for Data Center (G) Note: MITS encourages bidders to leverage the existing IT infrastructure at SDC wherever possible and quote accordingly.		



Note: MITS encourages bidders to leverage the existing IT infrastructure at SDC wherever possible and quote accordingly. **RFP Document** SI. Reference(s) **Original Clause Modified Clause** No. (Section & Page Number(s) Item: 8. Additional license for real time and passive back up management for existing backup server at SDC (Tivoli Storage Manager) AND 9. Additional license for EMS for the existing Tivoli EMS software at SDC (Module wise license to be procured) OR **New Item** (applicable only if new EMS Item: and NMS is proposed by the bidder 8. Additional license for real time instead of providing additional and passive back up management licenses for Tivoli): Form A: Bill of 8. & 9. License for new EMS and NMS for existing backup server at SDC Material 5. solution for monitoring of e-District (Tivoli Storage Manager) (Software), Page 9. Additional license for EMS for the infrastructure/application at SDC, 79,RFP Vol 1 existing Tivoli EMS software at SDC taking necessary real time and (Module wise license to be passive backup, service desk procured) management etc; Number of Licenses - Bidder to suggest the no of units required Bidders are required to propose the number of license required and include the same in the financial proposal (both Form 2 and Form 2A). It may be noted that the number of licenses proposed by the bidder should be adequate for continuous monitoring the e-District infrastructure/application at SDC.



Note: MITS encourages bidders to leverage the existing IT infrastructure at SDC wherever possible and quote accordingly.

quote	quote accordingly.					
SI. No.	RFP Document Reference(s) (Section & Page Number(s)	Original Clause	Modified Clause			
6.	Form B: Bill of Material (Infrastructure at SDC),Page 80,RFP Vol 1		New Item (applicable only if new EMS and NMS is proposed by the bidder instead of providing additional licenses for Tivoli): 12. Server for EMS and NMS for SDC, Quantity - Bidder to suggest quantity along with detailed specifications of servers. Bidders are required to propose the number of servers required and include the same in the financial proposal (both Form 2 and Form 2A). It may be noted that the number of servers proposed by the bidder should be adequate for continuous monitoring the e-District infrastructure/application at SDC.			
7.	8.4.1 Overview of Post Implementation Services, page 38, RFP Vol 1		New Point added: K. The selected bidder will be responsible for management of EMS and NMS solution to be deployed at SDC (this is applicable in case new EMS and NMS solution is proposed by the bidder instead of providing additional licenses for Tivoli)			
8.	Corrigendum 2- eDistrict Meghalaya RFP, Sl. No. 13	Intel or AMD; 64 bit Dual Core Processor; min 3 GHz	Intel or AMD; 64 bit Dual Core Processor; min 3 GHz and min 1 MB cache			

No. V,RFP Vol 1



Note: MITS encourages bidders to leverage the existing IT infrastructure at SDC wherever possible and quote accordingly. **RFP Document** SI. Reference(s) **Original Clause Modified Clause** No. (Section & Page Number(s) List of Services approved by Apex List of Services approved by Apex Committee for State wide rollout of Committee for State wide rollout of e-District MMP in Meghalaya are as ANNEXURE VI e-District MMP in Meghalaya are as follows. The State may add more follows. The State may add more services at later stages and the List of Services, 9. Page 117,RFP Vol services at later stages and the selected SI will need to work on and selected SI will need to work on and support rollout of those services as support rollout of those services as well. The final list of services will be well. approved by the latest Apex Committee meeting. Amended Form C: Bill of Material (Infrastructure at Field Offices) is attached in Annexure A of this Form C: Bill of Corrigendum IV. Material **New Point added** (Infrastructure at Sl. No. 23: Field Offices), Pg Description of Item: LCD Projector 88, Sl. No. 23, RFP Quantity:1 Vol 1 (Refer Annexure A of this Corrigendum IV for Minimum Specifications & Compliance Sheet) Form C: Bill of Material (Infrastructure at Description of Item: Laptop Description of Item: Laptop 11. Field Offices), Pg Quantity:15 Quantity:35 87,Sl. No.3,RFP Vol 1 New item added Form C: Bill of Pt. No. U: Material Description of Item: 4 Port Router 12. (Infrastructure at (Refer to Annexure A in this Field Offices), Pg Corrigendum IV for Minimum 109,RFP Vol 1 Specifications & Compliance Sheet) New item added Form C: Bill of Pt. No. V: Material Description of Item:12 Port Managed 13. (Infrastructure at L2 Switch (Refer to Annexure A in this Field Offices), Pt.

Corrigendum IV for Minimum

Specifications & Compliance Sheet)



Note: MITS encourages bidders to leverage the existing IT infrastructure at SDC wherever possible and quote accordingly.

quote a	uote accordingly.					
SI. No.	Original Clause		Modified Clause			
14.	Form B: Bill of Material (Infrastructure at SDC),Pg 80, RFP Vol 1		Amended Form B: Bill of Material (Infrastructure at SDC) is attached in Annexure A of this Corrigendum IV. New Item added as SI. No. 12: Description of Item: LDAP & CAS Server. Quantity:2 (Refer Annexure A of this Corrigendum IV for Minimum Specifications & Compliance Sheet)			
15.	Average Annual Sales Turnover generated from services related to System Integration (SI) for "Supply, Installation, Commissioning, Management and Maintenance of Computing Infrastructure, Data Entry, Site Preparation etc" during the last three (3) financial years (FY 12-13, FY 11-12, and FY 10-11) as per the last published balance Average Annual Sales Turnover generated from services related to System In Installation, Commissioning, Installation Management and Maintenance of Computing Infrastructure, Data Computing Site Preparation etc" during the last three (3) financial years (FY 12-13, and per the last published balance		Average Annual Sales Turnover generated from services related to System Integration (SI) for "Supply, Installation, Commissioning, Management and Maintenance of Computing Infrastructure, Data Entry, Site Preparation etc" during the last three (3) financial years (FY 13-14, FY 12-13, and FY 11-12) as per the last published balance sheets - Rs. 200 Crores or more			



Note: MITS encourages bidders to leverage the existing IT infrastructure at SDC wherever possible and quote accordingly. **RFP Document** SI. Reference(s) **Original Clause Modified Clause** (Section & Page No. Number(s) Company experience in Company experience in implementation of integrated implementation of integrated turnkey turnkey projects around System projects around System Integrator for **Integrator for Computing** Computing Infrastructure in India. Infrastructure in India. (Specifically (Specifically each project should have each project should have components of Hardware, components of Hardware, Networking, Helpdesk, Management Networking, Helpdesk, & Maintenance etc necessarily for Management & Maintenance etc this project). necessarily for this project). Section 6.1:Prequalification Number of such Assignments of value Number of such Assignments of 16. Criteria, Sl. No. 7, (as specified for tiers) which have value (as specified for tiers) which Pg. No 13, RFP gone live in the past 5 years (FY 13have gone live in the past 5 years Vol 1 14,FY 12-13, FY 11-12, FY 10-11, and (FY 12-13, FY 11-12, FY 10-11, FY FY 09-10): 09-10, and FY 08-09): Two minimum 10 Crores Project Two minimum 10 Crores Project OR OR Four 5 to 10 Crores Projects Four 5 to 10 Crores Projects OR OR Six 4 to 5 Crores Project Six 4 to 5 Crores Project Out of the above minimum 1 project Out of the above minimum 1 should be in project should be in Government sector. Government sector. The Firm / Company should be in The Firm / Company should be in the the business as System Integrator Section 6.1:Prebusiness as System Integrator for for "Supply, Installation, qualification "Supply, Installation, Commissioning, Commissioning, Management and 17. Criteria, Sl. No. 3, Management and Maintenance of Maintenance of Computing Pg. No 13, RFP Computing Infrastructure, Data Entry, Infrastructure, Data Entry, Site Vol 1 Site Preparation etc" at least 5 Preparation etc" at least 5 financial financial years as of 31st March 2014 years as of 31st March 2013



Note: MITS encourages bidders to leverage the existing IT infrastructure at SDC wherever possible and quote accordingly. **RFP Document** SI. Reference(s) **Original Clause Modified Clause** No. (Section & Page Number(s) The responding firm must have a The responding firm must have a minimum minimum number of 200 IT Staff of Section 6.1:Prenumber of 200 IT Staff of technically qualification technically qualified personnel qualified personnel having minimum 18. Criteria, Sl. No. 8, having minimum qualification of qualification of Pg. No 14, RFP B.E./B.Tech/MCA in the domain of B.E./B.Tech/MCA in the domain of Vol 1 systems integration, as on 30th systems integration, as on 30th June, September, 2013 on its roll. 2014 on its roll. For point a and b, the Completion For point a and b, the Completion Certificate of the projects Certificate of the projects completed Section 6.2: completed in the last 3 years (as on in the last 3 years (as on 31st July **Technical** 31st July 2013) need to be provided 2014) need to be provided (issued to Qualification (issued to the responding firm by the responding firm by the respective 19. Criteria, Note: Pt. the respective customers). For customers). For point c, Work No. 1, Pg. No 16, point c, Work Order/Agreement Order/Agreement copy dated within RFP Vol 1 copy dated within the last 5 years the last 5 years for projects for projects completed/ongoing in completed/ongoing in North East North East need to be provided. need to be provided. The Firm / Company should be in Form 4A: The Firm / Company should be in the the business as System Integrator Compliance business as System Integrator for for "Supply, Installation, Sheet for Pre-"Supply, Installation, Commissioning, Commissioning, Management and 20. Qualification Management and Maintenance of Maintenance of Computing Proposal, Sl. No. Computing Infrastructure, Data Entry, Infrastructure, Data Entry, Site 3, Pg. No 49, RFP Site Preparation etc" at least 5 Preparation etc" at least 5 financial Vol 1 financial years as of 31st March 2014 years as of 31st March 2013 The responding firm must have a Form 4A: The responding firm must have a minimum minimum number of 200 IT Staff of Compliance number of 200 IT Staff of technically Sheet for Pretechnically qualified personnel qualified personnel having minimum 21. Qualification having minimum qualification of qualification of Proposal, Sl. No. B.E./B.Tech/MCA in the domain of B.E./B.Tech/MCA in the domain of 8, Pg. No 50, RFP systems integration, as on 3oth systems integration, as on 30th June, Vol 1 September, 2013 on its roll. 2014 on its roll.



Note: MITS encourages bidders to leverage the existing IT infrastructure at SDC wherever possible and quote accordingly. RFP Document SI. Reference(s) **Original Clause Modified Clause** (Section & Page No. Number(s) Average Annual Sales Turnover Average Annual Sales Turnover generated from services related to generated from services related to Form 4A: System Integration (SI) for "Supply, System Integration (SI) for "Supply, Compliance Installation, Commissioning, Installation, Commissioning, Sheet for Pre-Management and Maintenance of Management and Maintenance of 22. Qualification Computing Infrastructure, Data Computing Infrastructure, Data Entry, Proposal, Sl. No. Entry, Site Preparation etc" during Site Preparation etc" during the last 6, Pg. No 49, RFP the last three (3) financial years (FY three (3) financial years (FY 13-14, FY Vol 1 12-13, FY 11-12, and FY 10-11) as 12-13, and FY 11-12) as per the last per the last published balance published balance sheets - Rs. 200 sheets - Rs. 200 Crores or more Crores or more Company experience in Company experience in implementation of integrated implementation of integrated turnkey turnkey projects around System projects around System Integrator for Integrator for Computing Computing Infrastructure in India. Infrastructure in India. (Specifically (Specifically each project should have each project should have components of Hardware, components of Hardware, Networking, Helpdesk, Management Networking, Helpdesk, & Maintenance etc necessarily for Management & Maintenance etc Form 4A: this project). necessarily for this project). Compliance Sheet for Pre-Number of such Assignments of value Number of such Assignments of 23. Qualification (as specified for tiers) which have value (as specified for tiers) which Proposal, Sl. No. gone live in the past 5 years (FY 13have gone live in the past 5 years 7, Pg. No 50, RFP 14,FY 12-13, FY 11-12, FY 10-11, and (FY 12-13, FY 11-12, FY 10-11, FY Vol 1 FY 09-10): 09-10, and FY 08-09): Two minimum 10 Crores Project Two minimum 10 Crores Project OR OR Four 5 to 10 Crores Projects Four 5 to 10 Crores Projects OR Six 4 to 5 Crores Project Six 4 to 5 Crores Project Out of the above minimum 1 project Out of the above minimum 1 should be in project should be in Government sector. Government sector.



	Note: MITS encourages bidders to leverage the existing IT infrastructure at SDC wherever possible and quote accordingly.				
RFP Document SI. Reference(s) No. (Section & Page Number(s) Original Clause		Original Clause	Modified Clause		
24.	Pg. No 87, RFP Vol 1, 3 rd Bullet "All Servers should have the following mandatory features for better reliability, availability and performance:"	OEMs must be one of the top 5 server vendor worldwide as on 1st Quarter 2013 as per Gartner report (bidder should provide supporting evidence)	OEMs must be one of the top 5 server vendor worldwide as on 1st Quarter 2014 as per Gartner report (bidder should provide supporting evidence)		
25.	Pg. No 88, RFP Vol 1, Important Note for bidders: Pt. No. (xiii)	OEMs for Desktops/PC must be one of the top 5 Desktop/PC vendor worldwide as on 2nd Quarter 2013 as per Gartner report (bidder should provide supporting evidence)	OEMs for Desktops/PC must be one of the top 5 Desktop/PC vendor worldwide as on 2nd Quarter 2014 as per Gartner report (bidder should provide supporting evidence)		



<u>ANNEXURE VI – Required Deliverables and Associated Timelines</u> Stands Amended As

ANNEXURE VI – Required Deliverables and Associated Timelines

Detailed deliverables will be as per the Scope of work detailed out in Section 8. The timelines have been calculated from time T, the date of signing of contract by the SI.

S. No.	Project Activity	Completion Timeline in months (from signing of contract)
1	Project initiation & Solution Design, Submission of Final Hardware Requirement Report	T + 2
2	Procurement, deployment and commissioning of the necessary Hardware and Software at SDC (in appropriate quantity and as per the specified technical specifications)	T + 6
3	Procurement, deployment and commissioning of the necessary Hardware at e-District locations (in appropriate quantity and as per the specified technical specifications)	T + 12 (In pilot district by T + 6)
2	Procurement, deployment and commissioning of the necessary Networking equipments and Connectivity as per the requirements to support functioning of at e-District locations	T + 12 (In pilot district by T + 6)
5	Data Entry and digitization of the records available in the paper files and migration of the data available in the existing databases, Verification of digitized and migrated data	T + 12 (In pilot district by T + 5)
6	Change Management	T + 12 (In pilot district Change Management will start based on mutual decision of SDA, ADA and SI.)



S. No.	Project Activity	Completion Timeline in months (from signing of contract)
-	Operations and Maintenance	For a period of 3 years from successful Go-Live at respective district



Annexure A

4 Port Router

S. No.	Feature	Minimum Specification	Specifications offered	Compliance (Yes / No)	Deviations, if any
1	Make	Must be specified		NA	
2	Model	Must be specified		NA	
3	Architecture	 a) Should be a single box configuration for ease of management b) Should have minimum of 128MB of RAM and 32 MB of Flash Memory 			
4	Interface	 a) 2 x 100/1000 Base interface. b) At least 2 serial additional slots 			
5	Performance	a) Should support high performance traffic forwarding with concurrent features like Security, Voice enabled b) Should support variety of interfaces like V.35 Sync Serial (2 Mbps), E1, ADSL for remote office aggregation			
6	Protocols	a) Should support Routing protocols like RIP ver1 (RFC1058)& 2, (RFC 1722 and 1723), OSPF ver2 (RFC2328), Telnet (RFC854),SSH ver2. b) Should have full IPv6 features. c) Should have RIP and OSPFv3 for IPv6 and MD5 route authentication.			



S. No.	Feature	Minimum Specification	Specifications	Compliance	Deviations, if any
			offered	(Yes / No)	
7	Security Features	a) Support for GRE Tunneling, NAT b) Support for MD-5 / SHA- 1/SHA-2 route authentication for RIP, OSPF c) Shall support multi-level of access d) Support for SNMPv3 authentication, SSHv2 e) AAA support using Radius and/or TACACS+ f) Support for PAP and CHAP authentication for P-to-P links g) Multiple privilege level authentications for console and telnet access through Local database or through an external AAA Server. h) ACLs for controlled forwarding i) IEEE 802.1x support for MAC address authentication			
8	Management	 a) Shall have support for Web based management, CLI, Telnet and SNMPv3 b) Shall support Secure Shell ver 2 for secure connectivity. c) Shall support Out of band management through Console and external modem for remote management 			
9	Certification	Common Criteria Certified			
10	Power	AC 200 – 240V			



12 Port Managed L2 Switch

S. No.	Feature	Minimum Specification	Specifications offered	Compliance (Yes / No)	Deviations, if any
1	Make	Must be specified		NA	
2	Model	All the relevant product brochures and manuals must be submitted.		NA	
3	Standards	1. IEEE 802.1D			
		2. IEEE 802.1p			
		3. IEEE 802.1Q			
		4. IEEE 802.1s			
		5. IEEE 802.1w			
		6. IEEE 802.1x			
		7. IEEE 802.1ab			
		8. IEEE 802.3			
		9.IEEE 802.3u			
		10.IEEE 802.3ab			
		11.IEEE 802.3z			
		12.RFC 854			
		13.RFC 951			
		14.RFC 1305 / RFC2030 or Higher/equivalent			
4	Protocol	CSMA/CD			
5	Throughput	Min 8 Gbps			
6	Data Transfer Rates	Non-Blocking Architecture			



S. No.	Feature	Minimum Specification	Specifications offered	Compliance (Yes / No)	Deviations, if any
			onered	(1637 1107	a.i.y
7	Network Cables	10BASE-T: UTP Cat. 5,6 (100 m) EIA/TIA- 586 100-ohm STP (100 m)			
		100BASE-TX: UTP Cat. 5,6 (100 m) EIA/TIA- 568 100-ohm STP (100m max.)			
8	Number of Ports	100/1000 Mbps port x 12			
9	Twisted-pair Rx	Auto-correction for each port			
	Reverse Polarity				
10	MAC Address	Automatic update			
	Learning				
11	RAM	128 MB			
12	Power Supply	100 - 240 VAC, 50/60 Hz			
13	Security	Should support			
		 a) 802.1x b) AAA c) SSH v1, v2 d) SSL e) Host to Host and Switch to Switch authentication or Higher/Equivalent 			
14	Management	Should have			
		a. IPv6 management capability			
		b. SNMP v1, v2, v3			
		c. RMON			
		d. RADIUS			
		e. CLI via console			
		f. Web interface			
		g. Provision of software and firmware upgrades with latest version releases through admin login			



S. No.	Feature	Minimum Specification	Specifications offered	Compliance (Yes / No)	Deviations, if any
15	Uplink Ports	Switch should have 2 dual-purpose uplink ports (100/1000 or SFP)			

LCD Projector

S. No.	Feature	Minimum Specification	Specifications offered	Compliance (Yes / No)	Deviations, if any
1.	Make	Must be specified		NA	
2.	Model	All the relevant product brochures and manuals must be submitted.		NA	
3.	General Aspect Ratio	4:3 (Native) 16:9 compatible			
4.	Brightness (ANSI Lumens)	3200 ANSI Lumens or above			
5.	Contrast Ratio	1500 : 1			
6.	Display Type	0.63" Poly silicon TFT LCD x 3 or higher			
7.	Resolution (Native)	xGA (1024 x 768)			
8.	Video Compatibility	NTSC, PAL, SECAM			
9.	Number of colors	16.77 Million Colors			



S. No.	Feature	Minimum Specification	Specifications offered	Compliance (Yes / No)	Deviations, if any
10.		Minimum of 1 RGB D- Sub 15 pin (VGA) or 1 Composite or 1 s-video			
	Connectivity Inputs	HDMI for video/display 2 RCA Audio or 1 stereo Mini Jack for audio output			
		Wireless Network Option, IEEE 802.11 b/g/n ready for LAN/ internet connectivity			
11.	Outputs	1 x RGB D-Sub 15 pin/ 1 x Stereo Mini Jack.			
12.	Control	1 x RS-232C/ 1 x RJ-45 LAN			
13.	Operation Power	220V - 240V, 50 Hz			
14.	Power Consumption Operational	Upto 320W			
15.	Power Consumption Operational (standby)	Upto 1W			
16.	Optical Zoom	1.2:1			
17.	Screen Specification	Screen: 12 feet x 9 feet (With stand on both sides).			
18.	Other Features	Desirable: Wireless Presentation from M-Tabs (Android Tablet).			
19.	Warranty	Minimum onsite comprehensive warranty for 2 years. Bulb warranty for 1 year.			
20.	Accessories	1 VGA Cable, and 1 HDMI cable (with converter from micro HDMI to standard HDMI). Other standard accessories.			



Specifications for LDAP & CAS Servers

SI.	Minimum Specifications	<u>Specifications</u>	Compliance	Deviations, if any
No.		offered	(Yes / No)	
1	8x Quad core processor with 2 GHz or above with			
	min 2MB L2 cache per processor			
2	64bit OS support: Red Hat® Enterprise Linux Server			
	Release 6.2 (Santiago)/Unix/Windows Server 2008			
	with 1 license			
3	Memory (RAM): Min. 32 GB should be latest			
	series/generation for the server model being			
	quoted			
4	RAID controller with RAID 1/3/5 with 256 MB			
	cache			
5	HDD: 200 GB 2.5" 10 K RPM HDD			
6	Disk bays: Support for min 4 small form factor hot			
	plug SAS / SCSI hard drives in disk drive carriers			
	that slides out from front			
7	At least 4 x 100/1000 Mbps Ethernet ports or more			
'	(if Rack)			
	(in ridery)			
8	2 x 4 Gbps Fiber Channel Ports (if Rack)			
	Min 2 USB ports (Ver 2.0/3.0), preferably 1 front			
9	USB port (ver 2.0/3.0), preferably 1 front			
	ροιτ (
10	Graphics controller: SVGA / PCI bus / ATI® ES 1000			
	/ min 16MB SDRAM std/max / 1280x1024 at 16M			
	colors			
11	Optical / diskette: 8X / 24X slim-line SATA DVD			
**	ROM drive (if Rack)			
	nom arre (ii nack)			



<u>Sl.</u> <u>No.</u>	Minimum Specifications	Specifications offered	Compliance (Yes / No)	Deviations, if any
12	Security: Power-on password / admin password / unattended boot / selectable boot / boot without keyboard			
13	It should provide Secure Sockets Layer (SSL) min. 256 bit encryption and Secure Shell (SSH) Version 2 and support VPN for secure access over internet			
14	Server must support virtualization			
15	Must be equipped with management ports with necessary software for fulfillment of manageability and virtual media			
16	Power: Minimum Dual Redundant Power Supply Hot Pluggable with cooling fans			

Form B: Bill of Material (Infrastructure at SDC) stands amended as follows

Form B: Bill of Material (Infrastructure at SDC)

#	Description of Item	Quantity
1.	Web Servers	2
2.	Application Servers (with high availability clustering)	2
3.	Database Servers (with high availability clustering)	2
4.	Staging / Patch Management / Testing Servers (Web Server & Application Server + Database Server)	2
5.	Demonstration Server (Web Server, Application Server and Database Server)	1
6.	Anti-Virus Server	1
7.	Server Rack (36U) (Maximum 2 racks for total solution, along with adequate power strips)	Bidder to suggest quantity
8.	SATA (2 TB) HDD for existing SAN IBM DS 5100 (Optional)*	8



9.	Additional Tapes - LTO4 (800 GB compressed, 1.6 TB raw) (OPTIONAL)*	10
10.	8 port SFP module compatible with existing SAN switch (CISCO MDS 9134) (OPTIONAL)*	2
11.	LDAP & CAS Server	2
12.	Server for EMS and NMS for SDC	Bidder to suggest quantity (this item is applicable only if new EMS and NMS is proposed by the bidder instead of providing additional licenses for Tivoli)

<u>Form C: Bill of Material (Infrastructure at Field Offices)</u> stands amended as follows:

Form C: Bill of Material (Infrastructure at Field Offices)

SI.	Description of Item	Quantity
No		
1.	Desktop / PC	800
2.	Laptop	35
3.	Digital Web camera	150
4.	Scanners	150
5.	Multi-Functional Devices (Network Printer cum Scanner cum Fax)	100
6.	Laser Printer (Color)	150
7.	Laser Printer (Black/White)	200
8.	9 U Rack (along with power cable etc.)	50
9.	24 Port Managed Switch (L3)	40
10.	Leased Line Modem Pair (In Pair of G703 and V35)	10

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11.	Router	10
12.	USB Token for digital signature	10
13.	Cat6 cable (Box of 305 mts)	100
14.	I/O Box (Single)	400
15.	I/O Box (Double)	400
16.	24 Port Single I/O Patch Panel and Jack Panel	70
17.	Patch Cord (1 mtr, 2 mtr & 3 mtr)	1 mtr -500, 2 mtr- 200, 3 mtr -150
18.	OFC Media Converter	20
19.	24 Port L2 Managed Switch	30
20.	True Online UPS (5 KVA) along with trolley and battery bank	50
21.	UPS (1 KVA) along with trolley	650
22.	OFC	200 m
23.	LCD Projector	1