Meghalaya State Data Centre

Addendum & Corrigendum

For Appointment of an Agency for Design, Site Preparation, Supply, Installation, Configuration, Operations and Maintenance of physical and IT infrastructure for

MEGHALAYA STATE DATA CENTRE
At
Shillong

Meghalaya Information Technology Society

(A Society under Information Technology Department, Govt. of Meghalaya)

NIC Building, Secretariat Hill, Shillong 793 001

Corrigendum Document

Appointment of an Agency to Design, Supply, Installation, and Configuration, Operations and Maintenance of Physical and IT Infrastructure of Meghalaya State Data Centre at Shillong (Meghalaya).

S. No.	Clause No.	Clause Description	Amendment Done
Volume 1			
1.	RFP Volume 1	QCBS criteria is 60:40	**Point Modified:** The QCBS criteria stands modified to 55:45
2.	4.1.1 f, Page no. 35	Integration of SDC with SWAN	**Point Added:** The monitoring of the link between the SDC and SWAN will be the responsibility of the SWAN operator.
3.	4.2.3, Page no. 42	**Application Monitoring:** • Others	**Point Deleted:** The word "others" stands deleted
4.	5.2.3, Page no. 66	**Service Level – Helpdesk**	All the severities, criticalities and timeframes of tickets shall be decided at the time of framing the ITSM policies and EMS deployment.

5.	6.18.2, Page no. 84	**Criteria for Evaluation and Comparison of Technical Bids**	**Modification:** Please find below the **Annexure III**
6.	7.20.2, Page no. 111	**Prices:** 7.20.2 If at any time during the period of contract, the DCO offers services similar in nature to any other customer at prices lower than those chargeable under this contract; he shall notify the same to the Client and extend such reduced prices to the Client with immediate effect.	**Point deleted**
7.	10.2.2.4, Page No. 170	Supply & Support Cost – IT Software	**Point Modified:** Please refer below mentioned **Annexure II**

Volume 2			
S. No.	**Clause No.**	**Clause Description**	**Amendment Done**
8.	DG Set Location		**The proposed location of the DG Set has been changed:** The DG Se which was earlier to be located behind the NIC building has been shifted to outside the building complex and will be located behind the NIC Building Complex within the Directorate of Printing & Stationery Complex (just behind the NIC

			Building Complex) The bidder has to provision for electrical connectivity from the LT Panel to the SDC electrical room. The distance between LT Panel to the SDC electrical room is approx. 20 meters
9.	2.1, Page no. 7	**SDC Architecture – IT** - In this secure infrastructure it has to be ensured that the security devices in the network such as Firewalls, Anti-virus/Spam Filters, proxy servers, anti-virus are in high-availability mode, and these components should be evenly distributed to optimize performance	**Point Deleted:**
10.	2.1.1, Page no. 10	**Web Servers:**	**Point Added:** • The Volume Manager and File system should support heterogeneous Storage models from different OEMs. • If, the Clustering software is provided, it should support heterogeneous Operating systems from different OEMs.
11.	2.1.1, Page no. 12	**Staging Server:**	**Point Added:** • The Volume Manager and File system

			should support heterogeneous Storage models from different OEMs. If, the Clustering software is provided, it should support heterogeneous Operating systems from different OEMs.
12.	2.2.1, Page no. 14	**Core Switch:** **Interface –** Minimum 5 slots	**Point Modified:** Minimum 7 slots
13.	2.2.9. Page no. 24	**EMT 64T Server (Type 2)**	**Point Modified:** Minimum 2x Quad core physical processor with Min 2.1Ghz or above with 1066Mhz FSB/ direct memory access.
14.	2.2.3, Page no. 17	**Internet Router:** • Minimum 2 x 10/100/1000 Mbps Ethernet ports and scalable to 4 Ports	**Point Modified:** Minimum 2 x 10/100/1000 Mbps Ethernet ports and scalable to additional 2 x 1000 Base T Ethernet ports
15.	2.2.3, Page no. 17	**Internet Router:** • Encryption - IP Sec 3DES/AES	**Point Modified:** Hardware based Encryption - IP Sec 3DES/AES
16.	2.2.3, Page no. 17	**Internet Router**	**Point Modified :** GRE and IP Sec 3DES/AES VPN for configuration of VPN tunnels, - OSPFv2 and v3, - MPLS L2 & L3

			Router should support all the above mention protocols from day one.
17.	2.2.4, Page no. 18	**Network Intrusion Prevention System:** • Should have at least 2 GB of RAM and upgradeable to 4 GB	**Point Modified:** The NIPS should have atleast 2 GB of RAM with a provision for up gradation
18.	2.2.4, Page no. 18	**Network Intrusion Prevention System:** **Operational Modes:** Should protect at inline segments	**Point Modified:** Should protect at 2 (Two) inline segments
19.	2.2.4, Page no. 18	**Network Intrusion Prevention System:** • Should support Automatic signature synchronization from OEM database server on web	**Point Modified:** • Should support Automatic signature synchronization from OEM central server
20.	2.2.6, Page no. 21	**Perimeter Firewall:** • Throughput: minimum 4 Gbps	**Point Modified:** Throughput: Min 2 Gbps scalable to 4 Gbps
21.	2.2.7, Page no. 22	**Internal Firewall:** • Firewall Throughput Min 2 Gbps upgradeable to 4 Gbps	**Point Modified:** Firewall throughput Minimum 4 Gbps
22.	2.2.10, Page no. 25	**Blade Server:** • Support heterogeneous environment: Xeon and RISC/EPIC CPU blades must be in same chassis with scope to run	**Point Modified:** • Support heterogeneous environment: Xeon and RISC/EPIC CPU blades must be in same chassis with scope to run Windows Server, Red Hat Linux,

			Win2003 Server, Red Hat Linux, Suse Linux, 64 Bit UNIX.	Suse Linux, 64 Bit UNIX.
23.	2.2.11, Page no. 27	**Database (RDBMS):**	**Point Added:** • The Volume Manager and File system on the server should support heterogeneous Storage models from different OEMs. • For Database cluster, the clustering software should support heterogeneous Operating systems from different OEMs.
24.	2.2.12.2, Page no. 28	**SAN:** • The storage array shall be configured with atleast 4 GB of mirrored cache scalable to 8 GB cache across two storage controllers for disk I/O operations.	**Point Modified:** • The storage array shall be configured with atleast 4 GB of mirrored cache scalable to 8 GB cache across two storage controllers for disk I/O operations with in the same box.
25.	2.2.12.2, Page no. 28	**SAN:** • The Storage subsystem should have at least 4 nos. of 4Gbps front-end host ports for an aggregate port bandwidth of 16Gbps and at least 4 nos. of 4Gbps back-end drive ports for an aggregate port bandwidth of	**Point Modified:** • The Storage subsystem should have at least 4 nos. of 4Gbps front-end host ports for an aggregate port bandwidth of 16Gbps and at least 4 nos. of 4Gbps back-end drive ports for an aggregate port bandwidth of 16Gbps.

		16Gbps. Any vendor who does not have 4Gbps Ports should provide sufficient number of ports to match the required aggregate front-end and back-end port bandwidth.	
26.	2.2.12.2, Page no. 28	**SAN:** • Dynamic Features should include – Dynamic array RAID migration, Dynamic Array/Volume and LUNs expansion and Dynamic Replication Mode Switching. All features should be available while the system/applications are online.	**Point Modified:** • Dynamic Features should include – Dynamic array RAID migration, Dynamic Array/Volume and LUNs expansion and Dynamic Replication Mode Switching. All features should be available while the system/applications are online. Also the proposed storage subsystem should be interoperable with other OEM make storage arrays.
27.	2.2.12.2, Page no. 29	**SAN:** • Storage should support RAID level 0, 1 & 5. All RAID shall be hardware based RAID	**Point Modified:** • Storage should support RAID level 0, 1, 10, 5 & 6. All RAID shall be hardware based RAID
28.	2.2.12.2, Page no. 29	**SAN:**	**Point Added:** • To meet interoperability requirements, the Storage arrays shall support data replication in both synchronous and asynchronous modes across

			heterogeneous storage arrays from different OEMs.
			• The Storage shall support Point-in-time copy and full volume copy for heterogeneous storage arrays. It should support these operations from storage of one OEM to storage from another OEM.
			• The multi-path software should not only support the supplied storage and Operating systems but should also support heterogeneous storage and operating systems from different OEMs.
29.	2.2.12.3, Page no. 29	**SAN Storage Management Software:** • Should be able to take "snapshots" of the stored data to another logical drive.	**Point Modified:** Should be able to take "snapshots" of the stored data to another logical drive. The licenses configured should be one time for the entire storage device and no incremental license should be charged.
30.	2.2.13, Page no. 31	**Server Load Balancer:** Redundancy Features • Segmentation / Virtualization support / Resource Allocation	**Point Modified:** • Segmentation / Virtualization support and Resource Allocation per segment on basis of CPU, connections, throughput etc, along with dedicated access control per segment.

31.	2.2.15, Page no. 33	**EMS:**	**Point Added:** Please find below the **Annexure IV**
32. 26.	2.2.15, Page no. 33	**EMS:** Polling Cycle: • Should be able to update device configuration changes such as re-indexing of ports.	**Point Deleted**
33.	2.3.6	**UPS Requirements & Features**	**Point Added:** • TVSS shall be installed at the input of each UPS as per IEEE guidelines
34.	2.3.6.3, Page no. 64	**Battery requirement:** • Remote tripping of battery CB (Circuit Breaker).	**Point Deleted:**
35.	3.3, Page no. 102	**BoM:** **Pt. no. 26**: MS SQL Enterprise latest Edition (dual processor (Quad core) licence) in active-active clustering mode	**Point Modified:** : MS SQL Enterprise latest Edition (dual processor (Quad core) licence) in active-passive clustering mode

Annexure I

Format of Bank Guarantee for EMD

BID SECURITY FORM
(Bank Guarantee to be furnished on Rs. 100/- stamp paper)

Reference No. _____   Date _____
Bank Guarantee No._____

To,
Member Secretary
Meghalaya Information Technology Society
Secretariat Hill Road
Shillong Meghalaya 793001, India

Sir,

Whereas _____, a _____registered under the _____, with its registered office at _____.. (hereinafter called "the Bidder") has submitted its bid dated...............2009, for _____ (hereinafter called the "Bid") KNOW ALL MEN by these presents that WE …………. Of .... having our registered office at ………………….. .... (hereinafter called the "**Bank**") are bound unto …………………. .... (hereinafter called "the [Meghalaya Information Technology Society, **MITS**] or his authorized representative") in the sum of .... for which payment well and truly to be made to the said [**MITS**] or his authorized representative the Bank binds itself, its successors and assigns by these presents. Sealed, with the Common Seal of the said Bank this...……day of .... 2009.

THE CONDITIONS of this obligation are:

1. If the Bidder withdraws its Bid during the period of bid validity specified by the Bidder on the Bid Form; or

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2. If the Bidder, having been notified of the acceptance of its bid by the [**MITS**] or his authorized representative during the period of bid validity:

    (a) Fails or refuses to execute the Contract Form if required; or
    (b) Fails or refuses to furnish the Performance Security, in accordance with the Instruction to   Bidders.

 We undertake to pay the [**MITS**] or his authorized representative up to the above amount upon receipt of its first written demand, without the [**MITS**] or his authorized representative having to substantiate its demand, provided that its demand the [Nodal Officer] or his authorized representative will note that the amount claimed by it is due owing to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.

The guarantee will remain in force up to and including 45 days after the period of the bid validity, and any demand in respect thereof should reach the Bank not later than the above date.

                         (Signature of the authorized officer of the Bank)

1)

    a) Name of Witness

    b) Address of the Witness

2)

    a) Name of Witness

    b) Address of the Witness

                         (Bank's common seal)

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Annexure II

Summary of Cost Components Table

S. No	Item	Schedule	TOTAL PRICE (INR)
	Physical Infrastructure	A	=a11
	IT Infrastructure – Hardware	B1	=b11
	IT Infrastructure – Software	B2	=b21
	Total CAPEX =Schedule (A+B1)		
OPEX	Operational Support for Five Years	C	
	Service Tax	X	
	Total OPEX = Schedule (C+X)		
TOTAL PROJECT COST (in INR) **= CAPEX + OPEX** **= (a11 + b11 + b21) + OPEX**			
TOTAL PROJECT COST in words::	**Rupees**		

CAPEX = a11 + b11 + b21

For OPEX, please refer Schedule C

Note:

It is mandatory to provide breakup of all Taxes, Duties and Levies wherever applicable and/ or payable under the relevant column in the schedules. State shall take into account all Taxes, Duties & Levies for the purpose of Evaluation

To ensure a reasonable and realistic ratio of CAPEX and OPEX: a bid may be liable to be rejected after scrutiny if total CAPEX happens to be more than 50 % of the overall bid value.

Operational Cost Table – Schedule C

S. No	Item	Description	Year				
			First	Second	Third	Fourth	Fifth
1.	Manpower Cost	Refer Schedule C1	$=c11$	$=c12$	$=c13$	$=c14$	$=c15$
2.	Additional / Miscellaneous expenses for MSDC	Refer Schedule C2	$=c21$	$=c22$	$=c23$	$=c24$	$=c25$
3.	AMC & Warranty – Non-IT	Refer Schedule C3	$=c31$	$=c32$	$=c33$	$=c34$	$=c35$
4.	AMC & Warranty – IT Hardware	Refer Schedule C4	$=c41$	$=c42$	$=c43$	$=c44$	$=c45$

5.	Support Cost – IT Software	Refer Schedule C5	=c51	=c52	=c53	=c54	=c55
Year wise OPEX (in INR) – **Total Cost for each Year (incl. Support, Maintenance & Operations)**			**Y1=Σ (cx1)**	**Y2=Σ (cx2)**	**Y3=Σ (cx3)**	**Y4=Σ (cx4)**	**Y5=Σ (cx5)**
Total Cost for Operations for First Year i.e. Y1 in Words		Rupees					
Total Cost for Operations for Second Year i.e. Y2 in Words		Rupees					
Total Cost for Operations for third Year i.e. Y3 in Words		Rupees					
Total Cost for Operations for fourth Year i.e. Y4 in Words		Rupees					
Total Cost for Operations for fifth Year i.e. Y5 in Words		Rupees					
Summary							
Total OPEX for MSDC (in INR) **OPEX = Y1 + Y2 + Y3 + Y4 + Y5**							
Total Cost for Operations for entire five Years i.e. **OPEX in Words**		Rupees					

This Operational Support per year shall be for the entire components / items / infrastructure of SDC under the RFP / Contract including the Support personnel deployed for the project. Bidder should ensure that Manpower resources required for Operations and Maintenance of Meghalaya SDC project should comply as per the RFP. In case there are changes in technology, (such as addition or Up-gradation of Hardware, Software, Tools, equipments, active or passive) DCO needs to provide the resources with suitable technical competencies in line with project requirements without any additional charges as and when required.

Please note: Operational expenses during operation phase (such as Electricity, Diesel consumption {by DG-Set}, etc) will be paid by the Client to DCO as per the actual usage/ consumption as per the prevailing market price. DCO shall integrate the energy meter (for electricity) as well as diesel consumption reading of DG Set with the BMS infrastructure for ensuring automatic information update regarding actual consumption/usage. DCO shall have to pay directly the electricity bills of Meghalaya SDC to the electricity department and the diesel vendor for diesel. However the Client shall reimburse based on the information available on the BMS infrastructure to the DCO. More ever the other cost associated with DG Set running shall be born by the bidder itself.

Annexure III

Modified Technical Evaluation Criteria

S. No	Criteria	Point System	Maximum Points	Format to be filled for compliance
A.	**Organizational strength**		**30**	
1.	Bidder's experience in setting-up Data centers in India, quantified in terms of number of projects will be evaluated. Setting-up Data Centers would mean where the bidder has procured, installed and commissioned all IT and Non-IT components of the data center. • Data centers with Project cost (IT and Non-IT both) not less than Rs. 5 Cr will be considered	Bidder with maximum numbers of projects (maximum capped to 4 projects) shall be awarded full 6 marks and the others shall be awarded marks on relative (prorata) basis.	6	**Schedule A**
2.	Bidder's experience in providing Facility management services to data centers in India, quantified in terms of number of projects will be evaluated. Facility Management would mean where the	Bidder with maximum numbers of projects (maximum capped to 4 projects) shall be awarded full 6 marks and the others shall be awarded marks on relative	6	**Schedule B**

S. No	Criteria	Point System	Maximum Points	Format to be filled for compliance
	bidder has provided comprehensive operations / maintenance services towards all IT & Non-IT components of the data center. • Data centers with Project cost (IT and Non-IT both) not less than Rs. 5 Cr will be considered	(prorata) basis.		
3.	Bidder's experience in providing System integration services in India, quantified in terms of number of years will be evaluated. System Integration would mean where the bidder has procured installed and commissioned all IT components. • Project considered for evaluation should have project cost more than Rs. 5 Cr.	Bidder with maximum years of experience (maximum capped to 3 years) shall be awarded full 4 marks and the others shall be awarded marks on relative (prorata) basis.	4	**Schedule C**

S. No	Criteria	Point System	Maximum Points	Format to be filled for compliance
4.	Bidder's experience in setting-up large Data centers in India, quantified in terms of value of projects will be evaluated. Setting-up Data Centers would mean where the bidder has procured, installed and commissioned all IT and Non-IT components of the data center.	Bidder with highest value of project (maximum capped to 10 Cr), within last 3 financial years i.e. 2009, 2008, 2007 shall be awarded full 4 marks and the others shall be awarded marks on relative (prorata) basis.	4	**Schedule D**
5.	Average Turn over of the bidder from Indian Operations for the last Three financial year ending 31st March 2008	> Rs 300 Cr = 5 > Rs 150 Cr <= Rs 300 crores = 4; > Rs 100 Cr <= 150 crores = 3;	5	**Schedule E**
6.	Data centers that the bidder has set-up or is operating / managing with ISO 27001 certification (valid as on tender submission date) will be considered for evaluation under this clause.	Bidder with maximum number of such data centers (capped to 4 nos) shall be awarded full 5 marks and the others shall be awarded marks on relative (prorata) basis.	5	**Schedule F**
B.	**Technical Solution Offered**		70	
B1	**Design & Architecture**		30	
	Following components have been included for evaluation. For each component a			**Schedule G**

S. No	Criteria	Point System	Maximum Points	Format to be filled for compliance
schedule has been enclosed which the bidder has to fill 1. Layout 2. Power Requirement 3. PAC 4. Fire Prevention 5. SAN 6. Backup 7. LAN 8. WAN/Internet 9. Physical Security 10. Logical Security 11. EMS Interoperability				
B 2	**Product Compliance**		**25**	
▪ For each BOM component as specified in the Schedule H the bidder will provide the compliance status, deviations if any, impact of deviations (considered as negative impact), value addition provided and impact of value addition (considered as positive impact).				**Schedule H**

S. No	Criteria	Point System	Maximum Points	Format to be filled for compliance
	• If there is no deviation and value addition the bidder would get 70% of the marks attributed to that component. For each negative impact 10% of the marks attributed to the component shall be deducted and for each value addition 10% of the marks attributed to the component shall be added. (Note: The overall marks shall be restricted to the maximum allowed under that component head irrespective of the positive impact) • Note: Evaluation committee has the sole right to accept the deviation and consider the same for negative impact or take action as per other tender conditions. Similarly accept the value addition and consider the same for positive impact.			
B3	Power Consumption		5	
	• The whole solution of the bidder shall be evaluated with regard to the total power requirements in terms of peak power requirement. The bidder shall provide Equipment wise peak power consumption of all the proposed equipments in a tabulated manner along with the un-priced BOM submitted with the technical bids. • The total peak power consumption of respective bids shall be compared for evaluation. The bidder with least peak power consumption shall be awarded full 5 marks and the other bidders shall be awarded marks on relative (prorate) basis			**Schedule I**
B4	Resource Allocation		6	

S. No	Criteria	Point System	Maximum Points	Format to be filled for compliance
a	The bidder must have on its roll at least 100 technically qualified professionals in, networking, systems integration, and prior experience in providing the Data Center Infrastructure maintenance services as on 31.03.2009: > 500 = 2; 400 - 500 =1.5; 300 - 200 =1; 100 – 200 = 0.5		2	**Schedule J**
b	Number of resources deployed by the bidder having valid BS7799 / ISO 27001 certification. More than 1 = 2 One resource with valid certification = 1;		2	**Schedule K**
c	Number of resources deployed by the bidder having valid ITIL/ ISO 20000 certification More than 1 = 2 One resource with valid certification = 1;		2	**Schedule L**
B5	**Operation & Maintenance**		**4**	

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S. No	Criteria	Point System	Maximum Points	Format to be filled for compliance
	The operations and maintenance capability and commitment is being gauged through the SLA commitment of each bidder and the solution offered to support the SLA commitment. The bidder can commit higher SLAs. SLA commitment of individual components shall be evaluated and the bidder with highest commitment in the particular component shall be awarded maximum marks and others shall be awarded marks on relative (pro-rata) basis. Components that will be considered are given below:			
a	Power Availability		1	
b	System Availability		1	**Schedule M**
c	Help desk, incident management, problem management		1	
d	Security Management		1	

Annexure IV

Enterprise Management System:

Application Performance Monitoring

- End to end Management of applications– should be able to do end to end monitoring of Web and non-web applications (like Oracle, Java, .net, Client Server, Legacy applications, Web 2.0 and Rich Internet Applications)
- Determination of the root cause of performance issues whether inside the Java application in connected back-end systems or at the network layer.
- Automatic discovery and monitoring of the web application environment.
- Ability to monitor multiple applications with a dashboard.
- Ability to expose performance of individual SQL statements within problem transactions.
- Proactive monitoring of all end user transactions; detecting failed transactions; gathering evidence necessary for problem diagnose.
- Storage of historical data is for problem diagnosis, trend analysis etc.
- Monitoring of application performance based on transaction type.
- Ability to identify the potential cause of memory leaks.
- The proposed solution should proactively monitor all user transactions for any web-application hosted in a J2EE-compliant application server; detect failed transactions; gather evidence necessary for triage and diagnosis of problems that affect user experiences and prevent completion of critical business processes
- The proposed solution should correlate performance data from HTTP Servers (external requests) with internal application performance data
- The proposed solution must be able to proactively identify errors and problems that users are experiencing and enable trouble shooting to begin before an increasing number of users are impacted.

- The proposed solution must be able to pro-actively determine exactly which real users were impacted by transaction defects, their location and status.
- The proposed solution must be able to provide the ability to create user groups based on application criteria or location and link user ids to user names and user groups.
- The proposed solution should give visibility into user experience without the need to install agents on user desktops.
- The solution should be appliance-based and deployable as a passive listener on the network thus inducing zero overhead on the network and application layer while monitoring the end-user experience for various web applications hosted in the data center.
- The proposed solution should provide deeper end-to-end transaction visibility by monitoring at a transactional level.
- The proposed solution should be able to trace the web transaction components and provide visual representation of an actual transaction if required. All the performance data for the components that make up this transaction should be captured. It should provide an easy way to understand the interaction of the components for e.g. which JSP calls which Servlet or EJB and backend component
- The proposed solution should determine whether web application performance issues are related to the database and collaborate with database administrators so that problems can be detected, isolated and eliminated quickly.
- The proposed solution should see response times based on different call parameters
- The proposed solution should be JVM & JDK independent, thereby enabling to manage applications on any Java Virtual Machine
- The solution should provide an advanced reporting facility with the ability to schedule reports (out of the box and customizable) for any application area.
- The proposed solution should allow data to be seen only by those with a need to know and limit access by user roles
- The proposed solution should view instantly the current value of any metric of any component providing instant real-time performance view
- The proposed solution should share critical application information across the enterprise enabling instant 24x7 monitoring for authorized users anytime, anywhere

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