Data Centre Infrastructure

Bids are invited to develop data centre infrastructure at IISER Mohali. The requirements are:

1. Three 42U racks for Servers, Workstations and Networking equipment.
2. Present power requirement is expected to be 20 kW and the maximum power usage for this facility is 40 kW.
3. Redundant power supply for all equipment.
4. Power backup with inbuilt redundancy with a backup time of 4 hours for maximum power usage envisaged.
5. Chilled water based rack cooling systems.
6. Blanking panels for unused slots in server racks.
7. Power backup for cooling systems.
8. False floor for chiller pipe distribution.
9. UPSs with three phase input. UPS and batteries are to be enclosed inside racks. The entire unit must come with fire safety certifications. A phase sequence corrector should be built into the UPS or supplied with it.
10. Equipment and environment monitoring with web interface, e-mail and SMS alerts in case of an alarm.
11. Cable management.

This is to be arranged in a hall (7m x 8m) with false ceiling at a height of 2300mm. Chiller water will be made available inside the hall. Input power will be available from multiple points, within a distance of 10m from the hall.

Interested parties may visit the site on December 08, 2014 between 2:00pm-4:00pm. Queries about all aspects of the tender will be entertained at the same time. Apart from the given time/date slot, vendors are requested to send queries by e-mail to headcc@iisermohali.ac.in

Three years of comprehensive onsite warranty must be quoted for all components. As an option, extending this for two more years should be quoted in the financial bid.

The supplier will be expected to post an engineer on site for two weeks after completion of installation.

Training of our staff members for administration, management and usage of all equipment is to be provided on site as a part of this order.

Technical and financial bids must be submitted in separate sealed envelopes.

Comparison of bids for proposals that meet the basic crterion will be made on the following technical grounds:

- Acceptability of the proposed solution: 30 points.
- Efficiency of the proposed power backup system: 10 points.
- Power usage of the proposed cooling system; 10 points.

50 points will be reserved for comparison of financial bids.

The expected cost of the data centre infrastructure is Rs. 90 Lakh.

Technical data to be submitted by the vendor:

S. No.	Item	Details
1.	Contact E-Mail IDs for technical clarifications and other notices (up to three e-mail IDs may be given).	
2.	Model Number for Server racks	
4.	Model Numbers for Power Distribution units used inside racks.	
6.	Details of remote monitoring of PDUs over the network, if available.	
7.	Size of PDUs in terms of slots used in server racks.	
8.	Model Number for the cooling unit and accessories used in the proposed solution.	
10.	Nominal cooling capacity of the proposed cooling units.	
11.	Cooling capacity of the proposed cooling units if the return air is at 35^{o} C	
12.	Details of remote monitoring and alarm systems for the cooling system over the network.	
13.	Model Number for the false floor and accessories used in the proposed solution.	
15.	Model Number for the UPS, PDUs and Distribution boxes used in the proposed solution.	
17.	Data on efficiency of the UPS system at half load, and at 90% load.	
18.	Data on backup time for each UPS at half load, and at 90% load.	
19.	Details of remote monitoring and alarm systems of UPS over the network.	
20.	Model Number for environmental monitoring used in the proposed solution.	

A detailed writeup of the overall solution highlighting various aspects must be submitted as the core of the technical bid.

A hard copy of detailed technical specifications for each and every component must be submitted with the technical bid.

A list of fire safety and other safety/security related certifications for each equipment must be submitted with the technical bid. All quality and safety compliance certificates should also be listed in the technical bid.

In addition, the following diagrams must be submitted with the technical bid.

S. No.	Item
1.	A detailed sketch/line diagram of the proposed solution with dimensions.
2.	A detailed circuit diagram of the proposed solution for power supply and backup.
3.	A detailed diagram of chiller flow in the proposed solution.