CSIR-NATIONAL GEOPHYSICAL RESEARCH INSTITUTE

(Council of Scientific and Industrial Research)

UPPAL ROAD, HYDERABAD 500 007. Telangana, INDIA

Telephone No:+91-40-27012887 / 27012370 Fax: +91-40-27171564 Email: purchase@ngri.res.in

No. 44(28)2016-Pur/T-133

January 20, 2017

Expression of Interest (EOI) for providing infrastructure set up for establishment of Data Centre

SI. No.	Description of Service	Quantity	Bid Security (EMD)
1	Expression of Interest (EOI) for providing infrastructure set up for establishment of Data Centre at CSIR-NGRI, Hyderabad as per details given in following pages.	As detailed in the EOI	INR 1,20,000/-

The EOI should accompany EMD as indicated above. The EOI must reach this office on or before 31.01.2017 – 2.30 P.M. and shall be opened on same day at 3.30 P.M.

All bids must be accompanied by a bid security as specified above and must be delivered to the above office at the date and time indicated above. The EOIs will be opened in the presence of Bidders' representatives who choose to attend on the specified date and time. In the event of the date specified for bid receipt and opening being declared as a closed holiday for purchaser's office, the due date for submission of bids and opening of bids will be the following working day at the appointed time.

The Director, CSIR-NGRI reserves the right to accept or reject any or EOIs either in part or in full or to split the order without assigning any reasons there for.

(S.GNANAPRAKASAM) Controller of Stores & Purchase

IMPORTANT NOTE

Amendment, Corrigendum if any to this tender document, WILL BE HOSTED ONLY IN CSIR-NGRI WEBSITE and no separate Press Notification will be issued. Bidders are advised to visit our website regularly to know such details.

EXPRESSION OF INTEREST

Expression of interest is invited on behalf of the CSIR-NGRI, Hyderabad, from the reputed and bonafide OEMs or their approved Authorized Partners/SIs (only one agency per manufacturer) and having required experience in Datacenter designing & implementation, for the Design, Site Preparation, Supply, Installation, Testing, Commissioning, Operations and Maintenance of Infrastructure for the establishment of a Datacenter. The Pre-qualified firms will be technically evaluated by inviting them to make presentation about their proposed solutions for the work. The techno-commercial bids shall be invited by issuance of the RFP (Request for Proposal) document from the technically qualified bidders

Scope of Work

Design, Site Preparation, Supply, Installation, Testing, Commissioning of basic Infrastructure for the establishment of a Datacenter in the Gas Hydrate Building (Room Nos: 006,007 including annexes) in the campus of CSIR-NGRI, Hyderabad. The proposal should be capable of accommodating 18 Nos server racks and provide 60 KVA modular UPS (multiple units) with 30 minutes battery backup on full load (the successful bidder shall supply UPS Rack of 100 KVA capacity). Bidder will provide PAC Cooling, considering the available floor area and 8 KW of power load for each rack on single phase. The bidder is required to offer total turnkey solution for the comprehensive responsibilities of design, supply, installation, commissioning, warranty support, and post warranty comprehensive Annual Maintenance Contract (AMC) of the total solution. A brief description of work is given as under:

Type of work	Description
PAC system	 44TR (in multiple units), n+1, Precision Air- Conditioning, Air-conditioning units, suitable for 24x7x368 continuous operation. No point of failure Air Flow –High CFM High Sensible Heat Ratio. Unit includes inbuilt option of Heaters, Humidifiers, Dehumidification of Air control, Temperature, humidity simultaneously. Air Filtration, air filters to take care filter out particles of sizes up to 5microns. PAC should have control panel for local monitoring and interfacing facility with BMS. Temperature range control should be 16 degree Celsius to 35 degree Celsius. Humidity range control should be 40% to 80%. Energy Efficient PAC units will be preferred. Electrical panel boards for electrical power supply with all necessary meters and protections. Work includes Design, supply, installation, testing, insulation of cooling areas (indoor) and commissioning including all required cable laying, stands for keeping compressors outside , ducting(inlet and outlet), Canvas, insulation, microprocessor controller panels with meters and indicators as per site requirements and direction given by Engineer In charge.
Networking	Laying, crimping, punching and testing of 1G network points from network distribution rack side to datacenter server rack. The complete architecture for the data center room should follow industry standard
	including laying of race ways etc.

Civil Work	Providing and fixing fire resistance false ceiling, fire rated door with all accessories. Providing and fixing glow signages for Emergency Fire Exits, Datacenter & Administrator room. The interior walls and ceiling shall be painted with best quality fire retardant paint of approved shades also includes leveling, dismantling if any, and repairing of the floor area, walls. Ceiling/False Flooring, Insulation of walls etc as required. Work also involves partitioning of floor area as per the floor plan including painting, repairing/modification of door design etc, and any other work like modifying of existing windows etc. as required. Including making the cabins/ partitions/ close enclosure etc at outside as required, for electrical panel, gas, Compressors for protection from rains. The external walls which are exposed to weather are to treated with best quality water proofing treatment with chemicals or cement based chemicals and the Data center should be free from dampness. Finally the walls to be painted with external paint of Apex Ultima of Asian Make or equivalent to give even shade. The work including of Water leak detection system, Fire detection, Fire suppression, Pest Control, Rodent Repellent System, Architectural Works, monitoring to make it as a state of art Data center.
UPS and Electrical Work	 Supply, installation, erection, testing and commissioning of following electrical equipment: 60kVA UPS system Modular type (multiple units), True online Double conversion UPS system, with 30 minute battery backup at RACK Capacity. LAN Monitoring facility / Interfacing with BMS. UPS Rack providing here will have a capacity of RACK 100 KVA. Electrical power distribution panels with sufficient feeders for air-conditioning units, ups systems, lighting systems, and emergency power etc(double door, outdoor type). to provide electrical power supply to all necessary requirements. Panels should be designed to support non-linear load with neutral conductors at least two times of phase conductors. UPS panels, Dual power supply mode to all servers and emergency power. Dual UPS power supply with overhead bus bar to each racks/ servers with power / socket outlets as per datacenter requirements. LED light fittings to meet adequate illumination level at all locations as per data center requirements. Electrical cables and wires should be provided and supplied and laid as per designing of electrical power distribution networks as per site. Copper conductors should be only used in wiring, cabling, and bus bars. Transient Voltage Surge Suppressor (TVSS) installed in electrical and UPS low tension panels. Designing of all electrical power distribution systems network and electrical and UPS power supply distribution systems network and electrical power distribution panels including load calculation, cable sizing, electrical wiring, switchgear rating to meet the all electrical requirements of datacenter including supply and fixing of all the electrical items in right position for correct functioning. Design of grounding / Earthing should be a single ground
	3. Design of grounding / Earthing should be a single ground system with separated ground widow of power and data.UPS system (body and neutral), Air conditioning (body), Data Center (Grid Earthing), etc as per site requirements.

	NOTE - Before designing of electrical networks existing and proposed UPS rooms and data center site should be physically inspected for technical evaluation and necessary discussion with technical persons in institute.	
BMS safety and Security System	 Providing, installation and commissioning of BMS related system with complete accessories a. Building Management System (BMS) shall be a unified system having capability to integrate with disparate systems irrespective of make or model. It shall be implemented for the monitoring and management of different systems of the Data Centre to provide a centralized monitoring and management platform. BMS should monitor all mechanical, electrical and other facilities equipment and systems. The system will be capable of local and remote monitoring and operation. 	
	 b. Air-conditioning monitoring System c. Gas based Fire Suppression System for Data CenterNOVEC 1230 shall be used as fire suppressant as per NFPA Standardsor latest d. Fire alarm, VESDA System e. Water leak detection ,Rodent repellent system 	
Maintenance	f. Access control Three years warranty and AMC up to 5 years.	

Site Visit:

The bidder is advised to visit the site of work, at his own cost, and examine it and its surroundings, to himself collect all information that he considers necessary for proper assessment of the prospective assignment including regulations and formalities required for getting various NOCs and approval at various stages of work. The bidder may contact Mr.KalyanNetti, Sr Scientist, 040-27012341 to co-ordinate visit.

Selection Methodology

Selection of the bidder shall be based on a two-stage open competitive bidding process as indicted below:

<u>Stage 1</u> – Expression of Interest (EOI): This document details the terms and conditions for inviting EOI from eligible bidders Only firms which qualify the overall evaluation criteria of the EOI, shall be invited to participate in stage 2. This stage shall have two sub stages:

- a) Pre-qualification: Bidders response to this EOI shall be evaluated by the authority concerned as per the pre-qualification criteria defined in this document. Bidders who meet the pre-qualification criteria shall be eligible for evaluation of the technical qualification criteria.
- b) Technical qualification: In technical qualification round, bidder will be required to present the details regarding the projects mentioned, showing their work experience, in response to this EOI. During presentation, bidder shall have to give presentation (proposed design and solution for data Center). Bidders must present evidence to substantiate their claims. The technical evaluation will be based on scope of work details.

Outcome of stage 1 Determination of qualified bidders for stage 2

<u>Stage 2</u> - Request for proposal: Based on pre-qualification and technical qualification criteria in this EOI, bidders would be shortlisted for stage 2 of selection process shall comprise of invitation of bids by issuance of the request for the proposal (RFP) to shortlisted bidders in 2-bid method i.e. separate Techno commercial bids and Price bids.

Outcome of Stage 2: Determination of successful bidder

Evaluation Criteria

Pre-Qualification Criteria

Bidder, participating in the bidding process shall meet the following minimum pre-qualifications/ eligibility criteria

S.No	Criteria	Document required
1	The bidder must be an OEM and/or authorized business partner of Infrastructure companies dealing in UPS, Precision Air Conditioning (PAC)/, Power Distribution units with feeder monitoring, Transient Voltage Surge Suppression, Automatic Transfer Switches, RACKS, KVM Switches, Data Center Infrastructure Monitoring Solutions and civil works. Only One authorized business partner per manufacturer will only be allowed.	Related
2	The bidder must be a registered company as per the Companies Act 1956/2013.	Necessary certificate shall be attached. The authorized business partner must submit letter of endorsement form the OEM.
3	The bidder must submit MAF of all the OEMs of the various components in the specifications.	Related
4	Consortiums are not the allowed to participate in the bidding.	
5	The bidder should have had average annual financial turnover (gross) of Rs. 60 lakhs from IT/ ITES in India during the immediate last three consecutive financial years ending 31.12.2016. Year in which no turnover is shown would also be considered for working out the average.	The information shall be submitted supported by audited balance sheets and profit and loss accounts, duly certified by a Chartered Accountant, as submitted by the bidder to the Income Tax Department.
6	 The bidder should have successfully executed at least 3 similar assignments/works each of value not less than Rs. 60 lakhs in last 3 years ending 31.12.2016 out of which a) One similar assignment/ work is for Central/ State Government Central Autonomous Body, Central PSU, Central Educational Institute/ University Institute/ Organization on turnkey basis b) One similar assignment/work shall be either 	The information shall be submitted supported by Work Orders and work completion certificates.

	Tier-2 or Tier-3/4 Datacenters. Similar work shall mean Supply, installation, testing commissioning and maintenance of Infrastructure works of Data Center on turnkey manner in India.	
7	The bidder should not been banned/suspended for any reasons by any Government Institute/PSU in last 3 years	A self-Certified letter.

Proof against all the above criteria along with necessary documents, brochures/leaflets have to be submitted on due date and time. The selected bidder who satisfies all the above mentioned criteria will only be considered for Technical Evaluation.

General Instructions

The bidder should provide detailed design/details as per available floor area for the following components:

- a) Floor layout design along with number of racks as per the diagram attached.
- b) Detailed electrical cabling/diagram and calculation for :
 - Required Power Load for cooling, lighting and other utilities.
- c) Cooling requirements for DC.
- d) Detailed layout for Fire Prevention and Suppression System for DC
- e) Access Control System
- f) BMS and integration of above components
- g) Operation, Management and Reporting Mechanism
- h) Actual Timelines for implementing Plans and projected deployment of manpower for this project only, in details.
- i) Any other proof or documents, if required.

Others:

NGRI reserves the right to accept or reject any proposal and to annul the EOI process and reject all proposals at any time, without thereby incurring any liability to the affected Agency or Agencies, or any obligation to inform the affected Agency or Agencies of the grounds for its action

EMD (Earnest Money Deposit)

The bids shall be accompanied by Earnest Money Deposit of **Rs.1,20,000/-** (INR One lakh and twenty thousand only) drawn by means of Demand Draft in favour of Director, CSIR-NGRI, Hyderabad and should be valid for 90 **days** from the date of opening of bid. In case, the bidder chooses to submit bank guarantee, it should be strictly as per proforma attached, from a Nationalized / Scheduled Bank.

The firms registered with DGS&D, NSIC, Govt. Public Undertakings, Central Autonomous Bodies and with the CSIR Labs./Instts, if any, are exempted from payment of EMD provided such registration includes the services they are offering and not for services provided by other companies.

Bids not accompanied by Earnest Money Deposit as mentioned above will be summarily rejected.

The EMD of unsuccessful Bidders will be returned within 15 days from the date of signing of contract.

EMD shall be forfeited in the following events:

- a) If the Bid is withdrawn or modified or varied in a manner not acceptable to NGRI during the Bid Validity period or any extension thereof.
- b) If a successful Bidder fails to sign the contract.
- c) If a successful Bidder fails to furnish Performance Bank Guarantee within 10 days of signing of contract.

MODEL BANK GUARANTEE FORMAT FOR FURNISHING BID SECURITY (EMD)

THE CONDITIONS OF THIS OBLIGATION ARE:

- 1) If the tenderer withdraws or amends, impairs or derogates from the tender in any respect within the period of validity of this tender.
- 2) If the tenderer having been notified of the acceptance of his tender by the Purchaser during the period of its validity:-
- a) If the tenderer fails to furnish the performance security for the due performance of the contract.
- b) Fails or refuses to accept/execute the contract.

We undertake to pay the Purchaser up to the above amount upon receipt of its first written demand, without the purchaser (CSIR/Lab) having to substantiate its demand, provided that in its demand the purchaser will note that the amount claimed by it is due to it owing the occurrence of one or both the two conditions, specifying the occurred condition or conditions. This guarantee will remain in force up to and including 45 days after the period of tender 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

Name and designation of the officer

Seal, name and address of the Bank and address of the Branch.