

## Corrigendum (Tender No. AIMSCS/HPCS/1/2018)

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Tender enquiry No. AIMSCS/HPCS/1/2018 dated 31-05-2018 for High Performance Computing System and Storage (HPCS).

This is to inform all concerned that after pre bid meeting following changes have been incorporated in the tender:

Ref. In Tender	Original phrase from the technical specification document	New, corrected phrase. Original should now be read as
<b>Clause 2.3.1, in Table 1 (in page 5)</b>	HPC: CPU + GPU Cluster  HPC System with CPU+GPU nodes (see detailed technical specification in 2.5 of Section 2) of 100 TFLOPS of sustained HP Linpack (HPL) performance. The HPL performance must be demonstrated using all the Compute nodes (including the GPU cards). The compute power of master nodes, I/O nodes and FPGA node should not be used for HPL demonstration.	HPC: CPU + GPU Cluster  HPC System with CPU + GPU nodes (see detailed technical specification in 2.5 of Section 2) of 100 TFLOPS of sustained HP Linpack (HPL) performance. The HPL performance must be demonstrated using <b>a single run of HPL across</b> all the Compute nodes (including the <b>CPUs and</b> GPU cards). The compute power of master nodes, I/O nodes and FPGA node should not be used for HPL demonstration.
<b>Clause 2.5.3 (in page 7)</b>	<b>d.</b> The proposed Interconnection Network should support (expandable) up to 16 nodes and the Interconnection switch should consist of at least 24 non-blocking ports. Also the interconnect switch must have 30% of the ports as free for future expansion.	<b>d.</b> The proposed Interconnection Network switch should consist of at least 24 non-blocking ports. Also the interconnect switch must have 30% of the ports as free for future expansion.
<b>Clause 2.5.3 (in page 7)</b>	<b>g.</b> The OEM/bidder should have installed a similar system of minimum 100TF peak performance in the country and maintained the same for at least one year during the last five years.	<b>This clause is removed</b>
<b>Clause 2.5.3 (in page 7)</b>	<b>a.</b> One time system administration training (3-5 days) should be provided to the CR Rao AIMSCS personnel.	<b>a.</b> One time system administration training (3 days) should be provided to the CR Rao AIMSCS personnel.

<p><b>Clause 2.5.4</b> <b>(in page 8)</b></p>	<p><b>c.</b> Each node should be configured appropriately for connecting to <b>FDR InfiniBand /Omnipath switch.</b></p>	<p><b>c.</b> Each node should be configured appropriately for connecting to FDR InfiniBand/ <b>EDR InfiniBand /Omnipath</b> switch.</p>
<p><b>Clause 2.5.5</b> <b>(in page 8)</b></p>	<p><b>a.</b> Node should have dual CPUs and dual GPU's: 2 x Intel® Xeon-Gold 6130 (Skylake)(2.1GHz/16-core/120W) or higher/AMD EPYC 7401 (2.0 GHz/24cores/180W) or higher /ARM thunder X2 (ARM CN99XX series at 2.0 GHz or higher )/ IBM Power8+/9 (3.6 GHz/8Cores) or higher or equivalent and with one FPGA accelerator card (XilinxVirtex-7 690T / Xilinx , Virtex-7 485T/ XilinxKintex-7 325T/ XilinxZynq-7000 7Z045).</p>	<p><b>a.</b> Node should have dual CPUs <b>and1 FPGA card:</b> 2 x Intel® Xeon-Gold 6130 (Skylake)(2.1GHz/16-core/120W) or higher/AMD EPYC 7401 (2.0 GHz/24cores/180W) or higher /ARM thunder X2 (ARM CN99XX series at 2.0 GHz or higher )/ IBM Power8+/9 (3.6 GHz/8Cores) or higher or equivalent and with one FPGA accelerator card (XilinxVirtex-7 690T / Xilinx , Virtex-7 485T/ XilinxKintex-7 325T/ XilinxZynq-7000 7Z045).</p>
<p><b>Clause 2.5.5</b> <b>(in page 9)</b></p>	<p><b>c.</b> The node should be configured appropriately for connecting to <b>FDR InfiniBand /Omnipath switch</b></p>	<p><b>c.</b> The node should be configured appropriately for connecting to FDR InfiniBand/ <b>EDR InfiniBand /Omnipath</b> switch.</p>
<p><b>Clause 2.5.10.3</b> <b>(in page 11)</b></p>	<p><b>a.</b> The job scheduler should support all Compute nodes including the one with an FPGA accelerator.</p>	<p><b>a.</b> The job scheduler should support all Compute nodes-</p>
<p><b>Clause 2.5.11</b> <b>(in page 12)</b></p>	<p><b>b.</b> The solution should have PFS Storage 100TB usable capacity with RAID 6 configuration with minimum 4 GB/s write throughput performance.</p>	<p><b>b.</b> The solution should have PFS Storage 100TB usable capacity with RAID 6 configuration with minimum <b>2 GB/s</b> write throughput performance.</p>
<p><b>Clause 2.5.11.</b> <b>(in page 13)</b></p>	<p><b>g. It is to be noted that L1 will be decided by adding AMC cost to the total cost of HPC.</b> Post-Warranty AMC cost will be paid on a quarterly basis at end of each quarter.</p>	<p><b>g. It is to be noted that L1 will be decided by adding post warranty AMC cost for 3 years and the one time system administration training cost to the total cost of HPCS.</b> Post-Warranty AMC cost will be paid on a quarterly basis at end of each quarter. <b>However, 100% yearly advance payment can be made against additional bank guarantee for an equivalent amount.</b></p>

<p><b>Clause 2.5.15</b> <b>(in page 14)</b></p>	<p>a. If bid is submitted by System Integrator, Manufacturer Authorization Letter from the OEMs should be submitted.</p>	<p>a. If bid is submitted by System Integrator, Manufacturer Authorization Letter from the OEMs should be submitted. <b>Additionally the OEM should take overall responsibility for the installation and functioning of the system during the warranty and post warranty AMC period.</b></p>
<p><b>Clause 3.1.1</b> <b>(in page 16)</b></p>	<p><b>3.1.1</b> The bidder should have implemented a 16 node HPC system in at least at one customer site in the last 3 years.</p>	<p><b>3.1.1</b> The bidder/OEM should have implemented a 16 node HPC system in at least at one customer site in India in the last 3 years.</p> <p><b>If the bidder does not meet this criteria, then the OEM must give a separate undertaking that they will take the primary responsibility for the installation, commissioning, warranty and post warranty services.</b></p>
<p><b>Clause 3.1.5</b> <b>(in page 16)</b></p>	<p><b>3.1.5.</b> The OEM should have local support in Hyderabad</p>	<p><b>3.1.5.</b> The bidder/OEM should have local support in Hyderabad.</p>
<p><b>Clause 3.7</b> <b>(in page 20)</b></p>	<p>a. The total solution as per the agreed bill of materials has to be supplied within 4 – 6 weeks after receiving a firm PO from CR Rao AIMSCS and the installation to be complete within 2-3 weeks after supply of the equipment.</p>	<p>a. The total solution as per the agreed bill of materials has to be supplied within <b>6-8</b> weeks after receiving a firm PO from CR Rao AIMSCS and opening of LC, if applicable, and the installation to be completed within 2-3 weeks after supply of the equipment.</p>
<p><b>Clause 3.10</b> <b>(in page 22)</b></p>	<p>The entire supply and installation should be completed within 60 days of acceptance of the work order from CR Rao AIMSCS</p>	<p>The entire supply and installation should be completed within <b>11 weeks</b> of acceptance of the work order from CR Rao AIMSCS</p>
<p><b>Clause 6</b> <b>(in page 3)</b></p>	<p><b>6.</b> EMD (Refundable): All bids must be accompanied by an <b>EMD (Earnest Money Deposit) of Rs. 3 Lakhs (Rupees Three Lakhs only)</b> in the form of bank guarantee from a nationalised bank or in the form of a demand draft from a nationalised bank or scheduled bank registered with RBI drawn in favour of <b>Director, CR Rao AIMSCS,</b></p>	<p><b>6.</b> EMD (Refundable): All bids must be accompanied by an <b>EMD (Earnest Money Deposit) of Rs. 3.00 Lakhs (Rupees Three Lakhs only)</b> in the form of bank guarantee from a nationalised bank or in the form of a demand draft from a nationalised bank or scheduled bank registered with RBI drawn in favour of <b>Director, CR Rao AIMSCS, Hyderabad.</b></p>

	<p><b>Hyderabad.</b> The EMD should remain valid for a period of 45days beyond price bid validity period.</p>	<p>The EMD should remain valid for a period of 45 days beyond price bid validity period. <b>Further, vendor may claim EMD exemption under MSME/NSIC registered as per Govt. of India norms.</b></p>
<p><b>Clause 2.2.3</b> <b>(in page 4)</b></p>	<p>The receipt of bids and processing of technical and financial bids is done manually by the Committees of the CR Rao AIMSCS duly constituted for the said purpose by the competent authority. Accordingly, all bids MUST be submitted to the office of CR Rao AIMSCS by <b>Registered/Speed Post</b> in hardcopy on or before the last date and time as indicated above. The bid should be addressed and dispatched to <b>The Director, CR Rao AIMSCS, University of Hyderabad campus, Prof. CR Rao Road, Gachibowli, and Hyderabad-500046.</b> Late/delyed bids shall not be considered for further processing under any circumstances.</p>	<p>The receipt of bids and processing of technical and financial bids is done manually by the Committees of the CR Rao AIMSCS duly constituted for the said purpose by the competent authority. Accordingly, all bids MUST be submitted to the office of CR Rao AIMSCS by <b>Registered/Speed Post or by hand-delivery to The Director, CR Rao AIMSCS, University of Hyderabad campus, Prof. CR Rao Road, Gachibowli, and Hyderabad-500046,</b> on or before the last date and time as indicated above.</p> <p>Late/delayed bids shall not be considered for further processing under any circumstances.</p>
<p><b>Clause Section 4, Sl.No.12 of Commercial bid format</b> <b>(in page 28)</b></p>	<p><b>12.</b> Other item related to technical specs</p>	<p><b>12.One time system administration training</b></p>
<p><b>Clause Section 4, Sl.No.4 of Commercial bid format</b> <b>(in page 28)</b></p>	<p><b>4.</b> Interconnect FDR InfiniBand /Omnipath Switch – based on proposed solution</p>	<p><b>4.</b> Interconnect FDR InfiniBand/ <b>EDR InfiniBand</b> /Omnipath Switch – based on proposed solution</p>
<p><b>ADDITION in Clause Section 4, as Sl.No.13 of Commercial bid format</b></p>		<p><b>13.Post warranty AMC cost per year for a period of 3 years</b></p>

(in page 28)		
<b>ADDITION in Clause Section 4, as Sl.No.1 of Optional items (in page 28)</b>		<b>1. Periodic System administration training (once in 6 months)</b>
<b>ADDITION in Clause Section 4, as Sl.No.2 of Optional items (in page 28)</b>		<b>2. Onsite engineer (Level-2) for general shift (9AM to 5PM) for a year.</b>
<b>ADDITION guideline (Criteria for determination of L1 vendor)</b>		<ol style="list-style-type: none"> <li><b>1. L1 will be decided based on the total cost as per Sl.No. 1 to 13 of Commercial bid format plus taxes, as applicable.</b></li> <li><b>2. In case of import, amount quoted in foreign currency will be converted into rupees based on the F.E conversion rate applicable on the date of opening of price-bids.</b></li> <li><b>3. For quotations on F.O.B basis, 5% of the cost will be added towards freight, insurance and custom clearance charges for comparison with prices on C.I.F basis.</b></li> <li><b>4. Custom duty at 5.15% will be added for import cases. However, IGST in such cases will be NIL.</b></li> <li><b>5. For price quoted in Indian Rupees, a GST of 18 % (as applicable) will be added for price comparison.</b></li> </ol>

**Director  
CR Rao AIMSCS**