**INVITATION TO TENDER**

**M/s**

**GIRS 2018-000223-01**

**Tender Due at** 14:00 hrs IST on 18/03/2019

Dear Sirs,

Please submit your sealed quotation, in the Tender Form enclosed here along with the descriptive catalogues/pamphlets/literature, superscribed with Our Ref. No. and Due Date for the supply of the following items as per the terms & conditions mentioned in Annexure (Form No. null).

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Description of Items with Specifications</th>
<th>Unit</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Hyper Convergent Infrastructure (HCI) based solution. 4 Node HCI solution for VM with storage, virtualization software, server security and server log maintenance and 3 year hardware and software and service support. NBD in case of hardware failure</td>
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<td>1</td>
</tr>
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</table>

**Delivery At**

IIRS, DEHRADUN

**Mode of Despatch**

DOOR DLVRY

**Special Instructions**

TWO PART

**Specific Terms**

Instructions to Tenderers

(1) Note: Details compliance as per Annexure-1

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KALPANA/R

PURS. & STORES OFFICER

For and on behalf of the President of India

/ The Purchaser
### Technical Specifications

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Minimum Technical Specifications</th>
<th>Compliance Yes/No</th>
<th>Deviations/Remarks</th>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>The solution shall provide hyper-converged software that allows delivery of enterprise-class storage services using latest x86 server infrastructures without dependence on a separate Storage Area Network &amp; associated component such as SAN Switches &amp; HBAs with minimum 4 Nodes, Total Memory 768</td>
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<tr>
<td></td>
<td>Per Node Requirement</td>
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<tr>
<td></td>
<td>CPU Per Node is 2</td>
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<tr>
<td></td>
<td>Network Connection Needed</td>
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<tr>
<td></td>
<td>a) 2x 10GbBase-T,</td>
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<td></td>
<td>b) 4x 1Gb</td>
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<td></td>
<td>c) Memory – Minimum 192 GB</td>
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<td>2.</td>
<td>Storage Requirement</td>
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<tr>
<td></td>
<td>a) Minimum and Total Storage of 56 TB minimum storage.</td>
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<td></td>
<td>b) IOPS requirement 16000-25000 IOPS at 70:30 Read: Write ratio on 4/8K block size not exceeding 5 ms latency</td>
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<tr>
<td></td>
<td>Inclusive of Hypervisor, VM Management Software</td>
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<td>3.</td>
<td>Processor Details for Each Node</td>
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<tr>
<td></td>
<td>Processor Family (Should be of min. 10 Cores) Silver 4114 or higher</td>
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<td></td>
<td>with (Lunch) Date &gt;= Mar-17</td>
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<td></td>
<td>Processor Base Frequency &gt;= 2.2 Ghz Min</td>
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<td></td>
<td>Number of Total Cores Required 80</td>
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<tr>
<td></td>
<td>Number of Threads 32 or More</td>
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<td></td>
<td>Cache &gt;= 13.75 MB L3</td>
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<td></td>
<td>Intel® vPro™ Technology The Processor Should Support vPro Technology</td>
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<td></td>
<td>Intel® Virtualization Technology (VT-x) The processor Should Support (VT-x) Technology</td>
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<td></td>
<td>Intel® Virtualization Technology for Directed I/O (VT-d) The processor Should Support (VT-d) Technology</td>
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<tr>
<td>4.</td>
<td>Memory Details for Each Node</td>
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<tr>
<td></td>
<td>Max Memory Capacity Upto 1 TB (minimum) including all nodes</td>
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<td></td>
<td>Memory Types DDR4- 2133 and above</td>
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<tr>
<td></td>
<td>Total Memory Required 768 GB minimum</td>
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<td></td>
<td>Storage Required Min 56 TB Raw with 15% SSD/Flash minimum</td>
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<td>5.</td>
<td>The proposed solution should be hypervisor and version agnostic and should support hypervisors like VMware ESXi Microsoft Hyper-V &amp; KVM.</td>
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<tr>
<td>6.</td>
<td>The proposed solution should be hypervisor and version agnostic and should support hypervisors like VMware ESXi Microsoft Hyper-V &amp; KVM.</td>
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<td>7.</td>
<td>Virtualization Software</td>
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<td></td>
<td>a) It must include virtualization software to manage complete cluster as Single solution similar to software defined data centers (SDDC)</td>
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<td>b) The solution should be able to provide snapshots of data and application, it should have synchronization feature option for DR</td>
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</tbody>
</table>

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Signed: [Signature]
should be available.
d) It should be bundled with cluster management, Provisioning, preemptive maintenance alerts based on usage and hardware availability.
e) The cluster should support graceful degradation in case of node failure.
f) The allocation of resource in case of failure should be automated without manual intervention.

8. **Server Security and Log Maintenance**
a) Minimum 10 server security licenses for window/Linux to be provided.
b) The server security licenses must include anti-ransomware capability, server lockdown, antivirus.
c) The licenses must support server logs solution to provide the events logs of minimum 10 virtualized servers.

The proposed HCI solution should be 100% software defined and should not use any hardware based RAID, Compression or De-duplication.

10. 3 Years OEM comprehensive Onsite Warranty and support for both hardware and software. This will start from the day of acceptance.

11. Proposed Solution should have minimum 7 years EOSIEOL from the date of UAT. A certificates needs to be submitted by OEM.

12. The OEM must feature in the Leaders/challenger segment of the Gartner Magic Quadrant for HCI in last 2 years as on latest report.

13. Distributed caching of all virtual machine data providing local read access to vDisk or equivalent (the methodology should help maintain the local copy of data in case of multiple host reading in network congestion) in multi reader situation. This feature must not require any manual configuration and provided natively at storage level.

14. The Solution should support industry protocol NFS for Linux, windows OS SMB/CIFS/iSCSI, the proposed solution should support native file services/ file services over NFS, CIFS and SMB and file replication across cluster and data centers.

15. The platform should have capability to leverage SSD for required IOP achievement. Workload should be running from SSD or hybrid drives only

16. The solution should provide enterprise data service such a deduplication and compression with ensure coding or optimize storage methodology (methodology that can run on all tiers not compelling to buy all flash, so that cluster can allowed mixing of all flash and hybrid in the cluster with optimized cost) completely in software without dependence on any proprietary hardware. This should be delivered in hybrid and or all flash appliances and in the same cluster. This functionality should be part for the proposed solution with license.
17. These should be delivered in hybrid and/or all flash appliances and in the same cluster. These functionalities should be part of the proposed solution and licensed.

18. The solution shall have min 20 VM's orchestration and automation license built into the complete cost of the solution.

19. Solution shall be supplied with license and capability of managing the east-west VM traffic using micro segmentation.

20. The solution should be scalable without any degradation in performance.

<table>
<thead>
<tr>
<th>S.No.</th>
<th>SI/OEM Requirement</th>
<th>Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SI/OEM should provide the tender specific authorization from OEM</td>
<td>Yes/No</td>
</tr>
<tr>
<td>2</td>
<td>SI/OEM should have registered office with support office with in Dehradun to provide the support service within 4 hour at IIRS, Dehradun</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>SI/OEM should have minimum existence of 5 years and should have executed minimum 4 government order within last five years. Proof needs to be submitted with the tender document. The proof can be in the form of executed order or customer certificate.</td>
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<tr>
<td>4</td>
<td>SI/OEM should not be blacklisted in any government offices an affidavit needs to be submitted.</td>
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<tr>
<td>5</td>
<td>Under taking by OEM for the support of solution without additional cost during warranty period of 3 years.</td>
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<tr>
<td>6</td>
<td>Under taking by OEM for the support of solution post warranty period of 3 years irrespective of SI.</td>
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<tr>
<td>7</td>
<td>Estimated cost for the post warranty and service support for whole solution should be provided.</td>
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<tr>
<td>8</td>
<td>Detail Technical Bill of Material needs to be submitted.</td>
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<tr>
<td>9</td>
<td>Site preparation guide, i.e., requirement of space, power, AC etc., should be provided with quotation.</td>
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<tr>
<td>10</td>
<td>The proposal must include a detailed datasheet for every single IT component included in your proposal and the necessary technical whitepapers discussing the features, performance and optimization techniques.</td>
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</tbody>
</table>

**General Terms and Conditions**

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>During warranty period, the vendor should do preventive maintenance once in every month. Any calls related to hardware/software failure service/repair/maintenance should be attended to within 3 hours.</td>
</tr>
<tr>
<td>2</td>
<td>OEM Hardware used for the solution must be certified by software OEM. The spare part of hardware must be available across India from different suppliers.</td>
</tr>
<tr>
<td>3</td>
<td>The complete solution must be integrated with the existing WAF, Firewall solution of IIRS.</td>
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<tr>
<td>4</td>
<td>Server Hardening at OS and hardware Level as per the requirement</td>
</tr>
<tr>
<td>5</td>
<td>The service engineer for security &amp; maintenance shall visit weekly to ensure preventive maintenance to in order to provide secured environment for the application with 24x7 running.</td>
</tr>
<tr>
<td>6</td>
<td>If the price is quoted in USD then the conversion rate will be applicable at the time of commercial bid opening.</td>
</tr>
<tr>
<td>7</td>
<td>Commercial bid is applicable only to technically qualified vendors.</td>
</tr>
<tr>
<td>8</td>
<td>Technical bid has to be submitted with build of material and commercial bid in close envelope separately.</td>
</tr>
</tbody>
</table>

Signature:

[Signature]

Date:

[Date]
SPECIAL TERMS AND CONDITIONS FOR SUBMITTING TWO PART BID

1. This is a two part tender viz., Techno-Commercial Bid (consisting of Technical Specifications, Commercial terms & condition etc.) and Price Bid. Hence, quotation should be submitted in separate sealed covers super-scribing “Tender No. GIRS 2018000223-01, Due on 18/03/2019 at 14:00 Hrs (Techno-Commercial Bid)” and “Tender No. GIRS 2018000223-01, Due on 18/03/2019 at 14:00 Hrs (Price Bid)”.

2. Both the sealed tenders (Techno commercial & Price bid) should be kept in one big cover super scribing Tender for Hyper Convergent Infrastructure (HCI) based solution etc. against Enquiry No GIRS 2018000223-01, Due on 18/03/2019 at 14:00 Hrs and put in the Tender Box available in Purchase Division, IIRS or send by post or Courier within the due date and time prescribed.

3. The Techno-Commercial Bid should clearly indicate the technical details, scope of supply, payment terms, delivery terms, delivery period, taxes and duties, warranty, guarantee, security deposit, performance bank guarantee, etc. under separate heads. Please note that the price should NOT be indicated in the Techno-Commercial Bid.

4. Tender forms can be purchased from Purchase & Store Section IIRS, Dehradun on all working days on payment of ₹560/- in the form of DD drawn in favor of Pay & Accounts Officer, IIRS Dehradun payable at Dehradun or can be downloaded from www.iirs.gov.in. When tender forms are downloaded, DD for ₹560/- drawn in favor of Pay & Accounts Officer, IIRS payable at Dehradun shall be attached with Technical Bid.

5. Only Techno-Commercial bid will be opened on the date of tender opening. The price Bids of those tenderers whose Techno-Commercial Bids are found to be meeting our specifications/requirements will be opened. The bidders are allowed to attend the tender opening on the date and time of opening.

6. Late and Delayed Tenders will not be considered. Therefore, please ensure that your tender is posted well in time to reach us before the due date and time.

7. Fax/Email offers shall not be considered.

8. All the pages of your offer should be signed/initialed by competent authority and affixed with your company’s Seal...

9. **EMD of ₹1,35,000/-** to be submitted along with the Technical Bid in the form of Crossed Demand Draft drawn on any Nationalized / scheduled bank in favor of Pay & Accounts Officer, IIRS, payable at Dehradun. Quotation received without EMD will not be considered. The EMD of unsuccessful bidder will be returned after finalization of order.

[Signature: Purchase & Stores Officer]
Specific terms and conditions to the tender

1. Please submit the Technical Details / Catalogue / Make/ Model/Data Sheets.
2. The offer should be valid for a period of 90 days from the date of opening of Tender.
3. Please send the quotations ONLY in 'SEALED COVER' indicating our tender enquiry No. and due date by speed post so as to reach us on or before the due date & time. IIRS will not be responsible for any postal delays.
4. E-mail/ fax quotations 'WILL NOT BE ACCEPTED'.
5. Please quote the percentage of GST applicable.
6. Our standard delivery term is FOR, IIRS. In case any vendor offers delivery term of Ex-works, Packing and Forwarding charges if any should be indicated separately either as a percentage of the quoted rate or as a Lump sum amount.
7. We are exempted from the payment of Customs Duty and necessary exemption certificate shall be issued upon request.
8. Payment Term: Payment will be made within 30 days from the date of receipt and acceptance of the item at our site for order value up to 2.00lakhs. For order value above 2.0 Lakh, 90% payment will be made within 30 days and 10% against submission of Performance Bank Guarantee for the warranty period (wherever warranty is applicable). The Performance Bank Guarantee should be valid for a period of 2 months beyond the completion of the warranty period.
9. Liquidated Damages – The delivery period quoted should be realistic. The delivery period so quoted and mentioned in the order is the essence of the order/contract. In case of delay in delivery of material as per the delivery schedule, Liquidated Damage @ 0.5% per week or part thereof on the undelivered portion subject to a maximum of 10% of the contract value shall be levied. Wherever, installation and commissioning is also involved, the supply will be deemed to have been completed only when the entire Stores is supplied, installed and accepted.
10. Security Deposit: - Wherever the offer value is Rs. 5.00 Lakhs or above, the successful tenderer should submit Security Deposit @ 10% of the order value by way of Bank Guarantee / FD Receipt. The Bank Guarantee shall be obtained from any Scheduled Bank on Rs.200/- Non Judicial Stamp Paper and should be valid beyond 2 months from the completion of all contractual obligations.
11. In order to avail of the benefits extended to by Govt. of India to the Micro and Small Sectors, please submit attested copy of the valid Entrepreneur Memorandum Part-II signed by the General Manager, District Industries Centre / Udyog Adhar / NSIC Registration Certification along with your offer.
12. If any bidder submits forged / false document along with the tender, offer of such vendors will be summarily rejected and such bidders will be blacklisted for all future tenders.

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Purchase & Stores Officer