Reply to Queries

Tender No: - IIIT-D/IT/GPU Servers/024/2021-22   **Date: 2nd March, 2022**

Clause	Sub clause	COMPONENTS	Description	Request for Change	Response
			Hardware Specifications of GPU Servers (Qty. - 03)	Hardware Specifications of 1-2 GPU Servers with Total Config listed (Qty. - 03 Sets)	**The scoring described in Annex II accommodates deviation from given hardware specifications. The bidder may present their proposal accordingly.**
1. Hardware Specifications of GPU Servers	H.2	**Number of GPUs and GPU Communication**	8 x Nvidia A100 GPU switch 40GB RAM, NV Link 3.0/ configured or NV Switch with minimum 600GB/s bidirectional communication bandwidth	It is requested to amend this specification as " 8 x Nvidia A100 GPU switch 80GB RAM" . 80GB GPU cards offers better performance and memory bandwidth that are particularly beneficial for AI & ML applications.	**The bidder may propose a server with 80GB GPU cards if they wish, however, our requirement stands.**
	H.10	**Network**	Minimum 8 x Single port Mellanox IB HDR Ports (200Gbps)	These specs are specific to a particular vendor. It is requested to reduce the adaptor count to " Minimum 4 x Single port Mellanox IB HDR Ports (200Gbps)" or Minimum 4 x Dual port Mellanox IB HDR Ports (200Gbps)	**Our requirement stands. 8x single ports are important to maintain high-speed communication**
			Minimum 2x Dual port Mellanox ConnectX-6 (10/25/50/100/20 0Gb/sec Ethernet for storage connectivity)	These specs are specific to a particular vendor. It is requested to remove this point as it applies only in case of external storage connectivity. If it is required, we request to provide the details of the	**Our requirement stands. The 2x Dual port Mellanox ConnectX-6 is crucial for high-speed communication with storage connectivity**

				external storage that would connect to these servers to ensure compatibility.	
3.3. Software Specifications	S.2		Nvidia NGC (Nvidia GPU Cloud) containers with Nvidia NGC support for 3 years for each system with unlimited user access. The proposed system should be an NGC certified system.		**Specialized software requirement needs optimized performance - hence the need of an NGC certified system.**
			Some of the basics:		
		AI, HPC Software Containers, and Required DL SDKs with Support	SDK/library/containers we will use in the system : CUDA toolkit, CUDA tuned Neural Network (cuDNN) Primitives	It is requested to remove "The proposed system should be an NGC certified system." NGC certification comes from Nvidia and may limit other bidders with equal or better system capabilities from bidding. However, all other specifications can be met in terms of NGC support and software support & compatibility.	**The servers are needed to run specialized programs crucial for AI related research on optimized NVidia GPU hardware with NGC software, therefore certification is required to avoid any hardware software compatibility issues and performance bottlenecks.** **Deviations, if any, are acceptable based on the scoring provided in Annexure-II**
			Tensor RT Inference Engine CUDA tuned BLAS (cuBLAS) CUDA tuned Sparse Matrix Operations (cuSPARSE) Multi-GPU Communications (NCCL) Industry SDKs – NVIDIA Deep Stream, ISAAC, DRIVE, Nemo, Jarvis		

	S.3	Preinstalled AI frameworks	Installed optimized AI frameworks like Caffe, CNTK, Tensor flow, Theano, Torch with Docker containers for deploying Deep learning frameworks.	These specs are specific to a particular vendor as Preinstall frameworks typically comes with fixed configuration appliances. It is requested to allow preinstall or field install AI frmeworks.	**Field Installation of these libraries is acceptable, as long as the performance is not degraded as specified in Perf. Reqmts.**
			Pre-installed Deep learning GPU Training System to train highly accurate deep neural networks (DNNs) for visual recognition (classification, segmentation, and object detection tasks), language modelling, and speech processing tasks.		
Qualifying Credential	S.6	Qualifying Credential	The quoted GPU Card & the quoted Server should be of the same OEM	It is requested to remove this clause as this is favouring only one OEM and limits all other OEMs to bid.	**OK, as long as the performance is not degraded as specified in Perf. Reqmts.** **Corrigendum for the same is uploaded.**
Performance Requirements		ML-Commons 0.7 Training Benchmark	Reference implementation: SSD Time (in Min) : 17	These benchmarks are specific to particular vendor in terms of achieving the asked results. Not all the listed OEMs have yet conducted these latest benchmarks and published results. However, other OEMs may have equal or better capabilities in terms of system performance, hardware and software support and compatibilities. Hence it is requested to remove this specification as it is favouring a particular vendor. Otherwise, it is requested to allow a variation of +/- 20% in the asked	**These requirements stand as these are standard benchmarks and a 20% tolerance is not acceptable** **And** **ML-Commons 0.7 Training Benchmark has been around longer and would be available to a larger set of bidders. The latest benchmarks may end up excluding a significantly larger set of bidders. Hence our requirement stands.**
			Benchmark: Object detection, Heavyweight, Data set: Coco,		
			Reference implementation: Mask RCNN Time (in Min) : 98		
			Benchmark : Reinforcement Learning Dataset: GO		
			Reference implementation: Minigo Time (in Min) : 310		
		Training Throughput Benchmark	1. BERT-Large model (pertaining): 3200 seqs/sec on Wikipedia		
			2. ReSNet-50 v1.5 model: 17000 images/sec on ImageNet		

		performance during demonstration And ML-Commons 1.1 Training Benchmark for each server	
	3. Jasper model: 550 seqs/sec on Librispeech		

Replies to non-Technical Queries

Query	Response
1. Referring to Clause 3 (Pg.10) of Terms and Conditions "Local Content: As per GOI guidelines (Order no. P-45021/2/2017-PP (BE-II) dated 04.06.2020 issued by DPIIT, Ministry of Commerce and Industry, Govt. of India." Please find that the subjected tender for assessment of Local Content is only referring to Order no. P-45021/2/2017-PP (BE-II) dated 04.06.2020 issued by DPIIT, Ministry of Commerce and Industry, Govt. of India. In reference to the above said Notification, 'MeitY' have also released the Notification i.e., F. No. W-43/4//2019-IPHW-Meity dated 07.09.2020. Therefore, it is requested you to also refer the above specified Notification. Be it noted, that criteria and guidelines for assessment of Local Content for particular 'Server' is defined in the said Notification under clause 4.12 from page no. 22 to 24. Therefore, it is a request to kindly incorporate the said Notification F. No. W-43/4//2019-IPHW-Meity dated 07.09.2020 in the subjected tender for assessment of local content.	**Yes, we follow the Meity Notification with regard to Local content.**
2. Referring to Annexure-III (Pg.17) "Declaration of Local Content". Be it noted, Local Content Certificate will be required from OEMs of items said to be purchase as per subjected Tender i.e., (i) GPU Servers and (ii) Switches. Since Server and Switches are the items to be purchased in the subjected tender thus, Certificate has to be issued as per Nodal Ministry guidelines i.e., Public Procurement (Preference to Make in India), Order 2017 No. P-45021/2/2017-PP (BE-II) dated 16.09.2020. Therefore, the Certificate in this regard must be issued by Server OEM and Switches OEM. In view of the above it is a request to kindly re-valuate the said clause and issue the corrigendum requiring Local Content Certificate respectively from Server and Switch OEMs. So as to complying with the above-mentioned Notification i.e., Public Procurement (Preference to Make in India), Order 2017 No. P-45021/2/2017-PP (BE-II) dated 16.09.2020, issued by DPIIT.	**Bidder has to provide the Local content on the Company's letterhead based on the OEM certification for the same and such proof needs to be provided.**
3. Referring to Annexure-III (Pg.17) "Declaration of Local Content to be issued by the Bidder on Company' letter head." In the subjected tender, it is mentioned that the declaration of Local Content is to be issued by the Bidder on Company Letter head which is incorrect and has to be corrected. Placing reliance on the Notification No. P-45021/102/2019-BE-II-Part (1) (E-50310) dated 04.03.2021 issued by Department of Promotion of Industry and Internal Trade (DPIIT), where it has been expressly clarified that only OEM can provide declaration, therefore, it is mandatory that it has to be on OEM letter head. Thus, we request you to kindly revise the condition accordingly.	

The Last date for submission of Tender has been extended to **11th March 2022 till 03:00 P.M.**