

INDIAN INSTITUTE OF TECHNOLOGY MADRAS Chennai 600 036

Telephone: [044] 2257 9763 E-mail: tender@imail.iitm.ac.in



Date: 25.10.2022

The Manager (Project Purchase)

Open Tender Reference No: CS/MITES/054/2022/CLOUDSERVICE

GEM NAR ID: GEM/GARPTS/18102022/OQ10IU03XKV1 Due Date/Time: 14.11.2022@ 3:00 PM

Dear Sir/Madam,

On behalf of the Indian Institute of Technology Madras, offers are invited for

Cloud Services for Deep Learning

conforming to the specifications.

Tender Documents may be downloaded from Central Public Procurement Portal https://etenders.gov.in/eprocure/app. Aspiring Bidders who have not enrolled / registered in e-procurement should enroll / register before participating through the website https://etenders.gov.in/eprocure/app. The portal enrolment is free of cost. Bidders are advised to go through instructions provided at "Help for contractors". [Special Instructions to the Contractors/Bidders for the e-submission of the bids online through this eProcurement Portal"]

Bidders can access tender documents on the website (For searching in the NIC site, kindly go to Tender Search option and type 'IIT'. Thereafter, click on "GO" button to view all IIT Madras tenders). Select the appropriate tender and fill them with all relevant information and submit the completed tender document online on the website https://etenders.gov.in/eprocure/app as per the schedule attached.

	Pre-bid Meeting	:	NA
<u>1)</u>	Details		
<u>2)</u>	ICSR Vendor	:	<u>Vendor registration code</u> . Vendor registration with IC&SR (IITM) is mandatory for
	Registration		bidders to participate in tenders.
			** For Vendor Registration & Guidelines, Please follow the website: https://icandsr.iitm.ac.in/vendorportal; Helpdesk: vendorhelpdesk@icsrpis.iitm.ac.in

<u>No manual bids will be accepted.</u> All tender documents including Technical and Financial bids should be submitted in the E-procurement portal.

Last date for receipt of tender	:	14.11.2022 @ 3:00 PM
Date & time of opening of tender	:	15.11.2022 @ 3:00 PM

3. Instructions to the Bidder:

<u>A)</u>	Searching for tender documents	:	 There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, organization name, location, date, value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as organization name, form of contract, location, date, other keywords etc. to search for a tender published on the CPP Portal. Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective "My Tender" folder. This would enable the CPP Portal to intimate the bidders through SMS / email in case there is any corrigendum issued to the tender
			 The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.
<u>B)</u>	Assistance to bidders	:	 Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender. Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk. The contact number for the helpdesk is [0120-4200462, 0120-4001002, 0120-4001005]
<u>C)</u>	Enrolment Process to Bidders	:	 Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal URL:https://etenders.gov.in/eprocure/app by clicking on "Online Bidder Enrolment". Enrolment on the CPP Portal is free of charge. As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts. Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal. Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / TCS / nCode / eMudhra etc.) Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSCs to others which may lead to misuse. Bidder then may log in to the site through the secured log-in by entering their user ID / password and the password of the DSC /

			 Possession of a Valid Class II/III Digital Signature Certificate (DSC) in the form of smart card/e-token in the company's name is a prerequisite for registration and participating in the bid submission activities through https://etenders.gov.in/eprocure/app Digital Signature Certificates can be obtained from the authorized certifying agencies, details of which are available in the web site https://etenders.gov.in/eprocure/app under the "Information about DSC".
<u>D)</u>	Preparation of bids	:	 Bidder should take into account any corrigendum published on the tender document before submitting their bids.
			 Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
			 Bidder, in advance, should prepare the bid documents to be submitted as indicated in the tender document / schedule and generally shall be in PDF / XLS formats as the case may be. Bid documents may be scanned with 100 dpi with black and white option.
			• To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, GSTIN Details, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Documents" area available to them to upload such documents. These documents may be directly submitted from the "My Documents" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.
<u>E)</u>	Submission of bids	:	 Bidder should log into the site well in advance for bid submission so that he/she can upload the bid in time i.e. on or before the bid submission date and time. Bidder will be responsible for any delay due to other issues.
			 The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
			• Bidder has to select the bid security declaration. Otherwise, the tender will be summarily rejected.
			 A standard BOQ format has been provided with the tender document to be filled by all the bidders. Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. Bidders are required to download the BOQ file, open it and complete the detail with their respective financial quotes and other details (such as name of the bidder). If the BOQ file is found to be modified by the bidder, the bid will be rejected.

		• The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
		• The Tender Inviting Authority (TIA) will not be held responsible for any sort of delay or the difficulties faced during the submission of bids online by the bidders due to local issues.
		 The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
		• Upon the successful and timely submission of bids, the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
		 Kindly add scanned PDF of all relevant documents in a single PDF file of compliance sheet. More information useful for submitting online bids on the CPP Portal may be obtained at: https://etenders.gov.in/eprocure/app. All tender documents including pre-qualification bid, Technical Bid &Financial Bid should be submitted separately in online CPP portal as per the specified format only. Right is reserved to ignore any tender which fails to comply with the above instructions. No manual bid submission will be entertained.
<u>F)</u>	Marking on Pre- Qualification Bid	• The bidder eligibility criteria, technical specification and supply of item for this tender is given in Annexure A.
		The Bidders shall go through the specification and submit the Pre-Qualification bid.
		• The Pre-qualification bid should be submitted in the proforma as per Annexure-B in pdf format only through online (e-tender).No manual submission of bid will be entertained.
		• The Pre-Qualification bid should have a page-wise heading as "Pre- qualification Bid" and page no. in all pages with seal and signature of authorized signatory. The total no. of pages should be mentioned at the last page of the documents
<u>G)</u>	Marking on Technical Bid	• The bidder eligibility criteria, technical specification and supply of item for this tender is given in Annexure A.
		• The Bidders shall go through the specification and submit the technical bid.
		 The Technical bid should be submitted in the proforma as per Annexure-C in pdf format only through online (e-tender). No manual submission of bid will be entertained.
		• The technical bid should have a page-wise heading as "Technical Bid" and page no. in all pages with seal and signature of authorized signatory. The total no. of pages should be mentioned at the last page of the documents.
		The technical bid should consist of bidder eligibility criteria details and all technical details along with catalogue/ pamphlet which will give a detailed description of product with technical data sheet so

		that technical compliance can be verified.
<u>H)</u>	Marking on Price Bid	• Financial bid (BoQ) should be submitted in the prescribed proforma format as per Annexure-D in xls format through e-tender only. No manual or other form of submission of Financial Bid will not be entertained

EMD: Rs.4,00,000 /- (Rupees Ten Lakhs Only) has to be paid by means of bank transfer. Bank Account Details are given below. Proof of remittance has to be enclosed along with technical tender documents; else the bid will be rejected due to non-enclosure of EMD. This Earnest Money will be returned to the unsuccessful tenderers after the finalization of the tenders. EMD will not carry any interest. EMD will not be waived under any circumstances. EMD is exempted for Micro and Small Enterprises (MSE) as defined in MSE Procurement policy issued by the department of Micro, Small and Medium Enterprise (MSME). Relevant proof of registration of MSE with the competent authority should be submitted. For others, non-submission of EMD will lead to rejection of tender at the opening stage itself.

Institution Account Name	The Registrar, Indian Institute of Technology - Madras
Account No	2722101003872
Account Print Name	The Registrar, IIT Madras
IFSC CODE	CNRB0002722
Bank Name (in full)	CANARA BANK
Branch Name	IIT -Madras Branch
	Canara Bank
	IIT -Madras Branch
Complete Branch Address	IIT -Madras Campus Post Office
	Sardar Patel Road
	Guindy, Chennai - 600 036
MICR No.	600015085
Account Type	Savings Account

5) Performance Security: -

The successful bidder should submit Performance Security for an amount of 3% of the value of the contract/supply. The Performance Security may be furnished in the form of an Account Payee DD, FD Receipt in the name of "The Registrar, IIT Madras" from any scheduled commercial bank or Bank Guarantee from any scheduled commercial bank in India. The performance security should be furnished within 14 days from the date of the purchase order.

Performance Security in the form of Bank Guarantee: - In case the successful bidder wishes to submit Performance Security in the form of Bank Guarantee, the Bank Guarantee should be routed directly to IIT Madras from the Bank.

The Bank Guarantee should remain valid for a period of sixty days beyond the date of completion of all contractual obligations of the supplier including the warranty obligations.

6) Price:

The offer/bid should be exclusive of taxes and duties, which will be paid by the purchaser as applicable. However, the percentage of tax & duties should be clearly indicated separately.

7) Tenderer shall submit along with this tender:

- (i) Name and full address of the Banker and their swift code and PAN No. and GSTIN number.
- (ii) GST registration proof showing registration number, area of registration etc.
 - a) (iii) All of your future correspondences including Invoices should bear the GST No. and Area Code.

8) Terms of Delivery:

The tenderer should clearly indicate the time of Delivery. In case there is any deviation in the delivery schedule, liquidated damages clause will be enforced or penalty for the delayed supply period will be levied.

9) Period for which the offer will remain open:

The Tender shall remain open for acceptance/validity till: 120 days from the date of opening of the tender. However, the day up to which the offer is to remain open being declared closed holiday for the Indian Institute of Technology Madras, the offer shall remain open for acceptance till the next working day.

10) Risk Purchase Clause

In the event of failure of provision of required services within the stipulated delivery schedule, the purchaser has all the right to get services from other sources on the total risk of the supplier under risk purchase clause.

11) Payment:

No Advance payment will be made for Indigenous purchase. Payment will be made 100% after the acceptance of completeness and accuracy of the said report by the Project Coordinator at IPM Cell, IITM.

12) Acceptance and Rejection:

Failure to comply with any of the instructions stated in this document or offering unsatisfactory explanations for non-compliance will likely to lead to rejection of offers.

(i) I.I.T. Madras has the right to accept the whole or any part of the Tender or portion of the quantity offered or reject it in full without assigning any reason.

13) Debarment from Bidding:

In case of breach of Terms & Conditions, Bidder may be suspended from being eligible for bidding in any contract with the IIT Madras up to 2 Years [as per Rule 151(iii) of GFR] from the date of Tender.

14) Disputes and Jurisdiction:

Settlement of Disputes: Any dispute, controversy or claim arising out of or in connection with this PO including any question regarding its existence, validity, breach or termination, shall in the first instance be attempted to be resolved amicably by both the Parties. If attempts for such amicable resolution fails or no decision is reached within 30 days whichever is earlier, then such disputes shall be settled by arbitration in accordance with the Arbitration and Conciliation Act, 1996. Unless the Parties agree on a sole arbitrator, within 30 days from the receipt of a written request by one Party from the other Party to so agree, the arbitral panel shall comprise of three arbitrators. In that event, the supplier will nominate one arbitrator and the Project Coordinator of IITM shall nominate on arbitrator. The Dean IC&SR will nominate the Presiding Arbitrator of the arbitral tribunal. The arbitration proceeding shall be carried out in English language. The cost of arbitration and fees of the arbitrator(s) shall be shared equally by the Parties. The seat of arbitration shall be at IC&SR IIT Madras, Chennai.

a. **The Applicable Law:** The Purchase Order shall be construed, interpreted and governed by the Laws of India. Court at Chennai shall have exclusive jurisdiction subject to the arbitration

clause.

Any legal disputes arising out of any breach of contact pertaining to this tender shall be settled in the court of competent jurisdiction located within the city of Chennai in Tamil Nadu.

- **Force Majeure:** The Supplier shall not be liable for forfeiture of its performance security, liquidated damages or termination for default, if and to the extent that, it's delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.
 - For purposes of this Clause, "Force Majeure" means an event beyond the control of the Supplier and not involving the Supplier's fault or negligence and not foreseeable. Such events may include, but are not limited to, acts of the Purchaser either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.
 - b. If a Force Majeure situation arises, the Supplier shall promptly notify the Purchaser in writing of such conditions and the cause thereof. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.
- Preference to "class I Local Suppliers": preference will be given to "class 1 local suppliers" (subject to class -I local supplier's quoted price falling within the margin of purchase preference) as per public procurement (preference to make in India) order 2017 .O.M No P- 45021/2/2017 pp(BE 11) dt 04/06/2020 subject to the conditions that the "class 1 Local Supplier" should agree to supply goods / provide service at L1 rate and furnish a certificate with the technical bid document that the goods/service provided by them consists local content equal to or more than 50%.(certificate from Chartered Accountant in case value of contract exceeds Rs 10 crore).

**Note: Local content percentage to be calculated in accordance with the definition provided at clause 2 of revised public procurement preference to Make in India Policy vide GoI Order no. P-45021/2/2017-PP (B.E.-II) dated 15.06.2017 (subsequently revised vide orders dated 28.05.2018, 29.05.2019and 04.06.2020) MOCI order No. 45021/2/2017-PP (BE II) Dt.16th September 2020 & P- 45021/102/2019-BE-II-Part(1) (E-50310) Dt.4th March 2021

17 **Preparation of Tender**: The bidders should submit the bids in three bid system as detailed below.

Cover I _Pre-Qualification Bid

The Pre- Qualification Bid for in the Bidder Eligibility criteria I & II along with all relevant proof needs to be submitted in the proforma given in Annexure -B.

The proof attached should be indexed and page numbers of the attached proof should be clearly mentioned in the Pre-Qualification Bid format.

Cover II Technical Bid

The technical bid should consist of technical specification compliance sheet as per Annexure-C.

Cover III Price Bid

The price bid should be submitted in excel format (BoQ) as per the proforma (Annexure D) uploaded in the e-Tender web site. The Quoted price should be for the services offered and inclusive of all cost and statutory levies at IIT Madras. The vendor should Quote the cost on Per Hour Basis as per the BOQ in Annexure D.

18 Bidder Eligibility Criteria I:

- a) As per the Government of India Order, only "Class I Local Suppliers" and "Class II Local Suppliers" can participate in this tender. Declaration to be submitted as per Annexure E
- b) Bidder should confirm their acceptance that they comply with the provisions with report to "Guidelines for eligibility of a bidder from a country which shares a land border with India as detailed at Annexure-F. The bidder should submit Certificate for "Bidder from/ Not from Country sharing Land border with India & Registration of Bidder with Competent Authority" as per Order of DoE F.No.6/18/2019-PPD dated 23.07.2020 as mentioned.
- c) Proof of Submission of EMD.
- d) Declaration for Blacklisting as per Annexure G

Bidder Eligibility Criteria II:

- a) Bidder shall be a company registered in India and should be operating in India for at least for the last 5 years offering cloud services and specifically for enabling Machine learning and Deep Learning initiatives in premier Academic and Research institutions, start-ups and deep technology companies. (Enclose company registration certificate)
- **b)** They should have a revenue of at least INR 20 Crores or higher over the past 3 years. (Enclose Company Financially audited results)
- c) There are at least 3 customer references from their previous work with the customers where the cloud services enable the ML & DL critical projects for the customer. These customers rate the quality of service (QoS) as excellent and rate price is optimal for value added by services provided by the Bidder.
- d) The Bidder should be one of the preferred partners of providing GPU infrastructure (For eg, Like NVIDIA, etc) and Proof of authorization to be submitted.

19) Evaluation of Bids

Bid evaluation will take place in three stages.

Stage 1 Pre-Qualification Bid evaluation

The Pre- Qualification Bid of the bidders will be evaluated and the bidders who have qualified all the criteria stipulated in bidder eligibility criteria I & II will alone be selected and their technical bids will be opened.

Stage 2 Technical Bid evaluation

1. All bidders who qualify in the Stage I should provide the following machine configuration on cloud for 24-to-48-hour test to run NLP workloads. The objective of this validation is to ensure performance, availability and reliability meet the goals outlined in technical evaluation criteria.

Upon publishing the Pre-Qualification result IITM will forward the inputs on Natural Language Processing workloads that need to be processed to bidders through email with time duration of 3 days for set up of cloud infrastructure for the test

(need to provide information on NLP workloads that would be run over 24-48 hour window and criteria around reliability, performance and availability to be validated)

- 2. Stage 1 Qualified bidders need to make a power point presentation before an EPC Committee. Date for presentation will be informed to bidders through email.
- 3. The technical submission, Data transcription and technical presentation together will be considered for technical bid evaluation.

The total marks for technical bid will be for 100 marks, out of which the bidders should score minimum 70 marks to qualify for opening of their financial bid. The Financial bids of those bidders who have scored less than 70 marks will not be opened.

The detailed scoring system for arriving at the total technical score of the bidders who have qualified Stage I are:

S. No	Category	Criteria	Maximum score for line item in category	Category Weightage
	Bidder Experience and Credentials	The bidder has delivered similar cloud services to education and research institutes in India and start-ups based in India and deep technology organizations in India for at least 18+ months and it will be a plus if they have done this for AI-NLP initiatives. Proposed scoring criteria E&R Institutes, Start Ups, Deep Technology Companies - (8 to 10) Two of the three (E&R Institutes, start-ups, Deep technology companies) - (5 to 7) One of the three (E&R Institutes, Start-ups, Deep technology) - (3 to 5) None (Score – 0)	20	30%

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1b	Reference Customer Rating score (at least 3 References) with cloud services delivered to these customers for 24 months or higher.	20	
	Adherence to timelines, Provisioning and SLA issue resolution: Excellent or Higher		
	Adherence to quality of service over 24- month period or higher: Excellent or Higher		
	Value added to the customer: Excellent or Higher		
	Examples of Repeat work done with the customer (at least two).		
	At least one reference is a premier educational &research institute and one of them a start-up.		
	These references should be using cloud services for processing their ML and DL workloads. Appropriate proof to be submitted by the bidder. This includes formal document / email from the customers whose reference is submitted as part of the bid. Proposed Scoring Criteria		
	When all the 4 criteria are met (8-10) - Timeline, QoS, Value added, Repeat Customers) When three of the criteria are met with QoS as one of them (Score 6-8)		
	When 2 of the 4 criteria are met with QoS as one of them, then score could be 4-6. When QoS alone is met, then score would be 2-4		
1c	The bidder is able to provide sufficient data points meeting required expectations based on their provisioning	60	

	of GPU services for DL workloads for their current customers 1. High availability/Up time: (24X7X365): 99% 2. High Reliability of 99.99% 3. Optimal Performance for DL workloads (Speed of processing) specific to Natural Language processing 4. Their unit cost for delivery of a standard DL throughput by their cloud services is optimal when compared to their peers who offer similar services (is at median or below median level) 5. Configured with Industry leading frameworks (Tensor Flow, Spark, Auto Keras, Pytorch) 6. Bidder would do a reasonable due diligence on geograpity of data and appears		
 Bidder Implementatio n and PM capability	diligence on security of data and apps running on their cloud services. Proposed Scoring Criteria When all 6 aspects are addressed (50-60) When 5 of these aspects are addressed (40 - 50) When 4 of these aspects are addressed (30-40) When 3 of these aspects are addressed (20-30) Else 0. The Bidder provides a solution approach that outlines how they would ensure 1. High availability 2. High reliability 3. Optimal Performance	70	45%
	 3. Optimal Performance 4. Management of dynamic workloads and additional throughput generation and workload thresholds that would be supported at the pricing quoted by Bidder 5. Data Loss Protection 6. Best in class security 7. Agility and effectiveness of Issue resolutions 		

	D 20 . 00 .		
	Proposed Scoring Criteria When approach addresses all above		
	When approach addresses all above factors - (60-70)		
	(00 /0)		
	When 6 of the 7 factors are addressed		
	(50-60)		
	When 5 of the 7 factors are addressed		
	(40-50) When at least 4 of 7 factors are		
	addressed (30-40)		
	addressed (50 10)		
	The bidder would submit the		
	documentation outlining the approach,		
	the proposed architecture to ensure the		
	adherence to non-functional		
	requirements outlined above.		
2b	The bidder would identify two team	10	
	leads who have at least 2 years of work	-	
	experience on provisioning and		
	maintenance of cloud services as		
	technical lead/architect with customers		
	whose work scope is similar to that of		
	this tender from IIT Madras. These leads have delivered the services		
	effectively and efficiently (Customer		
	reference)		
	The bidder would submit the		
	documentation of 2 technical architect		
	profiles and their experience with other		
20	Customers.	20	
2c	The bidder would share their experience of at least 2 data migration experiences	20	
	from GCP or Azure to bidder's cloud		
	eco-system for customers in premier		
	academic institutions and/or technology		
	companies. This for data size similar to		
	that in scope of this tender.		
	The proposed migration approach for		
	these customers would be shared by the		
	Bidder.		
	Proposed Scoring Criteria		
	Approach demonstrated is considered		
	excellent including validation of		
	migration (16-20) Is considered good (12-16)		
	Is considered on par (8-12)		

	3	Final	Bidder Presentation to committee –	100	25%			
		Presentation to		100	2570			
		the Committee	Approach and addressing key risks and					
			dependencies					
			1. Why they need to be selected -					
			USP					
			2. Their solution and delivery					
			approach (Technical, PM)					
			3. Risks Identification and					
			Mitigation					
			4. Value expected to be added to					
			IIT Madras (Cost – Benefits)					
			The made as (cost selection)					
	Nata	. Fach catacan H	o manimum capra is 100 and assessible a	ould coore for				
			e maximum score is 100 and committee w nen score in category is multiplied by categ					
			get a final bidder score. The weighted bidd					
		r for them to qua						
	Stage	3 Price Bid evalua	ation					
	The p	rice bid evaluation	n will be based on the rate quoted by the bi	dder for the sc	ope of services			
	_		ith cloud infrastructure to arrival of Lowes		-			
20)		<u>~</u>	of successful bidder and Award of Order					
20)	The	successful bidder	will be selected based on assessment	t of skills, e	xperience, and			
			the project scope as per Technical Bid.					
21)	Appo	ortion of work						
		The L1 bidder	for service(Training and Production Deplo	oyment) will b	e awarded the			
		contract.						
22)	Perio	d of Service: The	period of Service is 1 year and may be exten	ded for another	Year with the			
	same	rate & Terms of co	onditions of this tender.					
23)	Deliv	ery & Payment S	Schedule:					
	<u>Deliv</u>	ery Schedule:						
	•	The provision o	f GPU services on the Cloud would be con	npleted within	a fortnight of			
		issue of Purchas	se order to Bidder.					
	•		rt would be provided to users of these cloud nis cloud infrastructure in first month.	d services as pa	art of			
	•	_	el agreements would be defined and agreed	with the select	ed Bidder in			
		mot month of C						

	Payment Schedule:		
	The payment will be monthly and selected bidder would submit a monthly invoice		
	detailing		
	Usage of Infrastructure as per scope defined		
	o Usage of services.		
	• The payment terms will be T+30, where T is the date on which invoice is raised.		
	All information including selection and rejection of technical or financial bids of the prospective		
bidders will be communicated through e-Tender portal. In terms of Rule 173(iv) of General			
	Rule 2017, the bidder shall be at liberty to question the bidding conditions, bidding process and/or		
	rejection of bids.		
25)	The tenderer shall certify that the tender document submitted by him / her are of the same replica of the		
25)	tender document as published by IIT Madras and no corrections, additions and alterations made to the		
	same. If any deviation found in the same at any stage and date, the bid / contract will be rejected /		
	terminated and actions will be initiated as per the terms and conditions of the contract.		
26)	The bidders will not be entertained to participate in opening of Bids, since the tender is e-tender, the		
20)	opening of the bids may be checked using the respective logins of the bidders.		

ACKNOWLEDGEMENT

It is hereby acknowledged that I/We have gone through all the points listed under "Specification, Guidelines, Terms and Conditions" of tender document. I/We totally understand the terms and conditions and agree to abide by the same.

SIGNATURE OF TENDERER ALONG WITH SEAL OF THE COMPANY WITH DATE

Scope of the Work.

Cloud Services for Deep Learning Tender No. CS/MITES/054/2022/CLOUDSERVICE

- The purpose of this tender is to identify the right Bidder who could provide cloud services for enabling ML and DL workloads processing. This would include
 - Provisioning of latest GPU infrastructure as per the following configurations.
 - Cloud GPU Server like NVIDIA DGX or its equivalent
 - Configuration: Dual AMD EPYC 7742 (128 Phy Cores @2.25 GHz (base), 3.4 GHz (max boost), 1024 GB RAM, OS: 2x 1.92TB M.2 NVMe drives, Internal Storage: 15TB (4x 3.84TB) U.2 NVME drives, 8x A100 GPUs, 1 IP Address
 - Cloud GPU Server like NVIDIA 4xA100-40GB per month or its equivalent: Configuration: 64 vCPUs, 460 GB RAM, 6000 GB SSD storage, 4 x Nvidia A100 or its equivalent-40 GB GPU Card, 1 IP Address
 - Cloud GPU Server like NVIDIA 4xA30 or its equivalent: Configuration:64 vCPUs, 360 GB RAM, 2560 GB SSD storage, 4 x NVIDIA A30 or its equivalent-24 GB GPU RAM card, 1 IP Address
 - High bandwidth connection between the cards, such as InfiniBand, wherever available.
 - Elastic storage of up to 50TB with extensibility to support data growth of 50 to 75% per annum
 - Back-up services of priority data sets that would be part of work order to be generated for selected bidder.
 - Data loss protection features are enabled as part of cloud infrastructure services to be provided by the bidder.
 - Provide necessary support / assistance required for data migration to bidder's cloud ecosystem from existing cloud service provider
- The work approach would comprise of
 - Provisioning of applicable services for DL processing as per specifications outlined
 - Provide support services to ensure high reliability and performance for users leveraging the cloud services to process their deep learning workloads.
 - Provide support / assistance required for data migration from existing cloud provider to the bidder's Cloud partner/ecosystem.

• Key Criteria

- High availability and reliability of cloud services.
- Ensuring optimal performance for Deep learning (NLP, Speech, Computer Vision) Processing workloads.
- Resolution of issues as per service level agreements.

• The unit cost per hour is optimal and is best in class among the bidders for the Cloud Infrastructure provisioning

Terms and Conditions.

- 1. A simple governance mechanism would be in place to ensure to address and resolve the following effectively and with agility.
 - o Issues in the Delivery of services and/or
 - o Issues in meeting Service level agreements
- 2. The Selected Bidder need to Sign the SLA with IITM. Sample format may be referred in Annexure H of this tender document.

PRE-QUALIFICATION BID PROFORMA Tender No. EE/UME/40/2022/DATACOLLECT

Item Name: Cloud Services for Deep Learning

Bidder Eligibility Criteria:

I	Bidder Eligibility Criteria-I (Public Procurement – Preference to Make in India)	Class I / Class II	Local Content value	Reference, Page No.
a	Only 'Class-I local suppliers' and 'Class-II local suppliers', as defined under DIPP, MoCI Order No. P-45021/2/2017-PP (BE II) dated 16 th September 2020 and other subsequent orders issued therein. Declaration to be submitted as per Annexure - E			
b	Bidder should confirm their acceptance that they comply with the provisions with report to "Guidelines for eligibility of a bidder from a country which shares a land border with India as detailed at Annexure-F. The bidder should submit Certificate for "Bidder from/ Not from Country sharing Land border with India & Registration of Bidder with Competent Authority" as per Order of DoE F.No.6/18/2019-PPD dated 23.07.2020 as mentioned.			
c	Proof of Submission of EMD.			
d	Declaration for Blacklisting as per Annexure - G			
II	Bidder Eligibility Criteria-II	Compliance (Yes/No)	Reference Page No.	Remarks, If any
a	Bidder shall be a company registered in India and should be operating in India for at least for the last 5 years offering cloud services and specifically for enabling Machine learning and Deep Learning initiatives in premier Academic and Research institutions, start-ups and deep technology companies. (Enclose company registration certificate)			
b	They should have a revenue of at least INR 20 Crores or higher over the past 3 years. (Enclose Company Financially audited results)			
c	There are at least 3 customer references from their previous work with the customers where the cloud services enable the ML & DL critical projects for the customer. These customers rate the quality of service (QoS) as excellent and rate price is optimal for value added by services provided by the Bidder.			
D	The Bidder is one of the preferred partners of providing GPU infrastructure (For eg, Like NVIDIA etc) Proof of authorization to be submitted.			

<u>TECHNICAL BID PROFORMA</u> Tender No. CS/MITES/054/2022/CLOUDSERVICE

Item Name: Cloud Services for Deep Learning

The Bidders should submit a detailed proposal for the scope of works of this tender covering the proposed,

S. No	Category	Criteria	Compliance (Yes/No)	Reference Page No
1a	Bidder Experience and Credentials	The bidder has delivered similar cloud services to education and research institutes in India and start-ups based in India and deep technology organizations in India for at least 18+ months and it will be a plus if they have done this for AI-NLP initiatives. Proposed scoring criteria		
		E&R Institutes, Start Ups, Deep Technology Companies - (8 to 10)		
		Two of the three (E&R Institutes, start-ups, Deep technology companies) - (5 to 7)		
		One of the three (E&R Institutes, Start-ups, Deep technology) - (3 to 5) None (Score – 0)		
1b		Reference Customer Rating score (at least 3 References) with cloud services delivered to these customers for 24 months or higher.		
		Adherence to timelines, Provisioning and SLA issue resolution: Excellent or Higher		
		Adherence to quality of service over 24-month period or higher: Excellent or Higher		
		Value added to the customer: Excellent or Higher		
		Examples of Repeat work done with the customer (at least two).		
		At least one reference is a premier educational &research institute and one of them a start-up.		
		These references should be using cloud services for processing their ML and DL workloads. Appropriate proof to be submitted by the bidder. This includes formal document / email from the customers whose reference is submitted as part of the bid.		

Category	Criteria	Compliance (Yes/No)	Reference Page No
	Proposed Scoring Criteria When all the 4 criteria are met (8-10) - Timeline, QoS, Value added, Repeat Customers) When three of the criteria are met with QoS as one of them		
	(Score 6-8)		
	then score could be 4-6. When QoS alone is met, then score would be 2-4		
	The bidder is able to provide sufficient data points meeting required expectations based on their provisioning of GPU services for DL workloads for their current customers		
	1. High availability/Up time: (24X7X365): 99%		
	 High Reliability of 99.99% Optimal Performance for DL workloads (Speed of processing) specific to Natural Language processing Their unit cost for delivery of a standard DL throughput by their cloud services is optimal when compared to their peers who offer similar services (is at median or below median level) Configured with Industry leading frameworks (Tensor Flow, Spark, Auto Keras, Pytorch) Bidder would do a reasonable due diligence on security of data and apps running on their cloud services. Proposed Scoring Criteria When all 6 aspects are addressed (50-60) When 5 of these aspects are addressed (40-50) When 3 of these aspects are addressed (20-30) 		
Bidder Implementa	Else 0 The Bidder provides a solution approach that outlines how they would ensure		
tion and PM capability	 High availability High reliability Optimal Performance Management of dynamic workloads and additional throughput generation and workload thresholds that would be supported at the pricing quoted by Bidder Data Loss Protection Best in class security Agility and effectiveness of Issue resolutions 		
	Bidder Implementa tion and PM	Proposed Scoring Criteria When all the 4 criteria are met (8-10) - Timeline, QoS, Value added, Repeat Customers) When three of the criteria are met with QoS as one of them (Score 6-8) When 2 of the 4 criteria are met with QoS as one of them, then score could be 4-6. When QoS alone is met, then score would be 2-4 The bidder is able to provide sufficient data points meeting required expectations based on their provisioning of GPU services for DL workloads for their current customers 1. High availability/Up time: (24X7X365): 99% 2. High Reliability of 99.99% 3. Optimal Performance for DL workloads (Speed of processing) specific to Natural Language processing 4. Their unit cost for delivery of a standard DL throughput by their cloud services is optimal when compared to their peers who offer similar services (is at median or below median level) 5. Configured with Industry leading frameworks (Tensor Flow, Spark, Auto Keras, Pytorch) 6. Bidder would do a reasonable due diligence on security of data and apps running on their cloud services. Proposed Scoring Criteria When all 6 aspects are addressed (50-60) When 5 of these aspects are addressed (40-50) When 4 of these aspects are addressed (20-30) Else 0 The Bidder provides a solution approach that outlines how they would ensure 1. High availability 2. High reliability 3. Optimal Performance 4. Management of dynamic workloads and additional throughput generation and workload thresholds that would be supported at the pricing quoted by Bidder 5. Data Loss Protection 6. Best in class security	Proposed Scoring Criteria When all the 4 criteria are met (8-10) - Timeline, QoS, Value added, Repeat Customers) When three of the criteria are met with QoS as one of them (Score 6-8) When 2 of the 4 criteria are met with QoS as one of them, then score could be 4-6. When QoS alone is met, then score would be 2-4 The bidder is able to provide sufficient data points meeting required expectations based on their provisioning of GPU services for DL workloads for their current customers 1. High availability/Up time: (24X7X365): 99% 2. High Reliability of 99.99% 3. Optimal Performance for DL workloads (Speed of processing) specific to Natural Language processing 4. Their unit cost for delivery of a standard DL throughput by their cloud services is optimal when compared to their peers who offer similar services (is at median or below median level) 5. Configured with Industry leading frameworks (Tensor Flow, Spark, Auto Keras, Pytorch) 6. Bidder would do a reasonable due diligence on security of data and apps running on their cloud services. Proposed Scoring Criteria When 3 of these aspects are addressed (30-40) When 5 of these aspects are addressed (40-50) When 4 of these aspects are addressed (30-40) When 3 of these aspects are addressed (20-30) Else 0 Bidder Implementa tion and PM capability 2. High reliability 2. High reliability 3. Optimal Performance 4. Management of dynamic workloads and additional throughput generation and workload thresholds that would be supported at the pricing quoted by Bidder 5. Data Loss Protection 6. Best in class security 7. Agility and effectiveness of Issue resolutions Proposed Scoring Criteria

S. No	Category	Criteria	Compliance (Yes/No)	Reference Page No
		When 6 of the 7 factors are addressed (50-60)		
		When 5 of the 7 factors are addressed (40-50)		
		When at least 4 of 7 factors are addressed (30-40)		
		The bidder would submit the documentation outlining the approach, the proposed architecture to ensure the adherence to non-functional requirements outlined above.		
2b		The bidder would identify two team leads who have at least 2		
		years of work experience on provisioning and maintenance		
		of cloud services as technical lead/architect with customers		
		whose work scope is similar to that of this tender from IIT		
		Madras. These leads have delivered the services effectively		
		and efficiently (Customer reference)		
		The bidder would submit the documentation of 2 technical		
2.0		architect profiles and their experience with other customers.		
2c		The bidder would share their experience of at least 2 data migration experiences from GCP or Azure to bidder's cloud		
		eco-system for customers in premier academic institutions		
		and/or technology companies. This for data size similar to		
		that in scope of this tender.		
		The proposed migration approach for these customers would be shared by the Bidder.		
		Proposed Scoring Criteria		
		Approach demonstrated is considered excellent including		
		validation of migration (16-20)		
		Is considered good (12-16)		
		Is considered on par (8-12)		
3	Final	Bidder Presentation to committee – Approach and		
	Presentatio n to the	addressing key risks and dependencies		
	Committee	1. Why they need to be selected - USP		
		2. Their solution and delivery approach (Technical, PM)		
		3. Risks Identification and Mitigation		
		4. Value expected to be added to IIT Madras (Cost –		
		Benefits)		
		·		

SIGNATURE OF BIDDER ALONG WITH SEAL OF THE COMPANY WITH DATE

FINANCIAL BID (PROFORMA) - BILL OF QUANTITIES (BOQ)

Item Name: Cloud Services for Deep Learning Tender No. CS/MITES/054/2022/CLOUDSERVICE

It. No	Description of work	Quantity	Units	Basic Rate/Per Month in INR	GST %	Total Amount with taxes in INR
1	Cloud Services for Deep Learning(Training Environment)					
1.1	Compute	1	Month			
1.2	Elastic Storage	1	Month			
1.3	Backup services	1	Month			
1.4	Security Performance and Reliability	1	Month			
2	Cloud Services for Deep Learning(Production / Deployment)					
2.1	Compute	1	Month			
2.2	Elastic Storage	1	Month			
2.3	Backup services	1	Month			
2.4	Security Performance and Reliability	1	Month			
	Grand Total					

Total Amount Rupees in words

Note:

- 1. Break up of cost need to be quoted for our reference and only Total Value will be considered for Financial Bid Evaluation.
- 2. Financial bid (BoQ- Excel File) should be uploaded in the eProcurement portal, financial bid column only.

ANNEXURE: E

$\frac{FORMAT\ FOR\ AFFIDAVIT\ OF\ SELF-CERTIFICATION\ UNDER\ PREFERENCE\ TO\ MAKE\ IN\ INDIA-PER\ ITEM}{PER\ ITEM}$

Tender Reference Number: Name of the item / Service:
Date: I/WeS/o, D/o, W/o, Resident of
Hereby solemnly affirm and declare as under:
That I will agree to abide by the terms and conditions of the Public Procurement (Preference to Make in India) Policy vide GoI Order no. P-45021/2/2017-PP (B.EII) dated 15.06.2017 (subsequently revised vide orders dated 28.05.2018, 29.05.2019and 04.06.2020) MOCI order No. 45021/2/2017-PP (BE II) Dt.16th September 2020 & P- 45021/102/2019-BE-II-Part (1) (E-50310) Dt.4th March 2021 and any subsequent modifications/Amendments, if any and
That the local content for all inputs which constitute the said item/service/work has been verified by me and I am responsible for the correctness of the claims made therein.
Tick (✓) and Fill the Appropriate Category I/We
• The details of the location (s) at which the local value addition is made and the proportionate value of local
content in percentage Address Percentage of Local content:%
For and on behalf of(Name of firm/entity)
Authorized signatory (To be duly authorized by the Board of Directors) <insert and="" contact="" designation="" name,="" no.=""></insert>
[Note: In case of procurement for a value in excess of Rs. 10 Crores, the bidders shall provide this certificate from statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.]

This letter should be on the letterhead of the quoting firm and should be signed by a competent authority. Non-submission of this will lead to Disqualification of bids.

$\underline{Annexure-F}$

(To be given on the le	etter head of the bidder)
Tender Ref. No	Dated:
CERT	<u>IFICATE</u>
(Bidders	from India)
I have read the clause regarding restrictions on proceed border with India and hereby certify that I am not from	urement from a bidder of a country which shares a land n such a country.
OR (whichev	ver is applicable)
(Bidders from Country which	shares a land border with India)
border with India and hereby certify that I from registered with the Competent Authority. I also certification in the competent of the competent of the competent of the competent of the certification in the competent of the certification of the certificatio	urement from a bidder of a country which shares a land (Name of Country) and has been fy that I fulfil all the requirements in this regard and is distration by the Competent Authority is to be attached)
Place: Date:	Signature of the Tenderer Name & Address of the Tenderer with Office Stamp

Self-Declaration that the Service Provider has not been blacklisted

(To be given on the letter head of the bidder)

I	
	S/o
	police station District
is not	applicable) of
	(Firm or Company) do hereby declare and solemnly affirm:
I.	That the Firm
	insolvent by any of the Union or State Government / Organization.
II.	That none of the individual / firm / Company Blacklisted or any partners or shareholder thereof has any connection directly or indirectly with or has any subsistence interest in the deponent business / firm company.
III.	That neither the Firm nor any of its partner has been involved / convicted in any criminal case / economic offence nor any criminal case / economic offence is pending against firm or any partner of the Firm before any Court of Law / Police.
Place:	Signature of the Tenderer
Date:	Name & Address of the
	Tenderer with Office Stamp

Cloud Services Service Level Agreement (SLA)

The service level agreements would be shared with selected bidder and would align to Industry standard templates followed. This would cover the following

- 1. Availability: 99.9%
- 2. Reliability of Service: 99.99%
- 3. Security: Data Security would follow Industry best practices and number of security incidents is minimal and corresponds to best in class (lowest threshold)
- 4. Performance: Achieves best in class performance for Natural language processing workloads.

The detailed SLA definition will be done with selected bidder and this annexure is shared as a reference of what are in scope of that agreement.