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Due Date: 23.04.2018 4.30 P.M.

Technical Bid opening meeting on 26.04.2018 at 4p.m.

Request for Proposals for Cloud Solution Provider for Massive Open Online Course Application

Indian Institute of Technology Madras

Through National Programme on Technology Enhanced Learning (NPTEL)

Disclaimer

The information contained in this document or subsequently provided to Bidder(s), whether verbally or in documentary form by the Institute, shall be subject to the terms and conditions set out in the Terms of Reference Document and all other terms and conditions subject to which such information is provided. The purpose of this document is to provide the Bidder(s) with information to assist the formulation of their Proposals. This document does not purport to contain all the information each Bidder may require. This document may not be appropriate for all persons, as it is not possible for the Institute, to consider the investment objectives, financial situation and particular needs of each Bidder who uses this document. Each Bidder should conduct its own homework and analysis and should check the accuracy, reliability and completeness of the information in this document and wherever necessary obtain independent advice from appropriate sources. The Institute makes no representation or warranty and shall incur no liability under any law, statute, rules or regulations as to the accuracy, reliability or completeness of this document. The Institute may in its discretion, but without being under any obligation to do so, update, amend or supplement the information in this document.

This Tender is not an offer by the Indian Institute of Technology Madras but an invitation to receive bids from vendors. No contractual obligation whatsoever shall arise from the tender process unless and until a formal contract is signed and executed by duly authorized office bearers of the NOC organizing team of Indian Institute of Technology Madras with the vendor.

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Important: See Enclosure 1 - MOOC Portal Features along with this document

Summary and Tender Notice

Indian Institute of Technology Madras

Tenders are invited from reputed Agencies based in India to act as an Cloud Solution Provider (CSoIP) for a MOOC application similar to online courses.nptel.ac.in.

Interested Bidders eligible as per qualification criteria may submit their response to the RFP latest by 23/04/2018 till 04:30 p.m by Courier or In Person to the following address: Senior Manager, Project Purchase, 2nd floor, IC & SR Building, I.I.T. Madras-600 036.

The detailed RFP document can also be obtained from https://tenders.iitm.ac.in/.

Important Dates

Date, Time and Venue of Pre-Bid Meeting:

16.04.2018 - Monday, 3pm Central Library, IIT Madras

Deadline for submission of tender

26.04.2018 - Thursday, 2pm Central Library, IIT Madras

Date, Time and Venue of Opening of Technical Bids:

26.04.2018 – Thursday, 4pm Central Library, IIT Madras

Date, Time and Venue for Demonstration/Presentation: (Technically qualified vendors only)

02.05.2018 - Monday, 10am Central Library, IIT Madras

Date, Time and Venue of Opening of Commercial Bids:

Will be decided later

1. Introduction

1.1 About NPTEL

The National Programme on Technology Enhanced Learning (NPTEL) was initiated by seven Indian Institutes of Technology (Bombay, Delhi, Kanpur, Kharagpur, Madras, Guwahati and Roorkee) along with the Indian Institute of Science, Bangalore in 2003. Five core disciplines were identified, namely, civil engineering, computer science and engineering, electrical engineering, electronics and communication engineering and mechanical engineering and 235 courses in web/video format were developed in this phase.

The main goal of NPTEL Phase II (2009-14) was to build on the engineering and core science courses launched previously in NPTEL Phase I. An additional 600 web and video courses were created in all major branches of engineering, physical sciences at the undergraduate and postgraduate levels and management courses at the postgraduate level. Several improvements such as indexing of all video and web courses and keyword search were implemented.

Some highlights:

- Largest online repository in the world of courses in engineering, basic sciences and selected humanities and social sciences subjects
- Online web portal http://nptel.ac.in more than 400 million views
- Youtube channel for NPTEL most subscribed educational channel, 11 lakh+ channel subscribers, 300 million+ views
- More than 44000 hours of video content
- Most accessed library of peer-reviewed educational content in the world
- 34000+ hours of transcribed content; 31000+ hours of subtitled videos

1.2 NPTEL Online Certification

The objective of enabling students obtain certificates for courses is to make students employable in the industry or pursue a suitable higher education programme. Through an online portal (onlinecourses.nptel.ac.in), 4-, 8-, or 12-week online courses, typically on topics relevant to students in all years of higher education along with basic core courses in sciences and humanities with exposure to relevant tools and technologies, are being offered. The enrolment to and learning from these courses involves no cost. Following these online courses, an in-person, proctored certification exam will be conducted and a certificate is provided through the participating institutions and industry, when applicable.

1.2.1 Certification process:

NPTEL began the initiative of offering certification to students for courses in March 2014. The process of certification is as follows:

- Subject Matter Experts (SME faculty from IITs or partner institutes with input from industry) create recorded video content for courses.
- The course is uploaded on the portal and opened for enrollments, which is free.
- Every week, about 3 hrs of video content is released along with an assignment, which is evaluated and provides the student with a score.
- Teaching Assistants (TAs) and the faculty members support the discussion forum answering questions and clearing doubts.
- If someone wants to get a certificate from the IITs/IISc after doing the course, he/she should register for the in-person proctored certification exam that is conducted in about 100 cities across India in collaboration with an exam partner. The certification exam is not free but has a nominal fee of Rs 1100.
- Final score=25% assignment score + 75% exam score. To be eligible for a certificate, the learner should have scored >=40% final score. E-verifiable certificates are made available on nptel.ac.in/noc and hard copies are also dispatched to the candidates.
- These certificates are envisioned for use in credit transfer to universities or for making the student more employable or for enhancing his growth in his current place of work.

1.2.2 Some statistics regarding the open online courses since March 2014 till Nov 2017

Completed courses: 514;

Enrollments across courses: 27,00,000+

- Number of exam registrations: 1,82,000+
- All the statistics pertaining to completed courses are available at nptel.ac.in/noc.
- All courses are completely free to enrol and learn from. The certification exam is optional and comes at a fee of Rs 1100/course exam.
- Ongoing courses: 226 (Jan 2018); Enrollments: 9.8 lakhs+; Exam registrations: 86000+

2. Background and definitions

MOOC: Massive open online course, typically offered through an online portal

CSoIP: Cloud Solution Provider, a company or consortium that can manage and maintain large scale applications on cloud

CSerP: Cloud Service Provider, a company that provides hardware and software cloud infrastructure for public use

NPTEL: National Programme on Technology Enhanced Learning (nptel.ac.in) - a project of the IITs and IISc funded by the Ministry of Human Resource Development

Institute or IITM or IIT Madras: Indian Institute of Technology Madras, which is an institution of national importance started by the IIT Act of Parliament.

3. Eligibility criteria

In this tender document, Vendor, Bidder, Bidding agency and Cloud Solutions Provider (CSoIP) mean one and the same. The bidding agency shall be a single point of contact with the NPTEL office and shall be solely responsible for the execution and delivery of the work.

The basic eligibility of a cloud solution provider shall be assessed based on following pre-qualification criteria.

3.1 Cloud Solution Provider (CSoIP)

- 3.1.1. CSoIP shall be a company registered in India and should be operating in India for at least the last 5 years offering similar services. The company Registration certificate should be submitted for this. They should have a minimum turnover of Rs. 100 crores, total in the last 2 years. The details in this regard to be submitted are in Annexure 1 and 2.
- 3.1.2. CSoIP shall essentially be an Information Technology company.
- 3.1.3. CSoIP shall be able to implement and manage the solution directly without any organizational or other intermediary (s). They should have a demonstrable track record of management of such services and provide detailed information on prior and current projects in Annexure 3 and 4.

3.2 Application

3.2.1. NPTEL will not pay any licensing costs or buy/license software for any part of the application. The entire source code of the application should be available to NPTEL and should reside on a repository owned by NPTEL. NPTEL should have the option to release the source code under the open Apache license in case it decides to do so.

3.2.2. The application should be in use in a current live MOOC portal, which has hosted at least 500 courses since 2014 and has seen more than 30 lakh enrolments in total during this period. There must be at least one course that had more than 1 lakh enrolment.

3.3 Cloud deployment for NPTEL

- 3.3.1. The deployment should be on a public cloud offered by a renowned and reputed Cloud Service Provider (CSerP) and should have standard disaster recovery mechanisms. The public cloud should be capable of launching new instances within a minute to handle peak loads.
- 3.3.2. The CSerP should be extensively used by several organizations and should have a complete dashboard and console for monitoring and managing all aspects including billing, status of application, status of infrastructure etc.
- 3.3.3. The private student and course data of the deployment should be on machines situated physically inside India.
- 3.3.4. The CSoIP must be a certified partner of the CSerP. A suitable certificate from the CSerP should be attached.
- 3.3.5. The deployment must solely be for NPTEL and no other party must be using the deployment of the application or parts of it for any other purpose.

The above are only the criteria for eligibility. Only eligible bidders will be considered for technical evaluation. Please fill Form A for this section.

4 Scope of work

The purpose of this tender is to identify a Cloud Solution Provider (CSoIP), who will deploy, maintain and add features to a Massive Open Online Course (MOOC) application on cloud for a period of 3 years.

4.1 MOOC portal and features

- 4.1.1. All features that are available in NPTEL's current MOOC application hosted at onlinecourses.nptel.ac.in should be available in the MOOC application proposed by the CSolP, which would be a platform to develop and deliver online courses. Write to murali@nptel.iitm.ac.in if you need credentials to access the portal.
- 4.1.2. Semesters have different peak periods. The platform must be capable of elastically scaling application, compute, storage and database based on traffic spikes.
- 4.1.3. The platform must provide a collaborative interface for tutors to interact with students as well as for students to interact with each other.
- 4.1.4. NPTEL's current MOOC application is a highly enhanced version of open source MOOC application called coursebuilder.

4.1.5. A non-exhaustive list of important features and requirements on the application is given in Enclosure 1 - Portal features. The technical evaluation of eligible bidders will partly be based on compliance with these features.

4.2 Deployment and services

The MOOC application should be deployed on a highly scalable and highly available cloud platform by the CSoIP.

- 4.2.1. NPTEL's current MOOC application is deployed on Google cloud. A similar deployment with all services is to be delivered by the bidder on the public cloud of a renowned and reputed CSerP.
- 4.2.2. The portal should be hosted in a PaaS platform. The platform should keep track of active resources and be able to scale up and down in sub-second period.
- 4.2.3. Application to develop course content should be integrated well with cloud functionality.
- 4.2.4. Developer of course content need not know coding or knows only minimal coding.
- 4.2.5. The developer only needs to take care of the application code. All other maintenance aspects like monitoring, logging, security should be automatically taken care by the cloud platform.
- 4.2.6. The application should use a database that is horizontally scalable and integrate well with the application.
- 4.2.7. Semesters have different peak periods. The platform must be capable of elastically scaling application, compute, storage and database based on traffic spikes.
- 4.2.8. The application needs to have capability to upgrade with no impact to end user.
- 4.2.9. The platform should scale automatically with no intervention from end user.
- 4.2.10. Students and tutors should be able to collaborate over groups and chat forums.
- 4.2.11. There should not be any restriction in the number of mail exchanges between students and tutors.
- 4.2.12. The platform must support file sharing and collaborative document editing.
- 4.2.13. Old course materials must be archived and should be accessible always in sub-second duration.
- 4.2.14. The compute instances should be able to boot up in 30 seconds and the maximum bootup time should not exceed 60 seconds.
- 4.2.15. The platform should allow the capability to use low price compute instances that can be terminated at any time. This can help with cost savings.
- 4.2.16. Internal data warehouse needs to be supported with query results under a second. This will be used for reports and analytics.
- 4.2.17. For data transformation, apache beam compatible open source pipeline must be supported.

More detailed requirements with respect to the deployment and services are given in Enclosure 1.

(i) Current deployment and migration requirements

NPTEL's current MOOC portal is deployed on Google cloud. If a bidder desires to deploy NPTEL's current application in Google cloud, the bidder may write to murali@nptel.iitm.ac.in for more specific details and connections to the current developers.

The following are important requirements for any migration or new deployment.

- 4.2.18. The current platform is composed of coursebuilder open source software, nsjail open source software, GCP app engine, datastore, object storage, compute engine, cloud sql, bigquery and dataflow.
- 4.2.19. The application needs to be hosted in a data center physically located in India.Mention the list of data centres available within India.
- 4.2.20. The migration should get completed within a 2-week period.
- 4.2.21. During migration, there should not be any service outage.
- 4.2.22. The modular functionality of the application should be kept intact.
- 4.2.23. Performance should remain the same after migration.
- 4.2.24. Current platform supports google logins with sso integration. User directory migration needs to be done.
- 4.2.25. Current platform has API's built on top of Nsjail. The APIs need to be migrated as well.

4.3 Hosting and maintenance

The entire hosting of the MOOC application needs to be managed by the CSoIP. All services related to the application and its deployment needs to be managed fully by the CSoIP. The specific tasks of the CSoIP include the following:

- 4.3.1. Fix any identified bugs within the required time period as decided mutually. Please provide the Escalation matrix for bug fixes.
- 4.3.2. Add features as required by NPTEL on a regular basis. A list of features and timelines/priorities needs to be maintained always with a clear roadmap for the application. This will be mutually agreed upon between the CSoIP and NPTEL.
- 4.3.3. Training of NPTEL staff on usage of any new features.
- 4.3.4. Working and assisting NPTEL staff with access to data generated by the application.
- 4.3.5. Optimization of cloud usage charges.
- 4.3.6. Working with NPTEL faculty and course staff to meet their requirements in offering courses and evaluating students through assignments.
- 4.3.7. A detailed user manual for all types of users should be maintained at all times and be available online.

4.4 Staffing and costing

The CSoIP is expected to hire/depute software engineers, coders, architects and managers of suitable background and experience for working on this project.

4.4.1 Staffing plan

A detailed management plan should be provided as part of the technical bid (See Annexure 5 and 6 for details). This plan should clearly describe the number of CSoIP personnel involved in this project and their expertise/experience levels. The following is a suggested list of personnel.

- 4.4.1.1. A dedicated program manager, who is available 24/7 and is overall in charge of the project from the CSoIP. As part of the commercial bid, the bidder should quote the cost per month of the program manager. The program manager should have prior experience with managing large-scale projects on the CSerP.
- 4.4.1.2. One solution-cloud-certified architect with experience and sound knowledge of all technologies involved in the MOOC application and its deployment. The architect will have to interact with NPTEL staff to decide on feature enhancements and priorities. As part of the commercial bid, the bidder should quote the cost per month for the architect. The architect must have had prior coding experience and must have been involved in the building of multiple applications and their deployment on cloud.
- 4.4.1.3. Four coders/software engineers, who are cloud-certified engineers, of suitable experience and expertise. The coders and software engineers should be available during working hours and should interact with NPTEL staff for all operational aspects of the application. As part of the commercial bid, the bidder should quote the cost per month for each coder/software engineer. The coders must have extensive coding experience in all the technologies involved, devops knowledge, cloud platform and deployment experience.
- 4.4.1.4. As part of the commercial bid, the bidder should quote the total cost per month for the program manager, the architect and four coders/software engineers inclusive of all applicable taxes. Payments will be quarterly from the date of commissioning.
- 4.4.1.5. NPTEL reserves the right to increase or decrease or change the number/expertise of the architects and coders/software engineers on a quarterly basis in consultation with the CSoIP. For instance, a mobile front end for the application might have to be developed, and this might require a suitable change in the CSoIP personnel. The same quoted cost will apply for every additional staff deployed by the CSoIP.

4.4.2 Cloud usage costs

The CSoIP should submit an estimate of the cloud usage cost per user per month based on data from any existing deployment of the application. The estimate should be supported by cloud usage invoices and number of users for the last one year from another live large-scale deployment of the MOOC application on the public cloud of a cloud service provider.

The actual cloud costs will be directly paid by NPTEL to the CSerP on actual invoices raised by the CSerP.

Any costs outside of the line items agreed upon during the tender process for compliance of technical specification are deemed to be absorbed by the vendor or considered as free.

4.4.3 Agreements and penalties

- 4.4.3.1. The CSoIP is expected to maintain 99.999% uptime for the application under any concurrent user scenario.
- 4.4.3.2. Downtime of the portal For every hour of portal downtime, a penalty of Rs. 1 lakh will be imposed on the CSoIP.
- 4.4.3.3. Any bug that is classified as critical by NPTEL needs to be fixed within 2 hours.
- 4.4.3.4. Any bug that is classified as serious by NPTEL needs to be fixed within 24 hours.
- 4.4.3.5. Any other bug needs to be fixed within 3 days.
- 4.4.3.6. The CSoIP will forego payment for the period of time for which the above 3 service level requirements are violated.
- 4.4.3.7. On days when high usage is expected (like an exam day or assignment deadline day), online support is expected from coders and/or architect of the CSoIP.

4.5 Schedule of work

NPTEL currently has a running live MOOC portal with more than 30 lakh users and more than 750 course instances. The entire migration to CSoIP should happen without any break in service. The activities of the CSoIP will be as per the following timeline.

Date from award of contract	Activity	Remarks
2 weeks	- Deploy the application on the CSerP infrastructure - Testing by NPTEL	The application is demonstrated and ready at the time of bidding
4 weeks	- Migrate data from onlinecourses.nptel.ac.in - Test of migrated data by NPTEL - Test of the deployment for concurrency	- All user and course data, both archived and current, need to be migrated
5 weeks	- Go live on the CSoIP's deployment	- Make suitable DNS changes, if necessary

5. Submission of bids

5.1 General Terms and Conditions

The Bidder is expected to read and examine all the terms and conditions, specifications and instructions, in the RFP Document with full understanding of its implications. Failure to furnish all information required or submission of a bid not substantially responsive in every respect will be at the Bidder's risk and may result in outright rejection of the bid.

5.1.1 Format for submission of bid

All the forms given as part of the tender document should be filled and submitted along with any other relevant documentation. All the pages of the document should be signed and stamped.

5.1.2 Enclosures

The bidder must attach the suitable supporting documents for the claims made. All the enclosures attached with the bid shall also be signed and stamped.

5.1.3 Two Bid system

The bid must be submitted in two parts comprising Part-I: Technical Bid & Part-II: Financial Bid (i.e. commercial or price bid).

Marking on Technical Bid

- 1. The technical Specification for this tender is given in this document and the Annexures. The bidder shall go through the specification and submit the technical bid.
- The technical bid documents of the various items should be put into one big cover superscribed "Technical Bid".
- All technical bid should have the 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.
- 4. The technical bid should consist of all technical details along with catalogue, and relevant terms and conditions.
- 5. For all numbered items in the technical specifications (both in this document and Enclosure 1), compliance should be stated in a tabular form to include page number and the documentary evidence for reference. The form enclosed is for minimal compliance but it is the responsibility of the vendor to ensure completeness by addressing all the items in the technical specification.

Marking on Commercial/Price Bid

- 1. The tenderer shall go through the specification and submit the Commercial bid.
- 2. Price bid should be submitted in the prescribed proforma as per **Annexure 7.**
- 3. The price bid documents of the various items should be put into one big cover **superscribed** "Price Bid".
- 4. All Price bid should have the page-wise **heading as "Price 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.

EMD and Performance guarantee

- 1. EMD of Rs. 2,00,000/- has to be paid by means of DD only along with the tender.
- 2. Demand Draft may be drawn in favour of "The Registrar, IIT Madras" payable at Chennai.
- 3. The EMD should be put in a separate cover and should be enclosed in the technical bid cover only, else the bid will be rejected due to non-enclosure of EMD.
- 4. This Earnest Money will be returned to the unsuccessful tenderers after the final disposal of the tenders. **EMD will not carry any interest.**
- 5. The EMD along with Performance Guarantee will be retained in the case of successful tenderers till the warranty period.
- 6. EMD will not be waived under any circumstances.
- 7. EMD will be forfeited in the case of non-execution of the order within the due date.
- 8. Non submission of EMD will lead to rejection of tender at the opening stage itself.
- 9. Performance guarantee for Rs. 8,00,000/- has to be submitted in addition to above EMD by way of DD/ bank guarantee by the successful bidder only.

The envelopes super scribed TECHNICAL BID and FINANCIAL BID should again be sealed in a third bigger envelope super-scribing, "Proposals for Cloud Solution Provider for Massive Open Online Course Application - NPTEL".

The Part-I (Technical bid) will be opened on the date of tender opening and the Part-II (Financial Bid) after evaluation of Part-I. The Part-I of only those bidders shall be opened who are technically eligible, as decided by the Technical Evaluation Committee.

5.1.4 Performance Security

Within 15 days of the receipt of work order, the successful Bidder shall furnish a Performance Guarantee of Rs. 8,00,000/-. Failure of the successful Bidder to comply with this requirement can constitute sufficient ground for the annulment of the award and forfeiture of the EMD in which event the Institute may make the award to the next lowest evaluated Bidder or call for new bids. Performance Guarantee submitted shall be from a Scheduled Commercial Bank only. Performances guarantee in the form of Demand Draft, Fixed deposit receipt/Bank Guarantee in the standard format from a scheduled commercial bank shall only be acceptable.

5.1.5 Closure and commissioning

The CSoIP will be deemed to have started service as soon as the work schedule mentioned in Section 4.5 is completed. Payment will begin from the day the production version of the application runs on the CSoIP's deployment.

5.2 Amendment in RFP

At any time before the submission of bids, NPTEL Coordinators may amend the tender by issuing an addendum in writing or by standard electronic means. The addendum will be put up on the http://tenders.iitm.ac.in website and will not be communicated through the newspaper and bidders will have to check the website for any updates. The addendum will be binding on them. If the amendment is substantial, Bidder(s) shall be given reasonable time to make amendment or to submit revised bid and the deadline for submission of bids will be extended by the NPTEL Coordinators and this will be decided by the NPTEL coordinators.

5.3 Bid Disqualification

- The proposal is liable to be disqualified in the following cases:
- Proposal not submitted in accordance with this document and in proper formats.
- During validity of the proposal, or its extended period, if any, the bidder changes his quoted prices.
- Proposal is received in incomplete form.
- Proposal is received after due date and time.
- Proposal is not accompanied by all requisite supporting documents
- Information submitted in technical proposal is found to be misrepresented, incorrect or false, accidentally, unwittingly or otherwise, at any time during the processing of the contract (no matter at what stage) or during the tenure of the contract including the extension period if any.

- Financial proposal is enclosed with the same envelope as technical proposal
- Bidder fails to deposit the Bid security or fails to enter into a contract within specified date of notice
 of award of contract or within such extended period, as may be specified by Institute.

5.4 Queries and Clarification

The queries and clarification in this RFP must be addressed to "NPTEL - IIT Madras" and the same must be sent through conventional mail as well as e-mail to murali@nptel.iitm.ac.in, in the format below:

S. N.	Clause no. (as per the RFP)	Your understanding/interpretation	Clarification from NPTEL

Queries will be entertained up to 7 days before the close of tender.

5.5 Right to Accept/Reject Bids

NPTEL reserves the right not to accept any bid and to annul the tender process and reject all bids at any stage, without thereby incurring any liability to the affected Bidders or any obligation to inform the affected Bidders of the grounds for such action.

5.6 Other Conditions

All relevant information as specified in the Technical and Commercial Proposals including the contingency plans, and Annexures should be furnished by the bidders. The bidder is advised to attach any information that is necessary with regard to the capabilities to establish that the bidder is capable in all respects to successfully complete the envisaged work. The bidders are cautioned that not giving complete information called for or deliberately suppressing the information may result in the bidder being summarily disqualified.

The Tenders should be typewritten. The name and signature of bidder's authorized person should be recorded on each page of the application. All pages of the tender document shall be numbered and submitted as a package along with forwarding letter on agency's letter head.

The offer must remain open for a minimum period of **90 days** from the date of opening of the tender, within which the bidders cannot withdraw their offer.

Reference, information and certificates from the respective clients certifying technical, delivery and

execution capability of the bidder should be signed and the contact numbers of all such clients should be mentioned. The NPTEL coordinators may also independently seek information regarding the performance from the clients.

Even though the bidder may satisfy the qualifying criteria, the bidder is liable to disqualification due to record of poor performance or not being able to understand the scope of work etc.

The bid documents must be complete in all respects. Use the format given in this document for the preparation of bid response. The response should be brief and up to the point. Failure to comply with any of the instructions or conditions stated in this document or offering unsatisfactory explanations for non-compliance will likely to lead to rejection of offer. Further the Client reserves the right to reject all the bids without assigning any reason.

In the event of the date of opening of tender being declared a closed holiday for the Indian Institute of Technology Madras the due date for opening will be following working day

FAX/Email/Telegram quotations will not be accepted.

Please mention the GST number failing which your quotation will be rejected. All of your future correspondences including Invoices should bear the GST number.

Quotations should be submitted in Sealed Cover only. Unsealed/improperly sealed covers will be summarily rejected. Quotes given by the tenderers in their own format/letter heads will not be considered at all.

Signing of Tender:

The Tender is liable to be rejected if complete information is not given therein or if the particulars and date (if any) asked for in the schedule to the Tender are not fully filled in or not duly signed/authenticated. Each page of the tender documents required to be signed and bears the official seal of the tenderers.

Opening of Tenders:

You are at liberty to be present or authorize a representative to be present at the opening of the tender at the time and date specified in this document.

Right of Acceptance:

Indian Institute of Technology Madras, Chennai 600 036 does not pledge itself to accepting the whole or any part of the Tender or portion of the quantity offered.

Communication of Acceptance:

Acceptance by the Purchaser will be communicated by Post, and the Company's acceptance should be communicated to us formally in writing.

Tenderer shall submit along with his Tender:

- I. Name and full address of the Banker and their swift code and PAN No.
- II. Proof of registration with GST authorities like registration number etc. in clear terms.

Period of Service:

The period of service is for three years starting from the commissioning as mentioned in Section 5.1.5.

5.7 Deviations

Any deviations from the scope of work as outlined above should be mentioned clearly with suitable justification by the vendor in a separate sheet under the heading 'Deviations'. This sheet should be included in the technical proposal. If no deviations are mentioned, then it will be assumed that the vendor has accepted the scope of work in its entirety as mentioned in the tender document and is bound to deliver the same.

5.8 Mode of Payment and penalty clauses

The payment to the CSoIP shall be made in Indian rupees and shall be paid at the end of every quarter only after satisfactory completion of the work as per the service level agreements in Section 4.4.3. No advance payment shall be made. The successful bidder has to sign an agreement on non-judicial stamp paper which shall contain penalty clauses related to liquidated damages on account of delays, errors, cost, downtime and time overruns etc. If the bidder fails to execute the contract, the NPTEL committee shall have the liberty to get the work done through any other agency with full cost recoverable from the bidder in addition to damages and penalty.

5.9 Confidentiality

The Bidder and their personnel shall not, either during the term or after expiration of this work order, disclose any proprietary or confidential information relating to the services, agreement or the Institutes business or operations without the prior written consent.

5.10 Force Majeure

During the pendency of the service agreement if the performance in whole or part thereof by either party is prevented/delayed by causes arising due to any war, hostilities, civil commotion, act of public enemy, sabotage, fire, floods, explosion, epidemics, non-availability of raw material, and other

consumables, or any other causes including breakdown of equipment beyond their reasonable control neither of the two parties shall be made liable for loss or damage due to delay or failure to perform the contract during the pendency of forced conditions provided that the happenings are notified in writing within 7 days from the date of occurrence. The work shall be resumed under the contract as soon as possible after the restoration of normalcy.

5.11 Termination for Default

The Institute may, without prejudice to any other remedy for breach of agreement, may terminate the work order in whole or in part, by written notice of default sent to the Bidder, and the performance guarantee shall stand forfeited if,

- The Bidder fails to deliver any or all of the obligations within the time period(s) specified in the work order/agreement, or any extension thereof granted by the Institute.
- The Bidder fails to perform any other obligation(s) under the work order/agreement and fails to rectify it within the notice period for the rectification of the same.

5.12 Termination for Insolvency

The Institute may at any time terminate the work order by giving written notice to the Bidder without compensation, if the Bidder becomes bankrupt/insolvent, provided that such termination shall not prejudice or affect any right of action or remedy which has accrued thereafter to the Institute.

5.13 Suspension

The Institute may by a written notice of suspension to the Bidder, suspend all payments to the Bidder under the work order, if the Bidder fails to perform any of its obligations under this work order/agreement, (including the carrying out of the services).

5.14 Jurisdiction of Courts

All disputes arising out of this process shall be subject to the jurisdiction of Madras High court, **Chennai**, **Tamil Nadu**. The Chairman, Centre for Continuing Education (CCE), IIT Madras reserves the right to award the work or cancel the award without assigning any reason whatsoever. In case of differences, if any, the decision of the Chairman, CCE, IIT Madras, shall be final.

6 Bid Evaluation Process

The evaluation of bids shall be done in two stages, namely, Technical Evaluation and Financial evaluation. The final evaluation shall be based on Combined Quality Cum Cost Based System (CQCCBS), the weightage for Technical and Financial criteria are 70% and 30%, respectively.

6.1 Technical Evaluation

The technical bid shall be opened on a pre-decided and informed date and time. Only those bidders who have qualified under the eligibility criteria (Form-A) shall be considered for Technical evaluation by the Technical Evaluation Committee.

Any eligible bidder will be invited to demonstrate the MOOC application and make a presentation on their management plan to an expert committee at IIT Madras. All the staff of the CSoIP who are expected to be participating in this work must appear in front of the technical evaluation committee. Questions will be posed to the staff by the evaluation committee and they need to be answered convincingly. The actual staff deployed for this project by the CSoIP may be different, but should have skill sets comparable to those who appear at the technical evaluation.

The technical evaluation by the expert committee consists of the following three parts.

- 1. Technical evaluation of the CSoIP (34%): This will be based on the prior projects executed by the CSoIP, their personnel, answers to the technical questions posed by the evaluation committee and technical presentation. The information given in Annexures will be used for this purpose.
- 2. Technical evaluation of the MOOC application (33%): This will be based on the demonstration and compliance with required features. The information given in Form B will be used for this purpose.
- Technical evaluation of the deployment and management plan (33%): This will be based on the demonstration and compliance with required features. The information given in Form C will be used for this purpose.

Based on the technical presentation as well as demonstration, the Committee will judge the competence of the Bidder to deliver the desired solution to the Institute and accordingly allot them marks.

6.2 Financial Evaluation

The Financial bid shall be opened on a pre-decided and informed date and time only for eligible and technically qualified bidders. The evaluation of bids at this stage will be based on Combined Quality Cum Cost Based System (CQCCBS) criteria as per the following table:

Criteria	Score	Multiplying Factor	Weighted Score
Technical	Technical Score	0.7	X
Financial (total staffing cost per month)	(LPO/RPO) * 100	0.15	Y
Financial (estimated cloud cost per user)	(LPO/RPO)*100	0.15	Z
	Final score		(X+Y+Z)

LPO – Lowest Price offer. RPO – Price offer of the bidder.

6.3 Final Evaluation: Combined Quality Cum Cost Based System (CQCCBS)

The Bidder with the highest total score will be recommended to the Institute by the Committee. In case of a tie between two or more bidders, the bidder with the highest technical score will be recommended. The Committee will invite the recommended Bidder for further discussion on terms and conditions of the contract.

7. Annexures

Annexure 0	Acknowledgement
Annexure 1	Financial and other bidder information
Annexure 2	Details regarding works of similar nature executed in the past 2 years
Annexure 3	Projects of similar nature currently under execution

Annexure 4	Performance Report for works referred in Annexures-2 and 3					
Annexure 5	Structure of the Organization					
Annexure 6	Details of Technical and Administrative Personnel to be employed for this work					
Annexure 7	Financial bid					
Annexure 8	Checklist					
Form A	Eligibility criteria					
Form B	MOOC portal features					
Form C	Deployment and Management					

Annexure - 0: Acknowledgement

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

Annexure - 1: Financial Information

Details furnished below are to be supported duly by figures in Balance Sheet, Profit & Loss Account for the last 5 years as certified by the Chartered Accountant and submitted by the bidder to the Income Tax Department

Details	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
1) Gross annual turnover					
for works of similar					
nature					
2) Profit/Loss					
3) Financial position					
a) Cash					
b) Current assets					
c) Current liabilities					
d) Working capital					
e) Current Assets to					
Liabilities Ratio					

Documents to be attached along with the above statement:

- a) Up-to-date Income Tax Clearance Certificate
- b) Certificate of Financial soundness from the bankers of the Bidders
- c) Financial Arrangements for carrying out the proposed work
- d) Any other relevant documents

(Signature of Bidder)

Annexure - 2: Details regarding works of similar nature executed in the past 2 years

SI. no	Name of the C work	lient	Cost of work (in Crores)	Start date	End [date	Details of officer to Ren whom reference can be made	narks

Documents to be attached along with the above statement:

- a) Purchase orders
- b) Any other relevant documents

(Signature of bidder)

Annexure - 3: Projects of similar nature currently under execution

SI. no	Name of the work	Client	Cost of work (in Crores)	Start date	Expect ed date of compl etion	Details of officer to whom reference can be made	Remarks

Documents to be attached along with the above statement:

- a) Purchase orders
- b) Any other relevant documents

(Signature of bidder)

Annexure - 4: Performance Report for works referred in Annexures - 2 and 3

(Please furnish the following details for each individual project from the Client)

1. Name and location of project:	
2. Agreement No.:	
3. Estimated Cost	
4. Tendered Cost:	
5. Date of Start:	
6. Date of Completion	
a) Stipulated date:	
b) Actual date:	
7. Performance report by client:	
a) Quality of Work: (Excellent/Very Good/Good/	Fair/Poor)
b) Approach to problem solving: (Excellent/Very	Good/Good/Fair/Poor)
c) Resourcefulness: (Excellent/Very Good/Good/	Fair/Poor)
Date:	(Signature of the client with seal)

Annexure - 5: Structure of the Organization

address

and

1. Name

of

bidder:

2. Telephone No./Fax No./Email address :
3. Legal status (Attach copies of original document defining the legal status).
a) An Individual/ Consortium:b) A Proprietary/ Partnership agency:c) A Trust:d) A Limited Company or Corporation:
 4. Particulars of Registration with various Government bodies & Statutory Tax Authorities (attach attested photocopy) a. Registration Number: b. Organization/Place of registration: c. Date of validity:
5. Names and titles of Directors & Officers with designation to be concerned with this work with designation of individuals authorized to act for the organization.
6. Were you or your company ever required to suspend the work for a period of more than six months continuously after you commenced the works? If so, give the name of the project and reasons for not completing the work.
7. Have you or your constituent partner(s) ever left the work awarded to you incomplete? If so, give name of the project and reasons for not completing the work.
8. Have you or your constituent partner(s) been debarred/black listed for tendering in any organization at any time? If so, give details.
9. Area of specialization and Interest
10. Any other information considered necessary but not included above.

Annexure - 6: Details of Technical and Administrative Personnel

SI. n o	Designati on	Total No. of employees in this category	Numbe r availabl e for this project	Name	Qualificati on	Professio nal experien ce	Capacity in which the employe e was involved in this work

Documents to be attached along with the above statement:

- a) Resumes of staff mentioned in above table
- b) Any other relevant documents

(Signature of the bidder)

Annexure - 7: Financial bid

Staffing cost

S. No	Designation	Cost per month per person (in INR)	Number	Cost per month (in INR)
1	Program manager		1	
2	Architect		1	
3	Coder		4	
Total			6	

|--|

Estimate of cloud usa	ge cost per user per m	nonth (in INR):	
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The CSoIP should submit an estimate of the cloud usage cost per user per month based on data from any existing deployment of the application. A user is one who interacts with the portal on a regular basis and accesses content such as lectures, assignments and forum.

Enclosures:

- 1. Actual cloud charge invoices from an existing deployment of the MOOC application in a public cloud for the last one year.
- 2. Actual number of users on the existing deployment over the last one year.
- 3. Any other supporting document.

Annexure - 8: Checklist

- Annexures 0 to 8 have been filled completely.
 All supporting documents for Annexures 1 to 8 have been obtained.
 Forms A, B and C have been filled completely and attached.
 Compliance table for all numbered items in this document and Enclosure 1.
- 5. The documents for the technical bid (Annexures 0 to 6, Forms A, B, C and all their supporting documents and the compliance table) have been put into one cover superscribed "Technical bid".

 yes/no
- 6. Deviations from the requirements, if any, have been indicated in a separate document in the technical bid.

 yes/no
- 7. The documents for the price bid (Annexure 7 and all supporting documents) have been put into a separate cover, sealed and superscribed "Price bid". yes/no
- 8. No document pertaining to the price bid in any manner has been included in the technical bid cover. yes/no
- Both the technical bid cover and the price bid cover have been put inside a bigger sealed cover superscribed "Proposals for Cloud Solution Provider for Massive Open Online Course Application - NPTEL".
- 10. The EMD demand draft for Rs. 2 lakhs in favour of "Registrar, IIT Madras" has been included in the technical bid cover. yes/no

Support documents in Technical bid:

- 1. Company registration certificate (as described in 3.1.1)
- 2. Proof of registration with GST authorities like registration number etc.
- 3. The CSoIP must be a certified partner of the CSerP. A suitable certificate from the CSerP should be attached (Section 3.3.4)
- 4. The application needs to be hosted in a data center physically located in India. Mention the list of data centres available within India. (4.2.19)
- 5. Annexure 6 should contain the list of personnel with their details to be deployed on this project

Enclosures in financial bid:

- 1. Actual cloud charge invoices from an existing deployment of the MOOC application in a public cloud for the last one year.
- 2. Actual number of users on the existing deployment over the last one year.
- 3. Any other supporting document.