

I.I.T

# **Indian Institute of Technology Kanpur**

KALYANPUR, KANPUR-U.P.

208016

Tender Reference No.: CESE/IITK/MS/2019-20/02

# BID SUBMISSION END DATE- 19.06.2020 TENDER DOCUMENTS

FOR

"Rate contract for Air Quality Modeling Emission inventory and Environmental sampling and survey"

# **BID DOCUMENT**

Online bids (Technical & Financial) from eligible bidders which are valid for a period of 60 days from the date of Technical Bid opening (i.e. 22.06.2020) are invited for and on behalf of the Assistant Registrar, IIT, Kanpur for "Rate contract for Air Quality Modeling Emission inventory and Environmental sampling and survey"

Name of Work	"Rate contract for Air Quality Modeling Emission inventory and Environmental sampling and survey"		
Date of Publishing	29.05.2020 (14:00 Hrs)		
Clarification Start Date and Time	<b>29.05.2020</b> (14:00 Hrs)		
Clarification End Date and Time	<b>19.06.2020</b> (16:00 Hrs)		
Queries (if any)	No queries will be entertained after clarification end date and time		
Bid Submission Start Date	29.05.2020 (14:00 Hrs)		
Last Date and time of uploading of Bids	<b>19.06.2020</b> (16.00 Hrs)		
Last Date and time of <b>submitting</b> , EMD and other documents at IIT Kanpur (if any)	NA		
Date and time of opening of Technical Bids	<b>22.06.2020</b> (16:00 Hrs)		
Date and time of opening of Financial Bids	Will be separately notified for Technically shortlisted/qualified bidders		

Interested parties may view and download the tender document containing the detailed terms & conditions from the website http://eprocure.gov.in/eprocure/app

(The bids have to be submitted online in electronic form on www.eprocure.gov.in only. No physical bids will be accepted.)

#### INSTRUCTION FOR ONLINE BID SUBMISSION

The bidders are required to submit soft copies of their bids electronically on the Central Public Procurement (CPP) Portal ie<a href="http://eprocure.gov.in/eprocure/app">http://eprocure.gov.in/eprocure/app</a>, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.

#### REGISTRATION

- (i) Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: <a href="https://eprocure.gov.in/eprocure/app">https://eprocure.gov.in/eprocure/app</a>) by clickingon the link "Online Bidder Enrollment" option available on the home page. Enrollment on the CPP Portal is free of charge.
- (ii) During enrolment/ registration, the bidders should provide the correct/ true information including valid emailid & mobile no. All the correspondence shall be made directly with the contractors/ bidders through emailid provided.
- (iii) As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- (iv) For e-tendering possession of valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) is mandatory which can be obtained from SIFY /nCode/eMudra or any Certifying Authority recognized by CCA India on eToken/ SmartCard.
- (v) Upon enrolment on CPP Portal for e-tendering, the bidders shall register their valid Digital Signature Certificate with their profile.
- (vi) Only one valid DSC should be registered by a bidder. Bidders are responsible to ensure that they do not lend their DSCs to others which may lead to misuse and should ensure safety of the same.
- (vii) Bidders can than log into the site through the secured login by entering their userID/ password and the password of the DSC/ eToken.

#### SEARCHING FOR TENDER DOCUMENTS

- 1) 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 Tenders' folder. This would enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.
- 3) 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.

### PREPARATION OF BIDS:

- (i) For preparation of bid Bidders shall search the tender from published tender list available on site and download the complete tender document and should take into account corrigendum if any published before submitting their bids.
  - After selecting the tender document same shall be moved to the 'My favourite' folder of bidders account from where bidder can view all the details of the tender document.
- (ii) Bidder shall go through the tender document carefully to understand the documents required to be submitted as part of the bid. Bidders shall 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.
- (iii) Any pre-bid clarifications if required, then same may be obtained online through the tender site, or through

- the contact details given in the tender document.
- (iv) Bidders should get ready in advance the bid documents in the required format (PDF/xls/rar/dwf/jpg formats) to be submitted as indicated in the tender document/schedule. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.
- (v) Bidders can update well in advance, the documents such as experience certificates, annual report, PAN, EPF & other details etc., under "My Space/ Other Important Document" option, which can be submitted as per tender requirements. This will facilitate the bid submission process faster by reducing upload time of bids.

### **SUBMISSION OF BIDS:**

- (i) Bidder should log into the site well in advance for bid submission so that he/ she upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay.
- (ii) Bidder should prepare the EMD as per the instructions specified in the NIT/ tender document. The details of the DD/BC/BG/ others physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise the uploaded bid will be rejected.
- (iii) While submitting the bids online, the bidder shall read the terms & conditions (of CPP portal) and accepts the same in order to proceed further to submit their bid.
- (iv) Bidders shall select the payment option as offline to pay the EMD and enter details of the DD/BC/BG/others.
- (v) Bidder shall digitally sign and upload the required bid documents one by one as indicated in the tender document.
- (vi) Bidders shall note that the very act of using DSC for downloading the tender document and uploading their offers is deemed to be a confirmation that they have read all sections and pages of the tender document without any exception and have understood the complete tender document and are clear about the requirements of the tender document.
- (vii) Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document. For the file size of less than 1 MB, the transaction uploading time will be very fast.
- (viii) If price quotes are required in XLS format, utmost care shall be taken for uploading Schedule of quantities & Prices and any change/ modification of the price schedule shall render it unfit for bidding. Bidders shall download the Schedule of Quantities & Prices i.e. Schedule-A, in XLS format and save it without changing the name of the file. Bidder shall quote their rate in figures in the appropriate cells, thereafter save and upload the file in financial bid cover (Price bid) only.
  - If the template of Schedule of Quantities & Prices file is found to be modified/corrupted in the eventuality by the bidder, the bid will be rejected and further dealt as per provision of clause no 23.0 of ITB including forfeiture of EMD.
  - The bidders are cautioned that uploading of financial bid elsewhere i.e. other than in cover 2 will result in rejection of the tender.
- (ix) Bidders shall submit their bids through online e-tendering system to the Tender Inviting Authority (TIA) well before the bid submission end date & time (as per Server System Clock). The TIA will not be held responsible for any sort of delay or the difficulties faced during the submission of bids online by the bidders at the eleventh hour.
- (x) After the bid submission (i.e. after Clicking "Freeze Bid Submission" in the portal), the bidders shall take print out of system generated acknowledgement number and keep it as a record of evidence for online submission of bid, which will also act as an entry pass to participate in the bid opening.
- (xi) Bidders should follow the server time being displayed on bidder's dashboard at the top of the tender site, which shall be considered valid for all actions of requesting, bid submission, bid opening etc., in the e-tender system.
- (xii) All the documents being submitted by the bidders would be encrypted using PKI (Public Key Infrastructure) encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology.

# ASSISTANCE TO BIDDERS:

- (i) 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 contract person indicated in the tender. The contact number for the helpdesk is 0512-259-4637 or 7759 between 10:30 hrs to 17:00 hrs.
- (ii) 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 24 x 7 Help Desk Number 0120-4200462, 0120-4001002 and 0120-4001005. The helpdesk email id is <a href="mailto:support-eproc@nic.in">support-eproc@nic.in</a>

### **INSTRUCTION FOR e-PROCUREMENT**

# 1. PREPARATION AND SUBMISSION OF BIDS:

- a. The detailed tender documents downloaded from may be http://eprocure.gov.in/eprocure/app till the last date of submission of tender. The Tender may be submitted online through **CPP** Porta1 http://eprocure.gov.in/eprocure/app
- b. The bidder should submit the bid online in two parts viz. Technical Bid and Financial Bid. Technical Bid should be upload online in cover 1 and Financial Bid in ".Xls" should be upload online in cover-2
- 2. <u>SUBMISSION OF THE BID</u>: All interested eligible bidders are requested to submit their bids online on CPP Portal: <a href="http://eprocure.gov.in/eprocure/app">http://eprocure.gov.in/eprocure/app</a> per the criteria given in this document:
  - **a.** Technical Bid should be upload online in cover-1.
  - **b.** Financial Bid should be upload online in cover-2

Both Technical and Financial Bid covers should be placed online on the CPP Portal (http://eprocure.gov.in/eprocure/app).

3. <u>TECHNICAL BID</u>: Signed and Scanned copies of the Technical bid documents as under must be submitted online on CPP Portal: <a href="http://eprocure.gov.in/eprocure/app">http://eprocure.gov.in/eprocure/app</a>.

List of Documents to be scanned and uploaded (Under Cover-1) within the period of bid submission:-

- i. Scanned copy of Registration and Bank details.
- ii. Scanned copy of work experience.
- iii. Scanned copy of certificate of GST.
- iv. Scanned copy of tender acceptance letter.
- v. Scanned copy of other documents as mentioned in tender document (if any).

Please note that no indication of the rates/amounts be made in any of the documents submitted with the TC-BID.

### 4. Financial Bid

- **a.** The currency of all quoted rates may be in Indian Currency. All payment shall be made in INR.
- **b.** In preparing the financial bids, bidders are expected to take into account the requirements and conditions laid down in this Tender document. The financial bids should be uploaded online as per the specified ".Xls" format i.e. Price Bid

Excel sheet attached as '.Xls' with the tender and based on the scope of work, service conditions and other terms of the Tender document. It should include all costs associated with the Terms of Reference/Scope of Work of the assignment.

c. The Financial Proposal should be inclusive of all applicable taxes, duties, fees, levies, and other charges imposed under the applicable laws. The rates quoted in the Tender are inclusive of all applicable taxes, duties etc. except service tax. The service tax component shall be re-immersible by the department after receipt of paid challans etc. if applicable.

### 5. Last Date for Submission of Tender:

- **a.** Online bids complete in all respects, must be submitted on or before the last date and time specified in the schedule of events.
- **b.** The IIT, Kanpur may, at its own discretion, alter/extend the last date for submission of tenders.

# 6. Bid Validity

- **a.** All the Bids must be valid for a period of 60 days from the last date of submission of the tender for execution of Contract. However, the quoted rates should be valid for the initial/ extended period of the Contract from the effective date of the Contract. No request will be considered for price revision during the original Contract period.
- **b.** A bid valid for a shorter period shall be declared as non-responsive.
- c. In exceptional circumstances, prior to expiry of the original time limit, the IIT may request the bidders to extend the period of validity for a specified additional period beyond the original validity of 60 days. The request and the bidders' responses shall be made in writing. The bidders, not agreeing for such extensions will be allowed to withdraw their bids without forfeiture of their Bid Security.

### 7. Modification / Substitution / Withdrawal of bids:

- **a.** No Bid shall be modified, substituted or withdrawn by the Bidder after the Bid 's due Date.
- **b.** Any alteration/ modification in the Bid or additional information supplied subsequent to the Bid's due Date, unless the same has been expressly sought for by the Authority, shall be disregarded.
- 8. **Rejection of the Bid**: The bid submitted shall become invalid and tender fee shall not be refunded if:
  - a. The bidder is found ineligible.
  - b. The bidder does not upload all the documents as stipulated in the bid document.

### 9. Selection Criteria:

# Phase-I: Technical Evaluation & Sample Approval

Technical evaluation will be done on the basis of information given by technical bid submitted by the bidders. Bid containing partial, incomplete, uncleared and superfluous and unwanted information will be summarily rejected.

Technical declaration must be supported with relevant document. Discrepancy in relevant supporting document and technical compliance sheet shall lead to rejection of technical bids.

### Sample Approval:

### **Phase-II**

- 1. Financial bids of technically qualified and approve samples bidders shall be opened.
- 2. Financial evaluation is purely done on the total financial implication.
- 3. Any superfluous, unreasonable assets rate quotes will be summarily rejected.

### Late Delivery:

Delivery must be completed within the period mentioned in tender document from the date of receipt of the order. Penalty @ 1% per week or part thereof subject to a maximum of 10% of the delivery price will be deducted from the balance payment if supply is not completed within stipulated period.

# INDIAN INSTITUTE OF TECHNOLOGY Centre for Environmental Science and Engineering

# Enquiry letter for purchase of "Rate contract for Air Quality Modeling Emission inventory and Environmental sampling and survey"

Subject: "Rate contract for Air Quality Modeling Emission inventory and Environmental sampling and survey"

Reference: CESE/IITK/MS/2019-20/02 Dated: 29 May, 2020

With reference to the subject mentioned above, you are invited to submit the quotation online in electronic form on www.eprocure.gov.in portal for Empanelment and Rate Contract for Providing Services (see specifications below).

Submit quotation at your earliest. Make sure that the quotation should valid up to 60 days. The quotation duly signed must upload on the portal by 19.06.2020 (04.00 PM).

The quotation should have the following details:

- 1. Bidder must be a GST registered firm (if from India)
- 2. Academic and Research Institute discount
- 3. Delivery Period
- 4. Rates quoted must be FOR

### Terms and condition:

- 1. Our Institute is partially exempted from custom duty.
- 2. Payable GST @ 5% (for Indian company); DSIR certificate shall be issued.

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# INDIAN INSTITUTE OF TECHNOLOGY Centre for Environmental Science and Engineering

# **Technical Specifications Sheet:**

Sealed request for proposal (RFP) is invited from eligible and interested Indian Firms/ Institutions/Organizations/private for engagement as a service provider for various air quality projects.

# **Objectives:**

With this request for proposal, it is proposed to gather information from Indian Firms/ Institutions/ Organizations/private to provide services for the development of GIS-based Air Pollutant Emission Inventory, Air Quality Modeling, Environmental Surveys and Air Quality Sampling as per project needs. The partner organization will provide services to IIT Kanpur.

# **Request for Proposals**

IIT-Kanpur invites interested parties to submit an RFP to become a partner in the development of GIS-based Air Pollutant Emission Inventory, Air Quality Modeling, Environmental Survey and Air Quality Sampling as per project needs. It is expected that the partner/team should be an Indian entity with a minimum of one year of experience in the development of air pollutant emission inventory, air quality Modeling, and air quality sampling.

The Technical and Financial Proposal is to be submitted separately. The Technical proposal should include a understanding, methodology and plan.

# **Expectations from the Applicant**

The applicant is expected to understand the specific needs of the project in this endeavor and come up with a complete plan. The Applicant should not keep itself from taking initiatives and interacting with the concerned officials/scientists/institutions/body that plays a role in delivering the data and information for this task.

# **Pre-Qualification of the Applicant:**

The firm must fulfill the following criteria:-

- Should be a reputed and established Indian organization/company/ firm.
- Should have been in existence for a minimum period of two years.
- The Service Provider must have technically qualified employees having high profile expertise & experience in the field of GIS, Air Pollutant Emission Inventory, Environmental Surveys, Air Quality, Modeling, Air Quality Sampling.
- Preference will be given to the organizations/ companies/firms who (team) had executed similar types of work. Start-up companies can also apply.
- The Service Provider must also have sufficient manpower to handle the fieldwork required for the task entrusted.
- The Service Provider shall have to work in joint/collaborative mode under the strict guidance and supervision of the IITK.
- The additional terms and conditions considering the requirement of the project shall be mutually decided.
- All the disputes shall be subject to Kanpur jurisdiction.

# **Brief Scope of Work**

# 1. GIS-Based Emission Inventory

- Development of GIS-based gridded (2 km × 2 km resolution) emission inventory for air pollutants (particulate matter less than 10μm (PM10), particulate matter less than 2.5μm (PM2.5), sulphur dioxide(SO2), carbon monoxide(CO), and oxides of nitrogen (NOx), volatile organic compounds (VOCs) and polyaromatic hydrocarbons (PAHs)).
- Compilation of emission factors for all sources,
- Parking lot surveys through questionnaires for vehicle technology, model, engine capacity and measurement of driving patterns of various classes of vehicles operating on roads.
- Activity Data Collection of Point, Area and Line sources.

- Development of thematic layers.
- Digital data generation
- Forecast of source-wise emissions

# 2. Air Quality Dispersion Modeling (AERMOD)

- Meteorological Data Processing.
- Development of surface and upper-air data.
- Area, point and line source Modeling.
- Identification of control option efficacies
- Forecast emission Modeling
- Isopleth of pollutants

# 3. Survey related to environmental studies

- Demographic
- Income group
- Water consumption
- Waste water generation
- Ambient Air Quality
- Forest
- Fuel type, emission, effluent generation and disposal

# 4. Air Quality Ambient Air Sampling of Particulates, Gases and Hazardous Air Pollutants.

- Air Quality Sampling of PM<sub>10</sub> and PM<sub>2.5</sub> for chemical speciation using speciation sampler
- The team should have experience of speciation sampler operation
- Gaseous pollutant sampling

# **Technical Proposal Content**

- 1. Detailed Methodology. The rationale for the above and how the proposed content and methodology will meet the project's objectives.
- 2. A write up on the understanding of the assignment concerning the aforementioned brief scope of work.

- 3. Company/ Organization profile giving details of current activities and management structure.
- 4. The technical proposal should include the methodology as per the area of the city as per the following slabs:
  - a.  $A \le 100 \text{ km}^2$
  - b.  $B = 101-250 \text{km}^2$
  - c.  $C = 251-500 \text{ Km}^2$
  - d.  $D = 501-1000 \text{km}^2$
  - e.  $E \ge 1 \ 0.01 \text{km}^2$
- 5. The Technical Proposal shall not include any financial information.

# **Financial Proposal Content**

- 1. The proposal should be complete, i.e., it should list all costs associated with the Assignment.
- 2. The financial cost as per the area of the city classified under point 4 of Technical Proposal conten should be quoted for each service separately mentioned in brief scope of work components 1, 2, 3 and 4.
- 3. The financial proposal should be prepared in Indian Rupees.

### **Evaluation Criteria**

The evaluation criteria will be as follows:

Criteria	Total Weights	Weights (breakup)
1. Technical proposal:	80%	
<ul> <li>Project methodology, approach,</li> </ul>		50%
and plan		
<ul> <li>Experience and capability</li> </ul>		25%
<ul> <li>Resourcing and CVs</li> </ul>		
_		25%
2. Commercial proposal (price)	20%	100%

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# TENDER ACCEPTANCE LETTER (To be given on Company Letter Head)

		Date:
To,		
Sub: Acceptance of Terms & Cond	litions of Tender.	
Tender	Reference No:	
Name of Tender / Work:		
Dear Sir,		
<ol> <li>I/ We have downloaded / obta from the web site(s) namely:</li> </ol>	ined the tender document(s) for the above m	nentioned 'Tender/Work'
		as per your
advertisement, given in the above	e mentioned website(s).	
from Page No to	ve have read the entire terms and conditions _ (including all documents like annexure(s), nent and I / we shall abide hereby by the te	schedule(s), etc .,), which
3. The corrigendum(s) issued from taken into consideration, while su	m time to time by your department/ organishmitting this acceptance letter.	sation too have also been
4. I / We hereby unconditionally a corrigendum(s) in its totality / ent	accept the tender conditions of above mentic cirety.	oned tender document(s) /
5. I / We do hereby declare that of Govt. Department/Public sector u	ur Firm has not been blacklisted/ debarred/ tondertaking.	erminated/ banned by any
information is found to be incorre without giving any notice or rea	tion furnished by our Firm is true & correct ect/untrue or found violated, then your depa son therefore or summarily reject the bid of ghts or remedy including the forfeiture of the content of the cont	rtment/ organisation shall or terminate the contract,

Yours Faithfully, (Signature of the Bidder, with Official Seal)