NOTICE INVITING QUOTATION (E-PROCUREMENT MODE)

DEPARTMENT OF BOTANY

UNIVERSITY OF DELHI

Open Tender Ref. No. DUNC/Botany/SD/DBT/2020/NGS-Seq Dated: 09.03.2020

Department of Botany, University of Delhi is in the process of purchasing following item(s) as per details as given as under.

Details of the item	mRNA sequencing using Illumina's sequencing platform and bioinformatic analysis of sequenced data
Tender Fees	Rs. 500.00
Earnest money to be deposited	Rs. 25000.00

Tender Documents may be downloaded from Central Public Procurement Portal http://eprocure.gov.in. Aspiring Bidders who have not enrolled/registered in e-procurement should enroll/register before participating through the website http://eprocure.gov.in. The portal enrolment is free of cost. Bidders are advised to go through instructions provided at "Instructions for online Bid Submission"

Tenderers can access tender documents on the website (For searching in the NIC site, kindly go to Tender Search option and type either the "tender notice no." or "Department of Botany"). Select the appropriate tender and fill them with all relevant information and submit the completed tender document online on the website http://eprocure.gov.in as per the schedule given in the next page.

No manual bids will be accepted. All quotation (both Technical and Financial should be submitted in the *E-procurement portal*).

SCHEDULE

Name of Organization	Department of Botany, University of Delhi
Tender Type (Open/Limited/EOI/Auction/Single)	Open
Tender Category (Services/Goods/works)	Service
Type/Form of Contract (Work/Supply/ Auction/Service/Buy/Empanelment/ Sell)	Work and Supply
Product Category (Civil Works/Electrical Works/Fleet Management/ Computer Systems)	Services for NGS for transcriptome
Source of Fund (Institute/Project)	DBT project
Is Multi Currency Allowed	No; only INR is allowed
Date of Issue/Publishing	09.03.2020
Document Download Start Date	09.03.2020
Document Download End Date	30.03.2020
Date for Pre-Bid Conference	
Venue of Pre-Bid Conference	
Last Date and Time for Uploading of Bids	30.03.2020; 6.00 PM
Date and Time of Opening of Technical Bids	1.04.2020; 11.00 AM
Tender Fee	Rs. 500.00 (For Tender Fee)
EMD	Rs. 25000/-(For EMD)
No. of Covers (1/2/3/4)	02
Bid Validity days (180/120/90/60/30)	180 days (From last date of opening of tender)
Address for Communication	Dr. Sandip Das, Department of Botany, University of Delhi, Chattra Marg, Delhi-110007

Contact No.	9911517831
Fax No.	+91-11-27667573
Email Address	sandipdas04@gmail.com; sdas@botany.du.ac.in

Chairman Purchase Committee, (Buyer Member)

Instructions for Online Bid Submission

As per the directives of Department of Expenditure, this tender document has been published on the Central Public Procurement Portal (URL:http://eprocure.gov.in/eprocure/app). The bidders are required to submit soft copies of their bids electronically on the CPP Portal, 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.

More information useful for submitting online bids on the CPP Portal may be obtained at:

http://eprocure.gov.in/eprocure/app

REGISTRATION

- 1. Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL:http://eprocure.gov.in/eprocure/app) by clicking on the link "Click here to Enroll". Enrolment on the CPP Portal is free of charge.
- 2. As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- 3. 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.
- 4. 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.), with their profile.
- 5. 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.
- 6. Bidder then logs in to the site through the secured log-in 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.
- 2. 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 / email 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

- 1. Bidder should take into account any corrigendum published on the tender document before submitting their bids.
- 2. 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.
- 3. Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR / DWF formats. Bid documents may be scanned with 100 dpi with black and white option.
- 4. 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, annual reports, auditor certificates etc.) has been provided to the bidders.
- 5. Bidders can use "My Space" area available to them to upload such documents. These documents may be directly submitted from the "My Space" 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.

SUBMISSION OF BIDS

- 1. 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 due to other issues.
- 2. The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- 3. Format for filling the financial bid is provided as **Annexure V**. Bidders are requested to use the provided template only for filling the financial bids.
- 4. 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.
- 5. All the documents being submitted by the bidders would be encrypted using PKI 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. Data storage encryption of sensitive fields is done.

- 6. The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 7. 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.
- 8. Kindly add scanned PDF of all relevant documents in a single PDF file of compliance sheet.

ASSISTANCE TO BIDDERS

- 1. 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.
- 2. 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 1800 233 7315.

General Instructions to the Bidders

- 1. The tenders will be received online through portal http://eprocure.gov.in/eprocure/app. In the Technical Bids, the bidders are required to upload all the documents in .pdf format.
- 2. 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://eprocure.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://eprocure.gov.in/eprocure/app under the link "Information about DSC".
- 3. Tenderer are advised to follow the instructions provided in the 'Instructions to the Tenderer for the e-submission of the bids online through the Central Public Procurement Portal for e Procurement at https://eprocure.gov.in/eprocure/app.

Ref. No. DUNC/Botany/SD/DBT/2020/NGS-Seq

TECHNICAL SPECIFICATIONS FOR

NGS SEQUENCING

The Department of Botany, University of Delhi invites e-tenders (in two covers) for transcriptome sequencing. Tenders are invited from service providers for 'RNA sequencing using Illumina sequencing platform and bioinformatic analysis of the sequenced data'. Quotations should be submitted following the two-bid system with technical and financial bids to be submitted separately. Following are the Technical specifications:

Minimum Technical specifications for RNA Sequencing

S.No	Stage	Minimum technical requirement
I	Sample Submission and QC	 Shipping of the samples under proper conditions from the laboratory of the PI to service facility Samples are NOT permitted to be shipped outside of India. The bidder must provide a written commitment of the same that samples will not be shipped outside India for NGS data generation. Quality control of samples using Agilent Bioanalyzer or any other similar system.
II	Library Preparation and NGS	 cDNA library preparation and QC of each library. QC should be shared with the Principal Investigator before proceeding for the sequencing Sequencing of libraries (150-bp, paired-end reads) using Illumina's NGS platform Total read: The total reads to be generated will vary from sample to sample and details are given as under 3A: between 40-50 million reads (~4-5 Gb data) per sample along with data QC and report for each sample should be provided 3B: between 80-90 million reads (~8-9 Gb data) per sample along with data QC and report for each sample should be provided
III	NGS data processing	 Filtered for reads with more than 80% bases having Q30. Data should strictly be delivered as paired end filtered sequences (at least 2 x 150 bp) with more than 100X coverage
IV	NGS data analysis	 Quality filtered reads should be used for mapping, assembly, assembly evaluation and amelioration.

			2.	For samples as per 3A (mentioned in II) mapping of the
				reads to the reference genome should be done, however for
				the samples mentioned in 3B de novo assembly should be
				done.
			3.	Quantitation of transcripts followed by their structural and
				functional annotation
			4.	Differential gene expression analysis between different
				samples. User would provide all the possible combinations
				for finding differential gene expression
			5.	Result Representation as list of differentially expressed
				transcripts, Scatter Plot, HeatMap and Condition tree
			6.	Functional classification and biological significance of
				transcripts
			7.	Inter and Intra gene list comparisons
			8.	GO and Pathways based Gene Regulatory Network Modeling
				to find the key regulated pathways
			9.	Data Submission to NCBI SRA
V	Post	NGS	1.	Details of all protocols/methods followed for sequencing,
	analysis			and raw as well as high quality assembled sequence data
			2	should be provided in appropriate storage devices
			۷.	The vendor should be able to support data analysis till
				publication. This might include re-analysis during
				manuscript compilation and to address reviewer's
				comments.

Terms and Conditions:

- 1. Service providers should provide a list of users (5 minimum). Service provider should have provided services for Transcriptome data generation using NGS to government institutes in last 5 years. Please provide performance certificate/ user list with tender document.
- 2. Service providers should submit evidence of prior experience for Illumina based transcriptome sequencing projects only.
- 3. Confidentiality and non-disclosure agreement must be submitted.
- 4. *Data delivery deadline*: Sample QC report should be submitted within 5-7 days after receiving the sample. Sequencing and data analysis should be carried out and final analyses report to be submitted within 20 days of receiving the samples. In case timely delivery is not done, penalty may be applied, or order may be cancelled.
- 5. *Payment terms and conditions*: The payment shall be made only on the completion and delivery of sequencing data along with bioinformatic analysis. The University reserves

the right to amend any terms and conditions contained in the tender document or reject any or all applications/offers or not award the contract to the lowest bidder without giving any notice or assigning any reason thereof. The decision of the concerned will be final and binding.

Special Terms and conditions

- 1. Quality report of DNA/RNA/Library to be shared before proceeding to the next step. Raw reads, Statistics, Raw data QC, Statistics of clean filtered reads to be shared. Both raw and filtered data to be provided in Hard Disks.
- 2. No intellectual property/ knowledge/ insight / information/ data generated during the course of rendering such services can be retained or shared with any third party by the service provider / vendor. Such IPR / knowledge remains the property of the Principal Investigator, Department of Botany, University of Delhi. Samples / data / reports shall remain the property of Department of Botany, UDNC and service provider shall have to furnish the non-disclosure agreement with Department of Botany, UDNC as regards to ensuring the secrecy of these samples / data / reports/ information.
- 3. Methodology, Deliverables, Time frames, Milestones must be clearly indicated in the Bid. Service provider must have past experience of providing above-mentioned services. Proof of the same is required. The Technical Qualification will be based on service provider's experience and documentary proof as mentioned above to be submitted with technical bid.

Terms & Conditions

- 1. The bidder may kindly clearly indicate in your letter whether the rate quoted is inclusive or exclusive of GST. In case GST is to be levied over and above the rate quoted by you, the rate at which GST is to be levied must be specified.
- 2. The bidder should also clearly bring out the time that is needed for sequencing / analysis after the samples are made available to you.
- 3. An earnest money of 25000/- (Rupees Twenty Five Thousand only) in the form of DD/pay order drawn in favour of the Registrar, University of Delhi, payable at Delhi is required to be sent along with the quotations failing which the quotation will not be considered.
- 4. The EMD of the successful bidder shall be retained as Security Deposit which shall be released after the completion of tenure of the Contract. In case the agency fails to comply with the terms & conditions of the work order, the security deposit shall be forfeited.
- 5. No separate charges shall be paid for submission of reports / data.

- 6. Department of Botany, UDNC reserves the right to award the work and to increase or decrease the number of samples / items, whichever is applicable at its discretion.
- 7. Department of Botany, UDNC will have full authority to reject any/all offer(s) without assigning any reason thereof.
- 8. The rates quoted in the tender shall remain valid for a period of 365 days. No bidder can withdraw/or modify his tender or revoke the same within the said period. If a bidder on his own withdraws or revokes the tender or revises or alters or modifies the tender for any item or condition within the period mentioned in the tender notice, his earnest money deposit shall stand forfeited. Notwithstanding foregoing, the Department reserves the right to take other action as deemed appropriate.
- 9. Payment will be released after completion of work to the satisfaction of the undersigned and after deduction of tax at source as per rules.
- 10. The validity of the contract can be extended further subject to performance of the company & upon mutual consent from both sides.

Detailed tender with terms and conditions is uploaded on CPPP portal: https://eprocure.gov.in/eprocure/app