

The Jute Corporation of India Limited 15N, Nellie Sengupta Sarani, 7th Floor Kolkata, 700087, West Bengal

Request for Proposal for design, development, operations, and maintenance of a block chain based digital platform in the supply chain of jute

RFP Reference No: JCI/IT/BLOCKCHAIN/2022-23/01

Dated: 20th of January, 2023

Issued By: IT Department, The Jute Corporation of India Limited

Important Dates:

Date of Uploading RFP: 20/01/2023

Pre Bid Queries may be submitted by: 30/01/2023 18:00 hrs.

Date of Pre-bid Meeting: 01/02/2023 11:00 hrs. at Head Office of The Jute Corporation of India Limited

Latest date of publishing Corrigendum: 03/02/2023

Date of Submission of RFP: 13/02/2023 17:00 hrs.

Date of Opening of RFP: 13/02/2023 17:30 hrs.

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1. Introduction

The Jute Corporation of India Limited (JCI) is central public sector undertaking incorporated by the Government Of India in 1971 as a price support agency with a clear mandate for the procurement of raw jute / mesta without any quantitative limit from the growers at the Minimum Support Price (MSP) declared in each year by the Government of India based on the recommendations made by Commission for Agricultural Cost & Prices (CACP). This protects the jute growers from exploitations in the hands of the middle men. The basic objective is not profit making but a social cause to protect the interest of about 4.00 million families engaged in farming of jute, most of whom are small / marginal farmers. Therefore, the presence of JCI in the market provides stability in the raw jute prices.

JCI is looking for selecting an agency for design, development, operations, and maintenance of a blockchain based digital platform in the supply chain of jute in the country.

The Jute ecosystem consists of the following stakeholders, who will be users of the proposed platform:

- The Jute Corporation of India Limited
- National Jute Board
- Office of the Jute Commissioner
- Agriculture Department of the jute growing states
- Jute Farmers
- Farmer Producer Organizations / Cooperatives
- Intermediaries / Middlemen / Brokers / Traders
- Jute Mills/ Jute Diversified Products Manufacturers / Importers Exporters

The Jute supply chain is as below:





2. Instructions to Bidders

The JCI has detailed the minimum pre-qualification requirements and the process of selection in the RFP. The evaluation committee will evaluate the quality / capability of Bidders on the criteria mentioned in the RFP based on their proposals received and fulfilment of eligibility criteria.

The bidders shall submit their offers strictly in accordance with the Terms & Conditions of the RFP document. Any bid that stipulates conditions contrary to the conditions given in the RFP document will stand disqualified.

Pre-bid queries: All queries regarding the RFP can be emailed to JCI on sg2801@jcimail.in up to 18:00 hrs. on 30/01/2023 with subject line "Pre-bid Queries - JCI/IT/BLOCKCHAIN/2022-23/01". Queries received after mentioned time or through other medium or with different subject line, shall not be accepted.

Pre-Qualification Criteria

No	Criteria	Submission		
1	The Bidder should be a company registered in India under the Companies Act, 2013 or a partnership firm registered under the Indian Partnership Act 1932 or LLP registered under LLP Act 2008 with their registered office in India for at least 3 years before date of submission of Bid	Self-attested copy of Certificate of Incorporation/ Registration		
2	Minimum Average Annual Turnover of ₹50 lakhs in last 3 financial years (2019-20, 2020-21 & 2021-22)	Turnover Certificate in original by any CA/CMA with UDIN or self-attested copy of Audited copy of financial statements		
3	The Bidder should have Experience of development, maintenance and operation of large-scale applications with IT transaction systems owned by Government (Center /state /ministry /department/ organization/ PSU).	Certificate of Completion along with Letter of Award/ Contract.		
4	The bidder shall have positive net worth in last 3 financial years (2019-20, 2020-21 & 2021-22)	Net worth Certificate in original by any CA/CMA with UDIN or self-attested copy of Audited copy of financial statements		
5	The bidder should have experience* with any Central Government authority / PSU in: (1) Blockchain-based digital platform (2) AI/ML based digital platform * Ongoing projects or completed projects for each technology	Certificate of Completion along with Letter of Award / Contract		
6	The Bidder should not have been	No Conviction Certificate to be		



	blacklisted by any Central and/or State	submitted on behalf of the Bidder as		
	Government departments, PSU's and/or	well as its		
	any other Statutory or autonomous	Directors/Partners/Founders, duly		
	body/undertaking.	signed on the Agencies Letter Head		
		and Stamped.		
7	The Bidder should have a valid and active	Copy of PAN card and Goods & Service		
	PAN and GST in India	Tax Registration certificate		

3. Terms & Conditions of the Contract

Documents to be submitted -

The technical bid should consist of following documents along with indexing and proper identification tags:

- Documents with to satisfy pre-qualification criteria
- Understanding of scope
- Proposed Solution
- Technology Stack
- Key Innovations
- Infrastructure Requirements
- Milestone wise Work Plan
- Team Composition along with their proposed role and CV
- No. of trainings to be provided with desired trainee group

Performance Security Deposit

- The successful bidder will have to submit 10% of contract value within 10 working days in form of Demand Draft in favour of The Jute Corporation of India Limited payable at Kolkata.
- Performance Security Deposit amount can also be deposited through NEFT / RTGS in the below mentioned A/c details –

A/c No. – 00930001000297535 Bank – Punjab National Bank Branch – New Market, Kolkata IFSC – PUNB0009300

• The deposit amount will be refunded after completion of AMC period.

Project Duration

- Design, Development and UAT: Within 90 days of award of contract
- Integration, Testing, Changes, Go Live and Roll Out: Within 120 days of award of contract
- AMC Period: 3 years from date of Go Live

Price Quotation

The bidder must submit all prices inclusive of GST.

- i. Lump sum cost for design, development, implementation and Go Live, training and certifications and audit
- ii. AMC charges during operations and maintenance period and cloud hosting is to be quoted for 3 years inclusive of GST
- iii. JCI will ask for breakdown of cost, mentioned in serial nos. (i) & (ii) above, if required



Method of Selection

Evaluation shall on the basis of Combined Quality Cum Cost Based System (QCBS) as under:

- i. The score of technical proposal will be allotted weightage of 70%, while the score of financial proposal will be allotted weightage of 30%.
- ii. The technical score will be arrived at after evaluation of technical bids as per the section Parameters for Technical Score on QCBS.
- iii. Financial Bids of only those bidders will be opened, who score at least 70% in the Technical Scoring in addition to fulfilling pre-qualification criteria as above.
- iv. The rate quoted in Financial Bid must be reasonable and valid till the completion of project. The period can be extended with mutual agreement.
- v. Proposal with the lowest cost will be given a financial score of 100 and other proposals will be given financial scores that are inversely proportional to their prices. Illustration:

Bidder	Financial Bid Amount	Financial Score
Bidder1	1,20,000	100000/120000*100 = 83.33
Bidder2	1,30,000	100000/130000*100 = 76.92
Bidder3	1,00,000	100

vi. The total score, both technical (TS) and financial (FS), will be obtained by weighing the quality and cost scores and adding them up.

<u>Highest points basis</u>: On the basis of the combined weighted score for quality and cost, the consultant/service provider shall be ranked in terms of the total score obtained. The proposal obtaining the highest total combined score in evaluation of quality and cost will be ranked as H-1 followed by the proposals securing lesser marks as H-2, H-3 etc. The proposal securing the highest combined marks and ranked H-1 shall be recommended for award of contract.

1. Parameters for Technical Score on Quality Cum Cost Based System (QCBS):

Bidders shall be asked to make presentation before the committee formed by JCI to arrive at the final Technical Score (TS). The technical evaluation of the bids to arrive at Technical Score will be done strictly as per the matrix shown below:

#	Parameters	Break Up of Parameters	Weightage / Score	Max. Score
1	Presence of the bidder in e- Governance Based Software Solutions	< 5 yrs	4	10
		5 to 10 yrs	7	
		> 10 yrs	10	
2	Experience of development, maintenance and operation of applications with IT transaction systems owned by Government (Center / state / ministry / department / organization / PSU) in last 3 years	1-2 projects	4	
		3 – 5 projects	7	10
		More than 5 projects	10	
3	The bidder should have experience* with any Central Government authority / PSU in: (1) Blockchain-based digital platform (2) AI/ML based digital platform * Ongoing projects or completed projects for each technology	1 - 2 projects	3	5
		More than 2 projects	5	



4	Average Annual Turnover in last 3 financial years (2019-20, 2020-21 & 2021-22)	₹0.5 – 1.0 Crore	4	
		₹1 - 3 Crore	7	10
		More than ₹3 Crore	10	
5	Quality Certifications	ISO 9001	3	10
		CMMi Level 3	1	
		CMMi Level 4/5	4	
		ISO 27001	3	
	Proposed Solution / Technical Presentation	Understanding of	10	55
		Requirements		
		Solution with minimal	10	
		customization		
6		Implementation Approach &	10	
		Methodology		
		Technical Demonstration of	10	
		required features in a single		
		platform		
		Presentation and discussion	10	
		Open-Source Platform /	F	
		solution	5	

Payment Terms

Payment of design, development, implementation and Go Live, training and certifications and audit

- i. 30% on acceptance of SRS Document duly signed by the both the parties
- ii. 50% on completion of UAT duly signed by both the parties and STQC Audits
- iii. 20% on Go Live. Separate certificates for trainings completion, 3rd Party successful audit certificate with validity covering full AMC period and Go Live are to be provided. Go Live Certificate has to be signed by both the parties

Payment of AMC Amount

- i. Quarterly on submission of AMC Report for the period
- ii. If multiple audits are to be conducted to cover the full AMC period, these are to be complied and AMC amount should include that component also. AMC amount will only be released upon renewal of audit certificate, domain name, SSL etc. to cover AMC period (if required).
- Payments shall be made within 15 days against receipt of invoice in triplicate upon receiving all clear documents
- > GST amount will only be reimbursed / paid on submission of challan / Form GSTR 2B
- ➤ Bidders are requested to submit the proposals as per the attached documents. Deficiency of the required documents may lead to rejection of bids.
- ➤ Bidders are requested to comply with the pre-qualification criteria, technical evaluation criteria etc. as mentioned in the attached document.
- > Bidders are requested to submit the required details as mentioned in the bid documents.

4. Scope of Work

The digital platform will consist of the following details

- i. To design and develop a mobile-based application to capture the transaction data between the stakeholders and market information data from the stakeholders
- ii. To design and develop a web-based platform where the captured data is aggregated and correlated with the legacy datasets and external datasets to predict the best price for the jute procurement



- iii. The web-based platform will also support the prediction of the price trends for jute procurement
- iv. The web-based platform will have a role-based internal dashboard having the visualization and interactive dashboards and reports
- v. The platform shall be deployed on the Cloud infrastructure. Cloud infrastructure is to be arranged by the vendor from MeiTy empanelled list of GCC service provider.
- vi. The platform will be multilingual in English, Bengali, Hindi (Additionally Oriya, Assamese, Telegu can be added within 6 months of go-live)

4.1 <u>Technical Specifications of the Mobile Application</u>

The mobile application will have the following specifications:

- i. The mobile application should be a native one.
- ii. Developed for android-based devices.
- iii. Provision to store data records in offline mode and sync with the platform automatically.
- iv. Mobile application will capture the geo-coordinates (latitude and longitude) with every recorded transaction.
- v. The application will have a sign-up or registration option for the stakeholders.
- vi. Depending upon the category of the stakeholder, the demographic data will be validated using the APIs (provided by JCI such as JUTE-ICARE and other departments).
- vii. There will be an access authentication using the registered information.
- viii. The user interface of the mobile application should be very simple and user-friendly.
- ix. The layout of the application having form and input parameters should be responsive and fit the screen of any size and dimension.

4.2 <u>Technical Specifications of the Web Application</u>

The web application will have the following specifications:

- i. To be developed using the open source technologies
- ii. The User Interface of the application should be responsive
- iii. The application shall be able to consume and expose APIs
- iv. The indicative modules are:
 - a. Identity Access Control User Registration, Role & Rights Management
 - b. Master Data Management
 - c. Alerts and Notification Management via Email, SMS, In-App
 - d. APIs & Data Access Configuration
 - e. E-Forms for ecosystem transactions data acquisition
 - Buyer & Seller Data, date, time, location, price, variety, quality, and other parameters, as required by JCI – for every stage and stakeholder in the supply chain
 - f. Data Analytics Engine
 - g. Dashboards Charts & Insights, GIS View with drill downs
 - h. MIS Reports
 - i. Time, Region, State, Category wise data
 - ii. Crop type wise data
 - iii. Price, MSP comparison, exceptions data
 - iv. Automated and on-demand report generation

4.3 Core Tech Features

- Block chain for records securitization
- Advanced analytics & visualization



4.4 Key Deliverables

The implementation deliverables will cover the following:

- System Design and Development using Open-Source Technology Tools as per proposal
- Preparation and submission of Software Requirement Specification (SRS) Document
- Design and Development of analytics including MIS and dashboard
- Application software Testing, bug fixing and Security Audit
- Software requirement specification documentation
- Design and Development of Android based Mobile Application
- Design and Development of Web based platform
- Design of API specifications and API Development
- Migration of data from the old/existing system into new system
- Implementation of security architecture
- Procurement of domain and SSL certificate
- Publishing Mobile Application on the Google Play Store
- Deployment of Application and database deployment on the Cloud infrastructure on a MEITY empaneled GCC Cloud Services Provider.
- System readiness for UAT
- Security as well as function Audit of both the applications from STQC and issues resolution
- Training to JCI and key master users and master trainers
- Preparation of technical documents for Application, Training and ICT Infrastructure
- Design, Development, and UAT release within 90 days from contract
- Integration, Testing, Changes, Go Live, and Roll Out to start within 120 days from UAT release

The AMC deliverables will cover the following:

- Maintenance and support of application software for a period of three years after Go Live. Extension may be granted for additional two years with an increase of 10% annually.
- Renewal of cloud hosting, audit certificates, domain, SSL etc.
- Ongoing management of security, infrastructure, issues resolution
- Ongoing support for minor enhancements
- Ongoing support for on boarding new users, as required
- Ongoing support for trainings both technical and operational to new user groups, as required