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No. TRTI/2025-26/IT/Desk-01/2692

Date: 09/06/2025
T2

MINUTES OF PRE-BID MEETING FOR TENDER REFERENCE NO: TRTI/2025/IT/Desk-1/2442

For “Request for Proposal (RFP) for Design and Implementation of a Blockchain and AI-Enabled Caste Validity Certificate Verification System for Tribal Research and Training Institute (TRTI), Maharashtra”

[Tender ID: 2025_TRTIP_1185238_1, dated 30th May 2025]

Date & Time: 06/06/2025 at 15:00 hrs., Friday

Venue: Meeting held at Conference Hall, Tribal Research & Training Institute, Pune, 411001

Agenda: Pre-bid meeting for the tender: “Request for Proposal (RFP) for Design and Implementation of a Blockchain and AI-Enabled Caste Validity Certificate Verification System for Tribal Research and Training Institute (TRTI), Maharashtra” (Tender ID: 2025_TRTIP_1185238_1, dated 30th May 2025).

The pre-bid meeting was organized to address the queries raised by the bidders for the said tender. This tender is for “Request for Proposal (RFP) for Design and Implementation of a Blockchain and AI-Enabled Caste Validity Certificate Verification System for Tribal Research and Training Institute (TRTI), Maharashtra”. The committee clarified the queries pointwise raised by the bidder and the same is recorded. The queries received by above bidder with tender committee remarks are placed as below. The committee has also decided that the pre-bid meeting minutes should be treated as part of the Tender conditions and shall be binding to Bidders.

Sr No	Tender Page no.	Clause no.	Query raised by the bidder	Clarification given for the query
1	Page No 10	Immutable Ledger of Certificates	Request to clarify how many documents data is in the existing TRTI database. This would help us gauge the quantum of work with respect to blockchain conversion	The current system holds documents related to close to 7.5 lac applications & each application is having approx. 15 pages per application.
2	Page No 15	Earnest Money Deposit	Request to give EMD exemption to DIPP registered startups. Requesting exemption in compliance Rule 170 of GFR Rules 2017	No Change in EOI conditions shall prevail.
3	Page No 4	Key events and Dates	Bid Submission date: 13 th June 2025. Kindly extend the deadline by 2 weeks	Bid Submission date has been extended to 23-June-2025 05:00 PM
4	Page No 18	Prequalification Requirement(a), Point 2	The Bidder should have a minimum average annual turnover of INR 2.5 Crores from any 3 financial years from the last five years (i.e., FY 2020-21, FY 2021-22, FY 2022-23, FY 2023-24, FY 2024-25). Turnover Criteria: Kindly grant an exemption on the turnover requirement for Startups as per the per GFR Rule 173(i) under GFR Rules 2017.	No Change in EOI conditions shall prevail.
5	Page No 21	Technical Evaluation Criteria, Point 6, ISO & CMMI Certifications	ISO/IEC 27001:2022 is an evolution of ISO 27001:2013 certification which is an older certification standard. In line with suggestion number, kindly amend this to: ISO 9001:2015 – 2.5 marks ISO/IEC 27001: 2022 – 2.5 Marks ISO/IEC 20000-1: 2018 - 2.5 marks CMMI LEVEL 3 – 2.5 marks	Changes done in Technical Evaluation as below, ISO 9001:2015 – 2.5 Marks ISO 20000-1:2018 – 2.5 Marks ISO/ICE 27001:2022- 2.5 Marks CMMI Level 3 – 2.5 Marks

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6	Page No 20	Technical Evaluation Criteria – Point 1 <u>Experience in Years</u> - Experience in providing blockchain & AI-backed services	Request to amend to “Experience in providing Blockchain/AI projects” & “No of Blockchain and AI projects executed” to accommodate a broader range of qualified and innovative participants?	Changes done in Technical Evaluation as below, a. Experience in providing blockchain / AI -backed services ≥ 3 Years & ≤ 4 years - 5 Marks b. Experience in providing blockchain/ AI-backed services ≥ 4 Years & ≤ 5 years - 10 Marks c. Experience in providing blockchain / AI -backed services ≥ 5 Years - 15 Marks
7	Page No 20	Technical Evaluation Criteria, Point No 3	Average annual financial turnover of the company. Kindly grant an exemption/full score on the turnover requirement for Startups as per the per GFR Rule 173(i) under GFR Rules 2017.	No Change in EOI conditions shall prevail.
8	Page No 20	Technical Evaluation Criteria, Point No 4	Company must have at least 15 employees with experience in blockchain projects or emerging technologies. Kindly grant an exemption/full score on the employee strength criteria for Startups as per the GFR Rules 2017.	No Change in EOI conditions shall prevail.
9	Page No 12	Role - Based Access ("In case a private or permissioned blockchain (e.g., Hyperledger Fabric, Quorum) is used, and all costs related etc...")	The text needs to include Made in India blockchain projects such as a CORD as well.	The clause allows for flexibility in selecting appropriate blockchain technologies and is not limited to any specific platform. Bidders are encouraged to propose a technically sound and commercially feasible blockchain architecture—whether domestic or international, public or private—best suited to the objectives and functional requirements of the project.

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10	Page No 8	Automated Document Verification (AI-driven): The solution shall automatically verify applicant-submitted documents using AI technologies. This includes using Optical Character Recognition (OCR) and text extraction from scanned documents (such as caste certificates, identity proofs, affidavits, etc.)	<p>Using OCR to convert analog to digital data may not yield optimum results. We propose "Digital Attestation" service tackles the "analog information gap" by converting data from manual and handwritten documents into secure Digital Verifiable Credentials (DVCs).</p> <p>Justification: This approach is crucial as it instills verifiable trust in traditionally non-digital information. By creating cryptographically signed, tamper-evident "digital twins," Dhiway ensures data integrity and authenticity. This drastically improves efficiency by eliminating manual re-verification, empowers users with control over their attested data via digital wallets, and allows organizations to confidently integrate information from physical origins into secure digital workflows, effectively bridging the physical-digital trust divide for previously unverified sources.</p>	The approach outlined in the RFP, including the use of OCR and AI for document verification, has been defined after thorough analysis of existing systems and identified gaps. While alternate methods like digital attestation are acknowledged, bidders are required to adhere to the specified solution framework, which is aligned with the Department's operational requirements and feasibility considerations
11	Page No 8	Explaining the Digital Attestation Process	<p>Physical and non tokenised documents:</p> <ul style="list-style-type: none"> * We would use OCR as a tool to extract the data from scan or photo. * What Dhiway proposes is, like how in real-world, a photo-copy (xerox) is attested by a notary or a govt. officer 	We are adding an extra layer to give confidence that the extracted data is right, here the core process is important that is extraction.

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			with reference to original document, in digital world, the original is photo/scan, and the attester, can be remotely approving the document as valid. This one time tokenisation effort will make the same document ready to consume in digital form in future.																																													
12	Page No 24	Payment Schedule	First payment is post UAT, second is post go-live, and the remaining payments are happening half-yearly. Suggestion: We humbly suggest that TRTI follow industry standards.	<p>Payment Schedule has been changed as per below,</p> <table><tr><th>SN</th><th>Milestone</th><th>Timelines T ~ Date of Date of MOU Signed</th><th>Payment in % of the total work order value</th></tr><tr><td>1</td><td>Completion of UAT</td><td>T + 45 days</td><td>30%</td></tr><tr><td>2</td><td>Security Audit & Go-Live</td><td>T+ 90 days</td><td>30%</td></tr><tr><td>3</td><td>Support & Maintenance</td><td>T + 270 days</td><td>5%</td></tr><tr><td>4</td><td>Support & Maintenance</td><td>T + 450 days</td><td>5%</td></tr><tr><td>5</td><td>Support & Maintenance</td><td>T + 630 days</td><td>5%</td></tr><tr><td>6</td><td>Support & Maintenance</td><td>T + 810 days</td><td>5%</td></tr><tr><td>7</td><td>Support & Maintenance</td><td>T + 990 days</td><td>5%</td></tr><tr><td>8</td><td>Support & Maintenance</td><td>T + 1170 days</td><td>5%</td></tr><tr><td>9</td><td>After the Handover of code</td><td>T + 1170 days</td><td>10%</td></tr><tr><td colspan="3">Total</td><td>100%</td></tr></table>	SN	Milestone	Timelines T ~ Date of Date of MOU Signed	Payment in % of the total work order value	1	Completion of UAT	T + 45 days	30%	2	Security Audit & Go-Live	T+ 90 days	30%	3	Support & Maintenance	T + 270 days	5%	4	Support & Maintenance	T + 450 days	5%	5	Support & Maintenance	T + 630 days	5%	6	Support & Maintenance	T + 810 days	5%	7	Support & Maintenance	T + 990 days	5%	8	Support & Maintenance	T + 1170 days	5%	9	After the Handover of code	T + 1170 days	10%	Total			100%
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13	Page No 8	Automated Document Verification (AI-driven):	The system must cross-verify information against authoritative databases. It is not clear from the RFP about a central repository of database. We request you to please clarify against which database is the cross-verification to be done.	The system is expected to perform cross-verification by interfacing with multiple authoritative databases, including but not limited to those maintained by MAHA-IT for caste certificate issuance and other relevant government-maintained database like BARTI & etc. TRTI, in coordination with relevant authorities, will facilitate access to these databases through secure APIs. The integration will follow standard data exchange formats to ensure seamless interoperability, with necessary technical documentation and support made available to the selected bidder.																																												

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14	Page No 9	Validation and Cross-Referencing with Central Database	The extracted data should be verified against historical records. Are the historical records already digitized? If not, is it within the scope of the RFP to digitize historical data? If yes, what's the estimated size of the data?	The historical records exist in various states, some of them are digital copies, some exist as scanned copies of original digital or handwritten texts associated with the applicant submitted. The bidder will have to use these documents as their base to perform the necessary extractions.
15	Page No 9	Optical Character Recognition (OCR) and Text Extraction	Extracted text should be cross-checked with known templates and official database structures. Can you please share more information on the templates and database structures that is being referred here?	The extracted information is expected to align with the structured data formats currently maintained by MAHA-IT and other relevant departments for caste certificate issuance and validation. These formats represent both the field-level data and the standardized digital structure of such documents. TRTI will facilitate access to these systems through secure APIs, along with necessary technical specifications to ensure accurate cross-verification.
16	Page No 9	Natural Language Processing (NLP) for Data Analysis: Cross-Referencing for Accuracy	The system should compare extracted data with validated records in centralized indexed databases. Please clarify if the 'validated records' are digitized and searchable? If not, is it within the scope of the RFP to create this database?	Yes, the validated records are already digitized and maintained in structured formats by the respective departments. The system is expected to perform cross-verification of the extracted data against these existing records. Creation of a new database for these reference records is not required.
17	Page No 9	Anomaly Detection and Document Authenticity Validation	Pattern Recognition for Forgery Detection. It is not clear from the RFP about a central repository of database. We request you to please clarify against which database is the cross-verification to be done.	The system is expected to perform cross-verification by interfacing with multiple authoritative databases, including but not limited to those maintained by MAHA-IT for caste certificate issuance and other relevant government-maintained Electronic Systems. TRTI, in coordination with relevant authorities, will facilitate access to these databases through secure APIs. The integration will follow standard data exchange formats to ensure seamless interoperability, with necessary technical documentation and support made available to the selected bidder.

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18	Page No 9	Anomaly Detection and Document Authenticity Validation	Historical Record Verification. Are the historical records already digitized? If not, is it within the scope of the RFP to digitize historical data? If yes, what's the estimated size of the data?	The historical records exist in various states, some of them are digital copies, some exist as scanned copies of original digital or handwritten texts associated with the applicant submitted. The bidder will have to use these documents as their base to perform the necessary extractions. The estimated size of the data is 64 TB .
19	Page No 9	Historical Record Verification	The bidder must ensure that the AI tools used are tested for robustness and reliability across diverse data sets, with adequate fallback mechanisms for manual verification in cases of uncertain or ambiguous results. AI-based contextual analysis and anomaly detection may produce false positives/negatives due to contextual ambiguity. Is the bidder expected verify each case manually? What is the method used to ascertain uncertainty or ambiguity of results?	The system should be capable of identifying and flagging ambiguous or potentially inaccurate results. The bidder is expected to incorporate mechanisms within the solution to address and resolve such cases to the extent possible using technical methods. Only unresolved or critical anomalies may be routed for manual verification to the department.
20	Page No 10	Role-Based Access	In case a private or permissioned blockchain (e.g., Hyperledger Fabric, Quorum) is used, and all costs related to node operation and infrastructure can be borne by TRTI, given that such is reasonable and justifiable. Request the client to please provide guidelines to determine 'reasonable and justifiable' value. Will there be a situation that the client decided to not invest in Blockchain and thus the scope of this RFP reduces to just the AI part?	The scope defined in the RFP is final and not subject to reduction. Both blockchain and AI components are integral to the solution and must be implemented as specified. Bidders are expected to propose a blockchain architecture—public or private—based on their technical assessment and domain expertise, ensuring it is capable of supporting large-scale verification with high scalability, throughput, and operational reliability.


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21	Page No 11	Integration with External systems	Can you please indicate on the number of integrations and if we already have APIs available for such integrations	All required external system integrations will be facilitated through available APIs, as maintained by the respective departments, the exact number will be provided during stakeholder consultations.
22	Page No 11	Secure API-Based Database Interactions	The system should validate data from all the corresponding Government agencies for caste certificate validation. Can you please indicate on the number of databases? And are they already digitized and if we already have APIs available for all the databases?	All required external system integrations will be facilitated through available APIs, as maintained by the respective departments, the exact number will be provided during stakeholder consultations. But as on today we have 4 databases.
23	Page No 12	Scalability & Performance	The application should be scalable to handle a high volume of transactions and users. The design should support scaling up (and out, if cloud-based) to accommodate increasing load. Can you please clarify on the current volume and growth trends? This will help us in our solutioning approach	Please read point no 1 for more details.
24	Page No 13	Maintainability & Extensibility:	The bidder shall be responsible for comprehensive maintenance and support of the system for a period of 36 (Thirty-Six Months) months following the Go-Live date. Is this a 24x7 support or during office hours? Will the support be onsite or remote? If it is onsite, how many resources are needed?	Maintenance and support of the system for a period of 36 (Thirty-Six Months) months with coverage of 24 X 7 remotely & not onsite.
25	Page No 14	Hardware/Infrastructure Requirements	If the bidder is expected to supply hardware, it should be explicitly mentioned; otherwise, the focus is on specifying the requirements for the Department to provision. WE	The bidder is required to supply hardware or hosting infrastructure. The bidder is responsible for defining the detailed technical specifications of the required infrastructure—both hardware and system software—based on the solution architecture. The bidder will


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			understand that Hosting infrastructure including system software will be provided by the client. Will this deployment be on cloud or on premise?	make provision the necessary infrastructure, either on-premise or on cloud, as per those specifications during the deployment & maintenance phase.
26	Page No 35	Annexure- VII	Checklist for Empanelment of Bidder. Is this opportunity under an empanelment? If yes, which empanelment	There is no Empanelment of Bidder so please read as "Checklist for Bidder"
27	-	Implementation of application	Are you expecting the bidder to implement the solution at the customer place or Can the Bidder implement at their facility and host it in the customer's Infrastructure. Please allow the bidder to implement the solution at their facility and host it at the customer's servers to reduce the cost of travelling	Yes, the bidder is allowed to remotely develop the system and host it on behalf of TRTI on a suited cloud GCC Government Cloud infrastructure.
28	Page No 15	Maintenance and Support	Do the bidder need to place the resources at customer location during the maintenance period. Allow the bidder to maintain the application from remote location.	Please read point no 24 for more details.
29	Page No 14	Hardware / Infra Requirements	Where the application will be hosted (SDC/Cloud / own DC). Recommend to host the application in SDC or cloud to avoid the purchase and upgradation of infrastructure and maintaining a separate DR	Please read point no 27 for more details.
30	Page No 24	General Conditions of Contract, Point 7. Payment Schedule	After Go-Live, Bidders are getting only 30% of the overall contract value which is very less and bidders need to wait for 2 years after Go-Live to get the implementation cost. Lot of	Please read point no 12 for more details.


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			manpower is required at the implementation phase only. So we request you to pay 70% of the total value during the implementation phase and remaining 30% during the maintenance phase of 3 years (70% + 30% (6*5%))	
31	Page No 14	Software Requirement	Source code of the COTS products will not be available to share with the customers. Request to remove the clause of "Handover of Code" in the payment terms as the source code of the COTS will not be available.	We acknowledge that Commercial Off-The-Shelf (COTS) solutions are pre-packaged and commercially available products, and as such, source code handover is typically not applicable. However, it is imperative that any proposed COTS product complies with fundamental security standards, aligns with the provisions of the Digital Personal Data Protection Act (DPDPA), and remains commercially viable in the context of the project's requirements.
32	Page No 18	Prequalification Criteria – Point No 2	The Bidder should have <u>minimum average annual turnover of INR 2.5 Crores</u> from any 3 financial years from last five years. i.e. FY 2020-21, FY 2021-22, FY 2022-23, FY 2023-24, FY 2024-25. Requested to reduce the turnover criteria by considering the commercial aspect of the project. Also amend the Technical Evaluation Criteria Point No 3 marking for the same.	<p>Changes done in Pre-Qualification & Technical Evaluation criteria as per below.</p> <p><u>For Pre-Qualification –</u> Please read as “The Bidder should have <u>minimum average annual turnover of INR 1 Crore</u> from any 3 financial years from last five years. i.e. FY 2020-21, FY 2021-22, FY 2022-23, FY 2023-24, FY 2024-25”.</p> <p><u>For Technical Evaluation Criteria</u> will as per below,</p> <p>a. Average Annual Financial Turnover of the institute is at-least INR 1 Crore in any last 3 financial years from the last five Years - 10 Marks</p> <p>b. Average Annual Financial Turnover of the institute is at-least INR 1.25 Crore in any last 3 financial years from the last five Years - 15 Marks</p>

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				c. Average Annual Financial Turnover of the institute is at-least INR 1.5 Crore in any last 3 financial years from the last five Years - 20 Marks
33	Page No 20	Technical Evaluation Criteria – Point No 4	Company must have at least 15 employees with experience in blockchain projects or emerging technologies. Last month ELECTRONIC CHALLAN – CUM – RETURN submitted to EPFO (Employees' Provident Fund Organization, India). Also, declaration from Company HR head that all 15 employees are having experience in Blockchain projects with their Bio Data. EPFO is optional for 15 employees so instead of ELECTRONIC CHALLAN – CUM – RETURN asked to submit HR Self Declaration for the same.	Changed in supporting document as per below. Instead of Last month ELECTRONIC CHALLAN – CUM – RETURN submitted to EPFO (Employees' Provident Fund Organization, India) bidder can submit HR Self Declaration for the same. Also, need to submit all 15 employee bio data who are having experience in Blockchain/AI projects.

It was also decided that the queries received after the deadline as per tender & after pre-bid meeting, shall not be considered for reply and e- tender bidding. The meeting ended with a vote of thanks.


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