



NEW TOWN KOLKATA DEVELOPMENT AUTHORITY

(A Statutory Authority Under Government of West Bengal)
Plot No. DG/13, Premises No. 04-3333, Action Area-ID,
New Town, Kolkata - 700 156

Memo No: 1270/NKDA-14013/1/2022-IT SEC(NKDA)-NKDA

Date: 11/02/2025

NOTICE INVITING ONLINE TENDER (E-TENDER) NO.: 39/ EE (E) /NKDA of 2024-25 (2nd Call)

New Town Kolkata Development Authority (NKDA) invites online quotations from resourceful, reliable, bona-fide and experienced company/organization/firms for "Annual Maintenance Contract for the work of Non Fungible Token (NFT) based Record of Title (Mutation) by NKDA"

(Submission of Technical Bid & Financial Bid is through Online Mode only)

1. Important Date:

Sl.	Particulars	Date & Time
1	Date of uploading of NleT & other Documents (online) (Publishing Date)	11.02.2025
2	Pre-bid Meeting (online mode)	19.02.2025 at 12:00 noon (Zoom Meeting ID: 840 6758 2981 Passcode: jpydY5)
3	Documents download start date (Online)	11.02.2025 at 5:00 PM
4	Documents download end date (Online)	25.02.2025 at 5:00 PM
5	Bid submission start date (Online)	11.02.2025 at 5:00 PM
6	Bid submission closing date (Online)	25.02.2025 at 5:00 PM
7	Evaluation of Application (Offline)	To be decided
8	Bid opening date for Technical Proposals (Online)	27.02.2025
9	Last Date of uploading list for Technically Qualified Bidder(online)	28.02.2025
10	Date for opening of Financial Proposal (Online).	28.02.2025

- In the event of e-filing, intending bidder should download the tender documents from the website wbtenders.gov.in directly with the help of Digital Signature Certificate.
- Both Technical bid and Financial bid are to be submitted concurrently duly digitally signed in the website wbtenders.gov.in. The acceptance of lowest bid is not obligatory.
- Both Technical Bid and Financial Bid are to be submitted concurrently duly digitally signed in the website <http://wbtenders.gov.in>
- The intending Bidders shall clearly understand that whatever may be the outcome of the present invitation of Bids, no cost of Bidding shall be reimbursable by NKDA, New Town Kolkata

Development Authority reserves the right to accept or reject any offer without assigning any reason whatsoever and is not liable for any reimbursement of any cost that might have been incurred by any bidder at any stage of Bidding.

6. Prospective applicants are advised to carefully note the eligibility criteria before bidding.
7. Conditional / Incomplete bid will not be accepted under any circumstances.
8. The NKDA has right to accept / reject any of the Tender(s) without assigning any reason whatsoever and shall be final and binding.

9. GENERAL CONDITIONS:-

- 9.1. The bids received without prescribed performance certificate such as Go-Live/ Completion Certificate of NFT/Blockchain projects either completed/ in progress shall be rejected.
- 9.2. Validity of the contract: The period of contract shall be for a period of 3 (three) years from the date of issue of the Work Order. The period of development shall be proposed by the bidders.
- 9.3. Agencies are advised to go through NKDA website for understanding on the Record of Title (Mutation) by NKDA to familiarise on the nature of work realistically before quoting the rates. Prospective bidders are free to conduct additional feasibility/ functional study at their own cost and initiative.
- 9.4. Conditional tender will not be entertained and shall be deemed as 'informal' and rejected.
- 9.5. The quoted rates should include the cost of all AMC related services, cloud hosting cost in Ministry of Electronics and Information Technology (MeitY) approved cloud service provider, testing, deployment, training and maintenance for three years and any other charges related to hardware. No other charges except the quoted rate will be paid.
- 9.6. The rates should be mentioned in figures as well as in words including of taxes and levies.
- 9.7. The Tender Inviting Authority reserves the right to deny or accept or reject any or all the bids and even to annul the tendering process at any point of time without prejudice to further action and without assigning reason thereof.
- 9.8. The undersigned reserves the right to terminate the Contract at any point of time giving upon 10 (ten) days prior notice in writing without compensating the bidder in case of any breach of tender clause.

10. MINIMUM ELIGIBILITY CRITERIA:-

- 10.1. The prospective bidder having credential of experience on NFT (mandatory) and Blockchain based Application for at least 01 Years under authority of State / Central Government, State / Central Government undertaking / Statutory Bodies Constituted under the Statute of the Central / State Government/ Corporate/ Public Sector Undertakings may participate.
- 10.2. PAN Card, GST Registration Certificate, Valid Trade license/ certificate of enlistment as mentioned in point 10.3 are to be accompanied with the Technical Bid Documents.
- 10.3. Registered Partnership Deed for Partnership Firm only along with Power of Attorney is to be submitted along with the application. The company shall furnish the Article of Association and Memorandum. For Start-ups evidence of registration with DIPP, Ministry of Commerce and Industry Certificate to be submitted.
- 10.4. A prospective bidder shall be allowed to participate in a particular job either in the capacity of individual or as a partner of a firm. Consortium bids will not be allowed.

11. The existing SCOPE OF WORK (implemented previously from 2023-24):

11.1. Broad Scope of Work of the existing project:

- a. NKDA undertakes Record of Title (Mutation) through online mode under e-District platform where Citizen is applying for the said service and getting the digitally signed Certificate. In 2022, Non-Fungible Token (NFT) based Record of Title (Mutation) was introduced for all properties which are under the jurisdiction of NKDA.
- b. All the Properties (individual dwelling units/ flats/ apartments/ vacant land) are identified with a unique NFT which are to be assigned by the Authority.
- c. The scope of the project is the entire Land Area in New Town and the record of all Mutations done till date. The project was undertaken under the Smart City Mission (SCM), Govt of India (GoI) and funded by New Town Kolkata Green Smart City Corporation Limited (NKGSCCL). As such it is subject to all checks and compliances of SCM under the Ministry of Housing and Urban Affairs (MoHUA), GoI and Govt. of West Bengal.
- d. The legacy data of all NKDA mutations, HIDCO genesis land allotment, e-district data, current property registry data through API integration with ALSR Rajarhat is incorporated in the NFT.
- e. In case of transfer of Property, the Citizen applies for Mutation and the NFT/ Blockchain records are updated for further necessary changes in the NKDA's Record. An NFT card is issued to the new owner with the NFT of the old owner being invalidated.
- f. In case of devolution, the NFT is parallelly transferred to all the dependents to that Property through Fractional Ownership. In case of inheritance/ division of property in favour of multiple heirs/ owners, each heir/ owner has an identifiable NFT derived/ associated from the original NFT. The NFT functionality should follow the Mutation of properties. When a property is mutated in the name of multiple heirs, then the NFT should reflect it accordingly.
- g. There is a verifiable chain of data starting from HIDCO genesis land allotment to the co-operative/ housing society, subsequent mutation from the co-operative/ housing society to all existing flats/ houses in the plot and subsequent changes of ownership of each flat from owner to owner.
- h. The NFT is tagged with the Deed information for the validation of Data.

11.2. Detailed Scope of Work of the existing project:

- a. A private blockchain has been created for the NFT application that is not dependent on any cryptocurrency for any transactions.
- b. Creation of NFT hash code and unique identification number for all Properties.
- c. Integration with the Record of Title (Mutation) under e-District. Any change to Mutation is in the NFT. It is an API integration.
- d. Updating of NFT Records in case of transfer of Property.
- e. Validation of NFT Records by the Authority- All mutations are incorporated with the blockchain and are approved by the designated persons/ organisations as decided by NKDA.
- f. Provision of recovery of NFT Records in case of lost/ missing of the Document.
- g. Integration with acquiring bank of NKDA/HIDCO for payment collection. (in scope but not implemented)
- h. The mutation charges prevalent in NKDA area must be credited to NKDA via NFT post every applicable mutation. (in scope but not implemented)
- i. Mutation Charges must be as per NKDA rules. Provision must be there in solution to change the Mutation Rate as changed by NKDA.

- j. NKDA must have access to a customisable suite of smart contracts that enables the issuance, management such as blocking and transfer of NFTs.
- k. All NFT transactions and transfers must be visible and tracked in a dashboard. NKDA, HIDCO and any other agencies selected by NKDA can have access to the dashboard. Citizens are not to have access to the dashboard. However, on scanning the NFT QR code citizens can view the details of the NFT such as associated with the land/ property.
- l. NFT Token: The NFT is to have a printout in a card format that can be printed in any printer. It must contain the NFT number/ QR code whose data can be accessed through authentication (Mobile OTP etc). Mutation certificate may incorporate the NFT QR code.
- m. Integration with ICCC (Integrated Command and Control Centre) through API for real time monitoring.
- n. Design of workflow and secure intuitive application for the project.
- o. Development of Mobile App for citizens to scan the physical NFT card and access Mutation and Property details data therein.

11.3. Detailed Scope of Work under this tender

(for AMC of the project mentioned in Clause 11.1 and 11.2):

1. As mentioned in Clause 11.1 and 11.2, the project 'Design, Development, Testing and Maintenance of NFT based Property identification & integration with Record of Title (Mutation)' is implemented with AMC for the existing project expiring on December 12, 2024. The project is now live with lean support from the incumbent vendor.
2. Now, AMC for the existing implemented application is to be undertaken.
3. **Hardware maintenance:** Repairing, troubleshooting, and rectifying the existing card printer. Supplying spare parts for the printer (1 nos.).
4. **Software maintenance:** Installing, updating, and configuring software (NFT application, Google Cloud Server etc.)
5. **Data Management:**
 - a. Helping NKDA/ users restore or retrieve data.
 - b. Providing data to NKDA on Mutations as and when requested.
 - c. Providing regular reports on the number of mutations, NFTs issued, mutation fees payable to NKDA etc. and performance of the system.
6. **Security Audit:**
 - a. One time and annual Security Audit of the Application by CERT-In empaneled auditor.
 - b. Compliance with the Security Auditor and submission of compliance report to NKDA
 - c. Assisting Auditors from STQC, QCI, CAG etc. to audit the project in terms of technical, cybersecurity and functional scope. Installing and updating anti-virus/ security patches.
 - d. Providing regular reports on the health and performance of the system.
7. **Project scope management and Change Management**
 - a. Study of the existing application with NKDA and developing a plan for improvement of the application.
 - b. Conceptualizing, developing and implementing the identified enhancement features.
 - c. Implementing enhancements and additional features to the application as and when requested by NKDA.
 - d. Defining and outlining all work included in the project, such as objectives, tasks, outputs, and deadlines

- e. Data Collection from NKDA, HIDCO, ADSR Rajarhat and other private vendors as advised by NKDA from time to time.
- f. Data Cleaning of the existing and new data and identify discrepancies.
- g. API integration of the existing application with the ICCC of NKDA.
- h. Maintenance of the Mobile App developed for the application and incorporation of addition features to it as requested by NKDA.
- i. Migration of the application and all associated data to the State Data Centre or any other cloud/ on-premises server if requested by NKDA.
- j. The bidders will submit the details of manpower to be deployed for the project work before undertaking the work i.e. name, address, mobile no. etc.
- k. Weekly progress-report of project work undertaken will have to be submitted to NKDA on every Monday showing the details of work undertaken during the period.
- l. Develop any feature mentioned in Clause 11.1 and 11.2, but yet to be implemented and undertake enhancements for the same.

12. Payment Terms:

The progressive and stage-wise payment will be made depending upon the executed work as follows:

SL	Action Item	Payment	Timeline	Deliverables
Handover and Takeover Phase from existing vendor				
1	Knowledge Transfer of: <ol style="list-style-type: none"> 1. 'Non Fungible Token (NFT) based Mutation for NKDA' web portal and application 2. Functional Requirements Specifications 3. System Requirements Specification 4. Source Code 5. Cloud Server Specifications and Credentials 6. Liaison with existing e-district vendor such as TCS, NKDA, HIDCO and other stakeholders 7. Understand the scope of NKDA's upcoming e-district system and the mutation module therein and scope for API based integration 	10 %	30 days	<ol style="list-style-type: none"> 1. Signed SRS with design diagram. 2. Source Code with documentation 3. Hosting details of Cloud empaneled under the Ministry of Electronics and Information Technology, Government of India. An updated backup copy of the solution to be made available in NKDA server as well.

	<p>8. API integration of existing application with the Integrated Command and Control Centre (ICCC) of NKDA</p> <p>9. Report Table Structures and Database Schemas</p> <p>10. Existing Project documents such as but not limited to: Training Manuals, Security Audit Report, Project Databases, all project deliverables, RFP, DPR etc.</p> <p>11. Minor changes in the existing application.</p> <p>Asset Transfer of:</p> <p>1. NFT Card Printer Machine and unprinted cards</p>			<p>4. SSL certificate details,</p> <p>5. NFT management module details</p> <p>6. UI/UX Design document.</p> <p>7. Mobile App details, design and document with source code.</p>
Maintenance Phase				
2	Maintenance for 0-12 th Month, 13-24 th month and 25-36 th month.	30 %	At the end of each Year	<p>1. API in JSON format for integration with NKDA ICCC.</p> <p>2. Security Audit report of the application.</p> <p>3. Change management document.</p> <p>4. Performance Certificate certified by NKDA</p> <p>5. Updated Source Code.</p>

				6. Change management document.
				7. Preventive Maintenance Report.

No financial claim in case of any delay in payment will be entertained.

13. The bidders will submit the details of manpower to be deployed for the project work before undertaking the work i.e. name, address, mobile no. etc.

14. Weekly progress report of project work undertaken will have to be submitted to NKDA on every Monday showing the details of work undertaken during the period.

15. Contract details Period:

15.1. Acceptance of work order and undertaken the minor changes.

15.2. Annual Maintenance Period: 3 yrs. from the date of Go-Live

15.3. Maintenance Support:

- a. **Severity 1:** Production application down or major malfunction resulting in a product inoperative condition. Response time: 30 mins and Resolution time: 2 hours.
- b. **Severity 2:** Critical loss of application functionality or performance resulting in a high number of users unable to perform their normal functions. Response time: 30 mins and Resolution time: 4 hours.
- c. **Severity 3:** Minor loss of application functionality or performance resulting in a high number of users impacted to perform their normal functions. Response time: 30 mins and Resolution time: 6 hours.
- d. **Severity 4:** Product feature requests, how-to questions. Response time: 30 mins and Resolution time: 8 hours.
- e. The support is expected in all office hours. However, in case of Severity 1, 2 and 3, the support is also expected in weekend.

16. DOCUMENTS TO BE SUBMITTED:

1. Name of the firm & Owner	
2. (with Tel./Mob. Nos.)	
3. Email Id	
4. Office Address with Tel./Fax/Mob Nos.	
5. Email Id	
6. Contact Person(s) Name with	
7. Tel/FAX/Mob Nos.	
8. Email ID	
9. Audited financial statement / audited annual report of the last three financial years.	

Or DIPP, Ministry of Commerce and Industry registered Start-Up Certificate	
10. Experience on NFT and Blockchain based Application for at least 01 Years	
11. Valid Trade Licence.	
12. Pan Card	
13. GST Registration Certificate	
14. Work Orders/ Work Completion Certificates as Credential	
15. Filled up Form-I	
16. Filled up Form-II	
17. Filled up Form-III	
18. Filled up Annexure-I	
19. CV of Project Team	
20. Any other	

17. MODE OF SELECTION

The evaluation of the Technical bids will be carried out in the following manner:-

- (i) Technical Bids will be evaluated of only those bidders who fulfil the eligibility Criteria.
- (ii) Required document list.
- (iii) Past experiences.

18. BID PRICES

- (i) The intending bidder has to quote the gross amount to be paid towards application development and maintenance fee per annum (separately) to NKDA inclusive of GST and other taxes.
- (ii) The intending bidder are required to quote the rate online in the BCQ under the financial folder only and at no other document or form. Disclosure of rate at any other folder other than the financial folder will lead to the rejection of the bid.

19. OPENING OF TENDER:

Tender shall be opened as per Date and Time Schedule. In case Tender opening date is declared HOLIDAY, Tender shall be received and opened on next working day at the same time specified in the EoI document.

19.1. The successful bidder whose bid is accepted shall make formal agreement along with bid documents in triplicate, within 7 (seven) days from the date of issue of LOI by, New Town Kolkata Development Authority. If the successful bidder fails to perform the formalities within the specified period the Tender is liable to be cancelled and the Bid Security will be forfeited.

19.2. The offer shall remain valid for 180 days from the date of opening of the tender.

19.3. The bidders are bound by the terms & conditions of EOI document which forms a part and parcel of this contract.

19.4. Prospective applicants are advised to note carefully the eligibility criteria before bidding.

19.5. Conditional / Incomplete bid will not be accepted under any circumstances.

19.6. Any Corrigendum, notification in connection with this NIT will be published in the official website of New Town Kolkata Development Authority (www.nkdamar.org). The applicants are requested to follow the websites for such notifications, corrigendum etc.

19.7. The accepting authority reserves the right to reject any or all the bids without assigning any reasons and will not be bound to accept either the lowest bid or any of the bids.

20. TECHNICAL AND FINANCIAL EVALUATION OF BIDS: Evaluation shall be done through QCBS method. The Evaluation Scorecard is as follows.

Technical Scorecard			
Sl.	Criteria	Maximum Score	Supporting document to be submitted
1	Execution Team: Experience on NFT	20	CV of development team (Project Manager with NFT/Blockchain exp. - 5 Marks, Senior Technical Consultant - 3 Marks, IT Infrastructure Consultant-3 marks, ICT / Network Expert - 3 Marks, Blockchain Developer - 3 Marks, Software Developer - 3 Marks)
2	Bidder's experience in Design and Development of Blockchain based applications within India in Central / State Government / Urban Local Bodies / Public Sector Undertaking companies within last 05 years reckoned from the tender floating date.	20	Copy of Work Order/ Completion Certificate duly attested by the authorised signatory submitting the bid -For 1 no. of application: 5 marks -For 2-3 no. of application: 10 marks -For 4-5 no. of application: 15 marks -For more than 5 applications: 20 marks
3	Bidder has successfully executed NFT (Non-Fungible Token) and Smart Contract based Private blockchain based projects within India in Central / State Government / Urban Local Bodies / Public Sector Undertaking companies within last 05 years reckoned from the tender floating date.	20	No applications: 0 marks For 1 or more applications: 20 marks
4	Bidder should be empanelled as a blockchain technology partner / provider with any state or central government owned entity / PSU which specializes in delivering E-governance solutions to government clients in India within last 05 years reckoned from the tender floating date.	20	No empanelment: 00 marks For 1 or more empanelment: 20 marks
5	Experience on Design and Development of applications for government sector in any	20	Copy of Work Order/ Completion Certificate duly attested by the authorised signatory submitting the bid

type of e-district/ e-governance services.		-For 1 no. of application: 5 marks -For 2-3 no. of application: 10 marks -For 4-5 no. of application: 15 marks -For more than 5 applications: 20 marks
Total	100	

- 20.1. The Financial offer of only those bidders who qualify with 50 points in technical score will be opened for evaluation.
- 20.2. The highest financial score of 100 will be awarded to the technically qualified bidder who quotes the least amount of financial bid (including maintenance cost per annum) and the other qualified bidders will get proportionately lower score as follows:
- 20.3. If the financial offer of least cost bidder is L and that of another higher cost bidder is N then the financial score of the higher cost bidder FS will be $FS=100 \times (L/N)$
- 20.4. The technical score will be given a weightage of 70% and there will be a 30% weightage on the financial score and final selection will be made on the basis of the composite score as follows:
- 20.5. If the Technical score of a bidder out of 100 is T where $T > 50$, and their Financial Score calculated as FS out of 100, then the final CQCBS score of this bidder will be: $S=70\%$ of T+30% of FS
- 20.6. The bidder scoring highest composite score will be the selected bidder subject to compliance with all other relevant terms and conditions.


Executive Engineer (E)

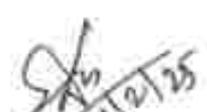
New Town Kolkata Development Authority

Memo No: 1270/NKDA-14013/1/2022-IT SEC(NKDA)-NKDA

Date: 11/02/2025

Copy forwarded for information and necessary action to :-

1. Chief Executive Officer, New Town Kolkata Development Authority
2. Administrative Officer (R&IT), New Town Kolkata Development Authority
3. Chief Engineer, New Town Kolkata Development Authority
4. Superintending Engineer, New Town Kolkata Development Authority
5. Finance Officer, New Town Kolkata Development Authority.
6. System Manager, New Town Kolkata Development Authority.
7. Assistant Estate Manager (Mutation), NKDA
8. PA to Hon'ble Chairman, New Town Kolkata Development Authority.
9. Office Notice Board.
10. NKDA official website. (www.nkdamar.org)


Executive Engineer (E)

New Town Kolkata Development Authority

FORM – I
CREDENTIAL CERTIFICATE

1	Name of the work	:	
2	Name of the client	:	
3	Work Order Value	:	
4	Duration of the project	:	
5	Date of commencement of work	:	
6	Date of completion as per work order	:	
7	Amount after full completion of Work (i.e the total value of work already executed)	:	

I hereby declare that all the statements made above are true to my knowledge. I also understand that any discrepancy found in the above statement will render me liable for cancellation of my tender.

(Signature of the bidder)

Note:

1. Completion Certificate / Go- Live certificate for fully (100%) completed works will only be considered.

FORM – II

STATEMENT ON ANNUAL TURNOVER FROM CONTRACTUAL BUSINESS

This is to certify that the following statement is the summary of the audited Balance sheet arrived from contractual business in favour of for the three consecutive years.

Sl. No.	Financial		Remarks
	Assessment Year	Turnover (rounded of)	
1	FY 2023-24		
2	FY 2022-23		
3	FY 2021-22		
Total			
Average Turnover			

Signature of the Bidder

FORM-III
DETAILS OF THE BIDDER

Sl. No.	Particulars	Details
1	Name of Tendering Company/ Firm/ Agency (Attach certificates of registration)	
2	Name of Proprietor / Director of Company/ Firm / Agency	
3	Full Address of Registered Office, if any	
(i)	Telephone No./ FAX	
(ii)	Mobile No.	
4	Full Address of operating/ Branch Office	
(i)	Telephone No./ FAX	
(ii)	Mobile No.	
5	E-mail Id	
6	Banker of Company/Firm/ Agency with full address (Attach evidence)	
7	PAN No. (Attach self-attested copy)	
8	GST Registration No.	

(Signature of the Bidder with date and Seal)

Annexure I: Confidentiality Undertaking

(In the letterhead of the bidder)

Confidentiality Undertaking

Ref No: _____

Date: 07/07/2024

The Executive Engineer (E)

New Town Kolkata Development Authority,
Administrative Building, Plot No - DG/13,
Premises No - 04-3333, Action Area - II,
New Town, Kolkata - 700156

Dear Sir,

We acknowledge that during the course of bidding for Notice Inviting Tender for 'Annual Maintenance Contract of Non Fungible Token based Record of Title (Mutation) by NKDA for 3 years', we shall have access to and be entrusted with the Confidential Information. In this letter, the phrase "Confidential Information" shall mean information (whether of a commercial, technical, scientific, operational, administrative, financial, marketing, business, or intellectual property nature or otherwise), whether oral or written, relating to NKDA and its business that is provided to us pursuant to this Undertaking.

In consideration of you providing opportunity to us to bid, and for this purpose making Confidential Information available to us, we agree to the terms set out below:

1. We shall treat all Confidential Information as strictly private and confidential and take all steps necessary (including but not limited to those required by this Undertaking), to preserve such confidentiality.
2. We shall use the Confidential Information solely for the preparation of our response to the EoI and not for any other purpose.
3. We shall not disclose any Confidential Information to any other person or firm, other than the following: -
 - With your prior written consent, such consent not to be unreasonably withheld;
 - To the extent that such disclosure is required by law;

- To the extent that such disclosure is required by any Rule or requirement of any regulatory authority with which we are bound to comply; and
 - To our professional advisors for the purposes of seeking advice. Such professional advisors will be informed of the need to keep the information confidential.
4. We shall not disclose or divulge any Confidential Information to any other client of _____ (name of service provider / implementation partner/ tenderer)
 5. This Undertaking shall continue perpetually unless and to the extent that you may release it in writing and we shall be liable for any breach of the terms and conditions contained herein.
 6. This Undertaking shall be governed by and construed in accordance with Indian Law and any dispute arising from it shall be subject to the exclusive jurisdiction of the Kolkata courts.

Yours Sincerely

Signature and Stamp of
Company Authorised
Signatory Designation:
Date