



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: 6406 /NKDA-14013/1/2022-IT SEC(NKDA)-NKDA

Date: 04/08/2022

e-Expression of Interest (EOI) NO.: 01/ EE (E) /NKDA of 2022-23

New Town Kolkata Development Authority (NKDA) invites online quotations from resourceful, reliable, bona-fide and experienced company/organization/firms for “**Design and Development of NFT based Record of Title (Mutation) by NKDA**”

(Submission of Technical Bid & Financial Bid is through **Online**)

1. Important Date:

Sl. No.	Particulars	Date & Time
1.	Date of uploading of NIEQ & other Documents (online) (Publishing Date)	04/08/2022
2.	Documents download start date (Online)	04/08/2022
3.	Documents download end date (Online)	05/09/2022
4.	Bid submission start date (Online)	04/08/2022
5.	Bid submission closing date (Online)	05/09/2022
6.	Evaluation of Application (Offline)	To be decided Venue: NKDA Conference Room, 4 th Floor, NKDA Bhawan, Near Kolkata Gate, DG Block, AA-I, New Town Kolkata
7.	Bid opening date for Technical Proposals (Online)	06/09/2022
8.	Last Date of uploading list for Technically Qualified Bidder(online)	09/09/2022
9.	Date for opening of Financial Proposal (Online).	09/09/2022

- 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>

5. 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 note carefully 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 Work Order/ 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 1 (one) year 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 development, cloud hosting cost in Ministry of Electronics and Information Technology (MeitY) approved cloud service provider, testing, deployment, training and maintenance for one year 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 annual 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 or 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/ Private Sector Organisations 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. SCOPE OF WORK:

11.1. Currently NKDA is undertaking 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. Now, as directed, the Non-Fungible Token (NFT) may be introduced for all properties which are under the jurisdiction of NKDA.

11.2. Broad Scope of Work:

- a. All the Properties (individual dwelling units/ flats/ apartments/ vacant land) are identified with a unique NFT which are to be assigned by the Authority.
Land Area in New Town is 7,000 acres
Mutation done till date is 27,000 since 2011
The legacy data of all NKDA mutations is to be incorporated in the NFT
- b. In case of transfer of Property, Citizen has to collect and update the NFT Information for further necessary changes in the NKDA's Record.
- c. In case of devolution, the NFT will be 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 must have 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
- d. The NFT will tagged with the Deed Information for the validation of Data.

11.3. Proposed Scope of Work:

- a. Creation of a private blockchain for the NFT application that is not dependent on any cryptocurrency for any transactions.
- b. Creation of NFT hash code for all Properties.
- c. Integration with the Record of Title (Mutation) under e-District. Any change to Mutation must be reflected in the NFT. It shall be an API integration.
- d. Updating of NFT Records in case of transfer of Property.
- e. Validation of NFT Records by the Authority- Any mutation shall be incorporated with the blockchain and shall be approved by a minimum of three 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.
- h. The mutation charges prevalent in NKDA area must be credited to NKDA via NFT post every applicable mutation. Mutation Charges must be as per NKDA rules. Provision must be there in solution to change the Mutation Rate as changed by NKDA
- i. NKDA must have access to a customisable suite of smart contracts that enables the issuance, management such as blocking and transfer of NFTs.
- j. 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
- k. 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.
- l. Integration with ICCC (Integrated Command and Control Centre) through API for real time monitoring.
- m. Design of workflow and secure intuitive application for the project.

12. Payment Terms:

- 12.1. After Go-live and Satisfactory Performance of the System – 70%.
- 12.2. After successful running of the system from 03 months after the Go-Live – 20%
- 12.3. The rest 10% will be release at the end of maintenance period, i.e., 01 Year after Go-Live.

13. Security Deposit:

The milestones are as per payment terms in clause 12. In each payment milestone 2% security shall be deducted from the running bill. The security deposit shall be paid back after one month from the date of end of contract (maintenance period)

- 14. 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.
- 15. 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.

16. Deliverables:

- a. SRS
- b. Source Code
- c. Hosting to be made in Cloud empanelled 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.
- d. SSL
- e. External audit report certifying that the developed application incorporates blockchain and NFT technology
- f. Security Audit must be conducted by the Agency.
- g. NFT management module
- h. API Development in JSON format for integration with NKDA ICCC.
- i. UI/UX Design of the Dashboard
- j. Mobile App

17. Completion Period:

17.1. Go-Live of the application is conditional upon delivery of SSL Certification and Security Audit.

17.2. Maintenance Period: 1 yr. from the date of Go-Live

17.3. 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.

18. DOCUMENTS TO BE UPLOADED:

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 or Blockchain based Application for at least 01 Years	
11. Valid Trade Licence.	
12. Pan Card	
13. GST Registration Certificate	

19. MODE OF SELECTION

As mentioned in clause no. 22, subject to submission of documents as mentioned in clause 10.

20. 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 BOQ 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.

21. 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.

- 21.1. 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.
- 21.2. The offer shall remain valid for 180 days from the date of opening of the tender.
- 21.3. The bidders are bound by the terms & conditions of EOI document which forms a part and parcel of this contract.
- 21.4. Prospective applicants are advised to note carefully the eligibility criteria before bidding.
- 21.5. Conditional / Incomplete bid will not be accepted under any circumstances.
- 21.6. 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.
- 21.7. 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.

22. 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 Blockchain/ NFT	10	CV of development team
2	Experience on Design and Development of Blockchain/ NFT application	20	Copy of Work Order/ Completion Certificate duly attested by the authorised signatory submitting the bid -For 1 no. of application: 10 marks -For 2-3 no. of application: 15 marks -4 or more no. of application: 20 marks

3	Duration of application development.	20	Completion time: -Upto 6 months: 20 marks -More than 6 months and upto 9 months: 15 marks -More than 9 months: 10 marks
4	Demonstration of the online application: -Security Features with appropriate certification -Ease of Use -Adequacy of MIS -All features as mentioned in the Scope of Work -Scalability	50	Demonstration of the application before a committee formed by NKDA for this purpose
Total		100	

- 22.1. The Financial offer of only those bidders who qualify with 50 points in technical score will be opened for evaluation.
- 22.2. The highest financial score of 100 will be awarded to the technically qualified bidder who quotes the least amount of financial bid (including application development and maintenance cost per annum) and the other qualified bidders will get proportionately lower score as follows:
- 22.3. 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 $FS=100 \times (L/N)$
- 22.4. 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:
- 22.5. 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
- 22.6. $S = 70\% \text{ of } T + 30\% \text{ of } FS$
- 22.7. 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: 6406 /NKDA-14013/1/2022-IT SEC(NKDA)-NKDA

Date: 04/08/2022

Copy forwarded for information and necessary action to :-

1. Chief Executive Officer, New Town Kolkata Development Authority
2. Administrative Officer-I, New Town Kolkata Development Authority
3. The Finance Officer, New Town Kolkata Development Authority.
4. System Manager, New Town Kolkata Development Authority.
5. PA to Hon'ble Chairman, New Town Kolkata Development Authority.
6. Office Notice Board.
7. NKDA official website. (www.nkdamar.org)



Executive Engineer (E)
New Town Kolkata Development Authority