



OFFICE OF THE EXECUTIVE ENGINEER  
PROJECT DIRECTORATE OF  
COMMISSIONER KARACHI

4, Club Road, Karachi. Tel No. 99205660, Fax 99205638  
Email: [pdcommissioneratekarachi@gmail.com](mailto:pdcommissioneratekarachi@gmail.com)

No: EE/PD/CKD/ 191 /2025-26

Dated: 19/12/2025

## **CORRIGENDUM**

This is to inform all concerned that tenders for the work "*Integration, Automation & Enhancement of Domicile & PRC System in Karachi Division (ADP No. 2832 of 2025-26)*" were called vide NIT No. EE/PD /CKD/12/2025-26, Dated: 11-12-2025, through print media. Accordingly tender appeared in the following Newspapers viz. Awami Parchar, Express, Express Tribune, Halchal, Kaleem, Kawish.

Following additions / amendments have been made:

### 1. New Schedule of tender:

Submission of Tenders	From the date of publishing to 14-01-2026 upto 11:00 A.M	EPAD System and office of the Executive Engineer Project Directorate of Commissioner Karachi
Opening of Tender (Technical Proposal)	Dated: 14-01-2026 At 11:30 A.M	EPAD System and office of the Executive Engineer Project Directorate of Commissioner Karachi

2. Pre-Bid meeting will be held on dated: 29-12-2025 at 11:30 AM in the office of Executive Engineer, Project Directorate of Commissioner Karachi, 4-Club Road Main Commissioner Office Karachi.

The other terms & conditions and instructions for submission will remain same.

  
**EXECUTIVE ENGINEER**  
Project Directorate of  
Commissioner Karachi



# OFFICE OF THE EXECUTIVE ENGINEER PROJECT DIRECTORATE OF COMMISIONER KARACHI

4, Club Road, Main Commissioner Office Karachi.  
Tel No. 99205660, Fax 99205638,  
Email: [pdcommissioneratkarachi@gmail.com](mailto:pdcommissioneratkarachi@gmail.com)

No. EE/PD/CKD/12/2025-26

Dated: 11/12/2025

## NOTICE INVITING TENDER

The office of the Executive Engineer Project Directorate of Commissioner Karachi being the procuring agency intends to invite E-bids through E-Pak Acquisition and Disposable System (EPADS) from intending I.T. / Software / Web Development Organizations / Firms on Single Stage Two Envelope Method under Rule 46(2) of SPPRA Rules 2010 (amended upto-date), regarding Procurement for the under mentioned work on Turn-Key basis.

Sr. No	Name Of Work	Cost of Bidding Documents	Completion Time	Earnest Money / Bid Security
01	INTEGRATION, AUTOMATION & ENHANCEMENT OF DOMICILE & PRC SYSTEM IN KARACHI DIVISION (ADP NO. 2832 OF 2025-26)	Rs. 5000/-	(12) Months	Rs. 5.00 (M)

1. Bidding documents containing detailed Terms & Conditions can be viewed / downloaded from <https://portalsindh.eprocure.gov.pk>.
2. Electronic Bids be submitted through EPADS ONLY; manual bids will not be entertained. Interested Bidders are required to register themselves on EPAD System at the link: <https://sindh.eprocure.gov.pk/#/supplier/> registration for submission of electronic-bids.
3. The bids prepared in accordance with the instruction in the bidding documents must be submitted on EPADS from date of publishing to 01-01-2026 up to 11:00 A.M which will be opened on same day at 11:30 A.M at the Office of the Executive Engineer, Project Directorate of Commissioner Karachi, 4-Club Road Main Commissioner Office Karachi.
4. Technical Proposals of the participating bidders will be opened on 01-01-2026 at 11:30 AM in presence of the Procurement Committee of Project Directorate of Commissioner Karachi, or the authorized representatives of the bidders.
5. Financial bids of only technically qualified bidders shall be opened, subsequently in accordance with SPPRA Rules, 2010 (updated till to date). The bidder will be selected on "Most Advantageous Bid" basis.
6. In case of any difficulty prospective bidders may contact EPADS Helpline 051-111-137-237 during working days / hours.

## **ELIGIBILITY CRITERIA (MANDATORY):-**

- i) Active Registration with Pakistan Engineering Council in the C-4 category or above having specialized codes EE-02 & EE-09 (Attach valid PEC License).
- ii) Active Registration with Income Tax Department (FBR) and Sindh Revenue Board (SRB), (Attach latest copy of NTN, SRB Registration & CNIC).
- iii) The Bid Security / Earnest money of **Rs. 5.00 (M)** on account of firms name in the shape of call deposit or pay order (original) issued from scheduled bank at the time of submission of bidding document in favor of Executive Engineer, Project Directorate of Commissioner Karachi.
- iv) Undertaking on e-stamp affidavit that the firm is not Black listed by any Government Department or Procuring Agency, have ability to disaster recovery requirement, have backup services having backup provisions for all types of backups, 24/7 support escalation matrix. Affidavit that all documents / particulars are correct.

## **2. OTHER CONDITIONS: -**

- a) Experience of at least one similar nature of work having minimum cost 80% of the estimated cost of the work or two works of 50% cost of the work executed during past 3 years duly supported with successful completion certificate(s) from respective department or private organizations. (SPPRA ID may be provided incase of Government Contractor)
- b) Average annual financial turn over not less than equivalent cost of the work during last three years.
- c) Annual audit report by registered audit firm (ICAP Registered Audit Firm), FBR Tax Return, SRB Tax Return of last financial year i.e. 2024-25.
- d) Bids will also be rejected if received after specified date & time, incomplete bid, as per instructions given in bidding documents, over writing or conditional bid, bid submitted by black listed firms, bids without seal & stamp.
- e) For hard wares the bidder should submit authorized distribution letter or partnership with manufacturer of particular product.
- f) The firm who has applied for this tender at EPADS is also required to submit 5 copies of same Technical proposal in office of procuring agency on day & time of Bid Opening.
- g) The technical proposals of bidders screened out from above mandatory criteria will further be evaluated on the basis of scoring system. If a bidder fails to obtain a total of 75% score then he will not be qualified.
- h) Total bid amount as well as the rate of items must be filled both in figures and words and incase any correction is made by the contractor himself then each correction must be initialed by contractor otherwise the Tenders will liable to be rejected / cancelled.
- i) The Income tax, S.R.B. Tax & G.S.T Tax at prevailing Government rate will be deducted from each bill. The bidder should quote their rates inclusive of all above taxes imposed by Government. No separate payment for SRB Tax or Income Tax or Sales Tax will be paid.

- i) Income Tax, Sales Tax, SRB Tax or any other Tax levied by Government if changed at any time will be deducted from successful bidder as per changed rates fixed by Government accordingly.
- j) The competent Authority reserves the right to reject any or all the tenders in accordance with SPPRA Rules 2010 (Amended upto date).

/

**EXECUTIVE ENGINEER**  
**PROJECT DIRECTORATE OF**  
**COMMISSIONER KARACHI**

Copy forwarded with Compliments for Information to:-

1. The Secretary Information Technology Department, Government of Sindh Karachi.
2. The Project Director, Project Directorate of Commissioner, Karachi.
3. The Director (CB) Sindh Public Procurement Regulator Authority, Government of Sindh, Karachi.
4. PS to Commissioner Karachi.
5. Members of Procurement Committee.

  
**EXECUTIVE ENGINEER**  
**PROJECT DIRECTORATE OF**  
**COMMISSIONER KARACHI**

**ANNUAL PROCUREMENT PLAN (2025-26)**  
**(WORKS, GOODS & SERVICES)**

**DEPARTMENT NAME:-      OFFICE OF THE EXECUTIVE ENGINEER, PROJECT DIRECTORATE, OF COMMISSIONER, KARACHI.**

S. NO	Description of procurement	Quantity where Applicable	Funds Allocated (2025-26)	Source of funds (ADPs Non ADPs)	Proposed Procurement Method	Timing of Procurement				Remarks
						1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	
	<b>OFFICE OF THE PROJECT DIRECTORATE, OF COMMISSIONER, KARACHI.</b>									
1	INTEGRATION, AUTOMATION & ENHANCEMENT OF DOMICILE & PRC SYSTEM IN KARACHI DIVISION (ADP NO. 2832 OF 2025-26)		100.00 (Million)	ADP	Single Stage Two Envelope		✓			



**ASSISTANT ENGINEER**  
 Project Directorate of  
 Commisioner Karachi

**SUBJECT: MINUTES OF MEETING REGARDING PREPARATION OF BIDDING DOCUMENTS OF ADP SCHEME NAMELY "INTEGRATION, AUTOMATION & ENHANCEMENT OF DOMICILE & PRC IN KARACHI DIVISION (ADP NO. 2832 OF 2025-26)" HELD ON 20-11-2025 UNDER THE CHAIRMANSHIP OF PROJECT DIRECTOR OF COMMISSIONER KARACHI.**

Meeting Agenda : Preparation of Bidding Document  
Date / Time : 20-11-2025 at 11.30 AM  
Venue : Office of the Project Directorate of Commissioner Karachi.

The list of participants is attached.

The meeting started with greetings & introduction. The Project Director of Commissioner Karachi welcomed the participants and apprised the forum regarding agenda of the meeting.

The Project Director / Chairman of Procurement Committee briefed the forum regarding scope of the scheme, whereby he told that a software need to be developed for centralized system of automation of domicile & PRC in Karachi Division.

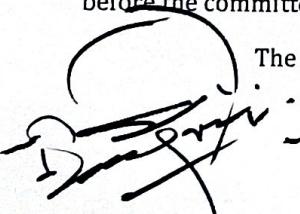
Member of the procurement Committee / IT expert Mr. Ishfaque Ahmed Khanzada emphasized that system should be centralized to avoid max: human intervention with link to DC Offices thereby classified cloud based system may be opted centrally at Commissioner Karachi Office. While calling NIT, he suggested for opting SPPRA-Bidding document of services rather than bidding documents of works or goods.

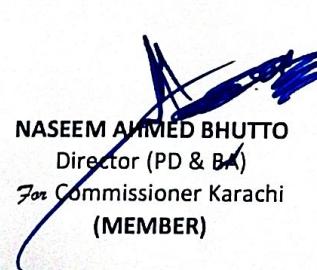
Other members of procurements committee also gave their valuable input regarding features of software like the system would be integrated with NADRA which may charge nominal fees to fetch and share data.

**DECISION:**

The chairman requested the member Mr. Ishfaque Ahmed Khanzada being I.T expert, to prepare & send draft bidding document of services within 3 working days keeping in view the scope of PC-I, TORs with NADRA and other features discussed in meeting for placing before the committee in its next meeting.

The meeting ended with vote of thanks to & from the chair.

  
ISHFAQE AHMED KHANZADA  
I.T. Expert University of Karachi  
(MEMBER)

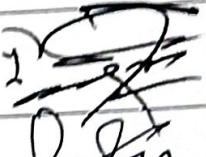
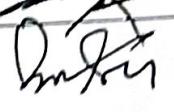
  
NASEEM AHMED BHUTTO  
Director (PD & BA)  
For Commissioner Karachi  
(MEMBER)

  
RABIA SYED  
Assistant Commissioner (HQ)  
For Commissioner Karachi  
(MEMBER)

  
SANJAY RAJA  
Executive Engineer  
Project Director Of  
Commissioner Karachi  
MEMBER / SECRETARY

  
GHOUS BUXT ABBASI  
Project Director  
Project Directorate Of  
Commissioner Karachi  
CHAIRMAN

ATTENDANCE SHEET OF MEETING OF "INTEGRATION, AUTOMATION &  
ENHANCEMENT OF DOMICILE & PRC SYSTEM IN KARACHI DIVISION  
(ADP NO. 2832 OF 2025-26)" HELD ON 20.11.2025 UNDER THE CHAIRMANSHIP  
OF PROJECT DIRECTOR OF COMMISSIONER KARACHI.

S.NO.	NAME OF OFFICER	DESIGNATION	CONTACT NO.	SIGNATURE
1.	Ghous Roux Abbasi	P. D.	0333 - 2220528	
2.	Sanjay Raja	Ex: Engineer	0333-7575244	
3.	NAEEM A. BHUTTO	Dir, (DP/BA)	0300 - 3410 650	
4.	Imfagne Khanzade.	N.E (U.K)	0333 - 3798606	
5.	Rabie Syed	AC (HQ)	0301-2976596	



# OFFICE OF THE COMMISSIONER KARACHI DIVISION KARACHI

4, Club Road, Main Commissioner Office, Karachi.  
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Email: [pdccommissioneratkarachi@gmail.com](mailto:pdccommissioneratkarachi@gmail.com)

## MINUTES OF MEETING

**SUBJECT: - MINUTES OF 2ND MEETING REGARDING PREPARATION OF BIDDING DOCUMENTS OF ADP SCHEME NAMELY "INTEGRATION, AUTOMATION & ENHANCEMENT OF DOMICILE & PRC SYSTEM IN KARACHI DIVISION (ADP NO. 2832 OF 2025-26)" HELD ON 26-11-2025 UNDER THE CHAIRMANSHIP OF PROJECT DIRECTOR OF COMMISSIONER KARACHI.**

Meeting Agenda : Preparation of Bidding Documents  
Date / Time : 26-11-2025 AT 11:30 AM  
Venue : Office of the Project Directorate of Commissioner Karachi.

The list of participants is attached.

The meeting started with greetings & introduction. The Project Director of Commissioner Karachi welcomed the participants and apprised the forum regarding agenda of the meeting.

The member Mr. Ishfaque Ahmed Khanzada shared the draft bidding document prepared by him.

The other members raised some queries regarding criteria for evaluation of technical proposal, selection of bidding documents and suggested to take documents of TURN-KEY Basis instead of cloud services. It was further suggested to take opinion of SPPRA representative and I.T. expert of Information Technology, Science & Technology Department in order to avoid any confusion.

### DECISION:

It was decided that the draft document may be discussed with SPPRA representative as well as I.T. expert of Information Technology, Science & Technology Department and their suggestions may be incorporated in the bidding document.

  
ISHFAQUE AHMED KHANZADA  
I.T. Expert University of Karachi  
(MEMBER)

  
NASEEM AHMED BHUTTO  
Director (PD & BA)  
For Commissioner Karachi  
(MEMBER)

  
RABIA SYED  
Assistant Commissioner (HQ)  
For Commissioner Karachi  
(MEMBER)

  
SANJAY RAJA  
Executive Engineer  
Project Director Of  
Commissioner Karachi  
MEMBER / SECRETARY

  
GHOUS BUX ABBASI  
Project Director  
Project Directorate Of  
Commissioner Karachi  
CHAIRMAN

*2nd Ref*

ATTENDANCE SHEET OF MEETING OF "INTEGRATION, AUTOMATION & ENHANCEMENT OF DOMICILE & PRC SYSTEM IN KARACHI DIVISION (ADP NO. 2832 OF 2025-26)" HELD ON 26.11.2025 UNDER THE CHAIRMANSHIP OF PROJECT DIRECTOR OF COMMISSIONER KARACHI.

S.NO.	NAME OF OFFICER	DESIGNATION	CONTACT NO.	SIGNATURE
01.	Sanjay Raja	Ex-Suspect C.I.C Office	0333-7575244	<i>Raja</i>
02.	Mosam A. Bhatti Dir (DP/SA)		0300344650	<i>Bhatti</i>
03.	Ishfaqe Khanzade N.E (UoK)		0333 - 3798606	<i>Ishfaqe Khanzade</i>
04.	Rabin Syed	AC HQ	0301-2976596	<i>Rabin</i>
05.	Ghous Bux Aboor	P. D.	0333 - 2220528	<i>Ghous Bux Aboor</i>
<del>Mr. Ishfaqe Khanzade (UoK)</del>				



# OFFICE OF THE COMMISSIONER KARACHI DIVISION KARACHI

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Tel No. 99205607, 99205610, Fax 99205652  
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## MINUTES OF MEETING

**SUBJECT: - MINUTES OF 3RD MEETING REGARDING PREPARATION OF BIDDING DOCUMENTS OF ADP SCHEME NAMELY "INTEGRATION, AUTOMATION & ENHANCEMENT OF DOMICILE & PRC SYSTEM IN KARACHI DIVISION (ADP NO. 2832 OF 2025-26)" HELD ON 18-12-2025 UNDER THE CHAIRMANSHIP OF PROJECT DIRECTOR OF COMMISSIONER KARACHI**

Meeting Agenda : Preparation of Bidding Documents

Date / Time : 18-12-2025 AT 11:30 AM

Venue : Office of the Project Directorate of Commissioner Karachi.

The list of participants is attached.

The meeting started with greetings & introduction. The Project Director of Commissioner Karachi welcomed the participants and apprised the forum regarding agenda of the meeting.

The Project Director / Chairman of Procurement Committee shared the draft copy of bidding documents as per consultation with I.T. Expert of Information, Science & Technology Department as well as representative of SPPRA.

The members agreed upon the corrections made as per instructions of I.T. Expert & approved the draft bidding documents.

The bidding data sheet & evaluation criteria of Technical proposal got signed from the members.

The meeting ended with vote of thanks to & from the chair.

### DECISION:

It was decided to send NIT to information department for publication in leading newspapers.

ISHFAQE AHMED KHANZADA  
I.T. Expert University of Karachi  
(MEMBER)

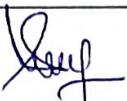
NASEEM AHMED BHUTTO  
Director (PD & BA)  
For Commissioner Karachi  
(MEMBER)

RABIA SYED  
Assistant Commissioner (HQ)  
For Commissioner Karachi  
(MEMBER)

SANJAY RAJA  
Executive Engineer  
Project Director Of  
Commissioner Karachi  
MEMBER / SECRETARY

GHOUS BUX ABBAS  
Project Director  
Project Directorate Of  
Commissioner Karachi  
CHAIRMAN

**ATTENDANCE SHEET OF 3<sup>RD</sup> MEETING OF PROCUREMENT COMMITTEE FOR  
"INTEGRATION, AUTOMATION & ENHANCEMENT OF DOMICILE & PRC  
SYSTEM IN KARACHI DIVISION (ADP NO. 2832 OF 2025-26)" HELD ON  
18.12.2025 UNDER THE CHAIRMANSHIP OF PROJECT DIRECTOR OF  
COMMISSIONER KARACHI.**

S.NO.	NAME OF OFFICER	DESIGNATION	CONTACT NO.	SIGNATURE
01.	Sanjay Raja	X.E.W Commissioner kyc	0333-7575241	
02.	Ghous Bux Ahsan	P.D. CIC offi	0333-222 0528	
03	Masvi Ahmad	Dir (Em/ DP)	0300 3410650	
04	Rabib Syed	AC (HDS)		
05	Ishtaqneem Khanjade	N.E (KU)	0333- 3798686	



OFFICE OF THE  
COMMISSIONER KARACHI DIVISION  
KARACHI

4, Club Road, Main Commissioner Office, Karachi.  
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NOTIFICATION

No. CK/F&A/PD/<sup>P.C.</sup>2025- , with the approval of competent authority i.e. Secretary (G.A.) Services General Administration Co-ordination Department Government of Sindh and in pursuance Rule 7 & 8 of Sindh Public Procurement Rules, 2010, a Procurement Committee, comprising of the following officers and terms of references, is hereby constituted for the work, "Integration, Automation & Enhancement of Domicile & PRC System in Karachi Division (ADP No. 2832 of 2025-26)".

•	Project Director, Project Directorate of Commissioner Karachi.	Chairman
•	IT / Communication Expert from Karachi University.	Member
•	Director (DP &BA) for Commissioner Karachi.	Member
•	Executive Engineer Project Directorate of Commissioner Karachi	Member / Secretary
•	Assistant Commissioner (HQ), office of the Commissioner Karachi Division.	Member

Terms of Reference: The Committee shall be responsible to perform the following functions:

- i) Preparing and/or reviewing bidding documents.
- ii) Carrying out technical as well as financial evaluation of the bids.
- iii) Preparing evaluation report as provided in Rule-45.
- iv) Making recommendations for the award of contract to the competent authority.
- v) Any other function ancillary and incidental to the above.

SYED HASSAN NAQVI (PAS)  
Commissioner Karachi Division

No. CK/F&A/PD/<sup>P.C.</sup>2025-146

Karachi dated the 07.11.2025

C.C. to:-

- I) The Chairman / Members of the Committee.
- II) The Director (Env. P&D / B&A) Commissioner Office Karachi.
- III) Master File.
- IV) SO (Dev) SGA&C

PROJECT DIRECTOR  
Project Directorate of  
Commissioner Karachi

OFFICE OF THE  
COMMISSIONER KARACHI DIVISION  
KARACHI

4, Club Road, Main Commissioner Office, Karachi.  
Tel No. 99205607, 99205610, Fax 99205652  
Email: [rdcommissioneratkarachi@gmail.com](mailto:rdcommissioneratkarachi@gmail.com)

NOTIFICATION

No. CK/F&A/ P.D./CRC/2025-  
(G.A.) Services General Administration Co-ordination Department Government of Sindh  
and in pursuance Rule 31 of Sindh Public Procurement Rules, 2010, a Complaint  
Redressal Committee, comprising of the following officers and terms of references, is  
hereby constituted for the work, "Integration, Automation & Enhancement of  
Domicile & PRC System in Karachi Division (ADP No. 2832 of 2025-26)".

•	Commissioner Karachi Division.	Chairman
•	Representative of Accountant General Sindh (Not Below the rank of BS-18)	Member
•	An Independent professional from the relevant field (to be nominated by the head of procuring agency).	Member

Terms of Reference: The Committee shall be responsible for performing the tasks as provided under Rule 31 bid:



SYED HASSAN NAQVI (PAS)  
Commissioner Karachi Division

No. CK/F&A/ P.D./CRC/2025/145

Karachi dated the 07.11.2025

C.C. to:-

- i) The Chairman / Members of the Committee.
- ii) The Director (Env. P&D / B&A) Commissioner Office Karachi.
- iii) Master File.

ccv, *SAC, A&CD*



PROJECT DIRECTOR  
Project Directorate of  
Commissioner Karachi



**BIDDING / TENDER DOCUMENT**  
**FOR**  
**INTEGRATION, AUTOMATION & ENHANCEMENT OF**  
**DOMICILE & PRC SYSTEM IN KARACHI DIVISION**  
**(ADP NO. 2832 OF 2025-26)**

**(ON TURNKEY BASIS)**

**DECEMBER-2025**

**EXECUTIVE ENGINEER PROJECT DIRECTORATE OF**  
**COMMISSIONER KARACHI**

Note:

1. The bidder is expected to examine the bidding documents, including all instructions, forms, terms, specifications, and charts/drawings. Failure to furnish all information required in the Bidding Document or submission of a Bid not substantially responsive to the Bidding Documents in every respect would result in the rejection of the Bid.
2. Tender bids must be submitted electronically through EPADS, any clause in this tender document asking for manual submission must be replaced and read as "through EPADS"
3. Please attach copy of Bid security with the financial proposal through EPADS.
4. Only the Bid Security Pay Order in favor of Executive Engineer, Project Directorate of Commissioner Karachi is to be sent in original on / before the last date & time for electronics bid submission through EPADS.

A handwritten signature in blue ink, appearing to read "Saeed".

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## INVITATION TO BID

Date: \_\_\_\_\_

Bid Reference No: \_\_\_\_\_

Executive Engineer, Project Directorate of Commissioner Karachi (hereinafter referred as the Purchaser), invites sealed bids from eligible bidders for "**INTEGRATION, AUTOMATION & ENHANCEMENT OF DOMICILE & PRC SYSTEM IN KARACHI DIVISION (ADP NO. 2832 OF 2025-26)**"

1. The Technical Proposal should contain all the bid items without quoting the price and must list firm's clientele, resumes / CV's of the team. Financial bids of Firms not obtaining minimum passing criteria on Technical basis will not be opened.
2. All bids must be accompanied by an **Earnest money / Bid Security of Rs. 5.00 (M)**, and must be accompanied with the financial offer. Bid without bid security of required amount and prescribed form shall be rejected.
3. Executive Engineer, Project Directorate of Commissioner Karachi will not be responsible for any costs or expenses incurred by bidders in connection with the preparation or delivery of bids.
4. The Bid prices and rates are fixed during currency of contract and under no circumstance shall any contractor be entitled to claim enhanced rates for any item in this contract.
5. Bidders shall submit Bids, which comply with the Bidding Documents. Alternative Bids will not be considered. The attention of bidders is drawn to the provisions of Clause on "Determination of Responsiveness of Bid" regarding the rejection of Bids, which are not substantially responsive to the requirements of the Bidding Documents.
6. Executive Engineer, Project Directorate of Commissioner Karachi shall have right of rejecting all or any of the tenders as per provisions of SPPRA RULES, 2010 (Amended upto date) Rule No 25(1).
7. All prices quoted must include any Taxes applicable, such as Income Tax, SRB Tax etc. If not specifically mentioned in the quotation, then it will be presumed that the prices include all the taxes.
8. Failure to Complete the Task within the stipulated time will invoke penalty of 0.025% of the total cost per day. In addition to that, Security Deposit (CDR) amount will be forfeited and the company will not be allowed to participate in future tenders as well.



## **INSTRUCTION TO THE BIDDERS**

### **GENERAL**

**1 Scope of Bid & Source of Funds**

1.1 The procuring agency as defined in the bidding data wishes to receive sealed bids for "**INTEGRATION, AUTOMATION & ENHANCEMENT OF DOMICILE & PRC SYSTEM IN KARACHI DIVISION (ADP NO. 2832 OF 2025-26)**"

1.2 Executive Engineer, Project Directorate of Commissioner Karachi, has received funds from provincial government in Pak rupee towards the cost of the subject procurement in the bidding data and it is intended that part of the proceeds of this funds will be applied to eligible payments under the contract for which these bidding documents are issued.

**2 Eligible Bidders**

2.1 Bidding is open to all firms and persons meeting the following requirements:

- a) The bidder is duly registered with FBR/SECP and SRB.
- b) The bidder shall not be under a declaration of ineligibility for corrupt and fraudulent practices issued by the Government.

**3 Cost of Bidding**

3.1 The bidder shall bear all the costs associated with the preparation and submission of its bids and the Procuring Agency will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process (SPPRA Rules 24).



## **BIDDING DOCUMENTS**

**4** Contents of the Bidding Documents

4.1 In addition to Invitation for Bids, the Bidding Documents are those stated below, and should be read in conjunction with any Addendum issued in accordance with sub clause 6.1.

- a) Instruction to the Bidders
- b) Bidding Data Sheet
- c) Scope of Work
- d) Evaluation Criteria
- e) Hardware/Software Development etc Items and their Specifications.
- f) Forms
- g) Conditions of the Contract

4.2 The Bidder is expected to examine all instructions, forms, terms, and specifications in the bidding documents. Failure to furnish all information required by the bidding documents or to submit a bid not substantially responsive to the bidding documents in every respect will be at the Bidder's risk and may result in the rejection of its bid.

**5** Clarification of the Bidding Document

5.1 Any interested Bidder requiring any clarification of the bidding documents may notify the Procuring agency in writing. The Procuring agency will respond in writing to any request for clarification of the bidding documents which it receives no later than three working days prior to the deadline for the submission of bids prescribed in the bidding document. Written copies of the Procuring agency's response (including an explanation of the query but without identifying the source of inquiry) will be sent to all interested bidders that have received the bidding documents

**6** Amendments in the Bidding Documents

6.1 At any time prior to the deadline for submission of Bids, the Procuring Agency may, for any reason, whether at his own initiative or in response to a clarification requested by a interested bidder, modify the bidding documents by issuing addendum.



- 6.2 Any addendum thus issued shall be a part of the Bidding Document pursuant to Sub-Clause 6.1 hereof, and shall be communicated in writing to all purchasers of the Bidding Documents. Prospective bidders shall acknowledge receipt of each addendum in writing to the Procuring Agency.
- 6.3 To afford interested bidders reasonable time in which to take addendum into account in preparing their Bids, the Procuring Agency may at its discretion extend the deadline for Submission of bids.

## PREPARATION OF BIDS

7	Language of Bid	7.1	The bid prepared by the Bidder, as well as all correspondence and documents relating to the bid exchanged by the Bidder and the Procuring agency shall be written in the language specified in the Bidding document. Supporting documents and printed literature furnished by the Bidder may be in another language provided they are accompanied by an accurate translation of the relevant passages in the language specified in the bidding document, in which case, for purposes of interpretation of the Bid, the translation shall govern.
8	Documents Comprising the Bid	8.1	<p>The Bid submitted by the bidder shall comprise the following:</p> <ul style="list-style-type: none"><li>a) Sealed Envelopes</li><li>b) <b>Covering Letter with proper index &amp; page Nos.</b></li><li>c) Schedules</li><li>d) Bid Security furnished in accordance with 13.</li><li>e) Power of attorney in accordance with 14.6</li><li>f) Documentary evidence in accordance with 2.1 and 11.</li><li>g) Documentary evidence in accordance with 12.</li></ul>

<b>9</b> Sufficiency of Bid	<p>9.1 Each bidder shall satisfy himself before bidding as to the correctness and sufficiency of his bid and of the rates and prices quoted in the schedule of prices, which rates and prices shall cover all his obligations under the Contract and all matters and things necessary for proper completion of the works.</p>
	<p>9.2 The bidder is advised to obtain for himself at his own cost and responsibility all information that may be necessary for preparing the bid and entering into a Contract for execution of the Works.</p>
<b>10</b> Bid Prices, Currency of Bid and Payment	<p>10.1 The bidder shall fill up the Unit Rates and prices of the Works or Software Development to be performed under the Contract. Prices in the Schedule of Prices / Bill of Quantities shall be quoted entirely in Pak Rupees keeping in view the instructions contained in the Preamble to Schedule of Prices.</p> <p>10.2 Unless otherwise stipulated in the conditions of the contract, prices quoted by the bidder shall remain fixed during the bidder's performance of the contract and not subject to variation on any account.</p> <p>10.3 The unit rates and prices shall be quoted by the bidder in the currency as stipulated in the Bidding Data.</p> <p>10.4 Items for which no rate or price is entered by the Bidder will not be paid for by the Procuring Agency when executed and shall be deemed covered by the other rates and prices in the Bill of Quantities.</p>
<b>11</b> Documents Establishing Bidder's Eligibility and Qualifications	<p>11.1 Pursuant to ITB Clause 8, the bidder shall furnish, as a part of its bid, documents establishing the bidder's eligibility to bid and its qualification to perform the contract if its bid is accepted.</p>



11.2 Bidder must possess and provide evidence of its capability and the experience as stipulated in the Bidding Data and Qualification Criteria mentioned in the **Bidding Documents in the form of Purchase order/completion order from the executing agency.**

**12 Documents Establishing Works' Conformity to Bidding Documents**

12.1 The documentary evidence of the Works' conformity to the bidding documents may be in the form of literature, drawings and data and the bidder shall furnish documentation as set out in the Bidding Data.

12.2 The bidder shall not the standards of Workmanship, material and equipment, and reference to brand names or catalogue numbers, if any, designated by the Procuring Agency in the Technical Provisions are intended to be descriptive only and not restrictive.

**13 Bid Security**

13.1 Each bidder shall furnish, as a part of his bid, at the option of the bidder, a Bid Security of **Rs. 5.00 (M)** or in the amount stipulated in the bidding data in Pak Rupees in the form of Bank Draft, Pay Order in favor of **Executive Engineer Project Directorate of Commissioner Karachi** in the form of Bank Draft/Pay Order valid for a period of 1 month beyond the validity of the bid.

13.2 Any bid not accompanied by an acceptable bid security shall be rejected by the Procuring Agency as non-responsive.

13.3 The bid securities of unsuccessful bidders will be returned upon award of contract to the successful bidders or on the expiry of validity of Bid Security whichever is earlier.

13.4 The bid security of the successful bidders will be returned when the bidder has furnished the required performance security, and signed the Contract of Agreement.

13.5 The bid security may be forfeited:

- a) If the bidder withdraws his bid during the period of bid validity; or
- b) If a bidder does not accept the correction of his Bid Price, pursuant to Sub Clause 16.4 b hereof; or
- c) In the case of successful bidder, if he fails within the specified time limit to:
  - a. Furnish the required performance security
  - b. Signing the Contract of Agreement.

14 Validity of Bids, Format, Signing and Submission of Bid.

14.1 Bids shall remain valid for a period of 90 Days after the date of bid opening.

14.2 In exceptional circumstances, Procuring agency may request the bidder to extend the period of validity for additional period but not exceeding 1/3 of the original period. The request and the bidders' responses shall be made in writing. A bidder may refuse the request without forfeiting the Bid Security. A bidder agreeing to the request will be required to extend the validity of Bid Security for the period of Extension, and in compliance with ITB 13 in all aspects.

14.3 All schedules to bid are to be properly completed and signed.

14.4 No alteration is to be made in the Form of Bid except in filling up the blanks as directed. If any alteration be made or if these instructions be not fully complied with, the bid may be rejected.

- 14.5 Each bidder shall prepare Original and number of copies specified in the Bidding Data of the Document comprising the bid as described in ITB 8 and clearly mark them Original and Copy as appropriate. In the event of discrepancy between them, the original shall prevail.
- 14.6 The Original and Copies of the bid shall be typed or written in edible ink and shall be signed by a person or persons duly authorize to sign. This shall be indicated by submitting a written power of attorney authorizing the signatory of the bidder to act for and on behalf of the bidder. All pages of the bid shall be initialed and official seal be affixed by the person signing the bid.
- 14.7 The bid shall be delivered in person or sent by registered mail at the address to the Procuring Agency as given in the Bidding Data.

### **SUBMISSION OF BID**

- 15 Deadline for Submission, Modification & Withdrawals of Bid.
  - 15.1 Bids must be electronically submitted EPADS on dates as mentioned in NIT not later than the time and date stipulated therein.
  - 15.2 Bids submitted through any other means shall not be accepted.
  - 15.3 Any bidder can withdraw his bid after bid submission, fulfilling the requirements of EPAD system for withdrawal.
  - 15.4 Withdrawal of bid during the interval between deadline for submission of bids and the expiration period of the validity specified in the Form of Bid may result in forfeiture if the Bid Security pursuant to ITB Clause 13.5.



## BID OPENING AND EVALUATION

**16 Bid Opening, Evaluation and Clarifications**

16.1 The procuring agency will open the bids electronically submitted, in presence of the bidder's representatives who choose to attend, at the time, date and in place specified in the Bidding Data.

16.2 The bidder's name, Bid Prices, any discount, the presence and absence of Bid Security, and such other details as the Procuring Agency at its discretion may consider appropriate, will be announced by the Procuring Agency at the Bid Opening. The Procuring Agency will record the minutes of the bid Opening. Representatives of the bidders who choose to attend shall sign the attendance sheet.

16.3 To assist in the examination, evaluation and comparison of Bids the Procuring Agency may, at its discretion, ask the bidder for a clarification of its Bid. The request for clarification and the response shall be in writing and no change in the price or substance of the Bid shall be sought, offered or permitted.

16.4

- a) Prior to the detailed evaluation, pursuant to IB.16.7 to 16.9, the Procuring Agency will determine the substantial responsiveness of each bid to the Bidding Documents. For purpose of these instructions, a substantially responsive bid is one which conforms to all the terms and conditions of the Bidding Documents without material deviations. It will include determining the requirements listed in Bidding Data.
- b) Arithmetical errors will be rectified on the following basis:

If there is a discrepancy between the unit price and total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected. If there is a discrepancy between the words and figures the amount in words shall prevail. If there is a discrepancy between the Total Bid price entered in Form of Bid and the total shown in Schedule of Prices-Summary, the amount stated in the Form of Bid will be corrected by the Procuring Agency in accordance with the Corrected Schedule of Prices.

If the bidder does not accept the corrected amount of Bid, his Bid will be rejected and his Bid Security forfeited.

- 16.5 A Bid determined as substantially non-responsive will be rejected and will not subsequently be made responsive by the bidder by correction of the non-conformity.
  
- 16.6 Any minor informality or non-conformity or irregularity in a Bid which does not constitute a material deviation (major deviation) may be waived by Procuring Agency, provided such waiver does not prejudice or affect the relative ranking of any other bidders.

**Major Deviations Include:**

- a) has been not properly signed;
- b) is not accompanied by the bid security of required amount and manner;
- c) stipulating price adjustment when fixed price bids were called for;
- d) failing to respond to specifications;
- e) failing to comply with Milestones/Critical dates provided in



Bidding Documents;

- f) sub-contracting contrary to the Conditions of Contract specified in Bidding Documents;
- g) refusing to bear important responsibilities and liabilities allocated in the Bidding Documents, such as performance guarantees and insurance coverage;
- h) taking exception to critical provisions such as applicable law, taxes and duties and dispute resolution procedures;
- i) a material deviation or reservation is one :
  - a. which affect in any substantial way the scope, quality or performance of the works;
  - b. Adoption / rectification whereof would affect unfairly the competitive position of other bidders present substantially responsive bids.

**Minor Deviations:**

Bids that offer deviations acceptable to the Procuring Agency and which can be assigned a monetary value may be considered substantially responsive at least as to the issue of fairness. This value would however be added as an adjustment for evaluation purposes only during the detailed evaluation process.

16.7 The Procuring Agency will evaluate and compare only the bids previously determined to be substantially responsive pursuant to IB.16.4 to 16.6 as per requirements given hereunder. Bids will be evaluated for complete scope of works. The prices will be compared on the basis of the Evaluated Bid Price pursuant to IB.16.8 herein below.

### **Technical Evaluation:**

It will be examined in detail whether the works offered by the bidder complies with the Technical Provisions of the Bidding Documents. For this purpose, the bidder's data submitted with the bid in Schedule B to Bid will be compared with technical features/criteria of the works detailed in the Technical Provisions. Other technical information submitted with the bid regarding the Scope of Work will also be reviewed.

#### **16.8 Evaluated Bid Price:**

In evaluating the bids, the Procuring Agency will determine for each bid in addition to the Bid Price, the following factors (adjustments) in the manner and to the extent indicated below to determine the Evaluated Bid Price:

- a) making any correction for arithmetic errors pursuant to IB.16.4 hereof
- b) Discount, if any, offered by the bidders as also read out and recorded at the time of bid opening.
- c) excluding provisional sums and the provisions for contingencies in the Bill of Quantities if any, but including Day work, where priced competitively

#### **17 Confidentiality**

17.1 Subject to IB.16.3 heretofore, no bidder shall contact Procuring Agency on any matter relating to its Bid from the time of the Bid opening to the time the bid evaluation result is announced by the Procuring Agency. The evaluation result shall be announced at least seven (07) days prior to award of Contract (SPP Rule 45). The announcement to all bidders will include table(s) comprising read out prices, discounted prices, price adjustments made, final evaluated prices and recommendations against all the bids evaluated.



17.2 Any effort by a bidder to influence Procuring Agency in the Bid evaluation, Bid comparison or Contract Award decisions may result in the rejection of his Bid. Whereas any bidder feeling aggrieved, may lodge a written complaint to Complaint Redress Committee as per terms and conditions mentioned in SPP Rules 31 & 32. However, mere fact of lodging a complaint shall not warrant suspension of procurement process.

17.3 Bidders may be excluded if involved in "Corrupt and Fraudulent Practices" means either one or any combination of the practices given below SPP Rule2(q):

- a) "Coercive Practice" means any impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence the actions of a party to achieve a wrongful gain or to cause a wrongful loss to another party;
- b) "Collusive Practice" means any arrangement between two or more parties to the procurement process or contract execution, designed to achieve with or without the knowledge of the procuring agency to establish prices at artificial, noncompetitive levels for any wrongful gain;
- c) "Corrupt Practice" means the offering, giving, receiving or soliciting, directly or indirectly, of anything of value to influence the acts of another party for wrongful gain;
- d) "Fraudulent Practice" means an act or omission, including misrepresentation, that knowin



or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;

e) “Obstructive Practice” means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in a procurement process, or affect the execution of a contract or deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements before investigators in order to materially impede an investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation, or acts intended to materially impede the exercise of inspection and audit rights provided for under the Rules.

## AWARD OF CONTRACT

### 18 Post Qualifications

18.1 The Procuring Agency, at any stage of the bid evaluation, having credible reasons for or *prima facie* evidence of any defect in contractor's capacities, may require the contractors to provide information concerning their professional, technical, financial, legal or managerial competence whether already pre-qualified or not:

Provided, that such qualification shall only be laid down after recording reasons therefore in writing. They shall form part of the records of that bid evaluation report.

18.2 The determination will take into account the bidder's financial and technical capabilities. It will be based upon an

examination of the documentary evidence of the bidders 'qualifications submitted under ITB.11, as well as such other information required in the Bidding Documents.

**19 Award Criteria & Procuring Agency's Rights**

19.1 Subject to IB.19.2, the Procuring Agency will award the Contract to the bidder whose bid has been determined to be substantially responsive to the Bidding Documents and who has offered the lowest evaluated Bid Price, provided that such bidder has been determined to be qualified to satisfactorily perform the Contract in accordance with the provisions of the IB.18.

19.2 Notwithstanding IB.19.1, the Procuring Agency reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids, at any time prior to award of Contract, without thereby incurring any liability to the affected bidders or any obligation to inform the affected bidders of the grounds for the Procuring Agency's action except that the grounds for its rejection of all bids shall upon request be communicated, to any bidder who submitted a bid, without justification of the grounds. Notice of the rejection of all the bids shall be given promptly to all the bidders (SPP Rule 25).

**20 Notification of Award & Signing of Contract**

20.1 Prior to expiration of the period of bid validity prescribed by the Procuring Agency, the Procuring Agency will notify the successful bidder in writing (Letter of Acceptance) that his bid has been accepted (SPPRA Rule 49).

20.2 Within seven (07) days from the date of furnishing of acceptable Performance Security under the Conditions of Contract, the Procuring Agency will send the successful bidder the Form of Contract Agreement provided in the Bidding Documents, incorporating all agreements between the parties.



**21 Performance Security**

21.1 The successful bidder shall furnish to the Procuring Agency a Performance Security in the form and the amount stipulated in the Conditions of Contract within a period of fourteen (14) days after the receipt of Letter of Acceptance (SPPRA Rule 39).

21.2 Failure of the successful bidder to comply with the requirements of Sub-Clauses IB.20.2 & 20.3 or 21.1 or Clause IB.22 shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security.

21.3 Publication of Award of Contract: within seven days of the award of contract, the procuring shall publish on the website of the authority and on its own website, if such a website exists, the results of the bidding process, identifying the bid through procurement identifying Number if any and the following information:

- a) Evaluation Report
- b) Form of Contract and Letter of Award
- c) Bill of Quantities

**22 Integrity Pact**

22.1 The Bidder shall sign and stamp the Form of Integrity Pact provided at Schedule-F to Bid in the Bidding Document for all Sindh Government procurement contracts exceeding Rupees ten (10) million. Failure to provide such Integrity Pact shall make the bid nonresponsive (SPPRA Rule 89).

## 23 **CONSORTIUM AGREEMENT**

23.1 In case of Consortium of two or more firms, the proposal shall be accompanied by a certified true copy of the Consortium Agreement. The Consortium Agreement as applicable shall confirm the following therein

- I) Date and place of signing
- II) Purpose of consortium (must include the details of contract works for which the consortium has been invited to bid);
- III) A clear and define description of the proposed administrative arrangements for the management and execution of the assignments.
- IV) Delineation of duties, responsibilities and scope of work to be undertaken by each along with resources committed by each partner / member of the consortium for the proposed services,
- V) An undertaking that the firms are jointly and severally liable to the Client for the performance of the services
- VI) Duties, responsibilities and powers of the lead firm,
- VII) The authorized representative of the consortium specified in power of attorney

23.2 In case of Consortium, it is expected that the lead partner would be authorized to incur liabilities and to receive instructions and payments for and on behalf of the consortium. For a consortium to be eligible for bidding, the experience of lead partner and other partners should be indicated. Lead partner may use experience and other required documents of another partner

23.3 Any alternative proposal, such as one by a firm in sole capacity and another in Consortium with another firm or as a part of 2 or more consortiums, for the assignment will be summarily rejected. In such an event, all the proposals submitted by such firm and its Consortium or associate shall be rejected.

23.4 The proposal of a firm is liable to be rejected if the firm makes any false or misleading statement in the proposal(s), without prejudice to the rights of the client to initiate further proceedings against the said firm(s)

23.5 Notwithstanding anything to the contrary contained in this bidding/tender document, the detailed terms specified in the draft contract agreement shall have overriding effect provided, however, that any conditions or obligations imposed on the bidder hereunder shall continue to have effect in addition to its obligations under the contract

23.6 Bidders not complying with any of the above eligibility pre-requisites would be disqualified. All documentary evidence must be submitted along with the bids, no document will be acceptable after bid submission

23.7 Bidders or any of its consortium partners must not have been black listed or declared bankrupt by any Government or Financial institution



## BID DATA SHEET

(All mandatory/required documents must be properly annexed)

<b>Sr. No.</b>	<b>Categories</b>	<b>Details</b>
01	Name of Procuring Agency	Executive Engineer, Project Directorate of Commissioner Karachi.
02	Website	<a href="http://www.sindh.gov.pk">www.sindh.gov.pk</a> <a href="http://portalsindh.eprocure.gov.pk">http://portalsindh.eprocure.gov.pk</a>
03	Mode of Tendering	Bidding / Tender Document
04	Method of procurement	46(2) Single Stage-Two Envelopes
05	Cost of the Bidding Document	Rs.5000/-
06	Bid Currency	Bids shall be quoted entirely in Pak Rupees.
07	Bid Security	A bid security amounting to <b>Rs. 5.00 (M) of the Bid Prices</b> shall be paid in favor of <b>Executive Engineer Project Directorate of Commissioner Karachi</b> in the form of Bank Draft/Pay Order.
08	Bid Validity	The bid shall be valid for 90 days after the bid opening date.
09	Deadline for submission of Bids alongwith time	As mentioned in N.I.T (Through EPADS)
10	No. of Copies to be submitted	05 Copies of technical proposal uploaded on EPADS in sealed envelope & One original Financial to the department.
11	Performance Security	5% of the Bid Price in the form of Pay Order or Demand Draft or a Bank Guarantee issued by a scheduled bank in Pakistan or from a foreign bank duly counter guaranteed by a scheduled bank in Pakistan in favor of <b>Executive Engineer Project Directorate of Commissioner Karachi</b> in the form of Bank Draft/Pay Order. (Remaining 5% will be deducted from each running bill)
12	Date for issuance of Bidding Documents	<b>19-12-2025</b> As mentioned in NIT (Through EPADS)
13	Date of Pre-Bid Meeting	<b>29-12-2025 at 11:30 AM</b>
14	Last Date for Submission of Written Queries for Clarification	<b>09-01-2026 during office hours</b> (Through EPADS)
15	Last Date & Time for submission of Bids on EPADS	<b>14-01-2026 till 11.00 A.M</b> As mentioned in N.I.T (Through EPADS)
16	Date & Time for Opening of Technical Bids	<b>14-01-2026 at 11.30 A.M at</b> Office of the Executive Engineer Project Directorate of Commissioner Karachi. As mentioned in N.I.T (Through EPADS)



17	Language of Bid	English
18	Bidding / tender document qualification criteria	The bidder firm/company should meet the qualification criteria as mentioned in Bidding / Tender document obtaining minimum 75 % in technical proposal for eligibility of financial proposal opening
19	Contact Details	<p><b>1. Mr. Sanjay Raja (Executive Engineer)</b> Email. <a href="mailto:Engr.srd@gmail.com">Engr.srd@gmail.com</a> Tel: +92-21-99205660</p>
20	Address for Submission of Bids	<p><b>Executive Engineer Project Directorate of Commissioner Karachi.</b> Address: 4-Club Road Main Commissioner Office Karachi. Tel :<b>021-99205660</b> URL: <a href="mailto:pdcommissioneratekarachi@gmail.com">pdcommissioneratekarachi@gmail.com</a></p>

## **SCOPE OF WORK**

The Scope of Work for the Karachi Division Online Domicile Management System covers the complete design, development, deployment, integration, testing, training, support, and operationalization of a centralized, secure, and scalable digital domicile issuance system for Karachi Division jurisdiction for its all districts.

### **1.1. Technical Specification of Hardware Equipment**

#### **1- Network Cabinet 42U Floor Standing**

##### **Specifications**

- 19 inch width standard;
- Removable Side Panels, side locks optional;
- Knock o hole for entering cable on both top cover, bottom panel, real panel
- Turning angle of front door is over 180 degrees
- Easy mounting installation
- Unassembled package saving shipping space
- fan,shelf,PDU are optional

#### **2- 2-ton floor standing A/C unit: MAKE TYPE "FLOOR STANDING**

##### **Specifications**

- Floor standing cabinet
- Cool only
- Stylish design
- Heavy air thrust (suitable for populated places)
- Comfortable airflow

- Auto-restart
- Filters to purify air
- Noise level low
- Malaysian compressor
- Copper condenser AIR CONDITIONER AFS25C

- Compressor type: Rotary
- 24000 BTU Cooling Capacity (2Ton)
- Weight 90 kg

### **3- Network Switch -24P-4X-E – 24 POE+ Ports**

#### **Specifications**

24 Gigabit Ethernet ports with PoE+ support, 4 10 Gigabit Ethernet uplink ports, advanced Layer 3 switching capabilities.

### **4- 2U SERVER RACKMOUNT**

#### **Specifications**

3.5" Chassis With Upto 12 HDD Supported,  
 Motherboard With Broadcom 5720 Dual Port 1GB Ethernet On Board,  
 Intel Xeon Silver 4310 2.1 GHz (12C/24T, 10.4GT/s 18MB Cache) Turbo HT 120W Dual Processors,  
 32GB DDR4 3200 MT/s Dual Rank (4 Module)  
 Dual Intel Enterprise SSD D3-5420 Series 480GB 2.5" SATA 6Gb/s,  
 4 Dell 4TB SAS 3.5" 12GB/s 7200 RPM HDD,  
 RAID Controller PERC H755 SAS Front,  
 iDRAC9 Enterprise (Integrated Dell Remote Access Controller) 15G,  
 Intel i350 Quad Port 1GbE Base-T OCP NIC 3.0,  
 Riser Config 0, 1 x OCP 3.0 (x16) + 3 x 16LP + 1 x 4LP (Gen3) + Risers:  
 2 x 16LP,  
 Dual Hot-Plug PSU (1 + 1) 800W Mixed Mode,  
 Wired Optical Mouse,  
 KB Wired English,  
 Ready Rail Sliding Rail,  
 Cable Arm Management,  
 Standard Bezel,

Jumper Cord,  
3 Years NBD Support Onsite Service

## **5- Network Firewall**

### **Specifications**

Threat Protection (UTP) (IPS, Advanced Malware Protection, Application Control, Web & Video Filtering, Antispam Service, and 24x7 Premium Care)

## **6- IP Camera**

### **Specifications**

High quality imaging with 4MP resolution (2688 × 1520), 25fps (2688 × 1520, 1920 × 1080, 1280 × 720), Water and dust resistant (IP67)

## **7- Network Video Recorders**

### **Specifications**

- Camera Support: 4-channel NVRs are designed to connect and manage up to four IP cameras.
- Resolution: They typically support a range of resolutions, including 8MP, 6MP, 5MP, 4MP, 3MP, 1080p, 720p, and lower resolutions.
- Max Decoding: Decoding capacity varies, with some models supporting 1-ch @ 8MP, 4-ch @ 1080p, or other combinations

## **8- Storage (Hard drive)**

### **Specifications**

10TB 3.5" Sky hawk Surveillance SATA HDD is built for high-capacity video surveillance systems.

## **9- Security door access control system**

### **Specifications**

integrates fingerprint identification, RFID card reading, and keypad PIN code entry for secure access. The device features a 2.4-inch TFT LCD screen, PoE (Power over Ethernet), and TCP/IP communication. It also supports wiegand output for connecting to other access control systems.



## **10- Signature Pad**

- High Performance and e-Signature precision.
- USB connectivity
- Windows® compatible and support e-Signature software
- Battery Free-Pen
- 8H tempered glass with anti-scratch, anti-glare, and anti-fingerprint

## **11- Printer**

### **Specifications**

- Print Speed: Up to 20 / 25 / 30 ppm
- Max Resolution: 1200 x 2400 dpi
- Monthly Duty Cycle: Up to 129,000 pages
- Functions: Print, Copy, Scan, Fax (Optional)

Paper Capacity: Up to 3,140 sheets

## **1.2. Technical Specification of Software (Application)**

This expanded Scope of Work is divided into seven major components, each with detailed sub-components:

- 1. Citizen Services (Front-End Portal & UX)**
- 2. Deputy Commissioner (DC) Office Services**
- 3. Commissioner HQ Central Control System**
- 4. Administrative Back Office (System Administration)**
- 5. Integrations (NADRA VeriSys, SMS, Email, Payment Gateways)**
- 6. Central Data Governance & Security**
- 7. Future Scope / Optional Expanded Modules**

Each section below is fully elaborated to reflect the depth as:

## **5.1 CITIZEN SERVICES (EXTENSIVELY EXPANDED)**

The Citizen Services component delivers a modern, intuitive, multilingual (Supports English, Urdu, Sindhi), and secure online portal enabling Karachi residents to apply for domicile certificates online hassle-free without physically visiting any office.

### **5.1.1 Citizen Registration & Authentication**

A complete digital on boarding process includes:

#### **5.1.1.1 CNIC-based Registration**

- Citizen registers using their **13-digit CNIC**.
- Automatic validation rules detect formatting or checksum issues.
- CNIC is cross-matched against **NADRA records**.

#### **5.1.1.2 Mobile Number Verification**

- One-time password (OTP) sent via SMS.
- Device ID and IP logging for fraud detection.
- Mobile number locked to citizen profile to prevent impersonation.

#### **5.1.1.3 Secure Login**

- Username = Citizen's CNIC
- Password compliance with government password policy
- Supports multi-factor authentication (MFA) for users security

### **5.1.2 NADRA CNIC & Identity Verification**

The system should perform real-time, API-level integration with NADRA's VeriSys to validate and pick data from NADRA's live Database:

- Full name
- Father's name
- Date of birth
- CNIC status (active/block/expired)
- Gender
- Family ID
- Family tree (optional deep verification mode)
- NADRA photograph (for officer comparison)

## **Technical Highlights:**

- Verification logs stored with timestamp and officer ID for verification at every stage
- NADRA request throttling to prevent overuse (from DoS attack like situation)
- Audit trail maintained for compliance (Every record should be maintained as an individual log trail and record should be kept)

### **5.1.3 Online Application Form (Dynamic & Auto-Prefilled)**

A multistep, easy-to-use, guided web form.(Instructions at every step in English and Urdu to guide user)

#### **5.1.3.1 Sections Included**

1. Personal Information
2. CNIC Details (Both options will be used)
  - a. **Option:1** Auto filled from NADRA picked from their DB
  - b. **Option:2** Live scanned of Physical NIC provided by the user, the system will read Scanned NIC detailed automatically insert them in form and user will mut have an option to edit it also
3. Father/Guardian Details
4. Permanent Address
5. Temporary Address
6. Place of Birth
7. Duration of Stay in Karachi
8. Previous Domicile Information
9. Reason for Applying
10. Document Uploads
11. Declaration & Digital Consent

12. Fee submissions
13. Review Application
14. Alerts
15. Dashboard Notices
16. Dashboard for progression (to show the timeline how much time is remained in his/her domicile to finalize)

### **5.1.3.2 Autofill Capabilities**

- NADRA data insertion
- Address options will be (via database or map service)

### **5.1.4 Document Uploading & Validation**

A secure and intelligent upload process for all the required documents.

#### **Documents Required**

1. CNIC (front/back)
2. Father/Guardian CNIC
3. Utility bills (electricity, gas, water) (in Optional section)
4. Rent agreement (if applicable)
5. Form-B
6. Passport-size photo
7. Affidavit

NOTE: The system should be capable of keeping record of 100 millions of entries with all attached files and etc)

#### **Validation Layers**

1. File type & size validation (Allowed sizes, The system/software should contain a live facility to compress attachments of user for free)
2. Blur detection (AI based)
3. Duplicate document detection
4. Hash storage for tamper detection

### **5.1.5 Application Submission**

1. System generates **unique Application ID**
2. District auto-selected based on provided address and CNIC
3. Submission event logged
4. Confirmation sent via SMS/Email

### **5.1.6 Real-Time Application Tracking**

Citizen sees a process timeline, including:

1. Submitted
2. Initial Review (Editable by user with no limitations)
3. Under Verification (A phase with limited edits allow)
4. NADRA Verification (Live from NADRA's DB)
5. Field Verification (if applicable)
6. Pending DC Approval
7. Approved / Rejected, Status

Each event includes:

1. Timestamp (Server input time)
2. Performing officer
3. Status change reason

### **5.1.7 Certificate Download**

1. Auto-generated PDF
2. QR code embedded
3. Digital signature of DC
4. Tamper-proof PDF/Image settings
5. Serial number integrated
6. Download + email delivery

### **5.1.8 Citizen Feedback, Complaints & Helpdesk**

- Ticketing system

- Resolution tracking
- Complaint escalations to higher channel, as ADC, DC, Commissioner (All should be online and complain raised by the user should be reflected immediately at ADC, DC, Commissioner's portal as alert when they logged-in, priorities could be assigned accordingly)
- Public service index measurement (Statistical data of every day, week, month with proper visibility of Graphs and charts on all management Dashboards)

## **5.2 DEPUTY COMMISSIONER (DC) OFFICE SERVICES**

This module elaborates all districts of Karachi centrally reporting to Commissioner's office. The module is a district-level domicile processing workflows.

### **5.2.1 Application Intake & Assignment**

- Dashboard listing new applications
- Automated assignment rules based on workload
- Manual override for supervisors
- Priority tagging for urgent cases

### **5.2.2 Document Verification Module**

Electronically verifies all submitted documents.

#### **Capabilities**

- Side-by-side comparison view
- Automatic “checklist completion” indication
- AI/ML-based fraud hints (optional)
- Metadata extraction (OCR)
- Document history comparison

### **5.2.3 NADRA Deep Verification Tools**

Officers can run advanced verification:

- 1. Basic CNIC Verification**
- 2. Family Tree Verification**

- 3. Family Head Confirmation**
- 4. Address Verification (NADRA record)**
- 5. Multi-factor Identity Match**
- 6. Photo Comparison with NADRA record**

Each verification event:

- Stored in audit log
- Shown in citizen tracking
- Used for risk scoring

#### **5.2.4 Workflow Processing**

The application flows through:

- 1. Clerk Review**
- 2. Verification Officer**
- 3. Supervisor (Optional)**
- 4. Deputy Commissioner Approval**

Each level:

- Adds notes
- Approves or rejects
- Requests more information
- GPS coordinates stored (live for security reasons)
- Verification report submitted digitally

#### **5.2.6 Decision Stage**

Deputy Commissioner can:

- Approve (to forward ahead)
- Reject
- Request clarification

- Mark as high-risk
- Sign digitally

### **5.2.7 Certificate Generation**

Upon approval:

- PDF is automatically created
- DC digital signature applied
- QR code embedded by the central system to verify its originality
- Certificate stored in permanent archive (DB of Central service and on cloud at the same time)

### **5.2.8 DC Office Dashboards**

Metrics include:

- Total applications
- Today's applications
- Pending in each stage
- Average processing time
- Officer workload distribution
- SLA compliance percentage
- Weekly performance trends

## **5.3 COMMISSIONER HQ CENTRAL CONTROL SYSTEM**

The Commissioner HQ system provides city-level governance, oversight, analytics, and control.

### **5.3.1 Unified Monitoring Dashboard**

Shows complete KPIs:

- District-wise application volumes
- Processing times per DC office

- SLA compliance per officer
- Fraud attempt alerts
- NADRA error rates
- Certificate issuance trends
- High-risk applications

### **5.3.2 Centralized User & Role Management**

Commissioner's office can:

- Create/delete DC office staff accounts
- Assign roles & permissions
- Suspend non-compliant officers and highlight
- Monitor login histories
- Track officer activities

### **5.3.3 Fraud Detection & Anomaly Analytics**

Includes:

- Duplicate CNIC applications
- Blacklisted addresses
- Multiple applications from same IP
- Unusually fast approvals
- Suspicious document patterns
- NADRA mismatch alerts

### **5.3.4 Compliance & Audit Tools**

Commissioner office can:

- Access full audit logs
- Inspect any application record
- Extract reports for government committees
- Generate compliance summaries



- Track SOP adherence

### **5.3.5 Certificate Serial Range Management**

Assigns district-level certificate ranges to ensure:

- No duplication
- No off-record issuance
- Consistent numbering

### **5.3.6 Policy Enforcement Controls**

Commissioner can define:

- Residency requirements
- Document requirements
- Verification rules
- Approval escalation rules

These policies automatically apply across all DC Offices.

## **5.4 ADMINISTRATIVE BACK OFFICE MODULE (Central System Module)**

The system includes a powerful administrative backend, such as

### **5.4.1 Role-Based Access Control (RBAC) Engine**

Admin can:

- 1) Define new roles
- 2) Configure permissions
- 3) Create permission groups
- 4) Assign workflow-based access

### **5.4.2 System Configuration Management**

Controls:

- 1) API settings
- 2) SMS gateway configuration

- 3) Email server configuration
- 4) NADRA API limits
- 5) Application timeout settings

#### **5.4.3 Logging & Audit Viewer**

Admin can view:

- 1) System logs
- 2) API logs
- 3) User action logs
- 4) NADRA verification logs
- 5) Error logs
- 6) Security logs

#### **5.4.4 Data Export & Reporting**

- 1) Export applications
- 2) Export certificate data
- 3) Export audit logs
- 4) Export officer performance reports

#### **5.4.5 Backup & Restore Controls**

Admin can:

- 1) Trigger manual backups
- 2) Restore data
- 3) View backup schedules

### **5.5 INTEGRATIONS**

#### **5.5.1 NADRA VeriSys/API Integration**

**NOTE:** Cost will be borne by the vendor/bidder

- Identity verification to set primary key
- Family tree / FRS record fetch

- Address verification (Permanent residency)
- CNIC status (Active/Inactive/Expire)
- Photograph (Match)

## Technical Features

- Mutual TLS
- IP whitelisting
- Dedicated NADRA gateway
- High-security token mechanism

### 5.5.2 SMS Gateway Integration

**NOTE:** Cost will be borne by the vendor/bidder

Used for:

- OTP generation to user's provided number
- Status updates at every stage
- Approval alerts when processing

Supports:

- Failover routes
- Delivery reports

### 5.5.3 Email Gateway Integration

**NOTE:** Cost will be borne by the vendor/bidder

Provides:

- Email confirmations
- Certificate delivery
- Notifications

Can use:

- SMTP
- API-based email services

#### **5.5.4 Payment Gateway (Live)**

For possible domicile fee:

Supports:

- JazzCash
- Easypaisa
- Debit/Credit Cards
- Banks

Provides:

- Payment receipts
- Transaction logs
- History

#### **5.6 CENTRAL DATA GOVERNANCE & SECURITY**

A centralized data model ensures:

- Single source of truth
- Consistent citizen data
- Strong access controls
- Immutable audit logging

Includes:

- Encryption at rest
- Encryption in transit
- Data masking
- Role-based data visibility

#### **5.7 FUTURE EXPANSION MODULES**

##### **5.7.1 Mobile Field Verification App**

- GPS lock

- Offline mode
- Photo upload
- QR scanning

### **5.7.2 Integration with Other Government Systems**

- Municipal records
- Housing records

### **5.7.3 AI-Based Fraud Detection**

- Machine learning risk scoring
- Pattern recognition

## **6. TECHNOLOGY FRAMEWORK**

**NOTE:** The following instructions for technology / The following technology framework will must be followed by the bidder(s) as:

The Technology Framework defines the complete technical ecosystem that supports the system. It includes the application architecture, infrastructure architecture, security architecture, data management architecture, and integration architecture.

### **6.1. High-Level Technology Overview**

The system must be designed as a Provincial-National-Scale, Enterprise-Level e-governance platform, capable of supporting:

- 100 million citizen records
- Millions of domicile certificates
- Thousands of concurrent users
- High availability (99.5% uptime)
- Strong security aligned with NADRA standards

The system uses:

- Hybrid On-Prem + Cloud-Compatible (as DR)
- Kubernetes + Docker Containerization
- Microservices Architecture

- Central API Gateway
- Event-Driven Logging + Auditing
- Scalable Database Cluster
- Hardware Failover
- Zero-Trust Security

## 6.2. CORE TECHNOLOGY STACK

### 6.2.1 Front-End Technologies (Preferably be used as following or equivalent)

Technology	Purpose	Why Used
<b>React.js / Vue.js</b>	<i>Citizen &amp; DC web portals</i>	<i>Fast, responsive, supports modern UI, scalable</i>
<b>Bootstrap / Tailwind</b>	<i>UI styling</i>	<i>Clean, modern UI with government branding</i>
<b>HTML5 / CSS3</b>	<i>Standard web technologies</i>	<i>Compliance with govt. accessibility guidelines</i>
<b>AES encrypted local storage</b>	<i>Storing temp session</i>	<i>Security-focused temporary data</i>

### 6.2.2 Back-End Technologies (Preferably be used as following or equivalent)

Technology	Purpose	Why Used
<b>Node.js / NestJS OR Laravel</b>	<i>API engine</i>	<i>Stable, mature, high-performance</i>
<b>Microservices Framework</b>	<i>Separation of modules</i>	<i>Faster development, easier scaling</i>
<b>Redis Cache</b>	<i>For speed &amp; session</i>	<i>Reduces DB load, improves response time</i>
<b>Nginx</b>	<i>Reverse proxy &amp; load balancer</i>	<i>High-performance handling of web traffic</i>

### 6.2.3 Database & Storage Technologies (Preferably be used as following or equivalent)

Technology	Purpose	Why Used
<b>PostgreSQL / MySQL Cluster</b>	<i>Primary database</i>	<i>Handles millions of records, highly stable</i>
<b>Elastic Search</b>	<i>Search engine</i>	<i>Fast searching across millions of records</i>
<b>MinIO / S3</b>	<i>Document storage</i>	<i>Scalable document storage for billions of files</i>
<b>Redis</b>	<i>Cache layer</i>	<i>Improves performance by 10x</i>
<b>Kafka / RabbitMQ (Optional)</b>	<i>Message queue</i>	<i>For event-driven logs, async tasks</i>

#### 6.2.4 Infrastructure Technologies (Preferably be used as following or equivalent)

Technology	Purpose	Explanation
<b>Docker</b>	<i>Containerization</i>	<i>Packages each service into isolated environments</i>
<b>Kubernetes</b>	<i>Orchestration</i>	<i>Auto-scaling, auto-recovery, load balancing</i>
<b>HAProxy / Nginx LB</b>	<i>Load balancing</i>	<i>Ensures 24/7 availability</i>
<b>Linux Servers (RHEL/Ubuntu)</b>	<i>OS</i>	<i>Government standards, secure, stable</i>
<b>Elastic Stack (ELK)</b>	<i>Logging</i>	<i>Stores all logs, searchable by Commissioner HQ</i>

#### 6.2.5 Security Technologies (Preferably be used as following or equivalent)

Technology	Purpose
<b>Zero Trust Framework</b>	<i>“Never trust, always verify”</i>
<b>OAuth2 + JWT</b>	<i>Authentication tokens</i>
<b>Firewall + WAF</b>	<i>Protects from attacks</i>
<b>TLS 1.3 Encryption</b>	<i>Secure data transmission</i>
<b>AES-256 Encryption at Rest</b>	<i>Secure database/files</i>
<b>SIEM (Security Information &amp; Event Management)</b>	<i>Detect fraud &amp; attacks</i>
<b>Multi-Factor Authentication (MFA)</b>	<i>Required for DC/Admin</i>

## 6.2.6 Integration Technologies (Preferably be used as following or equivalent)

<i>Technology</i>	<i>Purpose</i>
<i>API Gateway (Kong / Tyk)</i>	<i>Secure NADRA API integration</i>
<i>Secure NADRA Channel</i>	<i>CNIC &amp; family tree verification</i>
<i>SMS/Email Gateway API</i>	<i>Notifications for citizens</i>
<i>Future Payment Gateway API</i>	<i>Govt. fees if introduced</i>

## 6.3. HOW THE ENTIRE SYSTEM WORKS

This section breaks down the entire Online domicile management System platform in simple, understandable terms.

### 6.3.1 Citizen Perspective (Front-End Flow)

1. Citizen opens the web portal
2. Registers with CNIC + OTP
3. System talks to NADRA to verify CNIC
4. Citizen fills application form
5. Uploads documents
6. Submits application
7. Can check live progress
8. Once approved, citizen downloads certificate

Everything happens online — no visits required.

### 6.3.2 DC Office Perspective

1. New applications appear in their dashboard
2. Officers verify documents
3. Officers run NADRA deep verification
4. Optional field verification is done
5. DC approves/rejects
6. Certificate is digitally generated
7. System logs every action for audit

### 6.3.3 Commissioner HQ Perspective

Commissioner sees:

1. Performance charts
2. Fraud alerts
3. Duplicate CNIC attempts
4. Slow-performing officers
5. District-wise insights

Complete governance & transparency.

### 6.3.4 System Perspective (Behind the Scenes)

1. User actions go through API Gateway
2. API gateway routes to correct microservice
3. Microservice interacts with database
4. Log events are streamed to ELK/Kafka or equivalent.
5. Notifications sent via SMS/Email
6. PDF generator creates certificates
7. QR generator creates verification links

## 6.4. SOFTWARE ARCHITECTURE

The application portal/online system must have microservices architecture divided into independent modules.

Each microservice is responsible for ONE job:

<b><i>Microservice</i></b>	<b><i>Function</i></b>	<b><i>Explanation</i></b>
<b><i>Auth Service</i></b>	<b><i>Login &amp; roles</i></b>	<b><i>Handles user authentication</i></b>
<b><i>Citizen Service</i></b>	<b><i>Citizen profile</i></b>	<b><i>Stores citizen info</i></b>
<b><i>Application Service</i></b>	<b><i>Domicile applications</i></b>	<b><i>Manages application lifecycle</i></b>
<b><i>Document Service</i></b>	<b><i>Document storage</i></b>	<b><i>Handles uploads &amp; validation</i></b>

<b>Verification Service</b>	<i>NADRA checks</i>	<i>Runs CNIC &amp; family verification</i>
<b>Certificate Service</b>	<i>PDF + QR issuance</i>	<i>Creates domicile certificate</i>
<b>Notification Service</b>	<i>Email/SMS</i>	<i>Sends updates</i>
<b>Audit Service</b>	<i>Logs every action</i>	<i>Creates tamper-proof logs</i>
<b>Reporting Service</b>	<i>Dashboards</i>	<i>Generates analytics</i>

## 6.5. DATA FRAMEWORK & STORAGE CAPACITY FOR 100 MILLION RECORDS

The application portal/online system must be capable of storing the records of all Karachi citizens and future scaling, therefore a 100 million user dataset capability is essential.

### 6.5.1 Data Types Stored

<b>Data Type</b>	<b>Size</b>	<b>Notes</b>
<i>Citizen profiles</i>	<i>100M records</i>	<i>Basic data (name, CNIC, DOB, address)</i>
<i>Applications</i>	<i>30–50M records</i>	<i>Per citizen, multiple applications</i>
<i>Documents</i>	<i>500M–1B files</i>	<i>Uploaded photos, CNIC scans</i>
<i>Audit logs</i>	<i>Billions</i>	<i>Every click recorded</i>
<i>Certificates</i>	<i>30–50M PDFs</i>	<i>Long-term storage</i>

### 6.5.2 Database Storage Calculation

#### Citizen Profiles

- Avg size per record: 1 KB
- 100M records → 100 GB



## Applications

- Avg size per record: 2 KB
- 50M records → **100 GB**

## Audit Logs

- 1 KB/log
- 5 billion logs/year → **5 TB/year**

## Documents

- 0.5–2 MB each
- 100M files → around **100 TB's**

## Certificates

- ~150 KB each
- 50M → **7.5 TB**

### 6.5.3 Total Storage Must be Required as below:

Type	Storage
Structured Data (DB)	~500 GB
Documents (CNIC scans, utilities)	500 TB – 1 PB
Certificates	~10 TB
Logs	5–10 TB / year

## Total UPTO 550 TB Extendable

A dedicated object storage cluster (like MinIO/S3) is required.

**NOTE:** A storage bank in case of failure of any live hardware, The media must be mirrored weekly

## 7. SYSTEMS USER's

### Citizen / Applicant

- Age: 18+
- Needs quick issuance
- Limited technical background

## **DC Receiving Office staff**

- Initial reviewer
- Responsible for document completeness

## **Verification Officer**

- Performs deep verification
- Requires NADRA checks

## **Deputy Commissioner**

- Final authority
- Digital signer of certificates

## **Commissioner HQ Officer**

- Senior oversight role
- Monitors district-level performance

## **System Administrator**

- Manages configurations
- Ensures system operations

## **8. PERFORMANCE FRAMEWORK**

For a city as large as Karachi, the system must withstand heavy load.

### **8.1 Performance Goals**

<i><b>Metric</b></i>	<i><b>Value</b></i>
<i>Concurrent Users</i>	<i>500–2,000</i>
<i>Requests per second</i>	<i>2,000+</i>
<i>Daily applications</i>	<i>10,000–25,000</i>
<i>Peak load</i>	<i>5× increase during deadlines</i>

### **8.2 Performance Strategies**

**Redis or equivalent Caching:** Speeds up repeated lookups by 10×.

**Database Indexing:** Optimizes search across 100M records.

**Load Balancers:** Distributes traffic across multiple servers.

**Horizontal Scaling:** Add more servers anytime.

**Asynchronous Processing;** Heavy tasks are offloaded to queues.

**NADRA API Caching Rules;** Reduces redundant API requests.

## 9. INFRASTRUCTURE FRAMEWORK

### 9.1 Servers

- Application servers: 4–8 nodes
- Database servers: Primary + Replica
- Storage cluster: On-prem and cloud
- Backup server: Offsite

### 9.2 Network Topology

**Layers:**

- Public Access Layer
- DMZ (API Gateway & WAF)
- Application Layer
- Microservices Layer
- Database Layer
- Secure Storage Layer
- No direct public access to core servers
- Zero-trust enforced between layers

## 10. SECURITY FRAMEWORK (FULL ZERO TRUST)

### Core Rules

1. **Never trust any request** — verify every single one
2. **Least privilege** — officers only see what they need
3. **Encrypted everywhere**

4. All actions logged
5. Every certificate verifiable via QR

## Security Components

- MFA for DC/Admin
- Firewall + WAF
- Audit logs
- SIEM alerts
- Encrypted DB
- File hashing
- Tokenized NADRA requests
- IP whitelisting

## 11. FAULT TOLERANCE & HIGH AVAILABILITY

### Redundancy

- Active-passive failover
- Auto-recovery for services

### Backup

- Hourly incremental
- Daily full backup

### Failover Time

- <5 minutes

## 12. OPERATIONS & WORKFLOW

This part describes the core operational modules and portals of the Karachi Metropolitan Online Domicile Management System. Each module ensures transparency, governance control, accountability, and end-to-end digitization of the domicile issuance process.

**NOTE:** Each and every functionality mentioned here in this part, This must be provided in the application/portal/system by the vendor/bidder

### 12.1. AUTHORITY MANAGEMENT



Authority Management defines who is empowered to perform which actions, in which jurisdiction, and under what policy and delegation structure.

The system maintains a clear digital hierarchy for (These will be the system user's):

- Commissioner (city-wide oversight)
- Deputy Commissioners (district authority)
- Assistant Commissioners / Supervisors
- Clerks / Verification Officers / Field Officers
- System Administrators
- Internal Auditors

### **How it will work:**

- When an officer logs in, the system identifies:
  1. Their role
  2. Their authority level
  3. Their district or sub-division
  4. Whether any delegated authority applies (e.g., DC on leave)
- Before allowing sensitive actions such as approval, rejection, appeal decision, or show-cause issuance, the system checks:
  1. Whether the officer has the legal and administrative authority to perform the action
  2. Whether the action falls within their geographical jurisdiction
  3. Whether authority is temporarily delegated or revoked

### **Purpose:**

- Ensures all decisions are made:
  1. By the correct officer
  2. At the correct administrative level

3. Within the correct district
4. Under the correct rules

## 12.2. DISTRICT MANAGEMENT

Application must be capable of identifying the right district, District Management defines how Karachi's administrative structure is represented inside the system and ensures applications flow to the correct DC office.

### How It Works

- Citizen enters their address when applying.
- The system automatically maps the address to:
  1. Locality / UC
  2. Sub-division / Tehsil
  3. District
- The application is then routed to the appropriate DC portal.
- Each DC portal only sees and processes applications belonging to its district.
- The Commissioner portal sees all districts, countrywide statistics, comparison charts, and performance indicators.

**Purpose:** It must should

- Prevents data leakage across districts
- Ensures correct and timely routing
- Provides accurate, district-wise analytics and performance reports
- Supports future district boundary changes by updating configuration only

## 12.3. APPEAL MANAGEMENT

Appeal Management enables citizens to challenge rejection decisions or request review of their application simply applying appeal button on his portal, and this will be forwarded to higher authority.

### How It Works



## 1. Trigger

Citizen receives a rejection decision. The system offers a “File Appeal” button.

## 2. Appeal Submission

Citizen submits:

- Reasons for appeal
- Additional documents
- Clarifications

## 3. Automatic Routing

The system forwards the appeal to:

- Commissioner
- Designated Appellate Officer

## 4. Review Process

The higher authority sees his/her portal:

- Original case
- Previous officer decisions
- All supporting documents
- Application history and logs

## 5. Decision

The authority may:

- Uphold the rejection
- Overturn it
- Order re-verification
- Send it back to DC for corrective action

## 6. Outcome

Citizen gets SMS/Email updates and sees result in the Citizen Portal.

The decision becomes part of the permanent case history.

## 12.4. ASSIGNMENT, REASSIGNMENT & ESCALATION MANAGEMENT



This module ensures that applications are distributed automatically as per the defined roles to the specific users, to process without delay, and escalated automatically when timelines are exceeded.

## **How Assignment Works**

- Applications enter the district queue.
- System automatically distributes cases among officers based on:
  1. Workload
  2. Skill (some cases require senior officers)
  3. Availability
- Supervisors can manually assign cases for special handling.

## **Reassignment**

Used when:

- Officer is unavailable (leave, rotation)
- Case is complex and requires senior review
- Conflict of interest is flagged

System logs:

- Who reassigned
- When
- Why
- From which officer to whom

## **Escalation Handling**

The system monitors deadlines at each stage.

**As:**

- Officer/support staff must initiate review within 24 hours
- Verification Officer must complete verification within 72 hours
- DC must decide within 48 hours of receiving complete file

## **If timeline breached:**

- System automatically escalates the case to higher authority

- Reminders are issued before escalation
- Persistent delays may trigger show-cause workflows

## 12.5. NOTIFICATIONS & REMINDERS

This module keeps all stakeholders informed at all times.

### Channels

- SMS
- Email
- In-portal alerts
- (Optional) Mobile push notifications

### Events Triggering Notices

- Application submitted
- Application moved to next stage
- Verification requested
- Approval/Rejection
- Appeal decision
- SLA deadline approaching
- Escalation
- Show-cause issued

## 13. TRACE & TRACK DELIVERY SYSTEM

The tracking system for domicile certificate delivery will be used by citizen's portal

It ensures transparency in post-approval processing and allows citizens to choose how they want to receive their certificate.

### 13.1 Citizen Delivery Options

When the domicile is approved, the citizen chooses:

#### Option 1: Self-Collection



Citizen collects the certificate from the DC office.

System Features:

- Citizen receives(auto-generate)
  1. Date/time slot for collection
  2. Location map & instructions
- Officer receives:
  1. Notification of scheduled collection
  2. Citizen verification checklist
  3. Finished application process (mark complete) on portal after physical receiving also

A QR scan or OTP on the officer's device validates handover.

### **Option 2: Courier Delivery**

Citizen opts for home delivery.

System Behavior:

- The system automatically creates a **delivery order**.
- Courier company receives the delivery request through a secure integration (API or portal).
- Citizen receives:
  1. Courier tracking number
  2. Courier company details
  3. Estimated delivery time
  4. Live tracking link

**Courier Rider's Workflow:** (NOTE: The printing, paper, delivery is also the responsibility of vendor / bidder for 1 year of assigning this bid)

1. Rider receives the job in the **Courier Rider App** (connected to Commissioner's central system).
2. Rider picks up the sealed certificate packet from DC office.
3. Rider updates:
  - “Picked Up”
  - “Out for Delivery”
4. On reaching citizen:



- Rider verifies identity using:
  1. CNIC scan
  2. OTP sent to citizen's phone
  3. QR code verification
  4. Cross-check with Commissioner's central system
- 5. Rider updates:
  - "Delivered Successfully"
  - OR
  - "Delivery Failed" (no response/identity mismatch)

#### **Citizen's Experience:**

- They can log into the Citizen Portal and track:
  1. Where their certificate currently is
  2. Which courier/rider has it
  3. Expected time
  4. Delivery status

#### **Audit Trail:**

Every step (pick, transit, arrival, verification, delivery) is seen on applications dashboard to Clinet/citizen and also logged for Commissioner HQ.

#### **13.2.Delivery Timeline Rules**

You mentioned:

- Certificate must be ready to send within **48 hours** of approval
- Delivery must be completed within **one week**

System enforces these via:

- Automated reminders to DC office
- Alerts for pending dispatch



- Courier timeline monitoring
- Escalations if delivery exceeds deadlines

### **13.3 Integration With Central Commissioner System**

All delivery events sync with **Commissioner's Central Tracking System**, including:

- Courier company actions
- Rider actions
- Delivery logs
- ID verification attempts
- Failed delivery reasons

Commissioner can:

- Monitor delivery compliance
- Identify courier delays
- Penalize non-performing contractors
- Generate district-wise or courier-wise performance reports

## **14. PORTALS**

Each portal plays a specific role in the system's ecosystem.

### **14.1 System Admin Portal**

Used by system administrators for:

- Configuring NADRA, SMS, Email, delivery services
- Managing officers, roles, and authorities
- Enabling/disabling modules
- Monitoring health, logs, uptime
- Scheduling maintenance and backups
- Complete monitoring via Dashboard

## 14.2 CMS Portal

Used to manage public-facing informational pages:

- FAQs
- Guidelines
- Announcements
- Policies
- Maintenance notifications

Supports multi-language content(ENGLISH/URDU/SINDHI).

## 14.3 DC Portal

- The main work area for district teams:
- Entire application workflow
- Verification tools
- Document review
- Approval/rejection
- SLA tracking
- Show-cause issuance
- Delivery processing (handover to courier or self-collection)
- Complete monitoring via Dashboard

## 14.4 Commissioner Portal

Provides District-wide oversight:

- District comparisons
- Fraud detection
- Appeals handling
- Authority delegations
- Escalation oversight
- Delivery tracking monitoring
- Performance analytics
- Complete monitoring via Dashboard

## 14.5 Citizen Portal

For public users:

- Register
- Apply for domicile

- Upload documents
- Track their application & delivery
- Choose self-collection or courier
- Download digital certificate
- Appeal submission
- Complaint filing
- All Information of application, Dashboard

## 15. LIVE MONITORING & DASHBOARDS

The Online Domicile Management System MUST includes a fully integrated, role-based Live Monitoring and Dashboard ecosystem for every user of the system. Each dashboard is tailored to the specific responsibilities of the Commissioner, DC Office, operational officers, support staff, courier partners, and citizens. The system provides real-time information, alerts, performance indicators, and actionable insights, ensuring transparency, efficiency, and total operational control.

### 15.1. Commissioner's Real-Time Monitoring Dashboard

The Commissioner's dashboard serves as the central command and supervisory interface, providing a city-wide live view of all operations across Karachi. This dashboard highlights:

- **Overall domicile activity** (all districts combined) with real-time updates of applications submitted, approved, rejected, pending, or escalated.
- **Comparative performance** of all DC offices, showing which districts are processing efficiently and where backlogs are forming.
- **Operational bottlenecks**, such as officers with unusually high pending cases or districts nearing SLA breaches.
- **Fraud detection indicators**, including abnormal patterns in applications, multiple submissions from the same CNIC, or inconsistent address data.
- **Live delivery tracking**, allowing the Commissioner to view certificates dispatched through courier or awaiting self-collection.

This dashboard empowers the Commissioner to take immediate corrective action, issue directives, reassign authority, or intervene at any level.

### 2. Deputy Commissioner's Live Operational Dashboard

Each Deputy Commissioner receives a district-focused dashboard, showing a live breakdown of all activities within their jurisdiction. It includes:

- The flow of new applications, applications under verification, and those awaiting the DC's decision.
- Officer-specific workload, allowing the DC to see how many cases each officer is handling, how many are pending, and who is approaching or exceeding SLAs.
- Real-time visibility into field verification tasks, document review delays, and NADRA verification issues.
- A dedicated section for tracking certificate dispatches within the district — which certificates are ready, which await courier pickup, and which citizens have opted for self-collection.
- Monitoring of appeals filed against district-level decisions and show-cause notices related to the district office.

This dashboard enables DCs to run their district with precision, quickly spotting delays and ensuring timely service delivery.

### **3. Officer's Personal Work Dashboard**

Verification Officers, Clerks, and Field Officers use a personalized dashboard that highlights only their assigned tasks and their performance metrics. It displays:

- Their current queue of assigned applications.
- Cases approaching deadline, requiring immediate attention.
- Applications requiring field verification, document validation, or fresh NADRA checks.
- A personal productivity summary, including applications processed per day, accuracy trends, and compliance.

### **4. Staff Support and Helpdesk Dashboard**

Support staff have a dashboard designed for managing citizen interactions and operational issues. It provides:

- A live list of citizen complaints and inquiries.
- Complaint categories, pending tickets, and escalation indicators.
- System health checks such as NADRA API responsiveness,

SMS/email gateway connectivity, and upload errors.

## 5. Citizen's Personal Application & Delivery Dashboard

Citizens have a clear and user-friendly dashboard that keeps them informed throughout the entire process. It includes:

- A **step-by-step progress timeline** showing exactly where their application currently stands.
- Notifications about any missing documents, verification delays, or decisions.
- Delivery tracking options:

Citizens can also submit appeals or complaints from within the same dashboard. This creates complete transparency and eliminates the need for physical visits.

## 6. System Administration Dashboard

System administrators access a high-level technical monitoring dashboard that covers the platform's infrastructure health. It shows:

- API availability, response times, and service uptime.
- SMS/email delivery success rates.
- Storage consumption, database load, and micro service performance.
- Backup and restore schedules, plus system maintenance status.

## 7. Courier and Rider Delivery Dashboard

Courier partners and registered riders have a dedicated dashboard to manage certificate delivery. It provides:

- Certificates assigned for delivery with the timestamp of pickup.
- Real-time delivery routes (GPS optional), expected arrival times, and delivery status updates.
- Tools for identity verification at the citizen's doorstep using CNIC, OTP, or QR code scanning.
- Logs of failed delivery attempts with reasons and rescheduling options.

## **MODE OF PAYMENT**

1. Network Hardware payment will be made after 100% of equipment delivered & Installation of complete system of Hardware to the concerned authority office.
2. Software/application payment is divided in to FOUR Phases.

## **Phase 1 UI/UX Design & System Architecture**

### **SOFTWARE ARCHITECTURE**

The application portal/online system must have micro services architecture divided into independent modules. Each micro service is responsible for ONE job:

<b><i>Micro service</i></b>	<b><i>Function</i></b>	<b><i>Explanation</i></b>
<b><i>Auth Service</i></b>	<b><i>Login &amp; roles</i></b>	<b><i>Handles user authentication</i></b>
<b><i>Citizen Service</i></b>	<b><i>Citizen profile</i></b>	<b><i>Stores citizen info</i></b>
<b><i>Application Service</i></b>	<b><i>Domicile applications</i></b>	<b><i>Manages application lifecycle</i></b>
<b><i>Document Service</i></b>	<b><i>Document storage</i></b>	<b><i>Handles uploads &amp; validation</i></b>
<b><i>Verification Service</i></b>	<b><i>NADRA checks</i></b>	<b><i>Runs CNIC &amp; family verification</i></b>
<b><i>Certificate Service</i></b>	<b><i>PDF + QR issuance</i></b>	<b><i>Creates domicile certificate</i></b>
<b><i>Notification Service</i></b>	<b><i>Email/SMS</i></b>	<b><i>Sends updates</i></b>
<b><i>Audit Service</i></b>	<b><i>Logs every action</i></b>	<b><i>Creates tamper-proof logs</i></b>
<b><i>Reporting Service</i></b>	<b><i>Dashboards</i></b>	<b><i>Generates analytics</i></b>

## 6.5. DATA FRAMEWORK & STORAGE CAPACITY FOR 100 MILLION RECORDS

The application portal/online system must be capable of storing the records of all Karachi citizens and future scaling, therefore a 100 million user dataset capability is essential.

### 6.5.1 Data Types Stored

<b>Data Type</b>	<b>Size</b>	<b>Notes</b>
<i>Citizen profiles</i>	<i>100M records</i>	<i>Basic data (name, CNIC, DOB, address)</i>
<i>Applications</i>	<i>30–50M records</i>	<i>Per citizen, multiple applications</i>
<i>Documents</i>	<i>500M–1B files</i>	<i>Uploaded photos, CNIC scans</i>
<i>Audit logs</i>	<i>Billions</i>	<i>Every click recorded</i>
<i>Certificates</i>	<i>30–50M PDFs</i>	<i>Long-term storage</i>

### 6.5.2 Database Storage Calculation

#### Citizen Profiles

- Avg size per record: 1 KB
- 100M records → **100 GB**

#### Applications

- Avg size per record: 2 KB
- 50M records → **100 GB**

#### Audit Logs

- 1 KB/log
- 5 billion logs/year → **5 TB/year**

#### Documents

- 0.5–2 MB each
- 100M files → around **100 TB's**

#### Certificates

- ~150 KB each
- 50M → **7.5 TB**



### 6.5.3 Total Storage Must be Required as below:

Type	Storage
Structured Data (DB)	~500 GB
Documents (CNIC scans, utilities)	500 TB – 1 PB
Certificates	~10 TB
Logs	5–10 TB / year

**Total ~550 TB to 1.1 PB projected**

A dedicated object storage cluster (like MinIO/S3) is required.

**NOTE:** A storage bank in case of failure of any live hardware, The media must be mirrored weekly

## 7. SYSTEMS USER's

### Citizen / Applicant

- Age: 18+
- Needs quick issuance
- Limited technical background

### DC Receiving Office staff

- Initial reviewer
- Responsible for document completeness

### Verification Officer

- Performs deep verification
- Requires NADRA checks

### Deputy Commissioner

- Final authority
- Digital signer of certificates

### Commissioner HQ Officer

- Senior oversight role
- Monitors district-level performance

### System Administrator

- Manages configurations
- Ensures system operations

## 8. PERFORMANCE FRAMEWORK

For a city as large as Karachi, the system must withstand heavy load.

### 8.1 Performance Goals

<i>Metric</i>	<i>Value</i>
<i>Concurrent Users</i>	500–2,000
<i>Requests per second</i>	2,000+
<i>Daily applications</i>	10,000–25,000
<i>Peak load</i>	5× increase during deadlines

## 8.2 Performance Strategies

**Redis Caching:** Speeds up repeated lookups by 10×.

**Database Indexing:** Optimizes search across 100M records.

**Load Balancers:** Distributes traffic across multiple servers.

**Horizontal Scaling:** Add more servers anytime.

**Asynchronous Processing:** Heavy tasks are offloaded to queues.

**NADRA API Caching Rules:** Reduces redundant API requests.

# 9. INFRASTRUCTURE FRAMEWORK

## 9.1 Servers

- Application servers: 4–8 nodes
- Database servers: Primary + Replica
- Storage cluster: On-prem and cloud
- Backup server: Offsite

## 9.2 Network Topology

### Layers:

- Public Access Layer
- DMZ (API Gateway & WAF)
- Application Layer
- Microservices Layer
- Database Layer
- Secure Storage Layer
- No direct public access to core servers
- Zero-trust enforced between layers

# 10. SECURITY FRAMEWORK (FULL ZERO TRUST)

### Core Rules

6. **Never trust any request** — verify every single one
7. **Least privilege** — officers only see what they need
8. **Encrypted everywhere**
9. **All actions logged**
10. **Every certificate verifiable via QR**

### Security Components

- MFA for DC/Admin

- Firewall + WAF
- Audit logs
- SIEM alerts
- Encrypted DB
- File hashing
- Tokenized NADRA requests
- IP whitelisting

## 11. FAULT TOLERANCE & HIGH AVAILABILITY

### Redundancy

- Two data centers
- Active-passive failover
- Auto-recovery for services

### Backup

- Hourly incremental
- Daily full backup

### Failover Time

- <5 minutes

**After complication of Phase #1 above, 30% Payment may be clear**

## Phase 2 Core Development

### 5.1.2 NADRA CNIC & Identity Verification

The system should perform real-time, API-level integration with NADRA's VeriSys to validate and pick data from NADRA's live Database:

- Full name
- Father's name
- Date of birth
- CNIC status (active/block/expired)
- Gender
- Family ID
- Family tree (optional deep verification mode)
- NADRA photograph (for officer comparison)

### Technical Highlights:

- Verification logs stored with timestamp and officer ID for verification at every stage
- NADRA request throttling to prevent overuse (from DoS attack like situation)
- Audit trail maintained for compliance (Every record should be maintained as an individual log trail and record should be kept)

### **5.1.3 Online Application Form (Dynamic & Auto-Prefilled)**

A multistep, easy-to-use, guided web form.(Instructions at every step in English and Urdu to guide user)

#### **5.1.3.1 Sections Included**

- Personal Information
- CNIC Details (Both options will be used)
- Option:1 Auto filled from NADRA picked from their DB
- Option:2 Live scanned of Physical NIC provided by the user, the system will read Scanned NIC detailed automatically insert them in form and user will mut have an option to edit it also
- Father/Guardian Details
- Permanent Address
- Temporary Address
- Place of Birth
- Duration of Stay in Karachi
- Previous Domicile Information
- Reason for Applying
- Document Uploads
- Declaration & Digital Consent
- Fee submissions

17. Review Application

18. Alerts

19. Dashboard Notices

20. Dashboard for progression(to show the timeline how much time is remained in his/her domicile to finalize)

#### **5.1.3.2 Autofill Capabilities**

- NADRA data insertion
- Address options will be (via database or map service)

### **5.1.4 Document Uploading & Validation**

A secure and intelligent upload process for all the required documents.

### **Documents Required**

- CNIC (front/back)
- Father/Guardian CNIC
- Utility bills (electricity, gas, water) (in Optional section)
- Rent agreement (if applicable)
- Form-B
- Passport-size photo
- Affidavit

NOTE: The system should be capable of keeping record of 100 millions of entries with all attached files and etc)

### **Validation Layers**

- File type & size validation (Allowed sizes, The system/software should contain a live facility to compress attachments of user for free)
- Blur detection (AI based)
- Duplicate document detection
- Hash storage for tamper detection

### **5.1.5 Application Submission**

- System generates unique Application ID
- District auto-selected based on provided address and CNIC
- Submission event logged
- Confirmation sent via SMS/Email

### **5.1.6 Real-Time Application Tracking**

Citizen sees a process timeline, including:

- Submitted
- Initial Review (Editable by user with no limitations)
- Under Verification (A phase with limited edits allow)
- NADRA Verification (Live from NADRA's DB)
- Field Verification (if applicable)
- Pending DC Approval
- Approved / Rejected, Status

Each event includes:

4. Timestamp (Server input time)
5. Performing officer
6. Status change reason

### **5.1.7 Certificate Download**



7. Auto-generated PDF
8. QR code embedded
9. Digital signature of DC
10. Tamper-proof PDF/Image settings
11. Serial number integrated
12. Download + email delivery

### **5.1.8 Citizen Feedback, Complaints & Helpdesk**

- Ticketing system
- Resolution tracking
- Complaint escalations to higher channel, as ADC, DC, Commissioner (All should be online and complain raised by the user should be reflected immediately at ADC, DC, Commissioner's portal as alert when they logged-in, priorities could be assigned accordingly)
- Public service index measurement (Statistical data of every day, week, month with proper visibility of Graphs and charts on all management Dashboards)

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## **5.2 DEPUTY COMMISSIONER (DC) OFFICE SERVICES**

This module elaborates all districts of Karachi centrally reporting to Commissioner's office. The module is a district-level domicile processing workflows.

### **5.2.1 Application Intake & Assignment**

- Dashboard listing new applications
- Automated assignment rules based on workload
- Manual override for supervisors
- Priority tagging for urgent cases

### **5.2.2 Document Verification Module**

Electronically verifies all submitted documents.

#### **Capabilities**

- Side-by-side comparison view
- Automatic “checklist completion” indication
- AI/ML-based fraud hints (optional)
- Metadata extraction (OCR)
- Document history comparison

### **5.2.3 NADRA Deep Verification Tools**

Officers can run advanced verification:

#### **7. Basic CNIC Verification**

8. **Family Tree Verification**
9. **Family Head Confirmation**
10. **Address Verification (NADRA record)**
11. **Multi-factor Identity Match**
12. **Photo Comparison with NADRA record**

Each verification event:

- Stored in audit log
- Shown in citizen tracking
- Used for risk scoring

#### **5.2.4 Workflow Processing**

The application flows through:

5. **Clerk Review**
6. **Verification Officer**
7. **Supervisor (Optional)**
8. **Deputy Commissioner Approval**

Each level:

- Adds notes
- Approves or rejects
- Requests more information
- GPS coordinates stored (live for security reasons)
- Verification report submitted digitally

#### **5.2.6 Decision Stage**

Deputy Commissioner can:

- Approve (to forward ahead)
- Reject
- Request clarification
- Mark as high-risk
- Sign digitally

#### **5.2.7 Certificate Generation**

Upon approval:

- PDF is automatically created
- DC digital signature applied
- QR code embedded by the central system to verify its originality
- Certificate stored in permanent archive (DB of Central service and on cloud at the same time)



## 5.2.8 DC Office Dashboards

Metrics include:

- Total applications
- Today's applications
- Pending in each stage
- Average processing time
- Officer workload distribution
- SLA compliance percentage
- Weekly performance trends

## 5.3 COMMISSIONER HQ CENTRAL CONTROL SYSTEM

The Commissioner HQ system provides city-level governance, oversight, analytics, and control.

### 5.3.1 Unified Monitoring Dashboard

Shows complete KPIs:

- District-wise application volumes
- Processing times per DC office
- SLA compliance per officer
- Fraud attempt alerts
- NADRA error rates
- Certificate issuance trends
- High-risk applications

### 5.3.2 Centralized User & Role Management

Commissioner's office can:

- Create/delete DC office staff accounts
- Assign roles & permissions
- Suspend non-compliant officers and highlight
- Monitor login histories
- Track officer activities

### 5.3.3 Fraud Detection & Anomaly Analytics

Includes:

- Duplicate CNIC applications
- Blacklisted addresses
- Multiple applications from same IP
- Unusually fast approvals
- Suspicious document patterns

- NADRA mismatch alerts

#### **5.3.4 Compliance & Audit Tools**

Commissioner office can:

- Access full audit logs
- Inspect any application record
- Extract reports for government committees
- Generate compliance summaries
- Track SOP adherence

#### **5.3.5 Certificate Serial Range Management**

Assigns district-level certificate ranges to ensure:

- No duplication
- No off-record issuance
- Consistent numbering

#### **5.3.6 Policy Enforcement Controls**

Commissioner can define:

- Residency requirements
- Document requirements
- Verification rules
- Approval escalation rules

These policies automatically apply across all DC Offices.

### **5.4 ADMINISTRATIVE BACK OFFICE MODULE (Central System Module)**

The system includes a powerful administrative backend, such as

#### **5.4.1 Role-Based Access Control (RBAC) Engine**

Admin can:

- 5) Define new roles
- 6) Configure permissions
- 7) Create permission groups
- 8) Assign workflow-based access

#### **5.4.2 System Configuration Management**

Controls:

- 6) API settings
- 7) SMS gateway configuration
- 8) Email server configuration
- 9) NADRA API limits
- 10) Application timeout settings



### **5.4.3 Logging & Audit Viewer**

Admin can view:

- 7) System logs
- 8) API logs
- 9) User action logs
- 10) NADRA verification logs
- 11) Error logs
- 12) Security logs

### **5.4.4 Data Export & Reporting**

- 5) Export applications
- 6) Export certificate data
- 7) Export audit logs
- 8) Export officer performance reports

### **5.4.5 Backup & Restore Controls**

Admin can:

- 4) Trigger manual backups
- 5) Restore data
- 6) View backup schedules

## **5.5 INTEGRATIONS**

### **5.5.1 NADRA VeriSys/API Integration**

**NOTE:** Cost will be borne by the vendor/bidder

- Identity verification to set primary key
- Family tree / FRS record fetch
- Address verification (Permanent residency)
- CNIC status (Active/Inactive/Expire)
- Photograph (Match)

### **Technical Features**

- Mutual TLS
- IP white listing
- Dedicated NADRA gateway
- High-security token mechanism

### **5.5.2 SMS Gateway Integration**

**NOTE:** Cost will be borne by the vendor/bidder

Used for:

- OTP generation to user's provided number
- Status updates at every stage
- Approval alerts when processing

Supports:

- Failover routes
- Delivery reports

### **5.5.3 Email Gateway Integration**

**NOTE:** Cost will be borne by the vendor/bidder

Provides:

- Email confirmations
- Certificate delivery
- Notifications

Can use:

- SMTP
- API-based email services

### **5.5.4 Payment Gateway (Live)**

For possible domicile fee:

Supports:

- JazzCash
- Easypaisa
- Debit/Credit Cards
- Banks

Provides:

- Payment receipts
- Transaction logs
- History

## **5.6 CENTRAL DATA GOVERNANCE & SECURITY**

A centralized data model ensures:

- Single source of truth
- Consistent citizen data
- Strong access controls
- Immutable audit logging

Includes:

- Encryption at rest
- Encryption in transit
- Data masking
- Role-based data visibility

## 5.7 FUTURE EXPANSION MODULES

### 5.7.1 Mobile Field Verification App

- GPS lock
- Offline mode
- Photo upload
- QR scanning

### 5.7.2 Integration with Other Government Systems

- Municipal records
- Housing records

### 5.7.3 AI-Based Fraud Detection

- Machine learning risk scoring
- Pattern recognition

**After complication of Phase # 2 above, 30% Payment may be clear**

## **Phase 3 Testing & User Acceptance**

## **OPERATIONS & WORKFLOW**

This part describes the core operational modules and portals of the Karachi Metropolitan Online Domicile Management System. Each module ensures transparency, governance control, accountability, and end-to-end digitization of the domicile issuance process.

**NOTE:** Each and every functionality mentioned here in this part, This must be provided in the application/portal/system by the vendor/bidder

### **12.1. AUTHORITY MANAGEMENT**

Authority Management defines who is empowered to perform which actions, in which jurisdiction, and under what policy and delegation structure.

The system maintains a clear digital hierarchy for(These will be the system user's):

- Commissioner (city-wide oversight)
- Deputy Commissioners (district authority)

- Assistant Commissioners / Supervisors
- Clerks / Verification Officers / Field Officers
- System Administrators
- Internal Auditors

### **How it will work:**

- When an officer logs in, the system identifies:
  - 5. Their role
  - 6. Their authority level
  - 7. Their district or sub-division
  - 8. Whether any delegated authority applies (e.g., DC on leave)
- Before allowing sensitive actions such as approval, rejection, appeal decision, or show-cause issuance, the system checks:
  - 4. Whether the officer has the legal and administrative authority to perform the action
  - 5. Whether the action falls within their geographical jurisdiction
  - 6. Whether authority is temporarily delegated or revoked

### **Purpose:**

- Ensures all decisions are made:
  - 5. By the correct officer
  - 6. At the correct administrative level
  - 7. Within the correct district
  - 8. Under the correct rules

## **12.2. DISTRICT MANAGEMENT**

Application must be capable of identifying the right district, District Management defines how Karachi's administrative structure is represented inside the system and ensures applications flow to the correct DC office.

### **How It Works**

- Citizen enters their address when applying.
- The system automatically maps the address to:

4. Locality / UC
5. Sub-division / Tehsil
6. District

- The application is then routed to the appropriate DC portal.
- Each DC portal only sees and processes applications belonging to its district.
- The Commissioner portal sees all districts, countrywide statistics, comparison charts, and performance indicators.

**Purpose:** It must should

- Prevents data leakage across districts
- Ensures correct and timely routing
- Provides accurate, district-wise analytics and performance reports
- Supports future district boundary changes by updating configuration only

### **12.3. APPEAL MANAGEMENT**

Appeal Management enables citizens to challenge rejection decisions or request review of their application simply applying appeal button on his portal, and this will be forwarded to higher authority.

#### **How It Works**

##### **7. Trigger**

Citizen receives a rejection decision. The system offers a “File Appeal” button.

##### **8. Appeal Submission**

Citizen submits:

- Reasons for appeal
- Additional documents
- Clarifications

##### **9. Automatic Routing**

The system forwards the appeal to:

- Commissioner
- Designated Appellate Officer

##### **10. Review Process**

The higher authority sees his/her portal:

- Original case
- Previous officer decisions
- All supporting documents

- Application history and logs

## 11. Decision

The authority may:

- Uphold the rejection
- Overturn it
- Order re-verification
- Send it back to DC for corrective action

## 12. Outcome

Citizen gets SMS/Email updates and sees result in the Citizen Portal.

The decision becomes part of the permanent case history.

## 12.4. ASSIGNMENT, REASSIGNMENT & ESCALATION MANAGEMENT

This module ensures that applications are distributed automatically as per the defined roles to the specific users, to processed without delay, and escalated automatically when timelines are exceeded.

### How Assignment Works

- Applications enter the district queue.
- System automatically distributes cases among officers based on:
  4. Workload
  5. Skill (some cases require senior officers)
  6. Availability
- Supervisors can manually assign cases for special handling.

### Reassignment

Used when:

- Officer is unavailable (leave, rotation)
- Case is complex and requires senior review
- Conflict of interest is flagged

System logs:

- Who reassigned
- When
- Why
- From which officer to whom

### Escalation Handling

The system monitors deadlines at each stage.



**As:**

- Officer/support staff must initiate review within 24 hours
- Verification Officer must complete verification within 72 hours
- DC must decide within 48 hours of receiving complete file

**If timeline breached:**

- System automatically escalates the case to higher authority
- Reminders are issued before escalation
- Persistent delays may trigger show-cause workflows

## **12.5. NOTIFICATIONS & REMINDERS**

This module keeps all stakeholders informed at all times.

**Channels**

- SMS
- Email
- In-portal alerts
- (Optional) Mobile push notifications

**Events Triggering Notices**

- Application submitted
- Application moved to next stage
- Verification requested
- Approval/Rejection
- Appeal decision
- SLA deadline approaching
- Escalation
- Show-cause issued

## **13. TRACE & TRACK DELIVERY SYSTEM**

The tracking system for domicile certificate delivery will be used by citizen's portal

It ensures transparency in post-approval processing and allows citizens to choose how they want to receive their certificate.

### **13.1 Citizen Delivery Options**

When the domicile is approved, the citizen chooses:

#### **Option 1: Self-Collection**

Citizen collects the certificate from the DC office.

System Features:

- Citizen receives (auto-generate)
  4. Date/time slot for collection
  5. Location map & instructions
- Officer receives:
  6. Notification of scheduled collection
  7. Citizen verification checklist
  8. Finished application process (mark complete) on portal after physical receiving also

A QR scan or OTP on the officer's device validates handover.

### **Option 2: Courier Delivery**

Citizen opts for home delivery.

System Behavior:

- The system automatically creates a **delivery order**.
- Courier company receives the delivery request through a secure integration (API or portal).
- Citizen receives:
  5. Courier tracking number
  6. Courier company details
  7. Estimated delivery time
  8. Live tracking link

**Courier Rider's Workflow:** (NOTE: The printing, paper, delivery is also the responsibility of vendor / bidder for 1 year of assigning this bid)

6. Rider receives the job in the **Courier Rider App** (connected to Commissioner's central system).
7. Rider picks up the sealed certificate packet from DC office.
8. Rider updates:
  - "Picked Up"
  - "Out for Delivery"
9. On reaching citizen:
  - Rider verifies identity using:
    5. CNIC scan
    6. OTP sent to citizen's phone
    7. QR code verification
    8. Cross-check with Commissioner's central system

10. Rider updates:



- “Delivered Successfully”
- OR
- “Delivery Failed” (no response/identity mismatch)

### **Citizen's Experience:**

- They can log into the Citizen Portal and track:
  5. Where their certificate currently is
  6. Which courier/rider has it
  7. Expected time
  8. Delivery status

### **Audit Trail:**

Every step (pick, transit, arrival, verification, delivery) is seen on applications dashboard to Clinet/citizen and also logged for Commissioner HQ.

### **13.2.Delivery Timeline Rules**

You mentioned:

- Certificate must be ready to send within 48 hours of approval
- Delivery must be completed within one week

System enforces these via:

- Automated reminders to DC office
- Alerts for pending dispatch
- Courier timeline monitoring
- Escalations if delivery exceeds deadlines

### **13.3 Integration With Central Commissioner System**

All delivery events sync with **Commissioner's Central Tracking System**, including:

- Courier company actions
- Rider actions
- Delivery logs
- ID verification attempts
- Failed delivery reasons
- Commissioner can:
- Monitor delivery compliance
- Identify courier delays
- Penalize non-performing contractors
- Generate district-wise or courier-wise performance reports

## **14. PORTALS**

Each portal plays a specific role in the system's ecosystem.

### **14.1 System Admin Portal**

Used by system administrators for:

- Configuring NADRA, SMS, Email, delivery services
- Managing officers, roles, and authorities
- Enabling/disabling modules
- Monitoring health, logs, uptime
- Scheduling maintenance and backups
- Complete monitoring via Dashboard

### **14.2 CMS Portal**

Used to manage public-facing informational pages:

- FAQs
- Guidelines
- Announcements
- Policies
- Maintenance notifications

Supports multi-language content(ENGLISH/URDU/SINDHI).

### **14.3 DC Portal**

- The main work area for district teams:
- Entire application workflow
- Verification tools
- Document review
- Approval/rejection
- SLA tracking
- Show-cause issuance
- Delivery processing (handover to courier or self-collection)
- Complete monitoring via Dashboard

### **14.4 Commissioner Portal**

Provides District-wide oversight:

- District comparisons
- Fraud detection
- Appeals handling
- Authority delegations
- Escalation oversight

- Delivery tracking monitoring
- Performance analytics
- Complete monitoring via Dashboard

## 14.5 Citizen Portal

For public users:

- Register
- Apply for domicile
- Upload documents
- Track their application & delivery
- Choose self-collection or courier
- Download digital certificate
- Appeal submission
- Complaint filing
- All Information of application, Dashboard

**After complication of Phase # 3 above, 20% Payment may be clear**

## **Phase 4 Deployment, Training & Launch**

### **LIVE MONITORING & DASHBOARDS**

The Online Domicile Management System MUST includes a fully integrated, role-based Live Monitoring and Dashboard ecosystem for every user of the system. Each dashboard is tailored to the specific responsibilities of the Commissioner, DC Office, operational officers, support staff, courier partners, and citizens. The system provides real-time information, alerts, performance indicators, and actionable insights, ensuring transparency, efficiency, and total operational control.

#### **15.1. Commissioner's Real-Time Monitoring Dashboard**

The Commissioner's dashboard serves as the central command and supervisory interface, providing a city-wide live view of all operations across Karachi. This dashboard highlights:

- **Overall domicile activity** (all districts combined) with real-time updates of applications submitted, approved, rejected, pending, or escalated.
- **Comparative performance** of all DC offices, showing which districts are processing efficiently and where backlogs are forming.
- **Operational bottlenecks**, such as officers with unusually high pending cases or districts nearing SLA breaches.
- **Fraud detection indicators**, including abnormal patterns in

applications, multiple submissions from the same CNIC, or inconsistent address data.

- **Live delivery tracking**, allowing the Commissioner to view certificates dispatched through courier or awaiting self-collection.

This dashboard empowers the Commissioner to take immediate corrective action, issue directives, reassign authority, or intervene at any level.

## **2. Deputy Commissioner's Live Operational Dashboard**

Each Deputy Commissioner receives a district-focused dashboard, showing a live breakdown of all activities within their jurisdiction. It includes:

- The flow of new applications, applications under verification, and those awaiting the DC's decision.
- Officer-specific workload, allowing the DC to see how many cases each officer is handling, how many are pending, and who is approaching or exceeding SLAs.
- Real-time visibility into field verification tasks, document review delays, and NADRA verification issues.
- A dedicated section for tracking certificate dispatches within the district — which certificates are ready, which await courier pickup, and which citizens have opted for self-collection.
- Monitoring of appeals filed against district-level decisions and show-cause notices related to the district office.

This dashboard enables DCs to run their district with precision, quickly spotting delays and ensuring timely service delivery.

## **2. Officer's Personal Work Dashboard**

Verification Officers, Clerks, and Field Officers use a personalized dashboard that highlights only their assigned tasks and their performance metrics. It displays:

- Their current queue of assigned applications.
- Cases approaching deadline, requiring immediate attention.
- Applications requiring field verification, document validation, or fresh NADRA checks.
- A personal productivity summary, including applications processed per day, accuracy trends, and compliance.

## **4. Staff Support and Helpdesk Dashboard**

Support staff have a dashboard designed for managing citizen interactions and operational issues. It provides:

- A live list of citizen complaints and inquiries.
- Complaint categories, pending tickets, and escalation indicators.
- System health checks such as NADRA API responsiveness, SMS/email gateway connectivity, and upload errors.

## **5. Citizen's Personal Application & Delivery Dashboard**

Citizens have a clear and user-friendly dashboard that keeps them informed throughout the entire process. It includes:

- A **step-by-step progress timeline** showing exactly where their application currently stands.
- Notifications about any missing documents, verification delays, or decisions.
- Delivery tracking options:

Citizens can also submit appeals or complaints from within the same dashboard. This creates complete transparency and eliminates the need for physical visits.

## **6. System Administration Dashboard**

System administrators access a high-level technical monitoring dashboard that covers the platform's infrastructure health. It shows:

- API availability, response times, and service uptime.
- SMS/email delivery success rates.
- Storage consumption, database load, and micro service performance.
- Backup and restore schedules, plus system maintenance status.

## **7. Courier and Rider Delivery Dashboard**

Courier partners and registered riders have a dedicated dashboard to manage certificate delivery. It provides:

- Certificates assigned for delivery with the timestamp of pickup.
- Real-time delivery routes (GPS optional), expected arrival times, and delivery status updates.
- Tools for identity verification at the citizen's doorstep using CNIC, OTP, or QR code scanning.
- Logs of failed delivery attempts with reasons and rescheduling options.

Final Given Training of complete system with complete documentation given by end user to the authorities.

**After complication of Phase # 4 above, Final 20% Payment may be clear**

## **PHASE # 5 (OPERATION & MAINTENANCE).**

Will be paid month wise after completing the above works for the one year.

## **ELIGIBILITY CRITERIA / MANDATORY REQUIREMENT**

**(ALL MANDATORY / REQUIRED DOCUMENTS MUST BE PROPERLY ANNEXED)**

<b>Sr. No</b>	<b>Requirement</b>	<b>Response YES / NO</b>	<b>Documentary Proof @ Page</b>
01	Active Registration with Pakistan Engineering Council in the C-4 category or above having specialized codes EE-02 & EE-09 (Attach valid PEC License).		
02	Active Registration with Income Tax Department (FBR) and Sindh Revenue Board (SRB), (Attach latest copy of NTN, SRB Registration & CNIC).		
03	The Bid Security / Earnest money of <b>Rs. 5.00 (M)</b> on account of firms name in the shape of call deposit or pay order (original) issued from scheduled bank at the time of submission of bidding document in favor of Executive Engineer, Project Directorate of Commissioner Karachi.		
04	Undertaking on e-stamp affidavit that the firm is not Black listed by any Government Department or Procuring Agency, have ability to disaster recovery requirement, have backup services having backup provisions for all types of backups, 24/7 support escalation matrix. Affidavit that all documents / particulars are correct.		



## **EVALUATION CRITERIA OF TECHNICAL PROPOSAL**

Bidders who have been qualified in the mandatory evaluation shall be eligible for a detailed evaluation. The Procuring Agency will evaluate and compare the bids that have been determined to be substantially responsive in accordance with the SPPRA Rules 2010 (Updated 2022). The bidder with the Most Advantageous bid shall be awarded the contract, within the original or extended period of bid validity.

The Purchaser's evaluation of responsive bids will take into account technical factors, in addition to cost factors. The following weights will be used in the evaluation of bids:

<b>Evaluation Criteria</b>		Documentary Evidence be Attached	Marks
<b>Section 1 (5 Marks)</b>			
<b>Company Profile</b>			
1.1	Years of Establishment of firm	Company Profile/documentary evidence / proof should be attached in the Technical bid for verification (at least 3 years)	Max Marks = 5 9 Years and above = 5 Marks 7 Years = 04 Marks 5 Years = 03 Marks 3 Years = 02 Marks 3 Years = 01 Marks Less than 3 years = 00 Marks
<b>Section 2 (10 Marks)</b>			
<b>Financial Capability</b>			
2.1	Average annual turnover of the firm for the last 3 years	Audited Financial Statement of last 3 years of the company  2022-23 2023-24 & 2024-25	Max Marks = 10  200 Million or Above = 10 Marks 200 million to 150 million = 5 Marks 150 million to 100 = 2.5 Marks Below 100 Million = 0 Marks
<b>Section 3 (25 Marks)</b>			
<b>Experience / Similar Nature of work / Core expertise</b>			
3.1	Delivery / Deployment / Supply of Hardware in the public or private sector	Purchase Order OR work order OR Contract Agreement of IT Projects in Government sector or Private Sector (worth over 10.0 million per Project). <b>(provide documentary evidence)</b>	Max Marks = 10  Each project = 5 Marks 02 or more = 10 Marks
3.2	Software / Application Development Projects completed in the public or private sector.	Work order OR Contract Agreement of IT Projects in Government sector or Private. <b>(provide documentary evidence)</b>	Max Marks = 10  Rs. 200 (M) & above  Each project = 5 marks 02 or more = 10 marks  Rs. 100 (M) & above Each project = 2.50 marks 04 or more = 10 marks
3.3	Experience to manage hosting services	<b>(Provide documentary evidence)</b>	Max Marks = 5

<b>Section 4 (20 Marks)</b> <b>Human Resource</b>			
4.1	Team Profile	Profiles of Key HR: PM, tech, support, etc  (CVs, LinkedIn, certifications)  <b>(provide documentary evidence)</b>	Maximum Marks =5  5 = expert team, 3 = adequate, 1 = weak
4.2	Experience & Capacity	Experience in similar projects (Work history, reference)  <b>(provide documentary evidence)</b>	Max Marks = 5  5 = extensive team, 3 = moderate, 1 = limited.
4.3	Availability & Commitment	Resources allocation to this project (Deployment plan)  <b>(provide documentary evidence)</b>	Max Marks = 5  5 = dedicated team, 3 = shared, 1 = not clear
4.4	Validation of HR	Proof of employment (Employment letters, salary slips)  <b>(provide documentary evidence)</b>	Max Marks = 5  5 = full docs team, 3 = Partial, 0 = No Docs.
<b>Section 5 (25 Marks)</b> <b>Technical Strength</b>			
5.1	Technical Compliance (Hardware)	Provide Technical Compliance Sheet in Tabulated Form specifying the compliance of each and every quoted item as per required specification with documentary evidence.	Max = 5 Marks  Layer-2 Switch POE= 01 Mark Xeon Server = 01 Mark Network fire wall = 01 Mark Access Control = 01 Mark Printer RFID Copier = 01 Mark
5.2	Security Features (Online Verification)	Bidders must demonstrate implemented security features. This includes a secure online verification process that requires a full case brief and all necessary documentation. - Online verification method with complete brief and documents  (Any one project relevant to this project)	(5 Marks)
5.3	Security Features (Offline Verification)	The bidder must demonstrate the security features such as Offline verification(without any electronic gadgets) method with complete brief and documents, In addition, the submission must include proof-of-concept in terms of demonstrations to validate the proposed methodologies, technical feasibility and integration approach.	(5 Marks)

5.4	OEM Support (Original Equipment Manufacturer) For Software	Bidder should provide valid OEM authorized certificate for following software component.	
		a) Direct OEM Development Support: Evidence of the OEM's direct involvement in developing the integrated solution for online and offline feature.  b) SQL Server Microsoft Windows or any other software of international standard.	(7 Marks)  (3 Marks)

**Section 6 (15 Marks)**  
**Approach & Methodology**

6.1	Understanding the assignment & proposed methodology  (As per the write-up of submitted bid, its completeness, clarity of functionalities of project at each and every stage, providing solution, deployment, flows, commissioning, installing, provisioning and many similar other things, which reflects the expression and elaboration of work in submitted documents / bid).	(A) Approach and Methodology: Evaluation will be done in the following areas. i. How developed is the Work Breakdown Structure (WBS) for the assignment? ii. How suitable is the Resource Assignment Matrix (RAM) and its linkage with the WBS? iii. How suitable is the Work Plan (staffing schedule): is the resource utilization sufficient and practical?	(10 Marks)
		(B) Project Management & Work Plan i/c implementation strategy plan.	(5 Marks)

**TOTAL**

**100 Marks**

**Note: A technically eligible bidder, based on conditions listed in this document, not meeting the 75% pass marks limit will be rejected in technical evaluation, and its sealed/unopened financial proposal shall be returned back. All bidder scoring greater than or equal to 75 % of the marks will be accepted in technical proposal, and their financial bids will be opened.**



## **TECHNICAL QUALIFICATION CRITERIA**

The bidders must comply with the mandatory terms & condition of the BIDDING / TENDER DOCUMENT, along with a compliance statement. The following points will be used in the evaluation of Company to qualify in technical evaluation; an applicant must score not less than 80% of the specified points.

<b>S. no</b>	<b>Category</b>	<b>Points</b>
1	<b>Company Profile</b>	
	1.1 Years of Establishment of firm	5
2	<b>Financial Capability</b>	
	2.1 Average annual turnover of the firm for the last 3 years	10
3	<b>Experience / Similar Nature of work</b>	
	3.1 Delivery / Deployment / Supply of Hardware in the public or private sector	10
	3.2 Software / Application Development Projects completed in the public or private sector.	10
	3.3 The vendor should have experience to manage hosting services	5
4	<b>Human Resource</b>	
	Team Profile	5
	Experience & Capacity	5
	Availability & Commitment	5
	Validation of HR	5
5	<b>Technical Strength</b>	
	Provide Technical Compliance	5
	Security Features Online verification	5
	Security Features Offline verification	5
	OEM Support	10
6	<b>Approach &amp; Methodology</b>	
	Understanding the assignment & proposed methodology	15
	<b>Total</b>	<b>100</b>



## **HR EVALUATION RUBRIC WITH QUANTIFIED CRITERIA**

<b>Sub-Criteria</b>	<b>Score</b>	<b>Definition</b>	<b>Quantifiable Indicators</b>
Team Profile	5 (Expert)	All key roles filled with 5+ years' experience in relevant domains, high qualifications	<ul style="list-style-type: none"> <li>- CVs of PM, tech leads, trainer, etc.</li> <li>- Postgraduate or certifications (e.g., PMP, AWS, etc.)</li> <li>- Roles clearly mapped to project needs</li> </ul>
	3 (Adequate)	Some key roles filled; 3–5 years' experience; moderate qualifications	<ul style="list-style-type: none"> <li>- At least 3 roles identified</li> <li>- Most team members have 3–5 years exp</li> <li>- Bachelor-level education, some certifications</li> </ul>
	1 (Weak)	Few or no qualified profiles, irrelevant or missing roles	<ul style="list-style-type: none"> <li>- &lt;3 roles defined</li> <li>- Experience &lt;3 years or non-relevant</li> <li>- Missing or incomplete CVs</li> </ul>
Experience & Capacity	5 (High)	Team has executed 3+ similar LMS/digital projects in last 5 years	<ul style="list-style-type: none"> <li>- Project list with client details and dates</li> <li>- Reference letters or case studies</li> <li>- Similar scale and complexity</li> </ul>
	3 (Medium)	1–2 relevant projects done; partial match to current scope	<ul style="list-style-type: none"> <li>- Smaller or narrower scope</li> <li>- References available but limited</li> </ul>
	1 (Low)	No past experience in similar domain	<ul style="list-style-type: none"> <li>- Generic IT projects, not LMS/studio/HR projects</li> </ul>
Availability & Commitment	5 (Dedicated)	Key members fully dedicated (>75%) for project duration	<ul style="list-style-type: none"> <li>- No documentation</li> <li>- Resource plan with time commitment chart</li> <li>- Written declaration from bidder HR head</li> <li>- No conflicting assignments</li> </ul>
	3 (Shared)	Team shared with other projects; moderate availability (50–75%)	<ul style="list-style-type: none"> <li>- Commitment letter with time split</li> <li>- Role overlaps with other assignments</li> </ul>
	1 (Not Clear)	No clarity or allocation not shown	<ul style="list-style-type: none"> <li>- No plan or declaration</li> <li>- Vague mention in proposal</li> </ul>
Validation of HR	5 (Complete)	All CVs, employment proof, and IDs submitted	<ul style="list-style-type: none"> <li>- Offer letters or employment IDs</li> <li>- Payroll slips or HR declaration</li> <li>- LinkedIn URLs (optional)</li> </ul>
	3 (Partial)	CVs available but no employment proof or IDs	<ul style="list-style-type: none"> <li>- Missing verification docs</li> <li>- Roles not confirmed officially</li> </ul>
	1 (None)	No documentation, unverifiable claims	<ul style="list-style-type: none"> <li>- Only names given, no support</li> </ul>



**SAMPLE FORMS**  
**BID FORM**  
**(LETTER OF OFFER)**

To:  
The Executive Engineer,  
Project Directorate of,  
Commissioner Karachi.

Sir:

- Having examined the bidding documents, the receipt of which is hereby duly acknowledge, for the above Contract, we, the undersigned, offer to supply, deliver, test and impart training in conformity with the said bidding documents for the Total Bid Price.
- Pak Rupees in figures in words for such other sums as may be ascertained in accordance with the Price Schedule attached hereto and made part of this Bid.
- We undertake, if our Bid is accepted, to complete the Works in accordance with the Contract Execution Schedule provided in the Schedule – A, Special Stipulations to Bid.
- If our Bid is accepted, we will provide the performance security in the sum equivalent to equal to 10% of the Contract Price.
- We agree to abide by this Bid for the period of ninety (90) days from the date fixed for bid opening of the Instructions to Bidders, and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
- Until a formal Contract is prepared and executed, this Bid, together with your written acceptance thereof in your Notification of Contract Award, shall constitute a binding Contract between us.
- We understand that you are not bound to accept the lowest-priced or any Bid that you may receive.

Dated this -----day of -----2023

**WITNESS**

Signature -----

Signature -----

**BIDDER**

Name -----

Name -----

Title:-----

Title-----

Address.-----

Address-----



## **BID SECURITY FORM**

**WHEREAS**----- (hereinafter called "the Bidder" has submitted its bid dated ----- for the "**INTEGRATION, AUTOMATION & ENHANCEMENT OF DOMICILE & PRC SYSTEM IN KARACHI DIVISION (ADP NO. 2832 OF 2025-26)**", (hereinafter called "the Bid").

**KNOW ALL MEN** by these presents that We ----- (Name of Bank) of ----- (Name of Country) having our registered office at ----- (address of Bank) hereinafter called "the Bank" are bound into the Information, Science & Technology Department, Government of Sindh, (hereinafter called "the Purchaser") in the sum of -----, for which payment well and truly to be made to the said Purchaser, the Bank binds itself, its successors and assigns, by these presents.

Sealed with the Common Seal of the Bank this-----day of-----, 2023

**THE CONDITIONS** of this obligation are:

1. If the Bidder withdraws its Bid during the period of bid validity specified by the Bidder on the Bid Form; or
2. If the Bidder does not accept the corrections of his Total Bid Price; or
3. If the Bidder, having been notified of the acceptance of its Bid by the Purchaser during the period of bid validity:
  - (a) Fails or refuses to furnish the performance security, in accordance with the Instructions to Bidders; or
  - (b) Fails or refuses to execute the Contract Form, when requested. or

We undertake to pay to the Purchaser up to the above amount, according to, and upon receipt of, its first written demand, without the Purchaser having to substantiate its demand, provided that in its demand the Purchaser will note that the amount claimed by it is due to it owing to the occurrence of one or both or all the three above stated conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to -----2023, the period of bid validity, and any demand in respect thereof should reach the Bank not later than such date.

(NAME OF BANK)

By-----

(Title)

Authorized Representative



## **PERFORMANCE SECURITY FORM**

To,

The Executive Engineer,  
Project Directorate of,  
Commissioner Karachi.

**WHEREAS** (Name of the Contractor)

----- Hereinafter called "the Contractor" has undertaken, in pursuance of the bid for "**INTEGRATION, AUTOMATION & ENHANCEMENT OF DOMICILE & PRC SYSTEM IN KARACHI DIVISION (ADP NO. 2832 OF 2025-26)**", dated \_\_\_\_\_ 2025, (hereinafter called "the Contract").

**AND WHEREAS** it has been stipulated by you in the Contract that the Contractor shall furnish you with a bank guarantee by a recognized bank for the sum specified therein as security for compliance with the Contractor's performance obligations in accordance with the Contract;

**AND WHEREAS** we have agreed to give the Contractor a Guarantee:

**THEREFORE WE** hereby affirm that we are Guarantor and responsible to you, on behalf of the Contractor, up to a total of \_\_\_\_\_ (Amount of the guarantee in words and figures), and we undertake to pay you, upon your first written demand declaring the Contractor to be in default under the Contract, and without cavil or argument, any sum or sums as specified by you, within the limits of \_\_\_\_\_ (Amount of Guarantee) as aforesaid without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

This guarantee is valid until \_\_\_\_\_ day of \_\_\_\_\_, 2023, or one month of the issue of the Defects Liability Expiry Certificate, whichever is later.

**[NAME OF GUARANTOR]**

Signature \_\_\_\_\_

Name \_\_\_\_\_

Title \_\_\_\_\_

Address \_\_\_\_\_

Seal \_\_\_\_\_



## TECHNICAL PROPOSAL SUBMISSION FORM

---

[Location, Date]

To:  
The Executive Engineer,  
Project Directorate of,  
Commissioner Karachi.

Dear Sir:

I/We, the undersigned, offer to provide the technical proposal for [Insert title of assignment] in accordance with your Tender/Bidding Document dated [Insert Date] and our Proposal. We are hereby submitting our Proposal, which includes this Technical Proposal, and a Financial Proposal sealed under a separate envelope.

We are submitting our Proposal in association with: [Insert a list with full name and address of each associated Firm/Company]

We hereby declare that all the information and statements made in this Proposal are true and accept that any misinterpretation contained in it may lead to our disqualification.

If negotiations are held during the period of validity of the Proposal, i.e., before the date indicated in the Data Sheet, we undertake to negotiate on the basis of the proposed staff. Our Proposal is binding upon us and subject to the modifications resulting from Contract negotiations.

We undertake, if our Proposal is accepted, to initiate the consulting services related to the assignment not later than the date indicated in the Data Sheet.

We understand you are not bound to accept any Proposal you receive.

We remain,  
Yours sincerely,

Authorized Signature [In full and initials]: \_\_\_\_\_

Name and Title of Signatory: \_\_\_\_\_

Name of Firm: \_\_\_\_\_

Address: \_\_\_\_\_



## FINANCIAL PROPOSAL SUBMISSION FORM

[Location, Date]

To:  
The Executive Engineer,  
Project Directorate of,  
Commissioner Karachi.

**Subject: FINANCIAL PROPOSAL FOR “INTEGRATION, AUTOMATION & ENHANCEMENT OF DOMICILE & PRC SYSTEM IN KARACHI DIVISION (ADP NO. 2832 OF 2025-26)”**

Dear Sir:

We, the undersigned, offer to provide the financial proposal for “**INTEGRATION, AUTOMATION & ENHANCEMENT OF DOMICILE & PRC SYSTEM IN KARACHI DIVISION (ADP NO. 2832 OF 2025-26)**” in accordance with your Tender/Bidding document dated [Insert Date] and our Technical Proposal. **Our attached Financial Proposal is for the sum of [Insert amount(s) in words and figures].**

Our Financial Proposal shall be binding upon us up to expiration of the validity period of the Proposal, i.e. before the date indicated in the Data Sheet.

Yours faithfully,

Authorized Signature [*In full and initials*] \_\_\_\_\_

Name and Title of Signatory \_\_\_\_\_

Name of Firm \_\_\_\_\_

Address \_\_\_\_\_

*[The Financial Proposal is to be filled strictly as per the format given in BIDDING / TENDER DOCUMENT.]*



## **INTEGRITY PACT**

### **DECLARATION OF FEES, COMMISSION AND BROKERAGE ETC PAYABLE BY CONTRACTORS (FOR CONTRACTS WORTH RS. 10.00 MILLION OR MORE)**

Contract No \_\_\_\_\_

Dated \_\_\_\_\_

Contract Value: \_\_\_\_\_

Contract Title: \_\_\_\_\_

..... [name of Contractor] hereby declares that it has not obtained or induced the procurement of any contract, right, interest, privilege or other obligation or benefit from Government of Sindh (GoS) or any administrative subdivision or agency thereof or any other entity owned or controlled by it (GoS) through any corrupt business practice.

Without limiting the generality of the foregoing, [name of Contractor] represents and warrants that it has fully declared the brokerage, commission, fees etc. paid or payable to anyone and not given or agreed to give and shall not give or agree to give to anyone within or outside Pakistan either directly or indirectly through any natural or juridical person, including its affiliate, agent, associate, broker, consultant, director, promoter, shareholder, sponsor or subsidiary, any commission, gratification, bribe, finder's fee or kickback, whether described as consultation fee or otherwise, with the object of obtaining or inducing the procurement of a contract, right, interest, privilege or other obligation or benefit in whatsoever form from, from Procuring Agency (PA) except that which has been expressly declared pursuant hereto.

[name of Contractor] accepts full responsibility and strict liability that it has made and will make full disclosure of all agreements and arrangements with all persons in respect of or related to the transaction with PA and has not taken any action or will not take any action to circumvent the above declaration, representation or warranty. [name of Contractor] accepts full responsibility and strict liability for making any false declaration, not making full disclosure, misrepresenting facts or taking any action likely to defeat the purpose of this declaration, representation and warranty. It agrees that any contract, right, interest, privilege or other obligation or benefit obtained or procured as aforesaid shall, without prejudice to any other rights and remedies available to PA under any law, contract or other instrument, be voidable at the option of PA.

Notwithstanding any rights and remedies exercised by PA in this regard, [name of Supplier/Contractor/Consultant] agrees to indemnify PA for any loss or damage incurred by it on account of its corrupt business practices and further pay compensation to PA in an amount equivalent to ten times the sum of any commission, gratification, bribe, finder's fee or kickback given by [name of Contractor] as aforesaid for the purpose of obtaining or inducing the procurement of any contract, right, interest, privilege or other obligation or benefit in whatsoever form from PA.

---

[Procuring Agency]

---

[Contractor]



## **GENERAL INFORMATION OF THE COMPANY**

1	Name of Bidder	
2	No. of Years in business in Pakistan	
3	No. of Offices locations in Pakistan	
4	Annual Turnover (Million Rs.)	
5	Value of projects in hand (details may be given)	
6	Year of Incorporation (Start of Operation)	
7	Status of the Bidder	
	Sole Proprietor	
	Partnership	
	Private Limited	
	Public Limited	
	Entity registered/incorporated outside Pakistan (if yes, give detail)	
	Other (please specify)	
8	Names of Owner / Partners / Chief Executive / Directors	
9	Details of Registered Head Office (address, phone, fax, email & website information)	



## FORMAT OF CURRICULUM VITAE (CV) FOR PROPOSED KEY PROFESSIONAL STAFF

1. **Proposed Position** [only one candidate shall be nominated for each position]: \_\_\_\_\_
2. **Name of Firm** [Insert name of firm proposing the staff]: \_\_\_\_\_
3. **Name of Staff** [insert full name]: \_\_\_\_\_
4. **Date of Birth**: \_\_\_\_\_
5. **Nationality**: \_\_\_\_\_
6. **Educational Qualification**: [Summarize college/university and other specialized education of staff member, giving names of schools, dates attended and degrees obtained]: \_\_\_\_\_
7. **Membership of Professional Societies**: \_\_\_\_\_
8. **Other Training** [indicate significant training since degrees under 6 – Education were obtained]: \_\_\_\_\_
9. **Countries of Work Experience**: [list countries where staff has worked]: \_\_\_\_\_
10. **Languages** [for each language indicate proficiency: good, fair, or poor in speaking, reading and writing]: \_\_\_\_\_

### **11. Employment Record:**

[Starting with present position, list in reversed order, and every employment held by staff member since graduation, giving for each employment (see format here below): dates of employment, name of employing organization, position held]:

From [Year]: \_\_\_\_\_ To [Year]: \_\_\_\_\_

Employer: \_\_\_\_\_

Position held: \_\_\_\_\_

### **12. Detailed Tasks Assigned** [List all tasks to be performed under this assignment]:

### **13. Work Undertaken that Best Illustrates Capability to Handle the Tasks Assigned**

[Among the assignments in which the staff has been involved, indicate the following information for those assignments that best illustrate staff capability to handle the tasks listed under point 12]:

Name of assignment or project: \_\_\_\_\_

Year: \_\_\_\_\_

Location: \_\_\_\_\_

Line Department: \_\_\_\_\_

Main project features: \_\_\_\_\_

Positions held: \_\_\_\_\_

Activities performed: \_\_\_\_\_



**AFFIDAVIT**  
**(ON STAMP PAPER)**

To:  
The Executive Engineer,  
Project Directorate of,  
Commissioner Karachi.

**Re: TECHNICAL & FINANCIAL FOR THE PROJECT "INTEGRATION, AUTOMATION & ENHANCEMENT OF DOMICILE & PRC SYSTEM IN KARACHI DIVISION (ADP NO. 2832 OF 2025-26")**

**[Date]**

Pursuant to the Tender/Bidding document dated [Please insert the Date] in respect of the Project, [Name of Prospective Bidder/Partnership] hereby represents and warrants that, as of the date of this letter [Name of Prospective Bidder/Partnership], (if applicable):

- (a) Is not in bankruptcy or liquidation proceedings;
- (b) Has not been convicted of, fraud, corruption, collusion or money laundering;
- (c) is not aware of any conflict of interest or potential conflict of interest arising from prior or existing contracts or relationships which could materially affect its capability to comply with the obligations under the Consultancy Contract; and
- (d) Does not fall within any of the circumstances for ineligibility listed in (Basic Eligibility Criteria) of the Invitation for Proposal.

Yours Sincerely,

Authorized Signature  
Name and Title Signatory  
Name of Firm  
Address

Dated:



## COVERING LETTER

To  
The Executive Engineer,  
Project Directorate of,  
Commissioner Karachi.

**REFERENCE:** Tender/Bidding document for “INTEGRATION, AUTOMATION & ENHANCEMENT OF DOMICILE & PRC SYSTEM IN KARACHI DIVISION (ADP NO. 2832 OF 2025-26)” Executed by Project Directorate of Commissioner Karachi.

Dear Sir,

1. This is to notify that our company intends to submit a proposal in response to the bidding / tender document for “INTEGRATION, AUTOMATION & ENHANCEMENT OF DOMICILE & PRC SYSTEM IN KARACHI DIVISION (ADP NO. 2832 OF 2025-26)” executed by the Executive Engineer, Project Directorate of Commissioner Karachi.
2. Primary and secondary contacts of our company are:

	Primary Contact	Secondary Contact
Name:		
Title:		
Company Name:		
Address:		
Phone		
Mobile:		
Fax:		
E-Mail		

3. We confirm that the information contained in this response or any part thereof, including its exhibits, and other documents and instruments delivered or to be delivered are true, accurate, verifiable and complete. The response includes all information necessary to ensure that the statements therein do not in whole or in part mislead Information, Science & Technology Department in its short listing process.
4. We fully understand and agree to comply that verification, if any of the information provided here is found to be misleading the short listing process or unduly favors our company in the short listing process, we are liable to be dismissed from the selection process.
5. It is hereby confirmed that I/We are entitled to act on behalf of our corporation/company/firm/organization and empowered to sign this document as well as such other documents, which may be required in this connection.
6. This response to bidding / tender documents valid until --/--/2023.

Duly authorized to sign the bidding / tender document response for and on behalf of

Sincerely,



(Signature) Managing Director

Name: Title/Appointment

Name of the company: Address

Date:

(Seal/Stamp of the Bidder)

Certificate as to Authorize Signatories

I, XXX, certify that I am the Company Secretary of XXX, and that who signed the above response is authorized to bind corporation/company by authority of its governing body.

(Company Seal)

Date:



**FINANCIAL STRENGTH DETAILS**

**ANNUAL TURN OVER**

**(Attach relevant authenticated audited statement)**

**Date:-----**

<b>YEAR</b>	<b>AVERAGE TURN OVER</b>
2022-23	
2023-24	
2024-25	

**Note:**

Please attach relevant documents such as **Financial Annual Audited Report** as evidence of last three years Average Annual Turnover.



## PROJECT EXPERIENCE FORM

<b>Relevant Project Experience</b>	
General Information	
Name of the Project	
Client for which the project was executed	
Name and contact details of the client	
Project Details	
Description of the Project	
Scope of Work	
Other Details	
Total Cost of the Project	
Total Cost of the Work provided by the Contractor	
Duration of the Project	
Start and Completion Date or Current Status	
Other Relevant information	
Mandatory Supporting Documents	P.O/Completion certificate from the client to indicate the successful completion of the project or work order
Project Capability Demonstration	Complete detail of the scope of the project shall be provided to indicate the relevance to the evaluation criteria

## FORM FOR WORK SCHEDULE

*Russell*

## **CONDITIONS OF THE CONTRACT**

### **GENERAL CONDITIONS OF THE CONTRACT**

#### **1 Definitions**

1.1 In this Contract, the following terms shall be interpreted as indicated:

- a. "Purchaser" means the Executive Engineer Project Directorate of Commissioner Karachi.
- b. "Contractor" means the individual or firm whose bid has been accepted by the Purchaser and the legal successors, in title to the Contractor.
- c. "Contract" means the agreement entered into between the Purchaser and the Contractor, as recorded in the Contract Form signed by the parties, including all Schedules and Attachments thereto and all documents incorporated by reference therein.
- d. "Commencement Date of the Contract" means the date of signing of the Contract between the Purchaser and the Contractor.
- e. "Contractor Price" means the price payable to the Contractor under the Contract for the full and proper performance of its contractual obligations.
- f. "Contractor Value" means that portion of the Contract Price adjusted to give effect to such additions or deductions as are provided for in the Contract, which is properly apportioned able to the Software or Goods in question.
- g. "Services" means services, such as installation, delivery and configuration of items covered under the scope of work.
- h. "Works" means all items to be provided and work to be done by the Contractor under the Contract.
- i. "RO" means Responding Organization/ Bidder Firm.

2	Bid Security	2.1	A bid bond, and bid security in the shape of a Pay Order / Bank Draft in favor of Executive Engineer Project Directorate of Commissioner Karachi <b>Rs. 5.00 (M)</b> should be submitted along with the tender.
3	Validity of Proposal	3.1	All proposal and price shall remain valid for <u>90 DAYS</u> after submission of proposal. However, the responding organization is encouraged to state a longer period of validity for the proposal.
4	Currency	4.1	All currency in the proposal shall be quoted in Pakistan Rupees (PKR).
5	Withholding tax, sales tax and other taxes	5.1	The responding organization/bidder is hereby informed that the Government shall deduct tax at the rate prescribed under the tax laws of Pakistan, from all payments for goods rendered by any responding organization who signs a contract with the Executive Engineer Project Directorate of Commissioner Karachi. The responding organization will be responsible for all taxes on transaction and/or income, which may be levied by government. If responding organization is exempted from any specific taxes, then it will provide the relevant documents with the proposal.
6	Stamp Duty	6.1	The Applicable Stamp duty according to Government Rules shall be borne by responding organization/bidder at the time of signing of contract.
7	Compliance to Quality Service	7.1	The Responding Organization (RO) to provide information as required in the bidding / tender document. RO shall submit complete details of the proposed solution/device information, software capabilities and other item in their technical proposals.
8	Financial Capabilities	8.1	The RO(s) shall describe the financial position of its organization. Income Statement or Annual Report should be included in the detailed Technical proposal.

9	Earnest Money	9.1	The earnest money is refundable after finalization of the bid, in case of return of financial bids unopened to non-responsive bidders, on request after opening of financial bids or when award / placement of purchase order is finalized.
10	Performance Security	10.1	The successful bidder will have to deposit <b>10% bank Guarantee/security of the amount of contract</b> , in the form of pay order, bank guarantee or any other financial instrument recognized by Government of Pakistan, to the satisfaction of Executive Engineer Project Directorate of Commissioner Karachi. The same will be returned on due completion of the contract and warranty period.
11	Conditional Tenders	11.1	Conditional tenders/bids will not be acceptable.
12	Scope of Work	12.1	Executive Engineer Project Directorate of Commissioner Karachi, reserves the rights to increase or decrease the scope of work/number of units/items without assigning any reason.
13	Force Majeure	13.1	The Supplier shall not be liable for forfeiture of its performance security, liquidated damages, or termination for default if and to the extent that its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.
		13.2	For purposes of this clause, "Force Majeure" means an event beyond the control of the Supplier and not involving the Supplier's fault or negligence and not foreseeable. Such events may include, but are not restricted to, acts of the Procuring agency in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes
		13.3	If a Force Majeure situation arises, the Supplier shall promptly notify the

		Procuring agency in writing of such condition and the cause thereof. Unless otherwise directed by the Procuring agency in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.
14	Termination of Insolvency	14.1 The Procuring agency may at any time terminate the Contract by giving written notice to the Supplier if the Supplier becomes Bankrupt or otherwise insolvent. In this event, termination will be without compensation to the Supplier, if such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the Procuring agency.
15	Resolution of Disputes	15.1 The Procuring agency and the Supplier shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the Contract.

## 16. Deployment of Project Staff

- 16.1.1 The bidder shall deploy qualified Resident Engineers at all relevant offices as designated by the Client, including but not limited to the Data Center (DC) Office and the Commissioner's Office. The Resident Engineers must remain onsite throughout the entire project duration, from initiation until final completion—to provide continuous technical support, coordination, and oversight of all implementation activities.
- 16.1.2 The bidder shall submit complete details of the assigned Resident Engineers, including their CVs, qualifications, experience profiles, and all other required documentation, as part of the bid submission. These personnel must possess the necessary expertise to execute and support all onsite activities effectively and to assist the Client during the full project lifecycle.

## **17. Security Measures**

- 17.1.1 The bidder shall be fully responsible for providing all security measures specified in the Scope of Work. This includes ensuring secure handling, processing, and printing of sensitive data.
- 17.1.2 All printing activities shall be carried out exclusively by authorized personnel of the bidder.
- 17.1.3 Printing shall be performed on the designated security paper, and all printing machines/devices required for this purpose shall be provided, installed, and maintained by the bidder.
- 17.1.4 The bidder must ensure strict access control, monitoring, and confidentiality during all printing operations.

## **18. AI Capabilities**

- 18.1.1 The complete application solution shall incorporate AI-assisted capabilities, including but not limited to:
- 18.1.2 Document-level intelligent processing
- 18.1.3 Automated analysis and insights
- 18.1.4 Gesture-based or enhanced user-assistance features
- 18.1.5 Any additional AI-driven functionalities that contribute to operational efficiency, accuracy, and improved user experience

## **19. Hardware warranties / certifications**

- 19.1.1 Any hardware required for the entire project, whether explicitly listed or identified during execution—shall be provided by the bidder at no additional cost to the Client.
- 19.1.2 All hardware must be sourced from original equipment manufacturers (OEMs) with valid principal warranties, certifications, and endorsements.
- 19.1.3 The bidder shall ensure full compliance with warranty conditions and provide immediate replacement or support as required.

## **20. J.V.**

- 20.1.1 J.V / Consortium allowed.

## **SPECIAL CONDITIONS OF THE CONTRACT**

01	Procuring Agency	Executive Engineer Project Directorate of Commissioner Karachi.
02	Country of Origin	Pakistan
03	Performance Security	The Successful Bidder will provide the respective Performance Security in the sum equivalent to 5% of the Bid Price and remaining 5% will be deducted from the contractor bills at the time of signing of agreement.
04	Payment	The Payment terms and conditions should clearly be mentioned in the financial proposal at the time of submission with the bid. The terms and conditions will be finalized as per mutual agreement / consent at the time of signing of contract.
05	Prices	Price quoted by the bidder shall be fixed during the Bidder's Performance and not subject to variation on any account, unless otherwise specified in the bidding document.
06	Resolution of Dispute	In case of a dispute between Procuring Agency and the Supplier, the dispute shall be referred to adjudication or arbitration in accordance with the laws of the Procuring agency's country.
07	Governing Language	The Governing Language Shall be English
08	Notices	All notices shall be address at:  <b>THE EXECUTIVE ENGINEER,</b> PROJECT DIRECTORATE OF COMMISSIONER KARACHI 4-CLUB ROAD MAIN COMMISSIONER OFFICE KARACHI.



## SCHEDULE “B”

NAME OF SCHEME: **INTEGRATION, AUTOMATION & ENHANCEMENT OF DOMICILE & PRC SYSTEM IN KARACHI DIVISION. (ADP NO. 2832 OF 2025-26)**

<b>PART - I, HARDWARE COMPONENT</b>				
<b>A. Network Equipment's</b>				
<b>S#</b>	<b>Description of Items</b>	<b>Qty</b>	<b>Unit Cost</b>	<b>Total</b>
1	Supply & Installation of Access Switch 24 Port Switch (Layer-2) POE-CISCO or equivalent having 24 Gigabit Ethernet ports with PoE+ support, 4 10 Gigabit Ethernet uplink ports, advanced Layer 3 switching capabilities.	2 Jobs		
2	Supplying & Installation of DEL, HP or equivalent EMC Power Edge 750 x S2U Server Rack Mount having 3.5" Chassis With Upto 12 HDD Supported, Mother board With Broadcom 5720 Dual Port 1GB Ethernet On Board, Intel Xeon Silver 4310 2.1 GHz (12C/24T, 10.4GT/s 18MB Cache) Turbo HT 120W DualProcessors,32GB DDR4 3200 MT/s Dual Rank (4 Module)Dual Intel Enterprise SSD D3-5420 Series 480GB 2.5" SATA 6Gb/s,4 Dell 4TB SAS 3.5" 12GB/s 7200 RPM HDD,RAID Controller PERC H755 SAS Front,iDRAC9 Enterprise (Integrated Dell Remote Access Controller) 15G,Intel i350 Quad Port 1GbE Base-T OCP NIC 3.0,Riser Config 0, 1 x OCP 3.0 (x16) + 3 x 16LP + 1 x 4LP (Gen3) + Risers: 2 x 16LP,Dual Hot-Plug PSU (1 + 1) 800W Mixed Mode, Wired Optical Mouse, KB Wired English, Ready Rail Sliding Rail, Cable Arm Management, Standard Bezel,JumperCord,1 year warranty Support Onsite Service	1 Job		
3	Installation of Network Firewall with UTM Threat Protection (UTP) (IPS, Advanced Malware Protection, Application Control, Web & Video Filtering, Antispam Service, and 24x7 Premium Care)installation, configuration,	1 Job		
<b>Sub Total A)</b>				
<b>B. Communication Equipment's</b>				
<b>S#</b>	<b>Description of Items</b>	<b>Qty</b>	<b>Unit Cost</b>	<b>Total</b>
1	Supplying / Installation of Server Rack 42U Branded with following features. 19 inch width standard; Removable Side Panels, side locks optional; Knock o hole for entering cable on both top cover, bottom Panel, real panel Turning angle of front door is over 180 degrees Easy mounting installation Unassembled package saving shipping space fan, shelf, PDU are optional PDU 19" Multifunction 8 way socket Horizontal flat pin. (2Nos.)	1 No.		
2	Supplying & Installation of Photocopy Machine, Type: Digital Copier / Printer / Colour Scanner 25-CPM-PPM or higher, Print Speed: Up to 20 / 25 / 30 ppm, Max Resolution: 1200 x 2400 dpi, Monthly Duty Cycle: Up to 129,000 pages, Functions: Print, Copy, Scan, Fax (Optional), Paper Capacity: Up to 3,140 sheets. The cost also includes Printing papers for Domicile / PRC A-3 size minimum 110 grams with special features. Approximately 350,000/- for one year.	2 Nos.		
	<b>Sub Total B)</b>			



### C. IP Surveillance / Monitoring and Recording System

S#	Description of Items	Qty	Unit Cost	Total
1	<b>Supply, Installation Commissioning &amp; configuration of:</b> <ul style="list-style-type: none"> <li>CCTV System with Hikvision or equivalent-DS-2CD-1143G-2-LIU-4MP Smart hybrid Light fixed <b>Dome Cameras 4 Nos.</b> having High quality imaging with 4MP resolution (2688 × 1520), 25fps (2688 × 1520, 1920 × 1080, 1280 × 720), Water and dust resistant (IP67).</li> <li>4-channel NVR Hikvision or equivalent with Camera Support: 4-channel NVRs are designed to connect and manage up to four IP cameras.</li> <li>Resolution: They typically support a range of resolutions, including 8MP, 6MP, 5MP, 4MP, 3MP, 1080p, 720p, and lower resolutions.</li> <li>Max Decoding: Decoding capacity varies, with some models supporting 1-ch @ 8MP, 4-ch @ 1080p, or other combinations.</li> <li>Inverter Max Power.</li> <li>Dry Battery 51.6 V 100AH.</li> <li>10TB 3.5" Skyhawk Surveillance SATA HDD is built for high-capacity video surveillance systems.</li> <li>Installation, Commissioning and configuration.</li> </ul>	1 Job		
<b>Sub Total C)</b>				

### D. Access Control with Finger print RFID

S#	Description of Items	Qty	Unit Cost	Total
1	<b>Supplying, Installation Access control Machine, Anviz = VF-30 with following features:</b> <ul style="list-style-type: none"> <li>Authentication methods: Support for various credentials like fingerprint, RFID card, PIN, and sometimes face recognition.</li> <li>Capacities: Storage for users (e.g., fingerprint/user profiles) and event logs, such as 500 fingerprints and 80,000 events.</li> <li>Processor: A 32-bit microcontroller is common, sometimes with a dedicated processor for fingerprint recognition.</li> <li>Sensor: Typically an optical fingerprint sensor with a minimum resolution like 500 DPI.</li> <li>Display: A color TFT screen, often 2.4 inches or larger, may include a touch screen and keypad.</li> <li>Communication: Network connectivity via Ethernet (TCP/IP) and/or Wi-Fi, with USB ports for data transfer.</li> <li>Interfaces: Standard interfaces for connecting to an electric lock, door sensor, and exit button.</li> <li>Power: Supports a power supply and often includes a battery backup unit for continued operation during a power outage.</li> </ul>	1 Job		



	<ul style="list-style-type: none"> <li>• Dead Bolt Lock with Accessories. (1 No.)</li> <li>• Infrared push button. (1 No.)</li> <li>• RFID card. (2 Nos.)</li> <li>• Uninterrupted power supply.</li> <li>• Installation &amp;Commissioning of Access Control System</li> </ul>			
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**Sub Total D)**

#### **E. Comfort Cooling**

S#	Description of Items	Qty	Unit Cost	Total
1.	Supplying & Installation o2-ton floor standing A/C unit: MAKE Hi-Sense or ACSON or equivalent TYPE FLOORSTANDING"SERIES MODEL: AUF24UTR4SJCPE. A/C copper piping & wiring (as per actual) RATE:500/RFT AND WILL BE CHARGED AT ACTUAL.	1 No.		

**Sub Total E)**

**TOTAL PART - I**

#### **PART - II, SOFTWARE COMPONENT**

##### **A. Application Software, Dashboard**

S#	Description of Items	Qty	Unit Cost	Total
1	<p><b>Software Development of core desktop &amp; web-based system with automation features, paperless processing, and secure data handling) which may includes:</b></p> <p><b>5.1 CITIZEN SERVICES (EXTENSIVELY EXPANDED)</b></p> <p>The Citizen Services component delivers a modern, intuitive, multilingual (Supports English, Urdu, Sindhi), and secure online portal enabling Karachi residents to apply for domicile certificates online hassle-free without physically visiting any office.</p> <p><b>5.1.1 Citizen Registration &amp; Authentication</b></p> <p>A complete digital on boarding process includes:</p> <p><b>5.1.1.1 CNIC-based Registration.</b></p> <ul style="list-style-type: none"> <li>• Citizen registers using their 13-digit CNIC.</li> <li>• Automatic validation rules detect formatting or checksum issues.</li> <li>• CNIC is cross-matched against NADRA records.</li> <li>• Each document should be enabled with offline security feature.</li> </ul> <p><b>5.1.1.2 Mobile Number Verification</b></p>	1 Job		

<p><b>One-time password (OTP) sent via SMS.</b></p> <p><b>Device ID and IP logging for fraud detection.</b></p> <p><b>Mobile number locked to citizen profile to prevent impersonation.</b></p> <p><b>5.1.1.3 Secure Login</b></p> <ul style="list-style-type: none"> <li>➤ <b>Username = Citizen's CNIC</b></li> <li>➤ <b>Password compliance with government password policy</b></li> <li>➤ <b>Supports multi-factor authentication (MFA) for users security</b></li> </ul> <p><b>5.1.2 NADRA CNIC &amp; Identity Verification</b></p> <p>The system should perform real-time, API-level integration with NADRA's VeriSys to validate and pick data from NADRA's live Database:</p> <ul style="list-style-type: none"> <li>➤ <b>Full name</b></li> <li>➤ <b>Father's name</b></li> <li>➤ <b>Date of birth</b></li> <li>➤ <b>CNIC status (active/block/expired)</b></li> <li>➤ <b>Gender</b></li> <li>➤ <b>Family ID</b></li> <li>➤ <b>Family tree (optional deep verification mode)</b></li> <li>➤ <b>NADRA photograph (for officer comparison)</b></li> </ul> <p><b>Technical Highlights:</b></p> <ul style="list-style-type: none"> <li>➤ <b>Verification logs stored with timestamp and officer ID for verification at every stage</b></li> <li>➤ <b>NADRA request throttling to prevent overuse (from DoS attack like situation)</b></li> <li>➤ <b>Audit trail maintained for compliance (Every record should be maintained as an individual log trail and record should be kept)</b></li> </ul> <p><b>5.1.3 Online Application Form (Dynamic &amp; Auto-Prefilled)</b></p> <p>A multistep, easy-to-use, guided web form.(Instructions at every step in English and Urdu to guide user)</p> <p><b>5.1.3.1 Sections Included</b></p>				
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<p><b>21. Personal Information</b></p> <p><b>22. CNIC Details (Both options will be used)</b></p> <ol style="list-style-type: none"> <li><b>Option:1 Auto filled from NADRA picked from their DB</b></li> <li><b>Option:2 Live scanned of Physical NIC provided by the user, the system will read Scanned NIC detailed automatically insert them in form and user will mut have an option to edit it also</b></li> </ol> <p><b>23. Father/Guardian Details</b></p> <p><b>24. Permanent Address</b></p> <p><b>25. Temporary Address</b></p> <p><b>26. Place of Birth</b></p> <p><b>27. Duration of Stay in Karachi</b></p> <p><b>28. Previous Domicile Information</b></p> <p><b>29. Reason for Applying</b></p> <p><b>30. Document Uploads</b></p> <p><b>31. Declaration &amp; Digital Consent</b></p> <p><b>32. Fee submissions</b></p> <p><b>33. Review Application</b></p> <p><b>34. Alerts</b></p> <p><b>35. Dashboard Notices</b></p> <p><b>36. Dashboard for progression(to show the timeline how much time is remained in his/her domicile to finalize)</b></p> <p><b>5.1.3.2 Autofill Capabilities</b></p> <ul style="list-style-type: none"> <li>➤ <b>NADRA data insertion</b></li> <li>➤ <b>Address options will be (via database or map service)</b></li> </ul> <p><b>5.1.4 Document Uploading &amp; Validation</b></p> <p>A secure and intelligent upload process for all the required documents.</p> <p><b>Documents Required</b></p> <ol style="list-style-type: none"> <li><b>CNIC (front/back)</b></li> <li><b>Father/Guardian CNIC</b></li> </ol>			
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	<p><b>10. Utility bills (electricity, gas, water) (in Optional section)</b></p> <p><b>11. Rent agreement (if applicable)</b></p> <p><b>12. Form-B</b></p> <p><b>13. Passport-size photo</b></p> <p><b>14. Affidavit</b></p> <p><b>NOTE:</b> The system should be capable of keeping record of 100 millions of entries with all attached files and etc)</p> <p><b>Validation Layers</b></p> <ul style="list-style-type: none"> <li><b>5. File type &amp; size validation (Allowed sizes, The system/software should contain a live facility to compress attachments of user for free)</b></li> <li><b>6. Blur detection (AI based)</b></li> <li><b>7. Duplicate document detection</b></li> <li><b>8. Hash storage for tamper detection</b></li> </ul> <p><b>5.1.5 Application Submission</b></p> <ul style="list-style-type: none"> <li><b>5. System generates unique Application ID</b></li> <li><b>6. District auto-selected based on provided address and CNIC</b></li> <li><b>7. Submission event logged</b></li> <li><b>8. Confirmation sent via SMS/Email</b></li> </ul> <p><b>5.1.6 Real-Time Application Tracking</b></p> <p>Citizen sees a process timeline, including:</p> <ul style="list-style-type: none"> <li><b>8. Submitted</b></li> <li><b>9. Initial Review (Editable by user with no limitations)</b></li> <li><b>10. Under Verification (A phase with limited edits allow)</b></li> <li><b>11. NADRA Verification (Live from NADRA's DB)</b></li> <li><b>12. Field Verification (if applicable)</b></li> <li><b>13. Pending DC Approval</b></li> <li><b>14. Approved / Rejected, Status</b></li> </ul> <p><b>Each event includes:</b></p>			
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	<p>7. Timestamp (Server input time)</p> <p>8. Performing officer</p> <p>9. Status change reason</p> <p><b>5.1.7 Certificate Download</b></p> <p>13. Auto-generated PDF</p> <p>14. QR code embedded</p> <p>15. Digital signature of DC</p> <p>16. Tamper-proof PDF/Image settings</p> <p>17. Serial number integrated</p> <p>18. Download + email delivery</p> <p><b>5.1.8 Citizen Feedback, Complaints &amp; Helpdesk</b></p> <ul style="list-style-type: none"> <li>➤ Ticketing system</li> <li>➤ Resolution tracking</li> <li>➤ Complaint escalations to higher channel, as ADC, DC, Commissioner (All should be online and complain raised by the user should be reflected immediately at ADC, DC, Commissioner's portal as alert when they logged-in, priorities could be assigned accordingly)</li> <li>➤ Public service index measurement (Statistical data of every day, week, month with proper visibility of Graphs and charts on all management Dashboards)</li> </ul> <p><b>5.2 DEPUTY COMMISSIONER (DC) OFFICE SERVICES</b></p> <p>This module elaborates all districts of Karachi centrally reporting to Commissioner's office. The module is a district-level domicile processing workflows.</p> <p><b>5.2.1 Application Intake &amp; Assignment</b></p> <ul style="list-style-type: none"> <li>➤ Dashboard listing new applications</li> <li>➤ Automated assignment rules based on workload</li> <li>➤ Manual override for supervisors</li> <li>➤ Priority tagging for urgent cases</li> </ul> <p><b>5.2.2 Document Verification Module</b></p> <p>Electronically verifies all submitted documents.</p> <p>Capabilities</p>			
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	<ul style="list-style-type: none"> <li>➤ Side-by-side comparison view</li> <li>➤ Automatic “checklist completion” indication</li> <li>➤ AI/ML-based fraud hints (optional)</li> <li>➤ Metadata extraction (OCR)</li> <li>➤ Document history comparison</li> </ul> <p><b>5.2.3 NADRA Deep Verification Tools</b></p> <p>Officers can run advanced verification:</p> <ol style="list-style-type: none"> <li><b>13. Basic CNIC Verification</b></li> <li><b>14. Family Tree Verification</b></li> <li><b>15. Family Head Confirmation</b></li> <li><b>16. Address Verification (NADRA record)</b></li> <li><b>17. Multi-factor Identity Match</b></li> <li><b>18. Photo Comparison with NADRA record</b></li> </ol> <p>Each verification event:</p> <ul style="list-style-type: none"> <li>➤ Stored in audit log</li> <li>➤ Shown in citizen tracking</li> <li>➤ Used for risk scoring</li> </ul> <p><b>5.2.4 Workflow Processing</b></p> <p>The application flows through:</p> <ol style="list-style-type: none"> <li><b>9. Clerk Review</b></li> <li><b>10. Verification Officer</b></li> <li><b>11. Supervisor (Optional)</b></li> <li><b>12. Deputy Commissioner Approval</b></li> </ol> <p>Each level:</p> <ul style="list-style-type: none"> <li>➤ Adds notes</li> <li>➤ Approves or rejects</li> <li>➤ Requests more information</li> <li>➤ GPS coordinates stored (live for security reasons)</li> <li>➤ Verification report submitted digitally</li> </ul> <p><b>5.2.6 Decision Stage</b></p> <p>Deputy Commissioner can:</p>			
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	<ul style="list-style-type: none"> <li>➤ <b>Approve (to forward ahead)</b></li> <li>➤ <b>Reject</b></li> <li>➤ <b>Request clarification</b></li> <li>➤ <b>Mark as high-risk</b></li> <li>➤ <b>Sign digitally</b></li> </ul> <p><b>5.2.7 Certificate Generation</b></p> <p><b>Upon approval:</b></p> <ul style="list-style-type: none"> <li>➤ <b>PDF is automatically created</b></li> <li>➤ <b>DC digital signature applied</b></li> <li>➤ <b>QR code embedded by the central system to verify its originality</b></li> <li>➤ <b>Certificate stored in permanent archive (DB of Central service and on cloud at the same time)</b></li> </ul>		
2	<p>Dashboard (Centralized dashboard for monitoring, reporting, and administration. Customizable reports and analytics included) Metrics include:</p> <ul style="list-style-type: none"> <li>➤ <b>Total applications</b></li> <li>➤ <b>Today's applications</b></li> <li>➤ <b>Pending in each stage</b></li> <li>➤ <b>Average processing time</b></li> <li>➤ <b>Officer workload distribution</b></li> <li>➤ <b>SLA compliance percentage</b></li> <li>➤ <b>Weekly performance trends</b></li> </ul> <p><b>5.3 COMMISSIONER HQ CENTRAL CONTROL SYSTEM</b></p> <p>The Commissioner HQ system provides city-level governance, oversight, analytics, and control.</p> <p><b>5.3.1 Unified Monitoring Dashboard</b></p> <p>Shows complete KPIs:</p> <ul style="list-style-type: none"> <li>➤ <b>District-wise application volumes</b></li> <li>➤ <b>Processing times per DC office</b></li> <li>➤ <b>SLA compliance per officer</b></li> </ul>	1 Job	

	<ul style="list-style-type: none"> <li>➤ Fraud attempt alerts</li> <li>➤ NADRA error rates</li> <li>➤ Certificate issuance trends</li> <li>➤ High-risk applications</li> </ul> <p><b>5.3.2 Centralized User &amp; Role Management</b></p> <p>Commissioner's office can:</p> <ul style="list-style-type: none"> <li>➤ Create/delete DC office staff accounts</li> <li>➤ Assign roles &amp; permissions</li> <li>➤ Suspend non-compliant officers and highlight</li> <li>➤ Monitor login histories</li> <li>➤ Track officer activities</li> </ul> <p><b>5.3.3 Fraud Detection &amp; Anomaly Analytics</b></p> <p>Includes:</p> <ul style="list-style-type: none"> <li>➤ Duplicate CNIC applications</li> <li>➤ Blacklisted addresses</li> <li>➤ Multiple applications from same IP</li> <li>➤ Unusually fast approvals</li> <li>➤ Suspicious document patterns</li> <li>➤ NADRA mismatch alerts</li> </ul> <p><b>5.3.4 Compliance &amp; Audit Tools</b></p> <p>Commissioner office can:</p> <ul style="list-style-type: none"> <li>➤ Access full audit logs</li> <li>➤ Inspect any application record</li> <li>➤ Extract reports for government committees</li> <li>➤ Generate compliance summaries</li> <li>➤ Track SOP adherence</li> </ul> <p><b>5.3.5 Certificate Serial Range Management</b></p> <p>Assigns district-level certificate ranges to ensure:</p> <ul style="list-style-type: none"> <li>➤ No duplication</li> <li>➤ No off-record issuance</li> <li>➤ Consistent numbering</li> </ul>			
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	<p><b>5.3.6 Policy Enforcement Controls</b></p> <p>Commissioner can define:</p> <ul style="list-style-type: none"> <li>➤ Residency requirements</li> <li>➤ Document requirements</li> <li>➤ Verification rules</li> <li>➤ Approval escalation rules</li> </ul> <p>These policies automatically apply across all DC Offices</p>			
3	<p><b>Mobile Application</b>(Cross-platform mobile app for citizen access to services, application submission, and status tracking.)</p> <p><b>Mobile Field Verification App</b></p> <ul style="list-style-type: none"> <li>➤ GPS lock</li> <li>➤ Offline mode</li> <li>➤ Photo upload</li> <li>➤ QR scanning</li> </ul> <p><b>5.7.2 Integration with Other Government Systems</b></p> <ul style="list-style-type: none"> <li>➤ Police records</li> <li>➤ Municipal records</li> <li>➤ Housing records</li> </ul> <p><b>5.7.3 AI-Based Fraud Detection</b></p> <ul style="list-style-type: none"> <li>➤ Machine learning risk scoring</li> <li>➤ Pattern recognition</li> </ul>	1 Job		
4	<p><b>Cyber Security</b> (Advanced cyber security measures including firewalls, intrusion detection, and compliance with international standards.)</p> <p><b>Security Components</b></p> <ul style="list-style-type: none"> <li>➤ MFA for DC/Admin</li> <li>➤ Firewall + WAF</li> <li>➤ Audit logs</li> <li>➤ SIEM alerts</li> <li>➤ Encrypted DB</li> <li>➤ File hashing</li> <li>➤ Tokenized NADRA requests</li> <li>➤ IP whitelisting</li> </ul>	1 Job		
5	<p><b>APIs</b> - For liveness Verification, NADRA Verification, Gas/KE If needed.(Approx: 150,000 Domicile / PRC per year)</p> <p>The Online Domicile Management System MUST includes a fully integrated, role-based Live Monitoring and Dashboard ecosystem for every user of the system. Each dashboard is tailored to the specific responsibilities of the Commissioner, DC Office, operational officers, support staff, courier partners, and citizens. The system provides real-time information, alerts,</p>	1 Job		

	<p>performance indicators, and actionable insights, ensuring transparency, efficiency, and total operational control.</p> <p><b>15.1. Commissioner's Real-Time Monitoring Dashboard</b></p> <p>The Commissioner's dashboard serves as the central command and supervisory interface, providing a city-wide live view of all operations across Karachi. This dashboard highlights:</p> <ul style="list-style-type: none"> <li>➤ Overall domicile activity (all districts combined) with real-time updates of applications submitted, approved, rejected, pending, or escalated.</li> <li>➤ Comparative performance of all DC offices, showing which districts are processing efficiently and where backlogs are forming.</li> <li>➤ Operational bottlenecks, such as officers with unusually high pending cases or districts nearing SLA breaches.</li> <li>➤ Fraud detection indicators, including abnormal patterns in applications, multiple submissions from the same CNIC, or inconsistent address data.</li> <li>➤ Live delivery tracking, allowing the Commissioner to view certificates dispatched through courier or awaiting self-collection.</li> </ul> <p>This dashboard empowers the Commissioner to take immediate corrective action, issue directives, reassign authority, or intervene at any level.</p> <p><b>2. Deputy Commissioner's Live Operational Dashboard</b></p> <p>Each Deputy Commissioner receives a district-focused dashboard, showing a live breakdown of all activities within their jurisdiction. It includes:</p> <ul style="list-style-type: none"> <li>➤ The flow of new applications, applications under verification, and those awaiting the DC's decision.</li> <li>➤ Officer-specific workload, allowing the DC to see how many cases each officer is handling, how many are pending, and who is approaching or exceeding SLAs.</li> <li>➤ Real-time visibility into field verification tasks, document review delays, and NADRA verification issues.</li> <li>➤ A dedicated section for tracking certificate dispatches within the district — which certificates are ready, which await courier pickup, and which citizens have opted for self-collection.</li> </ul>			
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	<ul style="list-style-type: none"> <li>➤ Monitoring of appeals filed against district-level decisions and show-cause notices related to the district office.</li> </ul> <p>This dashboard enables DCs to run their district with precision, quickly spotting delays and ensuring timely service delivery.</p> <p><b>3. Officer's Personal Work Dashboard</b></p> <p>Verification Officers, Clerks, and Field Officers use a personalized dashboard that highlights only their assigned tasks and their performance metrics. It displays:</p> <ul style="list-style-type: none"> <li>➤ Their current queue of assigned applications.</li> <li>➤ Cases approaching deadline, requiring immediate attention.</li> <li>➤ Applications requiring field verification, document validation, or fresh NADRA checks.</li> <li>➤ A personal productivity summary, including applications processed per day, accuracy trends, and compliance.</li> </ul> <p><b>4. Staff Support and Helpdesk Dashboard</b></p> <p>Support staff have a dashboard designed for managing citizen interactions and operational issues. It provides:</p> <ul style="list-style-type: none"> <li>➤ A live list of citizen complaints and inquiries.</li> <li>➤ Complaint categories, pending tickets, and escalation indicators.</li> <li>➤ System health checks such as NADRA API responsiveness, SMS/email gateway connectivity, and upload errors.</li> </ul> <p><b>5. Citizen's Personal Application &amp; Delivery Dashboard</b></p> <p>Citizens have a clear and user-friendly dashboard that keeps them informed throughout the entire process. It includes:</p> <ul style="list-style-type: none"> <li>➤ A step-by-step progress timeline showing exactly where their application currently stands.</li> <li>➤ Notifications about any missing documents, verification delays, or decisions.</li> <li>➤ Delivery tracking options:</li> </ul> <p>Citizens can also submit appeals or complaints from within the same dashboard. This creates complete transparency and eliminates the need for physical visits.</p> <p><b>6. System Administration Dashboard</b></p>			
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	<p><b>System administrators access a high-level technical monitoring dashboard that covers the platform's infrastructure health. It shows:</b></p> <ul style="list-style-type: none"> <li>➤ API availability, response times, and service uptime.</li> <li>➤ SMS/email delivery success rates.</li> <li>➤ Storage consumption, database load, and microservice performance.</li> <li>➤ Backup and restore schedules, plus system maintenance status.</li> </ul> <p><b>7. Courier and Rider Delivery Dashboard</b></p> <p>Courier partners and registered riders have a dedicated dashboard to manage certificate delivery. It provides:</p> <ul style="list-style-type: none"> <li>➤ Certificates assigned for delivery with the timestamp of pickup.</li> <li>➤ Real-time delivery routes (GPS optional), expected arrival times, and delivery status updates.</li> <li>➤ Tools for identity verification at the citizen's doorstep using CNIC, OTP, or QR code scanning.</li> <li>➤ Logs of failed delivery attempts with reasons and rescheduling options.</li> </ul>			
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**TOTAL PART-II)**

**PART-III) SLA For Application Software and Data Center**

S#	Description of Items	Qty	Unit Cost	Total
	<p><b>Operations &amp; Maintenance (12 Months)</b></p> <p>Comprehensive post-deployment support, bug fixing, training, and system maintenance for one year with support staff:</p> <ul style="list-style-type: none"> <li>i) IT Head</li> <li>ii) Manager IT</li> <li>iii) Software Developer Engineer</li> <li>iv) Network Engineer</li> <li>v) Cyber Security Expert</li> <li>vi) Hardware Maintenance Engineer</li> </ul>	1 Job		
	<b>TOTAL PART-III)</b>			

**NOTE: The interested Bidders will quote the bid amount for all Components as mentioned above (from Component 1 to Component 3). The bidder will be selected on Grand total Amount on Turn Key basis Solution.**



## **SUMMARY OF BILL OF QUANTITIES**

NAME OF SCHEME: **INTEGRATION, AUTOMATION & ENHANCEMENT  
OF DOMICILE & PRC SYSTEM IN KARACHI  
DIVISION. (ADP NO. 2832 OF 2025-26)**

I / We hereby quoted as follows:		<u>In Figure</u>	<u>In Words</u>
1	Total Part "I"	Rs.	
2	Total Part "II"	Rs.	
3	Total Part "III"	Rs.	
Grand Total		Rs.	

The Total amount is Rs. \_\_\_\_\_ in Words \_\_\_\_\_

\_\_\_\_\_ for the complete job for offer rates (which ever included in the BOQ).

I/We have attached a Bid Security amounting to Rs. \_\_\_\_\_/- as per NIT is shape of pay order bearing No. \_\_\_\_\_ dated \_\_\_\_\_ issued from \_\_\_\_\_.

Time Limit: 12 Months Penalty Per Day: Rs. 3,000/- per day (Max.10% of Sanctioned Cost)

**Validity: 90 Days as per SPPRA Rules 2010 (Amended upto date)**

Note:

- Tender must be quoted in figure & in words both otherwise liable to be cancelled.
- All over writing & correction if any must be initialed & stamped by the bidder.
- We/I read the standard bidding Documents (Volume-I, II, III, & IV) and agreed to abide all of them and also provide all these documents with our signatures as & when directed.

Signature of the contractor with stamp

Address:



**EXECUTIVE ENGINEER**  
Project Directorate of  
Commissioner Karachi