

Date: 22-09-2026

Day: Tuesday

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Sindh Lakhra Coal Mining Company
Energy Department, Government of Sindh

REQUEST FOR PROPOSAL (RFP)
PROCUREMENT OF SERVICES

Sindh Lakhra Coal Mining Company (Pvt.) Ltd. (SLCMC) invites sealed bids, under the SPPRA Rules, 2010 (as amended), from reputable, duly registered, eligible, technically competent, and experienced software development firms and consulting firms/consultants having a minimum of three (03) years of relevant experience in software development, digital transformation, enterprise systems, and/or business process automation, for the design, development, supply, installation, integration, testing, commissioning, and post-implementation support of an Integrated Digital Management Platform for Digital Transformation and Operational Automation, having a minimum three years' experience for the following procurement:

No.	Description of Procurement	Quantity	Method of Procurement
1.	Procurement of services: Digital Transformation & Operational Automation	Complete Job	Single Stage - Two Envelope

Tender documents containing detailed specifications, terms and conditions, eligibility requirements, and other relevant information may be downloaded from the SPPRA EPAD Portal www.portalsindh.eprocure.gov.pk or from the official website of Sindh Lakhra Coal Mining Company www.sindhmining.com from the date of publication. Bidders are required to submit their bids online through the EPAD Portal in accordance with the prescribed procedure. A non-refundable tender fee of Rs. 3,000/- in the form of a Pay Order/Demand Draft, drawn in favor of Sindh Lakhra Coal Mining Company (Pvt.) Ltd., must be submitted to the Procuring Agency at its Head Office before or at the time of opening of bids, as prescribed in the bidding documents.

Bid Validity:	90 Days.
Bid Security:	2% of Bid Offer
Date of Issuance:	From date of Publication
Submission Date & Time:	08th October, 2026 @ 3:00 pm
Opening Date & Time:	08th October, 2026 @ 3:30 pm
Currency:	In Pak Rupees including Delivery Duty Paid at Consignee-end
Delivery:	As Specified in the Data Sheet of Bidding Documents
Evaluation Criteria:	Eligibility mentioned in the Data Sheet of Bidding Documents

The Technical Proposals will be opened in the presence of bidders or their authorized representatives who wish to attend. The date and time for opening of Financial Proposals will be communicated only to technically qualified bidders through email and/or official correspondence.

The Procuring Agency reserves the right to increase or decrease the quantity of worker's insurance based on need, subject to availability and allocation of funds. In case the submission or opening date falls on a public holiday or due to any unavoidable circumstances, proposals shall be received and opened on the next working day at the same time and venue.

NIT Ref: SLCMC/2026/004

MANAGER PROCUREMENT
Sindh Lakhra Coal Mining Company Pvt. Ltd.
Bungelow # B-89, Street 15, Gulshan-e-Faisal, Bath Island, Clifton, Karachi
Phone: (+92) 21-351680504, (+92) 346 1619828. Web: www.sindhmining.com
Email: info@sindhmining.com

سندھ لاکھڑا کول مائننگ کمپنی
انرجی دیپارٹمنٹ، گورنمنٹ آف سندھ

پروپوزل لاء گزاری (RFP)
سروسز جی پروکیورمینٹ

سندھ لاکھڑا کول مائننگ کمپنی (پرائیویٹ) لمیٹید (SLCMC) ایس بی بی آر ای دیوانہ 2010 (جسٹن ڈیمیر ٹیل آف) جی حدت ساک ہارن ریسٹور ٹیل اہل ٹیکنیکل طور تي قابل و تجربہ کار سافٹ ویئر ڈولپمنٹ فرم / کنسلٹنٹس کان جن کی سافٹ ویئر ڈولپمنٹ، ڈیجیٹل ٹرانسفارمیشن، انٹرپرائز سسٹمز و / یا بزنس آپریشنز و ڈیٹا انالیٹکس، سہولتی، منصوبہ بندی، ڈیزائن، ڈیولپمنٹ، ٹیسٹنگ، کمیشننگ و پوسٹ-ایمپلیمینٹیشن سپورٹ آف این انٹیگریٹڈ ڈیجیٹل مینجمنٹ پلیٹ فارم واسطی ڈیجیٹل ٹرانسفارمیشن اینڈ آپریشنز لاء گھٹ و گھٹ 03 سالن جو تجربہ رکھندو جنھن ویت چاہیال پروکیورمینٹ لاء گھٹ و گھٹ 03 سالن جو تجربہ رکھندو جنھن کان مہرید واک گھڑائی ٹی

نمبر	خریداری جو تفصیل	تعداد	پروکیورمینٹ جو طریقہ کار
1	سروسز جی پروکیورمینٹ: ڈیجیٹل ٹرانسفارمیشن اینڈ آپریشنز لاء گھٹ و گھٹ 03 سالن جو تجربہ رکھندو جنھن کان مہرید واک گھڑائی ٹی	مکمل جاب	سنگل اسٹیج-ٹو انویلپ

تفصیلی وضاحت، شرائط و ضابطہ اہلیت واریں گھرجن و بی لاگاہیل معلومات تی مشعل ٹیندر دستاویز EPAD SPPRA پورٹل www.portalsindh.eprocure.gov.pk یا سندھ لاکھڑا کول مائننگ کمپنی جی سرکاری ویب سائٹ www.sindhmining.com کان اشاعت جی تاریخ کان تائین لوڈ کری سگھجن تا۔

واک ڈینڈو کی گھڑی تی پنھنجا واک چاہیال طریقہ کار موجب EPAD پورٹل ذریعہ آن لائن جمع کرائیج. سندھ لاکھڑا کول مائننگ کمپنی (پرائیویٹ) لمیٹید جی نالی پری آرڈر / دماندہ ڈرافٹ جی صورت پر 3000 روپین جی ٹیندر فی ناقابل واپسی پروکیورنگ ایجنسی کی سندس ہیڈ آفس ڈانھن واک دستاویز پر چاہیال واکھن جی کولن جی وقت تی یا ایگ لازمی جمع کرائی ویندی. جیئن واک دستاویز پر چاہیال آھی.

واک کارگری:	90 ڈینھن
واک سیکیورٹی:	واک آج جو 2%
اشاعت جی تاریخ کان:	اشاعت جی تاریخ کان
جمع کرائیج جی تاریخ و وقت:	08 اکتوبر، 2026 تی ٹیہری: جو 03:00 وگی
کولن جی تاریخ و وقت:	08 اکتوبر، 2026 تیہری: جو 3:30 وگی
کرنسی:	پاک روپین پر بشمول ڈیولری ڈیوٹی ادا کھیل کنسلٹنٹس جی پچائی ٹی.
ڈیولری:	جیئن واک دستاویز جی دینا شیٹ پر چاہیال آھی.
تشخصی معیار:	واک دستاویز جی دینا شیٹ پر چاہیال اہلیت

ٹیکنیکل پروپوزل واک ڈینڈو یا سندھ مجاز نمائندہ جیگی حاضر ٹیئن چاہیجی پر کولیا ویندا. فائنل پروپوزل جی کولن جی تاریخ و وقت صرف ٹیکنیکل طور تي اہل واک ڈینڈو کی ای میل و / یا آفیشل کریسپانڈنس ذریعہ بڈای ویندو.

پروکیورنگ ایجنسی ضرورت جی بنیاد تی فنانس جی دستیابی ایلوکیشن موجب وکرز جی انشورنس جو تعداد واکھن یا گھٹانن جو پورو حق محفوظ رکھی ٹی. جیئن جمع کرائیج جی تاریخ تی سرکاری موکل جو اعلان ٹیٹی تو یا کنھن آفونڈو صورت حال سبب پروپوزل ورنڈو کمر کار واری ڈینھن تی ساگنی وقت و ہنڈ تی وصول کرا ویندا.

NIT Ref: SLCMC/2026/004

مینیجر پروکیورمینٹ
سندھ لاکھڑا کول مائننگ کمپنی پرائیویٹ لمیٹید
بنگلور نمبر B-89، اسٹریٹ 15، گلشن فیصل، باٹ آیلینڈ، کلٹون، کراچی
فون: (+92) 21-351680504، (+92) 346 1619828، ویب سائٹ: www.sindhmining.com، ای میل: info@sindhmining.com

سندھ لاکھڑا کول مائننگ کمپنی
محکمہ توانائی، حکومت سندھ

درخواست برائے پروپوزل (RFP)
خدمات کا حصول

سندھ لاکھڑا کول مائننگ کمپنی (پرائیویٹ) لمیٹید (SLCMC) ایس بی بی آر ای دیوانہ 2010 (جسٹن ڈیمیر ٹیل آف) جی حدت ساک ہارن ریسٹور ٹیل اہل ٹیکنیکل طور تي قابل و تجربہ کار سافٹ ویئر ڈولپمنٹ فرم / کنسلٹنٹس کان جن کی سافٹ ویئر ڈولپمنٹ، ڈیجیٹل ٹرانسفارمیشن، انٹرپرائز سسٹمز و / یا بزنس آپریشنز و ڈیٹا انالیٹکس، سہولتی، منصوبہ بندی، ڈیزائن، ڈیولپمنٹ، ٹیسٹنگ، کمیشننگ و پوسٹ-ایمپلیمینٹیشن سپورٹ آف این انٹیگریٹڈ ڈیجیٹل مینجمنٹ پلیٹ فارم واسطی ڈیجیٹل ٹرانسفارمیشن اینڈ آپریشنز لاء گھٹ و گھٹ 03 سالن جو تجربہ رکھندو جنھن ویت چاہیال پروکیورمینٹ لاء گھٹ و گھٹ 03 سالن جو تجربہ رکھندو جنھن کان مہرید واک گھڑائی ٹی

نمبر	خدمات کا حصول	تعداد	پروکیورمینٹ جو طریقہ کار
1	سروسز جی پروکیورمینٹ: ڈیجیٹل ٹرانسفارمیشن اینڈ آپریشنز لاء گھٹ و گھٹ 03 سالن جو تجربہ رکھندو جنھن کان مہرید واک گھڑائی ٹی	مکمل جاب	سنگل اسٹیج-ٹو انویلپ

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NIT Ref: SLCMC/2026/004

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SINDH LAKHRA COAL MINING COMPANY PVT. LTD
ENERGY DEPARTMENT, GOVERNMENT OF SINDH



REQUEST FOR PROPOSAL (RFP)

FOR

PROCUREMENT OF SERVICES

DIGITAL TRANSFORMATION AND OPERATIONAL AUTOMATION

Technical and Financial Proposal

BIDDING DOCUMENTS
September, 2026



SINDH LAKHRA COAL MINING COMPANY PVT. LTD
ENERGY DEPARTMENT, GOVERNMENT OF SINDH



REQUEST FOR PROPOSAL (RFP)
FOR

PROCUREMENT OF SERVICES

DIGITAL TRANSFORMATION AND OPERATIONAL AUTOMATION

Technical Proposal

BIDDING DOCUMENTS
September, 2026

DISCLAIMER

This Bidding Document is issued by M/s Sindh Lakhra Coal Mining Company (Private) Limited (SLCMC) solely for informational purposes and does not constitute any commitment or agreement. SLCMC reserves the right, at its sole discretion, to amend, cancel, or withdraw the bidding process or any part thereof at any time prior to contract award, without assigning reasons or incurring any liability.

The information provided herein, whether written, oral, or electronic, is based on assumptions and assessments made by SLCMC and may be incomplete, inaccurate, or unsuitable for all bidders. SLCMC makes no representation regarding the accuracy, adequacy, or completeness of the information and has not considered the specific objectives or needs of any bidder. Bidders are solely responsible for conducting their own due diligence and obtaining independent professional advice.

All submissions shall become the property of SLCMC, which assumes no obligation to maintain confidentiality. SLCMC shall not be liable for any loss arising from reliance on this document or for non-receipt of communications.

By submitting a bid, bidders acknowledge and accept these disclaimers, which shall not be modified or waived by any oral or written communication.

PREFACE

This Bidding Documents has been prepared for use by Procuring Agencies and their implementing agencies for the “Procurement of services Digital Transformation & Operational Automation” through National Competitive Bidding (NCB).

To simplify the preparation of bidding documents for individual procurements, the documents are divided into two parts based on provisions that are fixed and those that are specific to each procurement. Provisions intended to be used without modification are included in Part One, which comprises Section I: Instructions to Bidders and Section II: General Conditions of Contract.

Data and provisions specific to the “Procurement of services Digital Transformation & Operational Automation” are included, which comprises Section III: Bid Data Sheet, Section IV: Special Conditions of Contract, Section V: Schedule of Requirements, Section VI: Technical Specifications, and the applicable forms contained in Section VII: Invitation for Bids and Section VIII: Sample Forms.

This document constitutes Section I, which contains fixed provisions to be used unchanged. Each section includes notes intended solely for the guidance of the Procuring Agency or the person preparing the bidding documents. These notes are for informational purposes only and shall not form part of the final bidding documents.

INVITATION FOR BIDS:

REQUEST FOR PROPOSAL (RFP)

PROCUREMENT OF SERVICES

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NIT Ref: SLCMC/2026/004

MANAGER PROCUREMENT

Sindh Lakhra Coal Mining Company Pvt. Ltd

Bungalow # B-89, Street 15, Gulshan-e-Faisal, Bath Island, Clifton. Karachi

Phone (+92) 21 351680504, (+92) 346 1619828, **Web:** www.sindhmining.com **Email:** info@sindhmining.com

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SECTION – I.

INSTRUCTIONS TO BIDDERS

Note: These Instructions to Bidders along with Bidding Data will not be part of Contract and will cease to have effect once the Contract is signed.

A. GENERAL

1. Scope of Bid & Source of Funds

1.1. Scope of Bid: The Procuring Agency as defined in the Bidding Data (hereinafter called the Procuring Agency) wishes to receive Bids for the services summarized in the Bidding Data (hereinafter referred to as the services). Bidders must quote for the complete scope of services. **Any Bid covering partial scope of services will be rejected as non-responsive.**

1.2. Source of Funds: The Procuring Agency has arranged funds from its own sources which may be indicated accordingly in bidding data towards the cost of the project/scheme.

2. Eligibilities Bidders: Bidding is open to all firms and persons meeting the following requirements:

- a) Valid Registration with relevant Provincial and Federal Tax authorities' i.e. sales tax, services sales tax, income tax and custom duties, wherever applicable.
- b) Responsive Bidder is required to submit following documents with bid:
 - i. Company profile;
 - ii. Works of similar nature and size for each performed in last 3 years;
 - iii. Annual Returns of FBR of last 3 years;
 - iv. Information regarding litigations and abandoned works if any.
 - v. The bidder must be registered with the e-Pak Acquisition and Disposal System (EPADS) of the Sindh Public Procurement Regulatory Authority (SPPRA) at the time of bid submission.

3. Cost of Bidding: The bidder shall bear all costs associated with the preparation and submission of its bid 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 (SPP Rules 24 & 25).

B. BIDDING DOCUMENTS

4. Contents of 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 SPPRA.

1. Instructions to Bidders & Bidding Data
2. Form of Bid, Qualification Information & Schedules to Bid Schedules to Bid comprise the following:
 - i. Schedule A: Schedule of Prices / (Terms of References (TOR)
 - ii. Schedule B: Specific Data
 - iii. Schedule D: Delivery Schedule
 - iv. Schedule E: Method of Performing Works
 - v. Schedule F: Integrity Pact

3. Conditions of Contract & Contract Data

4. Standard Forms:
 - (a) Form of Bid Security,
 - (b) Form of Performance Security;
 - (c) Form of Contract Agreement;
 - (d) Form of Bank Guarantee for Advance Payment, if any.
5. Clarification of Bidding Documents
 - 5.1. A prospective bidder requiring any clarification(s) in respect of the Bidding Documents may notify the Procuring Agency 's address indicated in the Bidding Data.
 - 5.2. An interested bidder, who has obtained/download bidding documents, may request for clarification of contents of bidding documents in writing and procuring agency shall respond to such queries in writing within three calendar days, provided they are received at least five calendar days prior to the date of opening of bid (SPP Rule 23-1).
6. Amendment of Bidding Documents (SPP Rules 22(2) & 22).
 - 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 interested bidder, modify the Bidding Documents by issuing addendum.
 - 6.2. Any addendum thus issued shall be part of the Bidding Documents pursuant to Sub-Clauses.
 - 6.3. 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.
 - 6.4. To afford interested bidders reasonable time in which to take an addendum into account in preparing their Bids, the Procuring Agency may at its discretion extend the deadline for submission of Bids.

C. PREPARATION OF BIDS

7. Language of Bid: All documents relating to the Bid shall be in the language specified in the Contract Data.
8. Documents Comprising the Bid: The Bid submitted by the bidder shall comprise the following:
 - (a) Offer /Covering Letter
 - (b) Form of Bid duly filled, signed and sealed, in accordance with SPPRA.
 - (c) Schedules (A to D) to Bid duly filled and initialed, in accordance with the instructions contained therein & in accordance with SPPRA.
 - (d) Bid Security furnished in accordance with SPPRA.

- (e) Power of Attorney in accordance with SPPRA.
- (f) Documentary evidence in accordance with SPPRA.
- (g) Documentary evidence in accordance with SPPRA.

9. Sufficiency of Bid

9.1. Each bidder shall satisfy himself before Bidding as to the correctness and sufficiency of his Bid and of the premium on the rates of CSR / rates and prices quoted/entered in the Schedule of Prices, which rates and prices shall except in so far as it is otherwise expressly provided in the Contract, cover all his obligations under the Contract and all matters and things necessary for the proper completion of the works.

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.

10. Bid Prices, Currency of Bid and Payment

10.1. The bidder shall fill up the Schedule of Prices (Schedule A to Bid) indicating the percentage above or below the Composite Schedule of Rates/unit rates and prices of the Works to be performed under the Contract. Prices in the Schedule of Prices/terms of references shall be quoted entirely in Pak Rupees keeping in view the instructions contained in the Preamble to Schedule of Prices.

10.2. Unless otherwise stipulated in the Conditions of 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.

10.3. The unit rates and prices in the Schedule of Prices or percentage above or below on the composite schedule of rates shall be quoted by the bidder in the currency as stipulated in Bidding Data.

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 terms of references.

11. Documents Establishing Bidder's Eligibility and Qualifications

11.1. The bidder shall furnish, as part of its bid, documents establishing the bidder's eligibility to bid and its qualifications to perform the Contract, if its bid is accepted.

11.2. Bidder must possess and provide evidence of its capability and the experience as stipulated in Bidding Data and the Qualification Criteria mentioned in the Bidding Documents.

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 Bidding Data.

12.2. The bidder shall note that standards for workmanship, material and equipment, and references 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 part of his bid, at the option of the bidder, a Bid Security as percentage of bid price/estimated cost or in the amount stipulated in Bidding Data in Pak. Rupees in the form of Pay order/ demand draft / Bank Guarantee issued by a Scheduled Bank in Pakistan in favor of the Sindh Lakhra Coal Mining Company (Pvt.) Limited a Procuring Agency valid for a period up to ninety (90) days beyond the bid validity date.
- 13.2. Any bid not accompanied by an acceptable Bid Security shall be rejected by Procuring Agency as non-responsive.
- 13.3. The bid securities of unsuccessful bidders will be returned upon award of contract to the successful bidder or on the expiry of validity of Bid Security whichever is earlier.
- 13.4. The Bid Security of the successful bidder will be returned when the bidder has furnished the required Performance Security, and signed the Contract Agreement (SPP Rule 37).
- 13.5. The Bid Security may be forfeited:
 - a. if a 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 a successful bidder, if he fails within the specified time limit to:
 - d. furnish the required Performance Security or
 - e. Sign the Contract Agreement.

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

- 14.1. Bids shall remain valid for the period stipulated in the Bidding Data after the date of bid opening.
- 14.2. The bid shall be typed and signed by the bidder. The person signing the bid shall initial all pages of the bid to confirm authenticity. The bidder shall submit (upload) a typed bid in the form of an original scanned copy through the SPPRA e-Pak Acquisition and Disposal System (EPADS) portal. The bid shall be duly signed by the authorized signatory of the bidder to bind the bidder to the contract. Any interlineations, erasures, or overwriting shall be valid only if they are duly initialed by the person signing the bid. All bidding documents shall be properly attested, signed, and stamped by the authorized representative of the bidder.
- 14.3. In exceptional circumstances, Procuring Agency may request the bidders to extend the period of validity for an additional period but not exceeding 1/3 of the original period. The request and the bidders' responses shall be made in writing or by cable. A Bidder may refuse the request without forfeiting the Bid Security. A Bidder agreeing to the request will not be required or permitted to otherwise modify the Bid, but will be required to extend the validity of Bid Security for the period of

the extension, and in compliance with .13 in all respects (SPP Rule 38).

- 14.4. All Schedules to Bid are to be properly completed and signed.
- 14.5. 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.
- 14.6. Each bidder shall prepare Original and number of copies specified in the Bidding Data of the documents comprising the bid as described in .8 and clearly mark them original and copy as appropriate. In the event of discrepancy between them, the original shall prevail.
- 14.7. The original and all copies of the bid shall be typed or written in intangible ink and shall be signed by a person or persons duly authorized to sign (in the case of copies, Photostats are also acceptable). 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 or persons signing the bid.
- 14.8. The Bid shall be delivered in person or sent by registered mail at the address to Procuring Agency as given in Bidding Data.

D. SUBMISSION OF BID

15. Deadline for Submission, Modification & Withdrawal of Bids:

- 15.1. Bids must be received by the Procuring Agency at the address/provided in Bidding Data not later than the time and date stipulated therein.
- 15.2. Submission through EPADS: Under the procedures of Open Competitive Bidding, the term “Envelope” shall mean encrypted electronic file(s). The bid shall be submitted exclusively through the electronic procurement system of SPPRA (EPADS) and uploaded in the form of separate Technical Proposal and Financial Proposal as encrypted files, in accordance with the instructions provided on EPADS. The scanned copy of the original bid security shall be uploaded on EPADS. The original bid security in physical form shall be submitted at the address mentioned in the Notice Inviting Tender (NIT) / Invitation for Bids (IFB) / Bidding Documents / Bid Data Sheet (BFDS) within the prescribed time.
- 15.3. Bids submitted through telegraph, telex, fax or e-mail shall not be considered.
- 15.4. Any bid received by the Procuring Agency after the deadline for submission prescribed in Bidding Data will be returned unopened to such bidder.
- 15.5. Any bidder may modify or withdraw his bid after bid submission provided that the modification or written notice of withdrawal is received by the Procuring Agency prior to the deadline for submission of bids.
- 15.6. Withdrawal of a bid during the interval between the deadline for submission of bids and the expiration of the period of bid validity specified in the Form of Bid may result in forfeiture of the Bid Security.

- 15.7. Deadline for Submission: Bids must be received by the Procuring Agency through the SPPRA e-Pak Acquisition and Disposal System (EPADS) not later than the date and time specified in the Bid Data Sheet. The Procuring Agency may, at its discretion, extend the deadline for submission of bids by amending the Bidding Documents in accordance with Instruction to bidders Clause 7. In such case, all rights and obligations of the Procuring Agency and the bidders previously subject to the original deadline shall thereafter be subject to the deadline as extended.

E. BID OPENING AND EVALUATION

16. Bid Opening, Clarification and Evaluation (SPP Rules 41, 42 & 43)

- 16.1. The Procuring Agency will open the bids, in the presence of bidder's representatives who choose to attend, at the time, date and in the place specified in the Bidding Data.
- 16.2. The Procuring Agency shall open all bids electronically through the SPPRA e-Pak Acquisition and Disposal System (EPADS) in the presence of bidders' representatives who choose to attend, at the time, date, and place specified in the Bid Data Sheet. The bidders' representatives present shall sign an attendance register as evidence of their participation. At the time of bid opening, the following information shall be announced:
- i. Names of the bidders;
 - ii. Any bid modifications or withdrawals;
 - iii. Bid prices and discounts, if any;
 - iv. Presence or absence of the required bid security;
 - v. and any other information that the Procuring Agency may, at its discretion, consider appropriate.
 - vi. No bid shall be rejected at the time of bid opening, except for late bids, which shall be rejected in accordance with SPPRA.
- b) Bids, including any modifications submitted, that are not opened electronically and read out at the time of bid opening shall not be considered for further evaluation, irrespective of the circumstances, including but not limited to system errors, software bugs, viruses, unreadable files, or technical glitches. Withdrawn bids shall not be opened. The Procuring Agency shall prepare minutes of the bid opening, which shall form part of the official record of the procurement proceedings.
- c) 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 (SPP Rule 43)

17. Evaluation of Technical Proposals

- 17.1. The evaluation committee shall evaluate the Technical Proposals on the basis of their responsiveness to the Terms of Reference, applying the evaluation criteria, sub-criteria, and point system specified in the Data Sheet. Each responsive Proposal will be given a technical score. A Proposal shall be rejected at this stage if it fails to achieve the minimum technical score indicated in the Data Sheet.

18. Evaluation of Financial Proposal

18.1. Financial Proposals shall be opened publicly in the presence of the firm/organizations' representatives who choose to attend. The name of the Firms/organizations and the technical scores of the firm/organizations shall be read aloud. The Financial Proposal of the firms/organizations who met the minimum qualifying mark will then be inspected to confirm that they have remained sealed and unopened. These Financial Proposals shall be then opened, and the total prices read aloud and recorded. Copy of the record shall be sent to all Firms/organizations.

18.2. The Evaluation Committee will correct any computational errors. When correcting computational errors, in case of discrepancy between a partial amount and the total amount, or between word and figures the formers will prevail. In addition to the above corrections, activities and items described in the Technical Proposal but not priced, shall be assumed to be included in the prices of other activities or items.

18.3. The bid being most advantageous in shall be accepted.

19. Process to be Confidential

19.1. 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.

19.2. 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 Redressal 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.

F. AWARD OF CONTRACT

20. Post Qualification

20.1. The Procuring Agency shall award the Contract to the bidder being most advantageous in terms getting combined technical and financial score.

20.2. Award Criteria & Procuring Agency's Right: 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 satisfactory perform the Contract in accordance with the provisions of the SPPRA.

20.3. Notwithstanding: 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).

- 20.4. Notification of Award & Signing of Contract Agreement: 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 (SPP Rule 49).
- 20.5. 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.
- 20.6. The formal Agreement between the Procuring Agency and the successful bidder duly stamped at rate of 0.35% of bid price (updated from time to time) stated in Letter of Acceptance shall be executed within seven (07) days of the receipt of Form of Contract Agreement by the successful bidder from the Procuring Agency.
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 (SPP 39).
- 21.2. Failure of the successful bidder to comply with the requirements shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security.
22. Publication of Award of Contract: within seven days of the award of contract, the procuring agency 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:
- i. Evaluation Report;
 - ii. Form of Contract and letter of Award;
 - iii. Terms of references or Schedule of Requirements. (SPP Rule 50)
23. Integrity Pact: The Bidder shall sign and stamp the Form of Integrity Pact provided at Schedule-D 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 non- responsive (SPP Rule 89)

GENERAL TERMS AND CONDITIONS

A. General Provisions

1. Definitions: Unless the context otherwise requires, the following terms whenever used in this Contract have the following meanings:
- i. “Applicable Law” means the Sindh Public Procurement Act, thereunder Rules 2010.
 - ii. “Procuring Agency PA” means the Environment, Climate Change & Coastal Development Department which signs the contract
 - iii. “Firm/organization/Service Provider/bidder” Any individual, firm, company,

- partnership, joint venture, consortium, or legally registered organization that submits a bid in response to this tender for the provision of the required services and is legally bound to comply with the terms and conditions of the Contract.
- iv. “Contract” means the Contract signed by the Parties and all the attached documents listed in its Clause 1, that is General Conditions (GC), the Special Conditions (SC), and the Appendices.
 - v. “Contract Price” means the price to be paid for the performance of the Services, in accordance with Clause 6;
 - vi. “Effective Date” means the date on which this Contract comes into force and effect pursuant to Clause GC2.1.
 - vii. “Foreign Currency” means any currency other than the currency of the PA’s country.
 - viii. “GC” mean these General Conditions of Contract.
 - ix. “Government” means the Government of Sindh.
 - x. “Local Currency” means Pak Rupees.
 - xi. “Member” means any of the entities that make up the joint venture/consortium/association, and “Members” means all the seen titles.
 - xii. “Party” means the PA or the Firm/organization, as the case may be, and “Parties” means both of them.
 - xiii. “Personnel” means persons hired by the Firm/organization or by any Sub-Firms/organizations and assigned to the performance of the Services or any part thereof.
 - xiv. “SC” means the Special Conditions of Contract by which the GC may be amended or supplemented.
 - xv. “Services” means services to be performed by the Firm/organization pursuant to this Contract, as described in the Terms of References.
 - xvi. “Sub-Firms/organizations” means any person or entity to whom/which the Firm/organization subcontracts any part of the Services.
 - xvii. “In writing” means communicated in written form with proof of receipt.
2. Law Governing Contract: This Contract, its meaning and interpretation, and the relation between the Parties shall be governed by the applicable law.
 3. Language: This Contract is executed in the language specified in the SC, which shall be the binding and controlling language for all matters relating to the meaning or interpretation of this Contract.
 4. Notices
 - i. Any notice, request or consent required or permitted to be given or made pursuant to this Contract shall be in writing. Any such notice, request or consent shall be deemed to have been given or made when delivered in person to an authorized representative of the Party to whom the communication is addressed, or when sent to such Party at the address specified in the SC.
 - ii. A Party may change its address for notice hereunder by giving the other Party notice in writing of such change to the address specified in the SC.
 5. Location: The Services shall be performed at such locations as are specified in special condition of contract and, where the location of a particular task is not so specified, at

such locations, whether in the Government's country or elsewhere, as the PA may approve.

6. Authority of Member in Charge: The Firm/organization authorize focal person to deal with PA.
7. Authorized Representatives: Any action required or permitted to be taken, and any document required or permitted to be executed under this Contract by the PA or the Firm/organization may be taken or executed by the officials specified in the SC.
8. Taxes and Duties: The Firm/organization, Sub-Firms/organizations, and their Personnel shall pay such direct or indirect taxes, duties, fees, and other impositions levied under the Applicable Law as specified in the SC, the amount of which is deemed to have been included in the Contract Price.
9. Fraud and Corruption
 - a. If the PA determines that the Firm/organization and/or its Personnel, sub-contractors, sub-firms/organizations, services providers and suppliers has engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices, in competing for or in executing the Contract, then the PA may, after giving 14 days' notice to the Firm/organization, terminate the Firm/organization's employment under the Contract, and may resort to other remedies including blacklisting/disqualification as provided in SPPR 2010 (Amended time to time).
 - b. Any personnel of the Firm/organization who engages in corrupt, fraudulent, collusive, coercive, or obstructive practice during the execution of the Contract, shall be removed in accordance with the rules.

B. INTEGRITY PACT AND CONTRACT

10. Integrity Pact

- a. If the Firm/organization or any of his Sub-firms/organizations, agents or servants is found to have violated or involved in violation of the Integrity Pact signed by the Firm/organization as **it** to this Form of Contract, then the Client shall be entitled to:
 - b. recover from the Firm/organization an amount equivalent to ten times the sum of any commission, gratification, bribe, finder's fee or kickback given by the Firm/organization or any of his Sub-firm/organization, agents or servants;
 - c. Terminate the Contract; and recover from the Firm/organization any loss or damage to the Client as a result of such termination or of any other corrupt business practices of the Firm/organization or any of his Sub-firm/organization, agents or servants.
 - d. On termination of the Contract under Sub-Para (b) of this Sub-Clause, the Firm/organization shall proceed in accordance with Sub-Clause 1.9 A. Payment upon such termination shall be made under Sub-Clause 1.9 A after having deducted the amounts due to the Client under 19 B Sub-Para (a) and (c).
- e. Commencement, Completion, Modification and Termination of Contract

11. Effectiveness of Contract: This Contract shall come into effect on the date the Contract is signed by both Parties or such other later date as may be stated in the SC. The date

the Contract comes into effect is defined as the Effective Date.

12. Commencement of Services: The Firm/organization shall begin carrying out the Services not later than the number of days after the Effective Date specified in the SC.
13. Expiration of Contract: Unless terminated earlier pursuant to Clause GC 2.6 hereof, this Contract shall expire at the end of such time period after the Effective Date as specified in the SC.
14. Modifications or Variations: Any modification or variation of the terms and conditions of this Contract, including any modification or variation of the scope of the Services, may only be made by written agreement between the Parties. However, each Party shall give due consideration to any proposals for modification or variation made by the other Party.
15. Force Majeure: The failure on the part of the parties to perform their obligation under the contract will not be considered a default if such failure is the result of natural calamities, disasters and circumstances beyond the control of the parties.
16. No Breach of Contract: The failure of a Party to fulfill any of its obligations under the contract shall not be considered to be a breach of, or default under, this Contract insofar as such inability arises from an event of Force Majeure, provided that the Party affected by such an event (a) has taken all reasonable precautions, due care and reasonable alternative measures in order to carry out the terms and conditions of this Contract, and (b) has informed the other Party as soon as possible about the occurrence of such an event.
17. Extension of Time: Any period within which a Party shall, pursuant to this Contract, complete any action or task, shall be extended for a period equal to the time during which such Party was unable to perform such action as a result of Force Majeure.
18. Payments: During the period of their inability to perform the Services as a result of an event of Force Majeure, the Firm/organization shall be entitled to continue to be paid under the terms of this Contract, as well as to be reimbursed for additional costs reasonably and necessarily incurred by them during such period for the purposes of the Services and in reactivating the Service after the end of such period.
19. Termination by the Procuring Agency: The PA may terminate this Contract in case of the occurrence of any of the events specified in paragraphs (a) through (f) of this Clause GC 2.6.1. In such an occurrence the PA shall give a not less than thirty (30) days' written notice of termination to the Firm/organization, and sixty (60) days' in the case of the event referred to in(e).
 - i. If the Firm/organization does not remedy the failure in the performance of their obligations under the Contract, within thirty (30) days after being notified or within any further period as the PA may have subsequently approved in writing.
 - ii. If the Firm/organization becomes insolvent or bankrupt.
 - iii. If the Firm/organization, in the judgment of the PA has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.

- iv. If, as the result of Force Majeure, the Firm/organization(s) are unable to perform a material portion of the Services for a period of not less than sixty (60) days.
 - v. If the PA, in its sole discretion and for any reason whatsoever, decides to terminate this Contract.
 - vi. If the Firm/organization fails to comply with any final decision reached as a result of arbitration proceedings pursuant to Clause GC 8hereof.
20. By the Firm/organization: The Firms/organizations may terminate this Contract, by not less than thirty (30) days' written notice to the PA, such notice to be given after the occurrence of any of the events specified in paragraphs (a) through (c) of this Clause GC 2.6.2:
- i. If the PA fails to pay any money due to the Firm/organization pursuant to this Contract without firms/organizations fault.
 - ii. Pursuant to Clause GC 7 hereof within forty-five (45) days after receiving written notice from the Firm/organization that such payment is overdue.
 - iii. If, as the result of Force Majeure, the Firm/organization is unable to perform a material portion of the Services for a period of not less than sixty (60) days.
 - iv. If the PA fails to comply with any final decision reached as a result of arbitration pursuant to Clause GC 8hereof.
21. Payment upon Termination: Upon termination of this Contract, the PA shall make the following payments to the Firm/organization:
- i. Payment pursuant to Clause GC 6 for Services satisfactorily performed prior to the effective date of termination;
 - ii. except in the case of termination pursuant to paragraphs (a) through (c), and of Clause GC 2.6.1, reimbursement of any reasonable cost incident to the prompt and orderly termination of the Contract, including the cost of the return travel of the Personnel and their eligible dependents.
22. Obligations of The Firm/organization\ General Standard of Performance:
The Firm/organization shall perform the Services and carry out their obligations hereunder with all due diligence, efficiency and economy, in accordance with generally accepted professional standards and practices, and shall observe sound management practices, and employ appropriate technology and safe and effective equipment, machinery, materials and methods. The Firm/organization shall always act, in respect of any matter relating to this Contract or to the Services, as faithful advisers to the PA, and shall at all times support and safeguard the PA's legitimate interests in any dealings with Sub-Firms/organizations or third Parties
23. Conflict of Interests: The Firm/organization shall hold the PA's interests paramount, without any consideration for future work, and strictly avoid conflict with other assignments or their own corporate interests.

- i. Firms/organizations not to Benefit from Commissions, Discounts, etc.
 - ii. The payment of the Firm/organization pursuant to Clause GC 6 shall constitute the Firm/organization's only payment in connection with this Contract or the Services, and the Firm/organization shall not accept for their own benefit any trade commission, discount, or similar payment in connection with activities pursuant to this Contract or to the Services or in the discharge of their obligations under the Contract, and the Firm/organization shall use their best efforts to ensure that the Personnel, any Sub-Firms/organizations, and agents of either of them similarly shall not receive any such additional payment.
 - iii. Firm/organization and Affiliates not to be Otherwise Interested in Project The Firm/organization agrees that, during the term of this Contract and after its termination, the Firm/organization and any entity affiliated with the Firm/organization, as well as any Sub- Firms/organizations and any entity affiliated with such Sub- Firms/organizations, shall be disqualified from providing goods, works or services (other than consulting services) resulting from or directly related to the Firm/organization's Services for the preparation or implementation of the project. v Prohibition of Conflicting Activities.
 - iv. The Firm/organization shall not engage, and shall cause their Personnel as well as their Sub- Firms/organizations and their Personnel not to engage, either directly or indirectly, in any business or professional activities which would conflict with the activities assigned to them under this Contract.
24. Confidentiality Except with the prior written consent of the PA, the Firm/organization and the Personnel shall not at any time communicate to any person or entity any confidential information acquired in the course of the Services, nor shall the Firm/organization and the Personnel make public the recommendations formulated in the course of, or as a result of, the Services.
25. Software consultancy to be Taken Out by the Firm/organization: The Firm/organization (a) shall take out and maintain, and shall cause any Sub- Firms/organizations to take out and maintain, at their (or the Sub- Firms/organizations', as the case may be) own cost but on terms and conditions approved by the PA, Software consultancy against the risks, and for the coverage of all data as shall be specified in the SC; and (b) at the PA's request, shall provide evidence to the PA showing that such softwares has been taken out and maintained and that the current status of work.
26. Firm/organization's Actions Requiring PA's Prior Approval the Firm/organization shall obtain the PA's prior approval in writing before taking any of the following actions: a) Entering into a subcontract for the performance of any part of the Services, (b) Appointing such members of the Personnel not listed by name, and (c) Any other action that may be specified in the SC.
27. Reporting Obligations: a) The Firm/organization shall submit to the PA the reports and documents specified in (PA may insert) hereto, in the form, in the numbers and within the time periods set forth in the said) Final reports shall be delivered in CD ROM in addition to the hard copies specified .

28. Documents Prepared by the Firm/organization to be the Property of the PA
- i. All plans, drawings, specifications, designs, reports, other documents and software submitted by the Firm/organization under this Contract shall become and remain the property of the PA, and the Firm/organization shall, not later than upon termination or expiration of this Contract, deliver all such documents to the PA, together with a detailed inventory thereof.
 - ii. The Firm/organization may retain a copy of such documents and software. Restrictions about the future use of these documents, if any, shall be specified in the SC.
29. Accounting, Inspection and Auditing
- a. The Firm/organization shall keep, and shall cause its Sub-firms/organizations to keep, accurate and systematic accounts and records in respect of the Contract, in accordance with internationally accepted accounting principles and in such form and detail as will clearly identify relevant time changes and costs.
 - b. The Firm/organization shall permit, and shall cause its Sub-firms/organizations to permit, the PA and/or persons appointed by the PA to inspect its accounts and records relating to the performance of the Contract and the submission of the Proposal to provide the Services, and to have such accounts and records audited by auditors appointed by the PA if requested by the PA. The Firm/organization's attention is drawn to Clause 1.9.1 which provides, inter alia, that acts intended to materially impede the exercise of the PA's inspection and audit rights provided for under Clause 3.8 constitute a prohibited practice subject to contract termination (as well as to a determination of ineligibility pursuant to the PA's prevailing sanctions procedures.).
30. Firm/organization's Personnel a Description of Personnel:
- a. The Firm/organization shall employ and provide such qualified and experienced Personnel and Sub-Firms/organizations as are required to carry out the Services. The titles, agreed job descriptions, minimum qualifications, and estimated periods of engagement in the carrying out of the Services of the Firm/organization's Key Personnel are described. The Key Personnel and Sub- Firms/organizations listed by title as well as by name are hereby approved by the PA.
 - b. Removal and/or Replacement of Personnel
 - c. Except as the PA may otherwise agree, no changes shall be made in the Key Personnel. If, for any reason beyond the reasonable control of the Firm/organization, such as retirement, death, medical incapacity, among others, it becomes necessary to replace any of the Key Personnel, the Firm/organization shall provide as a replacement a person of equivalent or better qualifications.
 - d. If the PA finds that any of the Personnel have (i) committed serious misconduct or have been charged with having committed a criminal action, or (ii) have reasonable cause to be dissatisfied with the performance of any of the Personnel, then the Firm/organization shall, at the PA's written request specifying the grounds thereof, provide as a replacement a person with qualifications and experience acceptable to

the PA.

- e. The Firm/organization shall have no claim for additional costs arising out of or incidental to any removal and/or replacement of Personnel.

31. Obligations of the PA a Assistance and Exemptions:

- a. The PA shall use its best efforts to ensure that the Government shall provide the Firm/organization such assistance and exemptions as specified in the SC.
- b. Change in the Applicable Law Related to Taxes and Duties If, after the date of this Contract, there is any change in the Applicable Law with respect to taxes and duties which increases or decreases the cost incurred by the Firm/organization in performing the Services, then the remuneration and reimbursable expenses otherwise payable to the Firm/organization under this Contract shall be increased or decreased accordingly by agreement between the Parties, and corresponding adjustments shall be made to the amounts referred to in Clauses GC 6.2 (a) or (b), as the case maybe. c Services and Facilities.
- c. The PA shall make available free of charge to the Firm/organization the Services and Facilities listed.

32. Payments to the Firm/organization a Security:

- a. The firm/organization has to submit bid security and the performance security at the rate mention in SC.
- b. Lump-Sum Payment: The total payment due to the Firm/organization shall not exceed the Contract Price which is an all- inclusive fixed lump-sum covering all costs required to carry out the Services described. Except as provided in Clause 5.2, the Contract Price may only be increased above the amounts The amounts stated in the clause may be adjusted if the Parties have agreed to additional payments in accordance with Clause 24.6
- c. Contract Price: The price payable in Pak Rupees/foreign currency/ is set forth in the SC.
- d. Payment for Additional Services for the purpose of determining the remuneration due for additional services as may be agreed under Clause 2.4, a breakdown of the lump-sum price is provided in Appendices D and E.

33. Terms and Conditions of Payment: Payments will be made to the account of the Firm/organization and according to the payment schedule stated in the SC. Unless otherwise stated in the SC, the first payment shall be made against the provision by the Firm/organization of an advance payment guarantee for the same amount, and shall be valid for the period stated in the SC. Such guarantee shall be in the form set forth in hereto, or in such other form, as the PA shall have approved in writing. Any other payment shall be made after the conditions listed in the SC for such payment have been met, and the Firm/organization has submitted an invoice to the PA specifying the amount due.

34. Good Faith Good Faith the Parties undertake to act in good faith with respect to each

other's rights under this Contract and to adopt all reasonable measures to ensure the realization of the objectives of this Contract.

35. Settlement of Disputes:

- a. Amicable Settlement: The Parties agree that the avoidance or early resolution of disputes is crucial for a smooth execution of the Contract and the success of the assignment. The Parties shall use their best efforts to settle amicably all disputes arising out of or in connection with this Contract or its interpretation.
- b. Dispute Resolution: Any dispute between the Parties as to matters arising pursuant to this Contract that cannot be settled amicably within thirty (30) days after receipt by one Party of the other Party's request for such amicable settlement may be submitted by either Party for settlement in accordance with the provisions specified in the SC.

36. Variation: Variation may occur and the procuring agency can increase or decrease the requirements up-to 15% in keeping in view the needs and requirements.

SECTION –II.
BID DATA SHEET

The specific data for the services to be procured set out below shall complement, supplement, or amend the provisions of Part One: Instructions to Bidders (ITB). In the event of any inconsistency, the provisions herein shall prevail over those of the ITB.

A- INTRODUCTION

Particulates	Description
Name of Procuring Agency of Government of Sindh:	Sindh Lakhra Coal Mining Company Pvt Ltd (SLCMC), Energy Department, Government of Sindh
Source of Funds / Project Allocation:	A Self Income Generated Company, Governed by Energy Department Government of Sindh.
Name of Project	Sindh Lakhra Coal Mining Company Pvt Ltd. (SLCMC)
Name of Contract/Scope:	Procurement of Services regarding the Digital Transformation & Operational Automation More Details as per Specifications of services
Estimate Cost of Bidding / Contract	PKR. 30 Million

B – THE BIDDING DOCUMENTS

Content of Bidding Documents:	the bidding documents include: Part-One - Technical Proposal 1. Instruction to Bidders (ITB) 2. General Condition of Contract (GCC). 3. Special Condition of Contract (SCC). 4. Invitation for Bid (IFB). 5. Bid Data Sheet 6. Eligibility- Evaluation Criteria. 7. Technical Specification. 8. Schedule of Requirement- Schedule of Delivery 9. Detailed Terms of References (ToR) of Digital Transformation & Operational Automation 10. Integrity Pact Part Two- Financial Proposal 1. Bid Form 2. Price Schedule / Terms of References (ToR) 3. Bid Security Form 4. Contract Form 5. Performance Security Form 6. Bank Guarantee Form
Procuring Agency Name & Address for Clarification of Bidding Documents.	Manager Procurement, Sindh Lakhra Coal Mining Company Pvt Ltd. Energy Department, Government of Sindh Banglow No. B-89, Street 15, GoR Colony, Bathisland, Clifton Karachi Phone: 021-3518260. info@sindhmining.com, www.sindhmining.com

C-PREPARATION OF BID

Bid Language:	English
Bid	The Bidder Shall Complete and Submit BID in accordance with the requirement included in the Bidding Documents, proper signed and stamp on letter had. Part Two – Section VII
Bid Prices	The Bidder Shall Complete and Submit PRICE SCHEDULE in Pak Rupees Delivered Duty Paid (DDP) for complete Package items of all components in accordance terms of references (ToR), format with requirement included in the Bidding Documents, All Forms proper signed and stamped: Section IV Schedule of Requirement

	Section V Technical Specification. Section VI Forms Section VII Bid Form & Price Schedule Note: Conditional and uncompleted and alternate Bid shall Not accept
Bid Currencies:	Bid currencies in Pak Rupees including Delivery Duty Paid(DDP)
Eligibility and Qualification	The Bidder shall meet the Qualification Criteria on submission documentary evidences in technically and Financially Capability to perform the contract (80% +20%) Technical & Financial The Qualification Criteria details is available below.
Bidding Procedure:	Single Stage – Two Envelope, Rule 46 (2) of SPPRA-2010 (UPDATED). Each Bid Shall Comprise one single Envelope containing the Technical Proposal (with Company Profile / required Information Financial Proposal (with Bid Prices – As per Terms of references (ToR)
Bid Security:	2 % Of Bid Offered Amount Bid Security in the form of Pay Order/Demand Draft or a Bank Guarantee issued by any scheduled Bank of Pakistan in favor of “ <u>Sindh Lakhra Coal Mining Company (Pvt) Ltd</u> ” which should be valid till 28 days beyond the expiry of Bid Validity Period (i.e. 60 +30 days).
Period of Validity of Bid:	90 Days

D- SUBMISSION OF BID

Submission of Bids	Through E-Pak Acquisition and Disposal System (EPADS).
Scheme Title & Number:	Indicate Number: SLCMC/2026/004 Procurement of Services regarding the Digital Transformation & Operational Automation
Deadline for submission	08 th October, 2026 @ 3:00 pm
Time, Date, & Place for Bid Opening:	08 th October, 2026 @ 3:30 pm In Conference Room, at SLCMC, Head office Bungalow No. 89, Street 15, GoR Colony, Bath island Clifton Karachi.
Late Bids	Bid Will Reject & returned unopened to the Bidder.

E- OPENING & EVALUATION OF BID

Preliminary Examination:	<i>Bids will examine & determine by the Procurement Committee initially at the time of opening for required Mandatory Information. Annexure-I (In case of failure in preliminary checklist, the Bid will consider non-responsive Bid and not considerable for further Evaluation</i>
Evaluation & Comparison of Bids	<i>The Procurement Committee Will Evaluate Only Responsive Bids in detailed further screening as per required Eligibility Criteria for Technical Qualification, mentioned in the Bidding Documents Annexure-II</i> <i>The Most Advantageous bid shall be decided on the weighted average score of Technical Evaluation (80%) and Financial Evaluation (20%). The Highest Scoring Bid shall be declared as Most Advantageous Bid/ Best Evaluated Bid.</i>
Time period of contract	<i>The time period of contract is initially one year and same will extend on performance bases.</i>

F- AWARD PF CONTRACT:

Award of Contract;	<i>The Most Advantageous Bid / Best Evaluated Bid</i>
TERMS OF REFERENCES (TOR)	15% Increase or Decrease
Performance Security acceptable to the Employer:	2% the successful Bidder shall furnish a Performance Security in the form of unconditional on-demand Bank Guarantee issued by any Scheduled Bank in Pakistan which shall be equal to 2% of Contract Amount stated in the Letter of Award/ Acceptance & submit to SLCMC within a period of 14 days after the receipt of Letter of Acceptance
Validity of Performance Security:	Performance Security shall be valid up to the completion of contract period.
Signing of Contract Agreement:	Within fourteen (14) days from the date of furnishing acceptable Performance Security as indicated above, the successful bidder shall bring Contract Agreement (as per format given in Bid Documents) on e-stamp paper of the value as per Stamp Duty Act- latest version. .
Integrity Pact:	The Bidder shall sign and stamp the Integrity Pact provided at in the Bidding Documents as part of mandatory documents
Margin of Preference:	Not Applicable

MANDATORY ELIGIBILITY:

Following Mandatory Information required for Responsive Bid

Sr.	Description of Mandatory Information	YES	NO
1	i) Registration Certificates: a) FBR Tax Registration b) SRB Registration. c) Legal Status: Certificate of incorporation/firm registration and authorized signatory documents with SECP. d) Active Tax Filler Online Verification Printout Current		
	ii) Type of Firm: Company Profile, Client list, whether Individually Owned (Sole Proprietor), Partnership or corporation Joint Venture (not allowed)		
2	Authorization: The Bidding Firm Shall Submit a authorization in the name of SLCMC (Assignment / Work / Services) by Local / Foreign / OEM (Form-6)		
3	Affidavit-I. The Bidding Firm shall give discloser and Submit Undertaking for Not being blacklisted or Defaulter or Debarred in Government / Non-Government Organizations / any Mining Agency / Authority (Inclusive of any reason justification & jurisdictions). Undertaking on stamp paper of PKR. 200/= Properly signed, stamped & attested.		
4	Affidavit-II. The Bidding Firm Shall Submit Undertaking for Litigation / Arbitration history (if any without concealment of fact) in any Government / Non-Government Organizations in any Mining Agency / Authority). Undertaking on stamp paper of PKR. 200/= Properly signed, stamped & attested.		
5	Every Page of Bid (Including Bid Forms) is to be Signed, Stamped & Numbered with Indexing.		
6	Integrity Pact Signed & Stamped		
7	Bid Security @ 2 %. Of Bid Offer Pay Order No. PKR. DATE:		
8	Bid Document fees Rs. 3,000/- Pay Order No. DATE:		

Note: Missing of any Mandatory Information Bid shall consider as No-Responsive Bid

EVALUATION CRITERIA

Following eligibility criteria Information required for qualification of Bid:

(i) Technical Eligibility / Criteria – (Max. Marks =80) Experience, Skilled, Expertise, claim settlement, coveragte, ets			
Sr #	Description	Maximum Marks	Criteria for Marks Obtained
1	Completed Similar nature of works / Contracts in last 03 Years	30	30 marks: One Similar the Digital Transformation & Operational Automation contract completed in last 03 years, value $\geq 80\%$ of estimated cost. Two similar contracts completed, each value $\geq 50\%$ of estimated cost One similar contract completed, value $\geq 50\%$ of estimated cost Evidence: Purchase orders/contracts/completion/acceptance evidence for claimed similar assignments; where available, bidder may additionally provide working application URL, demo link, video/screenshots or client/reference contact for verification. No marks will be given if no evidence or fake/invalid evidence is provided.
	Contracts in Hand / Current Similar Assignments	10	10 marks: will be devided equally in each requirement, Two or more ongoing similar contracts, each $\geq 50\%$ of estimated cost. One ongoing similar contract $\geq 50\%$ of estimated cost Evidence: Signed compliance matrix, methodology, local-intranet/offline & cloud synchronization design, team, work plan, hardware/cloud datasheets or sizing, demo/project evidence and deviations.
2	Offline/Intranet Operation & Cloud Data Synchronization	10	10 marks: will be devided equally in each requirement, Verifiable integrated software/automation/ICT projects. Suggested scoring: 1 relevant project=3; 2=5; 3=7; 4 or more=10. Local-first operation with internet disconnected; device/workstation → local server Stage-1 synchronization; local server → cloud Stage-2 synchronization with queue/retry/no-duplicate/conflict controls; vendor-provided cloud compute/database/storage/backup plan and 12-month subscription; available demo/project link, video/screenshots or supporting document showing similar offline/synchronization capability. Evidence: Evidence may include PO/contract/completion/acceptance certificate and verifiable client reference. No marks will be given if no evidence or fake/invalid evidence is provided
4	Weighbridge Machine, Serial Communication & Related Hardware Connectivity	5	5 marks: will be devided equally in each requirement Live/demo proof of weight indicator communication through RS-232/RS-485/serial/TCP-IP and weight displayed/captured in application ; first/second weight + gross/tare/net/challan workflow; IP/PoE camera + Zebra/token printer + A4 challan printer + PoE/network integration; existing application/demo/project URL or supporting PO/completion/acceptance/screenshots/video/client evidence, where available.
5	Overall Solution Methodology & Integration Architecture	5	5 marks: will be devided equally in each requirement, Understanding of business modules and forms/workflows; APIs/shared masters/dashboard integration; security/audit/role controls; scalability/maintainability.

6	Key Technical Team	5	5 marks: will be devided equally in each requirement, Project Manager; Solution/Software Architect; Web/API Developer(s); Mobile/GIS resource; Weighbridge/Hardware/Network engineer; QA/Security resource Evidence: copies of contract and Cvs with academic qualifcations and experiences required.
7	Project Execution Plan, QA & UAT	5	5 marks: will be devided equally in each requirement, Detailed Gantt with local-first sequence; site rollout/data migration/risk plan; module/UAT/security/backup testing; go-live and handover plan.
08	Hardware, Network & Cloud Infrastructure Compliance	5	5 marks: will be devided equally in each requirement, Make/model/datasheets and required quantities; server/PC/tablet/camera/printer/PoE/serial/UPS/network compliance; antenna/booster/VPN/connectivity design; cloud sizing, warranty/support and renewal/expansion pricing
9	Training, Support & Complete Technical Handover	5	5 marks: will be devided equally in each requirement, Training plan; warranty/support; source code/Git/API/database documentation; cloud/admin/network credentials and as-built handover.
Sub-Total		80	

(ii) FINANCIAL ELIGIBLTY / CRITERIA (Max. Marks = 20)			
1	FINANCAIL ELIGIBILITY& TURN OVER	15	15 marks will be given on provided following Financial Information's in the name of firm: i) Annual Transection Statement (For Last 3 Years) ii) Annual Financial Audit Report (For Last 3 Years. iii) Annual FBR Tax Return (For last 3 Years.). Five (5) Marks for Each above category No marks will be given if not provided information in documentary evidence.
2	WORKING CAPITAL	05	05 marks will be given if the available Minimum working capital in hand up to 50% of this Assignment Cost. Or 05 marks will be given on provided details of last (3) years capital turnover, minimum capital turnover for each year up to 50% of this Assignment Cost. <i>Provided current date Original Certificate from concerned Bank / Authorities to show Working Capital / Balance/ Turnover submitted as evidence which may be verified.</i> <i>No marks will be given if no evidence or fake/invalid evidence is provided</i>
TOTAL MARKS		100	

Note: Minimum 50% Marks required for passing in each category. A bidder scoring below 70/100 shall be technically non-responsive and its Financial Proposal shall remain unopened/returned as per applicable procedure

- Minimum 80% Marks required for Qualified of Bid.
- Evaluation eligibility Criteria 80% + 20% (Technical + Financial)

- Joint Venture (JV) experience & resources, consortium or association of firms will **NOT** be considered
- Single bidder must qualify complete criteria at its own strength whereas for Joint venture/ consortium, one partner must qualify 80% of the above-mentioned technical criteria and the other partner should qualify 20% minimum technical criteria. The JV as a whole must qualify the complete technical criteria.
- The sub-contracting of any part is not allowed.
- Bidders are required to provide evidence/supporting documents with respect to all information given above.

Technical Demonstration / Evidence Submission

Evidence Area	What Bidder Should Provide	How SLCMC May Verify
Offline / Intranet + Data Sync	Live demonstration/PoC is preferred. Bidder may also submit an existing application URL/demo URL, recorded demo/video, screenshots, architecture, user manual or supporting project documents showing local/offline use and subsequent synchronization.	Internet may be disconnected during demonstration; SLCMC may inspect local transaction creation, pending queue, local sync, cloud sync, retry and duplicate prevention.
Weighbridge Serial / Machine Connectivity	Live or recorded demonstration showing serial/RS-232/RS-485/TCP-IP data received from a weighing indicator or test simulator, application weight display/capture, token/challan flow and hardware integration. Existing project URL/demo link or supporting documents may also be submitted.	SLCMC may require connection to available/test weight indicator, inspect communication settings, observe live/stable value in application and verify stored transaction.
Supporting Experience Evidence	PO/contract, completion/acceptance certificate, client reference, screenshots/video, project URL or controlled demo credentials where legally shareable.	SLCMC may verify evidence with client/reference and may open URLs/demo during technical presentation.

Technical Evaluation Rules

- Only documents/evidence, demo/project URLs and supporting material submitted with the Technical Proposal, or valid clarifications requested by SLCMC, shall be considered for technical scoring.
- SLCMC may verify purchase orders, completion certificates, customer references, working/demo URLs, screenshots/videos, team credentials, cloud proposal and hardware datasheets; demonstrations may be repeated on a controlled test environment where required.
- Material deviation from mandatory workflows such as direct weighbridge integration, field proof-of-presence controls, source-code handover or required hardware quantities may result in non-responsiveness regardless of aggregate score.
- The same published criteria and scoring method shall be applied consistently to all bidders.

ii. Mandatory Technical Handover:

- a) Complete web application source code and mobile application source code developed under the project.*
- b) Database schema, migration/DDL scripts and data dictionary.*
- c) API source code and API documentation.*
- d) Weighbridge integration service/source and device protocol/configuration documentation.*
- e) GIS configuration/data-exchange documentation.*
- f) Environment/configuration templates, deployment/build instructions and release versions.*
- g) Git/version-controlled repository and final production branch/tag.*
- h) Administrator credentials, cloud tenant/account, database/storage, domain/DNS/SSL, device/printer/router/network credentials under controlled handover where applicable.*
- i) User manuals, administrator manual, backup/restore guide, network diagram, IP plan and final as-built document.*

SECTION III.

SCHEDULE OF REQUIREMENTS:

Section	Title
1	Introcdution and background of project/Objectives
2	Summary of Digitization Modules
3	Module 01 – Mine Survey, Digital Geo-Mapping & Field Verification
4	Module 02 – Weighbridge Automation, Vehicle Management & Digital Challan
5	Module 03 – Pharmacy, Medical & Patient Management
6	Module 04 – HR, Attendance, Employee Deployment & Leave Management
7	Module 05 – Centralized Management Dashboard
8	Common Technical Architecture, Cyber Security, API, Backup & Networking
9	Consolidated Hardware, ICT & Cloud Services BOQ
10	Project Execution Plan & Milestones
11	Testing, UAT, Acceptance & Handover
12	Support, Warranty, Training & Source Code Handover
13	Financial Evaluation & Price Schedule

1. INTRODUCTION & BACKGROUND OF THE PROJECT:

Procucring Agency: Sindh Lakhra Coal Mining Company; is a Government of Sindh owned corporate legal entity, incorporated by Energy Department, Government of Sindh, and has the mandate for promotion, exploration and value chain development in coal sector of Sindh. The SLCMC is keen to expedite the coal production through mechanization to pave a way for the use of indigenous coal in Coal Based Power Plants.

Purpose:

Sindh Lakhra Coal Mining Company (SLCMC) invites proposals from eligible, technically competent and experienced firms/companies for the design, development, supply, installation, integration, testing, commissioning and implementation of an Integrated Digital Management, Operational Automation and ICT Infrastructure Solution under the First Quarter Digital Transformation & Operational Automation initiative. The procurement is intended as a single integrated assignment covering software applications, mobile/tablet functionality, operational automation, required hardware, secure networking, data synchronization, reporting, training, warranty/support and complete technical handover.

Objective:

- i. Digitize and connect SLCMC's mine survey, weighbridge, pharmacy/medical and HR/attendance operations.
- ii. Provide one centralized management dashboard for Karachi Head Office and other authorized SLCMC users.
- iii. Maintain field continuity during temporary internet failure through approved offline/local processing and secure synchronization.
- iv. Create traceable, auditable and role-controlled digital records from field transaction through management reporting.
- v. Deliver complete source code, database schema, APIs, configuration, deployment documentation and as-built infrastructure records.

2. SUMMARY OF DIGITIZATION MODULES:

S. No.	Module	Short Description
1	Mine Survey, Digital Geo-Mapping & Field Verification	GIS-based survey of Lease 50, 51 and 52 (approx. 12,010 acres), mine/site registration, GPS/geofence verification, geo-tagged evidence, Android field app, offline sync and survey approval.
2	Weighbridge Automation, Vehicle Management & Digital Challan	Vehicle/truck registration, tablet photo capture, token printing, direct weighbridge indicator integration, first/second weight, tax/charge calculation, four-copy challan and tonnage reporting.
3	Pharmacy, Medical & Patient Management	Employee/patient registration, OPD/token, consultation, electronic prescription, pharmacy issuance, medicine inventory, batch/expiry, stock movement and medical/pharmacy reports
4	HR, Attendance, Employee Deployment & Leave Management	Central employee master, biometric attendance integration, shifts, site deployment, leave, attendance regularization, posting history and HR/attendance reports.
5	Centralized Management Dashboard	Karachi Head Office dashboard consolidating survey progress, mine-wise/lease-wise tonnage, pharmacy stock/utilization, HR attendance/deployment, alerts, KPIs and drill-down reports.

2.1.Common Project-Wide Components:

- Secure APIs and centralized integration between modules.
- Role-Based Access Control (RBAC), audit trail, HTTPS/TLS and secure authentication.
- Servers, client systems, tablets, printers, cameras, biometric devices, PoE/LAN/Wi-Fi and associated accessories.
- Local-first operation: all critical modules shall run on the site intranet/local servers without internet dependency; field devices shall first synchronize to the local server, and the local server shall subsequently synchronize approved data to the vendor-provided cloud environment when internet becomes available.
- Centralized source-code repository, deployment documentation, administrator/user manuals and technical knowledge transfer.

SECTION IV.

TECHNICAL SPECIFICATIONS:

3. MODULE 01

MINE SURVEY, DIGITAL GEO-MAPPING & FIELD VERIFICATION SYSTEM:

3.1.Coverage & Purpose:

Lease	Approx. Area
Lease No. 50	1,200 Acres
Lease No. 51	3,850 Acres
Lease No. 52	6,960 Acres
Total	12,010 Acres

Purpose: Create a verified digital survey record of SLCMC lease areas and mine/site locations using GIS mapping, GPS, geo-tagged photographic evidence, user/device identity and approval workflow.

3.2.Methodology / Workflow:

Step	Activity	Output
1	Lease boundary and master-data setup	Lease polygons / GIS reference data
2	Survey assignment to authorized field team	Assigned lease/site worklist
3	Field visit using Android tablet	GPS, accuracy, device/user identity
4	Mine/site registration and survey form	Unique Mine/Site ID and survey transaction
5	Live in-app photo capture	Geo-linked photographic evidence
6	Geofence / lease-boundary validation	Pass / exception / review status
7	Field/offline capture while outside LAN coverage	Transaction and evidence retained securely on tablet
8	Return/connect to SLCMC site Wi-Fi / intranet	Tablet synchronizes first to the local site server without requiring internet
9	Local verification / approval and operational reporting	Local server contains the authoritative site working copy
10	Internet becomes available	Local server automatically/securely synchronizes approved pending data to cloud
11	Cloud database / centralized dashboard updated	Karachi/authorized management receives latest synchronized records and reports

3.3.Technology / Architecture

Layer	Required Characteristics / Acceptable Approach
Web Application	Responsive browser-based application using a current supported enterprise framework; no desktop-only dependency for normal operational workflows.
API Layer	RESTful/JSON or equivalent secure APIs with versioning, validation and authentication.
Database	Relational database such as PostgreSQL, MySQL/MariaDB, MS SQL Server or equivalent; structured backup and transaction integrity required.
Mobile/Tablet	Android application, native or cross-platform enterprise framework; secure local storage and offline synchronization where required.
Security	HTTPS/TLS, role/permission authorization, password hashing, token-based API authentication, audit logs and protected credentials.
Deployment	Local and/or central server deployment as per approved architecture; environment-specific configuration separate from source code.

Survey-Specific Technology	Requirement
GIS	Web GIS using standards-compatible mapping libraries/services; support KML/KMZ, GeoJSON, CSV coordinates and shapefile-compatible exchange where required.
GPS/GNSS	Device GPS coordinates, accuracy, timestamp and location provider recorded with survey transactions.
Offline Mobile	Encrypted/secured local transaction store with unique transaction IDs and retryable sync.
Camera	In-app live capture for mandatory evidence; gallery images shall not be accepted as equivalent live proof where live evidence is required.

3.4.Web Portal Forms / Masters

Form / Screen	Minimum Fields / Functions
Lease Master	Lease ID/number/name, sanctioned area, district/taluka/deh, status, start/expiry dates, polygon/boundary, documents, remarks.
Mine / Site Registration	Unique Site ID, lease, site name/type, status, coordinates, accuracy, locality, operational condition, operator/responsible person, remarks.
Survey Assignment	Lease/site, surveyor/team, due date, survey type, instructions, status.
Survey Verification	Survey data, GPS, geofence result, photos, verifier comments, approve/reject/return/re-survey.
GIS Map	Lease polygons, site markers, surveyed/pending/verified/re-survey layers, filters and drill-down.
Device Management	Registered tablet/device, assigned user/site, app version, active/suspended/revoked, last sync.

3.5.Android Survey Application

- (a) Secure login and device registration.
- (b) Assigned lease/site list and mine/site search.
- (c) New mine/site registration and survey form.
- (d) GPS coordinate and accuracy display/capture.
- (e) Boundary/coordinate capture and geofence result.
- (f) Multiple live geo-linked photographs.
- (g) Draft, offline save, pending-sync queue and retry.
- (h) Survey history, returned survey and re-survey workflow.

3.6.Roles

Role	Key Rights
Survey/GIS Administrator	Lease/GIS setup, mine/site master, assignments, GIS layers and reports.
Field Surveyor	Conduct assigned survey, GPS/photo capture, offline save and submit.
Supervisor / Verifier	Review evidence, compare location, approve/reject/return and request re-survey.
Management Viewer	Read-only dashboard, GIS map, approved records and reports.
Auditor	Read-only survey history, exceptions, modifications and audit trail.

3.7.Validations & Anti-Forgery Controls

- a) Selected mine/site must belong to selected lease; inactive lease/site shall not be available for normal verified submission.
- b) Latitude, longitude, GPS accuracy and capture timestamp mandatory for verified field surveys.
- c) Configurable GPS accuracy threshold and lease polygon/geofence validation.
- d) Live in-app photographic evidence linked to Survey ID, user, device, date/time and GPS context.
- e) Reasonable mock/simulated-location detection and rooted/compromised-device controls where supported.
- f) Surveyor cannot approve own survey; approved survey evidence shall not be silently overwritten.
- g) Offline record shall retain device time, local creation time, sync time and server receipt time.
- h) Repeated synchronization of the same unique transaction ID shall not create duplicate surveys.

3.8.Reports

Report Group	Reports
Lease / GIS	Lease-wise survey summary, site list, geographic coverage, completion percentage.
Survey Operations	Survey register, surveyor-wise activity, date-wise survey, pending/completed/verified/rejected/re-survey.
Verification	GPS accuracy exception, geofence exception, outside-boundary, suspicious location, device-wise activity.
Synchronization	Pending, successful, failed sync and offline survey report.

Report Group	Reports
Audit	Survey modification history, approval/rejection history, administrative activity.

4.9. Module-Specific Hardware

Dedicated survey tablets and GIS workstations are not included in the hardware supply. The Survey solution shall operate on compatible SLCMC-authorized GPS-enabled Android devices and standard workstations, while retaining all functional, GPS/GNSS, offline synchronization and security requirements stated in this module.

Equipment	Qty	Reference Make / Model (or Equivalent/Better)	Minimum Mandatory Configuration / Purpose
Dedicated Survey Hardware	Not Required	Shared project / SLCMC-authorized compatible devices	No separate survey tablets or GIS workstations are required under this procurement. The Survey application shall use the six rugged Android tablets supplied under the Weighbridge/Field Operations hardware and/or other compatible SLCMC-authorized GPS-enabled Android devices. The same tablets may be assigned to Survey activities as operationally required. The Survey local web/API/database component may use the Main Site application machine or another SLCMC-approved project machine; no separate Survey server shall be quoted.

4.10. Mandatory Survey UAT / Anti-Forgery Tests

Test	Scenario	Expected Result
Valid On-Site Survey	Authorized surveyor physically at site	GPS/accuracy/photo/user/device recorded; survey submitted.
Outside Geofence	Submit verified survey outside configured radius	Block or flag for supervisor exception.
Wrong Lease	Select Lease 50 while coordinates fall outside configured Lease 50 polygon	Mismatch blocked/flagged.
Mock GPS	Controlled simulated-location attempt on test device	Detect/flag/block according to implemented control.
Old Gallery Image	Attempt to use stored photo as mandatory live evidence	Application requires in-app live capture.
Offline Survey	Complete survey with internet disabled	Record retained locally and later syncs without data loss.
Duplicate Sync	Resend same offline transaction	Only one central business record created.
Approved Record Edit	Attempt direct modification after approval	Direct edit denied; correction requires auditable controlled workflow.

4. MODULE 2:

WEIGHBRIDGE AUTOMATION, VEHICLE MANAGEMENT & DIGITAL CHALLAN SYSTEM

4.1.Purpose: Automate vehicle entry, token generation, direct machine weight capture, photographic verification, gross/tare/net calculation, taxes/charges, four-copy challan generation and mine/lease-wise tonnage reporting.

4.2.End-to-End Workflow:

Step	Activity	System Control
1	Truck arrives at gate / mine	Vehicle search/registration and live tablet photograph
2	Lease, verified mine/site, contractor, customer/destination and material selected	Mine data consumed from approved Survey master
3	Unique token generated and printed	network/wireless thermal token printer or equivalent; QR/barcode; reprint logged
4	Truck moves to weighbridge	Token/vehicle verified; operator/tablet photographic evidence captured where configured
5	First weight captured	Live value read from indicator through RS-232/RS-485/TCP/IP as supported
6	Loading/unloading process	Transaction remains open on local intranet/server
7	Second weight captured	Second photo/evidence may be captured through the tablet/application where required; same local transaction
8	Gross/Tare/Net and tonnage calculated	System calculation; normal manual editing disabled
9	Tax/levy/charge calculated	Configured rates/effective dates
10	Transaction finalized	Unique challan generated locally
11	Four challan copies printed	Controlled original/reprint logging
12	Local transaction committed to site server	Operation completes on intranet even if internet/cloud is unavailable
13	Cloud synchronization when connectivity is available	Pending local transactions and evidence sync securely without duplication
14	Central dashboard / reports updated	Mine/lease/contractor-wise tonnage becomes available centrally

4.3.Technology & Integration

Layer	Required Characteristics / Acceptable Approach
Web Application	Responsive browser-based application using a current supported enterprise framework; no desktop-only dependency for normal operational workflows.

Layer	Required Characteristics / Acceptable Approach
API Layer	RESTful/JSON or equivalent secure APIs with versioning, validation and authentication.
Database	Relational database such as PostgreSQL, MySQL/MariaDB, MS SQL Server or equivalent; structured backup and transaction integrity required.
Mobile/Tablet	Android application, native or cross-platform enterprise framework; secure local storage and offline synchronization where required.
Security	HTTPS/TLS, role/permission authorization, password hashing, token-based API authentication, audit logs and protected credentials.
Deployment	Local and/or central server deployment as per approved architecture; environment-specific configuration separate from source code.
Integration	Requirement
Weighbridge Indicator	Direct integration through actual supported interface/protocol after site inspection; commonly RS-232/RS-485/serial/TCP-IP.
Local Integration Service	Windows/Linux service or equivalent local component to read stable weight and securely pass it to the web application/API.
Tablet / Mobile Photo Evidence	In-app live photo capture through the supplied rugged tablet/mobile device, linked to the transaction. No separate camera hardware is included in the required list; weighbridge photographic evidence shall be captured through the application/tablet.
Token Printer	network/wireless thermal token printer or equivalent capable of QR/barcode and fast token printing.
Offline Continuity	Local site server/database and local LAN shall allow approved operations when central internet is unavailable.

4.4.Web Portal Forms / Masters

Form / Screen	Minimum Fields / Functions
Vehicle Master	Vehicle no., type, capacity/reference tare, transporter, contractor, active/blacklist status, documents/remarks.
Driver Master / Transaction	Name, CNIC/ID, mobile, licence, vehicle, transporter/contractor, optional photo.
Contractor / Transporter / Customer	IDs, names, contact/tax information, assigned mines/vehicles, destination and status.
Material / Coal Master	Material/coal grade/category, active status and applicable charge rules.
Tax / Levy / Charge Configuration	Charge name/type, percentage/fixed/per-ton, effective dates and applicability.

Form / Screen	Minimum Fields / Functions
Token Form	Vehicle, driver, mine/lease, contractor, material, destination, live photo, QR/barcode and print.
Weighment Screen	Live/stable weight, first/second weight, camera evidence, operator, date/time and connection status.
Challan / Finalization	Gross/tare/net/tonnage, taxes/charges, challan number, print/reprint/cancel controls.

4.5. Tablet / Mobile Functions

- Gate operator login and vehicle search/registration.
- Driver, lease, mine/site, contractor, material and destination selection.
- Live truck photograph capture through application.
- Token generation request/status and pending vehicle list.
- Offline data capture for approved gate functions and synchronization status

4.6. Critical Validations

- No new active token for a vehicle with an incomplete/open transaction unless authorized exception is approved.
- Vehicle must be active and not blacklisted; contractor/material/mine must be active.
- Mine must belong to selected lease and be available from approved Survey master.
- Normal operator shall not manually type/alter machine-generated weight when integration is available.
- Second weighment cannot normally occur before first weighment; net weight must be greater than zero.
- Camera evidence required at configured weighment stages.
- Manual weight fallback, if enabled, shall require supervisor authorization, mandatory reason and separate MANUAL WEIGHT flag/report.
- Challan cancellation/reprint shall retain original transaction and complete audit history.

4.7. Reports & KPIs

Category	Reports / KPIs
Operations	Daily weighment, token register, pending first/second weight, completed/cancelled transactions.
Tonnage	Daily/weekly/monthly/yearly, mine-wise, lease-wise, contractor-wise, customer-wise, vehicle-wise, material-wise.
Financial	Tax/levy/charge report, challan summary and customer/contractor summaries.
Control	Manual weight, reprint, cancellation, duplicate token attempt, weight exception and missing photographic evidence.
System	Weighbridge communication status, pending/failed synchronization and operator activity.

4.8. Module-Specific Hardware

Equipment	Qty	Reference Make / Model (or Equivalent/Better)	Minimum Mandatory Configuration / Purpose
Primary Local Application / Database Machine	1	Dell Vostro 3030 Tower/Desktop or equivalent business desktop	Intel Core i7-14700 (14th Generation) or latest/equivalent higher processor; minimum 16 GB DDR5 RAM; minimum 512 GB PCIe NVMe SSD; integrated Gigabit Ethernet LAN; keyboard and mouse; Linux-ready with Rocky Linux / Ubuntu Server LTS or equivalent approved Linux operating system; minimum 1-year OEM/vendor warranty where commercially available.
Weighbridge / Gate Operational Desktop PC	2	Dell Vostro 3030 Tower/Desktop or equivalent business desktop	Intel Core i5-14500 (14th Generation) or latest/equivalent higher processor; minimum 16 GB DDR5 RAM; minimum 512 GB PCIe NVMe SSD; integrated Gigabit Ethernet LAN; Windows 11 Pro or approved genuine operating system; keyboard and mouse; 23.8-inch Full HD LED monitor; RS-232/USB serial adapter support where required; minimum 1-year OEM/vendor warranty where commercially available.
Gate / Weighbridge Rugged Android Tablet	6	Samsung Galaxy Tab Active5 5G Enterprise Edition or equivalent/better locally available rugged Android tablet	Minimum 6 GB RAM and 128 GB storage; GPS/GNSS; Wi-Fi; 4G/5G connectivity; minimum 13 MP class rear camera or equivalent suitable for vehicle/survey evidence; rugged protective case/hand strap and charger. IP67/IP68 or equivalent rugged protection preferred; MIL-STD-810H or equivalent ruggedness preferred. If the stated reference model is unavailable, bidder may offer any reputable locally available equivalent/better model meeting the functional requirements with manufacturer datasheet.
Network / Wireless Thermal Token Printer	4	Zebra ZD421d, Brother TD-4550DNWB, TSC DA220 or equivalent locally available model	Direct thermal printer; minimum 203 dpi; USB plus Ethernet and/or Wi-Fi; suitable for token/slip printing with token number, vehicle number, date/time and QR/1D/2D barcode where required; required drivers, power supply, connectivity accessories and starter media; minimum 1-year warranty.
A4 Network Monochrome Laser Printer	2	HP LaserJet Pro 4003dn or equivalent locally available business laser printer	Monochrome A4 laser printer; automatic duplex preferred; Ethernet and USB connectivity; suitable for challans, reports and official documents; starter toner and required cables included; minimum 1-year warranty.
Industrial USB-to-Serial Converter	2 (1 operational + 1 spare)	Moxa UPort 1150I or equivalent	Reliable USB-to-RS-232/RS-485 serial interface compatible with the actual weighbridge indicator and Linux/Windows drivers. One unit for operation and one spare; final baud/parity/data/stop-bit settings to be configured at commissioning.

Equipment	Qty	Reference Make / Model (or Equivalent/Better)	Minimum Mandatory Configuration / Purpose
UPS for Primary Weighbridge Application Machine	1	APC Easy UPS / Vertiv / Eaton or equivalent	Minimum 1500 VA class line-interactive/online UPS with AVR/surge protection and sufficient backup for safe shutdown of the primary local application/database machine; minimum 1-year warranty.
External Backup Drive	1	Seagate / Western Digital / Transcend or equivalent	Minimum 1 TB external USB 3.0/3.2 HDD or SSD for authorized operator/admin backup of local database/application data. Backup procedure and restore instructions shall be documented; minimum 1-year warranty.

4.9. Weighbridge UAT

Test	Expected Result
Token generation / duplicate token	Unique token prints successfully; unauthorized duplicate active token blocked.
Mine/lease validation	Invalid mine/lease combination rejected.
Direct first/second weight	Actual indicator values captured; normal manual alteration denied.
Tablet / photographic evidence	Configured live photo evidence is linked to the correct token/vehicle/transaction.
Automatic net weight	Gross – Tare calculated by system; positive result required.
Tax/charge calculation	Current configured rate applied correctly.
Four-copy challan & reprint	Correct challan generated; reprint retains same number and is logged.
Weighbridge disconnect	Connection loss displayed and normal automatic capture prevented.
Offline central internet	Local approved operations continue and later synchronize without duplicates.
Cancellation / audit	Unauthorized deletion denied; authorized cancellation preserves history.

5. MODULE 03:

PHARMACY, MEDICAL & PATIENT MANAGEMENT SYSTEM

5.1. Purpose & Workflow

Stage	Process
1	Employee/patient identified and OPD visit created.
2	Unique token generated and printed.
3	Doctor opens patient history and records consultation.
4	Electronic prescription submitted to pharmacy.
5	Pharmacist checks medicine, valid batch, expiry and stock.
6	Medicine issued against prescription; stock deducted automatically.
7	Patient history, medicine ledger, inventory and local reports update on the intranet/local server; approved data subsequently synchronizes to cloud when internet is available.

5.2. Technology

Layer	Required Characteristics / Acceptable Approach
Web Application	Responsive browser-based application using a current supported enterprise framework; no desktop-only dependency for normal operational workflows.
API Layer	RESTful/JSON or equivalent secure APIs with versioning, validation and authentication.
Database	Relational database such as PostgreSQL, MySQL/MariaDB, MS SQL Server or equivalent; structured backup and transaction integrity required.
Mobile/Tablet	Android application, native or cross-platform enterprise framework; secure local storage and offline synchronization where required.
Security	HTTPS/TLS, role/permission authorization, password hashing, token-based API authentication, audit logs and protected credentials.
Deployment	Local and/or central server deployment as per approved architecture; environment-specific configuration separate from source code.

5.3. Forms / Screens

Form / Screen	Minimum Fields / Functions
Employee / Patient Master	Patient ID, HR Employee ID where applicable, name, CNIC/ID, department, designation/location, contact, blood group/category, status.
OPD / Token	Visit number, patient, date/time, doctor, complaint/reason, token and status.
Doctor Consultation	Vitals, complaint/symptoms, examination, diagnosis, advice, referral/follow-up and notes.
Electronic Prescription	Medicine, strength, dosage, frequency, duration, quantity and instructions.
Medicine Master	Generic/brand, category, form, strength, unit, manufacturer, reorder/minimum level and active status.

Form / Screen	Minimum Fields / Functions
GRN / Receiving	Supplier, invoice/PO reference, medicine, batch, expiry, quantity, rate, received/verified by.
Pharmacy Dispensing	Prescription, available stock, batch/expiry, prescribed/issued/pending quantity.
Stock Adjustment / Transfer / Disposal	Batch-wise stock movement with mandatory reason and approval.
Physical Stock Verification	System qty, physical qty, variance, verifier and remarks.
Referral / Medical Document	Referral details and controlled attachments where required.

5.4. Key Controls

- Central HR Employee ID shall be used for SLCMC employees; clinical data remains restricted to authorized medical roles.
- Expired batch shall not be issued; near-expiry alerts shall support configurable 30/60/90-day or equivalent thresholds.
- FEFO (First Expiry, First Out) principle shall be supported for batch selection.
- Issued quantity shall not normally exceed prescribed quantity or available stock.
- Same completed prescription shall not be dispensed twice as a normal transaction.
- Stock adjustment, damage, expiry and disposal require reason, user and audit record.
- Finalized prescription shall not be silently changed by pharmacy users.

5.5. Roles

Role	Key Rights
Reception / Token Operator	Patient identification, OPD visit and token generation.
Doctor / Medical Officer	Consultation, diagnosis, prescription, referral and authorized patient history.
Pharmacist	Prescription view, batch selection and medicine issuance.
Storekeeper	GRN, stock/batch, transfer, physical stock and expiry management.
Medical Administrator	Medical masters, doctor setup and reports.
Management Viewer	Aggregate OPD/inventory/utilization only; clinical details restricted.
Auditor	Authorized read-only inventory/issuance/adjustment/audit history.

5.6. Reports

Category	Reports
OPD / Medical	Daily/monthly OPD, doctor-wise, department/site-wise, patient visit history.
Prescription / Issue	Prescription register, prescription vs issuance, patient/doctor/medicine-wise issuance.
Inventory	Current stock, batch-wise stock, medicine ledger, opening/received/issued/adjusted/transferred stock.
Expiry	Expired stock, near-expiry, disposal history.
Procurement / Supplier	GRN register, supplier-wise purchase and medicine purchase history.

Category	Reports
Control	Controlled medicine, duplicate issue attempt, stock adjustment and user activity.

5.7. Module-Specific Hardware

Equipment	Qty	Reference Make / Model (or Equivalent/Better)	Minimum Mandatory Configuration / Purpose
Primary Pharmacy / Medical Application Machine	1	Dell Vostro 3030 Tower/Desktop or equivalent business desktop	Intel Core i7-14700 (14th Generation) or latest/equivalent higher processor; minimum 16 GB DDR5 RAM; minimum 512 GB PCIe NVMe SSD; integrated Gigabit Ethernet LAN; keyboard and mouse; Linux-ready with Rocky Linux / Ubuntu Server LTS or equivalent approved Linux operating system; minimum 1-year OEM/vendor warranty where commercially available.
Medical / Pharmacy Client Workstation	2	Dell Vostro 3030 Tower/Desktop or equivalent business desktop	Intel Core i5-14500 (14th Generation) or latest/equivalent higher processor; minimum 16 GB DDR5 RAM; minimum 512 GB PCIe NVMe SSD; integrated Gigabit Ethernet LAN; Windows 11 Pro or approved genuine operating system; keyboard and mouse; 23.8-inch Full HD LED monitor; minimum 1-year OEM/vendor warranty where commercially available.
A4 Network Monochrome Laser Printer	2	HP LaserJet Pro 4003dn or equivalent locally available business laser printer	Monochrome A4 laser printer with Ethernet and USB connectivity; automatic duplex preferred; suitable for OPD records, prescriptions, inventory reports and official documents; starter toner and required cables included; minimum 1-year warranty.
OPD / Queue Thermal Token Printer	2	Zebra ZD421d, TSC DA220, Xprinter XP-420B or equivalent locally available model	Direct thermal printer; minimum 203 dpi; USB plus Ethernet and/or Wi-Fi; suitable for OPD/queue token printing including token number, patient/queue information, date/time and barcode/QR where required; required power supply, drivers and starter media included; minimum 1-year warranty.
UPS for Primary Pharmacy / Medical Application Machine	1	APC Easy UPS / Vertiv / Eaton or equivalent	Minimum 1500 VA class line-interactive/online UPS with AVR/surge protection and sufficient backup for safe shutdown of the primary local application/database machine; minimum 1-year warranty.
External Backup Drive	1	Seagate / Western Digital / Transcend or equivalent	Minimum 1 TB external USB 3.0/3.2 HDD or SSD for authorized operator/admin backup of local pharmacy/medical database and application data. Backup procedure and restore instructions shall be documented; minimum 1-year warranty.

5.8. Pharmacy/Medical UAT

Test	Expected Result
Duplicate patient	Duplicate controlled identifier detected/blocked according to rules.
OPD/token	Unique visit/token generated and printed.

Test	Expected Result
Electronic prescription	Doctor prescription becomes available to pharmacy.
Expired / insufficient stock	Expired batch blocked; insufficient stock prevents invalid issue.
Automatic deduction	Issued quantity deducts from correct batch.
Duplicate dispensing	Completed prescription cannot be dispensed again normally.
Stock adjustment	Reason/authorization/audit required.

6. MODULE 04:

HR, ATTENDANCE, EMPLOYEE DEPLOYMENT & LEAVE MANAGEMENT SYSTEM

6.1. Purpose:

Establish a centralized Employee Master and integrate biometric attendance, shifts, site deployment, leave, attendance regularization and posting history, while supplying authorized employee identity data to other SLCMC modules.

6.2. Methodology / Workflow

Process	Workflow
Employee Master	Create/maintain unique employee record → department/designation/location → status.
Biometric Attendance	Device punch → local collector/server over LAN → employee/device mapping → shift rules → local attendance status → pending cloud sync → secure cloud synchronization when internet is available.
Attendance Correction	Original biometric log preserved → regularization request → approval → corrected derived status with audit history.
Leave	Employee/HR request → reporting officer/authorized approval → leave balance/status → attendance integration.
Deployment / Transfer	Current posting → approved transfer/posting → new effective record while retaining full history.

6.3. Technology & Device Integration

Layer	Required Characteristics / Acceptable Approach
Web Application	Responsive browser-based application using a current supported enterprise framework; no desktop-only dependency for normal operational workflows.
API Layer	RESTful/JSON or equivalent secure APIs with versioning, validation and authentication.
Database	Relational database such as PostgreSQL, MySQL/MariaDB, MS SQL Server or equivalent; structured backup and transaction integrity required.

Layer	Required Characteristics / Acceptable Approach
Mobile/Tablet	Android application, native or cross-platform enterprise framework; secure local storage and offline synchronization where required.
Security	HTTPS/TLS, role/permission authorization, password hashing, token-based API authentication, audit logs and protected credentials.
Deployment	Local and/or central server deployment as per approved architecture; environment-specific configuration separate from source code.

- Biometric integration through TCP/IP, SDK/API, database or approved protocol supported by actual devices.
- Local attendance collector/sync service shall retain transactions during WAN/internet outage where technically required.
- Raw biometric device transactions shall be preserved; HR corrections shall not overwrite source logs.

6.4. Forms / Screens

Form / Screen	Minimum Fields / Functions
Employee Master	Employee ID/number, personal information, CNIC, contact, department, designation, employment type/status, joining/contract dates, location, shift and photo/documents.
Department / Designation / Location	Controlled organization and site masters.
Employee Deployment	Employee, site/mine/location, department/designation, effective dates, shift, reporting officer and reference.
Biometric Device / Mapping	Device ID/name/IP/location/status, employee device-user mapping and last sync.
Shift / Roster	Start/end time, grace, late/early threshold, break, night-shift flag and effective dates.
Attendance Review	Raw punches, derived check-in/out, working hours, late/absence/missing punch.
Regularization	Existing attendance, requested correction, reason, attachment, approver and status.
Leave	Leave type, dates, balance, reason, attachment, approval chain and status.
Official / Field Duty	Employee, date/time, duty type, site/location, approving authority and remarks.
Transfer / Posting	Previous/new location/department/designation, effective date, order/reference and approval.

6.5. Employee Self-Service / Mobile Functions

- View own profile and attendance history.
- View late/absence/missing-punch status.
- Apply for leave and view leave balance/status.
- Submit attendance regularization request.
- Mobile/web approval for authorized managers where enabled.

6.6. Reports

Category	Reports
Attendance	Daily/monthly, employee/department/location/site/shift-wise, present, absent, late, early departure, missing punch and working hours.
HR	Employee master, active/inactive, department/designation/location/site deployment and joining/contract expiry.
Leave	Leave register, employee-wise, leave balance, leave type, pending/approved/rejected.
Control	Manual/regularized attendance, biometric mapping, device sync failure, master changes and user activity.

6.7. Module-Specific Hardware

Equipment	Qty.	Reference Make / Model (or Equivalent/Better)	Minimum Mandatory Configuration / Purpose
Primary HR / Main Site Application Machine	1	Dell Vostro 3030 Tower/Desktop or equivalent business desktop	Intel Core i7-14700 (14th Generation) or latest/equivalent higher processor; minimum 16 GB DDR5 RAM; minimum 512 GB PCIe NVMe SSD; integrated Gigabit Ethernet LAN; keyboard and mouse; Linux-ready with Rocky Linux / Ubuntu Server LTS or equivalent approved Linux operating system; minimum 1-year OEM/vendor warranty where commercially available. This Main Site machine may also host approved Survey local services to avoid a separate Survey server.

No separate HR client workstation, printer or new biometric terminal is included in this procurement. The HR/Attendance system shall integrate with existing compatible SLCMC biometric devices and shall be accessible through authorized existing workstations and cloud-connected browsers.

6.8. HR/Attendance UAT

Test	Expected Result
Employee / biometric mapping	Valid employee correctly mapped to device ID.
Live punch	Employee, device, location, date/time received.
Late/absence/night shift	Configured shift rules calculate correct status.
Duplicate sync	Repeated device transaction does not create duplicate attendance.
WAN failure	Local device/collector retains records and later synchronizes.
Regularization	Raw log preserved; approved correction stored separately with audit.
Leave integration	Approved leave prevents incorrect absence classification.
Transfer/posting	New posting becomes active; previous posting remains historical.

7. MODULE 05:

CENTRALIZED MANAGEMENT DASHBOARD & EXECUTIVE MONITORING

7.1. Purpose

Provide authorized SLCMC management, including Karachi Head Office, a single read-mostly portal consolidating the latest cloud-synchronized operational KPIs and reports from Survey, Weighbridge, Pharmacy/Medical and HR/Attendance systems, while local site operations continue independently on the intranet during internet outages.

7.2. Dashboard Views

Dashboard	Minimum KPIs / Views
Executive Home	Survey progress, today/month tonnage, employee attendance, OPD/stock alerts, synchronization status and critical exceptions.
Survey / GIS	Lease 50/51/52 progress, surveyed/remaining area, verified/pending/re-survey sites, interactive GIS map.
Weighbridge	Vehicles, completed/pending transactions, today/month/year tonnage, mine/lease/contractor/customer/material-wise trends.
Pharmacy / Medical	OPD counts, prescriptions, stock availability, low/out-of-stock, near-expiry/expired and consumption trends.
HR / Attendance	Total employees, present/absent/late/on-leave, site/department attendance and employee deployment.
System Health	Last sync, pending/failed sync, site connectivity, critical integration/device status and backup status where integrated.

7.3. Management Functions

- Date/date-range, lease, mine/site, department, contractor, customer, vehicle, employee, status and location filters as applicable.
- Drill-down from KPI to authorized underlying records.
- Daily and monthly management summary reports.
- Trend comparison such as today vs previous day, current month vs previous month and custom date range.
- Alert panel for survey exceptions, manual/cancelled weighbridge events, critical pharmacy stock, device/sync failures and high attendance exceptions.
- Data freshness / last-updated timestamp on remotely synchronized information.
- Management users shall not directly alter original operational transactions through the dashboard.

7.4. Reports / Exports

Report	Content
Executive Daily Summary	Survey progress, vehicles/tonnage, attendance, OPD/pharmacy alerts, critical exceptions.
Monthly Management Report	Module KPIs, trends, mine/lease production, HR attendance, medical utilization and exception summary.
Mine Production Report	Verified mine/site mapped to weighbridge trip count and net tonnage.
Exception Summary	Manual weight, cancelled/reprinted challan, geofence exceptions, low stock, device/sync failures.
System Synchronization	Site/module last sync, pending/failed records and data freshness.

7.5. Module-Specific Hardware

Equipment	Qty.	Reference Make / Model (or Equivalent/Better)	Minimum Mandatory Configuration / Purpose
Dedicated New End-User Hardware	0	Not required	The centralized management dashboard is browser-based and shall operate on existing authorized SLCMC desktop/laptop systems. No duplicate desktop hardware is mandated under this module.
Central Cloud Hosting / Synchronization Service	1 Lot	Vendor-provided approved cloud platform	Cloud application/database, secure object/file storage, backups, SSL/TLS and synchronization connectivity are covered under Common ICT & Cloud Services in Section 10. Exact cloud sizing shall be proposed by bidder and approved by SLCMC.

7.6. Dashboard UAT

Test	Expected Result
Survey integration	Approved survey updates relevant KPI/map.
Weighbridge integration	Completed weighment updates vehicle/tonnage KPIs and mine production.
Pharmacy integration	Medicine issue updates authorized inventory/consumption summary.
HR integration	Attendance sync updates authorized attendance KPIs.
Offline site	Dashboard identifies stale/pending data through last-sync/freshness indicator.
Role access	Each user sees only authorized module/detail.
Read-only principle	Management viewer cannot change source transaction.
Drill-down/export	KPI drill-down and approved PDF/Excel export show correct period/data.

8. COMMON TECHNICAL ARCHITECTURE, CYBER SECURITY, API, BACKUP & NETWORKING

8.1. Architecture Principle

Layer	Function
Field / User Layer	Survey tablets, gate tablets, weighbridge PCs, pharmacy/HR workstations, biometric devices, cameras and printers.
Local Site Intranet – Primary Operation	Local application server, local database, integration services, LAN/PoE/Wi-Fi and backup server. Critical operations must function here without any internet/cloud dependency.
Device-to-Local Synchronization	Tablets/mobile devices synchronize to the local site server over SLCMC Wi-Fi/LAN first. A field device may retain data until it returns to local intranet coverage.
Secure Internet / VPN Layer	Firewall/router, high-gain antenna/outdoor CPE/booster where required, VPN/TLS and controlled outbound synchronization connectivity.

Layer	Function
Vendor-Provided Cloud Platform	Cloud application/API services, central database/reporting, scalable file/object storage for images/documents, backup and centralized dashboard.
Local-to-Cloud Synchronization	Approved local transactions sync in batches/queues with retry, duplicate prevention, conflict handling, acknowledgements and last-sync status.
Karachi / Management Access	Authorized users access the latest cloud-synchronized dashboard and reports; data freshness/last-sync must be visible.

8.2. Common Security Requirements

- Named user accounts; no uncontrolled shared admin/operator accounts for normal production use.
- Role-Based Access Control with server-side permission enforcement.
- Password hashing and configurable failed-login/account-lock controls.
- HTTPS/TLS for web and API communication over untrusted networks.
- JWT/access-token or equivalent secure API authentication with expiry and revocation capability.
- Mobile/field device registration and revocation where required by the module.
- Input validation, secure file upload, protection against SQL injection/XSS/CSRF as applicable, and controlled error handling.
- Database access restricted to approved applications/services; ordinary users/mobile apps shall not directly access production databases.
- Audit logs for critical create/edit/submit/approve/cancel/reprint/configuration actions.
- Credentials, encryption keys and production secrets shall not be hard-coded in public/source repositories.

8.3. Common API / Integration Requirements

- Versioned secure APIs with documented request/response, validation and error codes.
- Central HR Employee ID reused by authorized modules; clinical data remains isolated from normal HR access.
- Verified Survey mine/site master consumed by Weighbridge; no uncontrolled manual mine list in normal operations.
- All operational modules publish authorized KPIs to the Management Dashboard.
- Unique transaction IDs and idempotent synchronization to prevent duplicate records.
- Server-side business-rule validation remains authoritative even if client/mobile request is manipulated.

8.4. Local Intranet, Offline Operation & Two-Stage Data Synchronization

The proposed solution shall be local-first. Internet or cloud unavailability shall not stop normal site operations that are designated as critical. The primary operating path shall be local device/workstation → local intranet → local server/database. Cloud synchronization is a secondary path used when internet connectivity is available.

8.4.1. Two-Stage Synchronization Model

Stage	Data Path	Mandatory Behavior
Stage 1 – Field/Device to Local	Tablet/mobile/biometric/weighbridge PC → SLCMC Wi-Fi/LAN → local server	Works without internet; unique transaction ID; local acknowledgement; retry if local connection is interrupted.

Stage	Data Path	Mandatory Behavior
Stage 2 – Local to Cloud	Local site server/database → secure VPN/HTTPS → vendor-provided cloud	Queued/batch or near-real-time synchronization when internet is available; encrypted transfer; duplicate prevention; retry and acknowledgement.
Return / Master Sync	Cloud-approved users/masters/configuration → local server → authorized clients	Controlled versioning/conflict handling; inactive/changed masters must not be silently overwritten by stale offline data.

8.4.2. Mandatory Local-First Requirements

- Weighbridge token, weight capture, camera evidence, challan generation and local reports shall remain operational on the local LAN/server when public internet/cloud is unavailable.
- Pharmacy/medical transactions shall continue on the local intranet/server and maintain local stock integrity during internet outage.
- Biometric attendance collection shall continue locally and retain unsynchronized device logs.
- Survey tablets shall retain field records when outside Wi-Fi/internet coverage and shall first synchronize to the local server upon reaching SLCMC intranet coverage.
- Each local transaction shall carry a unique transaction ID, local creation time, user/device, synchronization status, retry count and cloud acknowledgement/reference where applicable.
- The application shall visibly show Pending Local Sync, Pending Cloud Sync, Synced, Failed/Retry and Last Successful Sync states to authorized users.
- No repeated synchronization attempt shall create duplicate business transactions.

8.5. Vendor-Provided Cloud Hosting, Storage & Central Synchronization

The bidder shall procure, configure and provide the required cloud environment as part of the bid. Cloud hosting/storage shall not be treated as an optional third-party cost to be arranged separately by SLCMC during the initial support/contract period.

Cloud Component	Minimum Requirement
Cloud Compute / Application Hosting	Production-capable cloud VM/PaaS/container environment sized by bidder for central APIs, synchronization services and management dashboard.
Central Database	Production relational database hosted securely in the cloud or on an approved cloud VM; automated backup and restore capability required.
File / Object Storage	Scalable storage for survey images, weighbridge photographs, medical/HR attachments and exported documents; bidder shall provide sizing calculation and expansion rate.
Backup / Recovery	Scheduled cloud database and file backup with documented retention, recovery and restore testing.
Security	HTTPS/TLS certificate, firewall/security-group rules, restricted administrative access, logs and secure secrets management.
Connectivity / Bandwidth	Sufficient bandwidth/egress allowance for synchronization of transactional data and photographic evidence; bidder shall identify any recurring bandwidth limitations/costs.

Cloud Component	Minimum Requirement
Subscription Period	Minimum initial cloud subscription for 12 months from go-live, included in bid price; bidder shall separately quote annual renewal and additional storage/compute rates.
Ownership / Access	Cloud tenant/account, administrative credentials, domain/DNS/SSL ownership or transferable administrative control shall be provided to SLCMC at handover; avoid vendor lock-in.
Monitoring	Cloud availability, storage utilization, backup status, sync status and capacity alerts shall be available to authorized administrators.

8.6. Networking, Internet Booster & Connectivity

- Managed LAN switches and PoE switches sized for current equipment and reasonable expansion.
- CAT-6 or better structured cabling, patch panels, racks, labels and testing.
- Separate logical network/VLANs where practical for servers, cameras/PoE, biometric/IoT, users and Wi-Fi/tablets.
- Cameras and biometric devices shall not be unnecessarily exposed directly to the public internet.
- Site-to-central connectivity may use site-to-site VPN, secure tunnel, private WAN, approved cloud connectivity or equivalent.
- High-gain antenna/outdoor CPE/signal booster shall be selected after site signal survey where required.
- The bidder shall perform a signal/connectivity survey at operational locations and propose the appropriate high-gain antenna, outdoor CPE, LTE/4G/5G router, point-to-point link or equivalent solution required for reliable cloud synchronization.
- Loss of the booster/internet/WAN shall not interrupt the primary local intranet workflow; it shall only delay Stage-2 cloud synchronization.

8.7. Backup & Disaster Recovery

- Scheduled database, application/configuration, uploaded evidence/document and audit-log backups as applicable.
- Local backup for critical operational sites plus central backup of synchronized information.
- Backup logs showing date/time, type, size/location and success/failure.
- Controlled restore test shall be performed before final acceptance.
- Documented recovery steps for primary server failure, database corruption, application failure and site connectivity failure

8.8. Common Technology / Handover Standards

- Supported production-grade technology stack with documented versions and dependencies.
- Separate Development / UAT / Production configurations where practical.
- Git/version-controlled source repository with release/build/deployment instructions.
- API documentation (OpenAPI/Swagger or equivalent), database schema/documentation and as-built architecture.
- No delivery solely as inaccessible binaries/APKs for software specifically developed under this contract.

9. CONSOLIDATED HARDWARE, ICT AND CLOUD SERVICES BOQs.

9.1. Procurement Note

Reference make/models are provided only to establish the required performance, interfaces, quality and compatibility. The bidder may offer the stated reference model or an equivalent/better current-generation model. Every major offered item shall be brand-new, supported, non-refurbished and accompanied by the exact manufacturer part/model number, official OEM datasheet and warranty details. Quantities below are minimum mandatory quantities and shall be fully included in the Financial Proposal.

Module	Hardware / Infrastructure	Qty	Reference Make / Model (or Equivalent/Better)	Minimum Specification / Purpose
Weighbridge	Primary Local Application / Database Machine	1	Dell Vostro 3030 Tower/Desktop or equivalent business desktop	Intel Core i7-14700 (14th Generation) or latest/equivalent higher processor; minimum 16 GB DDR5 RAM; minimum 512 GB PCIe NVMe SSD; integrated Gigabit Ethernet LAN; keyboard and mouse; Linux-ready with Rocky Linux / Ubuntu Server LTS or equivalent approved Linux operating system; minimum 1-year OEM/vendor warranty where commercially available.
Weighbridge	UPS for Primary Weighbridge Application Machine	1	APC Easy UPS / Vertiv / Eaton or equivalent	Minimum 1500 VA class line-interactive/online UPS with AVR/surge protection and sufficient backup for safe shutdown of the primary local application/database machine; minimum 1-year warranty.
Weighbridge	Weighbridge / Gate Operational Desktop PC	2	Dell Vostro 3030 Tower/Desktop or equivalent business desktop	Intel Core i5-14500 (14th Generation) or latest/equivalent higher processor; minimum 16 GB DDR5 RAM; minimum 512 GB PCIe NVMe SSD; integrated Gigabit Ethernet LAN; Windows 11 Pro or approved genuine operating system; keyboard and mouse; 23.8-inch Full HD LED monitor; RS-232/USB serial adapter support where required; minimum 1-year OEM/vendor warranty where commercially available.
Weighbridge / Survey	Shared Rugged Android Tablet	6	Samsung Galaxy Tab Active5 5G Enterprise Edition or equivalent/better locally available rugged Android tablet	Minimum 6 GB RAM and 128 GB storage; GPS/GNSS; Wi-Fi; 4G/5G connectivity; minimum 13 MP class rear camera or equivalent suitable for vehicle/survey evidence; rugged protective case/hand strap and charger. IP67/IP68 or equivalent rugged protection preferred; MIL-STD-810H or equivalent ruggedness preferred. If the stated reference model is unavailable, bidder may offer any reputable locally available equivalent/better model meeting the functional requirements with manufacturer datasheet. The quantity of six is the total project quantity and the same devices may be used for Survey/Field activities; no additional Survey tablets shall be quoted.
Weighbridge	Network / Wireless Thermal Token Printer	4	Zebra / Brother / TSC or equivalent locally available model	Direct thermal printer; minimum 203 dpi; USB plus Ethernet and/or Wi-Fi; suitable for token/slip printing with token number, vehicle number, date/time and QR/1D/2D barcode where required; required drivers, power supply, connectivity accessories and starter media; minimum 1-year warranty.

Module	Hardware / Infrastructure	Qty	Reference Make / Model (or Equivalent/Better)	Minimum Specification / Purpose
Weighbridge	A4 Network Monochrome Laser Printer	2	HP LaserJet Pro 4003dn or equivalent locally available model	Monochrome A4 laser printer; automatic duplex preferred; Ethernet and USB connectivity; suitable for challans, reports and official documents; starter toner and required cables included; minimum 1-year warranty.
Weighbridge	Industrial USB-to-Serial Converter	2 (1 operational + 1 spare)	Moxa UPort 1150I or equivalent	Reliable USB-to-RS-232/RS-485 serial interface compatible with the actual weighbridge indicator and Linux/Windows drivers. One unit for operation and one spare; final baud/parity/data/stop-bit settings to be configured at commissioning.
Weighbridge	External Backup Drive	1	Seagate / Western Digital / Transcend or equivalent	Minimum 1 TB external USB 3.0/3.2 HDD or SSD for authorized operator/admin backup of local database/application data. Backup procedure and restore instructions shall be documented; minimum 1-year warranty.
Pharmacy	Primary Pharmacy / Medical Application Machine	1	Dell Vostro 3030 Tower/Desktop or equivalent business desktop	Intel Core i7-14700 (14th Generation) or latest/equivalent higher processor; minimum 16 GB DDR5 RAM; minimum 512 GB PCIe NVMe SSD; integrated Gigabit Ethernet LAN; keyboard and mouse; Linux-ready with Rocky Linux / Ubuntu Server LTS or equivalent approved Linux operating system; minimum 1-year OEM/vendor warranty where commercially available.
Pharmacy	UPS for Primary Pharmacy / Medical Application Machine	1	APC Easy UPS / Vertiv / Eaton or equivalent	Minimum 1500 VA class line-interactive/online UPS with AVR/surge protection and sufficient backup for safe shutdown of the primary local application/database machine; minimum 1-year warranty.
Pharmacy	Medical / Pharmacy Client Workstation	2	Dell Vostro 3030 Tower/Desktop or equivalent business desktop	Intel Core i5-14500 (14th Generation) or latest/equivalent higher processor; minimum 16 GB DDR5 RAM; minimum 512 GB PCIe NVMe SSD; integrated Gigabit Ethernet LAN; Windows 11 Pro or approved genuine operating system; keyboard and mouse; 23.8-inch Full HD LED monitor; minimum 1-year OEM/vendor warranty where commercially available.
Pharmacy	A4 Network Monochrome Laser Printer	2	HP LaserJet Pro 4003dn or equivalent locally available model	Monochrome A4 laser printer with Ethernet and USB connectivity; automatic duplex preferred; suitable for OPD records, prescriptions, inventory reports and official documents; starter toner and required cables included; minimum 1-year warranty.

Module	Hardware / Infrastructure	Qty	Reference Make / Model (or Equivalent/Better)	Minimum Specification / Purpose
Pharmacy	OPD / Queue Thermal Token Printer	2	Zebra / TSC / Xprinter or equivalent locally available model	Direct thermal printer; minimum 203 dpi; USB plus Ethernet and/or Wi-Fi; suitable for OPD/queue token printing including token number, patient/queue information, date/time and barcode/QR where required; required power supply, drivers and starter media included; minimum 1-year warranty.
Pharmacy	External Backup Drive	1	Seagate / Western Digital / Transcend or equivalent	Minimum 1 TB external USB 3.0/3.2 HDD or SSD for authorized operator/admin backup of local pharmacy/medical database and application data. Backup procedure and restore instructions shall be documented; minimum 1-year warranty.
HR	Primary HR / Main Site Application Machine	1	Dell Vostro 3030 Tower/Desktop or equivalent business desktop	Intel Core i7-14700 (14th Generation) or latest/equivalent higher processor; minimum 16 GB DDR5 RAM; minimum 512 GB PCIe NVMe SSD; integrated Gigabit Ethernet LAN; keyboard and mouse; Linux-ready with Rocky Linux / Ubuntu Server LTS or equivalent approved Linux operating system; minimum 1-year OEM/vendor warranty where commercially available. This Main Site machine may also host approved Survey local services to avoid a separate Survey server.
Common ICT	8-Port Gigabit Desktop LAN Switch	3	TP-Link TL-SG108, D-Link DGS-108 or equivalent locally available model	One compact Gigabit desktop switch for Main Site, Pharmacy and Weighbridge, or equivalent right-sized LAN arrangement; minimum 8 x 10/100/1000 Mbps ports; plug-and-play or simple smart model acceptable; minimum 1-year warranty.
Common ICT	4G/5G Internet Router / Signal Booster Kit	3	Huawei / ZTE / TP-Link / Teltonika or equivalent locally available 4G/5G router/CPE	One complete connectivity kit for Main Site, Pharmacy and Weighbridge. SIM-based 4G/5G router/CPE with dual-band Wi-Fi and Gigabit LAN; secure administration; external antenna support. Compatible external/high-gain antenna or signal booster shall be included where required by the site signal test. Minimum 1-year warranty.
Common ICT	CAT-6 LAN Cabling, Connectors & Minor Installation Accessories	1 Lot	Locally available certified networking materials or equivalent	Only the quantity actually required for connecting the supplied PCs, servers, printers, router and switch at the three sites. Includes CAT-6 cable, patch cords/connectors, conduit/trunking where required, labeling and basic installation/testing. No bulk cable-box quantity is prescribed.

Module	Hardware / Infrastructure	Qty	Reference Make / Model (or Equivalent/Better)	Minimum Specification / Purpose
Common Cloud	Vendor-Provided Cloud Hosting, Database, Storage, Backup, SSL/TLS & Synchronization Service	1 Lot - minimum 12 months	Approved enterprise cloud provider	Cloud sizing to be proposed by bidder and approved by SLCMC; shall support central dashboard, APIs, database, file/image storage, cloud backup and secure site-to-cloud synchronization. Initial 12-month subscription shall be included in the bid.

9.2. Mandatory Hardware Supply Conditions

- All supplied equipment shall be brand-new, unused, non-refurbished and current supported generation at the time of supply.
- Reference make/model means the stated model or equivalent/better. Bidder shall not reduce any minimum processor, memory, storage, interface, environmental, security or integration requirement.
- Bidder shall submit exact offered make, model, manufacturer part number, official OEM datasheet, warranty and country of origin/manufacture where available for all major items.
- Any quoted model that becomes end-of-sale before delivery shall be replaced, after SLCMC approval, by its OEM successor of equal or better specification at no additional cost.
- All required power supplies, adapters, mounting accessories, patch cords/connectors, drivers/licenses and minor accessories necessary for complete installation and integration of the stated BOQ shall be included in the quoted price.
- Hardware quantities stated in Section 10 are minimum mandatory quantities. Financial comparison shall be based on these common quantities.
- All hardware shall be installed, configured, labeled, asset-registered, tested and commissioned; physical delivery alone shall not constitute acceptance.

9.3. Hardware Compliance Submission

Required Bidder Information	Description
Make / Model	Exact make and model proposed for every quoted hardware line.
Specification	CPU/RAM/storage/network/ports/camera resolution/PoE budget etc. as applicable.
Compliance	Comply / Higher / Deviation against minimum requirement.
Warranty	Manufacturer/vendor warranty period and local support arrangement.
Datasheet	Official datasheet / product literature reference.
Delivery	Lead time and proposed installation location.
Cloud Proposal	Cloud provider/service type, proposed compute/database/storage sizing, backup retention, included bandwidth, 12-month subscription cost, annual renewal rate, additional storage/compute unit rates and SLCMC ownership/credential handover.

10. PROJECT EXECUTION PLAN & MILESTONES:

10.1. Indicative Implementation Period

Maximum implementation period: 180 calendar days from commencement. The indicative execution sequence below is planned over approximately 24 weeks; bidders may propose an earlier completion schedule without reducing scope, testing, training or acceptance requirements.

Phase	Activity	Timeline	Acceptance Output
1	Kickoff, detailed site survey and requirements confirmation	Week 1	Inception report, site inventory, user/workflow matrix and connectivity/signal survey
2	Architecture, database/API design, forms and UI prototypes	Weeks 2-4	Approved local-first architecture, data model, forms, offline/sync design and hardware plan
3	Local intranet, local application/database machines, simple LAN/Wi-Fi/5G connectivity and backup foundation	Weeks 3-7	Site LAN operational; local servers/databases available without cloud dependency; internet router/connectivity kits configured.
4	Module development and local deployment – Survey / Field	Weeks 4-11	Web/GIS/mobile functions and tablet-to-local synchronization
5	Module development and local deployment – Weighbridge	Weeks 5-13	Token, serial live weight, tablet/photo evidence, printers, challan and local application/database workflow
6	Module development and local deployment – Pharmacy + HR	Weeks 6-14	Local OPD/inventory and HR/attendance/biometric workflows
7	Complete LOCAL/OFFLINE UAT with internet disconnected	Weeks 13-16	Critical site operations pass on intranet/local application/database machines only
8	Vendor cloud procurement and production provisioning	Weeks 14-16	Cloud compute/database/storage, SSL/security, backup and SLCMC admin access provisioned
9	Local-to-cloud synchronization and central dashboard integration	Weeks 16-19	Two-stage sync, retry/duplicate controls, data freshness and management dashboard
10	Field survey/data migration, integrated testing and security testing	Weeks 17-21	Master data, field records, integration tests and resolved defect log
11	Training and controlled pilot operation	Weeks 20-22	Trained users, pilot sign-off and support procedures
12	Final UAT, go-live, source code/cloud credentials and handover	Weeks 23-24	Accepted system, documentation, repository, cloud/admin handover and warranty/support start

10.2. Bidder Work Plan Requirements

- Named project manager and module leads.
- Resource deployment plan showing software, mobile/GIS, weighbridge integration, network/hardware and QA resources.
- Site survey and installation sequence.
- Detailed module-wise development and demonstration dates.
- Data migration/master-data preparation responsibilities.
- Testing, training, UAT, go-live and stabilization plan.
- Risk register covering remote connectivity, cloud outage, hardware lead time, device protocol compatibility, local-server failure and field execution.
- Bidder shall show a clear sequence in which local intranet/offline capability is completed and accepted before dependence on cloud synchronization is introduced.

11. TESTING, UAT, ACCEPTANCE & HANDOVER:

11.1. Acceptance Stages

Stage	Acceptance Requirement
Design Acceptance	Approved architecture, forms/workflows, hardware/site design, cloud sizing and project plan.
Local Intranet Acceptance	With public internet/cloud disconnected, designated critical workflows operate on local LAN/server and generate valid local transactions.
Module Testing	Functional test cases for each module passed and documented.
Weighbridge Hardware/Serial Test	Actual or agreed test indicator/weight source demonstrates serial/TCP communication, stable weight capture, tablet/application photo evidence where configured, printer and challan flow.
Stage-1 Synchronization Test	Mobile/tablet/device transactions synchronize to local server over intranet without internet.
Cloud Provisioning Acceptance	Vendor-provided cloud compute/database/storage, SSL, backup and SLCMC administrative access verified.
Stage-2 Cloud Synchronization Test	Local pending transactions synchronize to cloud after internet restoration with retry, acknowledgement and no duplication.
Integration Testing	Cross-module employee/mine/API/dashboard integrations verified.
Security Testing	Authentication, authorization, API validation, audit, device control and vulnerability testing.
Backup/Restore	Controlled local and cloud restore test completed.
UAT	SLCMC designated users execute approved end-to-end scenarios.
Final Acceptance	Critical defects closed, source code, cloud credentials, documentation, assets and as-built records delivered.

11.2. Minimum Cross-Module UAT

- Verified Survey mine/site appears in Weighbridge mine selection.
- Completed Weighbridge transaction updates mine/lease tonnage on central dashboard.
- HR Employee ID is usable by authorized Pharmacy and operational user mappings.
- Pharmacy transaction updates authorized stock/consumption dashboard summary.
- Biometric attendance updates central HR dashboard after synchronization.
- With cloud/internet disconnected, site systems continue locally and show Pending Cloud Sync; after reconnection, queued transactions synchronize without duplication and dashboard freshness/last-sync updates.

12. SUPPORT, WARRANTY, TRAINING & SOURCE CODE HANDOVER

12.1. Support / Warranty

- a. Minimum 12 months post-go-live application support/warranty is recommended unless SLCMC specifies another period in final bidding data.
- b. Hardware shall carry manufacturer/vendor warranty as quoted and approved.
- c. Bidder shall provide incident logging, remote support and on-site support for critical hardware/integration issues according to the agreed support plan.
- d. Any defect introduced by delivered software/integration during the warranty period shall be rectified without additional development charges, subject to agreed contract terms.

12.2. Training

Audience	Minimum Training
Survey Team	Mobile survey, GPS/photo evidence, offline sync and re-survey.
Weighbridge / Gate Team	Vehicle/token, direct weight capture, photo, challan and exception handling.
Doctors / Pharmacy	OPD, prescription, dispensing, inventory and expiry.
HR / Approvers	Employee master, attendance, leave, regularization and reporting.
Management	Dashboard, filters, drill-down and reports.
IT / Administrators	Users/roles, devices, servers, APIs, backup/restore, deployment, logs and source repository.

12.3. Mandatory Technical Handover

- a. Complete web application source code and mobile application source code developed under the project.
- b. Database schema, migration/DDI scripts and data dictionary.
- c. API source code and API documentation.
- d. Weighbridge integration service/source and device protocol/configuration documentation.
- e. GIS configuration/data-exchange documentation.
- f. Environment/configuration templates, deployment/build instructions and release versions.
- g. Git/version-controlled repository and final production branch/tag.
- h. Administrator credentials, cloud tenant/account, database/storage, domain/DNS/SSL, device/printer/camera/network credentials under controlled handover where applicable.
- i. User manuals, administrator manual, backup/restore guide, network diagram, IP plan and final as-built document.

SECTION-V.

INTEGRITY PACT DECLARATION OF FEES, COMMISSION AND BROKERAGE ETC. PAYABLE BY THE SUPPLIERS/CONTRACTORS/CONSULTANTS.

Contract Number: _____ Dated: Contract
Value: _____
Contract Title: _____

[Name of Supplier/Contractor/Consultant] 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 Supplier/Contractor/Consultant] 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 Procuring Agency (PA), except that which has been expressly declared pursuant hereto.

[Name of Supplier/Contractor/Consultant] certifies 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 Supplier/Contractor/Consultant] 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 right 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 Supplier/Contractor/Consultant] 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] [Supplier /Contractor/Consultant]

SPPRA



LAKHRA COAL MINING COMPANY PVT. LTD
ENERGY DEPARTMENT, GOVERNMENT OF SINDH



REQUEST FOR PROPOSAL (RFP)

FOR

PROCUREMENT OF SERVICES

DIGITAL TRANSFORMATION AND OPERATIONAL AUTOMATION

Financial Proposal

BIDDING DOCUMENT
September, 2026

SECTION-VI:

PRICE SCHEDULE IN PAK. RUPEES

Full and Final Price Including All Applicable Costs and Expenses

Sr#	Particulars	Total amount in PKR.
1	The quoted price shall constitute the full and final cost for the procurement and provision of services related to Digital Transformation and Operational Automation	

INSTRUCTIONS:

- The total price shall be inclusive of all applicable taxes, duties, levies, fees, and charges, as well as all direct and indirect costs associated with the successful completion and delivery of the required services, including but not limited to:
 - 1. Hardware and software
 - 2. Cabling and related accessories
 - 3. Loading and unloading
 - 4. Fuel and transportation
 - 5. Site visits and field visits
 - 6. Printing and documentation
 - 7. Lodging/accommodation
 - 8. Meals and food expenses
 - 9. Installation, configuration, testing, and commissioning
 - 10. Labour, manpower, and technical support
 - 11. Logistics and other operational expenses
 - 12. Any other incidental, administrative, or miscellaneous costs required for completion of the assignment
 - 13. No additional, hidden, or unforeseen costs shall be payable beyond the quoted amount. The quoted price shall be deemed to be all-inclusive and shall remain the full and final financial liability of the bidder for the scope of work specified.
 - 14. The Procuring Agency (PA) has right to increase / decrease quantities on any stage.
 - 15. The Bidding Firm offer Prices on (DDP) for complete job.
 - 16. Payment shall be made by SLCMC through corss cheaque in favor of qualified bidder three installments by submission of Deliverables in accordance with the terms set forth in the Draft Agreement with mutual consent of both qualified bidder and PA.
 - 17. Bidder will be required, besides submitting periodic reports and other documents as set forth in this Bidding Document and Draft Agreement, to submit the required deliverables of the Project.

Signature of Bidder
(Stamped with Name and Designation of Signed Person)

12.4. Financial Price Schedule – Summary

Ref.	Price Component	Amount (PKR)
i.	Module 01 Mine Survey, GIS & Field Verification Software / Services	
ii.	Module 02 Weighbridge Automation Software / Integration Services	
iii.	Module 03 Pharmacy & Medical Software	
iv.	Module 04 HR & Attendance Software / Biometric Integration	
v.	Module 05 Centralized Management Dashboard	
vi.	Module-wise Hardware Supply	
vii.	Networking, cabling, PoE, Wi-Fi, antenna/booster, connectivity and installation	
viii.	Local server configuration, backup and Stage-1 intranet synchronization	
ix.	Vendor-provided cloud compute/database/storage/backup + Stage-2 synchronization – initial 12 months	
x.	Annual cloud renewal after initial period (separately identified)	
xi.	Additional cloud storage/compute unit rates (for future expansion)	
xii.	Training, documentation, source-code/cloud-credential handover and go-live support	
xiii.	Warranty / Support Period included in bid	
	TOTAL BID PRICE	

Signature of Bidder
(Stamped with Name and Designation of Signed Person)

12.5. Hardware & Cloud Services Price Schedule

Sr#	Module	Item	Qty	Offered Make/Model	Unit Price (PKR)	Total Price (PKR)
1	Weighbridge	Primary Local Application / Database Machine	1			
2	Weighbridge	UPS for Primary Weighbridge Application Machine	1			
3	Weighbridge	Weighbridge / Gate Operational Desktop PC	2			
4	Weighbridge Survey /	Shared Rugged Android Tablet	6			
5	Weighbridge	Network / Wireless Thermal Token Printer	4			
6	Weighbridge	A4 Network Monochrome Laser Printer	2			
7	Weighbridge	Industrial USB-to-Serial Converter	2 (1 operational + 1 spare)			
8	Weighbridge	External Backup Drive	1			
9	Pharmacy	Primary Pharmacy / Medical Application Machine	1			
10	Pharmacy	UPS for Primary Pharmacy / Medical Application Machine	1			
11	Pharmacy	Medical / Pharmacy Client Workstation	2			
12	Pharmacy	A4 Network Monochrome Laser Printer	2			
13	Pharmacy	OPD / Queue Thermal Token Printer	2			
14	Pharmacy	External Backup Drive	1			
15	HR	Primary HR / Main Site Application Machine	1			
16	Common ICT	8-Port Gigabit Desktop LAN Switch	3			
17	Common ICT	4G/5G Internet Router / Signal Booster Kit	3			
18	Common ICT	CAT-6 LAN Cabling, Connectors & Minor Installation Accessories	1 Lot			
19	Common / Cloud	Vendor-Provided Cloud Hosting, Database, Storage, Backup, SSL/TLS & Synchronization Service	1 Lot - minimum 12 months			

Signature of Bidder
(Stamped with Name and Designation of Signed Person)

SECTION-VII:

SAMPLE FOMRS

FORM:01

Submission Bid Form

Date: _____
Tender No _____

To: *[name and address of Procuring Agency]*

Gentlemen and/or Ladies:

Having examined the bidding documents including all requirements, the receipt of which is hereby duly acknowledged, we, the undersigned, offer to provide the services as per requirements, *in conformity with the said bidding documents for the sum of [total bid amount in words and figures]* or such other sums as may be ascertained in accordance with the Schedule of Prices attached herewith and made part of this Bid.

We undertake, if our Bid is accepted, to deliver the services in accordance with the delivery schedule specified in the Schedule of Requirements.

If our Bid is accepted, we will obtain the guarantee of a bank in a sum equivalent to 2% percent of the Contract Price for the due performance of the Contract, in the form prescribed by the Procuring agency.

We agree to abide by this Bid for a period of *[number]* days from the date fixed for Bid opening as mentioned in 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 and your notification of award, shall constitute a binding Contract between us.

Commissions or gratuities, if any, paid or to be paid by us to agents relating to this Bid, and to contract execution if we are awarded the contract, are listed below:

Name and address of agent	Amount and Currency	Purpose of Commission
_____	_____	_____
_____	_____	_____
_____	_____	_____

(if none, state “none”)

We understand that you are not bound to accept the lowest or any bid you may receive. Dated this ___ day of ___ 20__.

[signature] [in the capacity of]

FORM:02**Price Schedule in Pak. Rupees**

Duly authorized to sign Bid for and on behalf of _____

Name of Bidder _____ Number _____ Page of _____

1	2	3	4	5	6	7
Item	Description	Country of origin	Quantity	Unit price DDP named place	Total DDP per item	Unit price of Delivered duty paid (DDP) including all services

Signature of Bidder _____

Note: In case of discrepancy between unit price and total, the unit price shall prevail.

FORM: 03

BID SECURITY FORM

Whereas [name of the Bidder] (hereinafter called “the Bidder”) has submitted its bid dated [date of submission of bid] for the supply of [name and/or description of the services] (hereinafter called “the Bid”).

KNOW ALL PEOPLE 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 unto [name of Procuring agency] (hereinafter called “the Procuring agency”) in the sum of for which payment well and truly to be made to the said Procuring agency, the Bank binds itself, its successors, and assigns by these presents. Sealed with the Common Seal of the said Bank this day of 20_____.

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, having been notified of the acceptance of its Bid by the Procuring agency during the period of bid validity:
 - i) fails or refuses to execute the Contract Form, if required; or
 - ii) fails or refuses to furnish the performance security, in accordance with the Instructions to Bidders;

we undertake to pay to the Procuring agency up to the above amount upon receipt of its first written demand, without the Procuring agency having to substantiate its demand, provided that in its demand the Procuring agency will note that the amount claimed by it is due to it, owing to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to and including ninety (90) days after the period of bid validity, and any demand in respect thereof should reach the Bank not later than the above date.

[signature of the bank]

FORM: 04

CONTRACT FORM

This Agreement is made on the ____ day of ____ 20 ____

between [name of Procuring Agency] of [country of Procuring agency] (hereinafter called “the Procuring agency”) of the one part and [name of Supplier] of [city and country of Supplier] (hereinafter called “the Supplier”) of the other part:

WHEREAS the Procuring agency invited bids for certain ancillary services, viz., [brief description of services] and has accepted a bid by the company for the software services in the sum of [contract price in words and figures] (hereinafter called “the Contract Price”).

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.

1. The following documents shall be deemed to form and be read and construed as part of this Agreement, viz.:
 - (a) the Bid Form and the Price Schedule submitted by the Bidder;
 - (b) the Schedule of Requirements;
 - (c) the Technical Specifications’
 - (d) the General Conditions of Contract;
 - (e) the Special Conditions of Contract; and
 - (f) the Procuring Agency’s Notification of Award.
2. In consideration of the payments to be made by the Procuring agency to the contractor as hereinafter mentioned, the Supplier hereby covenants with the Procuring agency to provide the services and to remedy defects therein in conformity in all respects with the provisions of the Contract
3. The Procuring agency hereby covenants to pay the contractor in consideration of the provision of the services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the contract at the times and in the manner prescribed by the contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with their respective laws the day and year first above written.

Signed, sealed, delivered by the (for the Procuring agency)

Signed, sealed, delivered by the (for the Supplier)

FORM:05

Performance Security Form

To: [name of Procuring agency]

WHEREAS [name of Supplier] (hereinafter called “the Supplier”) has undertaken, in pursuance of Contract No. [reference number of the contract] dated 20__ to supply [description of works and services] (hereinafter called “the Contract”).

AND WHEREAS it has been stipulated by you in the said Contract that the Supplier shall furnish you with a bank guarantee by a reputable bank for the sum specified therein as security for compliance with the Supplier’s performance obligations in accordance with the Contract.

AND WHEREAS we have agreed to give the Supplier a guarantee:

THEREFORE WE hereby affirm that we are Guarantors and responsible to you, on behalf of the Supplier, 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 Supplier to be in default under the Contract and without cavil or argument, any sum or sums 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 the day of 20 .

Signature and seal of the Guarantors

[name of bank or financial institution]

[address]

[date]

FORM:06

Bank Guarantee for Advance Payment

To: [name of Procuring agency] [name of Contract]
Gentlemen and/or Ladies:

In accordance with the payment provision included in the Special Conditions of Contract, which amends Clause 16 of the General Conditions of Contract to provide for advance payment, [name and address of Supplier] (hereinafter called “the Supplier”) shall deposit with the Procuring agency a bank guarantee to guarantee its proper and faithful performance under the said Clause of the Contract in an amount of [amount of guarantee in figures and words].

We, the [bank or financial institution], as instructed by the Supplier, agree unconditionally and irrevocably to guarantee as primary obligator and not as surety merely, the payment to the Procuring agency on its first demand without whatsoever right of objection on our part and without its first claim to the Supplier, in the amount not exceeding [amount of guarantee in figures and words].

We further agree that no change or addition to or other modification of the terms of the Contract to be performed thereunder or of any of the Contract documents which may be made between the Procuring agency and the Supplier, shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition, or modification.

This guarantee shall remain valid and in full effect from the date of the advance payment received by the Supplier under the Contract until [date].

Yours truly,

Signature and seal of the Guarantors

[name of bank or financial institution]

[address]

[date]