



TENDER DOCUMENT

**PROCUREMENT OF SOFTWARE FOR THE GEOLOGICAL MODELLING, MINE
PLANNING, OPTIMIZATION, & SCHEDULING SOFTWARE**



SAINDAK METALS LIMITED

MINISTRY OF ENERGY (PETROLEUM DIVISION), GOVERNMENT OF PAKISTAN

GUL BAGH STREET MAIN SMUNGLY ROAD, QUETTA

081-9201646, 081-9201084, www.saindak.com.pk

Saindak Metals Limited

Ministry of Energy (Petroleum Division), Government of Pakistan
Gul Bagh Street Main Smungly Road, Quetta
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1. Invitation to Bid

1.1. Rules to be followed

Public Procurement Rules 2004 will be strictly followed. These may be obtained from PPRA website <https://www.ppra.org.pk/>. In this document, unless otherwise mentioned to the contrary, "Rule" means a Rule under the Public Procurement Rules 2004.

1.2. Mode of Advertisement(s)

This tender is being placed online at PPRA's website, as well as being advertised in print media.

The tender document is available in the office of SAINDAK METALS LIMITED (SML), GUL BAGH STREET MAIN SMUNGPLY ROAD, QUETTA & the same may be obtained subject to the payment of cost of printing and provision of the document which is Rs. 1,000/-. Tender Document is also made available at www.saindak.com.pk and from the advertisements section and <https://www.ppra.org.pk/>.

The bidder can download the tender document online from Saindak Metals Limited's web site www.saindak.com.pk.

1.3. Type of Open Competitive Bidding

As per rules ibid, Single Stage - Two Envelope Bidding Procedure shall be followed. The said procedure is reproduced as follows:

- a) bid shall comprise a single package containing two separate envelopes. Each envelope shall contain separately the financial proposal and the technical proposal;
- b) envelopes shall be marked as —FINANCIAL PROPOSAL and —TECHNICAL PROPOSAL in bold and legible letters to avoid confusion;
- c) initially, only the envelope marked —TECHNICAL PROPOSAL shall be opened;
- d) envelope marked as —FINANCIAL PROPOSAL shall be retained in the custody of the Procuring Agency without being opened;
- e) Procuring Agency shall evaluate the technical proposal in a manner prescribed in advance, without reference to the price and reject any proposal which does not conform to the specified requirements
- f) no amendments in the technical proposal shall be permitted during the technical evaluation;
- g) financial proposals of technically qualified bids shall be opened publicly at a time, date and venue announced and communicated to the bidders in advance;
- h) financial proposal of bids found technically non-responsive shall be returned un-opened to the respective bidders; and
- i) bid found to be the lowest evaluated shall be accepted.

2. Bidding Details (Instructions to Bidders)

- 2.1. All bids must be accompanied by Bid Security (Earnest Money) as part of Financial bid and as per provisions of the clause "Bid Security" of this document in favor of "SAINDAK METALS LIMITED".
- 2.2. The complete bids as per required under this tender document must be delivered in the office of SAINDAK METALS LIMITED, GUL BAGH STREET MAIN SMUNGPLY ROAD, QUETTA, not later than 02:00 PM on last date of submission of bids i.e. **02-03- 2022**. Late bids shall not be considered.

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- 2.3. The Technical bids shall be publicly opened in the Committee Room of SAINDAK METALS LIMITED, GUL BAGH STREET MAIN SMUNGLY ROAD, QUETTA at **02:30 PM** on **02-03-2022**. In case the last date of bid submission falls in / within the official holidays / weekends of the Purchaser, the last date for submission of the bids shall be the next working day.
- 2.4. Queries of the Bidders (if any) for seeking clarifications regarding the scope of work, requirements, functional specifications and deliverables must be received in writing to the Chief Mining Engineer till 20-02- 2022. Any query received after said date may not be entertained. All queries shall be responded to within due time.
- 2.5. The bidder shall submit bids which comply with the Bidding Document. Alternative bids and options shall not be considered. The attention of bidders is drawn to the provisions of this tender document clause regarding **“Determination of Responsiveness of Bid”** and **“Rejection / Acceptance of the Tender”** for making their bids substantially responsive to the requirements of the Bidding Document.
- 2.6. It will be the responsibility of the Bidder that all factors have been investigated and considered while submitting the Bid and no claim whatsoever including those of financial adjustments to the contract awarded under this Bid Process will be entertained by the Purchaser. Neither any time schedule, nor financial adjustments arising thereof shall be permitted on account of failure by the Bidder.
- 2.7. It must be clearly understood that the Terms and Conditions and Specifications are intended to be strictly enforced. No escalation of cost except arising from increase in quantity by the Bidder on the demand and approval of the Purchaser will be permitted throughout the period of completion of the contract.
- 2.8. The Bidder should be fully and completely responsible for all the deliveries and deliverables to the Purchaser.
- 2.9. The Primary Contact & Secondary Contact for all correspondence in relation to this bid is as follows:

Primary Contact

Mr. Noor Ul Haque
Designation: Chief Mining Engineer
Email: noor_mining2005@yahoo.com
Phone: +92-332-4369197

Secondary Contact

Mr. Haji Muhammad Afzal
Designation: Purchase Officer
Email: smlpersonnalhr@gmail.com
Phone: +92-342-8051756

- 2.10. Bidders should note that during the period from the receipt of the bid and until further notice from the Primary Contact, all queries should be communicated via the Primary Contact and in writing or e-mail only. In the case of an urgent situation where the Primary Contact cannot be contacted, the bidder may alternatively direct their enquiries through the Secondary Contact.
- 2.11. Bidders are also required to state, in their proposals, the name, title, contact number (landline/mobile/fax) and e-mail address of the bidder's authorized representative through whom all communications shall be directed until the process has been completed or terminated.
- 2.12. The Purchaser will not be responsible for any costs or expenses incurred by bidders in connection with the preparation or delivery of bids.
- 2.13. Failure to supply required items/services within the specified time period will invoke penalty as specified in this document.

TERMS & CONDITIONS OF THE TENDER

3. Definition

In this document, unless there is anything repugnant in the subject or context:

- 3.1. "Authorized Representative" means any representative appointed, from time to time, by the Client, the Purchaser or the Contractor.
- 3.2. "Availability and Reliability" means the probability that a component shall be operationally ready to perform its function when called upon at any point in time.
- 3.3. "Bidder" means the interested (International or local) Firm/Company/Supplier/Distributors/Authorized Representative of International Company/Firm, that may provide or provides the Specialized I.T related services / software / specialized technical IT solution etc. and related services to any of the public/private sector organization under the contract and have registered for the relevant business thereof.
- 3.4. "Client / Purchaser" means the SAINDAK METALS LIMITED (SML) or any other person for the time being or from time to time duly appointed in writing by the Purchaser / Client to act as Purchaser / Client for the purposes of the Contract.
- 3.5. "Commencement Date of the Contract" means the date of signing of the Contract between the Purchaser / Client and the Contractor / Bidder.
- 3.6. "Contract" means the agreement entered into between the Purchaser and the Contractor, as recorded in the Contract Form / Agreement signed by the parties, including all Schedules and Attachments thereto and all documents incorporated by reference therein.
- 3.7. "Contractor / Vendor" means the Bidder whose bid has been accepted and awarded Letter of Intent for a specific item followed by the signing of Contract.
- 3.8. "Contract Price" means the price payable to the Contractor under the Contract for the full and proper performance of its contractual obligations.
- 3.9. "Contract Value" means that portion of the Contract Price adjusted to give effect to such additions or deductions as are provided for in the Contract which is properly apportion-able to the Goods or Services in question.
- 3.10. "Day" means calendar day.
- 3.11. "Force majeure" shall mean an event beyond the control of the Contractor and not involving the Contractor's fault or negligence and not foreseeable. Such event may include, but are not restricted to, acts of the Purchaser in its sovereign capacity, wars, revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.
- 3.12. "Goods" means software and related services which the Contractor is required to supply to the Purchaser under the Contract.
- 3.13. "Origin" means the place where the goods / software are produced or from where the services are provided. The origin of Goods and Services is distinct from the nationality of the Contractor.
- 3.14. "Person" includes individual, association of persons, firm, company, corporation, authorized representative of any international solution provider, institution and organization, etc., having legal capacity.
- 3.15. "Prescribed" means prescribed in the Tender Document.
- 3.16. "Services" means software solutions, installation, configuration, deployment, commissioning, testing, training, support, after sale service, etc. of final deliverables and other such obligations which the Contractor is required to provide to the Purchaser under the Contract.
- 3.17. "Software" means Geological Modeling and Mine Planning & Scheduling - end to end solution software package of international standard that is currently in use for said purposes in countries where mining activities are in advanced level. Contractor is required to supply complete solution including training to the Purchaser under the Contract. The software company should be member of Global Mining Guidelines group which allows standard open source file format so data can be transferred easily between different competitor software.

- 3.18. "Taking-Over Certificate" means the certificate to be issued by the Purchaser to the Contractor, in accordance with the Contract.
- 3.19. "Technical Score" is the score obtained by the bidder in evaluation of technical proposal.
- 3.20. "Works" means work to be done by the Contractor under the Contract.
- 3.21. "Eligible" is defined as any country or region that is allowed to do business in Pakistan by the law of Government of Pakistan.

4. Headings and Titles

- 4.1. In this document, headings and titles shall not be construed to be part thereof or be taken into consideration in the interpretation of the document and words importing the singular only shall also include the plural and vice versa where the context so requires.

5. Notice

- 5.1. In this document, unless otherwise specified, wherever provision is made for exchanging notice, certificate, order, consent, approval or instructions amongst the Contractor, the Purchaser and the Client, the same shall be:
- 5.1.1. in writing;
 - 5.1.2. issued within reasonable time;
 - 5.1.3. served by sending the same by courier or registered post to their principal office in Pakistan or such other address as they shall notify for the purpose; and
 - 5.1.4. The words "notify", "certify", "order", "consent", "approve", "instruct", shall be construed accordingly.

6. Tender Scope

- 6.1. Saindak Metals Limited (SML) intends to procure software for the Geological Modelling, Mine Planning and Optimization & Scheduling end-to-end solution Software with allied services. This software will be used simultaneously at Saindak Metals Limited office at Quetta and at a site located approximately 700 km away from Quetta office. The solution provider will have to provide the necessary maintenance services for one year and upgradation during that one year. TOR / High Level Scope of Work and requirements attached at Annex-"A"
- 6.2. The required end-to-end solution software will have all the modules including Geological modelling, 3D modelling, block modelling, advance resource estimation, mine planning, mine designing, pit optimization and mine-scheduling. The software solution should deliver efficiency and accuracy through ease-of-use, powerful 3D graphics and workflow automation that can be aligned to SML specific processes and data flows.
- 6.3. Software solution must address all the requirements of geologists, surveyors and mining engineers, business expert and flexible enough to be suitable for every mineral commodity, mining & geological operations.
- 6.4. The software providing firm, or its authorized representative must have proper training facilities (online or onsite).
- 6.5. The solution should allow to scale up and down easily as per business requirements evolve due to market changes or seasonal peaks.
- 6.6. The software should support in-built malware / ransom protection supporting the operating system.

7. Tender Eligibility/Qualification Criteria

- 7.1. Eligible Bidder is a Bidder who:
- 7.1.1. In case of company registered with Securities & Exchange Commission of Pakistan (SECP) under the Companies Ordinance 1984, in case of firm registered with Registrar of Firm under partnership rules and in case of Sole proprietor – valid registration with FBR;

- 7.1.2. Registered with FBR for Income Tax and must be on FBR's Active Taxpayers List.
- 7.1.3. In case of international bidder the bidder must be registered in its country as a Firm / Company etc and their local representative be registered in Pakistan.
- 7.1.4. The software provider must be member of GMG Group – where all major software and mining companies collaborate for standard open source file format.
- 7.1.5. Valid Authorization Certificate/document from the principal/manufacture for any 3rd Party Module, API, training authorization or service should available;
- 7.1.6. Firm's overall revenue must exceed Rs. 5 million in last three years (Bank Statement)
- 7.1.7. Submission of undertaking on stamp paper that the firm is not blacklisted by any of Provincial or Federal Government Department, Agency, Organization or autonomous body or Private Sector Organization anywhere in Pakistan;
- 7.1.8. Has submitted bid for complete software and related support and training expertise as per scope defined and relevant bid security against bid. Non-compliance of the same shall cause rejection of the bid;
- 7.1.9. Conforms to the clause of "Responsiveness of Bid" given herein this tender document;
- 7.1.10. Where applicable, Goods or Services can only be supplied / sourced / routed from "origin" in "eligible" member countries. "Eligible" is defined as any country or region that is allowed to do business in Pakistan by the law of Government of Pakistan. "Origin" shall be considered to be the place where the Software is produced or from which the Services are provided. Software is produced when, through designing, assembling of IT codes, manufacturing, processing or substantial and major assembling of components, a commercially recognized product results that is substantially different in basic characteristics or in purpose or utility from its components.

Note: *Verifiable documentary proof for all above requirements is a mandatory requirement, noncompliance will lead to disqualification.*

8. Tender Cost

The Bidder shall bear all costs / expenses associated with the preparation and submission of the Tender(s) and the Purchaser shall in no case be responsible / liable for those costs / expenses.

9. Examination of the Tender Document

- 9.1. The Bidder is expected to examine the Tender Document, including all instructions and terms and conditions.

10. Clarification of the Tender Document

- 10.1 Queries of the Bidders (if any) for seeking clarifications regarding the scope of work, requirements, functional specifications and deliverables must be received in writing to the Chief Mining Engineer till 20-02- 2022. Any query received after said date may not be entertained. All queries shall be responded to within due time.

11. Amendment of the Tender Document

- 11.1. The Purchaser may, at any time prior to the deadline for submission of the Tender, at its own initiative or in response to a clarification requested by the Bidder(s), amend the Tender Document, on any account, for any reason. All amendment(s) shall be part of the Tender Document and binding on the Bidder(s).
- 11.2. The Purchaser shall notify the amendment(s) in writing to the prospective Bidders as per ibid rules.
- 11.3. The Purchaser may, at its exclusive discretion, amend the Tender Document to extend the deadline for the submission of the Tender as per ibid rules.

12. Preparation / Submission of Tender

- 12.1. The Bidder is allowed to bid as per defined Tender Scope.
- 12.2. The Tender and all documents relating to the Tender, exchanged between the Bidder and the Purchaser, shall be in English. Any printed literature furnished by the Bidder in another language shall be accompanied by an English translation which shall govern for purposes of interpretation of the Tender.
- 12.3. The Tender shall be filed in / accompanied by the prescribed Forms, Annexes, Schedules, Charts, Drawings, Documents, Brochures, Literature, etc. which shall be typed, completely filled in, stamped and signed by the Bidder or his Authorized Representative. In case of copies, signed and stamped photocopies may be submitted. If volume of the bid contains various set(s) of documents the same must be properly numbered and tagged in binding shape.
- 12.4. The Tender shall be in two parts i.e. the Technical Proposal and the Financial Proposal. Each proposal shall be in two sets i.e. the original and the copy. In the event of any discrepancy between the original and the duplicate, the original shall govern.
- 12.5. Technical Proposal shall comprise the following, **without quoting the price:**
- 12.5.1. Technical Proposal Form (**Annex-“C”**)
 - 12.5.2. Covering letter duly signed and stamped by authorized representative and Authority letter (**Annex-“D”**)
 - 12.5.3. Undertaking (All terms & conditions and qualifications listed anywhere in this tender document have been satisfactorily vetted) (**Annex-“E”**).
 - 12.5.4. Where applicable, copy of a Valid Authorization Certificate / document from the principal / manufacturer for any 3rd Party Module, API or service should available;
 - 12.5.5. Where applicable, Evidence of eligibility of the Bidder and the Goods / Software Services.
 - 12.5.6. Where applicable, Evidence of conformity of the Goods / the Software Services to the Tender Document
 - 12.5.7. Undertaking and evidence that quoted software is genuine, new and updated, unaltered in any way, most recent / current edition, imported through proper channel and incorporate all recent improvements in design and technology.
 - 12.5.8. Detailed Technical Brochure / Literature
 - 12.5.9. List of all clients where software is implemented.
 - 12.5.10. Details of warranty and after sales service.
 - 12.5.11. Submission of undertaking on stamp paper that the firm is not blacklisted by any of Provincial or Federal Government Department, Agency, Organization or autonomous body or Private Sector Organization anywhere in Pakistan;
 - 12.5.12. Valid Registration Certificate for Income Tax & Sales Tax
 - 12.5.13. Profile of team that will implement the project with their relevant experience and education.
 - 12.5.14. Any other document required under mandatory eligibility and evaluation criteria.
- 12.6. The Financial Proposal shall comprise the following:
- 12.6.1. Financial Proposal Form (**Annex-“F”**)
 - 12.6.2. Financial Proposal (**Annex-“G”**)
 - 12.6.3. Bid Security, as per heading “Bid Security (Earnest Money) of this document (**Annex-“H”**)
- 12.7. The Bidder shall seal the Original Technical Proposal in an envelope duly marked as under:

ORIGINAL TECHNICAL PROPOSAL	
Tender Name:	
Tender Closing Date:	
Tender No.	
	SAINDAK METALS LIMITED, GUL BAGH STREET MAIN SMUNGLY ROAD, QUETTA
Name of Bidder:	

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Address of Bidder:	
Phone No. of Bidder:	

12.8. The Bidder shall seal the Duplicate Technical Tender in an envelope duly marked as under:

DUPLICATE TECHNICAL PROPOSAL	
Tender Name:	
Tender Closing Date:	
Tender No.	
	SAINDAK METALS LIMITED, GUL BAGH STREET MAIN SMUNGLY ROAD, QUETTA
Name of Bidder:	
Address of Bidder:	
Phone No. of Bidder:	

12.9. The Bidder shall follow the same process for the Financial Tender.

12.10. The Bidder shall again seal the sealed envelopes of Original Technical Proposal and the Original Financial Proposal in an outer envelope, duly marking the envelope as under:

ORIGINAL TENDER	
Tender Name:	
Tender Closing Date:	
Tender No.	
	SAINDAK METALS LIMITED, GUL BAGH STREET MAIN SMUNGLY ROAD, QUETTA
Name of Bidder:	
Address of Bidder:	
Phone No. of Bidder:	

12.11. The Bidder shall again seal the sealed envelopes of Duplicate Technical Proposal and the Duplicate Financial Proposal in an outer envelope, duly marking the envelope as under:

DUPLICATE TENDER	
Tender Name:	
Tender Closing Date:	
Tender No.	
	SAINDAK METALS LIMITED, GUL BAGH STREET MAIN SMUNGLY ROAD, QUETTA
Name of Bidder:	
Address of Bidder:	
Phone No. of Bidder:	

12.12. The Bidder shall enclose soft copies of the Technical Proposal, including all forms, annexures, schedules, documents, brochures, literature, etc., in the form of Microsoft office document, PDFs and scanned images along with the hard copies.

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- 12.13. This is made obligatory to affix authorized signatures with official seal on all original and duplicate (copies) documents, annexures, copies, certificates, brochures, literature, letters, forms and all relevant documents as part of the bids submitted by the Bidder.
- 12.14. The Tender shall be dropped at the prescribed address, not later than 02:00PM on last date of submission of bids. No late bid shall be accepted.

13. Tender Price

- 13.1. The quoted price shall be:
- 13.1.1. in PKR;
 - 13.1.2. inclusive of all taxes, duties, levies, insurance, freight, etc.;
 - 13.1.3. best / final / fixed and valid until completion of all obligations under the Contract i.e. not subject to variation / escalation;
 - 13.1.4. Including all charges up to the delivery point at the head office of **SAINDAK METALS LIMITED, GUL BAGH STREET MAIN SMUNGLY ROAD, QUETTA.**
- 13.2. If not specifically mentioned in the Tender(s), it shall be presumed that the quoted price is as per the above requirements.
- 13.3. Where no prices are entered against any item(s), the price of that item shall be deemed to be free of charge, and no separate payment shall be made for that item(s).
- 13.4. In case of locally supplied Software/Service, the price shall include already paid or payable on the components and raw materials used in the manufacture and assembly of the item. In case of Software /Services acquired from outside Pakistan, the price shall include all the relevant duties and taxes and shall be shown separately (if required by the Purchaser).

14. Bid Security (Earnest Money)

- 14.1. The Tenderer shall furnish the Bid Security (Earnest Money) of a sum equivalent to 2% of the total estimated price of the bid. All bids must be accompanied by Bid Security (Earnest Money) as part of Financial bid and as per provisions of the clause "Bid Security" of this document in favor of **"SAINDAK METALS LIMITED"** as part of financial bid envelope in the form of Bank Guarantee (of any A Rated international bank) / Demand Draft / Pay Order / Call Deposit Receipt and having a minimum validity period of one hundred and twenty (120) days from the last date for submission of the Tender or until furnishing of the Performance Security, whichever is later. Failing of providing the bid security will cause rejection of tender.
- 14.2. The Bid Security shall be forfeited by the Purchaser, on the occurrence of any / all of the following conditions:
- 14.2.1. If the Bidder withdraws the Tender during the period of the Tender validity specified by the Bidder on the Tender Form; or
 - 14.2.2. If the Bidder does not accept the corrections of his Total Tender Price; or
 - 14.2.3. If the Bidder, having been notified of the acceptance of the Tender by the Purchaser during the period of the Tender validity, fails or refuses to furnish the Performance Security, in accordance with the Tender Document.
- 14.3. The Bid security shall be returned to the technically unsuccessful Bidder with unopened/sealed financial bid while the unsuccessful bidders of financial bid opening procedure will be returned the Bid Security only after the award of the contract. The Bid Security shall be returned to the successful Bidder upon furnishing of the Performance Security.

15. Tender Validity

The Tender shall have a minimum validity of ninety (90) days from the last date for submission of the Tender. The Purchaser may solicit the Bidder's consent to an extension of the validity period of the Tender. The request and the response thereto shall be made in writing. If the Bidder agrees to extension of validity period of the

Tender, the validity period of the Bid Security shall also be suitably extended. The Bidder may refuse extension of validity period of the Tender, without forfeiting the Bid security.

16. Modification / Withdrawal of the Tender

- 16.1. The Bidder may, by written notice served on the Purchaser, modify or withdraw the Tender after submission of the Tender, prior to the deadline for submission of the Tender.
- 16.2. The Tender, withdrawn after the deadline for submission of the Tender and prior to the expiration of the period of the Tender validity, shall result in forfeiture of the Bid Security.

17. Opening of the Tender

- 17.1. Tenders (Technical Bids) shall be opened at 02:30 PM on the last date of submission of bids i.e. **02-03-2022**, in the presence of the Bidder(s) for which they shall ensure their presence without further invitation, as per provision of ibid rules. In case the last date of bid submission falls in / within the official holidays / weekends of the Purchaser, the last date for submission of the bids shall be the next working day.
- 17.2. The Bidder's name, modifications, withdrawal, security, attendance of the Bidder and such other details as the Purchaser may, at its exclusive discretion, consider appropriate, shall be announced and recorded.
- 17.3. No Bidder or its representative will be allowed to keep any digital device (camera, audio recorder, cell phone etc.) during tender opening meeting at given time and location.

18. Clarification of the Bid

The Purchaser shall have the right, at his exclusive discretion, to require, in writing, further information or clarification of the Tender, from any or all the Bidder(s). No change in the price or substance of the Tender shall be sought, offered or permitted except as required to confirm the corrections of arithmetical errors discovered in the Tender. Acceptance of any such correction is sole discretion of the purchaser.

19. Determination of Responsiveness of the Bid (Tender)

- 19.1. The Purchaser shall determine the substantial responsiveness of the Tender to the Tender Document, prior to the Tender evaluation, on the basis of the contents of the Tender itself without recourse to extrinsic evidence. A substantially responsive Tender is one which:
 - 19.1.1. meets the eligibility criteria given herein this tender document/ the Goods / the software / the Services;
 - 19.1.2. meets the Technical Specifications for the Goods / the software / the Services;
 - 19.1.3. meets the delivery period / point for the Goods / the software / the Services;
 - 19.1.4. in compliance with the rate and limit of liquidated damages;
 - 19.1.5. offers fixed price quotations for the Goods / the software / the Services, whereby no optional offer / bid or price is allowed;
 - 19.1.6. is accompanied by the required Bid Security as part of financial bid envelope;
 - 19.1.7. The original receipt of tender fee submitted, attached with technical bid envelope;
 - 19.1.8. In compliance with the Preparation/Submission of Tender in a manner prescribed in this tender document;
 - 19.1.9. Conforms to all terms and conditions of the Tender Document, without material deviation or reservation.
 - 19.1.10. A material deviation or reservation is one which affects the scope, quality or performance of the Services / the software / Goods or limits the Purchaser's rights or the Bidder's obligations under the Contract.
 - 19.1.11. The Tender determined as not substantially responsive shall not subsequently be made responsive by the Bidder by correction or withdrawal of the material deviation or reservation.

20. Correction of errors / Amendment of Tender

- 20.1. The Tender shall be checked for any arithmetic errors which shall be rectified, as follows:
- 20.1.1. if there is a discrepancy between the amount in figures and the amount in words for the Total Tender Price entered in the Tender Form, the amount which tallies with the Total Tender Price entered in the Price Schedule, shall govern.
 - 20.1.2. if there is a discrepancy between the unit rate and the total price entered in the price Schedule, resulting from incorrect multiplication of the unit rate by the quantity, the unit rate as quoted shall govern and the total price shall be corrected, unless there is an obvious and gross misplacement of the decimal point in the unit rate, in which case the total price as quoted shall govern and the unit rate shall be corrected.
 - 20.1.3. if there is a discrepancy in the actual sum of the itemized total prices and the total tender price quoted in the Price Schedule, the actual sum of the itemized total prices shall govern.
- 20.2. The Tender price as determined after arithmetic corrections shall be termed as the Corrected Total Tender Price which shall be binding upon the Bidder.
- 20.3. Adjustment shall be based on corrected Tender Prices. The price determined after making such adjustments shall be termed as Evaluated Total Tender Price.
- 20.4. No credit shall be given for offering delivery period earlier than the specified period.

21. Evaluation Criteria

- 21.1. Technical Proposal will be evaluated on the basis of Bidder's understanding of TOR / scope of work, main software provider, and presentation of the proposed system, proposed methodology and work plan and experience of key personnel. Proper training facilities to the engineers and staff of Saindak Metals Limited and training procedure must be the part of the bid.
- 21.2. Only those bidders whose Technical Proposal score will be in accordance with Section 22.4 shall qualify for further consideration and shall be ranked from highest to lowest on the basis of their Technical Score (TS). Financial Bid Shall not be opened in such case where Technical Score is not in accordance with Section 22.4.
- 21.3. SML will use "Quality and Cost Based Selection Method" under "Single Stage Two Envelope Methods" of selection of bidder for software solutions. Criteria for Technical and Financial Evaluation are enclosed. Scores will be allocated based on evidence available in the proposal only. The tender will be awarded to the firm with the highest total score based on the following weight ratios:
- 80% for Technical Score (TS)
 - 20% for Financial Score (FS)

22. Technical Proposal Evaluation Criteria

- 22.1. The bids will be evaluated in two steps. The first step would ensure that mandatory requirements are met as listed in **Clause 07** of this document and then firms confirming to the project scope as listed in **Clause-6** of this document, would be evaluated as per the technical evaluation criteria given in Annexure-B. In the second step financial proposals of only those firms which meet the requirements of first step will be evaluated.
- 22.2. The bids will be evaluated in a manner prescribed given below and in Clause 6, 7, 12 and 19 of this documents, without reference to the price and reject any proposal which does not confirm to the specified requirements as listed in such sections. The bids that do not confirm to the mandatory requirements as per **Clause 7, 12 and 19** of this document shall be rejected and not evaluated technically.
- 22.3. The Bidders who have duly complied with the Eligibility/Qualification and Evaluation Criteria will be eligible for further processing.

- 22.4. The post-qualification status shall be determined on the Point Scoring criteria. In order to qualify, the bidder must obtain overall score greater than or equal to **70% of the marks** and at least **50% of the marks** in each category as mentioned in the Evaluation Criteria.
- 22.5. A technically eligible bid, based on conditions listed in this document and Point Scoring Criteria as described in Section 21.4 will be accepted and their financial bids will be opened.
- 22.6. The Bids which do not conform to the Technical Specifications or Bid conditions or the Bids from the Bidders without adequate capabilities for supply and maintenance / warranty services will be rejected.
- 22.7. Verifiable documentary proof for all the following requirements and criteria points are required and marks will be awarded on the basis of these verifiable proofs.
- 22.8. The result of the technical evaluation will be announced at least five (05) day before the opening of financial bids. Said five days' time will be given for the grievance regarding technical qualification / disqualification of the bidders. However, after lapse of given time between the declaration of technical evaluation report and opening of the financial, no grievance petition would be entertained concerning the technical qualification / disqualification of the bidder. The objection after the opening of the financial bid would remain restricted to the financial bid only.
- 22.9. The weightage as provided below shall be given while evaluating the Technical Bids of prospective bidder:

22.9.1. Technical Bid Evaluation Criteria

Sr. No.	Criteria	Maximum Marks																																																												
TECHNICAL EVALUATION OF CAPABILITY OF SOFTWARE (Max 30 Marks)																																																														
1	Geology, Mining Planning & Designing Software (10 Marks)	30																																																												
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20.	Generate pit designs with varying berms and benches configuration and slope angles based on block model ;	3
21.	Triangulate the designs into a valid surface for reserves reporting;	3
22.	Report the pit design bench by bench against the block model;	2
23.	Support both spring data and triangle data.	3
24.	Any additional important feature	5
Total		65
A=Total marks out of 10 = (Obtained Marks / 65) x 10		
Mine / Pit Optimization Software (10 marks)		
Sr.	Criteria	Marks
1.	Optimization with a block from any GMP (geological mine planning package);	5
2.	Ability to optimize multiple pits;	4
3.	Generate multiple shells with varying revenue factors;	3
4.	Create pit shells using a predefined mining direction;	3
5.	Generate shells with practical mining with considerations;	3
6.	Ability to generate pit shells using user-defined expressions for block value calculations;	3
7.	Simultaneous optimization of cut-off grades, material re-handling /stockpile and capital optimization;	3
8.	Export results out as spreadsheets;	2
9.	Ability to generate optimum stope shapes for a range of underground mining methods;	2
10.	Ability to produces stope inventories from block models that spatially represent the location of mineralization;	3
11.	Ability to provides stope shapes that maximizes recovered resource value above cutoff grade or value;	2
12.	Allows for practical mining parameters such as minimum and maximum mining width, anticipated wall dilutions, minimum and maximum wall angles and other factors;	2
13.	Ability to design the minimum amount of rock to be mined to extract the maximum cut-off grade to meet profitability requirements;	3
14.	Ability to design the size and shape of stopes and proximity to other stopes so as not to cause rock stability issues that could result in a cavein; safety;	3
15.	Ability to automate the stope optimization solver so more time is available to analyze scenarios and complete designs in a shorter time frame;	3
16.	Ability to perform stope slicing;	2
17.	Ability to allow block model to be selected on-the-fly;	2
18.	Ability to add sequence number metadata for stope slicing;	2
19.	Ability to integrate with scheduling tools when slicing mining shapes for rings;	2
20.	Ability to identify preferred development strategy, capital investment, expected NPV and optimal extraction sequences;	3
21.	Support for both string data and triangle data.	2
Total		57
B=Total marks out of 10 = (Obtained Marks / 57) x 10		
Mine Scheduling Software (10 marks)		
1.	Create a multiple scenarios schedule	3
2.	Ability to generate a high level (life of mine) schedule;	4

Saindak Metals Limited

3.	Ability to generate a tactical (short term) schedule with defined activities (drilling, charging, basting);	3
4.	Managing fleet as individual machines or as a group;	3
5.	Create a schedule with a production ramp up;	3
6.	Adding the process plant in the schedule, if applicable;	2
7.	Creating a production schedule with a set target on the plant;	3
8.	Use the planned maintenance schedule in the calendar;	2
9.	Incorporate the holidays in the scheduling calendar;	2
10.	Create the schedule that has haulage network considerations for truck fleet calculations;	3
11.	Reporting the result in different time bands (daily, weekly, monthly, yearly or a combination);	2
12.	Reporting the schedule results as charts and Microsoft Excel compatible format;	2
13.	Reporting the results in animation format to check whether the mining logic is adhered to;	2
14.	Animating the ancillary activities; drilling, backfilling etc.;	3
15.	Sharing graphical results as lines, surfaces and solids;	2
16.	Sharing the result of schedule into a database;	2
17.	Sharing the result into project management space;;	2
18.	Ability to schedule long and short-term underground development that aligns with sub-level caving production schedules;	4
19.	Ability to reduce short-term tactical schedules from ring designs;	3
20.	Ability to import and refresh multiple underground headings for more productive schedule design;	2
21.	Ability to import haulage designs that fully integrated with the mine planning software used, ensuring they can be easily updated based on the latest design and roadway velocity information;	3
22.	Ability to see the path every block takes during the life of the schedule to validate that the schedule is practical to implement;	2
23.	Ability to allow users to define truck and Retarding data rather than manually assigning full and empty velocities to all haulage roads;	3
24.	Ability to set a global speed limit for open pit operations ensures that the haulage results are realistic, and removes the need to make special modifications to truck tables	3
25.	Ability to detect when changes are made to block model and refresh the schedule automatically;	3
26.	Support for both string data and triangle data.	2
Total		68
C=Total marks out of 10 = (Obtained Marks / 68) x 10		
Total Marks of this section = A+B+C		

Saindak Metals Limited

EXPERIENCE OF SOFTWARE COMPANY (Max 30 Marks)			
	Experience of Geological Modelling, Mine Planning, Optimization and Mine Scheduling end-to-end software solution Development and Deployment History	<p>Development and Deployment of Geological Modelling, Mine Planning, Optimization and Mine Scheduling end-to-end software solution in major mining projects internationally</p> <ul style="list-style-type: none"> • Less than 10 project: 0 Marks • 11-20 projects: 05 Marks • 11-30 projects: 10 Marks • More than 30 projects: 15 Marks <p>Experience of Pakistan in supply of Geological Modelling, Mine Planning, Optimization or Mine Scheduling end-to-end software solution</p> <ul style="list-style-type: none"> • 05 marks <p>Experience in providing successful training on Geological Modelling, Mine Planning, Optimization or Mine Scheduling software (national/international):</p> <ul style="list-style-type: none"> • 1-3 trainings: 03 marks • 3-6 trainings: 06 marks • More than 06 trainings: 10 marks 	30
EXPERIENCE OF LOCAL AGENT / REPRESENTATIVE (Max 10Marks)			
3	Experience of bidding / local representative	<p>General Experience in mineral sector in Private and Public Sector Organizations.</p> <ul style="list-style-type: none"> • 1-3 projects: 01 • 3-6 projects: 03 • More than 6 projects: 5 <p>Experience in providing software solutions/consultancy services in Geological Modelling, Mine Planning, Mine Design, Optimization or Mine Scheduling for mining projects in Pakistan</p> <ul style="list-style-type: none"> • 1-3 projects: 01 • 3-6 projects: 03 • More than 6 projects: 05 	10
STAFF ASSIGNED TO THE PROJECT (IMPLEMENTATION, SUPPORT, MAINTENANCE & TRAINING) (Max 15 Marks)			
	Organization Human Resource Team Developed for the execution of the Project	<p>Human Resource - 3 marks for each person with relevant degree with marks division as under:</p> <p>01 for Education (00 marks for BS - 01 marks for above)</p> <p>02 marks for experience (01 marks for 3 to 5 years - 02 marks for above 5 years)</p> <p>i. Project Manager – Mining Expert</p>	15

		ii. Geology Expert iii. Web & Network Engineering iv. Database Development v. Financial Expert	
COMPUTER LABS AND TRAINING FACILITIES (Max 5 Marks)			
	<ul style="list-style-type: none"> • Availability of computer training and technical training facilities for qualified engineers with functional in house computer lab. • To conduct the training sessions for mining sector firms. • Valid software training authorization from the international software provider. 		5
PROJECT PRESENTATION/DOCUMENTATION (Max 10 Marks) (Adequacy of the proposed work plan and methodology points responding to Terms of Reference and High-Level Scope of Work)			
	<ul style="list-style-type: none"> • Project Presentation/Documentation – Compliance to TOR and High Level Scope of Work (03 Marks) • Strength of Technical Presentation & Understanding of Scope (02 Marks) • Software Solution Implementation Plan (02 Marks) • Detailed Training Plan (02 Marks) • Support & Maintenance (01 Mark) 		10

Note: Minimum 70% marks overall and 50% marks in each category are required in Technical Bid for further consideration. The score given by the Evaluation Committee of Department shall be final and binding on all the bidders. Verifiable documentary proof of all above requirements and criteria points are mandatory requirement and marks will be awarded on the basis of these verifiable proofs. Keeping in view the availability of time, the vendors may also be asked to provide the technical presentation of their software.

23. Financial Proposal Evaluation Criteria

23.1. Technically qualified/successful Bidder(s) shall be called for opening of the Financial Proposal(s). The Financial Proposals will be opened in the presence of the Bidders at the time and venue indicated by the Purchaser accordingly. The technically Eligible/Successful Bidder(s) or their authorized representatives shall be allowed to take part in the Financial Proposal(s) opening.

23.2. The formula for determining the financial scores is as follows:

$$FS = 100 \times F_m / F$$

Where, FS is the Financial Score; F_m is the Lowest Price and F the Price of the Proposal under consideration.

The weights given to the Technical (T) and Financial Proposals (F) are:

$$T = 0.80 \text{ and } F = 0.20$$

23.3. The Price evaluation will include all duties, taxes and expenses etc. In case of any exemption of duties and taxes made by the Government in favor of the Purchaser, the contractor shall be bound to adjust the same in the Financial Proposal.

23.3.1. In cases of discrepancy between the cost/price quoted in Words and in Figures, the lower of the two will be considered.

- 23.3.2. In evaluation of the price of an imported item, the price will be determined and considered inclusive of the customs and other import duties etc.;
- 23.3.3. In evaluation of the price of articles/goods/services which are subject to excise duty, sales tax, income tax or any other tax or duty levied by the Government, the price will be determined and considered inclusive of such duties and taxes.
- 23.4. The Purchaser will not be responsible for any erroneous calculation of taxes and all differences arising out as above shall be fully borne by the Successful Bidder.
- 23.5. All payments shall be subject to any and all taxes, duties and levies applicable under the laws of Pakistan for the whole period starting from issuance of Letter of Intent (LOI) till termination of the signed contract in this regard.

24. Rejection / Acceptance of the Bid

- 24.1. The Purchaser shall have the right, at his exclusive discretion, to increase/decrease the number of services required within the scope of work and services requested without any change in unit prices or other terms and conditions at the time of order placement. Procuring Agencies shall announce and upload on Authority's web the results of bid evaluation in the form of a report and reasons for non-acceptance of all other bids or rejection of each bid at least ten days prior to the award of procurement contract. Provided that a copy of the evaluation report shall be provided to any bidder who may request for the same.
- 24.2. The Tender shall be rejected if it is:
- 24.2.1. substantially non-responsive in a manner prescribed in this tender document clause-19; or
 - 24.2.2. submitted in other than prescribed forms, annexes, schedules, documents / by other than specified mode; or
 - 24.2.3. incomplete, partial, conditional, alternative, late; or
 - 24.2.4. subjected to interlineations / cuttings / corrections / erasures / overwriting; or
 - 24.2.5. the Bidder refuses to accept the corrected Total Tender Price; or
 - 24.2.6. the Bidder has conflict of interest with the Purchaser; or
 - 24.2.7. the Bidder tries to influence the Tender evaluation / Contract award; or
 - 24.2.8. the Bidder engages in corrupt or fraudulent practices in competing for the Contract award;
 - 24.2.9. the Bidder fails to meet all the requirements of Tender Eligibility / Qualification Criteria (Clause-7);
 - 24.2.10. the Bidder fails to meet the evaluation criteria requirements (clause-21);
 - 24.2.11. the Bidder has been blacklisted by any public or private sector organization;
 - 24.2.12. the Bidder has been served any legal notices or displeasure letters by any public sector organization on serious failures to provide satisfactory services;
 - 24.2.13. The Bidder has mentioned any financial implication(s) in the financial proposal that is in contradiction to this document and Government rules and regulations.
 - 24.2.14. There is any discrepancy between bidding documents and bidder's proposal i.e. any non-conformity or inconsistency or informality or irregularity in the submitted bid.
 - 24.2.15. The Bidder submits any financial conditions as part of its bid which are not in conformity with tender document.
 - 24.2.16. Non-submission of verifiable proofs against the mandatory as well as general documentary, qualification and eligibility related requirements.
 - 24.2.17. If the rates quoted by vender are not workable or on higher side etc.

25. Award Criteria

- 25.1. At first step, eligible Bidder(s) as per clause-7 (Tender Eligibility) of this tender document fulfilling the qualification and technical evaluation criteria will stand technically qualified.
- 25.2. At second step, technically qualified and successful Bidder(s) will be evaluated in the light of all Pre-Conditions, necessary requisites and shall be selected on the basis of formula mentioned in clause 22.2 of this document as per rules and fulfilling all codal formalities.

26. Announcement of Evaluation Report

26.1. Procuring Agencies shall under rule ibid announce and upload on Authority's web the results of bid evaluation in the form of a report giving justification for acceptance of lowest evaluated bid, and reasons for non-acceptance of all other bids or rejection of each bid at least ten days prior to the award of procurement contract.

27. Performance Security

27.1. The successful Bidder/The Contractor, shall furnish Performance Security in the form of pay order or demand draft or bank guarantee or performance bond issued by insurance company of at least AA rating, provided that:

27.1.1. the amount will be 5% of contract price.

27.1.2. denominated in PKR;

27.1.3. Have a minimum validity period until the date of expiry of support period or termination of services, or fulfillment of all obligations under the contract, whichever is later. Performance security shall not be acceptable with any validity less than the prescribed time period.

27.2. The Performance Security shall be payable to the Purchaser, on occurrence of any / all the following conditions:

27.2.1. If the Contractor commits a default under the Contract;

27.2.2. If the Contractor fails to fulfill the obligations under the Contract;

27.2.3. If the Contractor violates any of the terms and conditions of the Contract.

27.3. The Contractor shall cause the validity period of the performance security to be extended for such period(s) as the contract performance may be extended. The Performance Security shall be returned to the Bidder within thirty working days after the expiry of its validity on written request from the Contractor.

28. Redressal of grievances by the procuring agency

28.1. The Purchaser has constituted a committee comprising of odd number of persons, with proper powers and authorizations, to address the complaints of bidders that may occur prior to the entry into force of the procurement contract.

28.2. Any bidder feeling aggrieved by any act of the Purchaser after the submission of his bid may lodge a written complaint concerning his grievances not later than ten days after the announcement of the bid evaluation report.

28.3. The committee shall investigate and decide upon the complaint within fifteen days of the receipt of the complaint.

28.4. Mere fact of lodging of a complaint shall not warrant suspension of the procurement process.

28.5. Any bidder not satisfied with the decision of the committee of the Purchaser may lodge an appeal in the relevant court of jurisdiction.

29. Contract

29.1. The Purchaser shall, after receipt of the Performance Security from the successful Bidder, send the Contract Agreement duly vetted as per general terms and conditions. Within three working days of the receipt of such Contract, the Bidder shall sign and date the Contract and return it to the Purchaser.

30. Commencement of Assignment

30.1. The selected bidder shall commence the work within 30 (thirty) days of contract or such other date as may be mutually agreed.

ANNEX – “A”

HIGH LEVEL SCOPE OF WORK AND REQUIREMENTS / TERMS OF REFERENCES **(TORS)**

- a) Saindak Metals Limited (SML) intends to hire the services of mining solutions’ provider for procurement of hardware and software for the Geological Modelling Mine Planning and Optimization & Scheduling end-to-end solution Software with allied services. This software will be used at Saindak Metals Limited office at Quetta and also at site that is 700 km away from headquarter. The solution provider will have to provide the necessary maintenance services for one year and upgradation during that one year.
- b) The required end-to-end solution software will have all the modules including Geological modelling, 3D modelling, block modelling, advance resource estimation, mine planning, mine designing, pit optimization and mine-scheduling. The software solution should deliver efficiency and accuracy through ease-of-use, powerful 3D graphics and workflow automation that can be aligned to SML specific processes and data flows.
- c) Software solution must address all the requirements of geologists, surveyors and mining engineers, business expert and flexible enough to be suitable for every mineral commodity, mining & geological operations. Its multilingual capabilities allow global companies to support a common solution across their operations.
- d) The solution should allow to scale up and down easily as per business requirements evolve due to market changes or seasonal peaks.
- e) The software should support in-built malware / ransom protection supporting the operating system.
- f) System should also support the low connectivity environment / network issues.

1. Geology ,Mining Planning & Designing Software – that may include

- 1.1. Borehole Database & Cross Sectioning;
- 1.2. Geo-statistics;
- 1.3. Surface Modelling, Solids Modelling, Block Modelling;
- 1.4. Plotting of plans;
- 1.5. Structural modelling of joints / fault data;
- 1.6. Ability to extract and visualize orientations directly from drill holes, points and block models;
- 1.7. Ability to do analysis of surface gradients;
- 1.8. Ability to analysis of structural trends;
- 1.9. Ability to rapidly analyze structures;
- 1.10. Ability to digitize structural planes;
- 1.11. Ability selectively display structural information;
- 1.12. Ability to display custom geological mapping symbols;
- 1.13. Ability to export structural information to third party tools;
- 1.14. Point cloud data (import, visualization and manipulation);
- 1.15. Survey database;
- 1.16. Generate ramps of varying widths and bench height;
- 1.17. Create ramp switch backs with a defined turning radius;
- 1.18. Auto-expansion of pits for quick analysis using the pit shell boundaries;
- 1.19. Generate pit designs with varying berms and benches configuration and slope angles based on block model ;
- 1.20. Triangulate the designs into a valid surface for reserves reporting;
- 1.21. Report the pit design bench by bench against the block model;
- 1.22. Support both spring data and triangle data.

2. Mine / Pit Optimization Software – that may include:

- 2.1. Optimization with a block from any GMP (geological mine planning package);
- 2.2. Ability to optimize multiple pits;
- 2.3. Generate multiple shells with varying revenue factors;
- 2.4. Create pit shells using a predefined mining direction;
- 2.5. Generate shells with practical mining with considerations;;
- 2.6. Ability to generate pit shells using user-defined expressions for block value calculations;
- 2.7. Simultaneous optimization of cut-off grades ,material re-handling /stockpile and capital optimization;
- 2.8. Export results out as spreadsheets;
- 2.9. Ability to generate optimum stope shapes for a range of underground mining methods;
- 2.10. Ability to produces stope inventories from block models that spatially represent the location of ,mineralization;
- 2.11. Ability to provides stope shapes that maximizes recovered resource value above cutoff grade or value;
- 2.12. Allows for practical mining parameters such as minimum and maximum mining width, anticipated wall dilutions, minimum and maximum wall angles and other factors;
- 2.13. Ability to design the minimum amount of rock to be mined to extract the maximum cut-off grade to meet profitability requirements;
- 2.14. Ability to design the size and shape of stopes and proximity to other stopes so as not to cause rock stability issues that could result in a cavein; safety;
- 2.15. Ability to automation the stope optimization solver so more time is available to analyze scenarios and complete designs in a shorter time frame;
- 2.16. Ability to perform stope slicing;
- 2.17. Ability to allow block model to be selected on-the-fly;
- 2.18. Ability to add sequence number metadata for stope slicing;
- 2.19. Ability to integrate with scheduling tools when slicing mining shapes for rings;
- 2.20. Ability to identify preferred development strategy, capital investment, expected NPV and optimal extraction sequences;
- 2.21. Support for both string data and triangle data.

3. Mine Scheduling Software – that may include:

- 3.1. Create a multiple scenarios schedule
- 3.2. Ability to generate a high level (life of mine) schedule;
- 3.3. Ability to generate a tactical (short term) schedule with defined activities (drilling, charging, basting);
- 3.4. Managing fleet as individual machines or as a group;
- 3.5. Create a schedule with a production ramp up;
- 3.6. Adding the process plant in the schedule, if applicable;
- 3.7. Creating a production schedule with a set target on the plant;
- 3.8. Use the planned maintenance schedule in the calendar;
- 3.9. Incorporate the holidays in the scheduling calendar;
- 3.10. Create the schedule that has haulage network considerations for truck fleet calculations;
- 3.11. Reporting the result in different time bands (daily, weekly, monthly, yearly or a combination);
- 3.12. Reporting the schedule results as charts and Microsoft Excel compatible format;
- 3.13. Reporting the results in animation format to check whether the mining logic is adhered to;
- 3.14. Animating the ancillary activities; drilling, backfilling etc.;
- 3.15. Sharing graphical results as lines , surfaces and solids;
- 3.16. Sharing the result of schedule into a database;
- 3.17. Sharing the result into project management space;;

- 3.18. Ability to schedule long and short-term underground development that aligns with sub-level caving production schedules;
- 3.19. Ability to reduce short-term tactical schedules from ring designs;
- 3.20. Ability to import and refresh multiple underground headings for more productive schedule design;
- 3.21. Ability to import haulage designs that fully integrated with the mine planning software used , ensuring they can be easily updated based on the latest design and roadway velocity information;
- 3.22. Ability to see the path every block takes during the life of the schedule to validate that the schedule is practical to implement;
- 3.23. Ability to allow users to define truck and Retarding data rather than manually assigning full and empty velocities to all haulage roads;
- 3.24. Ability to set a global speed limit for open pit operations ensures that the haulage results are realistic , and removes the need to make special modifications to truck tables
- 3.25. Ability to detect when changes are made to block model and refresh the schedule automatically;
- 3.26. Support for both string data and triangle data.

The above-mentioned requirements may be for quality software. Any better facilities offer will be an added advantage for the bidder.

- 3.27. The architecture of the developed applications / module in the project shall be modular, extensible and portable.
- 3.28. The solution should support all the major web browsers e.g. Google Chrome, Firefox, Internet Explorer etc.
- 3.29. The application should be developed in a centralized architecture with large number of concurrent users handling.
- 3.30. The developed applications / modules should have a high degree of cohesion such that each module deals with a separate task. Modules should not be highly dependent on other modules such that changes in a related module necessitate major changes in the main module.
- 3.31. Complete Technical documentation of modules that will be integrated with each other will be required.
- 3.32. Developed applications / modules should be upgradeable, configurable and easily maintainable.
- 3.33. Developed applications / modules should be tested in all aspects before its deployment on the production.

4. Web Application Security

- a) The applications / module must have standard security features inbuilt so that the applications / module has all the checks and balances to ensure integrity of data and the applications / module does not have any flaws or bugs which inadvertently or by design, permit the users to tamper, alter or modify any data without the appropriate permissions. The Contractor should ensure the confidentiality, integrity and availability of data. At the same time, the Contractor should ensure that the system is not vulnerable to threats such as unauthorized modification/ alteration, repudiation of origin, denial of receipt, delay and denial of service.
- b) The applications / module should provide highest degree of security in the architecture. However, the proposed architecture of applications / module applications in the project must address the following security considerations:
- c) There will be role based authentication and can be implemented at each level for different stakeholders where it is required. There must be different levels of security and privileges according to the use, department and authority of a user.
- d) For highly sensitive information, for instance right of modifying an existing entry over the Intranet / Internet, the system provision for the use of Intranet / Internet security certificates in web browsers must be explored.

- e) In order to protect sensitive data on the network, the system must use encrypted connections for all network traffic.
- f) The system must include mechanisms for ensuring integrity of sensitive data by digital checksums and audit trails.
- g) The system must be designed to maintain persistent and retrievable versions of all data entered in the system.
- h) Ability of the system to detect any manual tampering of the data at DB level by someone with systems level access
- i) Ability of the system to detect any tampering with log files.
- j) Security Protocols should clearly be mentioned in the User Manual.
- k) Logging of all activities in database with complete audit trails / timestamp etc.
- l) Field level encryption may be provided, if deems appropriate, in the database for storage as well as in the communication.
- m) The applications / module application in the project must ensure persistence of records and log updates to track changes in the system; the system must ensure that no record is ever deleted, while changes to the database must always be traced back to an authorized person.
- n) Secure online transactions are required; the digital signature mechanism (or any other security mechanism for secure online communication) for the secure communication and making the financial transactions etc
- o) Once the data has been entered, no one can modify the original entry; digital checksum or message digest mechanism or other appropriate for the purpose should be used for data authentication.

5. Customization

Since the operational users can increase therefore expansion of the systems should be seamless. The System should be flexible and modular, changeable as per requirements since applications / module used in the project shall be operational in complete organization. The applications / module used in applications / module applications in this system shall be operated in English language. The report formats will be provided during the analysis phase of applications / module used in the project. The customized updates patches of the product can be integrated in the system during the maintenance phase.

6. Training

Proper training must be a part of the proposed system. The software supplier firm / company must manage the training of human resources within Pakistan or online subject to COVID restrictions. Also will provide the training manuals and if possible training center must be established in Pakistan either in-house or through local training partner.

7. Performance

Response time for this application is critical as it deals with highly sensitive and important information regardless of the number and type of concurrent users on full load of the system. The areas where response time is critical are given below:

- Reporting Process.
- Application processing
- Communication (Data Transfer)
- Query Processing.
- Form saving
- Retrieval of data
- Seamless performance on full load with maximum number of users logged on simultaneously.

8. Deliverables

- SRS / Story boards of all the business process after BPR activity
- Prototype of business process after BPR activity in demonstration in mock environment with the entire domain related verification to be done as per actual scenario.
- Functional Specification (ER diagram, data dictionary, coding convention)
- Detailed Test Plan and Detailed Test Cases before the start of System Test Phase
- UAT at user site
- Workable Source Code on DVD / External Hard Disk
- Deployment manual, Installation manual, user manual
- Applications / module package comprising of the Applications / module, Object Code, User Manual, Technical Manual, Installation Instructions and other documents or files to the Client
- Training to all stakeholders as per requirement along with requisite manuals

9. SUPPORT MECHANISM (INCLUDING ONLINE)

- 9.1. **Queries:** These are requests for advice on the correct usage of the application covered in the scope. These can be resolved without any change to the application(s). Queries should be handled at Level 1 support.
- 9.2. **Implementation Issues:** Any issue arises due to defects in the applications / module as defined in the Functional Specification Document.
- 9.3. **Solution Defect:** These are reported when the application or application modules listed in Schedule 1 do not function as per the functionality described in the Functional Requirements Document.
- 9.4. **Operational Issues:** These are issues which may arise from the normal operation of such systems (e.g. Daily backups, operational maintenance of hardware and systems including database, application servers, operating systems etc.)
- 9.5. **Enhancements:** These are the alterations or enhancements in the functionality of the application(s).



ANNEX –“B”
TECHNICAL PROPOSAL FORMAT

1. GENERAL INFORMATION	Attachments
Name & Logo of Company	Profile
No. of years in business	
No. of Employees (Executive, Managers, Technical)	
No. of Employees (Regular/Contract/Project Based)	
Address & contact detail of registered offices	
Type of Organization (Sole Proprietor, AOP, Public, Private limited)	
Owner's Name/CEO/Chairman Board of Directors	
Phone# (Landline), Fax#(Landline), Official Email, Website	
Detailed profile including activity area, services, products, projects, clients, partners, affiliations, certifications etc.	
Registration #, date, place & office of registration (Mandatory)	
Undertaking on Stamp that company is not black listed (Mandatory)	Attach undertaking
Details of pending litigations (if any)	Attach list

2. FINANCIAL INFORMATION	Attachments
Annual Report (Income Statement, Balance Sheet)	Attach annual report
Bank Account Details (Last Year) (Mandatory)	Account Maintenance Certificate
Tax Registrations (Mandatory)	NTN & GSTN Certificate for local company Valid Tax Document for international Firms

3. RELEVANT EXPERIENCE OF PRINCIPAL SOFTWARE MANUFACTURAR IN SOFTWARE DEVELOPMENT ONLY GEOLOGY / MINING					
Sr. No.	Name of Project	Nature, Size & Brief of Project	Value of Project	Completion Time	Name of Customer with Contact Detail for Verification
<ul style="list-style-type: none"> • Attach Client Satisfaction Certificate where applicable and available 					

4. STAFF ASSIGNED TO THE PROJECT (IMPLEMENTATION, SUPPORT , MAINTENANCE & TRAINING)							
S#	Name of Employee	Designation of Employee	Date of Joining	Education	Certifications	Experience	Contact details
<ul style="list-style-type: none"> • Attach resume of each technical/developer team member 							

5. REQUIRED TECHNICAL DOCUMENTATION

- 5.1. Comprehensive Technical Proposal (Solution)
- 5.2. Technology Roadmap
- 5.3. Project Implementation Plan with Timelines and Milestones
- 5.4. Testing, Debugging Pan
- 5.5. Support & Maintenance Plan
- 5.6. Backup & Recovery Plan
- 5.7. System Security Plan
- 5.8. Risk Management Plan
- 5.9. Training Plan
- 5.10. Any other documentary evidence to support the proposal



ANNEX – “C”
TECHNICAL PROPOSAL FORM

To

(Name and address of Purchaser)

Sub: _____.

Dear Sir,

- a) Having examined the tender document and Appendixes we, the undersigned, in conformity with the said document, offer to provide the said items/ Services on terms of reference to be signed upon the award of contract for the sum indicated as per financial bid.
- b) We undertake, if our proposal is accepted, to provide the items/services comprise in the contract within time frame specified, starting from the date of receipt of notification of award from the client Department / Office.
- c) We agree to abide by this proposal for the period of ____ days (as per requirement of the project) from the date of bid opening and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
- d) We agree to execute a contract in the form to be communicated by the _ (insert name of the Purchaser) _, incorporating all agreements with such alterations or additions thereto as may be necessary to adapt such agreement to the circumstances of the standard.
- e) Unless and until a formal agreement is prepared and executed this proposal together with your written acceptance thereof shall constitute a binding contract agreement.
- f) We understand that you are not bound to accept a lowest or any bid you may receive, not to give any reason for rejection of any bid and that you will not defray any expenses incurred by us in bidding.

Authorized Signatures with Official Seal

**ANNEX-“D”****AUTHORIZATION LETTER / POWER OF ATTORNEY****(On Stamp Paper of relevant value)**

Know all men by these presents, we (name of the company and address of the registered office) do hereby appoint and authorize Mr. (full name and residential address) who is presently employed with us and holding the position of as our attorney, to do in our name and on our behalf, all such acts, deeds and things necessary in connection with or incidental to our proposal for (name of the project) in response to the tenders invited by the (name of the Purchaser) including signing and submission of all documents and providing information/responses to (name of the Purchaser) in all matters in connection with our Bid.

We hereby agree to ratify all acts, deeds and things lawfully done by our said attorney pursuant to this Power of Attorney and that all acts, deeds and things done by our aforesaid attorney shall and shall always be deemed to have been done by us.

Dated: ___ - ___ - 2022

For _____

[Signature]: _____

[Name, Designation, Address]

Accepted

For _____

[Signature]: _____

[Name, Designation, Address]

Dated: ___ - ___ - 2022

Saindak Metals Limited

Ministry of Energy (Petroleum Division), Government of Pakistan
Gul Bagh Street Main Smungly Road, Quetta
081-9201646, 081-9201084, www.saindak.com.pk



**ANNEX-“E”
UNDERTAKING**

It is certified that the information furnished here in and as per the document submitted is true and correct and nothing has been concealed or tampered with. We have gone through all the conditions of tender and are liable to any punitive action for furnishing false information / documents.

Dated: ____ - ____ - 2022

Signature: _____

(Company Seal)

In the capacity of Duly authorized to sign bids for and on behalf of: _____

Saindak Metals Limited

Ministry of Energy (Petroleum Division), Government of Pakistan
Gul Bagh Street Main Smungly Road, Quetta
081-9201646, 081-9201084, www.saindak.com.pk



ANNEX – “F”
FINANCIAL PROPOSAL SUBMISSION FORM

To

(Name and address of Client / Purchaser)

Dear Sir,

We, the undersigned, offer to provide the _ (Insert title of assignment) _ in accordance with your Request for Proposal No. _____ dated _ (insert date) _ and our Technical Proposal. Our attached Financial Proposal is for the sum of _ (insert amount in words and figures) _. This amount is inclusive of all taxes.

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

We also declare that the Government of Pakistan / Baluchistan has not declared us or any Sub-Contractors for any part of the Contract, ineligible on charges of engaging in corrupt, fraudulent, collusive, or coercive practices. We furthermore, pledge not to indulge in such practices in competing for or in executing the Contract, and are aware of the relevant provisions of the Proposal Document.

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

[Signed]

In the capacity of:

Duly authorized to sign the proposal on behalf of the Applicant.

Dated: _____ - _____ - 2022

Saindak Metals Limited

Ministry of Energy (Petroleum Division), Government of Pakistan
Gul Bagh Street Main Smungly Road, Quetta
081-9201646, 081-9201084, www.saindak.com.pk



ANNEX – “G”

FINANCIAL PROPOSAL FORMAT

Sr. No.	Item Description	Cost Type	Component	Cost with Taxes
01	Geology, Mining Optimization, Planning & Scheduling end-to-end Software solution	OTC	Software Component	
02	System Deployment & Training Cost			
03	Warranty & Support Service for 02 years			
			Total Cost PKR	
			Total Cost in Word	

- *Price must be quoted for all items as per above table*
- *The purchaser reserves the rights to increase / decrease the quantities of software and / services mentioned vide this tender document.*
- *Prices should be inclusive of all applicable taxes.*

Saindak Metals Limited

Ministry of Energy (Petroleum Division), Government of Pakistan
Gul Bagh Street Main Smungly Road, Quetta
081-9201646, 081-9201084, www.saindak.com.pk

**ANNEX – “H”****PERFORMANCE SECURITY FORM****Issuing Authority:** _____**Date of Issuance:** _____**Date of Expiry:** _____

WHEREAS [Name and Address of the Contractor] (hereinafter called "the Contractor") has agreed to supply the Goods and render the Services against Tender Name. _____, Tender No. _____ (hereinafter called "the Contract") for the Contract Value of PKR _____ in words _____;

AND WHEREAS it has been stipulated in the Tender Document that the successful Contractor shall furnish Performance Security, within twenty eight (28) days of the receipt of the Intent Letter (Letter of Intent) from the Purchaser, in the form of a Bank Guarantee, issued by a scheduled bank operating in Pakistan, as per this format, for a sum equivalent to PKR _____ (10% of the contract value) valid from the date of issue until all obligations have been fulfilled in accordance with the Contract;

AND WHEREAS [Name of the Bank] having registered office at [Address of the Bank] (hereinafter called "the Guarantor") has agreed to give the Contractor a Guarantee;

THEREFORE, the Guarantor hereby affirms to bind himself, his successors, and his assigns to the Purchaser, for the sum of PKR _____, in words _____, and undertakes to pay to the Purchaser, upon receipt of his written demand(s), any sum(s) as specified by him, not exceeding the above limit in aggregate, without cavil / argument and without the Purchaser having to substantiate / prove or to show grounds / reasons for such claim(s), on the occurrence of any / all of the following conditions:

- a) If the Contractor commits a default under the Contract;
- b) If the Contractor fails to fulfill any of the obligations under the Contract;
- c) If the Contractor violates any of the provisions of the Contract.

Provided that the Purchaser shall specify the occurred condition(s) owing to which the said sum is due to him.

Provided further that any demand(s) / claim(s) from the Purchaser shall reach the Guarantor before the expiry of the Guarantee.

This guarantee shall remain valid up to _____ or until expiry of warranties / support period or all obligations have been fulfilled in accordance with the Contract, whichever is later.

GUARANTOR

Signature: _____

CNIC #: _____

Name: _____

Designation: _____

Address: _____

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