

TERMS OF REFERENCE (TOR)

FOR

**HIRING PIPELINE PIGGING SERVICES ON
RATE-RUNNING BASIS**



**TENDER ENQUIRY # PROC-
SERVICES/CB/CORR-5057/2021**

SCOPE OF WORK / TORs

HIRING PIPELINE PIGGING SERVICES ON RATE-RUNNING BASIS

1. INTRODUCTION.

Oil & Gas Development Company Limited (to be referred as OGDCL or The Company in proceeding paras) is the largest & state-owned oil & gas exploration and production company of Pakistan and operates numerous oil & gas production fields (100% owned and joint venture projects) and processing plants. In order to ensure safe operations of critical pipeline segments, OGDCL intends to hire a third party contractor (who are reputed firms / service contractors, willing to work in Pakistan, have proven experiences and track record in the relevant field of expertise) to carry internal cleaning, de- watering, and chemical treatment of pipelines varying from 6” to 30” Dia through different types of pigs on rate-running basis initially for a period of two years to be extendable for one more year with consent of both parties.

2. OBJECTIVE OF THE SERVICES

The objective of the services contract is to carry out the following in the buried pipelines of different dia at any of the OGDCL fields.

- i. To remove debris, wax, liquids / hydrates, iron sulfate, mineral scales, bacteria, paraffin, black powder, asphaltene, degraded compressor oil, amines, glycol and other buildup inside the in-service and / or newly-fabricated pipelines what so ever the case may be.
- ii. All above shall be done in-service, without creating much interruption in normal operations.

3. PIG TYPES TO BE USED FOR CLEANING

Contractor shall be necessarily capable to design and provide any & all of following pig types to meet particular field / pipeline requirements. OGDCL may advise for the utilization of any of the services or combination of pig types to use.

- i. **Steel Mandrel Body Pigs with simple unidirectional cups:** for simple cleaning, de-watering, chemical batch treatment.
- iii. **Steel Mandrel Body Pigs with unidirectional Cups & Power Brushes:** For effective removal of stubborn material, corrosion deposits, scales etc from the inside of a pipeline.
- iv. **Steel Mandrel Body Pigs with combination of cups, power brushes and magnets (Combo Pigs):** to remove stubborn material through power brush and to collect the metallic particles, debris, welding / fabrication remaining, through magnet particles attached with the pig.

4. Quantum of Work:

- i. The pipeline pigging services are required on “As and when required basis” all over the country where ever OGDCL owns and operates oil and gas fields.
- ii. The quantity given in the financial bid is for purpose of financial counting and cost comparison only, however company is not bound to necessarily carry out pigging jobs at all listed pipelines. The quantum of work shall depend upon pipeline’s operational feasibility and company’s specific requirements at particular fields.

3. CONTRACTOR'S TECHNICAL RESPONSIBILITIES.

3.1 Feasibility / Pre-Assessment of pipeline before pigging job.

- i. Before carrying out actual job, contractor's main pipeline pigging engineer shall pay mandatory visit to the site for following:
 - a. Collection, review / analysis of historic and current operating data including diagrams. This stage may include mapping the physical location of the pipeline(s), its appurtenances, test facilities, valves, pump stations, take-offs, test stations, bonds, rectifiers, pig traps etc.
 - b. To determine the critical locations along the length of pipelines.
 - c. Estimate the volume of water / heavy wax paraffins / debris/ iron / manganese oxide etc expected to reach at receiver end.
 - d. Inspection / Assessment of Pig launching and receiving facilities.
 - e. Surface / Production facilities to collect water & slug.
 - f. Available gas volume and pressure for running of pigging tools etc.
 - g. Contractor shall suggest whether the pigging activity may be carried out through flow line's own fluid i-e Well's product or other means such as nitrogen or water etc based on the high concentration of H₂s in producing wells keeping in view the safety hazards.
 - h. In case of external fluid / pressure is required for pushing / running of pig in the subjected pipeline then the contractor shall provide estimated quantity and pressure required, company will arrange the same.
 - i. As a result of assessment during pre-job visit, the contractor shall need to prioritize potentially susceptible segments of pipelines along with a detailed inspection and assessment of those locations that are most likely susceptible to trap the launched pig and shall provide the contingency plan for the recovery of trapped pig.
 - j. The Contractor shall analyze the data collected in the pre-assessment step to identify tools to be used for each pipeline segment and give clear recommendations which type of PIG shall be used.
 - k. Also contractor shall be required to give his suggestions for cleaning of non-pig able lines.
 - l. The contract shall prepare and submit Preliminary inspection report after completion of job at field location that shall include above points.

3.2 Designing & Running Cleaning Pigs.

- i. In light of pre-assessment, feasibility, confirmation that the particular line is fit for pigging job, and selection of pig type, the contractor will arrange to mobilize material and man-power immediately to run the pigs accordingly as per advice of company.
- ii. It shall be sole responsibility of contractor to design the PIG tool appropriately and according to the pipeline conditions, operating parameters, effluents and flow velocities.
- iii. Since most of the pigs shall be run in in-service condition of pipelines under pressures, it will be contractor's responsibility to control velocity of pigs according to the company's requirement.
- iv. The company may ask contractor to run more than one type of pigs in one line depending upon condition of pipeline and field's operational requirement.

- v. The contractor shall have capability and facility to modify / alter the cleaning pigs in a way to achieve required speed & purpose with minimum possible operational disturbance and production curtailments.
- vi. The Contractor shall provide logical methodology along with details of planned activities on carrying of cleaning pig activities at different flow lines.

3.3 Pig Tracking System

- i. Since most of the pigging jobs shall be done in in-service buried pipelines passing through different terrains of the land including hilly areas, canal / road / railway crossings, cultivated lands etc, the company requires contractor to provide and implement very effective / latest developed and proven pig tracking technology.
- ii. The contractor shall install such pig tracker in all type of pigs except foam pig.
- iii. The tracking system shall be easy to operate, easy to find pig location and shall pinpoint stuck pig within 5 meters of range.
- iv. The pig tracker's minimum effective battery life is desired to be 72 hours (three days).
- v. Before any pigging job is carried out, the contractor may be required to demonstrate pig tracking system and prove it's battery's effective life.

3.4 Contingency Plan.

- i. The company will require the contractor to provide details of feasible contingency plan based on his expertise & experience in case the pig is stuck. The plan shall include probable location of the pig, alternate methods of retrieving pig, production loss estimations, estimated time required to retrieve pig, pipeline cutting method / SoP etc.
- ii. Contingency plan shall encompass all possibilities like failure to run (either due to tool or line condition), re-run possibilities, operational actions that could be used to dislodge the tool, removal of the tool by means of cut out etc.
- iii. In case of cut out, the contractor shall propose his methodology which shall be approved by OGDCL higher authorities either through cold cutting or hot cutting technique.
- iv. Contractor in case of cut out shall be responsible to carry out locating the trapped pig through their pig tracker technology.

3.5 Man-Power

i. Project Manager & Alternate.

- a. The Project Manager is the key person over-all incharge and responsible for entire project in terms of technical, operational, logistic, financial, administrative issues etc and shall be in contact with company regarding all matters and correspondence.
- b. The project Manager shall supervise the execution team.
- c. Contractor shall provide all his details including CV along with his position in the bidder's organization, qualification, experience, all contact numbers, email address etc.
- d. The Project Manager shall be required to hold minimum graduation in relevant field of engineering discipline. Master's degree shall be an advantage.

- e. Project Manager shall be required to have minimum of 10 years proven track record of pipeline operations including cleaning pigging / in-line inspections. Irrelevant experience shall not be considered. Local experience shall be an advantage.
- f. The contractor shall also be required to provide an equal alternate of the project manager in case the project manager is not available to carry out the required job due to any inevitable reasons.

ii. Job execution team professionals

- a. The company requires the contractor to have preferably Pakistani Nationals at least 3-4 properly educated (*preferably diploma or bachelor degree in mechanical / pipeline engineering*), very well experienced (not less than 7 years), well-versed in field technical communication team of **professionals with proven track record** of successfully carrying out pigging jobs (*In-Line Inspection experience shall be preferred*).
- b. This team shall work under direct supervision of P.M or Equally experienced pipeline engineer for all field jobs.
- c. The team will be responsible for pre-job site visit, gathering required data, check and confirm Pig launching & receiving assembly / facilities, history of pipeline, operational parameters etc.
- d. The same team will remain involved in actual job execution at field site.
- e. To ensure timely mobilization and quality assurance of services, it is desired that all above-mentioned professionals shall be employees of the contractor company.
- f. The bidder shall provide complete details of professionals including their CVs, educational qualifications, experience / track-record. (only relevant experience shall be counted during evaluation), evidence of employment with bidder.
- g. Freelance professionals or expected to be hired professionals shall not be acceptable. In case it is established that bidder has provided professionals who are freelance or are working for other service company(ies), the bid shall be declared non-responsive.

7. CONTRACTOR'S GENERAL RESPONSIBILITIES.

- i. Contractor will be responsible to carry out over-all job activities at all pipeline segments timely, effectively, and safely following all SoPs.
- ii. Contractor shall have to follow field operating procedures, work permits, mobilization plans etc. of the respective fields.
- iii. Contractor will have to follow HSEQ protocol of OGDCL implemented at fields.
- iv. Contractor will strictly follow security instructions of respective fields.
- v. Due to security reasons / protocols, it will be preferred to depute Pakistani citizens as technical man – power to execute the said jobs. But in case successful bidder intends to use expatriate's services then it will be his sole responsibility to

obtain proper “Security Clearance” from concerned authorities and shall mobilize the professionals at his own risk and cost with no liability on company.

- vi. The contractor will be ensure to mobilize team within 10 days after receiving job request for planned operations but in case of emergency company may ask contractor to mobilize within 48 hours’ notice period.
- vii. All movements shall be put into prior notice of Field Manager or his nominee / designated representative / I/c security.
- viii. Contractor will preferably not carry out any activity without presence of OGDCL representative(s) at site.
- ix. Contractor will be responsible to have all required tools and equipments necessary for such jobs and arrange shifting / mobilization of the tools to field site.
- x. Contractor would not put any condition for advance payment.
- xi. Bid format given in tender shall be followed. No other format of financial offer / bid shall be acceptable. No conditional bid shall be accepted.
- xii. Contractor could not claim any cancellation / termination charges if tender enquiry or contract is cancelled at any stage by OGDCL and company shall not be bound to justify any reason thereof.

8 Eligibility & Technical Responsiveness Criteria.

To be technically responsive and eligible for further processing like financial bid opening / evaluation and award of contract, the bidder shall have to provide minimum but not limited to following. Lack of any information listed down or improper evidence will lead the bidder to non-conformity, hence, non-responsiveness of the bid;

- i. Satisfactory evidence of Technical, Operational and Financial eligibility, capability and adequacy to carry out the contractual services timely and effectively.
- ii. Technical bid should include updates on firm’s history, experience, list of similar projects successfully carried out. As evidence, detailed list of similar jobs along with location / country, name of company for which job was done, pipeline data, year of job, company’s details and contact information etc in shape of service order / contract copy, work completion certificate be provided.
- iii. The Company should have no litigation problem with any operating company.
- vi. The Bidder shall have the relevant certified and trained professionals having adequate / appropriate qualifications and experiences to undertake the pigging activities. Details of professionals to be involved in this project along with their CVs to be provided along with technical bid.
- v. The bidder is required to have an active research and development center for continued betterment of operational, analysis tools, techniques, man-power, machines and material to meet specific requirements. Bidder to confirm owing

such research and development center and provide all its details with verifiable documentations. The bidder shall also arrange orientation tour of company's three professionals at bidder's account to verify the center, research activities being carried and to discuss various techno-commercial pig running options for particular pipeline requirements for operational ease.

- vi. Bidder should be thoroughly aware of applicable codes, standards and recommended practice requirements and shall do the job according to those requirements.
- vii. Since these services are required / hired on "as & when required basis", the bidder shall have to assure the company to provide and make available the required tools and technical man-power at site within 10 days of job request issued.
- viii. Bidder shall be given preference in case the bidder is successful in providing the details of technical staff having Pakistani nationality keeping in view of urgent requirement / mobilization of pigging team. However in case any bidder intends to engage foreign nationals for this project activities, then it will be sole responsibility of the bidder / successful contractor to obtain security clearance from concerned authorities of GoP and providing their security during mobilization shall be bidders / successful contractor's responsibility without any obligation on company.

9. DOCUMENTS TO BE FURNISHED BY BIDDERS

- i. The bidders shall prepare their bids in two parts i.e. Technical Proposal (Part-1) and Financial Proposal (Part-2).
- ii. The Technical proposals shall be evaluated first in light of technical requirements; evidence, capability etc. and the financial proposals will be opened of the only bidder(s) who shall stand technically responsive in the Technical Proposals.

10. TECHNICAL PROPOSALS.

- i. The technical proposal should demonstrate the bidder's corporate profile, organogram, C.V's of key personnel, Certification in their respective field of specialization, along with their position, who shall be deputed on this project to work at site in Pakistan, in the Company's offices in Pakistan and the Bidder's corporate office. The Bidder shall also nominate a 'Contact Person' in Pakistan who shall be responsible for overall work performance.
- ii. Name, background, qualification, employment records and detailed professional experience of each expert to be assigned for providing the proposed services with reference to similar assignments undertaken by the Contractor shall also be given.
- iii. In case of a Joint Venture, a valid and duly signed JV agreement clearly showing the part of job to be done by each JV partner on legal paper duly witnessed / stamped by authorized lawyer.

11. Boarding / Lodging / Messing.

Boarding, lodging and messing shall be provided by the company at field locations.

12. Transportation / logistic support.

Transportation / mobilization of men and material to OGDCL site shall be sole responsibility of the contractor.

13. Taxes and duties.

The quoted price should be fixed/firm and are inclusive of all applicable taxes, duties and levies etc. except Provincial Sales Tax/ICT Tax on services. Provincial sales tax/ICT Tax on services if applicable will be paid/reimbursed by OGDCL at actual.

14. Schedule, terms, and conditions of payment.

- i. Further to Clause 6 (BID PRICE) and Clause 7 (PAYMENT) of Master Set of Tender Documents, followings terms shall also apply:
- ii. Payment shall be made as per “actual successful pigging job done” against each activity / segment of the “job completed” as given in the financial bid format after the said activity is satisfactorily completed. Payment for unsuccessful job shall not be admissible.
- iii. The invoice shall be payable after verification of carried out and completed segment of service(s) in shape of “Work Completion Certificate” by respective field.
- iv. Invoices shall be submitted to Chief Accountant (Imports) along with signed work completion certification, copy of Annexure C, price list and signed contract copy.

15. Duration of Contact.

The contract shall be initially for a period of TWO (02) years effective after the date of contract and extendable for one more year with mutual understanding with same scope, price, terms and conditions. Any extension in term of contract will be subject to mutual consent of both the parties in writing.

16. BID BOND:

Bid bond/Bid security amounting to **USD 4,000/-** (US Dollars Four Thousand Only) is to be attached/provided with technical bid. Please see Master Set of Tender Document for further details.

17. MODE OF PROCUREMENT:

Bids against this tender are invited on “**Single Stage Two Envelope Bidding Procedure**” through press tendering therefore, the bidders shall submit one original technical and one original financial bid along with soft copy of technical bids. Unpriced financial bid is to be the part of technical bid.

Note: The master set of tender documents for services uploaded on OGDCL’s website (www.ogdcl.com) is the integral part of this TOR.

18. Technical & Financial Evaluation of bid

18.1 Technical Evaluation.

- a. Technical proposal of the bid shall be reviewed first to determine / check its technical responsiveness and conformity with the requirement of bid.
- b. In all 100 marks have been assigned for technical conformity of the bid out of which the qualifying marks are 70%.
- c. The technical evaluation shall be carried out according to the technical evaluation sheet provided with this document.
- d. The financial proposal of any of the bidder shall not be considered, who will obtain less than 70% over-all technical marks.

18.2. Financial Evaluation.

- a. The Financial Proposal of only the technically responsive / qualified bidder(s) as mentioned above shall be considered and evaluated. The financial evaluation shall be carried out as per provided financial format.
- b. Conditional financial bid shall not be considered for evaluation.
- c. In case of typo error(s) in costing, the unit cost shall prevail.

19. TECHNICAL EVALUATION & RESPONSIVENESS SHEET

It must be noted that technical bid shall be evaluated on basis of the requirement given in the scope of work. The bidder is advised to submit his bid strictly in accordance with requirement and provide necessary evidence as proof where ever advised / required.

S #	Item Description	Marks	Bidder To Provide
1.	Company shall have Minimum 7-Years' experience for Pipeline pigging of various dia and services using different type of pigs as given in SOW. <i>(Personal experience shall not be considered as company experience)</i>	10	Documentary evidence of the "only relevant jobs" as per SOW for this project along with all contact details of companies including job completion certificate from operator company in which diameter and length of pipeline inspected, tools runs, should be clearly mentioned.
2.1	<i>Successfully done 8,000 - 10,000 kms of pipeline pigging</i>	15	
2.2	<i>Successfully done 5,000 - 8,000 kms of pipeline pigging</i>	10	
2.3	<i>Successfully done 2,000 – 5,000 kms of pipeline pigging</i>	05	
2.4	<i>Successfully done Less than 2,000 kms</i>	00	
3.	Effective, proven & reliable PIG tracking technology	15	Bidder to provide complete documents showing the capability of tracking the Pig
3.1	<i>Advanced pig tracking / monitoring system</i>	15	
3.2	<i>Conventional monitoring method</i>	10	

4.	Continued Research and Development activities for improvement in equipment capability, ease in operation, meeting client's particular requirements etc.	10	Provide documentary evidence of research done for new and innovative technology with complete details of R&D center
5.	Technical Man-Power	25	
5.1	<i>Project Manager with required qualification & experience as required in SoW.</i>	15	Provide CVs, documentary proof of qualifications, experience and contact details.
5.2	<i>Execution team's number of persons, qualification & experience as per SoW</i>	10	
6.	Logical methodology along with detail planning of activities showing all details of the job.	05	Bidder to provide complete details for job execution methodology
7.	Local office in Pakistan or Joint-venture with local company	10	Verifiable documentary Evidence to be provided
8.	Satisfactory performance certificates (five jobs during last two years)	05	Satisfactory performance certificates of end user for similar activities be provided
9.	Financial soundness	05	Must have conducted at least 5 successful jobs during one year.

FINANCIAL FORMAT

S #	Pipeline Dia	Item / Activity Description	Unit cost US\$	Length (Mtrs)	Total Cost	Remarks
1	6"	Steel Mandrel Body Pig with only cups	Per Mtr	25,000		The cost will include all services such as pigs, pig cups and other accessories, material transportation from manufacturer to field site, custom clearance, road taxes, manpower's mobilization, their services cost etc.
		Steel Mandrel Body Pig with cups & power brushes	Per Mtr	25,000		
		Steel Mandrel Body Pigs with cups, power brushes & Magnets (Combo Pigs)	Per Mtr	25,000		
2	8"	Steel Mandrel Body Pig with only cups	Per Mtr	120,000		
		Steel Mandrel Body Pig with cups & power brushes	Per Mtr	120,000		
		Steel Mandrel Body Pigs with cups, power brushes & Magnets (Combo Pigs)	Per Mtr	120,000		
3	10"	Steel Mandrel Body Pig with only cups	Per Mtr	50,000		
		Steel Mandrel Body Pig with cups & power brushes	Per Mtr	50,000		
		Steel Mandrel Body Pigs with cups, power brushes & Magnets (Combo Pigs)	Per Mtr	50,000		
4	12"	Steel Mandrel Body Pig with only cups	Per Mtr	30,000		
		Steel Mandrel Body Pig with cups & power brushes	Per Mtr	20,000		
		Steel Mandrel Body Pigs with cups, power brushes & Magnets (Combo Pigs)	Per Mtr	20,000		
5	26"	Steel Mandrel Body Pig with only cups	Per Mtr	50,000		
		Steel Mandrel Body Pig with cups & power brushes	Per Mtr	50,000		
		Steel Mandrel Body Pigs with cups, power brushes & Magnets (Combo Pigs)	Per Mtr	50,000		
6	30"	Steel Mandrel Body Pig with only cups	Per Mtr	10,000		
		Steel Mandrel Body Pig with cups & power brushes	Per Mtr	10,000		
		Steel Mandrel Body Pigs with cups, power brushes & Magnets (Combo Pigs)	Per Mtr	10,000		
7	-----	Field visit charges of Pipeline Engr for feasibility survey and other services except above.	Per Day	90 Days		Includes Services, mob-demo etc.
8	-----	Field visit charges of Technician for feasibility survey & other services except above.	Per Day	180 Days		Includes Services, mob-demo etc.
Grand Total Cost						

Note: Financial Evaluation shall be carried out on Grand Total Cost basis and Contract will be awarded to Lowest Evaluated bidder on Grand Total Cost basis.