

**TERMS OF REFERENCE (TOR)
FOR
HIRING OF TUBING CONVEYED
PERFORATION (TCP) SERVICES**



**TENDER ENQUIRY # PROC-
SERVICES/CB/WL-4994/2021**

TOR for Tubing Conveyed Perforation (TCP) Services

1. Scope of Work

- 1.1 Tubing conveyed perforating (TCP) services are required on “CALL OUT” basis for a period of one year extendable with mutual consent from the issuance of LOI (subject to clause # 4 of TOR) on Exploratory, Appraisal, Development and Work over wells of OGDCL **region-wise** i.e., **Region-01** (Punjab & Sindh province) and **Region-02** (Khyber Pakhtunkhwa & Baluchistan province) of Pakistan. There are 24 number of estimated TCP jobs (12 jobs for each region) for the above mentioned period. The bidders have the option to bid for either single region or both regions.

2. Eligibility Requirements

The bidder:

- 2.1 must have minimum of 05 years of experience (national and/or international) of providing TCP services with excellent track record.
- 2.2 must have dedicated team of experienced professionals to handle technical matters relating to TCP operations.
- 2.3 must have excellent track record of providing HT-HP (High Temperature-High Pressure) TCP services.
- 2.4 must be capable of providing required services/equipment as per Annex-A2.
- 2.5 must be capable of providing TCP services simultaneously on at least two OGDCL wells located in each region (i.e. Region-01 & Region-02) of Pakistan.
- 2.6 must confirm to carry out jobs at locations where OGDCL is active in operations.
- 2.7 must ensure to provide slickline unit for each job.
- 2.8 must have well equipped base facilities, explosive storage facilities, allied arrangements etc. and back up equipment/system support for smooth execution of TCP services. All the bidders must attach their valid explosive licenses with the bid. Bidders having no existing setup in Pakistan, must confirm in writing (to be attached with the bid) that in case of award of contract, they will ensure the establishment of adequate operational base, explosive storage arrangements and allied facilities in Pakistan within 90 days of issuance of LOI.

3. Tools / Equipment / NOC's

The bidder has to ensure the following;

- 3.1 The Gun Systems quoted are in accordance with Annexure - “A2”.
- 3.2 Availability of sufficient explosive, gun bodies and other equipment with backup support at no extra charge to carry out TCP operations simultaneously at different locations without rig time loss.
- 3.3 Downhole equipment, explosive and other accessories required for HNS charges operation to be made available when required.
- 3.4 Special firing system (programmable / intelligent) also to be made available when required.

- 3.5 All types of permits / NOCs, security clearances required for TCP operations especially pertaining to manpower, explosive import, storage, transportation etc. to any location of OGDCL in Pakistan will be the responsibility of the bidder.

4. Base / Explosive Storage Facilities

The bidder must have well equipped base facilities, explosive storage facilities, allied arrangements etc. and back up equipment/system support for smooth execution of TCP services. All the bidders must attach their valid explosive licenses with the bid. Any bidder willing to avail extra time for the arrangement of explosives, gun bodies and allied accessories etc. will be allowed 90 days period for arrangements from the issuance of LOI (90 days time period will only be applicable for those bidders who ask for the same in writing along with the technical bid). For bidders availing 90 days period, the contract will start after 90 days from the issuance of LOI.

5. Personnel

The bidder shall provide experienced professionals (more than five years for field engineers/supervisors etc.) to perform TCP operations. CVs to be submitted with the bid to appraise the competency level.

6. PREPARATION OF BIDS

- 6.1 The bidders shall prepare their bid in two parts i.e. Technical proposal (part-1) one original & one copy accompanied by soft copy on CD and Financial proposal (part-2) original.
- 6.2 The Technical proposal shall contain the details as per annexure-A2.
- 6.3 The bidders shall prepare their bids in line with given TCP services as per Annexure A2 & A3.

7. Financial Evaluation Criteria

- 7.1 The Financial proposal should indicate **region wise** all prices/rates with break-up (**Separate sheet/breakup for each scenario as per given format**) pertaining to explosive, hardware, equipment operation, mob-demob of equipment / crew, slick line services etc. and discounts (if any), as specified in Annexure "A2". Evaluation will be carried out on region wise basis.

8. Bid Validity

- 8.1 The bid shall remain valid and open for acceptance for a period of 180 days from the specified date of tender opening.

9. EVALUATION OF PROPOSALS

- 9.1 The technical proposal shall be reviewed first to determine the responsiveness according to the information required vide Annexure-A1. Technical proposals not conforming to and **deviating materially from the specifications and the conditions laid down in the Tender Documents shall be determined to be non-responsive and shall be rejected by the Company.**
- 9.2 Technical evaluation will be based on the following criteria.

Detail of Technical Bid Evaluation Criteria

Descriptions	Point Value	
	Score	Section %
Equipment & Services		50%
Equipment, tools & services proposed by Contractor to meet OGDCL job requirements as per Annexure "A-2 & A-3".		
<ul style="list-style-type: none"> • HMX Perforating Charges 10 • HNS Perforating Charges 10 • Capability of performing simultaneous operations / region <ul style="list-style-type: none"> for 3 operations = 15 points for 2 operations = 12 points • Special Firing System - Programmable pulse operated firing head 5 • HT-HP (High Temperature-High Pressure) TCP services 5 • Technology with advanced applications to achieve clean perforating tunnels / dynamic underbalance 5 		
Contractor's Experience		10%
Contractor's National and/or International experience in equipment and related services		
<ul style="list-style-type: none"> • Experience > 11 yrs. = 10 points • Experience 8 - 11 yrs. = 9 points • Experience 5 - 8 yrs. = 8 points 	10	
Contractor's Services Base		15%
Contractor's Setup in Pakistan		
<ul style="list-style-type: none"> • Operational Base with allied facilities = 3 points • Contractor's global technical & equipment support = 12 points 	15	
Personnel Qualification & Experience		15%
Qualification, Training and Experience of Contractor's proposed field crew		
<ul style="list-style-type: none"> • Experience > 8 yrs = 15 points • Experience between 6-8 yrs = 13 points • Experience between 4-6 yrs = 12 points • Experience < 4 yrs = 10 points 	15	
HSE System		10%
Contractor's HSE Standards and Processes verification/ rating for the last three years	10	
TOTAL POINT VALUE	100	100%
TECHNICAL QUALIFICATION (Minimum Score)	75	75%

- 9.3 The financial bids of the bidders obtaining less than 75% marks on the aggregate will not be opened.
- 9.4 Financial evaluation will be carried out on region wise basis. Contract will be awarded to technically qualified and financially lowest bidder.
- 9.5 The bidder must provide un-priced copy of their financial proposal as per given format with the technical bid.
- 9.6 For the purpose of determining the lowest evaluated bid in **each region**, cost as per financial model at Annexure-"A3" will be taken into consideration. However; bidder(s) should quote their firm prices for any auxiliary / additional equipment / techniques or services not included in the schedule of requirement or financial evaluation model but required for TCP operations as per technical requirement.

Firm prices & clear discounts / rebates (if any) for all the services referred in the proposal may be quoted.

10. General Terms

- 10.1 If the operation cannot be completed due to failure/malfunctioning of equipment no charge will be applicable.
- 10.2 If the operation is attempted but cannot be completed due to well conditions or if the operation is cancelled by the client while equipment is in the hole, only incomplete operation charges will be applicable.
- 10.3 If crew and equipment reached wellsite and all operations are cancelled by OGDCL after loading of guns, only cancelled operation charges will be applicable.
- 10.4 If crew and equipment reached wellsite and all operations are cancelled by OGDCL before loading of guns, only mob / demob charges will be applicable.
- 10.5 POL such as HSD (Diesel) and lubricants will be issued by OGDCL (if required) to TCP crew during operations and the same will be adjusted / deducted from the service company invoices at the time of payment.
- 10.6 All consumable items required for execution of TCP services will be responsibility of the service company at no extra cost.
- 10.7 OGDCL shall provide accommodation and messing for contractor's personnel during stay at field.

11. Payment Terms

- 11.1 Service Company will submit the invoices duly signed and stamped by OGDCL representatives after completion of job & submission of final data to OGDCL head office Islamabad.
- 11.2 The invoices will be submitted in US Dollars. However payment will be made in equivalent Pak Rupees at the prevalent rate on the date of payment after technical and contractual verification.

12. DURATION OF CONTRACT:

Hiring of Tubing conveyed perforating (TCP) services are required on "CALL OUT" basis for a period of one year from issuance of LOI (contract extendable with mutual consent).

13. BID BOND:

Bid bond of USD 20,000/- (US Dollar Twenty Thousand Only) for Region-1
Bid bond of USD 20,000/- (US Dollar Twenty Thousand Only) for Region-2
Please see Master Set of Tender Document for further details.

14. 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.

Tubing Conveyed Perforation (TCP) Services

Item	Equipment / Tools	Description
1	Perforating Guns and Carrier	Standard Sizes (2-7/8", 3-1/8" and 4-1/2" OD) with pressure rating of 17000 psi.
2	Perforating Charges for above	HMX charges for standard operation and HNS charges for high temperature operations.
3	Minimum Penetration required for Perforating Charges	2-7/8", 6spf HSD = 40 inches 3-1/8", 6spf HSD = 43 inches 4-1/2", 5spf HSD = 69 inches 4-1/2", 12spf HSD = 30 inches
4	Perforations Hi-End Technology / special applications	Technology with advanced applications to achieve clean perforating tunnels
5	Firing Head	Single and Dual Firing Systems (Pressure Activated, Drop Bar/Jar Down/ Mechanical Impact).
6	Debris Barriers	Debris Sub
7	Debris Barriers	Fluid Isolation Sub
8	Accessories	Radioactive (RA) Marker Sub, Bottom Nose, Standard X-Overs, Intermediate Gun Adapter, Gun lifting subs, hand tools etc.
9	Data Sheets / Certifications	Complete technical literature (API 19B certifications / Manufacturer data sheets etc.) regarding perforating charges / carriers must be enclosed with the bids
10	Optional Gun systems	Any other gun system not mentioned above may also be quoted as optional. The same will not be considered for financial evaluation.

Region-I

Annexure-A3

Table-I

		A	B	C	D	E	F	G	H	I
Sr No	Gun System	Minimum penetration (Inches) API 19B	Blank Guns/Spacers Cost US \$/M	Multiplication factor for spacers/blanks	Sub Total-1	Perforation interval HMX (meter)	Explosive Cost US \$/M	High Temperature Surcharge US \$/M (in case HNS is used)	Sub Total-2 H=(E*F)+(E*G)	Total US \$ (Sub Total1 + Sub Total2)
1	2-7/8", 6spf HSD	40		90		80				
2	3-1/8", 6spf HSD	43		25		70				
3	4-1/2", 5spf HSD	69		500		500				
4	4-1/2", 12spf HSD	30		10		10				
Total Table-I										

Table-II

Sr No	Item	Unit Cost	Multiplication Factor	Total US \$
1	Safety Spacers (2-7/8" HSD)	Flat charge per job (US \$)	2	
2	Safety Spacers (3-1/8" HSD)	Flat charge per job (US \$)	1	
3	Safety Spacers (4-1/2" HSD)	Flat charge per job (US \$)	7	
4	Slickline Charges (per job)	Flat charge per job (US \$)	10	
5	Bottom Sub (per job)	Flat charge per job (US \$)	10	
6	Intermediate / intercarrier Sub (2-7/8" HSD)	unit cost (US \$ / Sub)	30	
7	Intermediate / intercarrier Sub(3-1/8" HSD)	unit cost (US \$ / Sub)	15	
8	Intermediate / intercarrier Sub (4-1/2" HSD)	unit cost (US \$ / Sub)	170	
9	Radioactive Marker Sub (per job)	Flat charge per job (US \$)	10	

10	Mechanical Firing Head (per job)	Flat charge per job (US \$)	10	
11	Pressure Activated Firing Head (per job)	Flat charge per job (US \$)	10	
12	Service Charge (per job)	Flat charge per job (US \$)	10	
13	Mob / Demob (per job)	Flat charge per job (US \$)	10	
14	Incomplete Operation	Flat charge per job (US \$)	1	
15	Cancelled Operation	Flat charge per job (US \$)	1	
Total Table-II				
Grand Total (Total Table-I + Total Table-II)				

Notes:

- * A service charge will be applied only once for a series of operations or attempted operations.
- * Service charge is inclusive of all type of hardware charges not mentioned above.
- * Intermediate / intercarrier subs will be calculated assuming 6M guns for the actual gross interval.
- * If the operation cannot be completed due to failure/malfunctioning of equipment no charge will be applicable.
- * If the operation is attempted but cannot be completed due to well conditions or if the operation is cancelled by the OGDCL while equipment is in the hole, incomplete operation charges will be applicable only.
- * If crew and equipment reached wellsite and all operations are cancelled by OGDCL after loading of guns, cancelled operation charges will be applicable only.
- * If crew and equipment reached wellsite and all operations are cancelled by OGDCL before loading of guns, mob / demob charges will be applicable only.
- * Above charges are inclusive of all types of rentals / standby charges.
- * Above charges are inclusive of H2S, CO2, deviation and any other surcharge.
- * Rates must be inclusive of all applicable taxes, duties, levies etc. except PST/ICT tax on services in Pakistan.

Region-II

Annexure-A3

Table-I

		A	B	C	D	E	F	G	H	I
Sr No	Gun System	Minimum penetration (Inches) API 19B	Blank Guns/Spacers Cost US \$/M	Multiplication factor for spacers/blanks	Sub Total-1	Perforation interval HMX (meter)	Explosive Cost US \$/M	High Temperature Surcharge US \$/M (in case HNS is used)	Sub Total-2 H=(E*F)+(E*G)	Total US \$ (Sub Total1 + Sub Total2)
1	2-7/8", 6spf HSD	40		220		320				
2	3-1/8", 6spf HSD	43		120		130				
3	4-1/2", 5spf HSD	69		260		280				
4	4-1/2", 12spf HSD	30		10		10				
Total Table-I										

Table-II

Sr No	Item	Unit Cost	Multiplication Factor	Total US \$
1	Safety Spacers (2-7/8" HSD)	Flat charge per job (US \$)	4	
2	Safety Spacers (3-1/8" HSD)	Flat charge per job (US \$)	3	
3	Safety Spacers (4-1/2" HSD)	Flat charge per job (US \$)	6	
4	Slickline Charges (per job)	Flat charge per job (US \$)	13	
5	Bottom Sub (per job)	Flat charge per job (US \$)	13	
6	Intermediate / intercarrier Sub (2-7/8" HSD)	unit cost (US \$ / Sub)	90	
7	Intermediate / intercarrier Sub(3-1/8" HSD)	unit cost (US \$ / Sub)	42	

8	Intermediate / intercarrier Sub (4-1/2" HSD)	unit cost (US \$ / Sub)	90	
9	Radioactive Marker Sub (per job)	Flat charge per job (US \$)	13	
10	Mechanical Firing Head (per job)	Flat charge per job (US \$)	13	
11	Pressure Activated Firing Head (per job)	Flat charge per job (US \$)	13	
12	Service Charge (per job)	Flat charge per job (US \$)	13	
13	Mob / Demob (per job)	Flat charge per job (US \$)	13	
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