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# GLOBAL EXPRESSION OF INTEREST (EOI) NO. EOI/ DRLG/PROJECT-DS/80/2023-24 DATED 05.10.2023.

#### **FOR**

INTEGRATED DRILLING PROJECT MANAGEMENT SERVICE (IDPMS) INCLUDING DRILLING RIG, ASSOCIATED SERVICES OF DRILLING, EQUIPMENT, MATERIAL PROCUREMENT AND PERSONNEL FOR A PERIOD OF 04 YEARS IN NORTHEAST INDIA WITH PROVISION FOR PAN INDIA DEPLOYMENT.

## 1. PREAMBLE:

- 1.1. Oil India Limited (OIL), a Government of India Enterprise under the Ministry of Petroleum and Natural Gas, is presently engaged in Exploration, Production and Transportation of Crude Oil and Natural gas in the States of Assam, Arunachal Pradesh, Andhra Pradesh, Odisha, Rajasthan, and Tripura in India. Its Field Head Quarter (FHQ) is at Duliajan, Dibrugarh, Assam, India, and corporate office is in Noida, Uttar Pradesh, India. Over the last decade, OIL has ventured in different parts of globe and currently spanned over nine overseas countries.
- **1.2.** Its operations are largely based in the Northeastern parts of India i.e., in Assam and Arunachal Pradesh but have also extended its activities in different parts of India particularly in Andhra Pradesh, Odisha and Rajasthan. OIL is gearing up to increase its current crude oil production through an accelerated drilling program. OIL has planned to drill more than 200 wells over a period of 03 (three) years.
- **1.3.** In this context, OIL intends to hire an Integrated Drilling Project Management Service covering various services under one umbrella as a turnkey basis for drilling phase till hermetical test.
- **1.4.** Prior to formal tender for hiring the aforesaid service, OIL plans to invite Global/National Expression of Interests (EOIs) from reputed and established E&P Service Providers/Vendors/Contractors to explore their capabilities and working model including scope of work.

## 2. NAME OF THE SERVICE

**INTEGRATED DRILLING PROJECT MANAGEMENT SERVICE (IDPMS)** for multiple wells where all services, equipment, material procurement and personnel are integrated under the contract including Drilling Rig with Personnel for a period of 04 years in Northeast India with provision for pan India deployment.

## 3. OBJECTIVE OF THE EOI

**INTEGRATED DRILLING PROJECT MANAGEMENT SERVICE (IDPMS)** for multiple wells where all services, equipment, material procurement and personnel are integrated under the contract including Drilling Rig with Personnel for a period of 04 years in Northeast India with a provision for pan India deployment. The integrated service would include following services to drill wells with minimum 04 casing policy or more:

## 3.1. PROJECT PLANNING AND FEASIBILITY STUDY

Each drilling location will be treated as project and will cover all core drilling activities from rig deployment to rig release till hermetical test excluding Wireline and MLU. It will include details of project planning, project timeline, milestones, and synchronisation/integration all these with Company's well planning and objectives.

#### 3.2. DRILLING RIG:

Drilling Rig with capacity of 2000 HP or more with personnel, equipped with top drive, hydraulic catwalk, power slip, casing running tool (CRT) and 10,000 PSI well control equipment like BOPs, Choke manifold, MGS with a provision for 15,000 psi similar well head equipment. It should have waste management system comprising of mobile effluent treatment plant (METP), vertical cutting drier (VCD), oil skimmer and provision for transporting/disposal of cuttings in designated area within the location or in a place situated within a radius of 60 kilometre. The rig should be capable of drilling more than 5000 meter well depth and horizontal displacement of minimum 1500-2000 meters with J, S or Horizontal profile.

### 3.3. MUD ENGINEERING SERVICES:

Mud Engineering Services capable of providing high performance water-based mud system along with all chemicals and call out centrifuge service. The service should also include suitable well site laboratory (skid mounted) complete with all regular mud checking equipment including but not limited to pressurized mud balance, MF Viscometer, API Filter press, HP-HT filter press, 6-speed viscometer equivalent to Fann model 35 SA, 50 ml retort kit, blender, magnetic stirrer, hot plate, pH meter, lubricity tester etc. The proposed high-performance water-based mud system should be able to address the borehole instability and differential pressure regimes leading to frequent held up / reaming, high torque & drag, bit balling, pipe stuck, hole washout/ caving's etc. Suitable chemicals to be added to attain certain specific properties, e.g., viscosifier to have good & stable mud and to maintain desired mud properties; fluid loss controller to control API as well as HPHT fluid loss; Shale stabilizer or clay inhibitor to provide additional inhibition from clay; Accretion inhibitor to achieve good ROP and prevent bit balling. While drilling out cement after cementing job, Sodium Bicarbonate should be added to the system to treat cement contamination and control pH around 9.5-10.5.

### 3.4. DRILLING DIRECTIONAL SERVICES:

SDMM/RSS with MWD/LWD and Jars for directional drilling for  $17\frac{1}{2}$ ",  $12\frac{1}{4}$ ",  $9\frac{1}{2}$ " and 6" holes with ability to record the following:

- Direction, Inclination with Temperature.
- Gamma Ray
- Resistivity

- Density-Neutron porosity
- Sonic while drilling
- FPWD
- NMR

The service shall provide:

- Sufficient back up tools, equipment & accessories to meet the workload and for situations such as tool failure/lost in hole etc. and ensure uninterrupted operations. At least one backup is to be kept always on rig for immediate replacement against failure/loss/non-performance/malfunctioning etc. at no extra cost.
- Basic support of a Data Processing and Interpretation at no cost to the Operator during the contract period.

### 3.5. CEMENTING SERVICES:

One (1) self-driven or trailer mounted twin pump high pressure Cementing Unit in perfectly working condition and complete with all accessories including pipe fittings and Batch Mixer(s) as required for oil/gas well cementation operations. Bulk facilities inclusive of pneumatic storage & transport silos with all required accessories such as air compressor, cutting battles, air dryer, dust collector, etc. Space will be provided at well site for temporary placing the vertical storage silos (rocket silos) only for storing cement for cementation jobs.

All consumables required for cementing operations including supply of API Class-G oil well cement, various additives, and floating & guiding equipment for primary as well as secondary cementation job including plug jobs.

- Processing of dry bulk cement & mixing / blending of additives and feeding to cementing unit through silos.
- To provide Slurry Design, Cementing Programme, Casing Stand-off Programme, and actual execution of various primary & secondary cementing operations.
- Supply of cement and additives required at various stages of the well.
- Supply of complete casing jewellery, floating and guiding equipment.
- To perform remedial and squeeze job, if required, using cement retainer.

## 3.6. LINER HANGER

Liner hanger and tie-back (as applicable) packer running & setting tool for 95%, 7

- To monitor Liner running-in operation.
- To arrange for and set liner hanger hydraulically with liner shoe as close as possible to drilled depth.
- Tie-back string, matching & cementation.

Provision for expandable liners.

#### 3.7. UNDER REAMING SERVICES

Hole enlargement (Under Reaming) tool with hydraulically/ hydromechanically traversing cutter Blocks with versatile PDC cutters in place of cutter arms suitable for wide range of abrasive medium formations.

- It should be compatible with MWD/LWD tools. The combination bit and underreamer must be aggressive and flow split to guarantee good drilling performance without compromising data quality of the LWD tools.
- Under-reamer technology must be suitable for ERD.
- The tool must be capable of unlimited extraction and retraction so that p/o or back reaming with pump on is possible. The tool should also have capacity of deactivation mode.

### 3.8. FISHING & MILLING SERVICES

The service shall include provision and maintenance of fishing, milling and abandonment tools as specified but not limited to the following:

- Overshots to catch all tubular, tools, and downhole equipment.
- Spiral grapples and spiral grapple controls for Overshots
- Basket grapples, mill controls and packers for Overshots
- Overshot extension subs, Overshot guides for Overshots
- Junk subs for each hole size.
- Reverse Circulating Junk Baskets for each hole size.
- Fishing Magnets for each hole size.
- Junk Mills for each hole size.
- Flat Bottom mills for each hole size (Concave and Bladed).
- Watermelon/String mills for each casing size.
- Mill redress kits.
- Casing spears for each casing size.
- Casing cutters for each casing/drive pipe size.
- Fishing jars, accelerators, and fishing bumper subs
- Casing patches

## 3.9. CORING SERVICES

The coring service should be capable of providing the following:

- Core Handling/Preservation and Transportation
- Core Processing
- Core Photography and Petrophysical Analysis
- Core Storage and archiving

 Bidder to indicate its QA/QC protocol and sample Core analysis format for the services offered at the time of submission of EOI.

### 3.10. INVENTORY MANAGEMENT

To provide well equipped storage yard with open and covered material storage area. To provide all Bulk movement including but not limited to cement and other chemicals including baryte and other material generally required for drilling, including movement from yard/other mobile storage to drilling locations. It should have provision for space within the proposed yard for placement of mud plant, storage for cement, baryte, other chemicals and additives, tubulars, casings and wellhead material and other accessories. Material handling equipment such as Cranes, Trailers, Trucks, Forklifts etc. for the loading/unloading operations will be required. It should have provision for NDT inspection and Tubulars Inspection by accredited inspection agencies as per relevant API guidelines.

## 3.11. TORQUE AND TURN/TUBULAR RUNNING IN

Major tools and equipment required to be provided for casings / liners of various sizes ranging from 30'' to  $4\frac{1}{2}$ " and tubing size  $4\frac{1}{2}$ " to  $2\frac{7}{8}$ " OD are:

- Torque-Turn Equipment
- Casing filling & circulating tool.
- Hydraulic Power Tongs with Power Unit
- Handling tools viz. Elevators, Spiders, bowls & Slips, etc.
- C-Plate with handling equipment to run 57/8" Drill pipe & cement stringer as inner casing string.
- Casing & Tubing Drift
- Stabbing Guides
- Clamp-on Thread Protectors
- Manual Belt Tong
- Lifting Nubbins
- Safety Clamps
- Casing Scrapper
- Casing Brush
- Casing Magnet
- Circulating Heads
- 55 Ton Slings & Sackles

To assist in safe handling, stabbing, filling, lowering & proper torqueing of casing/liner & tubing.

- To monitor & record Torque applied.
- To assist in safe handling, running the inner cement string for cementing operations.
- To assist in assembling of casing scrapper, casing brush & casing mag

- Appropriate and adequate quantities of consumables such as thread sealing compound, thread locking compound, thread dope, etc. for casing / liner running operations.
- Provision for piling of conductor casing with all equipment, accessories, consumable and personnel.

### 3.12. SUPPLY OF CONSUMABLES:

# 3.12.1. DRILL BITS (INCLUDING HIGH PERFORMANCE AND HYBRID BIT)

Supply of Roller Cone and PDC bits for various hole sizes viz. 26",  $17\frac{1}{2}$ ",  $12\frac{3}{4}$ ",  $9\frac{1}{2}$ ",  $8\frac{1}{2}$ " & 6" for different formation.

- Bits are to be supplied on consignment basis and stored at designated well site for ready availability.
- Payment will be based on actual consumption.
- All the bits will be under the custody of the service provider.
- High performance Bits, Specialized bits with In-Bit-Sensing, shaped cutter, Special Features (like Impact Arrestors and Depth of Cut Control) and hybrid bits on call basis.

### 3.12.2. WELL HEAD WITH ALL ACCESSORIES:

Conventional well head as well as unitised/compact well head as per API standard with all accessories/jewelleries for accommodating different casing sizes like 20", 133/8", 103/4", 95/8", 75/8", 77/8" and 5". It should have provision for well head service with all personnel as call out basis.

## 3.12.3. CASING WITH ALL ACCESSORIES

API-5CT or API 5L casing like 30", 20", 13%", 10¾", 95%", 75%", 7" & 5" and 4½"" with different grade like L-80, N-80, P-110 and Q-125 and non-API casing like 13¾" and 10" with special requirement. Supply must include all accessories like centralizers (bow type and solid), additional couplings and short joints. The supply should have provision for casing with premium or BTC connection, API drift or special drift and cross over for premium to BTC.

## 3.13. PERSONNEL CONTROL AND MONITORING (SUPERVISION)

In addition to the personnel deployed under different services following personnel will be required for entire project period:

- a) **PROJECT COORDINATOR:** One Project Co-coordinator for the project (Phase-I & II) with single point responsibility/ authority with all the delegations of power. The Project Coordinator should have experience of coordinating three or more turnkey drilling projects for reputed E&P Company in the last 20 years.
- b) **SENIOR CONSULTANT(S):** Senior Consultant(s) with at least 15 years of experience in carrying out risk assessment, drilling montage and project management.
- c) **DOMAIN EXPERTS:** Domain Experts with relevant experience for 15 years in the field of aforesaid services from point number 3.2 TO 3.9 on call basis.
- d) **SPECIAL EXPERT:** Special Expert should have relevant experience for 15 years in ERD, Multilateral, MPD/MPC and UBD technology.

**3.14.** The Integrated Service Provider may include additional personnel with requisite experience as per their convenience without additional financial load on OIL, however, the Project timeline shall be maintained strictly.

**NOTE**: This service excludes well design, well engineering, site construction and civil works.

## 4. SUPPORTING DOCUMENTS/INFORMATION:

**4.1.** The Service Provider shall provide information pertaining to experience in handling similar campaign in last seven years with project details. The Service Provider shall provide, details of technical information regarding all drilling associated services as mentioned under Point No (3) above.

## 5. TENTATIVE PROJECT TIMELINE

**5.1.** Oil India expects the mobilization shall be completed within 120 days.

TABLE-I: DETAILS OF THE PROJECT TIMELINE

PHASE	TIMELIN E	ITEMS	REMARKS
Phase-I	14 Days	Site visit	To adopt,
	14 Days	Report Submission	<ul><li>i) Possible warehouse/yard/logistics.</li><li>ii) Mobilization patterns and plans</li></ul>
	7 Days	LOA	To adopt,
Phase-II	120 Days	Completion of Mobilization	<ul><li>i) Inspection of services</li><li>ii) Modalities for integration</li></ul>

#### 6. GENERAL NOTES:

- (i) Integrated Service Provider shall facilitate provision of real time drilling data to 'OIL's eRTMAC centre at Duliajan for online monitoring of drilling operation.
- (ii) All documents submitted along with the offer must be self-certified by the Service Provider and should be clear & legible.
- (iii) The offer shall not be considered in case of submission of any misleading/false representation by the Service Provider.
- (iv) OIL INDIA LIMITED reserves the right to ignore any or all offers and to curtail/enhance the scope of work stated above, if required, without assigning any reason thereof.
- (v) Based on the responses received against this invitation, OIL intends to invite bid through formal Tendering process specifying detailed Scope of Work & BEC/BRC for award of contract.
- 7. SUBMISSION OF EOI: Interested vendors having relevant experience and expertise as above are invited to submit their EOI(s) at e-mail id: <a href="mailto:drilling@oilindia.in">drilling@oilindia.in</a> or <a href="mailto:hrishi\_phookan@oilindia.in">hrishi\_phookan@oilindia.in</a> within 25.10.2023 upto 15:00 Hrs (IST), followed by hard copies of the same in sealed envelopes super-scribing "EOI No.: EOI/DRLG/PROJECT-DS/80/2023-24 for Hiring of INTEGRATED DRILLING PROJECT MANAGEMENT SERVICE (IDPMS) INCLUDING DRILLING RIG, ASSOCIATED SERVICES OF DRILLING, EQUIPMENT, MATERIAL PROCUREMENT AND PERSONNEL FOR

# A PERIOD OF 04 YEARS IN NORTHEAST INDIA WITH PROVISION FOR PAN INDIA DEPLOYMENT' through courier/post to the following address:

## **CHIEF GENERAL MANAGER (DRILLING SERVICES)**

DRILLING SERVICES DEPARTMENT
OIL INDIA LIMITED

DULIAJAN-786602, ASSAM, INDIA. Phone: 91-374-2806800

Website: www.oil-india.com

Service Provider(s)/Vendor(s) may also upload their offer in their FTP server/File sharing website (portal) and the link(s) may be provided to us at our e-mail within the above specified period.

7.1. In case, the above-mentioned date happens to be a non-working day for OIL in Duliajan due to Bandh/holiday or for any other reasons, EOIs shall be received upto the next full working day till 15:00 Hrs. (IST) of 25.10.2023 and opened accordingly. EOI may be sent by post/courier service or delivered personally at the above office address. However, OIL shall not be responsible for any consequence arising out of delay in receipt or non-receipt of EOIs.

#### 8. EOI MEETING:

A pre-tender meeting with interested service provider(s)/vendor(s) will be held **at Delhi/ Noida** after the submission, however the final venue/ time for the proposed meeting will be intimated nearer the time.