



Oil India Limited
(A Govt. of India Enterprise)
P.O. Duliajan – 786602, Assam , India

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Tender No. & Date : **SDG6009P15/08 of 20.01.2015**

Tender Fee : INR 4,500.00 OR USD 100.00

Bid Security : Applicable

Bidding Type : **SINGLE STAGE TWO BID SYSTEM**

Bid Closing on : As mentioned in the Basic Data of the tender in OIL's e-portal.

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Bid Validity : **Bid should be valid for 180 days from bid closing date.**

Bid Bond Validity : **Bid Bond should be valid up to 18/03/2016.**
(Bid bond format has been changed. Please submit bid bond as per revised format)

Performance Guarantee : Applicable

OIL INDIA LIMITED invites Global Tenders for items detailed below:

Item No. / Mat. Code	Material Description	QTY.	UOM
1 .	Supply, Installation and Commissioning of Truck-Mounted Coiled Tubing Units as per the following Annexure: a) Detailed specification- Annexure -A. b) Bid Rejection Criteria (BRC) and Bid Evaluation Criteria- Annexure-B.	2	Nos.

Special Notes:

1.0 The tender will be governed by “General Terms & Conditions” for e-Procurement as per Booklet No. MM/GLOBAL/E-01/2005-July’12 for E-procurement (ICB Tenders) including Amendments & Addendum to “General Terms & Conditions” for e-Procurement.

2.0 Technical Check list and Commercial Check list are furnished. Please ensure that both the check lists are properly filled up and uploaded along with Technical bid.

3.0 The item qualifies for Nil duty / Deemed Export benefits. For Deemed Export benefits, please refer Addendum to the General terms and conditions for Global tender.

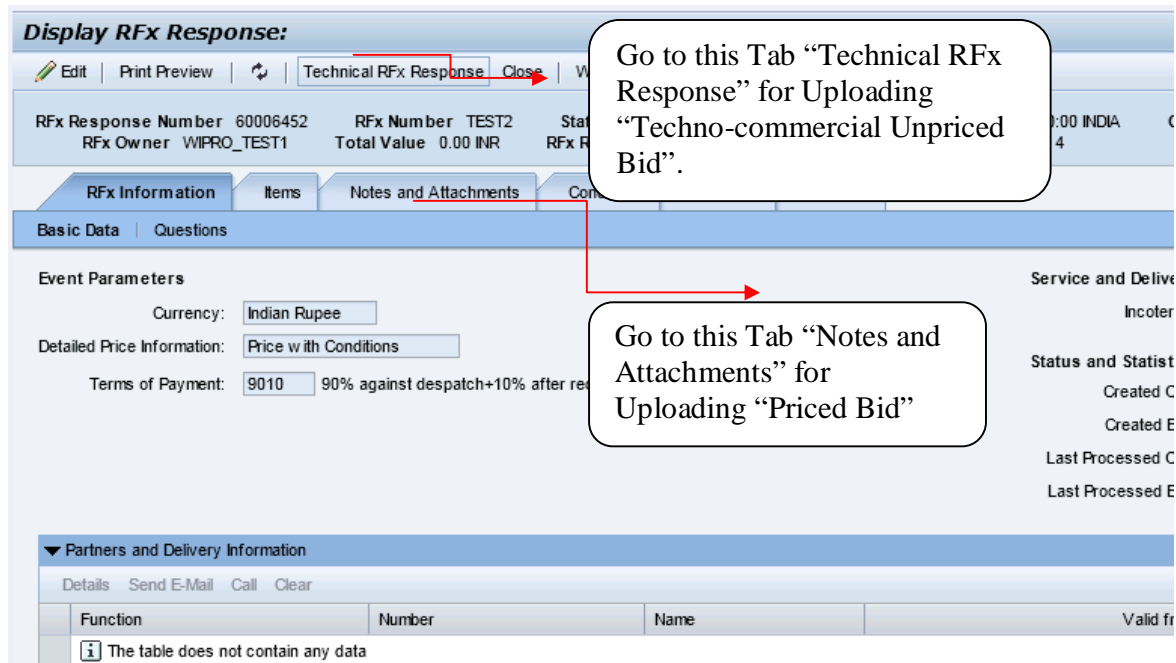
4.0 Please note that all tender forms and supporting documents are to be submitted through OIL's e-Procurement site only except following documents which are to be submitted manually in sealed envelope super scribed with tender no. and due date to The **Head- Materials, Materials Department, Oil India Limited, Duliajan- 786602, Assam** on or before the Bid Closing Date and Time mentioned in the Tender.

- a) **Original Bid Security.**
- b) **Detailed Catalogue and any other document which have been specified to be submitted in original.**

5.0 In case of SINGLE STAGE-TWO BID SYSTEM, bidders shall prepare the “Techno-commercial Unpriced Bid” and “Priced Bid” separately and shall upload through electronic form in the OIL's e-Tender portal within the Bid Closing Date and Time stipulated in the e-Tender. The “Techno-commercial Unpriced Bid” shall contain all technical and commercial details except the prices which shall be kept blank. Details of prices as per Bid format / Commercial bid to be uploaded as attachment in the Attachment Tab “Notes and Attachments”.

A screen shot in this regard is given below.

Any offer not complying with above submission procedure will be rejected as per Bid Rejection Criteria mentioned in the tender.



On “EDIT” Mode- The following screen will appear. Bidders are advised to Upload “Techno-Commercial Unpriced Bid” and “Priced Bid” in the places as indicated above:

Note :

- * The “Techno-Commercial Unpriced Bid” shall contain all techno-commercial details **except the prices.**
 - ** The “Price bid” must contain the price schedule and the bidder’s commercial terms and conditions. For uploading Price Bid, first click on Sign Attachment, a browser window will open, select the file from the PC and click on Sign to sign the Sign. On Signing a new file with extension .SSIG will be created. Close that window. Next click on Add Attachment, a browser window will open, select the .SSIG signed file from the PC and name the file under Description, Assigned to General Data and clock on OK to save the File.
- 6.0 Bidders are requested to examine all instructions, forms, terms and specifications in the bid. Failure to furnish all information required as per the bid or submission of offers not substantially responsive to the bid in every respect will be at the bidders risk and may result in the rejection of its offer without seeking any clarifications.
- 7.0 The Integrity Pact is applicable against this tender. OIL shall be entering into an Integrity Pact with the bidders as per format enclosed vide Annexure VI of the tender document. This Integrity Pact proforma has been duly signed digitally by OIL’s competent signatory. The proforma has to be returned by the bidder (along with the technical bid) duly signed (digitally) by the same signatory who signed the bid, i.e., who is duly authorized to sign the bid. Uploading the Integrity Pact with digital signature will be construed that all pages of the Integrity Pact has been signed by the bidder’s authorized signatory who sign the Bid. **If any bidder refuses to sign Integrity Pact or declined to submit Integrity Pact with the offer, their bid shall be rejected straightway”.**

OIL’s Independent External Monitors at present are as under:

(I) SHRI N. GOPALASWAMI, I.A.S (Retd) ,
Former Chief Election Commissioner of India
E-mail Id : gopaldaswamin@gmail.com

(II) SHRI RAMESH CHANDRA AGARWAL , IPS(Retd)
Former Director General of Police
E-mail Id : rcagarwal@rediffmail.com

8.0 **Pre –Bid Conference :**

- (A) A Pre-Bid Conference with the Parties will be held at Kolkata (India) on **18th February’2015** to discuss on the technical specifications and other terms and conditions of the tender. All the Parties who purchase the Tender Document within the closing date of sale of the tender will be eligible to attend the Pre-Bid Conference. The exact venue and time of the Pre-Bid conference will be intimated to the Parties at a later date.
- (B) Clarification on the technical specifications and other terms & conditions shall be provided to the parties during the Pre-bid Conference. Parties should come fully prepared to the Pre-bid Conference and submit their queries to OIL in the Pre-bid Conference for clarification. More than two persons will not be allowed from each party and they should depute representatives who are competent enough and authorized to take spot decision. **The set of queries may also be sent to OIL latest by 16/02/2015 for study by OIL.**
- (C) Any changes in the technical specifications and other terms & conditions arising out of discussion in the Pre-bid Conference shall also form part of the tender document.
- (D) Parties, immediately after the purchase of the Tender documents, shall inform OIL at the following address about their participation in the Pre-Bid Conference with details of the persons to enable OIL to make arrangement for the Pre-Bid Conference.

HEAD – MATERIALS
OIL INDIA LIMITED
P.O DULIAJAN, PIN – 786 602
DIST. DIBRUGARH (ASSAM) INDIA
FAX NO. : +91 - 374 – 2800533
E-Mail: matdmmfd@oilindia.in
materials@oilindia.in

Technical Specifications

TRUCK-MOUNTED COILED TUBING UNIT (CTU)

The Coiled Tubing Unit package shall comprise of the following:

1.0 APPLICATION:

Intervention of wells (vertical as well as and deviated such as S-bend, J-bend, Extended reach, Horizontal) for carrying out of the following (but not limited to) well servicing jobs:

Well unloading & activation, sand cleaning, fill removal, hot oil circulation, well killing, matrix acidization, removal of hydrate plug, fish recovery etc.

Maximum Well depths: up to 5500.0 meters.

Working pressure: maximum 10,000 psig.

Fluid to be handled: Crude oil, Plain Water, Acid, Saline Water, high density Slurries of sand / bauxite resin etc.

Tubing size: 2.7/8" or 3 1/2"

Liner size: 4" or 7",

Casing size: 5 1/2" or 7.1/8"

2.0 EQUIPMENT DETAIL:

2.1 COILED TUBING:

The bidder shall offer suitable continuous tubing made out of high strength alloy steel of Standard CT 80 as per API 5ST

Specification: 1.25"OD X 0.109" Wall thickness

Operation in 5500 m maximum depth oil and gas wells. The continuous tubing shall have the following specifications:-

O.D:1.25"

Wall Thickness: 0.109" Wall thickness

Length of the continuous Pipe: 5500 m/18040 ft (approx.)

Plain end weight: 1.332 lbs/ft

Pipe body yield load: 31,256 lb

Internal yield pressure: 13,100 Psi

Hydrostatic test pressure: 11,800 psi

Collapse pressure: 8830 psi

Torsional yield strength: 763 ft.lbs

Minimum Yield Strength: 80,000 psi

Minimum tensile strength: 88,000 psi

Minimum elongation: 28%

Maximum hardness: HRC22

Material: as per API 5ST

Heat treatment: Full body of the coiled tubing must be heat treated, quenched and tempered and the coiled tubing should be properly stress relieved and rolled flash-in.

2.2 TUBING REEL ASSEMBLY:

The above tubing is to be placed in a suitably designed skid mounted tubing reel assembly. The reel assembly is to be mounted on a steel sub frame, which shall in turn be mounted on the Truck chassis. Reel Assembly shall be an individual structure and required to be mounted directly on the chassis (not in platform on the chassis). The reel assembly sub frame shall have an integral sump with an arrangement for drain plug for cleaning or eliminating spills and pollutants. The structure of tubing reel assembly shall be suitably equipped with a ladder for carrying out maintenance job. The Tubing Reel assembly shall be equipped with suitable reel swivel Hydraulic mechanism in order to facilitate provision for alignment of CT reel with well head.

The reel assembly shall have the following features: -

2.2.1 DRIVE:

The system shall be suitably designed for hydraulic motor drive through gear reducer and Roller chain & sprocket system such that the system keeps a holding tension on the drum at all times regardless of direction of travel or injector speed.

2.2.2 LEVEL WIND:

Hydraulically operated level wind assembly for automatic tubing spooling in orderly manner with remote control shall be provided. A suitable tubing clamp mechanism shall be equipped to hold the tubing safely during maintenance operation of tubing drive system.

2.2.3 ROTARY JOINT:

Suitably designed Rotary joint complete with valves and necessary fittings for working pressure of 10,000 Psig shall be mounted on reel hub to permit continuous circulation during operation. Ball entry point for the actuation of disconnect/Ball activated down hole tool shall be equipped in suitable location in the flow tee.

2.2.4 BRAKING SYSTEM:

Integral fail-safe disc brake assembly for automatic engagement with manual override feature shall be provided so that the brake may be activated during emergencies.

2.2.5 SPRAY UNIT:

A remote controlled fluid spray bar or other tubing lubricator mechanism shall be provided for cleaning of the tubing while re-spooling on to the drum.

2.3 MEASURING AND DISPLAY:

Depth measuring assembly shall be of Mechanical & Electronic type (Mechanical counter and back up by electronic depth meter). Suitable tubing depth measuring assembly complete with all accessories and mountings shall be provided. The read out should be in 6 (six) digit metric units (inclusive of 2 decimal places). In addition to mechanical counter an electronic depth meter shall be provided in operator's console with the following features:

- i) The unit shall display both depth and tubing travel rate in MKS system and FPS system.
- ii) The unit shall be suitable for maintaining accuracy by field calibration even if the main wheel wears out.
- iii) The unit shall have provision to sound an alarm when preset depth is reached and rate of tubing travel goes outside the preset range.
- iv) The display is to be mounted in a NEMA – 4 rated enclosure. It shall be of oil, water & chemical resistant type and shall work with power input of 12/24 volt DC.

2.4 LIFT SYSTEM:

Lift system spreader bar arrangement for lifting loaded spool assembly with coiled tubing shall be provided.

2.5 REEL PIVOT OPERATOR:

Suitable mechanism for pivoting tubing reel as necessary shall be equipped to align reel with wellhead.

3.0 TUBING INJECTOR, BOP AND HOSE REEL ASSEMBLY:

Tubing injector, BOP and Hose Reel Assembly are to be mounted on a steel sub frame and properly positioned and mounted on the truck chassis. The relative position of the equipments on the sub frame shall be suitably designed to have sufficient access for movement of crew to carry out maintenance job. The details of these items are as follows:

3.1 TUBING INJECTOR:

- a) Tubing Injector shall be of make Hydra Rig / S&S / National / HPT suitable for 1.25" OD tubing, Hydraulic motor driven of pull capacity 60,000 lbs. @ 4400 psi.
- b) Maximum Injector Weight: 4000 Kg.
- c) Max speed: 250 ft/min.
- d) Hydraulic injector motor shall have fail safe brake system. Additional spring applied and pressure released Modular Brake system to be provided.
- e) The injector shall be equipped with:
 - i) Hydraulic Load Cell assembly (0-80,000 lbs) of make Martin Decker/Wagner with dual scale Weight Indicator.
 - ii) Dual planetary Gear transmission
 - iii) The drive chassis shall be equipped with Hydraulic system for tension adjustment. Necessary accumulators are to be installed in the chain tensioning hydraulic circuit to ensure continuous hydraulic pressure during operation.
 - iv) Goose neck shall be fold down roller type detachable preferably 72" radius
 - v) Catwalk on three sides of the injector
 - vi) A fall protection device also to be mounted
 - vii) Remote control injector chain lubricating system
 - viii) Pin on mount side loading stripper assembly
 - ix) "Quick Connector" chain assembly to adapt gripper block for CT size ranging from 1.25"-1.75" OD
 - x) One set telescopic support legs minimum 20 ft long with screw, to support injector during operation. Another set of short support legs (of length approx. 5 feet) to facilitate maintenance work at base.

3.2 BOP:

One (01) no. hydraulically operated BOP of make Bowen / Texas Oil Tool / Hydra Rig / National Oil Tool/Cameron shall be supplied with the following specifications:

- i) 2.9/16" bore X 10,000 psi (API 6A standard) & suitable for 1.25" OD Coiled Tubing having Quadra rams provision for
 - a. Pipe ram
 - b. Slip ram
 - c. Shear ram
 - d. Blind ram
- ii) Connection: Quick Union pin at the TOP (to match with Stuffing box connection) 2-9/16" X 10,000 Psig flange end at the BOTTOM.
- iii) Necessary adapter flanges to match the following wellheads with the BOP shall be supplied:
 - a. 2.9/16" X 3000 psig
 - b. 2.9/16" X 5000 psig

3.3 HOSE REEL ASSEMBLY:

- i) A set of high pressure hoses spooled in suitable reels shall be supplied along with the unit for connecting the various points of tubing injector, weight indicator, Hydraulic motors etc. with the control console.
- ii) All hydraulic lines as well as pneumatic hoses, electric cables etc. shall be covered/insulated and they shall not come into the contact with the truck's frame or other hard / metallic surfaces that may cause premature wear due to chaffing or vibration. Protective sheathing shall be provided wherever they come into contact with the truck's frame or other hard/metallic surfaces that may cause premature wear.
- iii) End connectors of all the hoses shall be distinctly marked with tags in both ends for easy identification.

4.0 STUFFING BOX:

Hydraulically actuated Side door stripper packer of make Texas Oil Tool / Hydra Rig / Cameron / HPT with the following specs shall be supplied.

- i. 2.9/16" X 10,000 Psi, H₂S service, dressed for 1-1/4" tubing.
- ii. Connection: Quick Union for bottom connection to match with the BOP. Top entry shall be as per the supplied injector.

In addition to the above, a tandem stripper shall be provided which is designed to run in tandem below the side door stripper packer. It may be run independently as a back-up stripper or in conjunction with the upper pack off. It shall have provision for injecting lubricant under pressure between the packers to reduce the well pressure across the tandem packer. The tandem stripper shall be of side door configuration (2.9/16" X 10,000 Psi, H₂S service, dressed for 1-1/4" tubing) and top connection shall be compatible to the above stuffing box and bottom connection shall be compatible to the BOP.

5.0 CRANE ASSEMBLY:

- i. The unit shall be equipped with hydraulically operated National Make 660E2 or equivalent make/model rear mounted Stand up Crane having:
 - a. 3 Section, 7.12-18.3 meters hydraulically operated boom.
 - b. Minimum lifting load at 3 (Three) meters (~10') radius is 10.34 Ton (22800Lbs.).
 - c. Suitable winch with minimum 3 part line, 9/16" diameter Cable with breaking strength of at least 17,463 Kg.
 - d. Winch Control shall be suitably mounted near the crane unit & it shall not obstruct any moving part of the unit.
- ii. The crane is to be firmly mounted on the truck chassis with hydraulically operated outriggers extremely stable in operation.
- iii. One set of complete operation, maintenance & Spare parts manual in printed form as well as soft copy (CD form) shall be provided along with the unit.

6.0 CONTROL CABIN:

A. The unit is to be provided with a telescopic Control Cabin Hydraulically raised with Aluminum Panels behind the truck cabin. The cabin shall be equipped with a hydraulic lift system such that the cabin may be raised during operation to allow the operator to have a full & clear view of the job during its operation. It shall be fitted with requisite number of doors & windows. Necessary seating arrangement for the operator & two other personnel shall be provided within the cabin. The control console is to be installed inside the cabin.

The cabin shall contain the following:

- a. Two (2) side access door with sliding type window, rain gutter & Stainless steel hardware. Front window with rain gutter, windshield wiper. Foldable platform is to be provided on both side of the cabin door for safe entry to and exit from the cabin.
- b. Front window is tinted safety glass protected by removable expanded metal guard.
- c. Access of about 29.50" (0.75m) width ladder provided with grab handles on cabin.
- d. Two (2) exterior spot lights shall be mounted in the front of the cabin controllable from inside of the cabin.(Exterior Light on the cabin roof is not acceptable)

- e. One (1) interior fluorescent light 12V & installed inside the cabin. All lights are to be wired to the truck.
- f. Captain chair shall be provided for operator comfort to have clear vision of the reel surface as well as counter. Two (2) foldable seats inside the cabin shall also be provided .
- g. Cabin shall be air conditioned to maintain a temperature of 20°C to 30°C.
- h. Air horn to be provided, operated from control console.
- i. All access steps (operator's cabin / chassis / driver's cabin) with grips / handles shall be located at the convenient location around the unit.
- j. Cabin floor shall be integral part of the Cabin to have a noise free environment inside the cabin during operation.
- k. Cabin shall be suitably noise sealed for a Noise free environment considering occupational health of the CTU operator.
- l. Hydraulic hoses inside and outside of the cabin are to be connected through the floor of the cabin with suitable connector.
- m. Suitable locking arrangement of Cabin doors shall be equipped.

B. Control Console shall contain the following:

- 1. Weight indicator hydraulically activated 2 (two) scale type (Metric & FPS).
- 2. Engine throttle controls, tachometer, Lube oil pressure & temperature gauges and water temperature gauges.
- 3. Tubing Injector hydraulic controls (Pulling & Snubbing) with pressure gauge.
- 4. Tubing reel hydraulic controls with Pressure gauge.
- 5. Tubing Injector Hydraulic chain tension and chain traction controls with pressure gauge.
- 6. Tubing Injector Chain oiler controls.
- 7. Well head pressure gauge.
- 8. Tubing Pressure Gauge.
- 9. All hydraulic pressure control & relief valve, valves bank with mechanical actuation levers.
- 10. All hydraulic pressure & temperature gauges.
- 11. Light switches.
- 12. All other necessary gauges.
- 13. The control console shall be positioned in such a way that the wellhead and all the other working places are in sight.
- 14. Audio visual Safety alarms for safe operation and protection of main equipment of the unit.
- 15. Detailed schematic as well as circuit diagram with color code of the control console shall be provided along with the quotation.

7.0 COILED TUBING INTEGRITY MONITORING SYSTEM:

The unit is to be provided with a coiled tubing integrity monitoring system capable of performing continuous coiled tubing inspection during RIH and POOH coiled tubing in field environment. It shall be equipped to provide the following data:

- a. Provide continuous and accurate wall thickness measurements
- b. Provide continuous diameter and ovality measurements
- c. Track weld-seam location to monitor rotation of the coiled tubing

The equipment shall be capable of adjusting between 1.25 inch to 1.5 inch coiled tubing (OD) range. It shall be horizontally split for installation on coiled tubing and light in weight. All hardware including laptop with latest configurations and software system required for monitoring the coiled tubing condition in real time and mounting brackets for installation of the equipment on coiled tubing shall be provided. The software system shall be capable to provide a clear, unambiguous and comprehensive analysis of the inspection data in an easy-to-read report.

7.1 DATA ACQUISITION SYSTEM (DAS):

Control box: Containing fit-for-purpose hardware housed in a NEMA 4X stainless steel enclosure. Standards channels acquired – Wellhead Pressure, Circulation Pressure, Pipe Weight (Heavy and Light), CT Depth, CT Speed, Fluid Pumping Rate with totalizer. Channels for input signals for nitrogen and fluid rates and volumes to

be supplied. Nitrogen pumping unit and fluid-pumping unit will supply the digital signals for N2 and fluid rates. Sensors and cabling necessary to attach standard channels to DAS for the following data channels.

OPTICAL ENCODER	COIL TUBING DEPTH & SPEED
PR.TRASDUCER	TUBING WEIGHT
PR.TRNSDUCER	CIRCULATING PRESSURE
PR. TRANSDUCER	WELL HEAD PRESSURE
MAGNETIC PICK UP	FLUID PUMPING RATE/ TOTAL FLOW

7.2 SOFTWARE PROGRAM:

Fully compatible software for real-time monitoring of CT working life shall be provided. Operates using MS windows software (latest edition recommended). Allows user to view and store data acquired from the DAS in English or metric units. Displays data in timeline configured by user (once every second is the default timeline).

The system shall have the following features:

Data recorded in various optional format such as access, excel, word document etc. User configurable alarms on all channels.

Multiple modes of operation – acquire data from sensors, post-job analysis; generate simulated data from a virtual CT control panel.

User customizable displays for easy visibility. Custom, onscreen strip charts.

Provision of UPS charged from truck electrical system, with suitable capacity to meet the power requirement of the complete system.

The necessary hardware/field instruments/necessary software/interfacing modules for software run are in the scope of vendors.

Provision for copying the data to removable storage device through USB connection.

A monitor is needed to display real time data clearly at all times and one Laptop with latest configurations to run the data acquisition program and retrieve the data simultaneously. The above system shall be installed inside the cabin in a weatherproof enclosure.

8.0 HYDRAULIC TRANSMISSION & CONTROLS:

1. All hydraulic pumps and motors shall be of hydraulically displacement control type (Electrical displacement control system is NOT desirable).
2. All hydraulic direction control valve shall have mechanical actuation system. In case of Pilot operated direction control valve, pilot signal shall be either pneumatic or hydraulic.
3. Make of the hydraulic control equipment shall be of Saur Danfoss / Sun Strand / Parker / Denison / Rexorth / Linde.
4. Make of the hydraulic hose and end connection shall be of Parker/Gates/Eaton/Power grip only and having SAE / DIN standard.

9.0 POWER DRIVE SYSTEMS:

A. The unit shall be equipped with air operated PTOs and hydraulic drive mechanism to power the following:

- a) Crane
- b) Injector
- c) Tubing reel
- d) BOP+ Stripper
- e) Other Hydraulic system
- d) Spray bar etc.

B. The following hydraulic components shall also be installed on the unit.

- i) A hydraulic oil reservoir of adequate capacity with sight level gauge, filters, breather cap, suction and return filters. The Hydraulic reservoir shall be equipped with a hand operated pump with filtration system for filling up hydraulic reservoir.
- ii) A hydraulic oil cooler.
- iii) All necessary hydraulic valves, gauges, hoses and piping.
- iv) Fluid holding tank for spray bar system to lubricate of coiled tubing.

C. Detailed technical specifications of all hydraulic components like pump, motor, valves, cylinders etc. shall be furnished and SAE / DIN standards of hoses in use shall be mentioned.

10.0 BACK UP SYSTEM:

High Pressure hand pump to back up power to BOP, Stripper, Injector chain traction and other emergency requirement shall be supplied.

11.0 ACCUMULATOR:

A high-pressure accumulator system with a sufficient volume shall be supplied and installed to provide a constant back up hydraulic pressure to BOP, Stuffing Box and chain traction system.

12.0 TRUCK CHASSIS:

Brand New Truck chassis (**8x6 drive**) manufactured not prior to six months from the date of issuance of Letter of Intent (LOI). It shall be of make **Kenworth / International / Peterbilt** and shall be suitable for operation in rough terrain, typical oil field roads and desert environment. The platform where the CTU equipment shall be mounted shall be robust in design and capable of withstanding and transmitting static as well as dynamic loads uniformly to the chassis. The bidder shall take special care in selecting and designing the platform considering the unit's application in rough terrain and typical oilfield roads. The offered model shall be latest and conforming to international quality standard norms, having specifications, fittings, accessories, etc. as under –

12.1 DIMENSION (COMPLETE UNIT):

Overall width - 2.60 meters (approx.)

Overall Height - Shall not exceed 4.5 meter

Overall Length - Shall not exceed 13.5 meter

Ground Clearance – Ground clearance shall be about 25.00 cm for operational convenience. The retro fitted undercarriage components shall be mounted with sufficient ground clearance to avoid hitting/fouling while moving on uneven roads.

12.2 ENGINE:

Water cooled turbo-charged diesel engine (**preferably Caterpillar / International / Cummins make**) developing power in the range of 425-500 HP at rated RPM suitable for road drive as well as Coil Tubing Operation. Engine radiator shall be tropically pressurized. **Air cooled engine will not be acceptable.** Relevant technical leaflet showing make/model and other technical details including speed-torque graph of the engine shall be enclosed in the offer. The Engine exhaust pipe is to be designed properly and located preferably behind the driver's cabin. The exhaust pipe shall be suitably wrapped with non-conducting material and enclosed in a cage. **The offered engine shall comply with BS-III/EURO-III or equivalent emission standard as applicable in the state of Assam in India at the time of delivery.** In case of engine with Electronic Controller System, Engine Fault Diagnostic & Repair Tool (both Software and complete Hardware) shall be supplied along with the unit. Bidder shall categorically confirm in their bid that the offered software is for the particular engine model of the truck.

12.3 TRANSMISSION:

Suitable Allison make fully automatic Transmission of 4700 series with minimum 6 forward and 1 reverse speed shall be provided for both road drive and Coil Tubing Operation. The offered Transmission shall

match with the maximum output torque of the engine. Suitable Transfer Case & other PTOs as per design / requirement shall be provided.

12.4 DRIVE & STEERING

Drive – Semi Forward Control (SFC) - 8X6 Drive - (One Single non powered front axle, One powered front axle & two Powered rear axles).

Steering - Right Hand Drives Hydraulic Power Assisted Steering (Steering wheel on the right hand side of the unit, when viewed from rear). **Left Hand Drive steering will not be acceptable.**

Turning Radius - Minimum Turning Circle (MTC) Radius as per design.

12.5 SUSPENSION, GVW & AXLES

A. Front Suspension – Robust Heavy Duty Multi-Leaf Spring Suspension of suitable design with Shock Absorbers. Details of suspension along with relevant technical leaflet shall be submitted along with the offer. **Rubber/Air/Hydraulic suspension will not be accepted.**

B. Rear Suspension - Rocker Beam (Walking Beam) suspension with auxiliary leaf springs or rubber cushion support of suitable design with shock absorbers.

C. Laden Weight - Laden Weight of the Unit shall be within Maximum Permissible Gross Vehicle Weight (i.e. Sum of Axle Capacities of all axles i.e. GVWR) of the unit.

[Laden Weight means – Weight of the complete unit with all equipment & fittings i.e. weight of the chassis with driver's cabin + weight of all coiled tubing equipment permanently mounted on the unit + weight of other tools, accessories, etc. generally being carried / kept in the unit, spare wheels, hydraulic & diesel oil, etc. Accordingly, Laden Weight is the sum of actual loading on each individual axle.]

Front Axle Capacity - As per Design.

Rear Axle Capacity - As per Design.

D. Rear Axles shall have Inter Axle Lock facility.

12.6 BRAKE

A. Service Brake - Multiple Circuit Pneumatic S-Cam brake acting on all wheels.

B. Parking / Emergency Brake - Parking Brake operating through hand operated shifter valve. It shall automatically get engaged in the event of low/ no air pressure.

C. All Emergency / Parking Brake Servos shall have manual release mechanism (Screw Type) to release the brake manually in case of low/ no air pressure for maintenance.

D. All air tanks shall have Drain Plugs. Suitable **AIR DRYER** (removable filter type) with auto unloading facility shall be provided.

E. All wheel brake drums shall have Dust Cover.

F. Buzzer warning for low air pressure.

G. In case of brake with ABS, ABS Fault Diagnostic & Repair Tool (both Software as well as complete Hardware) shall be supplied along with the unit.

12.7 FUEL TANK

Two (02) fuel tanks each of minimum 100 USG (380 Lts.) capacity. Suitable strainer at the opening of the tank to prevent entry of foreign materials & locking arrangement shall be provided.

12.8 DRIVER'S CABIN

Factory build (original built & supplied with chassis by chassis manufacture) ergonomically designed floating steel / aluminium driver's cabin complete with all standard fittings. Sitting capacity inside the cabin shall preferably be 3 (three) including the driver.

12.9 OTHER FITTINGS & ACCESSORIES

A Sufficient Side marker lights, Hazard warning lights, rear & side reflectors, Air horn in addition to electric horn, etc. for safe movement of the unit on road.

B. All lights shall be covered to the extent possible, with suitable guard to prevent damage. All electrical fittings / components / connections shall be suitable to operate in oilfield area.

C. Gauges & meters including Engine Tachometer & Hour meter shall be provided inside driver's cabin as per standard. Speedometer & Odometer with metric KM calibration only. Two (02) Nos. fan inside driver's cabin.

D. It shall be bidder's endeavor to provide the Engine Oil Pressure & Temperature meters, Air pressure meter, Transmission oil pressure & Temperature meters (if any) with high low warning buzzers.

E. Suitable Reversing Audio Alarm with Blinker lights at rear of the unit.

F. Suitable Air Dryer with replaceable type filter element for truck's pneumatics.

G. Well covered & non conducting material wrapped Vertical Exhaust located behind and projected above the top of the driver's cabin.

H. Suitable heavy duty front & rear Towing Hook capable of pulling / towing the unit from bogged down situation in slushy areas in oilfields from front as well as rear.

I. Electrical equipment like starter, alternator, etc. shall be of Lucas or Delco Remy make.

J. Engine start in transmission neutral position in case of Automatic Transmission.

K. Suitable electrical **Master Switch** to disengage all electrical circuits from battery.

L. Well covered Battery Box; Standard Tool Kit in a portable box for general maintenance of the truck; Heavy duty grease gun; Wheel Wrench & Handle; 2 (two) Nos. min. 30 MT capacity hydraulic jack with handle of reputed make; 2 (two) Nos. stopper block for rear wheels.

M. Fire Extinguisher & First Aid Box inside the driver's cabin.

N. Suitable spark arrestor for engine exhaust for operation in oilfield area.

13.0 ADDITIONAL EQUIPMENT:

The following additional items are required in conjunction with the operation and maintenance of the unit:

13.1 SPARE TUBING REEL:

A) One no of continuous Coiled Tubing Reel with shipping spool as per following specification:

Specification: 1.25"OD X 0.109" Wall thickness

Operation in 5500 m maximum depth oil and gas wells. The continuous tubing shall have the following specifications:-

O.D:1.25"

Wall Thickness: 0.109" Wall thickness

Length of the continuous Pipe: 5500 m/18040 ft (approx.)

Plain end weight: 1.332 lbs/ft

Pipe body yield load: 31,256 lb

Internal yield pressure: 13,100 Psi

Hydrostatic test pressure: 11,800 psi

Collapse pressure: 8830 psi

Torsional yield strength: 763 ft.lbs

Minimum Yield Strength: 80,000 psi

Minimum tensile strength: 88,000 psi

Minimum elongation: 28%
Maximum hardness: HRC22
Material: as per API 5ST

Heat treatment: Full body of the coiled tubing must be heat treated, quenched and tempered and the coiled tubing should be properly stress relieved and rolled flash-in.

Note:

- 1) Spool shall be made of metal of appropriate grade and the tubing must be plastic wrapped. Spool shall be properly protected by 0.5 to 1"x 4" wood around the diameter of the flange. There must be at least 2" of freeboard (tolerance) between the full reel and outside diameter of the flange.
- 2) Each coiled tubing reel (both inside and outside of the tubing) shall be protected from corrosion as per API 5ST latest edition.
- 3) Outer end connection of the coiled tubing shall have 2" FIG:1502 threaded half male union.

13.2 SPOOLING REEL:

Auxiliary skid mounted spooling reel with necessary hydraulic hoses with quick joint connections, necessary fittings for loading and unloading of coil and to be powered by CTU itself to load and unload the Coiled Tubing: 1 (one) no. The Auxiliary skid mounted Spooling reel shall be compatible with the Spare tubing reel i.e. Hub diameter of spare reel (4" or 6")

13.3 TOOLS:

The following tools shall be supplied along with the unit. The price of the tools shall be included in unit cost of the Coiled Tubing Unit.

- i) Tubing roll on connector = 4 (Four) nos.
- ii) Tubing connectors (Light & Heavy duty) = 2 (two) each i.e. External Slip (2nos) & External slip cum grub screw (2 nos), Connections 1.5" AMMT Pin.
- iii) Tubing rolling tools = 2 (two) nos.
- iv) CT cutters & rollers = 2 (two) each
- v) Nozzles of various types = 2 set(Multiple port, Mule Shoe, combination up flow & down flow
- vi) Slim hole motor (1.11/16"OD) with different drill bits & milling bits (size 1.7/8", 2", 2.1/8" & 2.3/6") = 1 set
- vii) One set of Lubricator Assembly of the following specifications:
 - a) 4 sections of 10 feet each
 - b) Top connection adaptable with the Stuffing Box connection & Bottom connection adaptable to supplied BOP's top connection.
 - c) 5000 psi working pressure
 - d) 2.56 inches ID.
- viii) Threading snake = 2nos.
- ix) Rotary wash tool = 2nos.
- x) Cold roll connector for jointing coil tubing = 4nos.
- xi) 1 Nos. NRV/Check valve (Double flapper type) for 1 1/4" CT. Connections 1.5" AMMT box.
- xii) 1 no. of hydraulic release tool for 1 1/4" CT. Connections 1.5" AMMT box.
- xiii) 1 No Motor Head Assembly for 2 1/8" motor (shall include double flapper check valve, hydraulic disconnect, circulation sub and rupture disc in one assembly.) Connections 1.5" AMMT box
- xiv) Roto hammer + Intensifier = 1 set
- xv) 10" pipe wrench= 4 nos
- xvi) 14" pipe wrench= 4nos
- xvii) 24" Pipe Wrench= 6nos
- xviii) 36" Pipe Wrench= 2nos
- xix) Grip vice= 4nos (Heavy and light duty)
- xx) Combination Wrench: a) Metric: 2 Set
b) British: 2 Set
- xxi) Screw Driver Set: 2 Set
- xxii) Allen-Key Set: 3 Set

- xxiii) Ball-Peen Hammer: 2 nos
- xxiv) Tool Box = 2 nos
- xxv) Belt for unscrewing filters: 2 nos

All tools shall be compatible with 1.1/4" Coiled tubing and supplied CT end Connectors.

14.0 SPARES

14.1 COMMISSIONING SPARES

The Supplier has to supply all the spare parts required for initial commissioning of the unit.

14.2 OPERATIONAL CRITICAL SPARES:

The Supplier shall supply the following operational critical spares along with the Units. The price of the spares shall be included in unit cost of the Coiled Tubing Unit.

i) AUTOMOBILE SPARE PARTS LIST:

Following spares in specified quantity as indicated shall be supplied along with the unit. Specific description, part Nos., Make etc. shall clearly be indicated in the bid.

A. ENGINE -

1. Fuel Filter Element - 10 Nos.
2. Water Separator Filter Element - 10 Nos.
3. Engine Oil Filter Element - 10 Nos.
4. Air Filter Element - 10 Nos.
5. Water/Corrosion Filter Element - 05 Nos.
6. Fan Belt - 04 Nos.
7. Alternator Belt - 04 Nos.
8. Compressor Belt - 04 Nos.
9. Water Pump Repair Kit - 02 Sets.
10. Radiator Water Hose - 04 Nos.
11. Engine Mounting - 01 Set.

B. TRANSMISSION -

1. Transmission Filter Element - 04 Nos.
2. Transmission Mounting - 02 Sets.
3. Gear Shifter (one inside driver's Cabin) - 01 No.
4. Gear Shifter Repair Kit - 02 Sets.
5. Gear Shifter Hoses - 02 Nos.

C. TRANSFER CASE (if any) & POWER TAKE OFF (PTO) -

1. Oil Filter Element, if any - 04 Nos.
2. Mounting - 02 Sets.
3. Oil Seal - 02 Nos.
4. PTO actuator Seal Kit - 05 Sets.

D. FRONT AXLE -

1. Wheel Stud with Nuts - 30 Nos.(15 nos for each front axle).
2. Axle Stud with Nuts - 10 Nos. for powered axle
3. Wheel Hub Oil Seal - 02 Sets*.

4. Wheel Hub Bearing - 01 Set*.
(* set comprising of items for one wheel).

E. REAR AXLE -

1. Wheel Stud with Nuts - 30 Nos.
2. Axle Stud with Nuts - 20 Nos.
3. Wheel Hub Oil Seal - 02 Sets.*
4. Wheel Hub Bearing - 02 Sets.*
5. Differential Oil Seal - 02 Sets.*
6. Differential Filter Element (if any) - 02 Nos.
(* set comprising of items for one wheel/differential)

F. DRIVELINE (Propeller Shaft) -

1. UJ Cross (Spider & Bearing) - 01 Set*
(*set comprising of different UJ crosses complete for both front & rear drivelines).

G. STEERING -

1. Steering Oil Filter Element - 02 Nos.
2. Steering Pump Repair Kit - 01 Set.
3. Steering Box/Cylinder Repair Kit - 03 Sets.
4. Tie Rod End (for both sides) - 02 Nos.

H. BRAKE & PNEUMATICS -

1. Foot Brake Valve Repair Kit - 03 Sets.
2. Servo diaphragm for Front Wheel - 04 Nos.
3. Servo diaphragm for Rear Wheel Servo - 08 Nos.
4. Air Dryer Filter Element - 08 Nos.
5. Repair Kit for all Pneumatic Valves - 01 Set each.
(* set comprising of items for one servo).

I. ELECTRICAL -

1. Engine Starter - 01 No.
2. Alternator - 01 No.

J. INSTRUMENTATION-

1. Shifter Relays - 6 Nos.
2. Mother board (as per user model) - 01 Set.
3. Male Female connector – 01 set for each type
4. Electronics diagnostic & repair tools-01 Set.
5. Depth sensor - 01 No.
6. Spare Connector and cables for Depth meter- 01 set
7. Electronic depth meter – 01 no
8. Pressure gauges – 01 set
9. Temperature gauges – 01 set

ii) SPARES FOR COILED TUBING UNIT

1. High pressure hydraulic filter (Injector) : 4 Nos.
2. Return line hydraulic filters fitted with the unit. : 1 each
3. Filter fitted with the case drain of all hydraulic pumps : 1 each
4. High pressure hydraulic line filter fitted with the unit : 1 each
5. Load cell diaphragm : 4 nos

6. Traction Cylinder repair kit : 4 set
7. Traction cylinder: 4 nos
8. Repair kit chain tension system/hydraulic cylinders: 2 set
9. Spooler arm Up/Down hydraulic cylinder repair kit 2 set
10. Reel swivel hydraulic cylinder repair kit: 2 set
11. Cabin lift hydraulic cylinder repair kit: 2 set
12. Injector Chain gripper block assembly: 60 nos
13. Gripper block insert: 60 nos
14. Goose neck roller: 15 nos
15. Interlock Packer/Stripper, stuffing box: 12 nos
16. Stripper / stuffing box repair kit: 2 set
17. BOP repair kit: 4 set
18. Inner seal, pipe ram: 4 nos
19. Slip insert: 2 nos
20. Rotary joint repair kit (Coiled tubing reel assembly): 2 Sets
21. 1.5" pitch link chains for guying injector 15m length: 4 nos
22. Load Binder for 1.5" chain (for guying injector): 4 nos

NOTE -

- a. All spares in specified quantity as indicated above shall be supplied along with the unit.
- b. Specific description, Part Nos., Make etc. shall clearly be indicated in the bid.
- c. In case of any difference in spares for left & right wheel studs, axle studs, etc., the specified quantities will be divided into 2(two) equal parts.
- d. Bidder shall also quote separately for any additional spares with similar details as felt necessary for 2 (two) years trouble free operation and maintenance but not covered in this list for future reference/ procurement- **NOT FOR BID EVALUATION.**

14.3 RECOMMENDED SPARES:

The bidder is to furnish a list of spares & components that will be required for regular operation and maintenance, overhauling etc. throughout the life of the equipment complete with price of each item. Annual consumption of each spare shall be furnished. The bidder shall also provide detailed spare list of all the items including bought out items in the operation and maintenance manuals. The list should include a spare parts list along with OEM part numbers, make & model of the equipment and contact postal address of OEM for all items of the whole unit. **THE PRICE QUOTED FOR RECOMMENDED SPARES WILL NOT BE TAKEN IN TO ACCOUNT FOR BID EVALUTION.** The bidder has to submit a complete spare parts list for the whole unit sub grouping major component in the following format as shown with example:

Name of the component /sub com.	Description of the item	Part No/ID No Of the item	Frequency of replacement (in day / Hrs)	Remark
Injector	Filter Bearing and so on indicating make & model	XX YY	359 / 5000	Donaldson Timken /SKF
Hydraulic System	Pump motor and so no indicating make & model	XY X1Y1	500 / 10000	Rexroth -do-
Instrumentation items	Tubing depth display etc.			Part no. Make and part no of the subunits are also to be provided.

14.4 The bidders shall submit a written undertaking (along with the bid) that they would be able to supply all the requisite spares and consumables (including bought out items) for a minimum period of 10 (ten) years from the Certified date of completion / successful field commissioning of the unit.

15.0 UNITIZATION AND COMPLETION

The above unit shall be fully assembled, unitized and completed as per best industrial practice. This shall include the following items:

- i) Installation of all electrical systems.
- ii) Installation of all pneumatic systems.
- iii) Installation of all hydraulic systems.
- iv) All operating oils, coolants and other operating fluids will be drained prior to shipment.
- v) All fixtures to ship complete with the unit.
- vi) Steel toolbox with locking arrangement of sufficient volume to accommodate all operational tools
- vii) All tanks (Fuel, Hydraulic oil etc) shall be fitted with suitable filter and locking arrangement
- viii) All labour to complete unit.
- ix) Workmanship shall be of good quality and appearance. Following is a partial list of example:
 - a) Flame cut edges shall be ground smooth. Sharp corners and edges to which operators and mechanics are vulnerable shall be ground smooth.
 - b) Bolt holes shall be drilled (not torch cut)
 - c) Welds shall be of good quality and of sufficient strength.
 - d) Use self-locking nuts.
 - e) All hoses shall be well supported with support type clamps.
 - f) All hose assemblies shall have swivel ends.
 - g) All hoses shall be protected by well secured rubber sleeves to prevent rubbing by frame, etc tagged for easy identification
 - h) All reservoirs constructed of steel plate with level gauge, cleanouts, vent fill cap, etc.
 - i) Noise level for the complete unit in running condition shall not cross 90dB-

16.0 STANDARDS:

The complete unit shall be built under the quality standards of-

I. For vehicle: **The offered engine shall comply with BS-III/EURO-III or equivalent emission standard as applicable in the state of Assam in India at the time of delivery.**

II. ASME standards

17.0 TECHNICAL MANUAL AND CERTIFICATION FOR OPERATION AND MAINTENANCE OF THE UNIT:

The following Manuals & Catalogues **in printed form (in English language)** shall be supplied along with the unit in addition to the supply of the same in Compact Disk (CD).

Supply of the manuals / catalogues only in Compact Disk is not acceptable. Manuals / Part Catalogues provided shall be Custom Illustrated Manuals / Catalogues for the particular vehicle and equipment only, not a general Composite Manual / Catalogue.

A. 4 (Four) sets of printed Spare Parts Catalogue and Workshop & Service Manual for all components / systems of truck chassis like engine, transmission, axles, brakes, suspension, electrical & pneumatic systems, etc. with complete schematics of electrical & pneumatic circuits.

B. 2 (two) sets of Operator's manual for vehicle.

C. 4 (Four) sets of Engine Fault Diagnostic & Repair Tool manuals in case of engine with Electronic Controller System

D. 4 (Four) sets of ABS Fault Diagnostic & Repair Tool manuals in case of brake with ABS.

E. The bidder has to supply 4 sets of operating, maintenance and spare parts manual detailing maintenance schedule for daily maintenance, preventive maintenance, major overhauling and frequency of spares replacement for all the components of the unit. The operation and maintenance manual shall also contain details

of all sub-assemblies, instrument sensors, wiring diagram hydraulic schematics with color code and entire requisite spare parts with part no (Preferably OEM part no. with detail contact address).

F. 4 (Four) copies of all relevant test and quality control certificates of the manufacturing and testing of all unit functions and parameters shall be supplied.

G. 4 (Four) sets of all relevant test and calibration certificate for each instrument shall be supplied along with the unit.

H. The necessary licensed software in original packages along with user software backups are also to be supplied

COMMISSIONING OF THE UNIT SHALL NOT BE CONSIDERED AS COMPLETE UNTIL & UNLESS ALL ABOVE PRINTED MANUALS / CATALOGUES ARE SUPPLIED.

18.0 INSPECTION CUM ACCEPTANCE

18.1 Third Party inspection of the unit is to be carried out for all the component of the unit by OIL approved TPI agency (viz M/s Lloyds, M/s Bureau Veritas, M/s IRS, M/s Rites, M/s DNV or M/s Tuboscope Vetco only). Scope of 3rd party inspection:

(i) Witness the manufacturing and assembly

(ii) Witness the functional and performance tests

(iii) Review of inspection procedure

(iv) Review of tests and documents related to all pressure holding equipments

(v) Any other requirement of the inspection agency to satisfy of the equipment as per applicable standards.

18.2 Pre shipment inspection shall be carried out by OIL (by representative of user as well as service dept viz. Instrumentation, Transport Dept. Field Engineering etc.) at manufacturing site after accomplishment of Third Party Inspection (TPI). The supplier shall inform OIL at least 2 (two) month ahead for such inspection to enable OIL to send its inspectors. The supplier has to arrange for inspection of the unit by a team of 5 (five) OIL's engineers. OIL will bear the expenses towards traveling and accommodation etc. of the OIL's inspection team. The Inspection cum Acceptance process would include the following minimum steps/tasks but not limited to -

a. Physical verification / inspection of all the items / fittings / accessories including all Parts Catalogue, Maintenance & Service Manuals, Final Chassis Built Up/Vehicle Content Record documents, etc. and **actual loading on axles**. The supplier shall arrange driver/operator, weighing facility and any other infrastructure during the process of inspection as and when required.

b. Operational testing of the carrier.

c. Supplier shall have to take note of any minor modification/s for operational requirement suggested by the inspector and comply with the same at no extra cost.

d. The inspection report shall be prepared at the end of the inspection and jointly signed by both the parties.

e. Supplier shall confirm in writing compliance of all the points raised in the inspection report as well as any other subsequent additions/changes, following deliberation with the inspector after arrival at Duliajan.

18.3 Supplier shall dispatch only on receipt of OIL's dispatch advice.

19.0 TRAINING TO OIL PERSONNEL ON CTU SYSTEM:

The supplier shall have to provide training to OIL personnel in two (02) phases –

19.1 During the pre-dispatch inspection visit of OIL's engineers the supplier shall arrange comprehensive training at their manufacturing plant/works for a period of minimum 2(two) weeks on Operation & Maintenance, Troubleshooting and Working Principle of followings system/items used in the unit amongst other relevant subjects –

i) Engine and its Electronic Controller System.

ii) Transmission, Transfer Case and their control systems.

iii) Brake & ABS - including their electronic control system.

iv) Power assisted steering system including hydraulic pump and gearbox.

v) Pneumatic system for brake, transmission, PTO shifters including different valves.

vi) Maintenance of National Stand up crane.

vii) Hydraulic system

viii) Control Panel

- ix) Injector & BOP maintenance
- x) CTU operation & trouble shooting

19.2 During installation and commissioning of the unit, the commissioning engineer shall have to provide field training as well as class room training for a period of minimum 1 (one) week to OIL's Engineers and technicians on Operation, Maintenance, troubleshooting, Working Principle and repair/ replacement of different equipment.

Bidders shall quote their training charges separately for evaluation purposes. The charges shall be shown in Commercial bid only.

20.0 COMMISSIONING:

20.1 The unit shall be commissioned at Duliajan, Assam, India with 3 (three) successful field jobs at different wells after arrival of the Supplier's Commissioning Engineer within a period of 2(two) weeks time.

20.2 The successful bidder shall quote for commissioning charges which shall include the to and fro charges, food & lodging and daily charges of the personnel. OIL will provide accommodation (on payment basis) subject to availability. OIL shall provide local transportation to the commissioning personnel.

20.3 The commissioning engineer shall be available at site within fifteen (15) days of the intimation given by OIL for commissioning the unit.

20.4 Bidders shall quote commissioning charges separately for evaluation purposes. The charges shall be shown in Commercial bid only.

21.0 GUARANTEE / WARRANTY:

The bidder shall offer a period of at least 1 (one) year warranty for the entire equipment supplied from the date of successful field commissioning of the entire equipment. OIL reserves the right to inspect, test and if necessary reject any part / parts after delivery at site (including incomplete manuals, catalogues, etc.) in case of any fault on the part of the supplier. It shall in no way be waived by the reason that the unit / item was previously inspected and passed by OIL as per Inspection Clause detailed elsewhere in the NIT. To keep the unit fully operational, in case of failure of any item during the warranty period, it shall be the supplier's responsibility to arrange replacement / repairing at site at their cost including customs, freight, etc. within a period of maximum 3 (three) weeks from the date of notification of such failure and warranty for such items shall be extended accordingly.

22.0 DEVIATIONS FROM THE SPECIFICATIONS:

The bidder shall enclose comprehensive list of intended deviations from the technical specifications, if any, clearly highlighting the reasons thereof, along with the bid. Deviations from the Technical specifications if intended, the same shall be confirmed in the offer. But OIL reserves the right for acceptance or rejection of the deviation(s).

23.0 BID SUBMISSION & DOCUMENTATIONS:

Bidder's response to all NIT stipulations shall clearly be defined maintaining the same sequence as in the NIT. **Bidder shall furnish specific details / specifications of all major components, systems with Make & Model etc.** Submission of technical leaflet/catalogue alone is not sufficient. General Response like- **'As per NIT Specifications / Technical Leaflet', 'Noted' etc. or in any similar fashion is not encouraged.** Quoting only the NIT stipulation without any confirmation of acceptance of the same and/or without any confirmation of offering the same is also not acceptable.

23.1 Following documents shall be submitted along with bid for evaluation –

1. Technical leaflets with detailed specifications; Make & Model of chassis, engine, transmission, power take off, transfer case (if any), axle, suspension, steering, brake, etc.
2. Detail dimensional layout drawing(s) illustrating Driver's Cabin & position of all major components & their mounting on the vehicle.
3. List of items that shall be supplied under the Engine Fault Diagnostic & Repair Tool (both Software as well as complete Hardware).

4. List of items that shall be supplied under brake ABS Diagnostic & Repair Tool (both Software as well as complete Hardware).
5. List of tools that shall be supplied under Standard Tool Kit for general maintenance of the truck.
6. Specific description, Part Nos., Make, etc. (for bid evaluation) as detailed in the **Operational Critical Spares** List provided in para 14.2 above.
7. List of Recommended Spares in para 14.3 above.
8. Checklist as per enclosed format shall be furnished along with the bid.
9. The weight of individual major equipment to be mounted on the truck chassis.

23.2 Following documents are to be submitted along with supply / unit:

- a. Sale Letter, Pollution & Roadworthy Certificate (in similar format of Form 21 & 22A of Indian Motor Vehicle Act - sample copies enclosed), Engine Emission Norms Certificate, etc. as required under Indian Motor Vehicle Act for registration of the unit in the name of **Oil India Limited**.
- b. Final Chassis Built Up/Vehicle Content Record documents from chassis manufacturer.
- c. Specification Sheet of unit indication all details viz Make & Model of chassis, engine, transmission, etc, GVWR, Axle Capacity, Axle Loading, Wheelbase, etc., number of Axles, wheels & tyres, etc., overall dimensions, turning radius, etc.
- d. Certificate of Origin for the chassis in original from chassis manufacturer. Amongst others, the certificate shall contain following information –
 - i. Make & Model of Chassis.
 - ii. Vehicle Identification Number (VIN i.e. Chassis No.)
 - iii. Month & Year of Manufacture of the chassis.
 - iv. Make & Model of Engine.
 - v. Serial No. of Engine.
 - vi. Month & Year of Manufacture of the engine.
- e. **Notwithstanding any clause mentioned elsewhere in the NIT, the invoice for the complete unit shall be submitted in 2 (two) parts separately as under -**
 - i. **Invoice for truck chassis** - it shall include the cost of the truck chassis with driver's cabin only.
 - ii. **Invoice for Coiled Tubing unit** - it shall include cost of all equipments, tools, accessories, etc. subsequently fitted in the original truck chassis as well as supplied separately along of the unit.

24.0 CONFORMITY TO THE NIT SPECIFICATIONS:

- (i) Bidder shall fill the Technical datasheet enclosed with the offer.
- (ii) The total axle capacity shall be at par with the GVW with all equipment.
- (iii) Detailed specifications of Mechanical, Electrical, Pneumatic and Hydraulic systems including relevant instrumentation details shall be provided.
- (iv) The bids and the accompanied technical documentation must be in English language only. The bids with other than English language must have an English version.
- (v) Bidder must undertake that the provision for supplying spares (including bought out items) of the equipment will be continued for next ten (10) years from the certified date of completion / successful field commissioning of the unit.
- (vi) The bidders are to confirm categorically the commissioning clause as mentioned in 20.0 of Technical Specification.

25.0 SAMPLE COPY OF FORM 21 & 22-A (as referred above)

- A. Following is a sample copy similar to FORM 21 of Indian Motor Vehicle Act only. The certificate to be issued by supplier in their letter head, shall contain following minimum information –

FORM 21

[See Rules 47 (a) and (d)]

SALE CERTIFICATE

(To be issued by manufacturer/ dealer or officer of Defence Department (in case of military auctioned vehicles) for presentation along with the application for registration of a motor vehicle).

Certified that (Brand name of the vehicle)

has been delivered by us to on (date)

Name of the buyer

Son /wife / daughter

Address (Permanent)

(Temporary)

The vehicle is held under agreement of hire-purchase/lease/hypothecation with

The details of the vehicle are given below:

1. Class of Vehicle
2. Maker's name
3. Chassis No.
4. Engine No.
5. Horse power or cubic capacity
6. Fuel used of cylinders.....
8. Month and year of manufacture
9. Seating capacity (including driver)
10. Unladen Weight
11. Maximum axle weight & number &
Description of tyres (in case of transport vehicle)
 - (a) Front axle
 - (b) Rear axle
 - (c) Any other axle
 - (d) Tandem axle
12. Colour or colours of the body
13. Gross vehicle weight
14. Type of body

Signature of the Manufacturer /
Dealer or Officer of defence Department

B. Following is a sample copy similar to **FORM 22(A)** of Indian Motor Vehicle Act only. The certificate to be issued by supplier shall contain following minimum information. –

FORM 22-A

[See Rules 47 (g), 124, 126-A & 127]

**INITIAL CERTIFICATE OF COMPLIANCE WITH POLLUTION
STANDARDS, SAFETY STANDARDS OF COMPONENTS AND ROAD
WORTHINESS
(FOR VEHICLES WHERE BODY IS FABRICATED SEPARATELY)**

PART – I

(TO BE ISSUED BY THE MANUFACTURER)

Certified that (brand name of the vehicle) bearing
Chassis number and Engine Number
..... complied with the provisions of Motor Vehicles Act, 1988 and
Rules made thereunder.

Signature of the Chassis Manufacturer

Form 22-A, Part I shall be issued with the signature of the manufacturer duly printed in the Form itself by affixing facsimile signature in ink under the hand and seal of the manufacturer.

PART – II

(TO BE ISSUED BY THE BODY BUILDER)

Certified that body of the vehicle(brand name of the vehicle) bearing
Chassis number and Engine Number
..... has been fabricated by us and the same complies with the
provisions of Motor Vehicles Act, 1988 and Rules made thereunder.

Signature of the body builder

Form 22-A, Part II shall be issued with the signature of the body builder duly printed in the Form itself by affixing facsimile signature in ink under the hand and seal of the body builder.

CHECK LIST:

**Part A TECHNICAL
A 1.1 (TRUCK CHASSIS)**

Sl. No.	PARAMETERS / REQUIREMENTS	BIDDER'S OFFER (To indicate details or yes/no, as applicable)	REMARKS, IF ANY
1	Make & Model of Chassis		
2	Max. Permissible Gross Vehicle Weight (GVWR)		
3	Drive		
4	Wheelbase		
5	Overall Dimensions (Width, Height & Length) of complete unit		
6	Ground Clearance		
7	Laden Weight (Total weight of the unit)		
8	Engine	a Make & Model	
		b Max. Output Power	
		c Max. Output Torque	
		d Naturally Aspirated or Turbo Charged	
		e Emission Norms	
		f Control System (Electronic?)	
9	Transmission (Main)		
		a Make & Model	
		b No. of gears	
		c High/Low provision	
10	Make, Model & Type of Transmission Shifter		
11	Make & Model of Transfer Case, if any		
12	Total number of PTOs in operation		
13	Make & Model of PTOs		
14	Make, Model & Type of Steering System		
15	Minimum Turning Radius		
16	Make, Model & Type of Front Suspension		
17	Make, Model & Type of Rear Suspension		
18	Axle Capacity	a Front	
		b Rear	
19	Axle Loading (actual loading)	a Front	
		b Rear	
20	Axle Loading		
21	Type, Size of Wheel & Tyre	a Front	
		b Rear	

22	Type of Service Brake (S-cam or not)			
23	Type of Wheel Brake Servos(screw type manual release or not)	a Front		
		b Rear		
24	Fuel Tank capacity			
25	Number of fuel tank			
26	Seating Capacity inside Driver's cabin.			
27	Reversing Alarm with Blinker Lights			
28	Electrical fittings/equipment suitable for hazardous oilfield area.			
29	Speedometer/Odometer in Metric (KM) calibration.			
30	Provision of Air Dryer in truck's pneumatic system.			
31	Towing Hooks at Front & Rear of truck.			
32	Make of Starter, Alternator, etc. of engine.			

A 1.2 HYDRAULIC PUMPS

Sl. No.	PARAMETERS / REQUIREMENTS		BIDDER'S OFFER (To indicate details or yes/no, as applicable)	REMARKS, IF ANY
1	Make , Model and specification of injector drive pump			
2	Nos of hydraulic pump for other functions except injector			
3	Make, model of other pumps			
4	Maximum capacity injector drive pump			
5	Wet Kit gear box type and ratio			
6	Type of hydraulic circuit for each pump			
7	Minimum Prime mover RPM to run pumps efficiently			
8	Injector pump	a. Speed(High/Low)		
		b. Flow/HP requirement		
		c. Circuit(Closed/Open)		
		d. Size of suction/delivery port Control System		
		e. (Electrical/hydraulic)		
		f. Control System (HDC/EDC)		
9	Other pump			
	Pump 1	Variable/fixed(If variable control system(EDC/HDC)		
	Pump 2	Variable/fixed(If variable control system(EDC/HDC)		
	Pump 3	Variable/fixed(If variable control system(EDC/HDC)		
10	Circuit drawing attached for all pumps			

	(Yes/No)		
11	Make , Model and type of control valves		
12	Valve control pilot(Electrical/Hydraulic)		
13	Servo valve for pump displacement control(Elect/hydraulic)		
14	Pump pressure sensing device(Hyd/elect)		
15	Filtration system(Inlet/return)		
16	Type of filters and indicating system		
17	Capacity of cooler		
18	Hydraulic temp sensing device	a. Hydraulic b. Electrical	
19	Reservoir for hydraulic oil for all pumps	a. Common b. Individual	
20	Level gauge/temperature gauge for reservoir		
21	Temperature measuring device	a. Mechanical b. Electrical	
22	Hand pump back up for critical function i.e.Stipper/BOP etc		
23	Reservoir hydraulic oil filling pump with filter	a. Metric b. British	
24	System pressure for all pump		
25	Identification mark for hoses		
26	Make of hydraulic hoses		
27	Hose tray and bindings for hyd hoses		
28	Space for Maintenance of pumps and other hyd components		
29	Accessibility for inspection of gear box oil, leakage etc		
30	Provision for auxiliary reel drive		
31	Accumulator back up for critical function		
32	Accumulator charge pressure		

A 1.3 INJECTOR, STUFFING BOX & BOP

Sl. No.	PARAMETERS / REQUIREMENTS	BIDDER'S OFFER (To indicate details or yes/no, as applicable)	REMARKS, IF ANY
1	Make & Model of Injector		
2	Gross Weight with goose neck and stuffing box		
3	Drive (double motor or single motor)		
4	Maximum pull capacity(High/low gear)		
5	Overall Dimensions (Width, Height & Length) of complete Injector		
6	Goose neck radius of curvature		
7	Goose neck mountings and adjustment		
8	Injector	a. Speed(High/Low)	
		b. Flow/HP requirement	
		c. Max. Output Torque at rated flow	
		d. Type of Chain and gripper block assy	

		Range of CT size		
		e. Lubrication system		
		f. Control System (Electronic?)		
9	Hydraulic motor (Injector)	a. Make & Model		
		b. Type and controls		
		c. braking and gear box system		
10	Make, Model & Type of traction cylinders			
11	Make, Model and type of load cell			
12	Arrangement of chain tensioning			
13	Catwalk and fall protection device(Injector)			
14	supporting legs height and weight(both short & Long)			
15	Stuffing box mounting			
16	Unsupported length between bottom of chains and top of the stuffing box			
17	Injector chain no and gripper block size			
18	Stuffing box type	a. Side		
		b. Top		
19	Working pressure, Stuffing box	a. WP		
		b. TP		
20	Stuffing box control(Elect/Hydraulic)			
21	Tandem Stuffing box type	a. Side		
		b. Top		
22	Working pressure, Tandem Stuffing box	a. WP		
		b. TP		
23	Tandem Stuffing box control (Elect/Hydraulic)			
24	Goose neck type	a. Fixed		
		b. Flexible		
25	Fail safe mechanism, Injector			
26	BOP	a. WP		
		b. TP		
27	Hydraulic operating pressure			
28	Ram type			
29	Make, Model & Type of BOP			
30	Top connection BOP			
31	Bottom flange, BOP			
32	Remote control provision, BOP			
33	Equalizer valve and rams,BOP			
34	Control valve(Electrical/Hydraulic)			
35	Accumulator back up,BOP			

A1.4 REEL

Sl. No.	PARAMETERS / REQUIREMENTS	BIDDER'S OFFER (To indicate details or yes/no, as applicable)	REMARKS, IF ANY
1	Make & Model Tubing reel assembly		

2	Gross Weight with coiled tubing			
3	Drive system			
4	Maximum capacity of CT of specified size			
5	Overall Dimensions (Width, Height & Length) of complete assembly and reel			
6	Level wind and spooling mechanism			
7	Swivel angle with centerline of the unit			
8	Reel motor	a. Speed(High/Low)		
		b. Flow/HP requirement		
		c. Reduction gear box type and ratio Reduction gear box type and ratio		
		d. Type of transmission Chain Auto spooling mechanism		
		e. Lubrication system		
		f. Control System (Electronic/hydraulic)		
9	Coiled tubing	a. Make & grade		
		b. Size and length		
10	Make, Model & Type of hydraulic cylinders			
11	Make, Model and type depthometer			
12	Arrangement of mounting of tube reel assembly on the main chassis			
13	Depth/speed measuring device(Electrical/mechanical)			
14	Reel speed control(Hydraulic/electrical)			
15	Level wind control(hydraulic/electrical)			
16	Reel swivel right/left control (hydraulic/electrical)			
17	Manual spooling override control	a. Hydraulic		
		b. Mechanical		
18	Working pressure, Rotary joint	a. WP		
		b. TP		
19	Flow measuring system(Electrical/Hydraulic)			
20	Temperature measuring device	a. Mech		
		b. Electrical		
21	Fail safe mechanism, reel motor			
22	Counter	a. Metric		
23		b. British		
24	Hydraulic operating pressure			
25	Guard to prevent hitting of CT to operator cabin in case of accidental un-spooling			
26	Make, Model of override hydraulic motor			
27	Flow line connection tee to CT(pressure rating)			
28	No. of plug valve in flow tee and pressure rating			
29	Hydraulic circuit for reel drive(Independent/integrated)			

A1.5 COILED TUBING INTEGRITY MONITORING SYSTEM

Sl. No.	PARAMETERS / REQUIREMENTS	BIDDER'S OFFER (To indicate details or yes/no, as applicable)	REMARKS, IF ANY
1	Make & Model		
2	Provide continuous and accurate wall thickness measurements		
3	Provide continuous diameter and ovality measurements		
4	Track weld-seam location to monitor rotation of the coiled tubing		
5	Capable of adjusting to 1.25 inch to 1.5 inch coiled tubing (OD) range		
6	Horizontally split for installation on coiled tubing		
7	Light in weight		
8	Laptop with latest configurations		
9	Coiled Tubing Integrity Monitoring System maintenance On-call out basis for 4 years		

A1.6 DATA ACQUISITION SYSTEM:

Sl. No.	PARAMETERS / REQUIREMENTS	BIDDER'S OFFER (To indicate details or yes/no, as applicable)	REMARKS, IF ANY
1	Make & Model		
2.	Measure and display following parameters:		
	a. Coil tubing depth, speed and Tubing fatigue		
	b. Tubing weight		
	c. Circulating pressure		
	d. Well head pressure		
	e. Fluid pumping rate / total flow		
	f. Density of pumping fluid		
3.	Standards channels acquired –		
	a. Wellhead Pressure		
	b. Circulation Pressure		
	c. Pipe Weight (Heavy and Light)		
	d. CT Depth		
	e. CT Speed		
	f. Fluid Pumping Rate with totalizer		
4.	Channels for input signals for nitrogen and liquid rates and volumes		
5.	Availability of hard copy of real time data and graphic traces using latest jet colour printer.		
6.	Licensed software for real-time monitoring		
7	LCD/ monitor to display real time data		
8	Provision of UPS		
9	Laptop with latest configurations to		

retrieve data		
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Part B DOCUMENTATIONS

B1.1 TRUCK

SI. No.	DESCRIPTIONS	DOCUMENT ENCLOSED (Yes or No)	REMARKS, IF ANY
1	Technical leaflets with detailed specifications, Make & Model of chassis, engine, transmission, transfer case (if any), PTOs, suspension, axle, steering, wheel & rim, brake, etc.		
2	Detailed dimensional layout drawing illustrating, Driver's Cabin and all major items/ components.		
3	List of items that shall be supplied under Engine Fault Diagnostic & Repair Tool (both Software as well as complete Hardware).		
4	List of items that shall be supplied under ABS Fault Diagnostic & Repair Tool (both Software as well as complete Hardware).		
5	List of tools that shall be supplied under Standard Tool Kit for general maintenance of the truck.		
6	Specific description, Part Nos., Make, etc. and Unit Price of each and every spares as detailed in the Automobile Spare Parts List.		
7	List of additional spares as felt necessary for two (02) years maintenance but not covered in the Automobile Spare Parts List provided in the NIT with Description, Part Nos., Make, etc. including Unit Rate (for future reference/procurement only; not for bid evaluation).		

B1.2 HYDRAULIC PUMP/INJECTOR

SI. No.	DESCRIPTIONS	DOCUMENT ENCLOSED (Yes or No)	REMARKS, IF ANY
1	Technical literature with detailed specifications of hydraulic pumps, control valves and accumulator		
2	Detailed hydraulic circuit drawing illustrating pumps, control valves and actuators.		
3	Technical literature with detailed specifications gear box.		
4	Technical literature with detailed specifications of pressure, flow and temperature measuring system		
5	List of tools that shall be supplied under Standard Tool Kit for general maintenance Tubing reel assy.		
6	Specific description, Part Nos., Make, etc. and Unit Price of each and every spares for hydraulic transmission.		
7	List of additional spares as felt		

necessary for 2 (two) years trouble free operation and maintenance but not covered in this list for future reference/procurement- NOT FOR BID EVALUATION.		
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B 1.3 INJECTOR, STUFFING BOX & BOP

SI. No	DESCRIPTIONS	DOCUMENT ENCLOSED (Yes or No)	REMARKS, IF ANY
1	Technical literature with detailed specifications, Injector, Hydraulic motor, Transmission and gear box, Brake mechanism, chains and gripper block assembly, Chain traction and tension system, hydraulic components, load cell.		
2	Detailed dimensional layout drawing illustrating operator's Cabin and all major items/ components.		
3	Technical literature with detailed specifications Stuffing box		
4	Technical literature with detailed specifications BOP		
5	List of tools that shall be supplied under Standard Tool Kit for general maintenance injector, BOP & stuffing box		
6	Specific description, Part Nos., Make, etc. and Unit Price of each and every spares for injector, Stuffing box and BOP		
7	List of additional spares as felt necessary for 2 years maintenance (for future reference/procurement only; not for bid evaluation).		

B 1.4 REEL

SI. No.	DESCRIPTIONS	DOCUMENT ENCLOSED (Yes or No)	REMARKS, IF ANY
1	Technical literature with detailed specifications reel ,Hydraulic motor, Transmission and gear box, Brake mechanism , auto spooling system, Hydraulic cylinders, hydraulic control valves, measuring device.		
2	Detailed dimensional drawing illustrating level wind, Measuring head, spooler override, lubrication system, drive mechanism, Transmission chain/auto		

	spooling and all major items/components.		
3	Technical literature with detailed specifications coiled tubing		
4	Technical literature with detailed specifications plug valves, flow and temperature measuring system		
5	List of tools that shall be supplied under Standard Tool Kit for general maintenance Tubing reel assy.		
6	Specific description, Part Nos., Make, etc. and Unit Price of each and every spares for tube reel assy.		
7	List of additional spares as felt necessary for 2 years maintenance (for future reference/procurement only; not for bid evaluation).		

GENERAL NOTES FOR BIDDERS:

(i) Oil India Purchase Order No. must be engraved on the body of the item. Bidder must confirm the same categorically in their quotation.

(ii) The items covered by this enquiry shall be used by Oil India Limited in the PEL/ML areas which are issued / renewed after 01/04/99 and hence Nil Customs Duty during import will be applicable. Indigenous bidder shall be eligible for Deemed Export Benefit against this purchase. Details of Deemed Export are furnished vide Addendum to MM/GLOBAL/E-01/2005 enclosed.

(iii) Other terms and conditions of the tender shall be as per "General Terms & Conditions" for e-Procurement as per Booklet No. MM/GLOBAL/E-01/2005 for E-procurement (ICB Tenders). However, if any of the Clauses of the Bid Rejection Criteria (BRC) / Bid Evaluation Criteria (BEC) mentioned here contradict the Clauses in the "General Terms & Conditions" for e-Procurement as per Booklet No. MM/GLOBAL/E-01/2005 for E-procurement (ICB Tenders) of the tender and/or elsewhere, those mentioned in this BRC / BEC shall prevail.

BID REJECTION CRITERIA & BID EVALUATION CRITERIA

I) BID REJECTION CRITERIA

The bid must conform to the specifications and terms and conditions given in the enquiry. Bid will be rejected in case the items offered do not conform to all the required technical parameters stipulated in the technical specifications and to the respective international / national standards wherever stipulated. Notwithstanding the general conformity of the bids to the stipulated specifications and terms and conditions, the following requirements shall have to be particularly met by the bidders, without which the offer will be considered as non-responsive and rejected.

Bid evaluation will be done only for those bids that pass through the Bid rejection criteria (BRC) as stipulated in this document.

(A) Technical:

1.0 Bidder's Qualification:

1.1 The bidder shall be an Original Equipment Manufacturer (OEM) of Coiled Tubing Unit.

OR

1.2 The bidder shall be an Authorized Dealer of OEM of Coiled Tubing Unit.

2.0 Bidder's Experience:

2.1 In case the Bidder is an Original Equipment Manufacturer (OEM) of Coiled Tubing Unit, the following criteria shall be met by the Bidder:

2.1.1 The OEM shall have the experience of successful completion (including commissioning of the equipment) of 100 % of the tender quantity in the last five (05) years preceding from the bid closing date of this tender against supply, installation & commissioning of Coiled Tubing Unit (CTU) to any reputed E&P / Service company. The OEM shall submit copies of Purchase order together with any or combination of the following documents related to the Purchase order viz. invoice, bill of lading, commissioning report from the clients and/or any documentary evidence which confirms that the bidder's past supply has been successfully executed. Additionally, the bidder shall also furnish the address including contact details of its client(s) to whom the above supplies were made.

2.2. In case the Bidder is an Authorized Dealer of the Original Equipment Manufacturer (OEM) of Coiled Tubing Unit, the following criteria shall be met by the Bidder:

2.2.1 The Bidder shall be in the business of supply, installation and commissioning of Coiled Tubing Unit (CTU) for the last five (05) years preceding from the bid closing date of this tender. Additionally, the bidder shall have the experience of supply, installation & commissioning of at least one (01) Coiled Tubing Unit (CTU) to any reputed E&P / Service company during the last five (05) years preceding from the bid closing date of this tender. The bidder shall submit copies of Purchase order together with any or combination of the following documents related to the Purchase order viz. invoice, bill of lading, commissioning report from the clients and/or any documentary evidence which confirms that the bidder's past supply has been successfully executed. Additionally, the bidder shall also furnish the address including contact details of its client to whom the above supply was made.

2.2.2 The bidder shall submit proof of valid authorization / dealership certificate issued by the OEM (the principal) with backup warranty / guarantee along with the technical bid.

2.2.3 The principal (i.e. OEM) must have experience of manufacturing Coiled tubing Unit (CTU) for 100 % of the tender quantity to any reputed E&P / Service company in the last five (05) years preceding from the bid closing date of this tender. The OEM's documentary evidence in this regard shall be provided in the form of copies of Purchase order together with any or combination of the following documents related to the Purchase order viz. invoice, bill of lading, commissioning report from the clients and/or any documentary evidence which confirms that the bidder's past supply has been successfully executed. Additionally, the bidder shall also furnish the address including contact details of its client(s) to whom the above supplies were made.

(B) COMMERCIAL:

- 1.0 Bids are invited under Single Stage Two Bid System. Bidders shall quote accordingly under Single Stage Two Bid System. Bidder to note that no price details should be furnished in the Technical (i.e. Unpriced) bid. The "Unpriced Bid" shall contain all techno-commercial details except the prices which shall be kept blank. The "Priced Bid" must contain the price schedule and the bidder's commercial terms and conditions. Bidder not complying with above submission procedure will be rejected.
- 2.0 **Bid security of US \$ 1,77,890.00 or Rs. 80,05,000.00 shall be furnished as a part of the TECHNICAL BID.** Any bid not accompanied by a proper bid security in ORIGINAL will be rejected without any further consideration. For exemption for submission of Bid Security, please refer Clause No. 9.8 (Section A) of General Terms and Conditions for Global Tender. **The Bid Security shall be valid upto 18/03/2016.**
- 3.0 Bidders must confirm that Goods, materials or plant(s) to be supplied shall be new of recent make and of the best quality and workmanship and shall be guaranteed for a period of twelve months from the date of commissioning of the complete CTUs at site against any defects arising from faulty materials, workmanship or design. Defective goods/materials or parts rejected by OIL shall be replaced immediately by the supplier at the supplier's expenses at no extra cost to OIL.
- 4.0 Successful bidder will be required to furnish a Performance Bank Guarantee @10% of the order value. The Performance Bank Guarantee must be valid for one

year from the date of successful commissioning of the complete CTUs at site. Bidder must confirm the same in their Technical Bid. Offers not complying with this clause will be rejected.

- 5.0 The prices offered will have to be firm through delivery and not subject to variation on any account. A bid submitted with an adjustable price will be treated as non-responsive and rejected.
- 6.0 **Validity of the bid shall be minimum 180 days from the Bid Closing date. Bids with lesser validity will be rejected.**
- 7.0 Bids received after the bid closing date and time will be rejected. Similarly, modifications to bids received after the bid closing date & time will not be considered.
- 8.0 Bidders shall quote directly and not through Agents in India. Offers made by Indian Agents on behalf of their foreign principals will be rejected. Similarly offers from unsolicited bidders will be rejected.
- 9.0 Bids containing incorrect statement will be rejected.
- 10.0 Offers should be submitted with Integrity Pact duly signed by the authorized signatory of the bidder. If any bidder refuses to sign Integrity Pact or declined to submit Integrity Pact with the offer, their bid shall be rejected straightway.
- 11.0 No offers should be sent by Telex, Cable, E-mail or Fax. Such offers will not be accepted.
- 12.0 Bidders are required to submit the summary of the prices in their commercial bids as per bid format (Summary), given below:

(i) Commercial Bid Format (Summary) for Foreign Bidders :

- (A) Total material cost of 02 Nos. CTUs
- (B) Third Party Inspection Charges of 02 Nos. CTUs
- (C) Grand Total Material Cost (A+B)
- (D) Packing & FOB Charges 02 Nos. CTUs
- (E) Total FOB Port of Shipment value, (C+D) above
- (F) Ocean Freight Charges upto Kolkata, India, of 02 Nos. CTUs
- (G) Insurance Charges of 02 Nos. CTUs
- (H) Total CIF Kolkata value, (E+ F+G)
- (I) Installation & Commissioning charges of 02 Nos. CTUs including Service Tax
- (J) Pre-shipment Inspection charges of 02 Nos. CTUs, if any, including Service Tax, if any.
- (K) Training to OIL Personnel charges, if any, including Service Tax.
- (L) Total Value, (H+I + J + K) above
- (M) Total value in words :
- (N) Gross Weight :
- (O) Gross Volume :

Note: Total material cost for 1 (one) No. CTU in (A) shall include cost of CTU, Additional Equipment (under Para 13 of Annexure-A) and Spares (under Para 14.1 & 14.2 of Annexure-A)

- (ii) Commercial Bid Format (SUMMARY) for Indigenous Bidders :
- (A) Total material cost of 02 Nos. CTUs
 - (B) Third Party Inspection Charges of 02 Nos. CTUs
 - (C) Grand Total Material Cost (A + B)
 - (D) Packing and Forwarding Charges of 02 Nos. CTUs
 - (E) Total Ex-works value, (C+D) above
 - (F) Excise Duty including Cess, (Please indicate applicable rate of Duty & Cess)
 - (G) Sales Tax, (Please indicate applicable rate of Tax)
 - (H) Total FOR Despatching station price, (E+F+G) above
 - (I) Road Transportation charges to Duliajan of 02 Nos. CTUs
 - (J) Insurance Charges of 02 Nos. CTUs
 - (K) Total FOR Duliajan value, (H+I+J) above
 - (L) Installation & Commissioning charges for 02 Nos. CTUs including Service Tax
 - (M) Pre-shipment Inspection charges of 02 Nos. CTUs, if any, including Service Tax, if any.
 - (N) Training to OIL Personnel charges, if any, including Service Tax.
 - (O) Total Value, (K+L + M + N) above
 - (P) Total value in words :
 - (Q) Gross Weight :
 - (R) Gross Volume :

Note: Total material cost for 1 (one) No. CTU in (A) shall include cost of CTU, Additional Equipment (under Para 13 of Annexure-A) and Spares (under Para 14.1 & 14.2 of Annexure-A)

SPECIAL NOTES:

1. The CTUs covered under this tender will be used by OIL in the PEL/ML areas issued/renewed after 01/04/99, applicable Customs Duty for import of goods shall be ZERO. Indigenous bidders shall be eligible for Deemed Export and should quote Deemed Export prices. Excise Duty under Deemed Export exempted. Necessary Project Authority Certificate (PAC) shall be issued by OIL towards this.
2. Successful bidder shall offer the CTUs for Pre-despatch/shipment Inspection by OIL's executives. Pre-despatch/shipment Inspection charges, if any, must be quoted separately on lumpsum basis which shall be considered for evaluation of the offers. The to and fro fares, boarding/lodging and other enroute expenses of OIL's personnel shall be borne by OIL. Pre-despatch Inspection charges shall include Service Tax, if any.
3. Installation/Commissioning charges must be quoted separately on lumpsum basis which shall be considered for evaluation of the offers. These charges should include amongst others to and fro fares, boarding/lodging, local transport at Duliajan and other expenses of supplier's commissioning personnel during their stay at Duliajan, Assam(India). All Income, Service, Corporate Taxes etc. towards the services provided under installation / commissioning shall be borne by the supplier and will be deducted at source at the time of releasing the payment. Bidder should also confirm about providing all these services in the Technical Bid.

4. Bidders must categorically indicate the Installation / Commissioning, Pre-despatch / Shipment Inspection and Training charges in their offers and must confirm about providing the same in their Technical bids.
5. A bid shall be rejected straightway if it does not conform to any one of the following clauses:
 - (a) Validity of bid shorter than the validity indicated in the Tender.
 - (b) Original Bid Security not received within the stipulated date & time mentioned in the Tender.
 - (c) Bid Security with (i) validity shorter than the validity indicated in Tender and/or Bid Security amount lesser than the amount indicated in the Tender.
 - (d) In case the Party refuses to sign Integrity Pact.
 - (e) Average Annual Turnover of a bidder lower than the average Annual turnover mentioned in the Tender.
- 13.0 LIQUIDATED DAMAGE: Supplier's competent personnel must arrive at Duliajan within 15 days from the date of intimation by OIL and complete the installation & commissioning job thereafter within the time mentioned in the tender. OIL, on the other hand, shall inform the party immediately on receipt of the goods at Duliajan. Liquidated Damage will be levied for any failure on the part of the supplier in completing the installation and commissioning of the Units @ 0.5% per full week or part thereof to a maximum of 10% of the total installation/commissioning charges.

(II) Bid Evaluation Criteria :

The bids conforming to the specifications, terms and conditions stipulated in the enquiry and considered to be responsive after subjecting to the Bid Rejection Criteria will be considered for further evaluation as per the Bid Evaluation Criteria given below:

COMMERCIAL:

- 1.0 The evaluation of bids will be done as per the Commercial Bid Format (SUMMARY) detailed vide Para 12.0 of BRC.
- 2.0 If there is any discrepancy between the unit price and the total price, the unit price will prevail and the total price shall be corrected. Similarly, if there is any discrepancy between words and figure, the amounts in words shall prevail and will be adopted for evaluation.
- 3.0 For conversion of foreign currency into Indian currency, B.C. selling (Market) rate declared by State Bank of India, one day prior to the date of price bid opening shall be considered. However, if the time lag between the opening of the bids and final decision exceed 3(three) months, then B.C. Selling(Market) rate of exchange declared by SBI on the date prior to the date of final decision shall be adopted for conversion and evaluation.
- 4.0 Offers not complying with the payment terms indicated in the enquiry shall be loaded with one percent above the prevailing Bank rate (CC rate) of State Bank of India for duration of commissioning time indicated in the tender plus transit time (3 months) for evaluation purpose.

5.0 To ascertain the inter-se-ranking, the comparison of the responsive bids will be made as under, subject to corrections / adjustments given herein.

5.1 When only foreign bidders are involved:

Comparison of bids will be done on the basis of "GRAND TOTAL VALUE" which is estimated as under:

- (A) Total material cost of 02 Nos. CTUs
- (B) Third Party Inspection Charges of 02 Nos. CTUs
- (C) Grand Total Material Cost (A + B)
- (D) Packing & FOB Charges of 02 Nos. CTUs
- (E) Total FOB Port of Shipment value, (C+D) above
- (F) Ocean Freight Charges upto Kolkata, India, of 02 Nos. CTUs
- (G) Insurance Charges @ 1% of Total FOB Value vide (E) above
- (H) Banking Charges @ 0.5% of Total FOB Value vide (E) above in case of payment through Letter of Credit (If confirmed L/C at buyer's account is required, 1.5% of Total FOB Value will be loaded)
- (I) Total CIF Kolkata Value, (E+F +G+H) above
- (J) Installation & Commissioning charges for 02 Nos. CTUs including Service Tax
- (K) Pre-shipment Inspection charges of 02 Nos. CTUs, if any, including Service Tax, if any.
- (L) Training to OIL Personnel charges, if any, including Service Tax.
- (M) Grand Total Value, (I+J + K + L) above

NOTE: Total material cost for 1 (one) No. CTU in (A) shall include cost of CTU, Additional Equipment (under Para 13 of Annexure-A) and Spares (under Para 14.1 & 14.2 of Annexure-A)

Banking charge in the country of the foreign bidder shall be borne by the bidder.

5.2 When only domestic bidders are involved or when more than one domestic bidders are in contention in case of mixed response:

Comparison of bids will be done on the basis of "GRAND TOTAL VALUE" which is estimated as under:

- (A) Total material cost of 02 Nos. CTUs
- (B) Third Party Inspection Charges of 02 Nos. CTUs
- (C) Grand Total Material Cost (A+B)
- (D) Packing and Forwarding Charges of 02 Nos. CTUs
- (E) Total Ex-works value, (C+D) above
- (F) Excise Duty including Cess
- (G) Sales Tax
- (H) Total FOR Despatching station price, (E+F+G)
- (I) Road Transportation charges to Duliajan of 02 Nos. CTUs
- (J) Insurance Charges @0.5% of Total FOR Despatching Station Value

- (H) above
- (K) Total FOR Duliajan value, (H+I +J)
- (L) Assam Entry tax
- (M) Installation & Commissioning charges for 02 Nos. CTUs including Service Tax
- (N) Pre-shipment Inspection charges of 02 Nos. CTUs, if any, including Service Tax, if any.
- (O) Training to OIL Personnel charges, if any, including Service Tax
- (P) Grand Total Value, (K+L+M +N+O) above

Note: Total material cost for 1 (one) No. CTU in (A) shall include cost of CTU, Additional Equipment (under Para 13 of Annexure-A) and Spares (under Para 14.1 & 14.2 of Annexure-A)

Excise Duty in case of the indigenous bidder is EXEMPTED.

5.3 When both foreign and domestic bidders are involved:

The Grand Total Value of domestic bidder (inclusive of customs duty on imported raw material and components etc, and applicable terminal excise duty on the finished products and Sales Tax) excluding inland transportation to destination, Assam Entry Tax and Insurance charges worked out as per Para 5.2 above and Grand Total Value of the foreign bidder worked out as per Para 5.1 above will be compared. No price preference will be allowed to indigenous bidders except that for capital goods, the domestic manufacturers would be accorded a price preference to offset CST to the extent of 4% or actuals, whichever is less subject to 30% local content norms as stipulated for World Bank Funded project to the satisfaction of OIL. When more than one domestic bidders fall within price preference range, inter-se-ranking will be done on Total value basis.

Note: If the Government of India revises these evaluation criteria the same as applicable on the bid closing date will be adopted for evaluation of the offers.

6.0 Other terms and conditions of the enquiry shall be as per General Terms and Conditions for Global Tender. However, if any of the Clauses of the Bid Rejection Criteria / Bid Evaluation Criteria (BEC / BRC) mentioned here contradict the Clauses in the General Terms & Conditions of Global Tender of the tender and/or elsewhere, those mentioned in this BEC / BRC shall prevail.

COMMERCIAL CHECK LIST

THE CHECK LIST MUST BE COMPLETED AND SUBMITTED WITH YOUR OFFER. PLEASE ENSURE THAT ALL THESE POINTS ARE COVERED IN YOUR OFFER. THESE WILL ENSURE THAT YOUR OFFER IS PROPERLY EVALUATED. PLEASE SELECT "Yes" OR "No" TO THE FOLLOWING QUESTIONS, IN THE RIGHT HAND COLUMN.

<u>Sl No.</u>	<u>REQUIREMENT</u>	<u>COMPLIANCE</u>
1	Whether bid submitted under Single Stage Two Bid System?	Yes / No
2	Whether quoted as manufacturer?	Yes / No
3	Whether ORIGINAL Bid Bond (not copy of Bid Bond) Sent separately? If Yes, provide details	
	(a) Amount :	
	(b) Name of issuing Bank :	
	(c) Validity of Bid Bond :	
4	Whether offered firm prices?	Yes / No
5	Whether quoted offer validity of 180 days from the date of closing of tender?	Yes / No
6	Whether quoted a firm delivery period?	Yes / No
7	Whether agreed to the NIT Warranty clause?	Yes / No
8	Whether confirmed acceptance of tender Payment Terms?	Yes / No
9	Whether confirmed to submit PBG as asked for in NIT?	Yes / No
10	Whether agreed to submit PBG within 30 days of placement of order?	Yes / No
11	Whether Price submitted as per Price Schedule (refer Para 12.0 of BRC)?	Yes / No
12	Whether confirmed that you would be able to supply all the requisite spares and consumables (including bought out items) for a minimum period of 10 (ten) years from the Certified date of completion / successful field commissioning of the unit.	Yes / No
13	Whether quoted as per tender (without any deviations)?	Yes / No
14	Whether quoted any deviation?	Yes / No
15	Whether deviation separately highlighted?	Yes / No
16	Whether indicated the country of origin for the items quoted?	Yes / No
17	Whether technical literature / catalogue enclosed?	Yes / No
18	Whether weight & volume of items offered indicated?	Yes / No
19	For Foreign Bidders - Whether offered FOB / FCA port of despatch including sea / air worthy packing & forwarding?	Yes / No
20	For Foreign Bidders – Whether port of shipment indicated. To specify:	Yes / No
21	For Foreign Bidders only - Whether indicated ocean freight up to Kolkata port (Excluding marine insurance) ?	Yes / No
22	Whether Indian Agent applicable?	Yes / No
23	If YES, whether following details of Indian Agent provided?	
24	(a) Name & address of the agent in India – To indicate	Yes / No
	(b) Amount of agency commission – To indicate	Yes / No
	(c) Whether agency commission included in quoted material value?	Yes / No

25	For Indian Bidders – Whether indicated the place from where the units (CTUs) will be dispatched. To specify :	Yes / No
26	For Indian Bidders – Whether road transportation charges up to Duliajan quoted?	Yes / No
27	For Indian Bidders only - Whether offered Ex-works price including packing/forwarding charges?	Yes / No
28	For Indian Bidders only - Whether indicated import content in the offer?	Yes / No
29	For Indian Bidders only - Whether offered Deemed Export prices?	Yes / No
30	For Indian Bidders only – Whether all applicable Taxes & Duties have been quoted?	Yes / No
31	Whether all BRC/BEC clauses accepted?	Yes / No
32	Whether confirmed to offer the CTUs for Pre-despatch/shipment Inspection?	Yes / No
33	Whether Pre-despatch/shipment inspection charges applicable?	Yes / No
34	If Pre-despatch/shipment inspection charges applicable, whether quoted separately on lumpsum basis?	Yes / No
35	Whether confirmed to carry out Installation & Commissioning of the equipment at Duliajan (Assam)?	Yes / No
36	Whether Installation & Commissioning charge applicable?	Yes / No
37	If Installation/ Commissioning charges applicable, whether separately quoted on lumpsum basis?	Yes / No
38	Whether to & fro air fares, boarding/lodging of the commissioning personnel at Duliajan, Assam (India) included in the quoted charges?	Yes / No
39	Whether confirmed that all Service, Income, Corporate tax etc. applicable under Installation/ Commissioning are included in the prices quoted?	Yes / No
40	Whether Integrity Pact with digital signature uploaded?	Yes / No
41	Whether confirmed to carry out Training to OIL personnel as per NIT?	Yes / No
42	Whether Training charge applicable?	Yes / No
43	If Training charges applicable, whether separately quoted on lumpsum basis?	Yes / No
44	Whether to & fro air fares, boarding/lodging of the Training personnel for providing training at Duliajan, Assam (India) included in the quoted charges?	Yes / No
45	Whether confirmed that all Service, Income, Corporate tax etc. applicable towards services to be provided under Training are included in the prices quoted?	Yes/No
46	Whether confirmed acceptance of tender Payment Terms of 80% against shipment/dispatch documents and balance 20% after successful Installation & Commissioning.	Yes/No

Offer reference	
Name of the Bidder	