MATERIALS DEPARTMENT
P.O. Duliajan, Dist. Dibrugarh
ASSAM, PIN – 786 602, INDIA

FORWARDING LETTER

Subject: Tender No. SDG1633P27/P7 dated 07.04.2026 for Hydraulic Fracturing Fleet, Qty = 1 No.

Dear Sir/Madam,

1.0 **OIL INDIA LIMITED (OIL)** is a premier Maharatna Oil Company engaged in the business of Exploration, Production and Transportation of Crude Oil and Natural gas. A Company under the Ministry of Petroleum and Natural gas, Government of India (GOI), with its Headquarters at Duliajan, Assam. Duliajan is connected by Air with nearest Airport at Dibrugarh, 45 km away.

2.0 In connection to its operations, OIL invites **INTERNATIONAL COMPETITIVE BIDS** from competent and experienced bidders through OIL's e-procurement site for the items mentioned below. One complete set of Bid Document for above is uploaded in OIL's e-procurement portal. You are invited to submit your most competitive bid on or before the scheduled bid closing date and time through OIL's e-procurement portal. For your ready reference, few salient points of the Tender are highlighted below:

	E-Tender No.	:	**SDG1633P27/P7 dated 07.04.2026**
	Type of Bidding	:	**SINGLE STAGE TWO BID SYSTEM**
	Bid Closing Date & Time	:	As mentioned in OIL's E- procurement portal at 11:00 HRS.
	Technical Bid Opening Date & Time	:	As mentioned in OIL's E- procurement portal at 13:00 HRS.
	Price Bid Opening Date & Time	:	To be decided later and shall be intimated separately to the technically qualified bidders only.
	Bid Security and Validity	:	**INR 4.84 Crores or USD 486,000.00 valid upto 30.11.2026**
	Bid Submission Mode	:	Bids must be uploaded online in OIL's E-procurement portal
	Bid Opening Place	:	Office of CGM-MATERIALS, Materials Department, Oil India Limited, Duliajan -786602, Assam, India.
	Bid Validity	:	Bid should be valid for **120 days** from actual bid closing date.
	Performance Guarantee	:	Applicable @ 5% of Order value
	Integrity Pact	:	Applicable
	MSE Purchase Preference	:	Applicable
	Preference To Make In India) order (MII Purchase Preference	:	Applicable
	Preference to domestically manufactured Iron and Steel product (DMI&SP Policy)	:	Not Applicable
	Document Verification by independent third party inspection agencies	:	Applicable *(Detailed in clause 47 of under CC: General Notes to Bidders of Annexure – A)*

	Restrictions on procurement from a bidder of a country which shares a land border with India	:	Applicable
	Sustainable Development (SD) and Environment, Social & Governance (ESG) Policy	:	Applicable
	OIL's Banning policy	:	Applicable
	Pre - despatch inspection	:	Applicable
	Third party inspection (TPI)	:	Applicable – To be arranged by Supplier
	Installation & Commissioning	:	Applicable
	Training	:	Applicable
	Annual Maintenance Contract	:	Applicable
	Contact Details	:	Tuhin Roy, Deputy General Manager Materials (FP) E-MAIL: tuhin_roy@oilindia.in PHN: 0374-2808721
	E-Tender technical Support	:	TEL: 0374- 2804903, 2807171, 2807192, E-MAIL: erp_mm@oilindia.in
	Bids to be addressed to	:	CGM-Materials, Materials Department, Oil India Limited, Duliajan -786602, Assam, India.
	OIL's PR No.	:	
LIST OF ANNEXURES, APPENDICES & PROFORMAS			
PART - A	Annexure - A	:	AA: Item Details and Quantities of Item BB: Pre-Bid Conference
	Annexure - B	:	AA: Technical Specifications BB: Special Notes to Bidders CC: General Notes to Bidders
	Annexure - C	:	Bid Evaluation Criteria
	Annexure - D	:	Technical & Commercial Check List
	Annexure - E	:	Price Bid Format/Price Schedule – For Foreign & Domestic Bidders *(Attached in 'Notes & Attachments')*
PART - B	Annexure - H	:	AA: General Notes to Bidders BB: Additional Notes to Bidders
	Appendix - A1	:	Public Procurement (Preference To Make In India) order (PPP- MII Order)
	Appendix - A2	:	Policy for providing preference to Domestically Manufactured Iron & Steel Products (DMI & SP)
	Appendix - A3	:	Amendment to DMI&SP vide Gazette notification No. S-13026/1/2020- IDD dated 31.12.2020 and amendments thereof, Ministry of Steel for certain amendment to DMI&SP policy
	Appendix - A4	:	Restrictions on procurement from a bidder of a country which shares a land border with India.
	General Terms & Conditions (GTC-1)	:	General Terms & Conditions" for e-Procurement as per Booklet No. MM/GLOBAL/E-01/2005 for E-procurement (ICB Tenders).
	General Conditions of	:	General Terms & Conditions for Services

	Contract (GTC -2)		(Applicable for AMC cases)
	Proforma - 1	:	Format for Bid Security
	Proforma - 2	:	Format for Integrity Pact
	Proforma - 3	:	Format for Performance Security
	Proforma - 4	:	Format for undertaking towards submission of authentic information / documents
	Proforma - 5	:	Format for undertaking towards compliance of restriction on procurement from a bidder of a country which shares a land border with India
	Proforma - 6	:	Form 10F
	Proforma - 7	:	Format for No Business Connection or Permanent Establishment Certificate
	Proforma - 8	:	Format for undertaking towards compliance of Financial Criteria
	Proforma - 9	:	Format for Annual Turn Over and Networth Certificate
	Proforma - 10	:	Format for Corporate Guarantee towards Financial Standing
	Proforma - 11	:	Format for Authorization letter For attending Tender Opening
	Proforma – 12	:	Format for Exception / Deviation
	Proforma – 13	:	Format for Undertaking For Local Content
	Proforma – 14	:	Format for Power of Attorney / Authorization letter (Regarding authority for submission of bid)
	Proforma – 15	:	Format for Bidders financial standing
	Proforma – 16 A Proforma – 16 B	:	Format for declaration that bidder is not under holiday list/delisted/blacklisted/debarred Format for declaration of NCLT / NCLAT /DRT /DRAT/ Court Receivership/ Liquidation
	Proforma – 17	:	Format for Inspection Certificate to be issued by Independent Inspection Agencies against Document Verification Clause
	Proforma - 18	:	Format for Bank Guarantee linked with Advance Payment
	Proforma -19	:	Format for Insurance surety bond for Bid security and Performance security
	Proforma -20	:	Format for Sustainable Development (SD) and Environment, Social & Governance (ESG) Policy

3.0 OIL looks forward to your active participation in the Tender.

Thanking You
Yours Faithfully,
OIL INDIA LIMITED

(Tuhin Roy)
DGM - Materials (FP)
For CGM-Materials (HoD)
For Resident Chief Executive

ANNEXURE – A

AA: ITEM DETAILS & QUANTITY OF ITEMS

SL NO.	ITEM DESCRIPTION	QUANTITY
10	Hydraulic Fracturing Fleet	1 No.
20	Installation, Commissioning and Training	1 AU
30	Comprehensive Maintenance for a period of 04 (Four) Years	1 AU

BB: PRE-BID CONFERENCE:

a) Pre-Bid Conference is scheduled to be held at **OIL INDIA LIMITED, CORPORATE OFFICE, NOIDA, UP, INDIA** tentatively on **29.04.2026 & 30.04.2026** to explain the requirements of OIL in details to the interested prospective Bidders and to understand bidders' perspective including exchange of views/clarifications, if any, on the Scope of Work, Bid Rejection/Bid Evaluation Criteria and other terms & conditions of the Tender.

Bidders interested to attend the pre-bid conference as above must send their confirmation to: Mr. Tuhin Roy, Deputy General Manager Materials (FD), Oil India Limited, P.O. Duliajan–786602, ASSAM, E-mail: tuhin_roy@oilindia.in at least 2 (Two) days prior to the date of pre-bid conference.

Those bidders who send their confirmation for participation at least 2 (Two) days prior to date of pre-bid conference shall be allowed to attend the pre-bid conference.

b) The prospective bidders shall submit their queries against tender conditions, through e-mail at least 2 (Two) days prior to the date of pre-bid conference. OIL expects that the Bidders should comply to the tender conditions in Toto. However, clarifications/exceptions /deviations, if required any, should be brought out by the bidders prior to or during the Pre-Bid Conference only. After processing these suggestions, as a sequel to the pre-bid conference, Company shall communicate the changes/modifications in this regard, if agreed any, through an addendum to tender document in e-portal and thereafter Company shall be at liberty to reject all such non-compliant Bids.

c) Maximum Two (2) representatives from each prospective bidder (authorized to participate in the tender), shall be allowed to participate in the pre-bid conference. All costs associated to attend the pre-bid conference by Bidders representatives shall be borne by the interested Bidders.

d) Details :

Pre Bid Queries/ Clarifications on the Tender	To submit through e-mail to tuhin_roy@oilindia.in.
Date of Pre-bid Conference	**29.04.2026 & 30.04.2026**
Venue	**OIL INDIA LIMITED, CORPORATE OFFICE, NOIDA, UP, INDIA**
Last date for receipt of Pre-bid participation confirmation	27-04-2026
Time of Pre-bid Conference	09.00 Hours (IST)

ANNEXURE – B

AA: TECHNICAL SPECIFICATIONS:

Detailed Technical Specifications as per Annexure-AAA enclosed.

BB: Special Notes to Bidders

As per Annexure-AAA enclosed.

CC: General Notes to Bidders:

1. PAYMENT TERMS: 80% of cost of materials will be paid against supply through Letter of Credit (LC) for Foreign bidders and balance 20% of cost of materials after satisfactory completion of installation & commissioning at site along with the installation & commissioning charges through Sight Draft (after adjustment of liquidated damages, if any). Bidders must confirm acceptance of the payment term while quoting. Payment towards pre-despatch inspection and training will be released through Sight Draft after successful completion of installation & commissioning & training and against submission of invoice. Payment for Comprehensive maintenance shall be paid on quarterly basis after successful completion of the quarter.

   For Domestic bidders, 80% of cost of materials will be paid after receipt of items at site against submission of despatch documents to OIL and balance 20% of cost of materials after satisfactory completion of installation & commissioning at site along with the installation & commissioning charges (after adjustment of liquidated damages, if any). Bidders must confirm acceptance of the payment term while quoting. Payment towards pre-despatch inspection and training will be released after successful completion of installation & commissioning & training and against submission of invoice. Payment for Comprehensive maintenance shall be paid on quarterly basis after successful completion of the quarter.

   Note:

   i) Request for payment/part payment to third party (i.e., other than the party on whom the order has been placed) will not be entertained by OIL under any circumstances. The offers stipulating payment/part payment to such third party will be considered as non-responsive and such offers will be rejected.

   ii) Any other payment term other than above shall be considered as Advance Payment for which bidder(s) must refer to Clause below.

2. Advance Payment:

   A) Request for advance payment shall not be normally considered. However, depending on merit and at the sole discretion of OIL, advance payment may be agreed at an interest rate of 1% above the prevailing Bank rate (CC rate) of State Bank of India compounding on quarterly basis from the date of payment of the advance till recovery/refund.

   B) Advance payment if agreed to by OIL shall be paid only against submission of an acceptable Bank Guarantee whose value should be equivalent to the amount of advance plus the amount of interest estimated by OIL on the basis of contractual delivery period without further reference.

   C) Bank Guarantee shall be valid for 3 (three) months beyond the delivery period incorporated in the order and same shall be invoked in the event of Seller's failure to execute the order within the stipulated delivery period.

D) In the event of any extension to the delivery date, seller shall enhance the value of the bank guarantee to cover the interest for the extended period and also shall extend the validity of bank guarantee accordingly.

E) Advance paid, if any along with the interest amount (as mentioned above) shall be recovered from supplier's first bill/invoice.

F) In no case, total value of advance payment shall exceed 10% of the purchase order value towards supply.

G) Advance payment if agreed to by OIL shall be paid after approval of drawings by OIL.

3. Domestic bidders are to quote and accept their payment in INR only; Indian agents of foreign suppliers are to receive their agency commission in INR; costs of imported goods, which are directly imported against the contract, may be quoted in foreign currency (currencies) and paid accordingly in that currency; and the portion of the allied work and services, which are to be undertaken in India (like installation and commissioning of equipment) are to be quoted and paid in INR.

4. Statutory Variation: Any statutory variation (increase/ decrease) in the rate of GST/ Customs Duty or any statutory levy after the bid closing date of tender and within the contractual delivery/ completion period will be to the account of OIL subject to documentary evidence. However, any increase in the rate of GST/ Customs Duty or any statutory levy after the expiry of the scheduled date of delivery / Completion Period shall be to the supplier's account. Any decrease in Excise duty/Sales tax/ GST / Customs Duty or any statutory levy shall be passed on to OIL.

5. Exchange Rate Variation : Any (increase/ decrease) in the Exchange rate after the closing date of tenders but within the contractual delivery/ completion period will be to the account of OIL subject to documentary evidence. However, any increase in the Exchange rate after the expiry of the scheduled date of delivery / Completion Period shall be to the supplier's account. Any decrease in Exchange rate shall be passed on to OIL.

6. The item shall be brand new, unused and of prime quality. Bidder shall warrant (in the event of order) that the product supplied will be free from all defects & faults in the material, workmanship & manufacture and shall be in full conformity with ordered specifications. This clause shall be valid for 12 (twelve) months from the date of successful field commissioning of the entire equipment. The defective materials, if any rejected by OIL shall be replaced by the supplier at their own expense. Bidder must confirm the same in the quotation.

7. The Bidder should indicate the dimensions and weight of the offered items, the name of the manufacturer, the country of origin, Local / Import content and place of dispatch of the materials.

8. In the event of an order on indigenous bidder, OIL will issue Project Authority Certificate (PAC) under Deemed Export Benefit Scheme (as per Govt. Policy in vogue), where import content is declared by the bidder for availing Custom Duty benefit on the import content. The PAC will be issued in the name of the indigenous bidder including the name of the sub-vendors as declared in their offer or as per the format issued by competent authority at time of placement of order.

9. In case the bidder has satisfactorily executed development order (i.e. including satisfactory inspection and Field Trial Testing) for each of similar tendered item of same or higher capacity in the past in OIL/ONGCL, then the bidder does not have to satisfy past supply experience criteria of BEC /BRC in OIL provided the specification of items matches to that of OIL.

10. Delivery: Materials must be delivered within delivery date mentioned in the tender.

    In Case of Indian Bidder: Materials must be despatched within Eighteen (18) months from the date of placement of order by OIL.

    In Case of Foreign Bidder: Materials must be delivered on FOB, Port of Shipment basis within Fifteen (15) months from the date of opening of Letter of Credit by OIL.

11. For payment through LC, Supplier shall submit following documents within 30 days of receipt of PO. Letter of credit (LC) shall be opened by OIL within 30 days of receipt of following documents:

    - Receipt and subsequent verification of Performance Security to be submitted to Materials Deptt, Duliajan.

    - Receipt of current year TRC, PE, Form 10F, bank details, Payment Favouring, HSN Code. Etc to be submitted to Shipping office, Kolkata.

12. In case PO has been placed on FOB basis, for appointment of Freight forwarder the Supplier shall submit Commercial Invoice, packing list and other related documents to OIL atleast 3 months prior to the date of delivery / despatch of materials mentioned in the PO for completing import formalities. Freight forwarder shall be appointed by OIL within 30 days of receipt of the documents. Also, the supplier shall arrange to obtain shipment clearance prior to shipment of materials from GM (KOLKATA BRANCH), KIND ATTENTION: GM(SHIPPING), OIL INDIA LTD, 15A, HEMANTA BASU SARANI, KOLKATA - 700001, FAX NO.(91)33-22101390/22202596, E-MAIL: oilcalsh @oilindia.in. The supplier shall affect shipment only on receipt of shipment clearance from OIL, failing which all related liabilities shall be to Supplier's account.

13. Liquidated Damages (LD):

    i) LD shall be applicable @ 0.5% per week on the total cost of Materials if default in delivery/ installation and commissioning takes place subject to a maximum of 7.5 % of the total cost of Materials.

    ii) Both Seller and Purchaser agree that the above percentages of LD are genuine pre estimates of the loss/damage which the Purchaser would have suffered on account of delay/breach on the part of the Seller and the said amount will be payable on demand without there being any proof of the actual loss or damage caused by such breach/delay. Decision of the Purchaser in the matter of applicability of price reduction shall be final and binding.

14. GST- The items covered in this Tender shall be used by Oil India Limited in the Petroleum Exploration License (PEL) and Mining Lease (ML) areas and hence GST @18% will be applicable as per Govt. Policy in vogue.

15. Order of Precedence- In the event of any conflict between the clauses of documents of the tender, following order of precedence shall apply:

    1. BEC / BRC.
    2. Technical specifications.
    3. Special Notes to bidders.
    4. General Notes to bidders.
    5. Additional Notes to the bidder.
    6. General terms and conditions MM/GLOBAL/E-01/2005 for E-procurement of ICB tenders.

16. Bidders to note that interpretation of all foreign trade terms shall be as per INCOTERMS 2020.

17. Clarification of Bids / Shortfall Documents.

During evaluation and comparison of bids, OIL may, at its discretion, ask the bidder for clarifications on the bid. The request for clarification shall be given in writing by email/registered/speed post, asking the bidder to respond by a specified date, and also mentioning therein that, if the bidder does not comply or respond by the date, his bid will be evaluated based on the submission. Depending on the outcome, such bids are to be ignored or considered further. No change in prices or substance of the bid shall be sought, offered or permitted. No post-bid clarification at the initiative of the bidder shall be entertained. The shortfall information/documents should be sought only in case of historical documents which pre-existed at the time of the tender opening and which have not undergone change since then. (Example: if the Permanent Account Number, registration with GST has been asked to be submitted and the tenderer has not provided them, these documents may be asked for with a target date as above). So far as the submission of documents is concerned with regard to qualification criteria, after submission of the tender, only related shortfall documents should be asked for and considered. For example, if the bidder has submitted a supply order without its completion/performance certificate, the certificate can be asked for and considered. However, no new supply order should be asked for so as to qualify the bidder.

18. Sustainable Development (SD) and Environment, Social & Governance (ESG) Policy -

Consequent to the implementation of Sustainable Development (SD) and Environment, Social & Governance (ESG) Policy in OIL, effective from 28.08.2024. For purchase orders value INR 20 Crores and above the successful bidder shall be required to submit a duly filled ESG Questionnaire in the prescribed format within fifteen (15) calendar days from the date of issue of purchase order. Failure to submit the completed ESG Questionnaire within the stipulated timeline may be treated as non-compliance with contractual obligations and dealt with accordingly.

The ESG Questionnaire, along with an Explanatory Note for guidance, is provided as Proforma - 20 of the tender document.

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ANNEXURE - C

Sl. No.	DESCRIPTION	Bidder's Comments (Confirmed/ Submitted/ Deviation etc.)
	BID EVALUATION CRITERIA (BEC)- The bids must conform to all the specifications, terms and conditions given in the tender. Bids shall be rejected in case the item(s) offered do not conform to the required minimum/maximum 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 shall be summarily rejected. Bidders are advised not to take any exception/ deviation to the Bid Documents. Exceptions/Deviations, if any, should be brought out during the **Pre-Bid Conference** as scheduled against this Tender. After processing such suggestions, Company may communicate the changes, if any, through an addendum to the tender document in this regard. **Still, if any exceptions/deviations are maintained in the bid, such conditional/ nonconforming bids shall not be considered, but shall be liable for rejection.**	
A	**BEC - TECHNICAL:**	
1.0	**BIDDER'S ELIGIBILITY:**	
1.1	**The bidder shall be an Original Equipment Manufacturer (OEM):**	
	The bidder shall be an **Original Equipment Manufacturer (OEM)**, i.e., designer and manufacturer of the following major Hydraulic Fracturing equipment: • Frac Pumper • Frac Control Centre (Data Van) • Frac Sand Dumper • Hydration Unit • Chemical Additive System • Blender Unit The bidder must be in the business of manufacturing for a minimum period of five (05) years preceding the original Bid Closing Date (BCD) of the tender. **Note:** Documentary evidence to substantiate the manufacturing experience of the above-mentioned major Hydraulic Fracturing equipment must be submitted along with the Technical Bid as per **Clause No. 3.0**. along with the bid. The date of Purchase Order submitted in this regard should be prior to five (05) years preceding the original bid closing date (BCD) of this tender.	
	OR	
1.2	The bidder shall be a **Service Provider** of **Hydraulic Fracturing Operations** for oil and gas wells supported by an **OEM,** who is its **Parent Company** or **Subsidiary Company**	
1.2.1	In case the bidder is a **Service Provider of Hydraulic Fracturing Operations** for oil and gas wells and is participating in association with an OEM, then they shall have experience in providing Hydraulic Fracturing services utilizing the following major Hydraulic Fracturing equipment:	

	• Frac Pumper • Frac Control Centre (Data Van) • Blender Unit **Note:** Documentary evidence to substantiate the experience must be submitted as per **clause 2.2.1.** below.	
1.2.2	The Service Provider's OEM shall fulfil Eligibility Criteria **clause 1.1.** above.	
2.0	**BIDDER'S EXPERIENCE:**	
2.1	**In case Bidder is an OEM participating as per Clause 1.1.**	
2.1.1	The OEM shall have the experience of successfully executed purchase order(s) for design, manufacture, supply and commissioning of following Major Hydraulic Fracturing equipment of same or higher capacity/working pressure (if applicable), in last ten (10) years preceding the original bid closing date of this tender to any E&P company or service provider to an E&P company, either by themselves or through their Sole Selling Agent/ Dealer/ Distributor/ Supply House/ Subsidiary. • Frac Pumper of WP 15,000 PSI – 03 Nos • Frac Control Centre (Data Van) – 01 No • Frac Sand Dumper of 50 Ton – 02 Nos • Hydration Unit – 01 No • Chemical Additive System – 01 No • Blender Unit – 01 No **Note:** a. Documentary evidence in this regard must be submitted as per **Clause No. 3.0** along with the bid. b. The date of Purchase Order submitted need not be within ten (10) years preceding the original bid closing date of the Tender, but execution/ supply of required quantity must be within ten (10) years preceding the original bid closing date of this tender.	
2.1.2	**IN CASE BIDS ARE SUBMITTED ON THE BASIS OF TECHNICAL EXPERIENCE OF THE PARENT/SUBSIDIARY COMPANY:** Offers of those bidders who themselves do not meet the criteria as stipulated in clause no. 2.1.1 above can also be considered provided the bidder is a subsidiary company of the parent company (supporting company, which holds more than fifty percent of the paid-up equity share capital of the bidder) who fulfils the experience criteria. Similarly, bid from parent company can also be considered on the strength of requisite experience of its subsidiary [supporting company, in which the bidder holds more than fifty percent of the paid-up equity share capital]. However, the parent/subsidiary company (as the case may be) of the bidder should on its own meet the experience as stipulated in the BEC and should not rely for meeting the experience criteria on its sister subsidiary/co-subsidiary company or through any other arrangement like Technical Collaboration agreement etc. In case of bidder who is a subsidiary company dependent upon the experience of the parent company or vice-versa with a view to ensure commitment and involvement of the parent/subsidiary company (Supporting Company) for successful execution of the contract, the participating bidder should enclose a Parent/Subsidiary Agreement (as per format Proforma B3 enclosed) and also a parent/subsidiary Guarantee (as per format Proforma B4 enclosed) to OIL for fulfilling the obligation under the Agreement, along with the technical bid.	

	Note: In case of above, the supporting company shall not be allowed to submit their separate/independent bid against this tender. In such case, all such bids shall be rejected. Also, bids having technical support from the same entity shall be rejected. Further, the bidders shall submit following: a) A certificate from the statutory Auditor of the bidding company to establish the relationship and equity percentage holding between bidding company and the supporting company. The certificate should be duly concurred/endorsed by the Company Secretary or one of the Directors of the company concerned. The certificate should not be more than 30 days old as on the original bid closing date. b) Undertaking should be submitted by the supporting Company [on whose strength/support the bidder is bidding] that in the event of placement of Purchase order they shall provide additional Performance Security (as per Proforma-B5) equivalent to 50% of the value of the Performance Security which is to be submitted by the bidding company in case the bidding company is the successful bidder. In cases where supporting company do not have Permanent Establishment in India, the bidding company can furnish Performance Security equivalent to 150% of the value of the Performance Security which is to be submitted by the bidding company. In such case the bidding company shall furnish an undertaking that their supporting company is not having any Permanent Establishment in India in terms of Income Tax Act of India. c) Undertaking from the supporting company to the effect that in addition to invoking the performance security submitted by the bidding company, the performance security provided by supporting company shall be invoked by OIL due to non-performance of the bidding company.	
2.2	**In case Bidder is a Service Provider of Hydraulic Fracturing Operations for oil and gas wells participating along with an OEM as per Clause 1.2.1.**	
2.2.1	The **Service Provider of Hydraulic Fracturing Operations** shall have the experience of successfully completed at least five (05) Hydraulic Fracturing jobs in oil and gas wells during the last ten (10) years preceding the original Bid Closing Date (BCD) of this tender. Out of these, at least one (01) Hydraulic Fracturing job must have been executed during the last three (03) years preceding the original Bid Closing Date (BCD) of this tender. **Note:** Documentary evidence to substantiate experience in providing Hydraulic Fracturing services with major equipment (viz. Frac Pumper, Frac Control Centre (Data Van) & Blender Unit) must be submitted along with the Technical Bid as per Clause No. 3.0 of the tender.	
2.2.2	The Service Provider's OEM shall fulfil Experience Criteria **Clause 2.1** above.	
3.0	**Documents to be submitted in support of Bidder's Eligibility & Experience criteria:** The following documents shall be submitted by the bidder in support of Bidder's Eligibility & Experience criteria above as applicable along with the technical bid, failing which the Bid shall be treated as incomplete and rejected: i. Copy of Purchase order(s)/contract(s) awarded by Client(s) ii. Copy of Commercial Invoice/Payment Certificate iii. Copy of Bill of Lading. iv. Copy of Installation & Commissioning / Completion / Daily Progress / End of Well Report or any other document which confirms successful execution of the order(s) /contract(s) etc.	
4.0	**Note to OEM:**	
4.1	The OEM must submit an undertaking along with the Technical Bid that their offered equipment is not going to become obsolete during the next ten (10) years from the date of successful Commissioning. The OEM must also guarantee uninterrupted supply of spares and availability of services for at least ten (10) years with effect from the	

	successful Commissioning of the equipment.	
4.2	The OEM shall be **responsible for design, manufacturing, technical support, supply of spares, and upgrades**, as applicable, for the **entire period of execution**, including warranty and post-warranty AMC period.	
4.3	Bidders showing past supply experience towards supply to its sister concern/ subsidiaries shall not be considered as experience for the purpose of meeting Bidders eligibility or Bidders experience criteria.	
5.0	**NOTE TO BIDDERS:**	
5.1	The service provider to an E&P company shall mean a company, who has procured the item shown in the experience credential submitted and has provided service by utilizing the equipment by himself to an E&P company.	
5.2	E&P company means Exploration & production company who is engaged in exploration & production of hydrocarbon (crude oil & natural gas).	
5.3	Oil India Limited (OIL) reserves the right to contact the Client(s) referred by the Bidder for authentication of the documents submitted by the Bidder. OIL may contact the clients/operators under intimation/copy to the respective Bidder. OIL will not be responsible for Client(s) not conforming or not replying to OIL's request for information. If OIL does not get an affirmative response within the stipulated time then such Bidder's technical bid will be considered as non-responsive. It will be the responsibility of the Bidder to take up the matter with his Client(s) and arrange for the confirmation as desired by OIL.	
5.4	All Certificates and documentary evidence required to be submitted in support of Clauses above and below should be clearly legible and in the English language. If any certificate is submitted in a language other than English language, the same should be translated to English, duly authenticated by local chamber of Commerce of bidder's/ Supporting company/partner's country, in which case, for purposes of interpretation of the bid, the English translation shall prevail.	
6.0	The bidder must quote for all the items of the tender, failing which their bid shall be rejected. The items of the tender are not splitable, hence all the items shall be procured from the L1 bidder.	
B	**BEC FINANCIAL:**	
	1.0 The bidder shall have an annual financial turnover from Operations of **minimum INR 110.24 Crores or USD 12,101,307.00** during any of the preceding 3 (Three) financial/accounting years reckoned from the original bid closing date of the tender. {Annual Financial Turnover of the bidder from operations shall mean–"Aggregate value of the realization of amount made from the sale, supply or distribution of goods or on account of services rendered, or both, by the company (bidder) during a financial year" as per the Companies Act, 2013 Section 2 (91). } 2.0 "Net Worth" of the bidder must be positive for the financial/accounting year just preceding to the original Bid Closing Date of the Tender (i.e., Year 2024-25). {Net worth shall mean: "Share capital + Reserves created out of profits and securities Premium - Aggregate value of accumulated losses (excluding revaluation reserves) - deferred expenditure - Miscellaneous Expenditure to the extent not written off and carried forward Loss - Reserves created out of write back of depreciation and amalgamation".} 3.0 Considering the time required for preparation of Financial Statements, if the last date of preceding financial/accounting year falls within the preceding six months reckoned from the original bid closing date and the Financial Statements of the preceding financial/accounting year are not available with the bidder, then the financial turnover of the previous three financial/accounting years excluding the preceding financial/accounting year will be considered. In such cases, the Net worth of the previous financial/accounting year excluding the preceding financial/accounting year will be considered. However, the bidder has to submit an affidavit/ undertaking	

(PROFORMA - 8) certifying that 'the balance sheet/Financial Statements for the financial year (i.e., Year 2025-26) has actually not been audited so far'.

Note:
a) For proof of Annual Turnover & Net worth any one of the following document must be submitted along with the technical bid:

i) A certificate issued by a practicing Chartered Cost Accountant (with Membership Number and Firm Registration Number), certifying the Annual Turnover & Net worth as per format prescribed in (PROFORMA – 9)

OR

ii) Financial Statements (Audited Balance Sheet & Profit & Loss account along with all the schedules/notes forming part of the Balance sheet & Profit and Loss Account) audited by the auditors appointed under the statute like Companies Act etc. wherever applicable. In cases where the bidding/ supporting company (as applicable) are not required to prepare Audited Financial Statements as per the Law of the Land of the country of the bidding/supporting company as applicable, the bidder shall provide documentary evidence for the same along with a certificate from a practicing Chartered Accountant or equivalent to this effect. The bidder must also submit the financial statement as per the accounting standards of the country of the bidding/supporting company as the case may be, duly certified by the practicing-chartered accountant or equivalent.

b) In case the bidder is a Central Govt. Organization/PSU/State Govt. Organization/Semi-State Govt. Organization or any other Central/ State Govt. Undertaking, where the auditor is appointed only after the approval of Comptroller and Auditor General of India and the Central Government, their certificates may be accepted even though FRN is not available. However, bidder to provide documentary evidence for the same.

4.0 In case the Audited Balance Sheet and Profit & Loss Account submitted along with the bid are in currencies other than INR or US$, the bidder shall have to convert the figures in equivalent INR or US$ considering the prevailing conversion rate on the date on which the Audited Balance Sheet and Profit & Loss Account is signed. A CA certificate is to be submitted by the bidder regarding converted figures in equivalent INR or US$.

4.1 Mention of UDIN (Unique Document Identification Number) is mandatory for all Certificates issued w.e.f. February 1, 2019 by Chartered Accountant in Practice.

5.0 In case the Bidder is subsidiary company (should be a wholly owned subsidiary of the parent/ultimate parent/holding company) who does not meet financial criteria by itself and submits its bid based on the strength of parent/ultimate parent/holding company, then following documents need to be submitted:

(i) Turnover of the parent/ultimate parent/holding company (supporting company) should be in line with Para A.2 (1.0) above.

(ii) Net Worth of the parent/ultimate parent/holding company (supporting company) should be positive in line with Para A.2 (2.0) above

(iii) Corporate Guarantee (PROFORMA - 10) on parent/ultimate parent/holding company's (supporting company) letter head signed by an authorized official undertaking that they would financially support their wholly owned subsidiary company for executing the project/job in case the same is awarded to them.

(iv) A certificate from the Statutory Auditor of the bidding company to establish the relationship and equity percentage holding between bidding company and the

	supporting company. The certificate should be duly concurred/endorsed by the Company Secretary or one of the Directors of the company concerned. The above certificate should not be more than 30 days old as on the original bid closing date.	
	C BEC COMMERCIAL:	
	Commercial Bid Evaluation Criteria will be as per Section D of General Terms & Conditions of Global Tender (MM/GLOBAL/E-01/2005) with following Special Bid Rejection Criteria. 1.0 Bids are invited online under SINGLE STAGE TWO BID SYSTEM. Bidders must prepare the Techno- Commercial Bid (Unpriced) as well as the Priced Bid separately and upload both these bids in OIL's e- procurement portal at the designated fields separately assigned. Please 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/costs. The rate and amount columns in the unpriced technical bid must be kept blank. The "Price 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 The prices/rates offered against the tender must remain firm through delivery and not subject to variation on any account. A bid submitted with an adjustable price condition shall be treated as non- responsive and rejected. No discount whatsoever should be quoted separately. Rates/prices quoted must be net of all discount. 3.0 Bids received in physical form against online invitation shall be rejected (except the documents specifically called for in hard copies, if any). Also, modifications to bids received after the bid closing date & time shall not be entertained. 4.0 Bids containing incorrect/false/misleading statement(s) shall be rejected. 5.0 Validity of the bid shall be minimum **120 days** from the date of actual Bid Closing Date. Bids with lesser validity shall be straightway rejected. 6.0 Bid Security in ORIGINAL amounting to **INR 4.84 Crores or USD 486,000.00 valid upto 30.11.2026** shall be submitted by the Bidder as a part of their Technical Bid. The amount of Bid Security & its validity shall be specified in the covering letter of this bid document. Any bid not accompanied by a proper bid security in ORIGINAL shall be rejected without any further consideration. A bid shall be rejected straightway if Original Bid Security is not received within the stipulated date & time mentioned in the Tender and/or if the Bid Security validity is shorter than the validity indicated in Tender and/or if the Bid Security amount is lesser than the amount indicated in the Tender. The Bid Security shall be valid for six (6) months from the original Bid closing date. 6.1 For exemption for submission of Bid Security please refer Clause No. 9.8 (Section A) of "General Terms & Conditions" for e-Procurement as per Booklet No. MM/GLOBAL/E-01/2005 for E-procurement (ICB Tenders). 7.0 Successful bidder will be required to furnish Performance Security as below: 1st Performance Security @ 5 % of cost for Materials during warranty period to be submitted within 30 days of receipt of LOA/notification of award. The 1st Performance Security must be valid for 3(three) months beyond the Warranty period indicated in the Purchase Order. Bidders should also undertake that in the event of AMC of 4 years, 2nd Performance Security @ 5% of cost of AMC of 4 years to be submitted prior to expiry of 1st PBG. The 2nd Performance Security must be valid for 3(three) months beyond the AMC period	

indicated in the Purchase Order/contract agreement. The 1st PBG shall be released after receipt of 2nd PBG only.

The Performance Security must be valid for a period as called for in the tender document. Bidder must confirm the same in their Technical Bid. Offers not complying with this clause will be rejected. (Please refer Annexure – III: GENERAL NOTES TO BIDDERS). Non-submission of Performance Security as above by the successful Bidder shall lead to cancellation/termination of award including forfeiture of their Bid Security, besides other penal actions as per OIL's Banning Policy.

8.0 Online Bid must be uploaded together with the duly signed Integrity Pact. If any bidder refuses to submit Integrity Pact with the offer, their bid shall be rejected straightway.

9.0 Bidders are to quote for the items as indicated in the NIT. Bids shall be typed or written in indelible ink. The Bids and all uploaded documents must be digitally signed using "Class 3" digital certificate [e-commerce application (Certificate with personal verification and Organization name)] as per Indian IT Act obtained from the licensed Certifying Authorities operating under the Root Certifying Authority of India (RCAI), Controller of Certifying Authorities (CCA) of India[except copies of the documents required in physical form] should invariably be submitted in OIL's e-tender portal, before the scheduled date and time for the tender closing. All the documents uploaded shall be digitally signed by the authorized signatory of the bidder.

10.0 Bidders shall accept and comply with the following clauses as given in the Bid Document, failing which bid shall be liable for rejection:

i)Liquidated Damages
ii)Warranty/Guarantee of material
iii)Arbitration / Resolution of Dispute
iv)Force Majeure
v)Applicable Laws.

11.0 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) Incase the party refuses to sign Integrity Pact.

c) Original Bid Security not received within the stipulated date & time mentioned in the Tender.

d) Bid Security with (i) validity shorter than the validity indicated in Tender and/or (ii) Bid Security amount lesser than the amount indicated in the Tender.

12.0 Price Schedule:

Bidder shall submit the Price Break up as per Price Bid Format (ANNEXURE - D). Bidders should fill up the annexure(s), sign and upload under "Notes & Attachments" > "Attachments" only.

13.0 Document Verification:

Oil India Limited (OIL) has engaged Independent Inspection Agencies to verify and certify of various documents required against BEC/BRC of the tender: (Details already provided in Part B of Tender, Clause 47.0)

13.1 The bidders have to get various documents required against BEC/BRC of the tender verified and certified (signed & stamped on each page) by anyone of the above

Independent Inspection Agencies and submit the duly certified documents alongwith the Inspection Certificate issued by the Inspection Agencies as part of their Technical Bids. It may be noted that the scope of inspections primarily to verify the authenticity of the documents being submitted as part of the bid. All Charges of the Third Party Independent Inspection Agencies towards verification of bidder's documents and certification thereof shall be borne by the respective bidders and Payments on account of above inspection, verification and certification shall be made directly by the Bidder to the Inspection Agency(s). OIL will not be responsible for any payment dispute between Bidders and Third Party Inspection Agencies.

13.2 As mentioned above, Bidder(s) have to submit the verified documents and the duly certified Inspection Certificate by the Inspection Agencies along with Technical Bids. Bid submitted with unverified supporting documents shall not be normally considered. However, in case a bidder submits its bid alongwith all relevant supporting documents against BEC/BRC without getting all/some of them verified by the designated Independent Inspection agency, such bid can be provisionally considered provided it is accompanied by an Undertaking by the Bidder on their official letterhead to submit the duly verified copies/verification certificate within seven (7) days of actual bid opening. Company will neither send any reminder nor seek any clarification in the regard from such bidders, and the bid will be rejected outright if the bidder fails to submit the verified copies/verification certificate within seven (7) days of actual bid opening at its own risk and responsibility. If a bidder does not submit the undertaking towards submission if third party certification within 7 days from date of Bid Closing date but certified document reaches us within cut-off date of above seven (7) days, then such bids shall be considered.

13.3 An undertaking from Independent Inspection Agencies for Document Verification as per (Proforma-17) should be submitted alongwith technical bid.

14.0 The bidder shall submit an undertaking/declaration as per Proforma- 16A confirming that they have read and understood OIL's Banning Policy and that, neither they nor any of their allied concerns or partners or associates or directors, or proprietors involved in any capacity, are currently on OIL's Holiday/Banning List. Further, the bidder shall confirm that neither they nor any of their aforementioned entities have, during the last three years, been involved in any transgression with any company conforming to the Transparency International (TI) approach or with any Public Sector Enterprise of India that could justify exclusion from the tender process. The bidder shall also disclose details of all such allied entities, if any, as required under the Banning Policy.

D PRICE EVALUATION CRITERIA :

1.0 Bidders must submit prices as indicated in the Price Bid Format (Annexure CCC). In case, any charges (except basic material value) are not indicated item wise specifically, the charges quoted would be pro- rata calculated and the same will be binding on the bidder. Hence, bidders are requested to quote accordingly.

2.0 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:

(i) **Price Bid Format (SUMMARY) for Foreign Bidders**:

(1) Basic Material Value including cost of all accessories, commissioning spares & mandatory spares (to indicate HSN code):

(2) Pre-despatch Inspection Charges, if any

(3) Packing & FOB charges

(4) FOB Value (1+2+3)

(5) Ocean Freight Charges upto Kolkata / Chennai / Mumbai, India

(6) Insurance, @0.5% of Total FOB Value (4)

(7) Banking Charges @1 % of Total FOB Value (4) 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(4) will be loaded)

(8) CIF Landed Value (4+5+6+7)

(9) Basic Custom Duty (including cess, if any) on (8)

(10) CIF Landed Value + CD (8+9)

(11) IGST (including cess, if any) on (10)

(12) Compensatory Cess on (11), if any

(13) CIF+CD+GST Landed Value, (10+11+12)

(14) Training Charges including GST

(15) Installation & Commissioning Charges including GST

(16) Charges for AMC of 4 years including GST

(17) Grand Total Value (13+14+15+16)

(ii) **Price Bid Format (SUMMARY) for Indigenous Bidders:**

(1) Basic Material Value including cost of all accessories, commissioning spares & mandatory spares (to indicate HSN code).

(2) Pre-despatch Inspection Charges, if any inclusive of GST

(3) Packing & Forwarding charges, if any

(4) Total Ex-Works Value (1+2+3)

(5) GST on Ex-Works Value (4)

(6) Compensatory Cess, if any

(7) Total FOR Despatching Station Value (4+5+6)

(8) Inland Freight Charges upto Duliajan, Assam including GST

(9) Transit Insurance Charges, including GST

(10) Training Charges including GST

(11) Installation & Commissioning Charges including GST

(12) Charges for AMC of 4 years including GST

(13) Grand Total Value (7+8+9+10+11+12)

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

(I) When only foreign bidders are involved:
Comparison will be done on Total value vide SI. No 17.

(II) When both foreign & Domestic bidders are involved:

Comparison will be done on Grand total value vide SI no 17 of Foreign bidder and Grand total value vide SI. no 13 (excluding SI no 8, 9) of domestic bidder.

(III) When only domestic bidders are involved:
Comparison will be done on Total value vide SI no 13 of Domestic bidder.

Note:

Domestic bidders must quote inland freight charges upto Duliajan. In case bidder fails to quote inland freight charges, highest freight quoted by domestic bidder (considering pro-rata distance) Against this tender or OIL's estimated freight, whichever is higher, shall be loaded to their offer for comparison purpose.

4.0 Customs Duty:

The items covered under this enquiry shall be used by OIL in the PEL/ML areas issued/renewed after 01/04/99. In terms of Customs Notification No. 45/2025-Customs dated 24.10.2025 (including amendments thereof), imports of the items specified in List 16 of the Notification are subject to levy of concessional rate of customs duty subject to conditions specified therein.

Similarly, the domestic supply of such goods would attract GST @ 18% as per Gazette Notification No. No. 3/2017- Central Tax (Rate) dated 28.06.2017 (and as amended from time to time).

Bidders shall take note of the prevailing customs notifications including the latest amendment vide gazette Notification No. 45/2025- Customs dated 24.10.2025 while quoting their prices. Bidder should consider concessional Customs Duty only for those items appearing in List-16 therein. Items of their import other than those appearing in List-16 of the said gazette notification shall be considered as duty payable on merit basis in their respective bid. OIL shall issue the requisite undertaking/certificate on request from Contractor for availing concessional rate of customs duty only against the items explicitly covered under List-16 of Customs Notification No. 45/2025- Customs dated 24.10.2025 or against any other item(s) subsequently declared by the competent authority during the tenure of the contract to be duty exempted/concessional. However, in the event of refusal/denial by Customs Authority to accord exemption/ concession of Customs Duty against import of items which are explicitly covered under List-16 of Notification No. 45/2025- Customs dated 24.10.2025, such applicable customs duty shall be reimbursed at actual by OIL to the Contractor on submission of documentary evidence.

Similarly, the items other than those appearing in List-16 of the said gazette notification, if to be imported by the Contractor for the purpose of execution of contract against this tender, the same shall be considered as duty payable on merit basis and the applicable customs duty thereof must be included by the bidder in their respective bid value. OIL will not issue any Undertaking/Certificate towards customs duty concession/exemption for those items (not included in List-16 of Notification) and the duty payable on merit shall be borne by the Contractor. However, any other item if subsequently notified by the competent authority to be Duty free/concessional during the tenure of the contract, OIL will issue requisite Certificate/Undertaking for Contractor to avail the Customs Duty benefit and the duty benefit must be passed on to OIL. Additionally, for all those items against which the bidder considers the Customs Duty on merit, the list specifying the

Customs Duty Rate (percentage) may be furnished, so that subsequent increase/decrease in Customs Duty, if any shall be reimbursed/recovered by OIL as the case may be on documentary evidence.

Bidders should submit the list of items which are to be imported for execution of the contract against this tender prudently along with their bid. Undertaking/Certificate for availing concessional rate of Customs Duty shall be issued by OIL only for the eligible items, provide the same are included in the list of items which are to be imported for execution of the contract against this tender submitted by the bidder.

Notes:
a. The above stipulations shall prevail over other clauses if stipulated otherwise elsewhere in the original tender document/previous amendments. However, the aforementioned notifications are subject to change as per Government guidelines and the provisions ruling at the time of Bid Closing will be applicable.

5.0 Purchase Preference Clause:

Purchase Preference to Micro and Small Enterprises (MSE) falling within the price band of L1+15% and Purchase Preference Policy Linked with Local Content (PP-LC) falling within the price band of L1+20% shall be applicable to this tender.

5.1 Purchase Preference to MSE Bidders:

Purchase Preference to Micro and Small Enterprises is applicable to this tender. Bidders seeking benefits, under Purchase Preference Policy (MSE) shall have to be registered for that item under the NIC group code under Udyam Registration or UAM.

(i) In case participating MSE Quote price within price band of L1+15%, such MSE shall be considered for award of contract by bringing down their price to L1 price in a situation where L1 price is from someone other than an MSE.

(ii) In case of more than one such MSE qualifying for 15% purchase preference, the contract shall be awarded to lowest eligible MSE amongst the MSEs qualifying for 15% purchase preference.

Documentation required to be submitted by MSEs: Categorization and various criteria applicable to MSE bidders shall be guided by the Gazette Notification No. **CG-DL-E-26062020-220191** dated **26.06.2020** and Amendment vide Gazette Notification no. CG-**DL-E-16062021-227649 dated 16.06.2021** and **No. CG-DL-E-19012022-232763 dated 19.01.2022** and **CG-DL-E-06052022-235600 dated 06.05.2022** issued by MINISTRY OF MICRO, SMALL AND MEDIUM ENTERPRISES, and any amendment thereof.

The bidder claiming the MSE status (MSE-General, MSE-SC/ST, MSE-Woman) against this tender has to submit Udyam Registration Number with Udyam Registration Certificate along with the technical bid for availing the benefits applicable to MSEs.

Note: In case bidding MSE is owned by Schedule Caste or Schedule Tribe or Woman entrepreneur, valid documentary evidence issued by the agency who has registered the bidder as MSE owned by SC/ST/Woman entrepreneur should also be enclosed.

5.2 Purchase Preference Policy (PPP-MII):

Purchase preference under Public Procurement (Preference to Make in India) Order, 2017 of Department for Promotion of Industry and Internal Trade (DPIIT), Govt. of India and as amended time to time with modifications as notified vide **MoPNG Order No. FP-20013/2/2017-FP-PNG-Part (4) (E-41432) dated 26th April 2022** (including subsequent amendments thereof, if any) shall be applicable for this Tender. Bidders are advised to check the provisions of the said notifications for their eligibility to bid and

seek benefits for Purchase preference, accordingly. The margin of purchase preference shall be 20%.

5.3 Concurrent Application of Purchase Preference Policies:

The quantities under this tender are Not splitable and Public Procurement Policy for MSE Order 2012 and PP(MII) Order 2017 as per Order No. F.1/4/2021-PPD dated 18.05.2023 issued by Public Procurement Division, Department of Expenditure, Ministry of Finance, Govt. of India and any subsequent amendment thereto shall be applicable. Bidders are advised to refer to the said Order for further detail. In case of concurrence application of Purchase Preference Policies, the preference order shall be as mentioned below:

Preference Order	**Category of Bidder**
1st Preference	MSE Class-I Local Supplier
2nd Preference	MSE but Non- Class-I Local Supplier
3rd Preference	Non-MSE but Class-I Local Supplier
4th Preference	Non-MSE Non- Class-I Local Supplier

Note: Further if multiple bidders are falling under a 'category of bidder', the purchase preference for price matching shall be given to MSEs falling within the price band of L1+15%. Purchase preference shall be given in the following order of preference:

1. SC/ST Women-owned MSEs
2. SC/ST owned MSEs
3. Women-owned MSEs
4. Other MSEs

All other guidelines issued in respect of benefits to MSEs shall prevail. Bidder claiming above relaxation/ exemption need to submit necessary documentary proof of their eligibility along with their techno-commercial bid. The certificate must be valid on the bid closing date.

6.0 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.

7.0 While evaluating the bids, the closing rate (B.C. Selling Rate) of exchange declared by State Bank of India on the day prior to price bid opening will be taken into account for conversion of foreign currency into Indian Rupees.

8.0 Submission of Forged Documents:

Bidders should note that Company (OIL) may verify authenticity of all the documents /certificates / information submitted by the bidder(s) against the tender. In case at any stage of tendering process or Contract execution etc., if it is established that bidder has submitted forged documents / certificates / information towards fulfilment of any of the tender / contract conditions, Company shall immediately reject the bid of such bidder(s) or cancel / terminate the contract besides taking action as per OIL's Banning Policy dated 6th January 2017, available in the OIL's website. Accordingly, service provider/vendor to submit the Undertaking of authenticity of information/documents.

	9.0 Land Border Sharing: Bidders should submit an Undertaking that, their bid is compliant to Order No. F.No. 6/18/2019-PPD dated 23.07.2020 issued by Ministry of Finance, Department of Expenditure, Public Procurement Division, Govt. of India (including subsequent amendments thereto, if any), regarding restrictions on procurement from a bidder of a country which shares land border with India. **10.0 Compliance of The Competition Act, 2002:** The bidder shall strictly comply with the provisions of the Competition Act, 2002, more particularly, Section-3 of the Act. Any violation of the provisions of the Act shall attract penal action under the Act. 11.0 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 Evaluation Criteria (BEC) mentioned here contradict the Clauses in the General Terms & Conditions of Global Tender of the tender and/or elsewhere, those mentioned in this BEC shall prevail.	

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Proforma – 17

PROFORMA FOR UNDERTAKING FROM THIRD PARTY DOCUMENT VERIFICATION INSPECTION AGENCY

(To be submitted on official letter head)

TO,
CGM- MATERIALS
MATERIALS DEPARTMENT
P.O. DULIAJAN, PIN-786602
DIST. DIBRUGARH, ASSAM, INDIA

Sir,

Sub : OIL's tender No. .....

M/s_____having registered office at _____intend to participate in the above referred tender of OIL INDIA LIMITED.

The tender conditions stipulated that the bidder shall submit documents pertaining to Bid Evaluation Criteria / Bid Rejection Criteria (BEC / BRC), duly verified and certified by designated independent Third Party Document Verification Inspection Agency.

In this regard , we hereby certify that copies of documents pertaining to Bid Evaluation Criteria / Bid Rejection Criteria (BEC / BRC), submitted to us by the bidder. M/s _____have been verified and certified by us with originals and found to be genuine and authentic. We have signed and stamped on the copies of all the verified and certified documents having_____nos. pages.

Note: In the event of any requirement, OIL reserves the right to ask the inspection agencies to verify the documents with source, if required at no extra cost to OIL.

Thanking you,

Authorised Person's Signature:_____
Name:_____

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ANNEXURE B3

FORMAT OF AGREEMENT BETWEEN BIDDER AND THEIR PARENT COMPANY/ SUBSIDIARY COMPANY (As the case may be)

(TO BE EXECUTED ON STAMP PAPER OF REQUISITE VALUE AND NOTORISED)

This agreement made this _____day of __month_____ year by and between M/s.....(Fill in the Bidder's full name, constitution and registered office address) hereinafter referred to as bidder on the first part and M/s. _____ (Fill in full name, constitution and registered office address of _____Parent Company/Subsidiary Company, as the case may be) hereinafter referred to as "Parent Company/Subsidiary Company (Delete whichever not applicable)" of the other part:

WHEREAS

M/s. Oil India Limited (hereinafter referred to as OIL) has invited offers vide their tender no _____for_____ and M/s _____ (Bidder) intends to bid against the said tender and desires to have technical support of M/s _ [Parent Company/Subsidiary Company-(Delete whichever not applicable)] and whereas Parent Company/ Subsidiary Company (Delete whichever not applicable) represents that they have gone through and understood the requirements of subject tender and are capable and committed to provide the services as required by the bidder for successful execution of the Purchase order, if awarded to the bidder.

Now, it is hereby agreed to by and between the parties as follows:

1. M/s. _____(Bidder) will submit an offer to OIL for the full scope of work as envisaged in the tender document as a main bidder and liaise with OIL directly for any clarifications etc. in this context.

2. M/s. _____ (Parent Company/Subsidiary Company (Delete whichever not applicable) undertakes to provide technical support and expertise, expert manpower and procurement assistance and project management to support the bidder to discharge its obligations as per the Scope of work of the tender/ Purchase Order for which offer has been made by the Parent Company/Subsidiary Company (Delete whichever not applicable) and accepted by the bidder.

3. This agreement will remain valid till validity of bidder's offer to OIL including extension if any and till satisfactory performance of the Purchase Order in the event the Purchase Order is awarded by OIL to the bidder.

4. It is further agreed that for the performance of work during Purchase Order period bidder and Parent Company/Subsidiary Company (Delete whichever not applicable) shall be jointly and severely responsible to OIL for satisfactory execution of the Purchase Order.

5. However, the bidder shall have the overall responsibility of satisfactory execution of the Purchase Order awarded by OIL.

In witness whereof the parties hereto have executed this agreement on the date mentioned above.

For and on behalf of (Bidder)	For and on behalf of (Parent ompany/Subsidiary Company (Delete hichever not applicable)
M/s. Witness: 1) 2)	M/s. _____ Witness: 1) 2)

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ANNEXURE B4

PARENT COMPANY/SUBSIDIARY COMPANY GUARANTEE

(Delete whichever not applicable)

(**TO BE EXECUTED ON STAMP PAPER OF REQUISITE VALUE AND NOTORISED**)

DEED OF GUARANTEE

THIS DEED OF GUARANTEE executed at……this … … . day of ….. by M/s ……..(mention complete name) a company duly organized and existing under the laws of ……..(insert jurisdiction/country), having its Registered Office at …….. hereinafter called "the Guarantor" which expression shall, unless excluded by or repugnant to the subject or context thereof, be deemed to include its successors and permitted assigns.

WHEREAS

M/s Oil India Limited, a company duly registered under the Companies Act 1956, having its Registered Office at Duliajan in the State of Assam, India, hereinafter called "OIL" which expression shall unless excluded by or repugnant to the context thereof, be deemed to include its successor and assigns, invited tender number……for …… …… . on ..M/s…… (mention complete name), a company duly organized and existing under the laws of …….. (insert jurisdiction/country), having its Registered Office at …….. (give complete address) hereinafter called " the Company" which expression shall, unless excluded by or repugnant to the subject or context thereof, be deemed to include its successor and permitted assigns, have, in response to the above mentioned tender invited by OIL, submitted their bid number …… to OIL with one of the condition that the Company shall arrange a guarantee from its parent company guaranteeing due and satisfactory performance of the work covered under the said tender including any change therein as may be deemed appropriate by OIL at any stage.

The Guarantor represents that they have gone through and understood the requirement of the above said tender and are capable of and committed to provide technical and such other supports as may be required by the Company for successful execution of the same.

The Company and the Guarantor have entered into an agreement Dated ……. as per which the Guarantor shall be providing technical and such other supports as may be necessary for performance of the work relating to the aforementioned tender.

Accordingly, at the request of the Company and in consideration of and as a requirement for OIL to enter into agreement(s) with the Company, the Guarantor hereby agrees to give this guarantee and undertakes as follows:

1. The Guarantor (Parent Company/ ***Subsidiary Company (Delete whichever not applicable***) unconditionally agrees that in case of non- performance by the Company of any of its obligations in any respect, the Guarantor shall, immediately on receipt of notice of demand by OIL, take up the job without any demur or objection, in continuation and without loss of time and without any cost to OIL and duly perform the obligations of the Company to the satisfaction of OIL.

2. The Guarantor agrees that the Guarantee herein contained shall remain valid and enforceable till the satisfactory execution and completion of the work (including discharge of the warranty obligations) awarded to the Company.

3. The Guarantor shall be jointly with the Company as also severally responsible for

satisfactory performance of the Purchase Order entered between the Company and OIL.

4. The liability of the Guarantor, under the Guarantee, is limited to the 50% of the annualized Purchase Order price entered between the Company and OIL. This will, however, be in addition to the forfeiture of the Performance Guarantee furnished by the Company.

5. The Guarantor represents that this Guarantee has been issued after due observance of the appropriate laws in force in India. The Guarantor hereby undertakes that the Guarantor shall obtain and maintain in full force and effect all the governmental and other approvals and consents that are necessary and do all other acts and things necessary or desirable in connection therewith or for the due performance of the Guarantor's obligations hereunder.

6. The Guarantor also agrees that this Guarantee shall be governed and construed in accordance with the laws in force in India and subject to the exclusive jurisdiction of the courts of India.

7. The Guarantor hereby declares and represents that this Guarantee has been given without any undue influence or coercion, and that the Guarantor has fully understood the implications of the same.

8. The Guarantor represents and confirms that the Guarantor has the legal capacity, power and authority to issue this Guarantee and that giving of this Guarantee and the performance and observations of the obligations hereunder do not contravene any existing laws.

For & on behalf of (Parent Company/Subsidiary Company (Delete whichever not applicable)

Witness: 1. Signature _____ Full Name _____ Address _____ 2. Signature _____ Full Name _____ Address _____	M/s _____ Signature _____ Name _____ Designation _____ Common seal of the Company _____

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PROFORMA–B5

FORMAT OF PERFORMANCE BANK GUARANTEE BY SUPPORTING COMPANY

To
M/s OIL INDIA LIMITED (OIL)
MATERIALS DEPARTMENT
DULIAJAN, ASSAM, INDIA, PIN-786602

WHEREAS _____ (Name and address of Contractor) (hereinafter called "Contractor", which expression shall, unless repugnant to the context or meaning thereof include all its successors, administrators, executors and assignees) had undertaken, in pursuance of Contract No. _____ to execute ---------- (Brief Description of the Work)(hereinafter called "the Contract").

Further, M/s _____ (Name of the ultimate parent) having its registered/head office at _____ is the "**Ultimate Parent**" of "**Supporting Company**" M/s.....(Name of the supporting company with address)/M/s.....(Name of the Contractor with address, in case experience is taken from the ultimate parent) (hereinafter referred to as the 'SUPPORTING COMPANY'/ "ULTIMATE PARENT", which expression shall, unless repugnant to the context or meaning thereof include all its successors, administrators, executors and assignees). Based on the experience/technical strength of the **"Supporting Company"/ "Ultimate Parent"** (whichever is applicable), the CONTRACTOR has qualified for award of contract and has agreed to provide complete technical and other support to the CONTRACTOR for successful completion of the contract as mentioned above, entered between OIL and the CONTRACTOR and OIL having agreed that the **"ULTIMATE PARENT/SUPPORTING COMPANY"**, shall furnish to OIL a performance guarantee for Indian Rupees/US$ ..... towards providing complete technical and other support to the CONTRACTOR for successful completion of the contract as mentioned above,

AND WHEREAS we have agreed to give the **"ULTIMATE PARENT/SUPPORTING COMPANY"**, such a Bank Guarantee; NOW THEREFORE we hereby affirm that we are Guarantors on behalf of the **"ULTIMATE PARENT/SUPPORTING COMPANY"**, up to a total of (Amount of Guarantee in figures) _____ (in words _____), such amount being payable in the types and proportions of currencies in which the Contract price is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of guarantee sum as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein. We hereby waive the necessity of your demanding the said debt from the Contractor / **ULTIMATE PARENT/SUPPORTING COMPANY** before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract or the work to be performed there under or of any of the Contract documents which may be made between you and the Contractor shall in any way cease us from any liability under this guarantee, and we hereby waive notice of such change, addition or modification.

This guarantee is valid until the _____day of _____.

The details of the Issuing Bank and Controlling Bank are as under:

Issuing Bank:

BANK FAX NO:

BANK EMAIL ID:
BANK TELEPHONE NO:
IFSC CODE OF THE BANK:

Controlling Office:

Address of the Controlling Office of the BG issuing Bank:
Name of the Contact Person at the Controlling Office with Mobile No. and e-mail address:

SIGNATURE AND SEAL OF THE GUARANTORS _____
Designation _____
Name of Bank _____
Address _____
Witness _____
Address _____

Date: _____
Place: _____

Note:
The Bank Guarantee issuing bank branch shall ensure the following:

a. The Bank Guarantee issued by the bank shall be routed through SFMS platform as per the following details:

i "MT 760/MT 760 COV" for issuance of bank guarantee.
ii "MT 760/MT 767 COV" for amendment of bank guarantee.

Note: The above message/intimation shall be sent through SFMS by the BG issuing bank branch to ICICI BANK LTD., Duliajan Branch; IFS Code – ICIC0000213; SWIFT Code – ICICINBBXXX; Branch Address: Kunja Bhavan, Daily Bazaar, Duliajan, Dibrugarh, Assam – 786602.

b. Bank Guarantee issued by a Scheduled Bank in India at the request of some other Non-Scheduled Bank of India shall not be acceptable.

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ANNEXURE - D

TECHNICAL CHECKLIST

&&&

COMMERCIAL CHECK LIST

A. The Commercial Check List must be completed and returned 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.

Sl. No.	REQUIREMENT	COMPLIANCE Yes/No/Not Applicable
1.0	Whether bid submitted under Single Stage Two Bid System?	
2.0	Whether quoted as manufacturer?	
2.1	Whether quoted as OEM Dealer/Supply House.	
2.2	If quoted as OEM Dealer/Supply House	
	(a) Whether submitted valid and proper authorization letter from manufacturer confirming that bidder is their authorized Dealer/supply House for the product offered ?	
	(b) Whether manufacturer's back-up Warranty/Guarantee certificate submitted?	
3.0	Whether Purchase Preference claimed? If so, whether under -	
	(i) PPP-MII (Whether relevant documents uploaded?)	
	(ii) MSE (Whether relevant documents uploaded?)	
	(iii) DMS&IP (Whether relevant documents uploaded?)	
4.0	Whether offered firm prices?	
4.1	Whether quoted offer **validity of 120 days from** the bid closing date of tender?	
4.2	Whether quoted a firm delivery period?	
4.3	Whether agreed to the NIT Warranty clause?	
4.4	Whether confirmed acceptance of tender Payment Terms as per Tender?	
4.5	Whether Bid security submitted as per NIT.	
5.0	Whether confirmed to submit PBG as asked for in NIT?	
5.1	Whether agreed to submit PBG within 30 days of placement of order?	
6.0	Whether Price submitted as per Price Schedule?	
6.1	Whether cost of Recommended Spares for 2 years of operations quoted (if applicable)?	
7.0	Whether quoted as per NIT (without any deviations)?	
7.0	Whether quoted any deviation?	
7.1	Whether deviation separately highlighted?	
8.0	Whether indicated the country of origin for the items quoted?	
8.1	Whether technical literature / catalogue enclosed?	
8.2	Whether weight & volume of items offered indicated?	
9.0	For Foreign Bidders - Whether offered FOB/FCA port of despatch including sea/air worthy packing & forwarding?	
9.1	For Foreign Bidders – Whether port of shipment indicated? To specify:	
9.2	For Foreign Bidders only - Whether indicated ocean freight up to Kolkata port (Excluding marine insurance)?	
9.3	Whether Indian Agent applicable?	
	If YES, whether following details of Indian Agent provided?	
	(a) Name & address of the agent in India – To indicate	
	(b) Amount of agency commission – To indicate	

	(c) Whether agency commission included in quoted material value?	
10.0	For Indian Bidders – Whether indicated the place from where the goods will be dispatched. To specify :	
10.1	For Indian Bidders – Whether road transportation charges up to Duliajan quoted?	
10.2	For Indian Bidders only - Whether offered Ex-works price is including packing/forwarding charges?	
10.3	For Indian Bidders only - Whether indicated import content in the offer?	
10.4	For Indian Bidders only - Whether offered Deemed Export prices?	
10.5	For Indian Bidders only – Whether all applicable Taxes & Duties have been quoted?	
11.0	Whether all BRC/BEC clauses accepted?	
12.0	Whether Integrity Pact with digital signature uploaded?	
12.1	Whether all the clauses in the Integrity Pact have been accepted?	
13.0	Whether indicated 'Local Content' required as per PPP-MII Policy ?	
14.0	Whether indicated the import content in Price Bid ?	
14.1	Whether submitted Undertaking towards Local Content and CA Certificate towards Local Content (as applicable) (PROFORMA – 13)	
15.0	Whether submitted Undertaking towards submission of authentic information/ documents submitted (PROFORMA – 4)	
16.0	Whether submitted Undertaking for restrictions on procurement from a bidder of a country which shares a land border with India. (Exhibit – I / III / III as applicable)	
17.0	Whether submitted Power of Attorney/ Authorization letter (Regarding authority for submission of bid) in prescribed format (PROFORMA – 14)	
18.0	Whether submitted Declaration about bidder's Financial standing i.e. the bidder should not be under liquidation, court receivership or similar proceedings, should not be bankrupt. (PROFORMA – 15)	
19.0	Whether submitted declaration that bidder is not under holiday list/delisted/blacklisted/debarred (PROFORMA – 16 A) Whether submitted declaration of NCLT / NCLAT /DRT /DRAT/ Court Receivership/ Liquidation (PROFORMA – 16 B)	
20.0	Whether submitted declaration for Document Verification by independent third party inspection agencies (PROFORMA – 17)	
21.0	Whether submitted declaration for Sustainable Development (SD) and Environment, Social & Governance (ESG) Policy (PROFORMA – 20)	

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BIDDERS PAST SUPPLIES PROFORMA FOR SIMILAR ITEMS.

Sl No.	PO No and date	Name & Address of Client	Description in Details	Documentary Evidence of successful completion	Date of completion	Remarks

****

B. ADDITIONAL INFORMATION (To be filled up by bidder and submit along with Technical Bid):

Sl No	Requirement	Bidder's Reply
1	Offer reference & Date	
2	Name, Address, Phone No & E-mail of Bidder	
3	Bank details of Bidder	
4	Name of Manufacturer	
5	Bid validity	
6	Payment Terms	
7	Guarantee/Warranty Terms	
8	Delivery Period	
9	Country of Origin	
10	Port of Despatch/Despatching Station	
11	Confirm submission Integrity pact, if required as per NIT	
12	Confirm acceptance of PBG clause, if required as per NIT	
13	Compliance to: Liquidated Damage Warranty/Guarantee Arbitration/Resolution of Dispute Force Majeure Applicable laws	
14	Confirm submission of the balance sheet/Financial Statements for the financial year (as applicable). If not, whether declaration as per BRC submitted **(PROFORMA - 8).**	
15	Confirm submission of undertaking towards authenticity of submitted documents.	
16	Exception/Deviations quoted, if any, to be given in details or refer to respective page of the bid documents. ANNEXURE III of General Terms & Conditions" for e-Procurement as per Booklet No. MM/GLOBAL/E-01/2005 for E-procurement (ICB Tenders) submitted in this regard?	
17	Whether submitted all the applicable Annexures as per document General Terms & Conditions" for e-Procurement as per Booklet No. MM/GLOBAL/E-01/2005 for E-procurement (ICB Tenders).	

C. ADDITIONAL INFORMATION ON EXPERIENCE CRITERIA CLAUSE OF BRC-TECHNICAL. (To be filled up by bidder and submit along with Technical Bid):

Sl No	Requirement	Bidder's Reply
1	Whether all documents have been submitted as required for fulfilling Experience criteria clause of BRC-Technical.	
2	Name and details of the vendor to whom the bidder has successfully executed orders / contracts for atleast 50% of the tendered quantity as per Experience criteria clause of BRC-Technical.	
3	Whether submitted the profile and other documents of the E&P company / Drilling Contractor / Drilling Service provider for	

	verification (viz. Annual reports, Memorandum of Association, Article of Association etc.) if applicable	

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ANNEXURE - E

PRICE BID FORMAT

(Uploaded as attachment in the Attachment Tab "Notes and Attachments" in e-portal)

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Scope of supply of Hydraulic Fracturing Fleet, Qty = 1 No.

1.0 INTRODUCTION

1.1 The scope of supply will include the following:

a) Supply of Hydraulic Fracturing Equipment
b) Pre-Shipment Inspection
c) Installation & Commissioning of Hydraulic Fracturing Equipment
d) Comprehensive Training on Hydraulic Fracturing and Equipment Maintenance & Operation
e) Comprehensive Maintenance for a period of 04 (Four) Years

2.0 SCOPE OF SUPPLY OF HYDRAULIC FRACTURING EQUIPMENT

2.1 Bidder shall supply the following hydraulic fracturing equipment along with other items as mentioned below:

Sl. No.	Units Description	Quantity (Nos.)	Annexure
1.	TRACTOR/ PRIME MOVER FOR PULLING	03	ANNEXURE-A
2.	TRAILER MOUNTED FRAC PUMPER	06	ANNEXURE-B
3.	TRAILER MOUNTED FRAC DATA VAN	01	ANNEXURE-C
4.	TRUCK MOUNTED SAND DUMPER	03	ANNEXURE-D
5.	TRAILER MOUNTED HYDRATION UNIT	01	ANNEXURE-E
6.	TRAILER MOUNTED CHEMICAL ADDITIVE SYSTEM	01	ANNEXURE-F
7.	TRAILER MOUNTED BLENDER UNIT	01	ANNEXURE-G
8.	SKID MOUNTED FRAC CHEMICAL LAB	01	ANNEXURE-H
9.	SKID MOUNTED FRAC MANIFOLD SYSTEM	01	ANNEXURE-I
10.	X-MAS TREE ISOLATION TOOL	02	ANNEXURE-J
11.	SKID MOUNTED CENTRIFUGAL PUMP	02	ANNEXURE-K
12.	SKID MOUNTED TRIPLEX PUMP	01	ANNEXURE-L

2.2 Bidder shall comply with all the clauses mentioned against each of the equipment mentioned in the **Annexures** and other parts of the tender documents.

2.3 Bidder shall comply with all the specifications & requirements of each unit mentioned in the **Annexures**.

2.4 **Bidder shall dispatch all the items in one lot (all the units together) and at the same time** as per the delivery period.

2.5 **WARRANTY / GUARANTEE TERMS:**

Clause No.	Clause Description Bidder to confirm compliance to the following:	Bidder's Response
1)	The bidder shall offer warranty for the entire equipment for a period of at least one (01) year from the date of successful installation & commissioning of the entire equipment.	
2)	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.	
3)	**Penalty during Warranty period.** To keep all the units fully operational, in case of failure of any item during the warranty period, it shall be the bidder's responsibility to arrange replacement / repairing at site at their cost including customs clearance, freight, etc. within a period of maximum three (03) weeks from the date of notification of such failure and warranty for such items shall be extended accordingly. In case failure of any item is not rectified within 3 weeks of notification then penalty @ 0.5% of PO value per week subject to a maximum of 5 % of cost of Materials shall be levied and warranty for such items shall be extended accordingly. This penalty amount shall be recovered from 1st Performance security amount submitted by the successful bidder.	

2.6 SPARES.

a) COMMISSIONING SPARES: The bidder has to supply all the Commissioning spare parts free of cost, required for initial commissioning of the unit. All the consumables such as, lube oil, gear oil, hydraulic oil etc. except diesel fuel, required for commissioning should also be supplied. **Cost of Commissioning Spares shall be considered for Bid evaluation.**

b) OPERATIONAL CRITICAL SPARES:
The bidder has to quote and Supply for Operational Critical Spares mentioning Make, Part Nos. etc in the technical bid as per details mentioned in the tender document. **Cost of Operational Critical Spares shall be considered for Bid evaluation.**

c) 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 without price of the items. Annual consumption of each spare should be furnished. The bidder should 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 and E-mail ID of OEM for all items. **Cost of Recommended Spares shall NOT be considered for Bid evaluation.**

3.0 SCOPE OF INSPECTION CUM ACCEPTANCE

Clause No.	Clause Description	Bidder's Response
A	**SCOPE OF THIRD-PARTY INSPECTION:**	
1)	Supplier shall arrange for Third Party Inspection (TPI) of the units through OIL's approved Third-Party Inspection Agency below at Bidder's/ Manufacturer's plant/premises as per approved QAP and conditions of the Purchase Order. a) Bureau Veritas (BV) b) Lloyds c) DNV-GL) d) RITES e) Indian Register of Shipping (IRS) f) Tuboscope Vetco.	

2)	All cost towards the engagement of Third-Party Inspection agency shall be borne and paid by supplier. Bidder shall quote/include the cost of Third-Party Inspection in their offer.	
3)	The Scope of Third-Party Inspection will include but not limited to the following: 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 components of equipment. v. Review of Test Document for equipment Installed on the unit. vi. Any other requirement of the inspection agency to satisfy of the equipment as per applicable standards. **Note:** ***TPI certificates shall be submitted along with material supply***	
B	**SCOPE OF PRE-SHIPMENT INSPECTION:**	
	Pre-shipment inspection shall be carried out by team of OIL executives at manufacturer's site/workshop after completion of Third-Party Inspection (TPI). The inspection team shall consist of representatives of the concerned departments of OIL. The following points shall be noted but not limited to regarding Pre-Shipment Inspection by OIL	
	The inspection shall not relieve the supplier of their responsibility to ensure that the equipment supplied is free from all manufacturing and other defects and fully conform with the required specifications.	
	The period for the Inspection-cum-Acceptance shall be of (05) five weeks.	
	The Bidder shall inform OIL at least three (03) months ahead of the inspection date and OIL shall depute its Inspection Team within three (03) months of receipt of intimation from Bidder. However, OIL shall witness such inspection at a mutually agreed date based on readiness of the Unit.	
	Scope of Inspection: The inspection shall include, but not limited to: • Physical verification of all items, fittings, and accessories. • Review of documentation such as Parts Catalogue, Maintenance & Service Manuals. • Verification of Make & Model of the trailer unit, Type Approval Certificate of the trailer etc., as per the Tender/Purchase Order. • Any other documents required verification.	
	Functional Testing: • Functional testing of equipment shall be conducted • Hydraulic system testing • Instrumentation system • Pumping system • PTO system wherever applicable. • Vehicle Testing • Safety interlocks wherever applicable.	

	The supplier shall arrange for driver, operator, weighing facility and any other infrastructure required for the inspection.	
	For operational or safety reasons, if any minor modifications are suggested by the OIL inspector, the same must be complied with by the bidder at no additional cost to OIL.	
	Bidder 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.	
	The inspection report would be prepared at the end of the inspection and jointly signed by both the parties.	
	Bidder shall effect dispatch of the unit only on receipt of OIL's dispatch advice.	
	All expenses related to travel, accommodation and other expenses of the OIL's team will be borne by OIL.	

4.0 SCOPE OF INSTALLATION & COMMISSIONING HYDRAULIC FRACTURING EQUIPMENT:

Clause No.	Clause Description	Bidder's Response
1)	The successful Bidder shall arrange for installation & commissioning of entire hydraulic fracturing equipment at Duliajan, Assam, India	
2)	**Inspection of equipment on receipt at OIL:** Inspection of the equipment, along with all spares and accessories, upon receipt at OIL's base at Duliajan, Assam shall be carried out jointly by representatives of OIL and the Supplier. The inspection shall verify that the equipment, spares, and accessories have been supplied strictly in accordance with the Purchase Order (PO). OIL shall intimate the Supplier within **ten (10) days** of receipt of the items. The Supplier shall depute its representative(s) to Duliajan within **fifteen (15) days** from the date of such intimation for conducting the joint inspection.	
3)	**Mobilization of Supplier's Commissioning Team:** Upon successful completion of the joint inspection as stated above, the Supplier's Commissioning Team shall be available at Duliajan, Assam within **sixty (60) days** from the date of successful completion of joint inspection for commissioning of the Hydraulic Fracturing Fleet.	
4)	While quoting Commissioning charge, bidder should consider all expenses including to and fro fares, boarding/lodging, local transport, and other daily expenses during stay of their commissioning team accordingly. OIL may provide accommodation on Chargeable basis subject to availability.	
5)	**The successful bidder shall commission the entire units within Sixty (60) days of the arrival of the Commissioning Team.**	
6)	However, if the commissioning is delayed for reasons not attributed to the bidder and to the satisfaction of OIL, OIL may	

	extend the commissioning period to a maximum of one hundred and twenty (120) days.	
7)	The Bidder shall confirm and submit an undertaking that the unit will be fully commissioned within a period not exceeding one hundred and twenty (120) days from the date of commencement of the commissioning job.	
8)	The Commissioning Team shall ensure availability of all spares related to initial installation & commissioning of the entire units. In case use of operation Critical Spares by the commissioning Team during Commissioning of the Equipment, the same shall be replenished by the bidder within 90 days.	
9)	Bidders should quote installation & commissioning charges for evaluation purposes.	
10)	**The supplied units shall be deemed commissioned only after the bidder successfully complete one hydraulic fracturing job with the units supplied and to the satisfaction of OIL.**	
11)	All consumables/chemicals/fluids/proppant and other items required for carrying out the above hydraulic fracturing job shall be under the scope of OIL.	
12)	All the consumables such as, lube oil, gear oil, hydraulic oil etc. except diesel fuel, required for commissioning shall be supplied by the bidder.	
13)	All manpower required for setting up the hydraulic fracturing fleet at the well site shall be under the scope of the bidder.	
14)	All manpower required to carry out the hydraulic fracturing job in the well shall be under the scope of the bidder.	
15)	The bidder shall be provided with the data of Ten (10) nos. of wells, from which the bidder shall identify five (05) best suitable wells in order of suitability to carry out the hydraulic fracturing job. The data of the wells shall be provided within 10 days from the date of issue of purchase order (PO).	
16)	After studying the Ten (10) wells and selecting the five (05) best candidates, the bidder shall design the HF job for the best three (03) candidates well as advised by OIL. As per the design, the bidder shall inform OIL for procurement of required amount of consumables/chemicals/fluids/proppant etc., as the case may be, for carrying out hydraulic fracturing job as a part of installation and commissioning.	
17)	The bidder shall provide the HF job design & the requirement chemicals/fluids/proppant etc. within 60 days from date of receipt of PO. **It shall be the responsibility of OIL to prepare the candidate wells before the HF equipment arrives at OIL, Duliajan.**	
18)	Mobilization of the equipment from Duliajan to the well site shall be under the scope of OIL.	

5.0 SCOPE OF COMPREHENSIVE TRAINING ON HYDRAULIC FRACTURING & EQUIPMENT MAINTENANCE & OPERATION:

Clause No.	Clause Description	Bidder's Response
1)	The scope of imparting advance training to OIL's HF team comprising of Geologist, Reservoir Engineers, Stimulation/ Fracture Engineers, Maintenance Engineers would be sub-divided in Modules of Well Selection, Fracture Modelling & Simulation, Field Operation, Maintenance Procedures and OIL shall depute its personnel against respective domains to gain technical expertise against a schedule.	
2)	Hydraulic fracturing is a critical stimulation technique to enhance hydrocarbon production from low-permeability formations. Effective implementation requires a combination of geoscientific analysis, fracture modelling, and operational expertise. The proposed training program aims to build advanced competency in both fracture design and real-time execution for engineers and supervisors engaged in well intervention and stimulation activities.	
3)	**Training Objectives**	
i)	To develop comprehensive knowledge of candidate well selection, formation evaluation, and fracture design modelling using industry tools.	
ii)	To impart practical skills in field execution of hydraulic fracturing, including equipment operation, fluid/proppant handling, job optimization, and post-fracture evaluation.	
iii)	To ensure participants gain hands-on experience through simulation exercises and field/virtual demonstrations.	
4)	**Deliverables & Timelines** • Training Plan & Schedule: To be presented along with the offer & finalized within Thirty (30) days from the date of receipt of PO. • Bidder to provide comprehensive training materials in soft form and a comprehensive copy (as a set based on pages and volumes) in coloured and Hard binding for Library & Record. • Place of training shall be specifically mentioned along with the bid.	
5)	**Training Schedule & Modalities**	
i)	The bidder shall conduct the training under two structured modules and the cumulative duration for the two modules shall be fifteen (15) working days.	
ii)	The bidder shall conduct the training for minimum of 15 nos. of OIL Executives at the location selected by the bidder.	
iii)	**Bidder shall offer the location of training along with the Technical bid. The location of training shall not be changed after receipt of the Purchase Order (PO).**	
iv)	All expenses related to travel, accommodation and other expenses of the OIL's team will be borne by OIL.	

v)	**Module 1**: Geoscience & Fracture Modelling.	
	The duration of training for Module 1 shall be ten (10) working days and shall include the following minimum content; bidder may include additional content if required. • Hydraulic Fracturing • Candidate well selection based on geological, petrophysical, and completion data • Reservoir geomechanics and fracability analysis • Fracture modelling and simulation using industry software • Sensitivity analysis for optimization of fracture parameters • Hands-on design exercises with case studies	
vi)	**Module 2**: **Equipment Maintenance & Operation**	
	The duration of training for Module 2 shall be five (05) working days and shall include the following minimum content**;** bidder may include additional content if required. • Job planning and execution based on fracture models • Equipment layout and surface facilities arrangement • Equipment Operation, Field Trouble Shooting & Maintenance • Contingencies – Scenarios & Mitigation • Frac fluids and chemical additive handling • Proppant blending and transport mechanism • On-site job monitoring and real-time optimization • Flowback operations and post-frac evaluation • HSE compliance in fracturing operations	
6)	**Bidder's Obligations:** The bidder shall: • Provide Expert Trainers: SMEs with minimum 10 years of experience. • Develop Customized Training Content • Arrange Simulation Software & Tools (In line with the Software bundled with Treatment Control Unit/ Data Van) • Conduct Practical Exercises. • Deliver Comprehensive Training Material • Ensure Interactive Delivery. **Note: Bidder may take the support from reputed firm/party for providing the training.**	

6.0 SCOPE OF COMPREHENSIVE MAINTENANCE:

Clause No.	Clause Description	Bidder's Response
1)	The Comprehensive Maintenance shall be for a period of **four (04) years** from the date of successful installation & commissioning of the entire fleet of equipment. This period shall comprise one (01) year of **Comprehensive Maintenance during warranty period** which shall be Free of cost, followed by three (03) years of **Comprehensive Maintenance post warranty period.**	
2)	Bidder's obligation for the **comprehensive maintenance** of the hydraulic fracturing fleet, inclusive of supply of spare parts & Consumables (except POL), manpower, tools & tackles, and recertification services and management of Spares inventory. OIL's HF team shall guide and provide necessary insights into OIL's policies of spare & inventory management. The bidder's personnel shall be responsible for following those guidelines and preparing maintenance checklists, spare & consumable list for codifying in OIL's SAP/ERP database.	
3)	This service aims to ensure sustained operational availability, optimized performance, minimized downtime, and compliance with international standards.	
4)	The Comprehensive maintenance shall start from the date of successful commissioning of the entire fleet of equipment.	
5)	**Comprehensive Maintenance during warranty period:**	
i	In Comprehensive maintenance during the warranty period the Supplier shall be responsible for replacing defective parts (if any) covered under warranty without any cost implication to OIL including Technician/ Personnel mobilization (if required in addition to maintenance crew) to that effect. Personnel engaged for general maintenance for replacement/ repair of equipment during period of warranty shall be Free of cost. The Scope of Comprehensive Maintenance Scope during the warranty period shall be equivalent to Comprehensive Maintenance post warranty period. Any equipment, spares, and ancillaries that require replacement during the warranty period shall be replaced by the Supplier at no additional cost to OIL.	
6)	**Comprehensive Maintenance post warranty period:**	
i.	After the expiry of one year Warranty Period, OIL shall bear the cost of spare under scheduled/ breakdown / repair/ overhauling maintenance at the cost indicated in the bid submitted for the remaining period of Three (03) year.	

ii.	Bidder shall keep the spares & consumables (except POL) as per their plan for carrying out any maintenance activities against comprehensive maintenance.	
iii.	In the event of any equipment becomes non-operational due to reasons attributable to the Supplier's failure to provide Comprehensive Maintenance Services as per terms of reference, the Regular Maintenance Charge shall not be paid until the equipment is made operational.	
iv.	To keep the all the units fully operational, in case of failure of any item during the COMPREHENSIVE MAINTENANCE post warranty period, it shall be the bidder's responsibility to arrange replacement / repairing at site at their cost including customs clearance, freight, etc. within a period of maximum three (03) weeks from the date of notification of such failure and COMPREHENSIVE MAINTENANCE period for such items shall be extended accordingly. In case failure of any item is not rectified within 3 weeks of notification then penalty at the rate of 0.5% of Annual COMPREHENSIVE MAINTENANCE charges shall be levied per week subject to a maximum of 5 % of Annual COMPREHENSIVE MAINTENANCE value and COMPREHENSIVE MAINTENANCE period for Hydraulic Fracturing Fleet shall be extended accordingly. This penalty amount shall be recovered from 2nd Performance security amount submitted by the successful bidder for COMPREHENSIVE MAINTENANCE.	
7)	The Supplier shall establish and maintain a suitable office/base at Duliajan for the Maintenance Team for the entire period of four (04) years. All expenses related to food, lodging, manpower, office infrastructure, utilities, and any other facilities required for execution of the services shall be borne by the Supplier. The Bidder shall consider the same while submitting their bid.	
8)	Bidder shall arrange for IME/PME, Labour permission (if required) and any other requirement for satisfactory completion during the comprehensive maintenance period. The cost for such expenses shall be borne by the Supplier.	
9)	OIL shall provide the requisite space/ yard for stowage of equipment, spares & ancillaries required to carry out any or part of the maintenance as described anywhere in the scope & tender.	
10)	Bidder to provide a tentative drawing required for equipment stowage, maintenance along with requirement for spares godown, racks, any special requirements (with justification), requirement of lifting equipment like crane, forklifts, hydraulic lifts, scissor lifts etc. required for safely carrying out maintenance of HF fleet & associated equipment.	
11)	Bidder to provide the comprehensive list of spare parts against each equipment & automobile along with the offer along with information on warranty of that particular spare in days/ hours of operation, whichever is earlier.	

12)	The bidder's supply of replacement parts/consumables and materials as required for the repair or maintenance of the Equipment shall be of brand-new condition and from OEM or equivalent and as per the OEM recommended specifications. Any variation to be notified to OIL and recorded before replacement.	
13)	Warranty of Parts: Any replacement parts supplied by the bidder are covered by a pre-dictated warranty period of from the date of installation, during which the bidder shall replace defective parts at no additional cost to the OIL.	
14)	As part of the Comprehensive Maintenance, the bidder shall provide undertaking along with the bid to provide the following:	
i)	**Trained & Experience personnel** for Comprehensive Maintenance shall be provided and shall be stationed at Duliajan, Assam.	
A.	**Manpower for Comprehensive Maintenance:**	
1)	**Project Coordinator/ Supervisor:** • One (01) number of Project Coordinator/ Supervisor. • Minimum 10 years' experience for Engineering Graduate or minimum 15 years' experience for Engineering Diploma. • Shall have experience in maintenance of various pumps, hydraulics, gears, mechanical equipment and automobile etc. • Office based at Duliajan to liaise with Company regularly • Shall be able to guide the technicians/ helpers to guide during maintenance. • Acting as project manager for Comprehensive Maintenance	
2)	**Inventory Manage/Supervisor:** • One (01) number of Inventory Manager/Supervisor. • Minimum 05 years' experience for Engineering Graduate or minimum 7 years' experience for Engineering Diploma. • Shall have experience in maintenance of various pumps, hydraulics, gears, mechanical equipment and automobile etc. • Shall have the experience for managing of inventories • Office based at Duliajan to liaise with Company regularly • Shall able to guide the technicians/helpers to guide during maintenance.	
3)	**Mechanic Technician:** • Two (02) numbers of Mechanic Technician. • Minimum 05 years' experience in maintenance of various pumps, hydraulics, gears, mechanical equipment and automobile etc. Maintain proper regular equipment maintenance report to be provided with each job tickets and monthly rental ticket. • Shall be an engineering Diploma passed. • Manage equipment spare parts minimum inventory.	
4)	**Electronics/ Sensors/ Instrument/Electrical Technician**	

	• Two (02) numbers of Electronics/ Sensors/ Instrument/ Electrical Technician • Minimum 5 years' experience in maintenance of instrumentation/ Electronic/ Electrical equipment/ Automobile Engineering. • Shall be an engineering diploma passed. • Shall have proper training on maintenance of instrumentation/ Electronic/ Electrical equipment/ Automobile. • Maintain proper regular equipment maintenance report to be provided with each job tickets and monthly rental ticket • Manage equipment spare parts minimum inventory	
5)	**Helper/ Assistant** • Six (06) numbers of Helper/Assistant • Minimum 3 years' experience in mechanical and/or instrument maintenance. • Shall be 10th Passed or above.	
6)	**Note:** 1) The above manpower mentioned are minimum requirement. However, the supplier can deploy additional manpower if required for successful completion of the Comprehensive Maintenance service. 2) The supplier shall require to provide protective clothing and PPEs to each of their employee. 3) Supplier shall ensure to provide the minimum manpower as mentioned above during entire period of the service. However, if the Supplier wants to replace any of the above manpower than prior replacement shall be intimated and get it approved by OIL. 4) The replaced manpower shall have the similar credential as mentioned above. 5) Payment for Manpower shall be included with Regular Maintenance. 6) During the period of the service if any manpower is not available a penalty of 10% against the rate of regular Maintenance shall be deducted from the bill.	
ii)	**Regular maintenance services** for the Equipment, Tools, Tackles and any other equipment etc. required shall be provided by the bidder, following OEM guidelines for scheduled maintenance after each job and at defined intervals. like Periodic inspection, cleaning, lubrication and adjustments to ensure optimal operation of the equipment and to prevent unexpected breakdown. **Regular Maintenance** shall be systematically planned to perform on recurring set of actions on the all the fracturing equipment along with the equipment/ automobile/ machines/ systems to ensure their optimal performance, safety and longevity. It involves routine inspections, cleaning,	

	lubrication, adjustments, calibration, and replacement of consumable parts as per the manufacturer's or operational schedule. **Equipment under Regular Maintenance:** TRACTOR/ PRIME MOVER, TRAILER MOUNTED FRAC PUMPER, TRAILER MOUNTED FRAC CONTROL CENTRE (DATAVAN), TRUCK MOUNTED SAND DUMPER TRAILER MOUNTED HYDRATION UNIT TRAILER MOUNTED CHEMICAL ADDITIVE SYSTEM TRAILER MOUNTED BLENDER UNIT SKID MOUNTED FRAC CHEMICAL LAB SKID MOUNTED FRAC MANIFOLD SYSTEM X-MAS TREE ISOLATION TOOL SKID MOUNTED OF CENTRIFUGAL PUMP SKID MOUNTED TRIPLEX PUMP	
iii)	**Scheduled Maintenance like** identification & correction of any equipment malfunctions and replace wear components and perform calibrations, recertification wherever applicable while carrying out scheduled replacement of parts as recommended by OEM/ supplier. Schedule maintenance shall be planned as per recommendation of OEM. **Equipment under Scheduled Maintenance:** TRACTOR/ PRIME MOVER, TRAILER MOUNTED FRAC PUMPER, TRAILER MOUNTED FRAC CONTROL CENTRE (DATAVAN), TRUCK MOUNTED SAND DUMPER TRAILER MOUNTED HYDRATION UNIT TRAILER MOUNTED CHEMICAL ADDITIVE SYSTEM TRAILER MOUNTED BLENDER UNIT SKID MOUNTED FRAC CHEMICAL LAB SKID MOUNTED FRAC MANIFOLD SYSTEM SKID MOUNTED OF CENTRIFUGAL PUMP SKID MOUNTED TRIPLEX PUMP	
iv)	**Breakdown Maintenance and Emergency Repairs** necessary to restore the Equipment to working order after a sudden malfunction or breakdown. **Equipment under Breakdown Maintenance:** TRACTOR/ PRIME MOVER, TRAILER MOUNTED FRAC PUMPER, TRAILER MOUNTED FRAC CONTROL CENTRE (DATAVAN), TRUCK MOUNTED SAND DUMPER TRAILER MOUNTED HYDRATION UNIT TRAILER MOUNTED CHEMICAL ADDITIVE SYSTEM TRAILER MOUNTED BLENDER UNIT SKID MOUNTED OF CENTRIFUGAL PUMP SKID MOUNTED TRIPLEX PUMP	
v)	Service response time against the various types of maintenance shall be defined under broad scenarios involving	

	different set of equipment. The bidder's maintenance crew shall have to adhere to this timeline.	
vi)	**Inventory Management** a. Maintain critical spares and consumables at site or base. b. Keep reorder levels and replenishment cycle for key parts. c. Recertification of treating Iron as per local regulation, guidelines & frequency.	
vii)	**Exclusions:** The Maintenance Services under this Agreement do not cover: • Damage caused by OIL's negligence or misuse of the Equipment. • Repairs or replacements emerging out of natural disasters, accidents, or external causes beyond the control of bidder.	
viii)	**Customization of Services:** Company may request additional or customized services not covered under this Agreement. Any such additional services shall be subject to mutual agreement and may incur additional fees.	
ix)	**Bidder shall provide the Comprehensive list of spares & consumables (Except POL) for all the equipment and automobile along with the bid.**	
x)	**Bidder shall include the cost of the spares & Consumables (except POL) against each line items of regular/ Schedule/ Breakdown maintenance as per industry practice or as per the bidder's plan.**	
xi)	**Key Performance Indicators (KPIs)** **Bidder shall ensure the following:** • Fleet Availability ≥ **92%** • MTBF (Mean Time Between Failures) ≥ **150** hours per pump • Unplanned Downtime ≤ **5%** • Spare Lead Time ≤ 30 **days** • 100% recertification compliance	
xii)	Bidder should ensure that all personnel engaged for the requirement of Comprehensive Maintenance shall complete the all the statutory requirements under DGMS/ OMR-2017 and Mines Rules, 1955. **Mandatory Training & Certifications (Minimum)** The Bidder shall, at its own cost, ensure that all personnel are trained and certified for their respective roles prior to mobilisation, and that such certifications remain valid for the entire contract duration, viz. (but not limited to): 1. General HSE Induction & Site-Specific Orientation (location rules, PTW, ERP, alarms, muster, hazard communication). 2. First Aid (valid certificate from DGMS-recognised centre for mines/oil-mine work). 3. H2S Awareness & Escape (including use of escape sets and gas monitoring) for drilling/workover/production and any sour-gas exposure tasks.	

	4. Permit-to-Work (PTW) including isolation/LOTO and hot work; Fire safety & firefighting basics; Emergency Response drills. S. Working at Height, Confined Space Entry, Lifting & Rigging/Scaffolding, Electrical Safety, PPE selection/use, Manual handling - as applicable to job role. 6. Well Control Certification (IWCF/IADC or equivalent) for drilling supervisors, tool pushers, drillers, well-services engineers and well-intervention roles, in line with OISD-STD-174 and OISD-STD-190. 7. Specialized Competency Modules aligned to role (e.g., wireline, cementing, logging, SIMOPS, geophysical ops) as per relevant OISD standards. 8. Medical Fitness as per statutory norms for mine/oil-field work; records to be available at site.	
xiii)	**Note:** 1) The bidder should be responsible for maintaining digital logs of all maintenance activities. The project coordinator should report to OIL's HF team personnel pertaining to any maintenance requirement/ replacement of spares from inventory. 2) The description of the Major Equipment is as mentioned as part of the Supply Scope. Refer the Supply Scope for the same. 3) Cost of spares & consumables (Except POL) required under Regular/ Schedule/ breakdown maintenance shall be included under Regular/ Schedule/ breakdown maintenance. Expert/ additional manpower if required during any maintenance activities shall be deployed by the bidder and cost shall be included by the bidder. No extra cost shall be paid to the bidder for deployment of Expert/additional manpower. 4) Penalty against KPI non-compliance shall be 15% of the cost against the non-compliance. 5) If the noncompliance is for not receiving the spares withing the timeline than there shall be a penalty of 10% of the rate mentioned against regular/ schedule/ breakdown maintenance.	

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SPECIFICATIONS OF TRACTOR/ PRIME MOVER FOR PULLING FRAC PUMPER, BLENDER UNIT, HYDRATION UNIT, CHEMICAL ADDITIVE SYSTEM & FRAC DATA VAN, QTY = 3 NOS.

Note to bidder:

1. The bidder shall provide their response and mention applicable information/ Complied / Not Complied / Not Applicable/ Make & Model etc. (as applicable) against all the below mentioned clauses.

2. The bidder shall mention details of Reference Document name / Serial number / Page number of bid for documentary evidence (if any).

3. The bidder shall fill up this document and submit it along with their technical bid.

Technical Specifications:

Clause No.	Clause Description	Bidder's Response
1.0	**GENERAL:**	
	The Tractor / Prime Mover shall be able to pull the trailer mounted equipment viz. **FRAC PUMPER, BLENDER UNIT, HYDRATION UNIT, CHEMICAL ADDITIVE SYSTEM & FRAC DATA VAN.** The Tractor Trailer combination vehicle should be suitable for driving over national highways, state highways, district roads, rural /village roads, non-grade road surfaces and for use in the rough, windy, marshy/waterlogged and dusty terrain oil and gas field environments found in the Indian Oilfields. The unit should be capable of operating in ambient temperature ranges of 0° C to +50° C in a 90% relative humidity. The unit with upgraded latest state of the art technology improved version will be acceptable for the basic configuration, accessories, instrumentation, control etc. without affecting the main frame of specification. All 3 (three) Tractors should be identical in every respect like Make, Model, dimension, Gross Combination Weight Rating, Fifth Wheel Coupling etc. Each Tractor / Prime Mover must be interchangeably compatible with each of the trailer unit of Frac Pumpers, Blender Unit, Hydration Unit and Frac data Van.	
2.0	**EQUIPMENT DETAILS – TRACTOR**	
2.1	**OVERALL DIMENSIONS OF THE TRACTOR / PRIME MOVER**	
a.	**Length-** The Length of the offered Tractor / Prime Mover should be such that when coupled with Semi Trailer Unit (Frac Pumper / Blender Unit / Hydration Unit /Chemical Additive System / Frac Data Van), the **overall length of the complete unit (Tractor and Trailer combination**, i.e., Tractor coupled with the Trailer) does not exceed **18750 mm**.	
a.1	The bidder shall mention the overall length of the Tractor / Prime Mover alone in the technical bid & the GA layout diagram.	
b.	**Height** – The height of the Tractor unit shall not exceed **4000 mm** from ground level.	
b.1	The bidder shall mention & submit the height of the Tractor / Prime Mover unit from ground level in the technical bid & GA layout diagram.	
c.	**Width**- The width of the Tractor / Prime Mover	

Clause No.	Clause Description	Bidder's Response
	Not more than **2600 mm.**	
c.1	The bidder shall mention & submit the width of the Tractor / Prime Mover in the technical bid & GA layout diagram.	
d.	**Ground Clearance**: Ground clearance for the Tractor unit shall be as per the design of the Tractor manufacturer.	
d.1	The bidder shall mention & submit the minimum ground clearance of the Tractor / Prime Mover in the technical bid & GA Layout Diagram	
2.2	**GROSS COMBINATION WEIGHT RATING OF THE TRACTOR / PRIME MOVER**	
a.	The Gross Combination Weight Rating (GCWR) of the Tractor / Prime Mover should be such that when coupled with each trailer of Frac pumpers, Blender Unit, Hydration Unit & Frac Data Van; the tractor in conjunction with the respective trailer shall be able to take the load of the entire unit as a whole and the total combination weight of each complete unit (tractor coupled with trailer mounted with corresponding equipment) shall not exceed 55,000 Kg. This is a requirement for permanent registration of the unit with government authorities as per Motor Vehicle Act, 1988 & Central Motor Vehicle Rules 1989 of India.	
a.1	The bidder shall mention & submit the Gross Combination Weight Rating of the offered Tractor / Prime Mover in the technical bid.	
2.3	**GENERAL ARRANGERMENT (GA) DRAWING OF TRACTOR / PRIME MOVER**	
a.	The bidder shall submit GA (General Arrangement) drawing of the offered Tractor / Prime Mover The GA drawing shall have mention of major dimensions of the Tractor / Prime Mover (like length, height, width, etc.); estimated loading on individual axles of Tractor (Front & Rear) showing the position of all major components & their mounting.	
3.0	**SPECIFICATION OF THE TRACTOR (PRIME MOVER):**	
3.1	**MAKE, MODEL & PERIOD OF MANUFACTURE:**	
a.	The Tractor unit shall be brand new, manufactured not earlier than six months from the date of issuance of Oil India Limited (OIL)'s Purchase Order.	
b.	The Tractor unit shall be of the Make: Ashok Leyland/ Tata / Mahindra / Eicher / Bharat Benz / Volvo / Kenworth / International / Peterbilt. The bidder shall take special care in selecting and designing the unit considering its application in typical oil field roads and guidelines of Central Motor Vehicle Act / Rules of Government of India. All the Tractor-Trailer units offered by the bidder in the tender and to be supplied by a successful bidder (i.e., supplier) in future against this tender shall be identical and shall have same Make, Model, design in all respects. In case the bidder offers more than one Tractor / Prime Mover make & model in the technical bid, such bidder shall submit their technical specifications for each offered Tractor make & model unambiguously against the requirements of each clause of the tender document. Such bidder shall also to note that,	

Clause No.	Clause Description	Bidder's Response
	the make & model, design etc. of all the Tractor / Prime Mover Units to be supplied finally shall be same & identical in all respects. The bidder to confirm the same in technical bid. In case the bidder offers more than one Make & Model of Tractor / Prime Mover along with all technical / supporting documents required for evaluation purpose, the price offered in price bid must be firm and unique (same) for all the makes and models. Bidder must submit a single price without any condition which should be valid for all offered makes & models quoted by the bidder. The bidder shall ensure and confirm the same in technical bid. Offers with conditional / optional price shall be rejected at any point of time. No preference shall be provided during evaluation for vehicle(s) with higher specifications. All Make/ Model of vehicle(s) meeting tender specifications shall be treated as equal and at par.	
c.	The bidder shall mention & submit the following information in the technical bid:	
(i)	Make & Model of the offered Tractor unit.	
(ii)	Technical specification catalogue/ brochure/ leaflet of the offered model of Tractor unit. Note: In case of common technical leaflet / brochure containing multiple models of Tractor unit, bidder shall clearly indicate / highlight the offered model of Tractor unit in the technical leaflet.	
3.2	**TRACTOR / PRIME MOVER ENGINE:**	
a.	One (01) number of water-cooled / liquid-cooled diesel fuel engine of adequate power [**not less than 350 HP** at rated rpm] as per manufacturer of the offered Tractor shall be provided.	
b.	The Tractor / Prime Mover Engine shall be used for road drive of the complete unit (Tractor & Trailer mounted **FRAC EQUIPMENT**) only. The Tractor engine shall not be utilized to run any other equipment / item /machine etc. The Frac units shall be designed in such a way that the entire operation etc. shall be done through Deck Engine including lighting system (except the road drive lightings), air supply system (except the road drive pneumatic system), hydraulic system etc. wherever/whichever is required.	
c.	The bidder shall mention & submit the following information in the technical bid:	
(i)	Water-cooled / liquid-cooled diesel fuel Tractor Engine. **(Yes/ No).**	
(ii)	Make & model of the offered Tractor Engine.	
(iii)	Maximum power of the offered Tractor Engine in horse power (HP) at rated RPM	
(iv)	Maximum torque of the offered Tractor Engine	
(v)	Technical specification catalogue/ brochure with technical details of the offered Tractor Engine.	
3.3	**EMISSION NORMS:**	
a.	The offered Tractor unit shall have to comply with the emission norms BS (Bharat Stage) –VI OBD Stage II / EURO-VI Stage-E. The emission norms shall comply Real Drive Emissions (RDE) and Portable Emissions Measurement System (PEMS).	
b.	The bidder shall mention & submit the following information in the technical bid:	

Clause No.	Clause Description	Bidder's Response
(i)	Emission norms of the offered Tractor / Prime Mover unit.	
3.4	**TRANSMISSION OF THE TRACTOR/ PRIME MOVER:**	
a.	The offered Tractor / Prime Mover unit shall be provided with automatic / automated transmission having forward gears, neutral & reverse gear(s) with **suitable automatic shifter** and **without clutch pedal** for road drive of the complete unit (Tractor & Trailer) The bidder shall note that Manual Transmission with clutch pedal is not acceptable. The offered Transmission shall be compatible with the offered Tractor Engine meeting the tender specifications. The offered Transmission shall be suitable at least up to the Gross Combination Weight Rating (GCWR) of the offered Tractor unit when coupled with the offered Trailers mounted with Frac equipment.	
b.	The bidder shall mention & submit the following information in the technical bid:	
(i)	Type of offered transmission (automatic/ automated transmission, with automatic gear shifter).	
(ii)	Make & model of the offered transmission.	
(iii)	Number of forward gears in the offered tractor transmission.	
(iv)	Number of reverse gear(s) in the offered tractor transmission.	
(v)	Technical specification catalogue/ brochure with technical details of the offered tractor transmission.	
(vi)	Offered Transmission is suitable at least up to the Gross Combination Weight Rating (GCWR) of the offered Tractor unit when coupled with each of the offered Trailer unit mounted with Frac Equipment (Yes / No)	
(viii)	Mechanical power flow block diagram from Engine to Axle/ Wheels for Road drive and driving at site indicating all major components like Transmission, Tractor Rear axles, Wheels etc.	
3.5	**DRIVE & AXLE CONFIGURATION:**	
a.	The offered Tractor / Prime Mover shall have following Drive and Axle configuration: **Drive** 6 X 4 drive for Tractor unit. **Axle Configuration** [Total 03 Nos. of axles (including Front & Rear) with 02 Nos. of drive axles at Rear].	
b.	The bidder shall mention & submit the following information in the technical bid:	
(i)	Drive of the offered Tractor unit	
c.	**Front Axle:** One number non powered front steer axle as per design shall be provided. The bidder/supplier shall offer front axle with axle capacity of front axle to meet the design requirement considering the total weight of the complete unit with equipment, handling fluids, etc.: The maximum permissible axle weight for single axle with two tyres in Transport mode is 7000 Kg as per Central Motor Vehicle Rules, 1989 of India.	
	The bidder shall mention & submit the following information in the technical bid:	
(i)	Number of front axles in the offered Tractor unit.	

Clause No.	Clause Description	Bidder's Response
(ii)	Total front axle capacity.	
(iii)	Estimated Total loading on front axle	
d.	**Rear Axles:** Two numbers of powered rear drive axles as per design shall be provided. The bidder/supplier shall offer rear axles with total axle capacity of the tandem rear axles to meet the design requirement considering the total weight of the complete unit with equipment, handling fluids, etc.: The maximum permissible total axle weight for tandem axles in transport mode is 21,000 Kg as per Central Motor Vehicle Rules, 1989 of India. Rear axles shall have differential lock facility with alarm/indicator.	
	The bidder shall mention & submit the following information in the technical bid:	
(i)	Total number of rear axles in the offered Tractor unit.	
(ii)	Total rear axle capacity for both the rear axles.	
(iii)	Estimated Total loading on rear axles	
(v)	Differential lock facility in rear axles with alarm /indicator (Yes/ No).	
(vi)	Technical specification catalogue/ brochure with technical details of the offered rear axles.	
e.	The bidder shall confirm in the technical bid that in the actual loading on each individual axle (all front and rear) shall be within axle capacity of the respective axle.	
3.6	**STEERING:**	
a.	The offered Tractor unit shall have Power assisted Right Hand steering system (i.e. steering wheel shall be on the right hand side inside the Driver's cabin when viewed from the rear of the Tractor unit). Tractor unit with Left Hand steering system shall not be acceptable.	
3.7	**SUSPENSION:**	
a.	**Front Suspension:** Heavy duty multi-leaf spring suspension shall be provided. Rubber/ Air/ Hydraulic suspension will not be accepted.	
b.	**Rear Suspension:** Preferably bogie suspension with leaf springs or suitable pneumatic suspension system shall be provided in rear. Hydraulic suspension will not be acceptable.	
c.	The bidder shall mention & submit the following information in the technical bid:	
(i)	Type of offered rear suspension.	
(ii)	Make & model of offered rear suspension.	
(iii)	Technical specification catalogue/ brochure with technical details of the offered rear suspension system.	
3.8	**WHEELS & TYRES:**	
a.	The Tractor unit shall be fitted with suitable wheels with Tube type / Tubeless type Tyre of adequate ply rating.	

Clause No.	Clause Description	Bidder's Response
	Single wheel on each side of the front axle (i.e. total 02 Nos. of wheels in front axle) and 02 Nos. of wheels on each side of each rear axle (i.e. total 04 Nos. of wheels in each rear axle & total 08 Nos. of wheels for 02 Nos. rear axles) shall be provided as per design specifications. Suitable mounting arrangement facility for spare wheel shall be provided. Bidder/prospective supplier is to look into the tyres of Trailer units while selecting the Tractor tyres and vice-versa for compatibility of the Tractor and the Trailer unit with each other, if possible.	
b.	The bidder shall mention & submit the following information in the technical bid:	
(i)	Total number of wheels in the front axle.	
(ii)	Type of Tyres (Tube type / Tubeless type) in the front axles.	
(iii)	Tyre size of front axle wheels.	
(iv)	Total number of wheels in all the rear axles. (Axle wise information to be provided)	
(v)	Type of Tyres (Tube type / Tubeless type) in the rear axles.	
(vi)	Tyre size of rear axle wheels.	
(vii)	Mounting arrangement facility for spare wheel is provided in the Tractor / Prime Mover (Yes/No).	
3.9	**BRAKE:**	
a.	**Service Brake:** Multiple Circuit Pneumatic brake acting on all wheels with Anti-lock Braking System (ABS) shall be provided and to be operated from Driver's Cabin. The Service Brake of the each Tractor / Prime Mover shall be compatible with Service Brake system of each Trailer Unit of Frac Pumper, Blender Unit, Hydration Unit and Frac Data Van. The brake system shall have palm coupling for quick coupling and detaching the air connections with the trailer unit.	
b.	**Parking Brake:** Suitable parking brake shall be provided in the Driver's Cabin to be used while parking the unit. The parking brake shall be hand operated from Driver's Cabin. It shall automatically get engaged in the event of low/ no air pressure.	
c.	Preferably buzzer warning for low air pressure to be provided.	
3.10	**ELECTRICAL SYSTEM:**	
a.	Suitable electrical starting, charging and lighting systems etc. shall be provided in the Tractor unit.	
b.	Suitable electrical master switch to disengage all electrical circuits from battery shall be provided in the Tractor unit as per Tractor manufacturer, if applicable.	
c.	Covered Battery Box shall be provided. Battery box shall **not** be located inside the Driver's Cabin.	
d.	The Electrical system of the Tractor / Prime Mover shall be compatible with the Electrical system of the each of the Trailer unit of Frac Pumpers, Blender Unit, Hydration Unit and Frac Data Van. Easily detachable electrical connections with the trailer units shall be provided.	

Clause No.	Clause Description	Bidder's Response
3.11	**TRACTOR ENGINE FUEL TANK & DIESEL EXHAUST FLUID (DEF) TANK:**	
a.	Lockable engine fuel tank(s) of approximately not less than **300 Liters** total capacity shall be provided in the Tractor unit for road drive of the unit. Suitable strainer at the opening of the tank shall be provided to prevent entry of foreign materials. In case, the Tractor unit comes with multiple fuel tanks, all the Tractor engine fuel tanks shall be connected to each other.	
b.	Suitable Diesel Exhaust Fluid (DEF) tank with adequate capacity shall be provided.	
c.	The bidder shall mention & submit the following information in the technical bid:	
(i)	Number of fuel tank(s) in the Tractor unit (for Road Drive only).	
(ii)	Capacity of each fuel tank in the Tractor unit (for Road Drive only).	
3.12	**DRIVER'S CABIN:**	
a.	The Driver's cabin of the Tractor unit shall be ergonomically designed factory built (original built, supplied with the Tractor unit by the Tractor manufacturer) Air-Conditioned driver's cabin with seating capacity of minimum 02 (two) persons (including Driver). All the controls required for road drive of the unit should be clearly arranged to have easy access to the driver inside the Driver's cabin while driving the unit. The driver's seat & co-driver's seat should be comfortable and ergonomically designed with adjustable mechanism and shall have seat belts as per norms.	
b.	The Tractor unit shall be fitted with dashboard inside the Driver Cabin with all standard gauges & fittings like air pressure gauges, charging system gauge, engine oil pressure gauge, engine temperature gauge, fuel gauge, Transmission oil pressure gauge (if any) & Temperature meters (if any) etc. and any other items with warning displays, as per the Tractor manufacturer.	
c.	The Tractor unit dashboard shall have Speedometer indicating the speed in **Kilometers per hour** and the Odometer shall be with **Kilometers** calibration system.	
d.	The bidder shall mention & submit the following information in the technical bid:	
(i)	Seating capacity (including driver) inside the Driver's cabin.	
3.13	**FIFTH WHEEL COUPLING:**	
a.	The Tractor shall be fitted with compatible "Fifth Wheel Coupling" for coupling the Trailer units of Frac Pumper, Blender Unit, Hydration Unit, Chemical Additive System and Frac Data Van with **Kingpin of size not less than 3.5 inch**. The make of "Fifth Wheel Coupling" shall be of ASHLEY/HYWA / TATA /VOLVO / JOST / YORK / PLHT/ GF / SAF / HOLLAND or any other make as per the Tractor manufacturer. The "Fifth Wheel Coupling" shall be provided with fail safe locking arrangement. **Height of the "Fifth Wheel Coupling" shall match with the rubbing plate of the ~~CTU~~ Trailer units of Frac Pumper, Blender Unit, Hydration Unit, Chemical Additive System and Frac Data Van** for proper locking and engagement. Proper coupling & locking of the Tractor / Prime Mover with the ~~CTU~~ Trailer units of Frac Pumper, Blender Unit, Hydration Unit, chemical Additive System and Frac Data Van is to be ensured by the bidder/prospective supplier. **Fifth Wheel Coupling of each of the Prime Movers must be identical in every respect** and **Fifth Wheel Coupling of each Tractor / Prime Mover must be compatible with each trailer unit** of Frac Pumpers, Blender Unit, Hydration Unit, Chemical	

Clause No.	Clause Description	Bidder's Response
	Additive System and Frac Data Van in all aspects ensuring proper coupling and locking.	
b.	The bidder shall mention & submit the following information in the technical bid:	
(i)	Make & Model of offered Fifth Wheel Coupling.	
(ii)	Offered Fifth Wheel Coupling is suitable / compatible for Trailer Kingpin of each trailer of Frac Pumpers, Blenders, Hydration Unit, Chemical Additive System and Frac Data Van. Yes/ No	
(iii)	Technical specification catalogue/ brochure with technical details of offered Fifth Wheel Coupling.	
3.14	**PNEUMATIC & ELECTRICAL CONNECTION FOR TRAILER:**	
a.	The Tractor units shall be provided with pneumatic coiled hoses suitable for Trailer brake connection with suitable palm coupling.	
b.	The Tractor units shall be provided with suitable electrical connection to connect the ~~Trailer~~ Road drive electrical systems of the Trailers of the Frac Pumpers, Blenders, Hydration Unit, Chemical Additive System and Frac Data Van	
3.15	**OTHER FITTINGS & ACCESSORIES:** The unit shall be driven on roads in India having traffic rules for Right Hand Drive vehicles only. Accordingly, the following fittings and accessories are to be fitted / provided in each Tractor / Prime Mover unit for safe movement of the unit on road. All the lightings/ controls etc. as mentioned below and as required for road drive are to be operated from the Driver's cabin of the Tractor / Prime Mover through electrical / pneumatic system of the Tractor / Prime Mover only.	
a.	All standard accessories, fittings, lighting, safety features etc. as per the Tractor / Prime Mover manufacturer.	
b.	Headlamps. The photometry of the headlamps to suit "keep left" traffic.	
c.	Stop Lamps.	
d.	Parking Lamps.	
e.	Fog Lamps.	
f.	Direction Indicator Lamps.	
g.	Hazard Warning Lamps.	
h.	Sufficient side marker lights, top marker lights.	
i.	Driver Cabin Lights.	
j.	(02) Nos. of adjustable search lights, mounted at top behind the Driver cabin of the Tractor / Prime Mover are to be fitted in the unit(s) for illuminating the rear equipment.	
k.	Horn.	
l.	Rear-view mirrors at both sides.	
m.	Blind spot mirrors, if possible	
n.	Windscreen Wipers.	
o.	Mudguard with mud flaps for all the wheels	
p.	An audible back-up alarm is to be provided to sound when the Tractor is put in reverse gear.	
q.	Well covered exhaust with thermal non-conducting material / heatshield (as per the ~~Truck~~ Tractor/ Prime Mover manufacturer) shall be provided. Moreover, in case of vertical exhaust, the exhaust pipe shall be such that rainwater ingression shall not be possible.	
r.	Suitable heavy duty Towing Hook at front & rear, capable of pulling / towing the unit from bogged down situation in slushy areas in oilfields from front as well as rear shall be provided.	

Clause No.	Clause Description	Bidder's Response
s.	The Tractor / Prime Mover engine exhaust shall be fitted with suitable Spark Arrestor. The Spark Arrestor may be additional attachment to be fitted with the exhaust or there shall be chassis in-built internal mechanism to prevent discharge of open flame and sparks in the exhaust. The bidder shall confirm in the technical bid whether the Spark Arrestor shall be additional attachment or chassis in-built internal mechanism. In case Spark Arrestor is not needed/ recommended as per the ~~Truck~~ Tractor / Prime Mover manufacturer as additional attachment, the bidder shall submit supporting document(s) from the Truck manufacturer or Truck manufacturer's dealer along with the technical bid.	
t.	The Tractor / Prime Mover shall be fitted with Speed Limiting Device (SLD) & its accessories. The maximum road speed of the Tractor / Prime Mover with Speed Limiting Device shall preferably be **50 km/hour** without affecting the other performance parameters of the Tractor / Prime Mover in any manner. The speed limitation function shall not actuate the Tractor's service braking system. The Speed Limiting Device shall be fail-safe and so designed to act on road drive only The set speed shall be indicated on a plate in a conspicuous position in the Driver's compartment of the vehicle. Necessary certification/ documentation from appropriate authority / entity regarding the speed limitation function or the SLD is to be accompanied along with the supply.	
u.	The Tractor / Prime Mover shall be fitted with Vehicle Tracking System (VTS) compatible for use in India. The successful bidder (supplier) may also fit the VTS (compatible for use in India) after arrival of the unit in India. Necessary certification/ documentation from appropriate entity regarding the Vehicle Tracking System (VTS) is to be accompanied along with the supply.	
w.	Retro reflective marking (3M make or equivalent, 50 mm width) on the front, rear and both side of the Driver's cabin as per the colour code- Front: White, Rear: Red and Sides: Yellow as per AIS: 090 / applicable standard.	
x.	01 (one) number Fire Extinguisher inside Driver's Cabin of Truck.	
y.	01 (one) number First Aid Box inside Driver's Cabin of Truck.	
z.	Wheel Wrench & Handle with each Tractor / Prime Mover. In case, the wheel nuts at front and rear are of different sizes, then separate Wheel Wrench & Handle for both front & rear shall be supplied along with each unit.	
aa.	04 (four) numbers of wheel chocks with each Tractor / Prime Mover	
ab.	02 (two) numbers minimum 30 MT capacity hydraulic jack with handle with each Tractor / Prime Mover.	
ac.	02 (two) numbers of complete spare wheel assembly (even in case of identical front & rear wheels) with each Tractor / Prime Mover	
ad.	01 (one) number of tyre pressure gauge with each Tractor / Prime Mover	
ae.	01 (one) number of Heavy-duty Grease Gun with each Tractor / Prime Mover	
af.	Any other standard items/accessories provided by the Tractor / Prime Mover manufacturer with each Tractor / Prime Mover	
3.16	**TOOL KIT FOR GENERAL MAINTENANCE OF TRACTOR - TRAILER UNIT:** A toolkit consisting of tools given below shall be supplied along with **each** Tractor / Prime Mover unit at supplier's cost:	

Clause No.	Clause Description	Bidder's Response
a.	Set of Ring Spanners [Sizes(mm): 6x7, 8x9, 10x11, 12x13, 14x15, 16x17, 18x19, 20x22, 21x23, 24x27, 25x28, 30x32], at least 01 number of each size.	
b.	Set of Open-Ended Spanners [Sizes(mm): 6x7, 8x9, 10x11, 12x13, 14x15, 16x17, 18x19, 20x22, 21x23, 24x27, 25x28, 30x32], at least 01 number of each size.	
c.	6 inch Long Nose Plier – 01 number.	
d.	Screwdriver (Small, Medium, Long) – 03 numbers.	
e.	8 Inch Adjustable Wrench – 01 number.	
f.	Hammer with Handle – 01 number.	
g.	Chisel – 02 numbers.	
h.	Centre Punch – 01 number.	
i.	Drift Punch – 02 numbers.	
j.	File, Flat, Bastard Cut with Handle, 10 inch – 01 number.	
k.	File, Flat, Smooth Cut with Handle, 10 inch – 01 number.	
l.	Brass Punch – 01 number.	
m.	Oil Can – 01 number.	
n.	Allen key set (as applicable).	
o.	Toolbox / Tool bag for above tools (not mounted on the Tractor-Trailer) – Minimum 01 number or as required as per manufacturer's standard.	
	Note: The sizes of the above-mentioned tools may charge as per manufacturer's standard.	
3.17	**SPARES**	
a.	**COMMISSIONING SPARES:** The Supplier has to supply all the spare parts free of cost, required for initial commissioning of the unit. All the consumables such as, lube oil, gear oil, hydraulic oil etc. except diesel fuel, required for commissioning should also be supplied.	
b.	**OPERATIONAL CRITICAL SPARES:** Spares as given under **Table-1** in specified quantity shall be supplied along with each Tractor / Prime Mover unit. Specific Description, quantity of each & every spares shall be indicated in the technical bid and Make, Part Nos. etc. shall be submitted along with the supply. Bidder / supplier to note that the spares mentioned in **Table-1** to be supplied shall be additional to the items fitted in each unit. Bidders shall include the price of these spares in the cost of the each Tractor / Prime Mover Unit in the priced bid format.	

<table>
<tr><th>Clause No.</th><th>Clause Description</th><th>Bidder's Response</th></tr>
<tr><td></td><td>In case any of the spares mentioned in Table-1 does not come as per bidder's design and the bidder has not quoted for such spares, the bidder shall clearly indicate the same. However, in case such spares are provided in the unit in future, the same shall be supplied by the bidder / supplier along with the supply without any extra cost to Oil India Limited (OIL).</td><td></td></tr>
<tr><td>c.</td><td>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 without price of the items. Annual consumption of each spare should be furnished. The bidder should 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 and E-mail ID of OEM for all items of the Tractor / Prime Mover.

The bidder has to submit a complete spare parts list for the unit subgrouping major component in the following format:

<table>
<tr><td>Name of the component/Sub com.</td><td>Description of the item</td><td>Part no./ID no. of item</td><td>Frequency of replacement (in Hours / Day)</td><td>Make</td></tr>
<tr><td></td><td></td><td></td><td></td><td></td></tr>
</table>
</td><td></td></tr>
<tr><td>d.</td><td>UNDERTAKING
The bidder shall submit a written undertaking (along with the technical bid) that they, themselves or through other sources, would be able to supply all the requisite spares (including bought out items, if any) & consumables and provide the maintenance services for their offered Tractor / Prime Mover in OIL operational area(s) in India for a minimum period of fifteen (15) years from the certified date of completion of successful field commissioning of the unit.

The cost of such spares, consumables & maintenance services which may be utilized by Oil India Limited in future (beyond Warranty period and O&M Period) shall be extra and SHALL NOT BE considered by the bidder in their quoted prices in this tender.

Spares & repair services during Warranty period & warranty extension period (if any) for the item(s) under Warranty claim (if any) of the unit(s) shall be in the scope of the successful bidder (supplier).</td><td></td></tr>
<tr><td>3.18</td><td>TECHNICAL MANUALS, CATALOGUES AND CERTIFICATION FOR OPERATION AND MAINTENANCE OF THE UNIT:

The following Manuals & Catalogues (in English language) shall be supplied along with <u>each</u> unit of the Tractor / Prime Mover. Manuals/ Part Catalogues provided shall be Custom Illustrated Manuals/Catalogues for the vehicle only, not a general Composite Manual/Catalogue.</td><td></td></tr>
</table>

Clause No.	Clause Description	Bidder's Response
	The manuals supplied should be specific to the make / model of the Tractor / Prime Mover. In case a comprehensive OEM catalogue is supplied, then the respective make / model of the equipment / part / components supplied in the units should be clearly marked / identified. Bidder to confirm that the following will be provided along with each unit of supply:	
a.	Preferably, 01 (One) set of Spare Parts Catalogue with Part Numbers and Workshop & Service Manual for all components/systems of Automobile (i.e., Tractor and Trailer) like Tractor Engine, Tractor Transmission, Tractor axles, Differentials, Drivelines, Brake System, ABS, Tractor Suspension, Steering, Electrical & Pneumatic Systems etc. All the manuals & catalogues shall contain only those components/systems that have been used in the unit i.e. the same must be CUSTOM ILLUSTRATED MANUALS/ CATALOGUES ONLY – not the generalized ones. The Spare Parts Catalogue with Part Numbers and Workshop & Service Manual shall be provided by the supplier in any one of the following forms: (a) Hard copy format (i.e. in printed form) or (b) Soft copy format (i.e. in USB drive) The bidder/supplier has to exhibit the Hard copy / soft copy of Parts Catalogue and Maintenance / Service Manual of Tractor / Prime Mover to the Pre despatch Inspection Team of Oil India Limited and handover soft copies to the Pre Despatch Inspection team of Oil India Ltd. The Hard copy of the Parts Catalogue and Maintenance / Service Manual of-Tractor / Prime Mover may be submitted to Oil India Ltd along with the supply. The bidder has to submit a declaration along with the bid in this regard as per Annexure A1.	
b.	01 (One) set of Driver's manuals in English language for the Tractor, if provided by the Tractor manufacturer	
3.19	SPECIAL NOTES	
a.	All lights shall be covered to the extent possible, with suitable guard to prevent damage. The guards shall have detachable provision.	
3.20	TYPE APPROVAL CERTIFICATE OF TRACTOR UNIT:	
a.	Type Approval Certificate of vehicle is required for the following activities in India: i) Custom clearance of the vehicle as per import policy conditions/guidelines of India Chapter-87 of ITC (HS), 2022, Schedule 1-Import Policy, Section: XVII, in case of imported vehicle from other countries to India. ii) Homologation (the formal process by which an official authority certifies that a product, especially a vehicle, meets specific regulatory standards for safety, performance, and environmental impact before it can be sold or used in a particular market/ region) / Uploading the vehicle details in the relevant Government of India portal (VAHAN/ Parivahan portal) for registration of vehicle as per Motor Vehicle Act, 1988 & Central Motor Vehicle Rules, 1989 of India which is mandatory for plying of the vehicle in roads in India.	
b.	In case the offered Tractor / Prime Mover is manufactured in India, it shall be compliant to Central Motor Vehicle Rules 1989 of India and its amendments. In case the offered Tractor / Prime Mover is imported from other countries to India, the offered Tractor shall be compliant with the import policy of Government of India.	

Clause No.	Clause Description	Bidder's Response
	In both the case i.e. manufactured in India and imported from other countries to India, the bidder/supplier has to exhibit the original Type Approval Certificate of Tractor, and submit a copy of the same to the Pre despatch Inspection Team of Oil India Limited. The original copy of the Type Approval Certificate has to be submitted to Oil India Ltd along with the supply. The bidder has to submit a declaration along with the bid in this regard as per Annexure A2. Submission of Type Approval Certificate of Tractor shall be as per Central Motor Vehicle Rules of India in case of Tractor manufactured in India or as per the import policy of Government of India, in case of imported vehicle, as on the date of supply.	
c.	In case of vehicle (Tractor / Prime Mover) manufactured in India, the list of Type Approval Certificate issuing agencies are mentioned in Central Motor Vehicle Rules, 1989 of India & its amendments. In case of imported vehicle from other countries to India, at the time of Customs clearance, a Type Approval Certificate/COP, of an international accredited agency including a notarized English translation thereof shall be furnished. This Type Approval Certificate shall stipulate that vehicle to be imported complies with all the ECE (Economic Commission for Europe) Regulations. The list of international accredited agencies approved for issuance of Type Approval Certificate is available on DGFT (Director General of Foreign Trade) website, under Policy Circular No. 12 (RE- 2013)/2009-2014 dated 15.01.2014 issued by Ministry of Commerce & Industry, Department of Commerce, Director General of Foreign Trade, New Delhi subjecting "Type Approval issuing agencies under Policy Condition number 7 and 9 of Chapter 87 of ITC (HS) 2012".	
d.	Bidder/supplier shall ensure adherence to any subsequent revisions to the above referred Policy Circulars that may be issued in future by DGFT. Bidder shall note that, they shall be conversant with the policy of Government of India and Oil India Limited (OIL) shall not be liable in this regard whatsoever.	
e.	Type approval certification of individual components shall not be considered as vehicle Type approval certificate.	
f.	Notwithstanding anything mentioned elsewhere in this document, submission of Type Approval Certificate/ Conformity of Production (CoP) shall be as per the guideline of Government of India as on the date of supply.	
3.21	**Document(s) to be submitted along with the supply of each unit for government Registration etc.:** Following documents shall be submitted by the supplier along with the supply as mentioned hereunder:	
a.	Invoice of each Tractor / Prime Mover separately in the name of Oil India Limited, Duliajan, Assam-786602 in original. **Note:** Tractor Chassis Number, Tractor Engine Number shall be mentioned in invoices	
b.	Sale Certificate for Tractor (Form-21) separately for each Tractor / Prime Mover in Original	

Clause No.	Clause Description	Bidder's Response
	The documents shall be in the name of Oil India Limited, Duliajan, Assam-786602, sample format as per Motor Vehicle Act, 1988 & Central Motor Vehicle Rules, 1989 of India provided.	
c.	Road-Worthiness Certificate for Compliance to Emission and Noise Standards for Tractor unit (Form-22) separately for each Tractor / Prime Mover in original. The documents shall be in the name of Oil India Limited, Duliajan, Assam-786602, sample format as per Motor Vehicle Act, 1988 & Central Motor Vehicle Rules, 1989 of India provided.	
d.	**Certificate of Origin of the Tractor**	
e.	Pencil prints of Vehicle Identification Number (VIN) i.e., Chassis Number of each Tractor unit.	
f.	Certificate for the Tractor unit in original from Tractor manufacturer or from Tractor manufacturer's dealer. Amongst others, the certificate shall contain following information: (i) Make & Model of Tractor unit. (ii) Vehicle Identification Number (VIN) i.e., Chassis Number of the Tractor unit. (iii) Month & Year of Manufacture of the Tractor unit.	
g.	Necessary certification/ documentation from appropriate authority / entity regarding the speed limitation function or SLD (Speed Limiting Device) with speed limit.	
h.	Necessary certification/ documentation from appropriate entity regarding the Vehicle Tracking System (VTS)	
i.	Type Approval Certificate of Tractor as per Clause No. 3.20	
j.	Technical drawing of the offered Tractor indicating the Centre of Gravity, length, width, height, angle of approach, angle of departure, weight, etc.	
3.22	**HOMOLOGATION, UPLOADING OF VEHICLE DATABASE IN VAHAN / PARIVAHAN PORTAL, REGISTRATION OF THE TRACTOR / PRIME MOVER, PRINTING OF HSRP (High Security Registration Plate) , UPLOADING OF LID OF HSRP IN APPROPRIATE PORTAL** The bidder shall categorically confirm their compliance of the following clauses in the technical bid:	
a.	**In case the Tractor unit is manufactured outside India.** The vehicle details of Tractor unit in relevant VAHAN / Homologation / Parivahan portal of Ministry of Road Transport & Highways (MoRTH), Government of India shall be dealt by the bidder as per the applicable guidelines of Ministry of Road Transport & Highways (MoRTH) / Director General of Foreign Trade, Government of India at the time of supply. Homologation and uploading of vehicle data (i.e. Make, Model, Chassis Number, Engine number etc.) in VAHAN / PARIVAHAN portal by providing the requisite documents is under the scope of the successful bidder. **Temporary Registration (if required) and Permanent Registration in local RTO (Rgional Transport Office) of the Govt of Assam is under the scope of**	

Clause No.	Clause Description	Bidder's Response
	successful bidder. The documents pertaining to Oil India Ltd shall only be provided by Oil India Limited. All other documents/ certificates pertaining to the vehicle shall be provided / submitted by the supplier / successful bidder .	
b.	**In case the Tractor / Prime Mover is manufactured in India** The bidder (supplier) shall be responsible and ensure that the vehicle details of Tractor unit are available in the relevant VAHAN / Parivahan portal of Ministry of Road Transport & Highways (MoRTH), Government of India in accordance with Motor Vehicle Act, 1988 & Central Motors Vehicles Rules, 1989 of India prior to delivery of the unit(s) to Oil India Limited. If the vehicle details are not available in VAHAN portal, it shall be the responsibility of the bidder to upload the same in VAHAN portal. Then the supplier shall arrange for temporary registration (if required) and **Permanent Registration in local RTO (Rgional Transport Office) of the Govt of Assam**. The documents pertaining to Oil India Ltd shall only be provided by Oil India Limited. All other documents/ certificates pertaining to the vehicle shall be provided / submitted by the bidder.	
c.	**Each Tractor / Prime Mover has to be registered separately. Combined registration of any Tractor / Prime Mover with any trailer of Frac Pumpers, Blender Unit, Hydration Unit, Frac Data Van, Chemical Additive System is not acceptable.**	
d.	The cost of permanent registration in the form of Registration fee and initial Road tax to the Government of Assam shall be borne by the successful bidder. However, this cost will be reimbursed to the bidder on submission of Government Receipt as proof. The cost of Registration is not to be considered by the bidder while quoting their price against this tender, as it will be re imbursed on submission Government receipt.	
e.	**HIGH SECURITY REGISTRATION PLATE (HSRP):** On receipt of the government Registration Number, the supplier (successful bidder) shall supply the High Security Registration Plate (HSRP) through the Original Equipment Manufacturers of motor vehicle/ dealer/any one of the agencies authorised by the Government of India/Assam to issue the High Security Registration Plate (HSRP) of each units. The supplier shall ensure to upload the HSRP details in relevant (FTA/ HSRP) portal enabling the DTO /Oil India Ltd to issue download permanent Registration Certificate for the vehicle(s) as required for road drive of the vehicle. The cost of High Security Registration Plate (HSRP) shall be borne by the supplier (successful bidder). Bidder/supplier shall also ensure adherence to any subsequent revisions to the referred requirements that may be issued in future by Ministry of Road Transport & Highways (MoRTH), Government of India.	

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TABLE-1: Ref. Clause No. 3.17 b- OPERATIONAL CRITICAL SPARES:

SECTION (A): AUTOMOBILE SPARE PARTS LIST:

Total No. of TRACTOR / PRIME MOVER: 3 (THREE)

Sl. No.	Item Description	Qty. for 01 No. unit
A	B	C
A.	**ENGINE:**	
1.	Fuel Filter	05 Nos.
2.	Engine Oil Filter	05 Nos.
3.	Air Filter Element	05 Nos.
4.	Fan Belt	04 Nos.
5.	Radiator Hose Set (Each set shall comprise of all upper & lower hoses)	02 Sets.
6.	Engine Mounting Set [Each set shall comprise of all the mountings (one each)]	01 Set.
7.	Radiator Assembly (Each Radiator Assembly shall consist of at least Top Tank, Radiator Core, Bottom Tank)	01 No.
8.	Water (Engine Coolant) Pump Assembly	01 No.
9.	Engine Oil Cooler Assembly	01 No.
B.	**ENGINE EXHAUST AFTERTREATMENT SYSTEM**	
1.	Diesel Exhaust Fluid (DEF) Filter	08 Nos.
2.	Diesel Particulate Filter	08 Nos.
3.	Nitrogen Oxide (NOx) Sensor	04 Nos.
C.	**TRANSMISSION:**	
C1.	**IN CASE OF AUTOMATIC TRANSMISSION:**	
1.	Transmission Filter (if any)	04 Nos.
2.	Transmission Mounting Set [Each set shall comprise of all the mountings (one each)]	01 Set.
3.	Gear Shifter Assembly (inside driver's Cabin)	01 No.
C2.	**IN CASE OF AUTOMATED TRANSMISSION:**	
1.	Transmission Filter (if any)	04 Nos.
2.	Transmission Mounting Set [Each set shall comprise of all the mountings (one each)]	01 Set.
3.	Gear Shifter Assembly (inside driver's Cabin)	01 No.
4.	Clutch Disc Assembly (if any)	01 No.
5.	Pressure Plate Assembly (if any)	01 No.
6.	Release Bearing (if any)	01 No.
7.	Release Bearing Fork (if any)	01 No.
D.	**FRONT AXLE:**	
1.	Wheel Stud with Nuts (Right Side) (Each set shall comprise of all the studs & nuts for one wheel)	01 Set.
2.	Wheel Stud with Nuts (Left Side) (Each set shall comprise of all the studs & nuts for one wheel)	01 Set.
3.	Wheel Hub Bearing (Right Side)	02 Nos.
4.	Wheel Hub Bearing (Left Side)	02 Nos.
5.	Wheel Hub Oil Seal (Right Side)	02 Nos.
6.	Wheel Hub Oil Seal (Left Side)	02 Nos.
7.	Wheel Rim (Right Side)	01 No.
8.	Wheel Rim (Left Side)	01 No.

Sl. No.	Item Description	Qty. for 01 No. unit
A	**B**	**C**
9a.	In case of Tube type Tyres: Tyre with Tube	01 No.
9b.	In case of Tubeless type Tyres: Tubeless Tyre	01 No.
E.	**REAR AXLE:**	
1.	Wheel Stud with Nuts (Right Side) (Each set shall comprise of all the studs & nuts for one wheel)	01 Set.
2.	Axle Stud with Nuts (Right Side) (Each set shall comprise of all the studs & nuts for one wheel)	01 Set.
3.	Wheel Stud with Nuts (Left Side) (Each set shall comprise of all the studs & nuts for one wheel)	01 Set.
4.	Axle Stud with Nuts (Left Side) (Each set shall comprise of all the studs & nuts for one wheel)	01 Set.
5.	Wheel Hub Oil Seal (Right Side)	04 Nos.
6.	Wheel Hub Oil Seal (Left Side)	04 Nos.
7.	Wheel Hub Bearing (Right Side)	04 Nos.
8.	Wheel Hub Bearing (Left Side)	04 Nos.
9.	Wheel Rim (Right Side)	04 Nos.
10.	Wheel Rim (Left Side)	04 Nos.
11a.	In case of Tube type Tyres: Tyre with Tube	02 Nos.
11b.	In case of Tubeless type Tyres: Tubeless Tyre	02 Nos.
12.	Differential Oil Seal Set [Each Set shall comprise of all seals (one each) of different differentials]	02 Sets.
13.	Differential Filter (if any)	02 Nos.
F.	**DRIVELINE (PROPELLER SHAFT):**	
1.	UJ Cross Assembly Set (Each set shall comprise all the different UJ crosses in complete required for the drivelines)	02 Sets.
2.	Centre Bearing with Rubber Cushion Assembly (if any)	01 No.
G.	**STEERING:**	
1.	Steering Oil Filter (if any)	02 Nos.
2.	Power Steering Hoses Set (Set shall comprise of all hoses used in steering system, one each)	01 Set.
3.	Steering Pump Assembly	01 No.
4.	Steering Gear Box Repair Kit (if any)	02 Sets.
H.	**BRAKE & PNEUMATICS:**	
1.	Foot Brake Valve- Assembly	01 No.
2.	Brake Servo Assembly - Front Wheel	04 Nos.
3.	Brake Servo Assembly - Rear Wheel	04 Nos.
4.	Air Dryer Assembly	02 Nos.
5.	Air Dryer Filter	08 Nos.
6.	Brake Shoe Assembly - Front Wheel	08 Nos.
7.	Brake Shoe Assembly - Rear Wheel	12 Nos.
8.	Pneumatic Circuit System Protection Valve	02 Nos.
9.	Relay Valves Set (Set shall comprise of all the different relay valves fitted in the vehicle, one each)	01 Set.
10.	Quick Release Valves Set (Set shall comprise of all different quick release valves fitted in the vehicle, one each)	01 Set.
I.	**ELECTRICAL:**	

Sl. No.	Item Description	Qty. for 01 No. unit
A	**B**	**C**
1.	Engine Self Starter Assembly	01 No.
2.	Alternator Assembly	01 No.
3.	Wiper Motor Assembly	01 No.
4.	Wiper Blade with Arm (Left)	01 Set.
5.	Wiper Blade with Arm (Right)	01 Set.
6.	Head Lamp Assembly (Left)	01 No.
7.	Head Lamp Assembly (Right)	01 No.
J.	**SUSPENSION:**	
1.	Leaf Spring Assembly (Front) (Set shall comprise of all the different leaf springs forming the suspension)	01 Set.
2.	Leaf Spring Assembly (Rear) (If any, in case of Bogie Suspension) (Set shall comprise of all the different leaf springs forming the suspension)	02 Sets.
3.	Rear Air Suspension Bellow (If any, in case of Air Suspension)	08 Nos.
4.	Torque Rod Bushing	08 Nos.

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Annexure-A1

To-

Oil India Limited,
Duliajan, Assam, India

Sub: Undertaking / Declaration regarding Type Approval Certificate, Parts Catalogue, Maintenance / Service Manual of OIL's Inhouse Hydraulic Fracturing Fleet.

Ref: Tender No. for Supply of Hydraulic Fracturing Unit.

We M/s _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ do hereby declare that we shall produce the following at the time of Pre Despatch Inspection of Hydraulic Fracturing Fleet at our premise-

1) Type Approval Certificates (Hard copy) of-

a) Tractor / Prime Mover
b) Trailers of Frac Pumpers
c) Trailer of Blender Unit
d) Trailer of Hydration Unit
e) Trailer of Frac Data Van
f) Truck Chassis of Sand Dumper

Photocopies / Softcopies (scan copy) of the above Type Approval Certificates will be handed over to Pre Despatch Inspection Team of Oil India Ltd

2) **Hard copy / soft copy of Parts Catalogue and Maintenance / Service Manual of-**

a) Tractor / Prime Mover
b) Trailers of Frac Pumpers
c) Trailer of Blender Unit
d) Trailer of Hydration Unit
e) Trailer of Frac Data Van
f) Truck mounted Sand Dumper

Soft copies of the above will be handed over to Pre Despatch Inspection Team of Oil India Ltd

M/s _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
(Name of Bidder)

A. REF. CLAUSE NO. 3.21 b

SAMPLE COPY OF FORM- 21 (as referred above)

Following is a sample copy of **FORM 21** of Indian Motor Vehicle Act only. The certificate shall contain following minimum information –

FORM 21
[See Rules 47 (a) and (d)]
SALE CERTIFICATE

(To be issued by manufacturer ~~or dealer or registered E-rickshaw or E-cart Association (in case of E-rickshaw or E-cart) 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 **OIL INDIA LIMITED** against Purchase Order No. .....

Name of the buyer **OIL INDIA LIMITED**
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 number ~~or motor number in case of Battery Operated vehicles~~	.....
5.	Engine ~~or Motor~~ Power	.....
6.	Cubic capacity	.....
7.	Fuel used	.....
8.	Number of cylinders	.....
9.	Month and year of manufacture	.....
10.	Seating capacity (including driver)	.....
11.	Unladen Weight	.....
12.	Maximum axle weight and number and description of tyres ~~(in case of transport vehicles)~~	.....
a.	Front axle	.....
b.	Rear axle	.....
c.	Any other axle	.....
d.	Tandem axle	.....
13.	Colour	.....
14.	Gross Vehicle Weight Rating	.....
15.	Type of body	.....
16.	Wheelbase	.....

(Signature of the manufacturer ~~or dealer or officer of Defence Department or registered E-rickshaw or E-cart Association~~)

*Strike out whichever is inapplicable.

B. REF. CLAUSE NO. 3.21 c

SAMPLE COPY OF FORM- 22 (as referred above)

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

FORM-22
[See rules 47(1) (g)]
ROAD-WORTHINESS CERTIFICATE FOR
COMPLIANCE TO EMISSION AND NOISE STANDARDS
(To be issued by the manufacturer along with the vehicle)

It is certified that the following vehicle complies with the provisions of the Motor Vehicles Act, 1988 and rules made thereunder or international standard namely EEC / ECE Regulations:

1. Model/Commercial Name of the vehicle: .....
2. Chassis Number: .....
   [Example: Vehicle Identification Number (VIN)]
3. Engine ~~or Motor~~ Number: .....
4. Applicable Emission Norms: .....
5. Emission, Sound Level for Horn and Pass by noise values of the above vehicle model, obtained during Type Approval Testing as per Central Motor Vehicles Rules, 1989 or ECE/EEC Regulations are given below:

i. Type Approval Certificate No.: .....
ii. Type of Fuel: .....
iii. Emission values for vehicle: .....

TABLE
Positive Ignition Engine or Compression Ignition Engine Vehicle

Sr. No.	Pollutant (as applicable)	Units (as applicable)	Value (upto 3 Decimal places)
(1)	(2)	(3)	(4)
1.	Carbon Monoxide (CO)	mg/km or mg/kWh or g/kWh	
2.	Hydrocarbon (THC/HC)	mg/km or mg/kWh or g/kWh	
3.	Non-Methane Hydrocarbon (NMHC)	mg/km or mg/kWh or g/kWh	
4.	Oxides of Nitrogen (NOx)	mg/km or mg/kWh or g/kWh	
5a.	HC+NOx	mg/km or mg/kWh or g/kWh	
5b.	THC+NOx	mg/km or mg/kWh or g/kWh	
6.	Methane (CH4)	mg/kWh	
7.	Ammonia (NH3)	PPM	
8.	Mass of Particulate Matter (PM)	mg/km or mg/kWh or g/kWh	
9.	Number of Particles (PN)	Numbers/km or Numbers/kWh	

iv. Noise level (as applicable):

a. Horn (for all vehicles other than agricultural tractors and construction equipment vehicles) as installed on the vehicle: ..... dB (A); (upto 1 decimal place)

b. Pass by or Bystander's position: ..... dB(A)

(Facsimile Signature of Manufacturer)

Note 1: This Form shall be issued with signature of the manufacturer duly printed in the Form itself by affixing facsimile signature in ink under the hand and seal, as applicable.

Note 2: In case of multiple combinations, values pertaining to any one test result in the test report to be provided. For V2, V3 cases- average value of the test result in the test report to be provided.

Note 3: While printing Form 22, the relevant pollutants in the table as applicable for the subject vehicles may only be listed.

****

SPECIFICATIONS OF TRAILER MOUNTED FRAC PUMPING UNIT, QTY = 6 NOS.

Note to bidder:

1. The bidder shall provide their response and mention applicable information/ Complied / Not Complied / Not Applicable / Make & Model etc. (as applicable) against individual clauses in this document.

2. The bidder shall mention details of Reference Document name / Serial number / Page number of bid for documentary evidence (if any).

3. The bidder shall submit the filled-up document along with their technical bid.

Technical Specifications

Clause No.	Clause Description	Bidder's Response
1.0	i) The Trailer mounted Frac pump unit should be suitable for deployment in oil and gas fields across India. ii) The Trailer mounted Frac pump unit shall be suitably designed detachable brand new **semi-trailer**, manufactured after issue of Oil India Limited (OIL)'s Purchase Order. The semi-trailer shall be mounted with all the Frac pump unit machineries/ equipment, items as specified in the tender. The semi-trailer shall be coupled with any of the Tractor / Prime Mover as detailed elsewhere in the tender document. The Tractor Trailer combination vehicle should be suitable for driving over national highways, state highways, district roads, rural /village roads, non-grade road surfaces and for use in the rough, windy, marshy/waterlogged and dusty terrain oil and gas field environments found in the Indian Oilfields. **Note:** "Semi-trailer" means a Trailer, which is intended to be connected to a haulage Tractor and which is so constructed that a portion of it is superimposed on and apart of whose weight is borne by the haulage Tractor. iii) Suitable to work in the following climatic conditions: o Altitude: 120 meter above mean sea level (msl) o Temperature range: 0°C - 50°C o Average Rainfall: 350 cm o Relative humidity: 98% at 35° C. iv) Application: Typical application includes hydraulic fracturing, acid fracturing & high-pressure pumping etc. of water, acid, high viscous fluid, and brine etc. v) The operation of the unit should be controlled locally as well as from remote panel located in Frac Control Center (datavan). The remote-control system should allow the operation of the unit from a vantage point away from the unit. vi) The components in the unit should be arranged in such a manner for easy access for maintenance & ease of operation. Storage provision for related accessories & commonly used auxiliary equipment should be provided. vii) The Quintuplex pump should be mounted on the rear side of the trailer. Fluid delivery to the suction manifold of the Quintuplex pump will be from the blending unit.	

Clause No.	Clause Description	Bidder's Response
	viii) All components and systems should be assembled in a manner so as to provide ease of maintenance. ix) The bidder/supplier shall ensure adequate gap between Trailer deck and Trailer wheels, so as to ensure that the Trailer wheels do not touch the body of deck of the Trailer or any other machineries/equipment mounted on the Trailer while crossing speed breakers, potholes or any other uneven surface.	
2.0	**EQUIPMENT DETAILS:**	
2.1	**DIMENSIONS & WEIGHT OF FRAC PUMP TRAILER**	
a.	**Length of each Frac Pumper Trailer:** As per design. However, the Length of each offered Frac Pumper Trailer should be such that when coupled with Tractor / Prime Mover, the **overall length of Tractor and Frac Pump Trailer combination**, i.e., Tractor coupled with the Trailer does not exceed **18750 mm**.	
a.1	The bidder shall mention the length of each Frac Pumper Trailer alone in the technical bid & the GA layout diagram.	
b.	**Width of each Frac Pumper Trailer:** Shall not exceed **2600 mm.**	
b.1	The bidder shall mention the width of each Frac Pumper Trailer alone in the technical bid & the GA layout diagram.	
c.	**Height of each Frac Pumper Trailer:** Shall not exceed **4500 mm** from ground level.	
c.1	The bidder shall mention the height of each Frac Pumper Trailer alone in the technical bid & the GA layout diagram.	
d.	**Weight (mass) of Frac Pump Trailer:** As per design. However, the Total combination weight (mass) of Tractor and Frac Pump Trailer combination, i.e., Tractor coupled with the Trailer shall be within 55,000 kg.	
d.1	The bidder shall mention the weight (mass) of each Frac Pumper Trailer (with equipment mounted) alone in the technical bid.	
e.	**GENERAL ARRANGERMENT (GA) DRAWING OF FRAC PUMPER TRAILER:** The bidder shall submit GA (General Arrangement) drawing of the Frac Pumper Trailer. The GA drawing shall have mention of major dimensions of Frac Pumper Trailer (like length, height, width, etc.); estimated loading on individual Rear axles of Trailer (when combined with offered Tractor unit); showing the position of all major components & their mounting. The GA drawing of the Frac Pumper Trailer shall be submitted along with the technical bid by the bidder.	

Clause No.	Clause Description	Bidder's Response
2.2	**CHASSIS FRAME:**	
a.	All welded construction, robust, heavy-duty chassis of steel frame suitably welded and cross braced at close pitch to withstand the maximum load. The chassis shall provide maximum structural performance in terms of load carrying capacity, bending moment & deflection, maximum tensional stability and long life. Skirt rails, wherever possible shall be provided along the length of the Trailer. The main Chassis frame beam shall be around 450 mm (in height) near the centre of the Trailer (when viewed from the rear of the Trailer) and the chassis frame beam is to be reinforced & adequately sized as per manufacturer's standard practice in suspension area etc. to bear the designed load.	
b.	The bidder shall mention & submit the following information in the technical bid: Details of the chassis frame beam drawing mentioning the size of the chassis frame beam offered.	
2.3	**TRAILER AXLES:**	
a.	Each Trailer shall be provided with 03 (three) Nos. of axles at rear of the Trailer as per design and meeting tender specifications. The Trailer axles shall be compatible with the brake system. The bidder/supplier shall offer Trailer axles with total axle capacity of the Trailer triaxle to meet the design requirement considering the total weight of the complete unit with equipment, handling fluids, etc. in all conditions: Bidder shall ensure that the loading on the Trailer axles shall be within the axle capacity of the Trailer triaxle in all conditions.	
b.	The bidder shall mention & submit the following information in the technical bid for each Frac Pump Trailer:	
(i)	Total number of Axles in the Trailer at rear.	
(ii)	Make & model of offered Trailer axles.	
(iii)	Total axle capacity of offered 03 Nos. of Trailer axles.	
(iv)	Estimated Total loading on Trailer triaxle. (in coupled condition with the Tractor)	
(v)	Total Loading on Trailer triaxle is within the axle capacity of Trailer triaxle in all conditions. (Yes / No).	
(vi)	Technical specification catalogue/brochure with technical details of the offered Trailer axles.	
2.4	**BRAKE SYSTEM:**	
a.	Pneumatic service brake system with ABS (anti-lock brake system) and parking brake system compatible with the Tractor shall be provided in the Trailer. The service brake system & parking brake system shall be operated from Tractor's driver Cabin.	

Clause No.	Clause Description	Bidder's Response
	The brake system shall also have provision for applying brake automatically to the Trailer axles in case of accidental disconnection of the pneumatic connections. The trailer shall have control valve for synchronized braking of "tractor and trailer" to enhance the safety. The brake system shall have palm coupling for quick coupling and detaching the air connections with the Tractor unit. All brake components shall be compatible with axles offered.	
2.5	**TRAILER SUSPENSION:**	
a.	Heavy duty Trailer suspension system suitable for movement of Tractor & Frac Pumper Trailer unit with full load in all types of road conditions typical to oilfield operation area/slushy plinths shall be provided. The suspension system shall be capable to bear the maximum designed load in all conditions.	
b.	The bidder shall mention & submit the following information in the technical bid:	
(i)	Type of offered Trailer Suspension.	
(ii)	Make & Model of offered Trailer Suspension.	
(iii)	Technical specification catalogue/ brochure with technical details of the offered Trailer suspension system.	
2.6	**TRAILER WHEELS & TYRES:**	
a.	The Trailer shall be fitted with suitable wheels with Tube type / Tubeless type Tyre of adequate ply rating. 02 (two) Nos. of wheels in each side of each axle i.e., total 04 (four) Nos. of wheels in each axle i.e., total 12 (twelve) Nos. of wheels in 03 Nos. of Trailer axles shall be provided as per design specifications. If possible, Trailer wheels / tyres shall be interchangeable with the Tractor unit. Bidder is to look into the tyres of Tractor Unit while selecting the Trailer tyres and vice-versa for compatibility of the Tractor and the Trailer unit with each other, if possible.	
b.	The bidder shall mention & submit the following information in the technical bid for each Frac Pumper Trailer:	
(i)	Total number of wheels in 03 Nos. of Trailer axles. (Axle-wise information to be provided).	
(ii)	Type of Tyres (Tube type / Tubeless type) in the Trailer axles.	
(iii)	Tyre size of Trailer axle wheels.	
2.7	**KINGPIN FOR COUPLING WITH TRACTOR UNIT:**	
a.	Suitable rubbing plate fully welded to the chassis frame and the **Kingpin of size not less than 3.5 inch** shall be provided. The make of the Kingpin shall be of ASHLEY /HYWA / TATA / JOST / VOLVO / YORK / PLHT/ GF / SAF /	

Clause No.	Clause Description	Bidder's Response
	HOLLAND or any other make. Height of rubbing plate shall match with the "Fifth Wheel" height in all load conditions of any / each of the Tractor units for proper coupling and locking. Proper coupling & locking etc. of the Frac Pumper Trailer with each of the Tractor unit is to be ensured by the bidder/prospective supplier. The Kingpin of each Frac Pumper Trailer must be identical in all respect and compatible with each Tractor unit.	
b.	The bidder shall mention & submit the following information in the technical bid:	
(i)	Size of offered Trailer Kingpin.	
(ii)	Make & model of offered Trailer Kingpin.	
(iii)	Technical specification catalogue/ brochure with technical details of offered Trailer Kingpin.	
2.8	**LANDING GEAR:**	
a.	Retractable, mechanical type landing gear with sand-pad and having adequate capacity for taking the load on the Trailer when fully loaded shall be located conveniently at the front end of the Trailer. The make of the landing gear shall be of HYWA/ JOST / YORK / PLHT/ GF / SAF / HOLLAND or any other make with capacity as per design. The landing gear shall be so positioned that there is sufficient clearance behind the rear end of the Tractor unit, and it does not fault with the Tractor while taking the shortest turn.	
b.	The bidder shall mention & submit the following information in the technical bid:	
(i)	Make & model of offered Landing Gear.	
(ii)	Capacity of offered Landing Gear.	
(iii)	Technical specification catalogue/ brochure of the offered Landing Gear.	
2.9	**ELECTRICAL EQUIPMENT:**	
a.	Electrical system compatible with the electrical system of the offered Tractor unit shall be provided in the Trailer for road drive. Easily disconnectable electrical connections with the Tractor unit shall be provided.	
2.10	**TRAILER DECK:**	
a.	All welded steel construction with not less than 5mm thick MS chequered plate Trailer deck shall be provided, wherever feasible as per design. Trailer decks shall be of non-slip type.	
2.11	**PAINTING:**	
a.	Surface preparation through shot blasting. Minimum two coats of Zinc rich metal primer shall be applied. Minimum two final coats of suitable paint shall be applied.	

Clause No.	Clause Description	Bidder's Response
	Note: Surface primer, paints shall be suitable for corrosive handling fluids etc. used in oil & gas industry.	
2.12	**TYPE APPROVAL CERTIFICATE OF THE FRAC PUMPER TRAILER:**	
a.	Type Approval Certificate of vehicle is required for the following activities in India: i) **Custom clearance** of the vehicle as per import policy conditions / guidelines of India Chapter-87 of ITC (HS), 2022, Schedule 1- Import Policy, Section: XVII, in case of imported vehicle from other countries to India. ii) **Homologation** (the formal process by which an official authority certifies that a product, especially a vehicle, meets specific regulatory standards for safety, performance, and environmental impact before it can be sold or used in a particular market/ region) / **Uploading the vehicle details in the relevant Government of India portal (VAHAN/ Parivahan portal**) for **registration** of vehicle as per Motor Vehicle Act, 1988 & Central Motor Vehicle Rules, 1989 of India which is mandatory for plying of the vehicle in roads in India.	
b.	In case the offered Trailer is manufactured in India, the offered Trailer shall be compliant to Central Motor Vehicle Rules 1989 of India and its amendments. In case the offered Trailer is imported from other countries to India, the offered Trailer shall be compliant with the import policy of Government of India. In both the case i.e. manufactured in India and imported from other countries to India, the bidder/supplier has to exhibit the original Type Approval Certificate of offered Trailer and submit a copy of the same to the Pre despatch Inspection Team of Oil India Limited. The original copy of the Type Approval Certificate has to be submitted to Oil India Ltd along with the supply. The bidder has to submit a declaration along with the bid in this regard as per Annexure A1. Submission of Type Approval Certificate of Trailer shall be as per Central Motor Vehicle Rules of India in case of Trailer manufactured in India or as per the import policy of Government of India, in case of imported vehicle, as on the date of supply.	
c.	In case of Trailer manufactured in India, the list of Type Approval Certificate issuing agencies are mentioned in Central Motor Vehicle Rules, 1989 of India & its amendments. In case of imported vehicle from other countries to India, at the time of Customs clearance, a Type Approval Certificate/COP, of an international accredited agency including a notarized English translation thereof shall be furnished. This Type Approval Certificate shall stipulate that vehicle to be imported complies with all the ECE (Economic Commission for Europe) Regulations. The list of international accredited agencies approved for issuance of Type Approval Certificate is available on DGFT (Director General of Foreign Trade) website, under Policy Circular No. 12 (RE- 2013)/2009-2014 dated 15.01.2014 issued by Ministry of Commerce & Industry, Department of Commerce, Director General of Foreign Trade, New Delhi subjecting "Type Approval issuing agencies under Policy Condition number 7 and 9 of Chapter 87 of ITC (HS) 2012".	

Clause No.	Clause Description	Bidder's Response
d.	Bidder/supplier shall ensure adherence to any subsequent revisions to the above referred Policy Circulars that may be issued in future by DGFT. Bidder shall note that, they shall be conversant with the policy of Government of India and Oil India Limited (OIL) shall not be liable in this regard whatsoever.	
e.	Type approval certification of individual components shall not be considered as vehicle Type approval certificate.	
f.	Notwithstanding anything mentioned elsewhere in this document, submission of Type Approval Certificate/ Conformity of Production (CoP) shall be as per the guideline of Government of India as on the date of supply.	
3.0	**OTHER GENERAL POINTS:**	
3.1	**ACCESSORIES & OTHER FITTINGS:** Each Frac Pumper Trailer shall be fitted with the following fittings and accessories:	
a.	Mudguard with mud flaps for all Trailer wheels.	
b.	Suitable Heavy duty attachment (hook/loop) shall be provided at the rear of the Trailer, capable of pulling / towing the unit from bogged down situation in slushy areas in oilfields shall be provided.	
c.	Wherever feasible, Side / Lateral Underrun Protective Device (SUPD)s, Rear Underrun Protective Device (RUPD) shall be fitted in the unit. Note: 1. SUPD/ RUPD are structures that prevent smaller vehicles from getting underneath etc. during collision as per AIS 069, IS: 14812, IS: 14682 or similar standards. 2. The equipment manufacturer shall check the feasibility of providing the SUPDs, RUPDs during manufacturing and arrange to provide the same accordingly as per feasibility in the unit. SUPDs/ RUPDs provided by the equipment manufacturer shall be of detachable type and shall not be permanently fitted / welded to the Trailer chassis.	
d.	**TRAILER INFORMATION PLATE:** The Trailer shall be provided with a VIN plate fixed in a suitable place in the Trailer chassis (easily visible) containing, amongst others, the following information: a) Trailer Serial Number / Trailer Chassis No. as per Trailer manufacturer. b) Year and Month of Manufacture of the Trailer. c) Pay Load Capacity of the Trailer. d) Name & Address of Trailer Manufacturer etc.	
e.	Retro reflective marking (3M make or any other make, 50 mm width) on the rear and both side of the trailer as per the colour code- Rear: Red and Sides: Yellow as per AIS: 090 / applicable standard.	
f.	Wheel Wrench & Handle.	
g.	02 (two) numbers of wheel chocks.	

Clause No.	Clause Description	Bidder's Response
h.	01 (one) number of complete spare wheel assembly.	
3.2	**UNDERTAKING FOR SPARES & SERVICE:**	
a.	The bidder shall submit a written undertaking (along with the technical bid) that they, themselves or through other sources, would be able to supply all the requisite spares (including bought out items, if any) & consumables and provide the maintenance services for their offered Frac Pumper Trailer in OIL operational area(s) in India for a minimum period of 15 (fifteen) years from the certified date of completion of successful field commissioning of the unit. The cost of such spares, consumables & maintenance services which may be utilized by Oil India Limited in future **(beyond Warranty period and O&M Period**) shall be extra and **SHALL NOT BE** considered by the bidder in their quoted prices in this tender. Spares & repair services during Warranty period & warranty extension period (if any) for the item(s) under Warranty claim (if any) of the unit(s) shall be in the scope of the successful bidder (supplier).	
3.3	**SPECIAL NOTES:**	
a.	All lights shall be covered to the extent possible, with suitable guard to prevent damage. The guards shall have detachable provision.	
b.	The electrical connections shall be suitable to operate in oilfield areas. The lightings shall comply road vehicle lighting regulations. Screw-in bulbs shall not be used as far as possible. The electrical wirings shall be fixed and protected as to minimize accidental damage or undue wear. The wirings shall be insulated, and the electrical circuits shall be protected against overloading by fuses or automatic cut-outs. Adequate steps shall be taken to ensure electrical continuity and wherever necessary, components shall be bonded by copper straps. The junction boxes, if any, shall be sealed.	
c.	All the 06 (six) nos. Trailer Frac Pumper units offered by the bidder in the tender and to be supplied by a successful bidder (i.e. supplier) in future against this tender shall be identical and shall have same design in all respects.	
4.0	**EQUIPMENT:**	
4.1	**DECK ENGINE:**	
i)	The deck engine shall be liquid cooled, turbo-charged diesel fuel (HSD) engine of make **Caterpillar/Cummins** developing required power at rated RPM suitable to drive QUINTUPLEX PUMP of 2500 BHP at rated RPM and to run the entire operation of the Fracturing.	
ii)	The offered engine shall comply with BS-VI/EURO-VI/TIER IV Final/equivalent or higher emission standard as applicable in the in India at the time of delivery of the unit. The engine should be vibration isolated from the trailer by means of suitable anti-vibration mounting.	
iii)	The rating should be in accordance with BS 5514-1:1987, or ISO 3046/1-1986 and duty should be suitable for FRAC PUMPING Operation: The engine will run in the following broad climatic conditions:	

Clause No.	Clause Description	Bidder's Response
	i. Altitude – 150 meter above sea level (ASL) ii. Temperature range: 2 deg - 45 Deg C Max iii. Average Rainfall - 350cms iv. Relative humidity 95% at 35° C	
iv)	The Engine exhaust is to be designed properly with manifold, suitable muffler, spark arrester, rain cap and flexible exhaust connection as per norms of Oil Field Operation. The exhaust pipe shall be suitably wrapped by insulated material for safety of operators. Both External type and Internal type Spark arrester are acceptable	
v)	Suitable arrangement for keeping engine starting battery under locking arrangement and with safety cover from rain.	
vi)	The engine safety system should be equipped with the following: i. Emergency shut off. ii. Automatic tripping of the engine with alarm for the following conditions: low lube oil pressure, high water temperature, over speed and high lube oil temperature. iii. There should be a master switch to isolate the battery from powering the engine when the unit is not operation to prevent drain out of the battery.	
vii)	All engine operations like Start/ Stop, Throttle control, Emergency stop etc. shall be performed from control cabin or from the Frac Control Center (datavan). Also, alternative arrangement should be made to perform the above operation from engine control panel.	
viii)	The deck engine shall be suitable to run the entire operation of the FRAC PUMPING Unit smoothly along with all accessories as detailed elsewhere including lighting system of control room and deck, air conditioning of control room and air supply wherever required.	
ix)	All the engine performance parameters like lube oil pressure and temperature, water temperature, engine rpm etc. should be displayed in the control cabin of the unit and in the Frac Control Centre (datavan) along with additional gauges mounted near the engine for the parameters.	
x)	Engine Starting System: Engine shall be equipped with Electric Starter and Charging Alternator System.	
xi)	Other engine accessories to be provided are: i. Charging Alternator. ii. Engine Electric starter. iii. Air cleaners & Air dryer assembly. iv. Fuel filtration system. v. Lube oil pump and distribution system. vi. Lube oil filters and oil pan sight gauge. vii. Fuel filters. Air compressor.	
xii)	Bidder must forward following details of the Fracture unit along with their offer. i. Maximum Power Generated by Deck Engine ii. Maximum Power Consumption by QUINTUPLEX Pump. iii. Maximum Power consumption in each Hydraulic Circuits. iv. Maximum Power Consumption of Auxiliary Equipment Maximum Power Generated by Engine shall be atleast 10 % more that the total maximum power required for Unit Full load Operation.	
xiii)	**The offered make and model of the engine along with datasheets to be provided along with the technical bid.**	

Clause No.	Clause Description	Bidder's Response
4.3	**AUXILIARY SYSTEMS:**	
i)	Plunger lube system and pump brake system should be provided. In case pneumatic system is provided for the Plunger lube system and pump brake system, air compressor of sufficient capacity driven by the deck engine of the frac pump to meet the air requirement as per the design should be provided inclusive of air tank and dryer.	
ii)	12V and/or 24V electrical system	
iii)	Battery box (with battery disconnect switches) with 12V automotive type batteries of suitable capacity to meet the electrical requirement of control panel, engine ECM, work light, starting system of power pack, hydraulic motor of articulating frac arm etc.	
iv)	Deck engine driven Alternator of sufficient capacity for charging of battery bank of the unit.	
v)	Strobe light above quintuplex pumps to indicate run status of Quintuplex pump.	
4.4	**DECK TRANSMISSION:**	
i)	One Allison/ Caterpillar/ Twin Disc power shift transmission should be attached to the engine and should drive the quintuplex pump through Dana/Spicer/Twin Disc heavy duty one piece drive shaft assembly. The transmission should have: 1) Net input HP: 2500 BHP. 2) Max input speed : Matching with maximum deck engine RPM. 3) Torque convertor. 4) Transmission power shift. 5) DC electrically activated hydraulic shift assembly with lockup inhibitor or advanced electronic shift system as per design. 6) Lockup clutch. 7) Output shaft disc brake. 8) Transmission oil cooler. 9) Transmission oil pump. 10) The transmission should be so designed to ensure optimum rated performance of the Quintuplex pump. 11) Safety interlocks like overpressure tripping. 12) There should be smooth transmission while shifting gears and there should not be any down in discharge pump pressure while shifting to higher gears. **The offered make and model of the transmission along with datasheets to be provided along with the technical bid.**	
ii)	The engine/transmission should be vibration isolated from the trailer by means of anti-vibration mounts at rear and engine vibration trunnion mount at the front.	
iii)	The **drive line** should be utilized for connecting deck transmission to the Quintuplex pump. It should be a Dana/ Twin disc/Spicer that should not exceed the manufacturers' recommended maximum angle. The drive line should include a removable metal guard. A viscous torsional vibration dampener as per OEM design should be included and mounted between the	

Clause No.	Clause Description	Bidder's Response
	universal joint drive shaft assembly and Quintuplex pump input flange to protect the engine and transmission from inherent vibrations created by the Quintuplex pump.	
4.5	**FUEL TANK FOR DECK ENGINE:**	
i)	Suitable diesel tank with adequate capacity for 10 hours of continuous operation at peak load to be installed near the deck engine to provide sufficient suction to the engine fuel pump along with suitable strainer at the opening of the tank to prevent entry of foreign materials & locking arrangement shall be provided.	
ii)	Cleaning facility with suitable drain plug and locking arrangement for the tank shall be provided. Fuel level in the tank should be displayed in the instrument panel of the control cabin along with dip gauge facility.	
iii)	A hydraulically operated pump with filtration system should be provided for filling of diesel tank into Deck Engine Tank from Barrel/drum.	
4.6	**HYDRAULIC TRANSMISSION:**	
i)	The first system should power the deck engine radiator fan motor and should incorporate a hydraulic pump system directly driven from the deck mounted engine.	
ii)	The second system should power the deck engine dual hydraulic starting system powered by the power pack.	
iii)	These hydraulic systems should incorporate all equipment such as hydraulic oil tank, suction filters, return filters, relief valves, control valves, coolers, breathers and troubleshooting connections.	
iv)	All variable displacement hydraulic pump and motor should be hydraulic displacement control type only.	
v)	All hydraulic direction control valve should have mechanical actuation system. In case of Pilot operated direction control valve, pilot signal should be hydraulic.	
vi)	Make of the hydraulic motors/ pumps shall be Sauer Danfoss / Sauer Bibus/ Sun strand / Parker / Denison / Rexroth / Linde / Vickers/ Eaton.	
vii)	Hydraulic oil cooler should be designed in such a way that the temperature of the hydraulic oil in the system does not exceed 70° C in extreme ambient temperature of 50° C.	
viii)	Hydraulic Hose Make: Parker / Gates / Eaton / Power Grip / Hansaflex	
ix)	Hydraulic Fitting: JIC (Imperial) or ERMETO (Metric)	
x)	All hydraulic filters used in the system should be of Donaldson/ Pall/Fleet guard/ Parker make.	
5.0	**PUMPING SYSTEM:**	
5.1	**HIGH PRESSURE PUMP:**	

Clause No.	Clause Description	Bidder's Response
i)	One (01) number. QUINTUPLEX PUMP with replaceable plungers, valves and stuffing box packing with max Working Pressure of 15,000 psi. **INPUT POWER: 2500 BHP**	
ii)	Plunger size of 4" diameter with Working pressure of 15000 psi or higher to be fitted.	
iii)	The pump should be compatible to interchange the fluid end with 4" to 4.5" plunger size.	
iv)	Make & Model of Pump: Note: The pump shall be any one of following make: 1) Gardner Denver 2) National Oilwell Varco 3) SPM 4) MSI 5) Weatherford	
v)	Duty type: "Intermittent Service"	
vi)	The pump will be operated at different speeds to have a wide range of discharge volume against various pressure rating. The pump should be equipped with internal reduction gear or chain drive arrangement with proper reduction ratio to those discharge condition.	
vii)	A suitable size removable type suction cavitation eliminator / pulsation dampener to be fitted to the suction manifold. The cavitation eliminator / pulsation dampener should also include ½" bleed line which includes a ball valve and pressure gauge.	
viii)	Additional fluid end: One no. fluid end of 4.5" plunger size with suction manifold should also be supplied separately along with the unit. The fluid end should be fitted with all sub-assemblies like plunger, valves, valve seats etc. complete in all respect.	
ix)	The bidder has to furnish the performance curve of the pump with selected plunger along with data sheet & technical leaflet of the offered pump along with the bid. **The offered make and model of the pump & fluid ends along with the performance curve of the pump with selected plunger along with data sheet & technical leaflet to be provided along with the technical bid.**	
5.2	**PUMP LUBRICATION:**	
i)	For lubrication of plunger & packing, suitable lubricating system either of slow speed drip lubrication type (e.g. air over oil design) or provision for regular greasing along with required accessories.	
ii)	Power end should be pressure lubricated either by crank shaft driven lube pump or by hydraulically driven lube oil pump to ensure proper lubrication at slow speed of the pump. The power end lubrication system should include a lube oil pump, oil cooler, oil filter, oil temperature gauge, system relief valve and lube oil reservoir with the following accessories: • Suction strainer • Sight level glass • Filling port • Breather	
iii)	If a chain drive system is used, proper lubrication system has to be installed for the chain drive and the chain with the sprockets should be enclosed in leak-proof metal enclosure with provision for periodic inspection.	
6.0	**MANIFOLD:**	

Clause No.	Clause Description	Bidder's Response
6.1	**SUCTION MANIFOLD:**	
i)	The 6" suction manifold fitted to the pump should extend to the rear edge of the unit.	
ii)	This should terminate with two nos. of 4" FIG 100 / 206/ 207 Male union connections to facilitate dual suction. Each connection should contain manually operated 4" butter fly valve. The suction end facing the rear of the unit will be connected to a 6" suction manifold by Victaulic clamp.	
iii)	The other side of the suction manifold should be fitted with 4" FIG 100 / 206 / 207 female further connected to 2" valve for taking the sample.	
6.2	**QUINTUPLEX PUMP DISCHARGE MANIFOLD:**	
i)	The discharge connections facing the rear of the pump should be fitted with Articulating Arm as described at **Clause No. 6.3**	
ii)	The opposite side of the fluid end should have a 2" FIG 1502 female flange with a 2" FIG 1502 plug valve and FIG 1502 blind.	
iii)	The Pressure Transducer (Viatran or equivalent) to be mounted directly on the pump through 2" FIG 1502 wing nut connection. All Treating iron should be of SPM/ FMC / MSI/ PARVEEN/ Alnas	
iv)	For on-road movement provision for support stand for supporting the discharge connection piping shall be provided.	
6.3	**ARTICULATING FRAC ARM:**	
i)	FMC/SPM or equivalent articulating frac arm with required degree of freedom shall be built into the design of arm for eliminating fatigue loading due to binding with pre-assembled piping system that extends from the frac pump discharge manifold with significantly less effort. It shall have all necessary swivel joints and piping for required degree of freedom and required length.	
ii)	3" FIG 1502 discharge end equipped with one no. style 10 FIG 1502 (MXM) long sweep swivel & a sufficient length pup joint (MXF) along with style 50 FIG1502 long sweep swivel joint so that it may reach to the ground when swing down to make the connections.	
iii)	The rated pressure to be 15000 psi.	
iv)	The arm reach capability to be minimum12 ft from rear of the unit.	
v)	The arm shall be able to connect the treating line laid on the ground as well as treating iron manifold having a maximum height of 6 ft.	
vi)	Suitable independent hydraulic system for operation of arm to be provided.	
vii)	Hydraulic system should comprise all the necessary equipment like accumulator, filters, hoses, pressure gauge etc.	
viii)	Hydraulic system of Frac Arm is to be powered by 12V DC Electric system. Hydraulic lever system to be incorporated for movement of arms.	

Clause No.	Clause Description	Bidder's Response
Note for clause 6.0	**The bidder shall submit the Pumping network Schematic in the technical bid.**	
7.0	**CONTROL PANEL, INSTRUMENTATION & MONITORING SYSTEM AND ILLUMINATION:**	
7.1	**CONTROL PANEL & INSTRUMENTATION:**	
i)	The local control panel shall be made of stainless-steel plates. Panel shall be weatherproof (IP-66) & above and shall have provision of front opening with proper side hinge & Locking System. The necessary hinge, screw, nuts& bolts used in the panel should be SS. Control Panel should be preferably upward opening with gas struts on both sides to support the panel. There shall be proper illumination inside the panel. Necessary power supply for the panel DC/AC, inverter/converter shall be mounted inside the panel or a suitable location near the panel or on the truck body with proper enclosure. All nuts, bolts, screws etc. used for mounting the panel and its modules shall be non-rusting type.	
ii)	The unit shall be monitored & controlled from remote console placed at a vantage point approximately 50 meters from the unit. A sleeve/ armor protected cable, suitably located on the side of the unit, shall be used for connection of the remote console.	
iii)	The AC operating power for the instruments shall be 230±10 V, 50 Hz and DC operating power for the instruments shall be 12/24V. Inverter shall be 12/24VDC to 230VAC.	
iv)	The inside of the door should depict a permanent block/flow diagram of the operating process and list of start-up and shutdown procedure.	
v)	The Mechanical gauges installed in the control panel shall be liquid filled type to dampen vibration when the unit is in operation. The control panel shall be installed with suitable anti vibration pads. The gauges to be provided shall be dual scale, English / Metric wherever possible.	

Clause No.	Clause Description	Bidder's Response
vi)	All-important parameters of the unit shall be indicated in the control panel. The parameters/ controls that are required to be installed in this local gauge cabinet will be as follows: 1. Deck Engine coolant temperature gauge. 2. Deck Engine oil pressure gauge. 3. Deck Engine RPM. 4. Hydraulic oil pressure gauge. 5. Hydraulic Temperature gauge. 6. Air Pressure gauge. 7. Transmission oil temperature gauge. 8. Gear shifter for transmission gear shifting with break option. 9. Quintuplex pump Lube oil temperature gauge. 10. Quintuplex pump power end lube oil pressure gauge along with one (01) no. additional pressure gauge for direct power end lube oil pressure. 11. Quintuplex pump pressure. 12. Deck quintuplex pump flow rate meter. 13. Deck quintuplex pump flow totalizer display. 14. Emergency shut down. 15. Normal shut down. 16. Lights on / off. 17. Transmission shifter. 18. Hooter/Alarm. 19. All controls of the pumps. 20. All controls of the valves. 21. Deck Engine Throttle control **22. Any other control/switch required for operating the pumping equipment.** **23.** Connector provisions like: Diagnostic tool connector, remote connector for Frac Control Centre (datavan) based on TCP/IP or other equivalent Open industrial protocol network.	
vii)	A touch screen based Human Machine Interface (HMI) enabling multi frac pumper control is desired for controlling at least 10 pumpers. The following shall be of plug and play type in a TCP/IP network, covering normal operational aspect along with safety interlocks. All the frac pumpers can communicate in TCP/IP network in Daisy chain/ Star/ combination or ring topology.	
viii)	The Multi pumper control system shall be provided with an additional manual All-Stop button connected to each pumper via hard wired connection from a control system enclosure installed in Frac Control Centre (datavan) to enable a hard-wired shutdown of all pumps in an emergency situation.	
ix)	**Normal operation includes:** 1. Deck engine normal start / stop. 2. Deck Transmission gear shifting. 3. Deck Engine smooth throttle control. 4. Neutral/brake control shifting. 5. Pump batch/group programming option. **Parameter display includes:** 1. Deck engine tachometer. 2. Deck quintuplex pump flow rate meter. 3. Deck quintuplex pump flow totalizer display. 4. Quintuplex pump suction pressure (optional) and discharge pressure. 5. Rod loading in lbs (optional). 6. Pump stroke rpm (optional).	

Clause No.	Clause Description	Bidder's Response
	Safety interlocks and warning display includes: 1. Deck Engine emergency shutdown. 2. Over pressure trip / idle. 3. Instant neutral option. 4. Engine Diagnostic information. 5. Function and Warning indication. 6. Power on indication. 7. Deck Transmission gear indication. 8. Deck Transmission Converter mode indication. 9. Deck Transmission Lockup mode indication. 10. Brake on indication. 11. Deck Engine stop/check indication. 12. Low quintuplex pump lube oil pressure indication 13. High quintuplex pump lube oil temperature indication	
x)	In addition to the above pump rate K factor and other meter configuration data shall be easily editable by a configuration page, to accommodate any change in sensor or device.	
xi)	will be properly and adequately labelled in English. This Frac Pumper control HMI will be mounted under the Frac Control Centre (datavan), Control cabin rear window allowing the operator a full and clear view of pumping operations. Each section will be fully wired and connected to the relevant input connection plug on the Control Cabin External Data/Control Connection Panel through router or switch whichever required.	
7.2	**DATA ACQUISITION & CONTROL SYSTEM:**	
i)	The unit shall have an independent standalone portable Data Acquisition System (DAS) which shall be supplied with the frac pumper. It should be a portable, suitcase type weatherproof inclusive of all necessary electronic hardware, power supply modules, cables, software in a rugged industrial laptop required as per design. The rugged industrial laptop shall be with the latest configurations, along with all necessary accessories. The DAS should have the suitable interfacing module to capture all the parameters which shall be required for smooth and reliable operation of the unit. Necessary Pressure Sensors (Transducers), Temperature Sensors, Frequency Sensors, and Flowmeters shall be equipped in the Frac Pumping Unit to acquire all critical data such as suction and discharge pressure, pump discharge flow rate, pump strokes per minute, engine RPM, torque, power output, lube oil temperature and pressure, coolant temperature, and vibration/frequency signals, and shall transmit the same to the Data Acquisition and Control System for real-time monitoring, recording, analysis, and safe operation of the unit.	
ii)	The Data Acquisition System should have the following features: 1. Digitally record and store in real time the various data inputs. 2. Graphically displays for charting & trending in real time the various data inputs. 3. Output/ Print the recorded data as Excel data sheets, like .csv files in ASCII format and printable curve diagrams. 4. Software should have provision for configuring data transfer, i.e., ASCII data in serial data transmission and/or XML data in open	

Clause No.	Clause Description	Bidder's Response
	protocol digital transmission mode, for interfacing with third party hydro fracturing simulation software. 5. Real time editing of displayed graphics and curves. 6. Adjustable time spans. 7. Append and pause files during operation. 8. User defined parameter trace selection in X-Axis. 9. The data channels should have facility to change scale range and calibration and should support mathematical functions like addition of discharge rates of pumps etc. 10. To restore the DAS system in the event of system crash, the DAS system should be supplied with all necessary licensed softwares with registration codes or should be supported by OEM for immediate restoration free of cost.	
iii)	**The Data Acquisition System (DAS) software shall be provided with a perpetual license, with lifetime validity and without any requirement for periodic renewal or additional licensing cost.**	
iv)	**Data Acquisition System (DAS) – General Specifications** **Power Supply to Sensors:** • The DAS shall be capable of providing regulated 24 VDC or 12 VDC excitation power for pressure transmitters and frequency sensors. **Transducer and Sensor Interface:** • The DAS shall be compatible with high-pressure transducers suitable for oilfield/fracturing applications, having the following general characteristics: • Supply voltage range: 8–30 VDC • Output signal: 4–20 mA • Pressure measurement range: up to 15,000 psi • The DAS shall also be capable of interfacing with flow measurement devices (e.g., turbine flowmeters) having frequency output signals, with supply voltage provided from the DAS. • Provision shall be made for acquiring proppant concentration, slurry density, and other blender parameters via a suitable digital communication link with the blender unit. **Scope of Supply with DAS:** • A suitable number of high-pressure transducers (minimum six or as per project requirement) with ranges appropriate for fracturing applications. • Corresponding instrument cables (approx. 50 m length each, supplied on portable cable reels) for connection of transducers to the DAS. • One turbine flowmeter for measuring pump discharge flow rate. The data acquisition system shall be equipped with totalizer of the flow that is being measured. **System Configuration:**	

<table>
<tr><th>Clause No.</th><th>Clause Description</th><th>Bidder's Response</th></tr>
<tr><td></td><td>• The DAS shall support dual power supply modes:
• Direct 12 VDC input, and
• 230 VAC input with inbuilt AC–DC conversion.
• The operator interface shall be based on an industrial laptop/PC architecture, with latest-generation CPU, SSD storage, Windows-based operating system, 14" or larger high-bright display, and provision for real-time monitoring, data recording, and reporting.</td><td></td></tr>
<tr><td>v)</td><td>The Data Acquisition System will feature data retrieval capability via laptop or pen drive or Ethernet.</td><td></td></tr>
<tr><td>7.3</td><td>ILLUMINATION:</td><td></td></tr>
<tr><td>i)</td><td>The unit should have an inbuilt electrical system to provide sufficient LED Light illumination to enable emergency operation during night hour operations. At least six flood lights (2 at front, 2 nos. at rear and 2 nos. near Middle of the unit) shall be provided in the unit for all round illumination.</td><td></td></tr>
<tr><td>ii)</td><td>These lamps should have independent individual switches with the master switch located at the operation control panel. These lights should be mounted in such a way they can be rotated as per requirement.</td><td></td></tr>
<tr><td>iii)</td><td>The lights should be protected with an outer detachable cover to prevent them from physical damage.</td><td></td></tr>
<tr><td>8.0</td><td>TREATING IRON</td><td></td></tr>
<tr><td>i)</td><td>All Treating iron should be of SPM/ FMC / MSI/ PARVEEN/ Alnas</td><td></td></tr>
<tr><td>ii)</td><td>High pressure treating iron and low-pressure appliances should be mounted on the truck with a rack and hanger / tool box.</td><td></td></tr>
<tr><td>iii)</td><td>The following items are to be supplied with this unit:</td><td></td></tr>
<tr><td></td><td>Items — Quantity (Nos)</td><td></td></tr>
<tr><td>1.</td><td>Pressure relief valve pressure setting up to 15000 psi 2" FIG 502 M — 4</td><td></td></tr>
<tr><td>2.</td><td>Pressure relief valve pressure setting up to 15000 psi 3" FIG 1502 M — 4</td><td></td></tr>
<tr><td>3.</td><td>3" long sweep swivel joint style 10 with (M X F) FIG 1502 unions: — 12</td><td></td></tr>
<tr><td>4.</td><td>3" long sweep swivel joint style 50 with (M X F) FIG 1502 unions — 12</td><td></td></tr>
<tr><td>5.</td><td>2" long sweep swivel joint style 50 with (MXF) FIG 1502 unions — 12</td><td></td></tr>
<tr><td>6.</td><td>2" long sweep swivel joint style 10 with (MXF) FIG 1502 unions — 12</td><td></td></tr>
<tr><td>7.</td><td>3" stream flow check valves will be of clapper type standard flow without needle valve. The needle valve may be installed on blind FIG 1502 female (drilled for ½" needle valve) with one "T" connection (3" x 2") with 2" hammer valves FIG 1502 — 6</td><td></td></tr>
</table>

Clause No.	Clause Description		Bidder's Response
8.	2" stream flow check valves will be of clapper type standard flow without needle valve. The needle valve may be installed on blind FIG 1502 female (drilled for ½" needle valve) with one "T" connection (3" x 2") with 2" hammer valves FIG 1502	**6**	
9.	3" plug valve c/w FIG 1502 w/p 15000psi	**12**	
10.	2" x 2" plug valve c/w Fig1502 MXF w/p 15000 psi	**12**	
11.	2" x 2" x 2" Y connection MxFxF FIG 1502	**8**	
12.	2" x 2" x 2" T connection MxFxF FIG 1502	**4**	
13.	3" x 3" x 2" T connection MxFxF FIG 1502	**4**	
9.0	**UNITIZATION AND COMPLETION:**		
i)	The Frac Pumper should be supplied with data diagnostic kit for diagnosing the fault code of deck engine and transmission (if applicable). It shall preferably be a handheld reader having removable cartridges to support diagnosis of engine/ transmission. If a laptop is provided for the above, it should include software, adopters and other accessories with licensed installation software.		
ii)	The equipment described herein should be fabricated in accordance with industry accepted standards.		
iii)	Installation of all electrical systems. All wiring systems will be produced as moulded cables and recorded as system kits.		
iv)	Circuit protective device mechanism (Fuses) for local & remote-controlled panel. Resettable circuit breaker is also acceptable		
v)	The above unit should also confirm the following specification: a) Installation of all electrical system. b) Installation of work lights. c) Installation of all pneumatic system. d) Installation of all hydraulic system.		
vi)	The unit should be designed for stability and structural integrity at full loaded conditions.		
vii)	Workmanship should be of the best quality & appearance. The equipment shall be fabricated in accordance with industry accepted standards. Following is a partial list of examples: 1. Flame cut edges shall be ground smooth. 2. Sharp corners and edges to which operators and mechanics are vulnerable shall be ground smooth. 3. Bolt holes for bolts shall be drilled (not torch cut) 4. Welds shall be of good quality and sufficient strength. 5. No sweated or brazed type hydraulic fittings will be used. 6. Where applicable use self-locking nut. 7. All hoses should be supported with support type clamps. 8. All hoses should be protected by well-secured rubber sleeves to prevent rubbing by frame etc.		

Clause No.	Clause Description	Bidder's Response
	9. All hosing and wiring will be labelled or tagged on both ends for easy identification. 10. All hosing or wiring in close proximity with hot surfaces (i.e. engine exhaust manifold) will be secured to a heat- shielded cable mount. 11. Hydraulic reservoirs should be completed with sight level gauge, clean outs, vent fill cap etc. 12. All hydraulic hoses, air hoses, electric lines etc. should be covered with protective sheathing where they come into contact with the hard surfaces that may cause premature wear due to chaffing or vibration. 13. Access steps with grab handles should be located at convenient locations around the unit. 14. Access ladder for radiator fill. 15. All hoses & wiring should be protected, easily accessible & symmetrically for easy identification & maintenance. 16. All reservoirs should be constructed of steel plate with sight level gauge, clean out, vent fill cap etc. 17. The complete testing of unit should be done at the manufacturer's factory & certificate should be produced. 18. Special instruments / attachments for setting user settable meter configuration parameters are to be provided. 19. Gps hardware	
viii)	All steel & miscellaneous fittings to complete the unit	
ix)	This should include the following items: a) Installation of all other electrical systems (all electrical systems should be wired to a two pole two wire arrangement). b) Lights for twenty-four-hour operation (entire lighting system should be shipped packed to avoid breakage during shipment). c) Installation of all pneumatic systems. d) Installation of all hydraulic systems. e) Pipe, hose brackets and racks. f) All steel and miscellaneous fittings to complete the unit. g) Steel toolbox containing: 1) Pipe Wrench 12" size 2 Nos. 2) Pipe Wrench 18" size 2 Nos. 3) Pipe Wrench 24" size 2 Nos. 4) Pipe Wrench 36" size 1 No. 5) Vice Grip Pliers 1 No. 6) Adjustable Wrench 6", 8", 10" 2 Nos. each 7) 5lb Sledge Hammer 2 Nos. 8) 10lb Sledge Hammer 2 Nos. 9) Combination Wrench Set (3/8" to 1 ¼") 2 Sets 10) Hack Saw with 10 Blades 2 Nos. 11) Circuit testing light 1 No. 12) Heavy duty ½" drive socket set (3/8" to 1 ¼") 1 Set 13) 10 piece Allen set Wrench 2 Sets 14) Plain Screw Driver 6" x 10" 2 Sets 15) Philips Screw Driver 6" x 10" 2 Sets 16) Strap type filter Wrench 1 No. 17) Fluke 85 or above digital multi-meter 1no 18) Tool box for hand carrying tools with Pad lock 2 Nos. h) One set of tools for operations, routine maintenance of unit. i) Complete set of Special tools/wrenches for pump serving maintenance. j) Fire extinguisher (ABC Type)	

Clause No.	Clause Description	Bidder's Response
x)	A console for display / control of job in auto/Manual mode. A remote console to be provided in existing FRAC CONTROL CENTRE (datavan) with suitable inter connections and compatibility for the existing remote data acquisition system.	
xi)	OEM part number must be given along with supplier's part number for each and every sub assemblies.	
xii)	3 sets of catalogue to be supplied in both hard and soft copies for all installed components of the units along with the make and Model Part No. and Sl no. of assemblies , sub – assemblies.	
xiii)	Complete testing of the equipment at manufacturer's plant. Testing to be include all function tests and the operational testing of the unit. Copies of all relevant test documentation/certificates should be supplied	
xiv)	Supplied with each unit should be three (3) copies, in English, of a complete operating, maintenance (including sub-assemblies, instrument sensors, wiring diagrams etc) (Note: OEM part numbers will be supplied along with the Suppliers part numbers) with two (2) soft copies	
xv)	Special instruments / attachments for setting user settable meter configuration parameters are to be provided.	
xvi)	All hosing and wiring will be labelled or tagged on both ends for easy identification. All hosing or wiring in close proximity with hot surfaces (i.e. deck engine exhaust manifold) will be secured to a heat- shielded cable mount	
xvii)	Layout diagram of the units should be sent to OIL only for information during the engineering stages. However, the supplier need not to take any approval from OIL to proceed unitization as per their schedule.	
10.0	**PAINTING:**	
i)	Unit to be sand blasted wherever required, one coat of primer followed by two coats of paint as specified below:	
ii)	Frame and Control console: RED-315	
iii)	Rim and Cab Top: Gold-44753	
iv)	Bumper: Gold & Red Stripes	
v)	OIL logo (to be provided at the time of unit manufacturing)	
11.0	**SPARES:**	
11.1	**COMMISSIONING SPARES** The supplier has to supply all the spare parts free of cost, required for initial commissioning of the unit. All the consumables such as, lube oil, gear oil, hydraulic oil etc. except diesel fuel, required for commissioning should also be supplied.	
11.2	**OPERATIONAL CRITICAL SPARES:**	

Clause No.	Clause Description	Bidder's Response
	Spares as given **under Table 1** in specified quantity shall be supplied along with each Frac Pumper Trailer. Specific Description, quantity of each & every spares shall be indicated in the technical bid and Make, Part Nos. etc. shall be submitted along with the supply. Bidders shall include the price of these spares in the priced bid format. The bidder shall confirm in the technical bid that all spares given under **Table-1** will be supplied with the unit.	
a.	**AUTOMOBILE (TRAILER) SPARE PARTS LIST:** All spare parts for the Automobile (Trailer) in specified quantity as mentioned in **Table-1 / Section A** shall be supplied along with each Frac Pumper Trauler. Bidder / supplier to note that the spares mentioned in **Table-1 / Section (A)** to be supplied shall be additional to the items fitted in each unit. Specific description, Quantity etc. of each item shall clearly be indicated in the technical bid. Make, Part Nos. etc. of each item shall be submitted by the supplier along with the supply. In case any of the spares mentioned in **Table-1 / Section (A)** does not come as per bidder's design and the bidder has not quoted for such spares, the bidder shall clearly indicate the same. However, in case such spares are provided in the unit in future, the same shall be supplied by the bidder / supplier along with the supply without any extra cost to Oil India Limited (OIL).	
b.	**DECK ENGINE SPARES:** All spare parts for the DECK ENGINE in specified quantity as mentioned in **Table-1 / Section (B)** shall be supplied along with the supply. Bidder / supplier to note that the spares mentioned in **Table-1 / Section (B)** to be supplied shall be additional to the items fitted in each unit. Specific description, Quantity etc. of each item shall clearly be indicated in the technical bid. Make, Part Nos. etc. of each item shall be submitted by the supplier along with the supply. In case any of the spares mentioned in **Table-1 / Section (B)** does not come as per bidder's design and the bidder has not quoted for such spares, the bidder shall clearly indicate the same. However, in case such spares are provided in the unit in future, the same shall be supplied by the bidder / supplier along with the supply without any extra cost to Oil India Limited (OIL).	
c.	**PUMP SPARES:** All spare parts for the pump in specified quantity as mentioned in **Table-1 / Section (C)** shall be supplied along with the supply. Bidder / supplier to note that the spares mentioned in **Table-1 / Section (C)** to be supplied shall be additional to the items fitted in each unit.	

<table>
<tr><th>Clause No.</th><th>Clause Description</th><th>Bidder's Response</th></tr>
<tr><td></td><td>Specific description, Quantity etc. of each item shall clearly be indicated in the technical bid. Make, Part Nos. etc. of each item shall be submitted by the supplier along with the supply.

In case any of the spares mentioned in Table-1 / Section (C) does not come as per bidder's design and the bidder has not quoted for such spares, the bidder shall clearly indicate the same. However, in case such spares are provided in the unit in future, the same shall be supplied by the bidder / supplier along with the supply without any extra cost to Oil India Limited (OIL).</td><td></td></tr>
<tr><td>d.</td><td>INSTRUMENTATION & CONTROL SYSTEM:

All spare parts for the instrumentation & control system in specified quantity as mentioned in Table-1 / Section (D) shall be supplied along with the supply.

Bidder / supplier to note that the spares mentioned in Table-1 / Section (D) to be supplied shall be additional to the items fitted in each unit.

Specific description, Quantity etc. of each item shall clearly be indicated in the technical bid. Make, Part Nos. etc. of each item shall be submitted by the supplier along with the supply.

In case any of the spares mentioned in Table-1 / Section (D) does not come as per bidder's design and the bidder has not quoted for such spares, the bidder shall clearly indicate the same. However, in case such spares are provided in the unit in future, the same shall be supplied by the bidder / supplier along with the supply without any extra cost to Oil India Limited (OIL).</td><td></td></tr>
<tr><td>11.3</td><td>RECOMMENDED SPARES:</td><td></td></tr>
<tr><td></td><td>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 without price of each item. Annual consumption of each spare should be furnished. The bidder should 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 and e-mail id of OEM for all items of the whole unit.

The bidder has to submit a complete spare parts list for the whole unit subgrouping major component in the following format as shown with example:

<table>
<tr><th>Name of the component /Sub com.</th><th>Description of the item</th><th>Part no./ID no. of item</th><th>Frequency of replacement (in Hours / Day)</th><th>Make</th></tr>
<tr><td></td><td></td><td></td><td></td><td></td></tr>
</table></td><td></td></tr>
</table>

Clause No.	Clause Description	Bidder's Response
12.0	**UNDERTAKING**:	
a.	The bidders must submit a written undertaking (along with the technical bid) that they, themselves or through other sources, would be able to supply all the requisite spares (including bought out items, if any) & consumables and provide the maintenance services of their offered unit in OIL's operational areas for a minimum period of fifteen (15) years from the Certified date of completion of successful field commissioning of the unit. The cost of such spares, consumables & maintenance services which may be utilized by Oil India Limited in future **(beyond Warranty period and O&M Period**) shall be extra and **SHALL NOT BE** considered by the bidder in their quoted prices in this tender. Spares & repair services during Warranty period & warranty extension period (if any) for the item(s) under Warranty claim (if any) of the unit(s) shall be in the scope of the successful bidder (supplier).	
13.0	**TECHNICAL MANUALS, CATALOGUES AND CERTIFICATION FOR OPERATION AND MAINTENANCE OF THE UNIT:** The following Manuals & Catalogues (in English language) shall be supplied along with the Trailer Frac Pumper unit. Manuals/ Part Catalogues provided shall be Custom Illustrated Manuals/Catalogues for the vehicle and equipment only, not a general Composite Manual/Catalogue. The manuals supplied should be specific to the make / model of the equipment / part / components supplied in the Trailer Frac Pumper unit. In case a comprehensive OEM catalogue is supplied of the equipment / part / components, then the respective make / model of the equipment / part / components supplied in the Trailer Frac Pumper unit should be clearly marked / identified. The bidder/supplier has to exhibit the Hard copy / soft copy of Parts Catalogue and Maintenance / Service Manual of Trailer Frac Pumper unit to the Pre despatch Inspection Team of Oil India Limited and handover soft copies to the Pre Despatch Inspection team of Oil India Ltd. The Hard copy of the Parts Catalogue and Maintenance / Service Manual of Trailer Frac Pumper unit may be submitted to Oil India Ltd along with the supply. The bidder has to submit a declaration along with the bid in this regard as per Annexure A1. Bidder to confirm that the following will be provided along with supply:	
1.	Preferably, 01 (One) set of Spare Parts Catalogue with Part Numbers and Workshop & Service Manual for all components / systems of Trailer like Trailer Axles, Brake System, Trailer Suspension, Electrical & Pneumatic Systems etc. All the manuals & catalogues shall contain only those components/systems that have been used in the unit i.e. the same must be CUSTOM ILLUSTRATED MANUALS/ CATALOGUES ONLY – not the generalized ones. The Spare Parts Catalogue with Part Numbers and Workshop & Service Manual shall be provided by the supplier in any one of the following forms: (a) Hard copy format (i.e. in printed form)	

Clause No.	Clause Description	Bidder's Response
	OR (b) Soft copy format (i.e. in USB drive) The bidder/supplier has to exhibit the Hard copy / soft copy of Parts Catalogue and Maintenance / Service Manual of Frac Pumper Trailer to the Pre despatch Inspection Team of Oil India Limited and handover soft copies to the Pre Despatch Inspection team of Oil India Ltd. The Hard copy of the Parts Catalogue and Maintenance / Service Manual of-Tractor / Prime Mover may be submitted to Oil India Ltd along with the supply. The bidder has to submit a declaration along with the bid in this regard as per Annexure A1.	
2.	03 (Three) sets of Operational manuals of the unit with categorical steps to operate the unit by an operator along with the functionality for each control switches, etc. and the operating range of the control parameters to be provided.	
3.	Supplier to supply 03 (Three) Sets of OEM's operation, maintenance and overhauling manuals of supplied models of Deck Engine, Pumps and all other sub-assemblies and their corresponding Spare part catalogue.	
4.	03 (Three) sets of the following schematics, layout drawings not limited to i. Equipment layout ii. Process flow drawing iii. Electrical, pneumatic and hydraulic schematic for operator panel are to be provided. iv. Control Panel wiring diagram, Termination panel details, Panel BOM with name of OEM & their part numbers.	
5.	The layout diagram of each system must enlist the components in it along with technical detail (Nomenclature).	
6.	All the components should also have nameplate embossed indicating original equipment manufacturer of these components, Make / Model their Part No., Sl No. and possible details as per industry standards. Wherever the mounting of the nameplate is not possible such detail must be made on layout sheet of the system in which the component is installed. This is not required for components pertaining to Automobile (i.e. Trailer) portion.	
7.	The O&M manuals and the spare part lists (three sets) to be provided in hard copy as well as in a soft copy. This is not required for components pertaining to Automobile (i.e. Trailer) portion.	
8.	Lubrication and Fluids: Lubrication fluids chart (permanent attached to Unit) should be provided listing fluids, lubricants and filter types which are required by the Equipment. Fluids should be identified by generic name (i.e., hydraulic oil) near the fill port for each fluid. The lettering should be in English, and colour should be black on a white or stainless-steel background. This is not required for components pertaining to Automobile (i.e. Trailer) portion.	

Clause No.	Clause Description	Bidder's Response
9.	Control Panel drawings with complete/ comprehensive Bill of Materials (BOM) with name of OEM & their part numbers.	
10.	Instrumentation wiring diagrams with end-to-end termination details.	
11.	The necessary licensed software in original packages along with user software backups are also to be supplied.	
NOTE	**COMMISSIONING OF THE UNIT SHALL NOT BE CONSIDERED AS COMPLETE UNTIL & UNLESS ALL ABOVE PRINTED MANUALS / CATALOGUES ARE SUPPLIED** Soft copies of documents shall also be acceptable for components pertaining to Automobile (i.e. Trailer) portion.	
14.0	**Document(s) to be submitted along with the supply of each unit for government Registration etc.:** Following documents shall be submitted by the supplier along with the supply as mentioned hereunder:	
1.	Invoice(s) in the name of Oil India Limited, Duliajan, Assam-786602 in original. Notwithstanding any clause mentioned elsewhere in the NIT/tender, the Invoice for each of the complete unit shall be submitted in 02 (two) parts separately as under for registration purpose: i. Invoice for the Frac pumper Trailer unit with all items, components, machineries, equipment, tools, etc. fitted permanently on the Trailer unit. ii. Invoice for items, spares, accessories etc. supplied separately along with the complete unit. **Note: 1.** Trailer Chassis Number shall be mentioned in invoice(s) against above Sl. No. (ii).	
2.	Sale Certificate for Trailer of Frac Pumper unit (Form-21) in original. The documents shall be in the name of Oil India Limited, Duliajan, Assam-786602, sample format as per Motor Vehicle Act, 1988 & Central Motor Vehicle Rules, 1989 of India provided.	
3.	Road-Worthiness Certificate for Compliance to Emission and Noise Standards for Trailer of Frac Pumper unit [Form-22, Form-22A (Part I), Form-22A (Part II)] in original. The documents shall be in the name of Oil India Limited, Duliajan, Assam-786602, sample format as per Motor Vehicle Act, 1988 & Central Motor Vehicle Rules, 1989 of India provided.	
4.	Certificate of Origin of the Frac pumper Trailer.	
5.	Pencil print of Vehicle Identification Number (VIN) i.e., Chassis Number of Trailer of the Frac pumper unit.	

Clause No.	Clause Description	Bidder's Response
6.	Certificate for the Trailer of the Frac pumper unit in original from Trailer manufacturer. Amongst others, the certificate shall contain following information: (i) Make & Model of Trailer. (ii) Vehicle Identification Number (VIN) i.e. Chassis Number of the Trailer. (iii) Month & Year of Manufacture of the Trailer.	
7.	Type Approval Certificate of Trailer of Frac Pumper unit as per Clause No. 2.12.	
8.	Technical drawing of the Frac Pumper Trailer indicating the Centre of Gravity, length, width, height, angle of approach, angle of departure etc.	
15.0	**HOMOLOGATION, UPLOADING OF VEHICLE DATABASE IN VAHAN / PARIVAHAN PORTAL, REGISTRATION OF THE TRAILER, PRINTING OF HSRP (High Security Registration Plate) , UPLOADING OF LID OF HSRP IN APPROPRIATE PORTAL** The bidder shall categorically confirm their compliance of the following clauses in the technical bid:	
a.	**In case the Trailer is manufactured outside India.** The vehicle details of Trailer in relevant VAHAN / Homologation / Parivahan portal of Ministry of Road Transport & Highways (MoRTH), Government of India shall be dealt by the bidder as per the applicable guidelines of Ministry of Road Transport & Highways (MoRTH) / Director General of Foreign Trade, Government of India at the time of supply. Homologation and uploading of vehicle data (i.e. Make, Model, Chassis Number) in VAHAN / PARIVAHAN portal by providing the requisite documents is under the scope of the successful bidder. **Temporary Registration (if required) and Permanent Registration in local RTO (Rgional Transport Office) of the Govt of Assam is under the scope of successful bidder**. The documents pertaining to Oil India Ltd shall only be provided by Oil India Limited. All other documents/ certificates pertaining to the vehicle shall be provided / submitted by the bidder. The cost of permanent registration in the form of Registration fee and initial Road tax to the Government of Assam shall be borne by the successful bidder. However, this cost will be reimbursed to the bidder on submission of Government Receipt as proof.	
b.	**In case the Trailer is manufactured in India** The bidder (supplier) shall be responsible and ensure that the vehicle details of Trailer are available in the relevant VAHAN / Parivahan portal of Ministry of Road Transport & Highways (MoRTH), Government of India in accordance with Motor Vehicle Act, 1988 & Central Motors Vehicles Rules, 1989 of India prior to delivery of the unit(s) to Oil India Limited. If the vehicle details are not available in VAHAN portal, it shall be the responsibility of the bidder to upload the same in VAHAN portal. Then the supplier shall arrange for temporary registration (if required) and **Permanent Registration in local RTO (Rgional Transport Office) of the Govt of Assam**. The documents pertaining to Oil India Ltd shall only be provided by Oil India Limited. All other documents/ certificates pertaining to	

Clause No.	Clause Description	Bidder's Response
	the vehicle shall be provided / submitted by the bidder. The cost of permanent registration in the form of Registration fee and initial Road tax to the Government of Assam shall be borne by the successful bidder. However, this cost will be reimbursed to the bidder on submission of Government Receipt as proof.	
15.1	Each Frac Pumper Trailer has to be registered separately. Combined registration of frac Pumper Trailer with any of the Tractor shall not be accepted.	
15.2	Cost of Registration is **not to be considered** by the bidder while quoting their prices against this tender.	
16.0	**HIGH SECURITY REGISTRATION PLATE (HSRP):** On receipt of the government Registration Number, the supplier (successful bidder) shall supply the High Security Registration Plate (HSRP) through the Original Equipment Manufacturers of motor vehicle / dealer / any one of the agencies authorised by the Government of India / Assam to issue the High Security Registration Plate (HSRP) of each units. The supplier shall ensure to upload the HSRP details in relevant (FTA / HSRP) portal enabling the DTO / Oil India Ltd to issue download permanent Registration Certificate for the vehicle(s) as required for road drive of the vehicle. The cost of High Security Registration Plate (HSRP) shall be borne by the supplier (successful bidder). Bidder / supplier shall also ensure adherence to any subsequent revisions to the referred requirements that may be issued in future by Ministry of Road Transport & Highways (MoRTH), Government of India.	
17.0	**DEVIATIONS FROM THE SPECIFICATIONS:** The bidder shall enclose comprehensive list of intended deviations from the technical specifications, clearly highlighting the reasons thereof, if any, sufficiently prior to Bid closing date & time for Tender amendment, etc. But OIL reserves the right for acceptance or rejection of the deviation(s).	
18.0	**BID SUBMISSION & DOCUMENTATIONS:** Bidders should submit their bids in the above tabular form mentioning their offered specification, Make, Model, necessary data, submitted/not submitted/ complied/not complied etc. as applicable to all the NIT terms and conditions including submitting the documents, leaflets as specified. Other details, if any, the bidder may mention the same by adding additional row(s)/separate sheet as the case may be. Bidder's response to all NIT stipulations should 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 acceptable. 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.	
18.1	**Following documents shall be submitted along with technical bid for evaluation –**	

ANNEXURE-B

Clause No.	Clause Description	Bidder's Response
1.	Technical leaflets with detailed specifications, Trailer axle, Trailer suspension, brake, different equipment of Frac pumper etc. as per respective individual tender clauses.	
2.	GA (General Arrangement) drawing of the Frac Pumper Trailer. The GA drawing shall have mention of major dimensions of Frac Pumper Trailer (like length, height, width, etc.); estimated loading on individual axles of Rear Trailer (when combined with offered Trailer unit); show the position of all major components & their mounting.	
3.	Undertaking(s) for supply of spares and service as per clauses mentioned elsewhere in the tender document.	
4.	Specific description, quantity etc. of each and every spares (for bid evaluation) as detailed in the Operational Critical Spares List provided in **clause 12.2 above** & Table-1 below.	
5.	List of Recommended Spares**.**	
6.	Checklist as per enclosed format shall be furnished along with the bid.	
7.	Any other document as applicable against clauses of this tender document.	

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TABLE-1: Ref. Clause No. 12.2 OPERATIONAL CRITICAL SPARES:

Total no. of Trailer Frac Pumper units: 06 (six) nos.

SECTION (A): AUTOMOBILE SPARE PARTS LIST:

AUTOMOBILE SPARE PARTS LIST for TRAILER

Sl. No.	Item Description	Qty. for 01 No. unit	Total Qty. for 06 Nos. units
A	**B**	**C**	**D = C x 6**
A.	**TRAILER AXLE:**		
1.	Wheel Stud with Nuts (Right Side) (Each set shall comprise of all the studs & nuts for one wheel)	02 Sets.	12 Sets.
2.	Wheel Stud with Nuts (Left Side) (Each set shall comprise of all the studs & nuts for one wheel)	02 Sets.	12 Sets.
3.	Wheel Hub Bearing (Right Side)	06 Nos.	36 Nos.
4.	Wheel Hub Bearing (Left Side)	06 Nos.	36 Nos.
5.	Wheel Rim (Right Side)	03 Nos.	18 Nos.
6.	Wheel Rim (Left Side)	03 Nos.	18 Nos.
7a.	In case of Tube type Tyres: Tyre with Tube	03 Nos.	18 Nos.
7b.	In case of Tubeless type Tyres: Tubeless Tyre	03 Nos.	18 Nos.
B.	**TRAILER BRAKES:**		
1.	Brake Servo Assembly - Trailer Wheel	04 Nos.	24 Nos.
9.	Brake Shoe Assembly - Trailer Wheel	16 Nos.	96 Nos.

SECTION (B): DECK ENGINE:

Sl. No.	Item Description	Qty. for 01 No. unit	Total Qty. for 06 Nos. units
A	**B**	**C**	**D = C x 6**
1.	Fuel Filter Element	10 Sets.	60 Sets
2.	Water Separator Filter Element	10 Nos.	60 Nos.
3.	Engine Oil Filter Element -	10 set.	60 sets.
4.	Air Filter Element -	10 Nos.	60 Nos.
5.	Fan Belt/ Alternator Belt/ Compressor Belt	02 Sets.	12 Sets.
6.	Water Pump Repair Kit	01 Set.	06 Set.
7.	Radiator Water Hose	3 nos.	18 nos.
8.	Fuel Injector set	01 Set	06 Set
9.	Fuel Pump Assembly	01 No.	06 Nos.
10.	Fuel Pump Repair Kit	01 Set	06 Set
11.	Lube oil pump and distribution system	01 Set	06 Set
12.	Air cleaners & Air dryer assembly	01 Set	06 Set
13.	Engine Electric Starter Assembly	01 No.	06 No.
14.	Battery Charging Alternator Assembly	01 No.	06 No.

SECTION (C): PUMP SPARES LIST:

Sl. No.	Item Description	Qty. for 01 No. unit	Total Qty. for 06 Nos. units
A	**B**	**C**	**D = C x 6**
1.	**Pump repair kit containing the following:**		
i.	Bearing oil seal	01 No. each for DE & NDE.	06 Nos. each for DE & NDE.
ii.	Suction valve cover gasket	06 Nos. each.	36 Nos. each.
iii.	Discharge valve cover gasket	06 Nos. each.	36 Nos. each.
iv.	Packing, oil stop head	06 Sets.	36 Sets.
v.	Seal, suction to fluid cylinder	06 Sets.	36 Sets.
2.	Plunger	03 Nos.	18 Nos.
3.	Stuffing box	03 Nos.	18 Nos.
4.	Stuffing Box Seal	12 Nos.	72 Nos.
5.	**Complete Fluid Valve assy. including valve seat, spring etc.**		
i.	Suction valve assy.	06 Nos.	36 Nos.
ii.	Discharge valve assy	06 Nos.	36 Nos.
6.	**Fluid Valve with inserts as applicable,**		
i.	Suction	06 Nos.	36 Nos.
ii.	Discharge	06 Nos.	36 Nos.
7.	Complete packing assembly	12 Nos.	72 Nos.
8.	Complete Packing rings set	12 Sets	72 Sets
9.	Valve spring, suction and discharge	03 Nos. each.	18 Nos. each
10.	Pump lube oil filter	04 Nos.	24 Nos.
11.	Packing Nut	04 Nos.	24 Nos.
12.	Header Ring	03 Nos.	18 Nos.
13.	Pressure Ring	06 Nos.	36 Nos.
14.	Transmission oil filter	04 Nos.	24 Nos.
15.	Heavy duty Pressure gauge	02 Nos.	12 Nos.

SECTION (D): INSTRUMENTATION & CONTROL SYSTEM SPARES LIST:

More Spare if required to be incorporated:

Sl. No.	Item Description	Qty. for 01 No. unit	Total Qty. for 06 Nos. units
A	**B**	**C**	**D = C x 6**
1.	All Temperature Sensors	02 each type.	12 each type
2.	All Pressure Sensors	02 each type.	12 each type
3.	Controller	01 No.	06 Nos.
4.	All Pressure Gauges	01 each type.	06 each type.
5.	All Temperature Gauges	01 each type.	06 each type
6.	Inverter	01 No.	06 Nos.
7.	SMPS	01 No.	06 Nos.
8.	Solenoid Valves	01 each type.	06 each type
9.	Toggle Switch	5 Nos.	30 Nos.
10.	Emergency Shutdown Switch	02 Nos	12 each type

Note:

1. All spares in specified quantity as indicated above shall be supplied along with the supply of the units.

2. Specific description, Quantity etc. of each item shall clearly be indicated in the technical bid. Make, Part Nos. etc. of each item shall be submitted by the supplier along with the supply.

3. Bidder shall also quote separately (without prices) 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.
4. If any spares mentioned in above Tables is / are not required, the bidder must mentioned that the spares do not require for the unit.

5. In case the multiple quantity of an item named above is used in the Automobile portion (i.e. Trailer) of the Frac Pumper Unit and the specifications of such item does not match with each other, then the supplier shall supply such item in a mixed manner comprising all the variants used in the Automobile portion (i.e. Trailer) of the Frac Pumper Unit. The supplier shall first try to supply all the variants of such item preferably in equal/proportional quantity of each of the variant used in the Automobile portion (i.e. Trailer) of the Frac Pumper Unit as far as possible. However, the total quantity of such item to be supplied must not be less than the quantity mentioned in above.

6. In case the specifications of the item named above used in left & right side of the Axle System / Suspension System / Brake System of the Automobile portion (i.e. Trailer) of the Frac Pumper Unit does not match with each other of that particular system, the supplier shall first try to supply all the variants of such item preferably in equal/proportional quantity of each of the variant used in the Automobile portion (i.e. Trailer) of the Frac Pumper Unit as far as possible. However, the total quantity of such item to be supplied must not be less than the quantity mentioned in above.

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ANNEXURE-B

Annexure- A1

To-

Oil India Limited,
Duliajan, Assam, India

Sub: Undertaking / Declaration regarding Type Approval Certificate, Parts Catalogue, Maintenance / Service Manual of OIL's Inhouse Hydraulic Fracturing Fleet.

Ref: Tender No. for Supply of Hydraulic Fracturing Unit.

We M/s _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ do hereby declare that we shall produce the following at the time of Pre Despatch Inspection of Hydraulic Fracturing Fleet at our premise-

1) Type Approval Certificates (Hard copy) of-

a) Tractor / Prime Mover
b) Trailers of Frac Pumpers
c) Trailer of Blender Unit
d) Trailer of Hydration Unit
e) Trailer of Frac Data Van
f) Truck Chassis of Sand Dumper

Photocopies / Softcopies (scan copy) of the above Type Approval Certificates will be handed over to Pre Despatch Inspection Team of Oil India Ltd

2) **Hard copy / soft copy of Parts Catalogue and Maintenance / Service Manual of-**

a) Tractor / Prime Mover
b) Trailers of Frac Pumpers
c) Trailer of Blender Unit
d) Trailer of Hydration Unit
e) Trailer of Frac Data Van
f) Truck mounted Sand Dumper

Soft copies of the above will be handed over to Pre Despatch Inspection Team of Oil India Ltd

M/s _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
(Name of Bidder)

A. REF. CLAUSE NO. 18.0 / 2.

SAMPLE COPY OF FORM- 21 (as referred above)

Following is a sample copy of **FORM 21** of Indian Motor Vehicle Act only. The certificate shall contain following minimum information –

FORM 21
[See Rules 47 (a) and (d)]
SALE CERTIFICATE

(To be issued by manufacturer ~~or dealer or registered E-rickshaw or E-cart Association (in case of E-rickshaw or E-cart) 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 **OIL INDIA LIMITED** against Purchase Order No. .....

Name of the buyer **OIL INDIA LIMITED**
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 number ~~or motor number in case of Battery Operated vehicles~~	.....
5.	Engine ~~or Motor~~ Power	.....
6.	Cubic capacity	.....
7.	Fuel used	.....
8.	Number of cylinders	.....
9.	Month and year of manufacture	.....
10.	Seating capacity (including driver)	.....
11.	Unladen Weight	.....
12.	Maximum axle weight and number and description of tyres ~~(in case of transport vehicles)~~	.....
a.	Front axle	.....
b.	Rear axle	.....
c.	Any other axle	.....
d.	Tandem axle	.....
13.	Colour	.....
14.	Gross Vehicle Weight Rating	.....
15.	Type of body	.....
16.	Wheelbase	.....

(Signature of the manufacturer ~~or dealer or officer of Defence Department or registered E-rickshaw or E-cart Association~~)

*Strike out whichever is inapplicable.

B. REF. CLAUSE NO. 18.0 / 3.

SAMPLE COPY OF FORM- 22 (as referred above)

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

FORM-22
[See rules 47(1) (g)]
ROAD-WORTHINESS CERTIFICATE FOR
COMPLIANCE TO EMISSION AND NOISE STANDARDS
(To be issued by the manufacturer along with the vehicle)

It is certified that the following vehicle complies with the provisions of the Motor Vehicles Act, 1988 and rules made thereunder or international standard namely EEC / ECE Regulations:

1. Model/Commercial Name of the vehicle: .....
2. Chassis Number: .....
   [Example: Vehicle Identification Number (VIN)]
3. Engine ~~or Motor~~ Number: .....
4. Applicable Emission Norms: .....
5. Emission, Sound Level for Horn and Pass by noise values of the above vehicle model, obtained during Type Approval Testing as per Central Motor Vehicles Rules, 1989 or ECE/EEC Regulations are given below:

i. Type Approval Certificate No.: .....
ii. Type of Fuel: .....
iii. Emission values for vehicle: .....

TABLE
Positive Ignition Engine or Compression Ignition Engine Vehicle

Sr. No.	Pollutant (as applicable)	Units (as applicable)	Value (upto 3 Decimal places)
(1)	(2)	(3)	(4)
1.	Carbon Monoxide (CO)	mg/km or mg/kWh or g/kWh	
2.	Hydrocarbon (THC/HC)	mg/km or mg/kWh or g/kWh	
3.	Non-Methane Hydrocarbon (NMHC)	mg/km or mg/kWh or g/kWh	
4.	Oxides of Nitrogen (NOx)	mg/km or mg/kWh or g/kWh	
5a.	HC+NOx	mg/km or mg/kWh or g/kWh	
5b.	THC+NOx	mg/km or mg/kWh or g/kWh	
6.	Methane (CH4)	mg/kWh	
7.	Ammonia (NH3)	PPM	
8.	Mass of Particulate Matter (PM)	mg/km or mg/kWh or g/kWh	
9.	Number of Particles (PN)	Numbers/km or Numbers/kWh	

iv. Noise level (as applicable):

a. Horn (for all vehicles other than agricultural tractors and construction equipment vehicles) as installed on the vehicle: ..... dB (A); (upto 1 decimal place)

b. Pass by or Bystander's position: ..... dB(A)

~~c. Driver perceived or Operator's ear level (as applicable for agricultural tractors and construction equipment vehicles: ..... dB (A)~~

(Facsimile Signature of Manufacturer)

Note 1: This Form shall be issued with signature of the manufacturer duly printed in the Form itself by affixing facsimile signature in ink under the hand and seal, as applicable.

Note 2: In case of multiple combinations, values pertaining to any one test result in the test report to be provided. For V2, V3 cases- average value of the test result in the test report to be provided.

Note 3: While printing Form 22, the relevant pollutants in the table as applicable for the subject vehicles may only be listed.

C. REF. CLAUSE NO. 18.0 / 3.
SAMPLE COPY OF FORM 22-A

Following is a sample copy of **FORM 22-A (Part – I) & FORM 22-A (Part – II) of Indian Motor Vehicle Act** only. The certificate shall contain following minimum information. –

FORM 22-A
[See Rules 47 (g), 115, 124(2), 126-A and 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 the following vehicle complies with the provisions of the Motor Vehicles Act, 1988 and the rules made there under or international standard namely EEC / ECE Regulations, including the following mass emission norms:

1. Brand name of the vehicle : .....
2. Chassis number : .....
3. Engine number/~~Motor number (In case of battery operated vehicles)~~ : .....
4. Emission norms : .....

(Signature of 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.

FORM 22-A
[See Rules 47 (g), 115, 124(2), 126-A and 127]
INITIAL CERTIFICATE OF COMPLIANCE WITH POLLUTION STANDARDS, SAFETY STANDARDS OF COMPONENTS AND ROAD WORTHINESS
(FOR VEHICLES WHERE BODY IS FABRICATED SEPARATELY)
PART – II
(**TO BE ISSUED BY THE BODY BUILDER**)

Certified that body of the following vehicle has been fabricated by us and the same complies with the provisions of Motor Vehicles Act, 1988 and Rules made there under or international standard namely EEC / ECE Regulations:

1. Brand name of the vehicle : .....
2. Chassis number : .....
3. Engine number/~~Motor number (In case of battery operated vehicles)~~ : .....
4. ~~Bus Body Builder Accreditation Certificate Number~~ : .....

(Signature of 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.

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TECHNICAL SPECIFICATIONS FOR TRAILER MOUNTED FRAC CONTROL CENTRE UNIT (DATA VAN), QTY = 1 NO.

Note to bidder:

1. The bidder shall provide their response and mention applicable information/ Complied / Not Complied / Not Applicable / Make & Model etc. (as applicable) against individual clauses in this document.

2. The bidder shall mention details of Reference Document name / Serial number / Page number of bid for documentary evidence (if any).

3. The bidder shall submit the filled-up document along with their technical bid.

Technical Specifications

Clause No.	Clause Description	Bidder's Response
1.0	**GENERAL DETAILS:**	
	i) The scope of supply shall include a fully equipped, mobile Frac Control and Data Acquisition Trailer (Data Trailer), designed for on-site remote control and monitoring of up to eight (08) Frac Pumping Units, two (02) Frac Blenders, one (01) Hydration Unit, and one (01) Liquid Additive System (LAS). The Trailer shall be fully compatible with the control systems of the supplied equipments such that the Hydro Frac fleet is functionally and operationally complete. **ii) FRAC CONTROL CENTRE UNIT (DATA VAN)** unit (engineering and data acquisition unit) is a stand-alone data acquisition, communication, and control facility. This unit is designed to acquire frac operations data from well-site stimulation units and other independent sensors for monitoring job performance and creating reports. In addition, the unit is equipped with control systems to allow control of local units. All of this is done from a clean, weatherproof and comfortable workspace for oil/gas company personnel. iii) Data Van shall be a trailer mounted unit, with upgraded latest state of the art technology, for data acquisition and HF fleet units' remote control. The Trailer mounted Data Van unit shall be suitably designed detachable brand new **semi-trailer**, manufactured after issue of Oil India Limited (OIL)'s Purchase Order. The semi-trailer shall be mounted with all the Data Van machineries/ equipment, items as specified in the tender. The semi-trailer shall be coupled with any of the Tractor / Prime Mover as detailed elsewhere in the tender document. The Tractor Trailer combination vehicle should be suitable for driving over national highways, state highways, district roads, rural /village roads, non-grade road surfaces and for use in the rough, windy, marshy/waterlogged and dusty terrain oil and gas field environments found in the Indian Oilfields. **Note:** "Semi-trailer" means a Trailer, which is intended to be connected to a haulage Tractor and which is so constructed that a portion of it is superimposed on and apart of whose weight is borne by the haulage Tractor. iv) This unit shall be provided with essential computer hardware/software tools for onboard data acquisition allowing the equipment to monitor,	

Clause No.	Clause Description	Bidder's Response
	display, record and analyse the various pumping and well parameters during fracturing, acidizing, foamed fracturing and other pumping operations. v) The unit with upgraded latest state of the art technology improved version will be acceptable for the basic configuration, accessories, instrumentation, control etc. without affecting the main frame of specification. vi) The unit shall be designed with suitable Noise, Vibration and Harshness (NVH) considerations considering the delicate instrumentation and electronics inside the data van. vii) The unit shall be capable of operating during prolonged periods in climatic conditions with an ambient temperature range of 0 °C to +50° C and for use in the rough, windy, humid (relative humidity range from 40 – 98%), and dusty environments found in the Indian oilfields. viii) The components to be incorporated into this model should be so arranged to provide reasonable access for maintenance & ease of operation. Storage device for related accessories & commonly used auxiliary equipment should be provided. ix) The bidder/supplier shall ensure adequate gap between Trailer deck and Trailer wheels, so as to ensure that the Trailer wheels do not touch the body of deck of the Trailer or any other machineries/equipment mounted on the Trailer while crossing speed breakers, potholes or any other uneven surface.	
2.0	**EQUIPMENT DETAILS:**	
2.1	**DIMENSIONS & WEIGHT OF DATA VAN TRAILER**	
a.	**Length of each Data Van Trailer:** As per design. However, the Length of each offered Data Van Trailer should be such that when coupled with Tractor / Prime Mover, the **overall length of Tractor and Data Van Trailer combination**, i.e., Tractor coupled with the Trailer does not exceed **18750 mm**.	
a.1	The bidder shall mention the length of each Data Van Trailer alone in the technical bid & the GA layout diagram.	
b.	**Width of each Data Van Trailer:** Shall not exceed **2600 mm.**	
b.1	The bidder shall mention the width of each Data Van Trailer alone in the technical bid & the GA layout diagram.	
c.	**Height of each Data Van Trailer:** Shall not exceed **4500 mm** from ground level.	
c.1	The bidder shall mention the height of each Data Van Trailer alone in the technical bid & the GA layout diagram.	
d.	**Weight (mass) of Data Van Trailer:** As per design.	

Clause No.	Clause Description	Bidder's Response
	However, the Total combination weight (mass) of Tractor and Data Van Trailer combination, i.e., Tractor coupled with the Trailer shall be within 55,000 kg.	
d.1	The bidder shall mention the weight (mass) of each Data Van Trailer (with equipment mounted) alone in the technical bid.	
e.	**GENERAL ARRANGERMENT (GA) DRAWING OF DATA VAN TRAILER:** The bidder shall submit GA (General Arrangement) drawing of the Data Van Trailer. The GA drawing shall have mention of major dimensions of Data Van Trailer (like length, height, width, etc.); estimated loading on individual Rear axles of Trailer (when combined with offered Tractor unit); showing the position of all major components & their mounting. The GA drawing of the Data Van Trailer shall be submitted along with the technical bid by the bidder.	
2.2	**CHASSIS FRAME:**	
a.	All welded construction, robust, heavy-duty chassis of steel frame suitably welded and cross braced at close pitch to withstand the maximum load. The chassis shall provide maximum structural performance in terms of load carrying capacity, bending moment & deflection, maximum tensional stability and long life. Skirt rails, wherever possible shall be provided along the length of the Trailer. The main Chassis frame beam shall be around 450 mm (in height) near the centre of the Trailer (when viewed from the rear of the Trailer) and the chassis frame beam is to be reinforced & adequately sized as per manufacturer's standard practice in suspension area etc. to bear the designed load.	
b.	The bidder shall mention & submit the following information in the technical bid: Details of the chassis frame beam drawing mentioning the size of the chassis frame beam offered.	
2.3	**TRAILER AXLES:**	
a.	Each Trailer shall be provided with 03 (three) Nos. of axles at rear of the Trailer as per design and meeting tender specifications. The Trailer axles shall be compatible with the brake system. The bidder/supplier shall offer Trailer axles with total axle capacity of the Trailer triaxle to meet the design requirement considering the total weight of the complete unit with equipment, handling fluids, etc. in all conditions: Bidder shall ensure that the loading on the Trailer axles shall be within the axle capacity of the Trailer triaxle in all conditions.	
b.	The bidder shall mention & submit the following information in the technical bid for each Data Van Trailer:	
(i)	Total number of Axles in the Trailer at rear.	
(ii)	Make & model of offered Trailer axles.	

Clause No.	Clause Description	Bidder's Response
(iii)	Total axle capacity of offered 03 Nos. of Trailer axles.	
(iv)	Estimated Total loading on Trailer triaxle. (in coupled condition with the Tractor)	
(v)	Total Loading on Trailer triaxle is within the axle capacity of Trailer triaxle in all conditions. (Yes / No).	
(vi)	Technical specification catalogue/brochure with technical details of the offered Trailer axles.	
2.4	**BRAKE SYSTEM:**	
a.	Pneumatic service brake system with ABS (anti-lock brake system) and parking brake system compatible with the Tractor shall be provided in the Trailer. The service brake system & parking brake system shall be operated from Tractor's driver Cabin. The brake system shall also have provision for applying brake automatically to the Trailer axles in case of accidental disconnection of the pneumatic connections. The trailer shall have control valve for synchronized braking of "tractor and trailer" to enhance the safety. The brake system shall have palm coupling for quick coupling and detaching the air connections with the Tractor unit. All brake components shall be compatible with axles offered.	
2.5	**TRAILER SUSPENSION:**	
a.	Heavy duty Trailer suspension system suitable for movement of Tractor & Data Van Trailer unit with full load in all types of road conditions typical to oilfield operation area/slushy plinths shall be provided. The suspension system shall be capable to bear the maximum designed load in all conditions.	
b.	The bidder shall mention & submit the following information in the technical bid:	
(i)	Type of offered Trailer Suspension.	
(ii)	Make & Model of offered Trailer Suspension.	
(iii)	Technical specification catalogue/ brochure with technical details of the offered Trailer suspension system.	
2.6	**TRAILER WHEELS & TYRES:**	
a.	The Trailer shall be fitted with suitable wheels with Tube type / Tubeless type Tyre of adequate ply rating. 02 (two) Nos. of wheels in each side of each axle i.e., total 04 (four) Nos. of wheels in each axle i.e., total 12 (twelve) Nos. of wheels in 03 Nos. of Trailer axles shall be provided as per design specifications.	

Clause No.	Clause Description	Bidder's Response
	If possible, Trailer wheels / tyres shall be interchangeable with the Tractor unit. Bidder is to look into the tyres of Tractor Unit while selecting the Trailer tyres and vice-versa for compatibility of the Tractor and the Trailer unit with each other, if possible.	
b.	The bidder shall mention & submit the following information in the technical bid for each Data Van Trailer:	
(i)	Total number of wheels in 03 Nos. of Trailer axles. (Axle-wise information to be provided).	
(ii)	Type of Tyres (Tube type / Tubeless type) in the Trailer axles.	
(iii)	Tyre size of Trailer axle wheels.	
2.7	**KINGPIN FOR COUPLING WITH TRACTOR UNIT:**	
	Suitable rubbing plate fully welded to the chassis frame and the **Kingpin of size not less than 3.5 inch** shall be provided. The make of the Kingpin shall be of ASHLEY /HYWA / TATA / JOST / VOLVO / YORK / PLHT/ GF / SAF / HOLLAND or any other make. Height of rubbing plate shall match with the "Fifth Wheel" height in all load conditions of any / each of the Tractor units for proper coupling and locking. Proper coupling & locking etc. of the Data Van Trailer with each of the Tractor unit is to be ensured by the bidder / prospective supplier. The Kingpin of each Data Van Trailer must be identical in all respect and compatible with each Tractor unit.	
b.	The bidder shall mention & submit the following information in the technical bid:	
(i)	Size of offered Trailer Kingpin.	
(ii)	Make & model of offered Trailer Kingpin.	
(iii)	Technical specification catalogue/ brochure with technical details of offered Trailer Kingpin.	
2.8	**LANDING GEAR:**	
a.	Retractable, mechanical type landing gear with sand-pad and having adequate capacity for taking the load on the Trailer when fully loaded shall be located conveniently at the front end of the Trailer. The make of the landing gear shall be of HYWA/ JOST / YORK / PLHT/ GF / SAF / HOLLAND or any other make with capacity as per design. The landing gear shall be so positioned that there is sufficient clearance behind the rear end of the Tractor unit, and it does not fault with the Tractor while taking the shortest turn.	
b.	The bidder shall mention & submit the following information in the technical bid:	
(i)	Make & model of offered Landing Gear.	

Clause No.	Clause Description	Bidder's Response
(ii)	Capacity of offered Landing Gear.	
(iii)	Technical specification catalogue/ brochure of the offered Landing Gear.	
2.9	**ELECTRICAL EQUIPMENT:**	
a.	Electrical system compatible with the electrical system of the offered Tractor unit shall be provided in the Trailer for road drive. Easily disconnectable electrical connections with the Tractor unit shall be provided.	
2.10	**TRAILER DECK:**	
a.	All welded steel construction with not less than 5mm thick MS chequered plate Trailer deck shall be provided, wherever feasible as per design. Trailer decks shall be of non-slip type.	
2.11	**PAINTING:**	
a.	Surface preparation through shot blasting. Minimum two coats of Zinc rich metal primer shall be applied. Minimum two final coats of suitable paint shall be applied. Note: Surface primer, paints shall be suitable for corrosive handling fluids etc. used in oil & gas industry.	
2.12	**TYPE APPROVAL CERTIFICATE OF THE DATA VAN TRAILER:**	
a.	Type Approval Certificate of vehicle is required for the following activities in India: i) **Custom clearance** of the vehicle as per import policy conditions / guidelines of India Chapter-87 of ITC (HS), 2022, Schedule 1- Import Policy, Section: XVII, in case of imported vehicle from other countries to India. ii) **Homologation** (the formal process by which an official authority certifies that a product, especially a vehicle, meets specific regulatory standards for safety, performance, and environmental impact before it can be sold or used in a particular market/ region) / **Uploading the vehicle details in the relevant Government of India portal (VAHAN/ Parivahan portal**) for **registration** of vehicle as per Motor Vehicle Act, 1988 & Central Motor Vehicle Rules, 1989 of India which is mandatory for plying of the vehicle in roads in India.	
b.	In case the offered Trailer is manufactured in India, the offered Trailer shall be compliant to Central Motor Vehicle Rules 1989 of India and its amendments. In case the offered Trailer is imported from other countries to India, the offered Trailer shall be compliant with the import policy of Government of India. In both the case i.e. manufactured in India and imported from other countries to India, the bidder/supplier has to exhibit the original Type Approval Certificate of offered Trailer and submit a copy of the same to the Pre despatch Inspection Team of Oil India Limited. The original copy of the	

Clause No.	Clause Description	Bidder's Response
	Type Approval Certificate has to be submitted to Oil India Ltd along with the supply. The bidder has to submit a declaration along with the bid in this regard as per Annexure **A1**. Submission of Type Approval Certificate of Trailer shall be as per Central Motor Vehicle Rules of India in case of Trailer manufactured in India or as per the import policy of Government of India, in case of imported vehicle, as on the date of supply.	
c.	In case of Trailer manufactured in India, the list of Type Approval Certificate issuing agencies are mentioned in Central Motor Vehicle Rules, 1989 of India & its amendments. In case of imported vehicle from other countries to India, at the time of Customs clearance, a Type Approval Certificate/COP, of an international accredited agency including a notarized English translation thereof shall be furnished. This Type Approval Certificate shall stipulate that vehicle to be imported complies with all the ECE (Economic Commission for Europe) Regulations. The list of international accredited agencies approved for issuance of Type Approval Certificate is available on DGFT (Director General of Foreign Trade) website, under Policy Circular No. 12 (RE- 2013)/2009-2014 dated 15.01.2014 issued by Ministry of Commerce & Industry, Department of Commerce, Director General of Foreign Trade, New Delhi subjecting "Type Approval issuing agencies under Policy Condition number 7 and 9 of Chapter 87 of ITC (HS) 2012".	
d.	Bidder/supplier shall ensure adherence to any subsequent revisions to the above referred Policy Circulars that may be issued in future by DGFT. Bidder shall note that, they shall be conversant with the policy of Government of India and Oil India Limited (OIL) shall not be liable in this regard whatsoever.	
e.	Type approval certification of individual components shall not be considered as vehicle Type approval certificate.	
f.	Notwithstanding anything mentioned elsewhere in this document, submission of Type Approval Certificate/ Conformity of Production (CoP) shall be as per the guideline of Government of India as on the date of supply.	
3.0	**OTHER GENERAL POINTS:**	
3.1	**ACCESSORIES & OTHER FITTINGS:** Each Data Van Trailer shall be fitted with the following fittings and accessories:	
a.	Mudguard with mud flaps for all Trailer wheels.	
b.	Suitable Heavy duty attachment (hook/loop) shall be provided at the rear of the Trailer, capable of pulling / towing the unit from bogged down situation in slushy areas in oilfields shall be provided.	
c.	Wherever feasible, Side / Lateral Underrun Protective Device (SUPD)s, Rear Underrun Protective Device (RUPD) shall be fitted in the unit. Note:	

Clause No.	Clause Description	Bidder's Response
	1. SUPD/ RUPD are structures that prevent smaller vehicles from getting underneath etc. during collision as per AIS 069, IS: 14812, IS: 14682 or similar standards. 2. The equipment manufacturer shall check the feasibility of providing the SUPDs, RUPDs during manufacturing and arrange to provide the same accordingly as per feasibility in the unit. SUPDs/ RUPDs provided by the equipment manufacturer shall be of detachable type and shall not be permanently fitted / welded to the Trailer chassis.	
d.	**TRAILER INFORMATION PLATE:** The Trailer shall be provided with a VIN plate fixed in a suitable place in the Trailer chassis (easily visible) containing, amongst others, the following information: a) Trailer Serial Number / Trailer Chassis No. as per Trailer manufacturer. b) Year and Month of Manufacture of the Trailer. c) Pay Load Capacity of the Trailer. d) Name & Address of Trailer Manufacturer etc.	
e.	Retro reflective marking (3M make or any other make, 50 mm width) on the rear and both side of the trailer as per the colour code- Rear: Red and Sides: Yellow as per AIS: 090 / applicable standard.	
f.	Wheel Wrench & Handle.	
g.	02 (two) numbers of wheel chocks.	
h.	01 (one) number of complete spare wheel assembly.	
3.2	**UNDERTAKING FOR SPARES & SERVICE:**	
	The bidder shall submit a written undertaking (along with the technical bid) that they, themselves or through other sources, would be able to supply all the requisite spares (including bought out items, if any) & consumables and provide the maintenance services for their offered Data Van Trailer in OIL operational area(s) in India for a minimum period of 15 (fifteen) years from the certified date of completion of successful field commissioning of the unit. The cost of such spares, consumables & maintenance services which may be utilized by Oil India Limited in future **(beyond Warranty period and O&M Period**) shall be extra and **SHALL NOT BE** considered by the bidder in their quoted prices in this tender. Spares & repair services during Warranty period & warranty extension period (if any) for the item(s) under Warranty claim (if any) of the unit(s) shall be in the scope of the successful bidder (supplier).	
3.3	**SPECIAL NOTES:**	
a.	All lights shall be covered to the extent possible, with suitable guard to prevent damage. The guards shall have detachable provision.	
b.	The electrical connections shall be suitable to operate in oilfield areas. The lightings shall comply road vehicle lighting regulations. Screw-in bulbs shall	

Clause No.	Clause Description	Bidder's Response
	not be used as far as possible. The electrical wirings shall be fixed and protected as to minimize accidental damage or undue wear. The wirings shall be insulated, and the electrical circuits shall be protected against overloading by fuses or automatic cut-outs. Adequate steps shall be taken to ensure electrical continuity and wherever necessary, components shall be bonded by copper straps. The junction boxes, if any, shall be sealed.	
4.0	**CONTROL CABIN:**	
4.1	**GENERAL:**	
i)	Control Cabin shall have an aluminium alloy external surface and be fully insulated, it should contain lockable compartments to carry cable reels, tools, and other miscellaneous and measuring/metering devices and fittings etc. The total external dimensions of the Control Cabin shall be within the dimension of the complete unit.	
ii)	The Control Room will contain all pumper controls, data acquisition and processing systems, computers, printers, working table, chairs, large storage space, etc. to provide a suitable operating environment for the stimulation team. All these equipment should have proper lashing arrangement, to prevent dislocation during road transportation. One Conference room for arranging the meetings etc.	
iii)	The general features of this Control Cabin shall be as follows:	
	A) FRAC CONTROL ROOM a) This shall be a fully lined and insulated Control Cabin. b) This Control Cabin shall have large windows installed on the sides and rear of the enclosure. All windows shall be tinted dark with blinds; the side windows Shall have sliders with screens. c) Control Room shall have lockable insulated door. d) A complete internal fluorescent/ LED lighting and electrical system with all necessary auxiliary plug receptacles and switches to be installed. All cabinets shall have under lighting. e) Desks, cupboards/filing cabinet, work surfaces (corners will be rounded, no sharp edges), shelves, bench seats and Six (06) theatre seats (installed in the Control Room), etc. will be supplied. f) Heavy duty anti slip floor covering, fire resistant. g) The Control Room shall be heated and cooled by two separate combination roof mounted air conditioning/ heating units. External air conditioning equipment projecting outside the Data Van at the top should be properly protected from accidental hitting during transportation. These projections should be well within the overall limits specified above. h) Three (03) roof mount air conditioning units (13,500 BTU each). i) Overhead cabinets and silestone or equivalent countertops. j) Stereo sound system. k) Computer rack compartment complete with ventilation. l) Installed on the outside wall of the Control Cabin will be an External Data/Control Connection Panel for external signal connections to the controls of unit mounted Pumper, Blender, Hydration unit, CAS and Data Acquisition equipment. m) Signal and clearance lights shall be installed on the outside of the Control Cabin n) Two flood/spot work lights will be installed on each top corner of each outside side of the enclosure (total 8) o) Access steps to door with handrails wherever required. p) Universal power sockets at different locations (at least 4 nos.) for power required for Laptops or other electrical equipment.	

Clause No.	Clause Description	Bidder's Response
	q) This Control Cabin will be equipped with good grounding system.	
	B) CONFERENCE ROOM COMPARTMENT a) Single compartment insulated cab with one (1) door b) Interior access door between two (2) compartments c) Overhead cabinets and silestone or equivalent countertops. d) Bench seating on each side of room. e) Countertop near bench seating areas. f) Clean power and dirty power outlets at counter space height. g) One standard size Coffee pot, microwave and a fridge (500L or more) installed in the compartment. h) Two (2) roof mount air conditioning units (13,500 BTU each). i) Shall have sliding door in between conference room & main compartment.	
	C) BELLY BOXES a) Belly boxes sealed and hard surface coated. Ten (10) double sealed flush style lockable swing up storage access doors for belly access. Doors at slide outs will have gas shocks limiting travel to 90 degrees from trailer eliminating slide out interference. The remaining doors will have holdbacks allowing for more access. b) Four (04) passenger side belly boxes in middle of trailer are fully enclosed with a total depth of 20". These four belly boxes are interconnected with 8" x 4" opening and most forward belly box with 8" x 4" opening to top into server rack room.	
	D) SERVER RACK ROOM a) Separate small room located in main operator room with clear panel front door with a thumb turn latch suitable to fit in a 40U/suitable server rack. b) Equipped with full height access door to rear of the rack. c) The room has air exchange fans with replaceable filters. All AC and DC power cables land in server rack room and are clear labelled for identifying circuit. d) Electrical distribution panel 230/400 Volt AC located in top portion of server rack room. All live contacts shall be provided with IP20 protection; no open or exposed contacts are permitted. LED read outs showing power available. Fully labelled. Shore/generator manual transfer switch shall be included.	
	E) GENSET STORAGE COMPARTMENT a) Separate compartment for installation of **Silent** Diesel Generator set. b) Shall be Diesel powered 50KVA 230 VAC minimum generator, four-cylinder, direct injection, four stroke, water cooled. c) U.S. EPA Tier 3 Equivalent/EU Stage IIIA Equivalent emissions d) 24V DC starter and battery charging alternator with regulator. e) The generator shall have following features: i) Dry air filter, fuel filter, oil filter. ii) Self governing. iii) Enclosed water cooling. iv) Silencer/muffler. v) Manual/auto protection/shutdown, water temperature & oil pressure alarm. vi) Local Instrument Panel	

Clause No.	Clause Description	Bidder's Response
	f) The Genset shall have a control panel for remote start/stop/emergency kill, with AC voltage, frequency, running hour, charging voltage to be mounted in the Operators Control Room. g) An aluminium light weight ladder will be stored in the Genset compartment in a storage bracket and will attach to the generator slide-out rack for fuelling the generator. h) Installed next to the Genset will be a battery system that will be installed in a battery box and include two maintenance free lead acid type batteries configured in 24VDC with battery disconnect switch, prewired battery cables to the Genset Diesel Engine 24VDC electric power systems. i) Installed in the Genset Storage compartment in a easily accessible position will be a minimum capacity 27 gallon (100 liter) diesel fuel tank with all required drain/fuel suction and return lines/fuel filters etc.	
	F) **UPS:** The unit shall be equipped with an at least 3 KVA / 230 VAC Uninterrupted Power Supply (UPS) feeding the Clean Outlets. Shall be installed in the Genset Compartment.	
	G) **BATTERIES:** Suitable batteries as per UPS design has to be supplied.	
	H) CHARGER: One (1) 24V battery charger mounted in battery compartment and plugged into dirty power outlet for charging the 24V system.	
	I) LIGHTS: Complete package of LED strip lights under cabinets and at each workstation. Required numbers of red/white capable puck lights with labeled switches. All belly storage compartments, rear reel compartment and generator compartment will have LED lights switched at accessible location on each side.	
	J) Grounding: Two (02) retractable ground reel cable with ground rod.	
	K) POST LEG STABILIZER: Four (04) post leg stabilizer system shall be provided. Electric over hydraulic closed system with control panel in operator room.	
iv)	The following Computer Hardware/Software, Data Acquisition equipment/components etc. will be installed in this cabin: a. One Monitoring station with Six HMIs for data acquisition system. b. One FPU remote operation station. c. Remote touchscreen HMI based remote monitoring station for blender / CAS /Hydration / Sand Dumper units either combined or individual for each unit. d. The Data Acquisition System (DAS) software shall be provided with a perpetual license, with lifetime validity and without any requirement for periodic renewal or additional licensing cost. e. Necessary configuration tools(e.g. Laptops, Cables, connectors etc.) with software backups has to be supplied. f. To restore the DAS system in the event of system crash, the DAS system should be supplied with all necessary licensed software with registration codes or should be supported by OEM for immediate restoration free of cost.	
4.2	**EXTERNAL PUMPER/DATA CONNECTIONS:**	

Clause No.	Clause Description	Bidder's Response
i)	The Pumpers, Blenders, CAS, Hydration Units, Sand Dumpers, and Data Acquisition inputs shall be integrated and configured to communicate over Ethernet, TCP/IP, or any other recognized open-source industrial communication protocols.	
ii)	Data connections are to be designed considering following Monitoring/ operator stations: a) The Data Van must have capability to control at least 08 Frac Pumpers. b) The Data Van must have capability to control at least 02 Blender Units. c) The Data Van must have capability to control at least 01 Hydration Unit. d) The Data Van must have capability to control at least 01 Chemical Additive System Unit. e) One Remote station for Sand/ Proppant Blender. f) One Monitor station for CAS and Hydration unit.	
iii)	There should be enough space for future expansion and communication protocols and network topology configuration should adopt open industrial communication protocols / topology.	
iv)	There should be provision for intercommunication between other monitoring stations and monitoring station having data acquisition software and frac design software so that if required selected data channels can be routed and displayed on multiple displays on monitoring station bearing data acquisition software screen.	
4.3	**CABLES, REELS AND ACCESSORIES:**	
i)	All cables shall be supplied on portable cable reels, be of industrial grade construction, and suitable for oilfield applications. Connectors shall be of ruggedized multipin type (e.g., Canon/KPT or equivalent), appropriate for the intended signal type. In the external lockable compartments meant for carrying remote cables, the following cables should be included: **Frequency Signal Cables** • Eight (8) numbers, approx. 250 feet each. • Complete with multipin connectors. • Suitable for use with **magnetic pickup sensors, encoders, or equivalent frequency devices**. **Analog Signal Cables** • Eight (8) numbers, approx. 250 feet each. • Complete with multipin connectors. • Compatible with **4–20 mA and low-voltage analog signal sensors** (e.g., pressure transducers, densitometers). **Pressure Transducer Cables** • Eight (8) numbers, approx. 250 feet each. • Designed for connection between **high-pressure transducers** (up to 15,000 psi, 4–20 mA output, 8–30 VDC supply) and the Data Acquisition System.	

Clause No.	Clause Description	Bidder's Response
	• Supplied with ruggedized connectors and suitable shielding. **Frac Pumper Communication Cables** • Two (2) numbers, approx. 250 feet each. • For **data transfer** between Frac Pumping Unit and Frac Control Center (Data Van) Control Panel. • Shall be strengthened industrial grade, suitable for oilfield use. **Blender Communication Cables** • Two (2) numbers, approx. 250 feet each. • For **data transfer** between Blender Unit and Frac Control Center (Data Van) Control Panel. • Shall be strengthened industrial grade, suitable for oilfield use. **CAS and Hydration Unit Communication Cables** • Two (2) numbers, approx. 250 feet each (one for Chemical Additive System, one for Hydration Unit). • Armoured, shielded industrial grade type. • Suitable for **data transfer** between these units and the Frac Control Center (Data Van) Control Panel. **Magnetic Pickup Sensor Cables** • Two (2) numbers, approx. 250 feet each. • Designed for use with **2-pin/3-pin mag pickup sensors** for pump RPM/frequency measurement. **Densitometer Cables** • Two (2) numbers, approx. 250 feet each. • Designed for connecting densitometer sensors to the Data Acquisition System for **slurry density measurement**.	
4.4	**REMOTE FRAC PUMPER CONTROL SYSTEM:**	
i)	A touch screen-based HMI enabling multi frac pumper control is desired for controlling at least 08 pumpers. The following shall be of plug and play type covering normal operational aspect along with safety interlocks. All the frac pumpers can communicate in in a TCP/IP network or any other recognized open-source industrial communication protocols.	
ii)	The Multi pumper control system should be provided with an additional manual All-Stop button connected to each pumper via hard wired connection from a control system enclosure installed in data van to enable a hard-wired shutdown of all pumps in an emergency situation.	
iii)	Normal operation includes: a) Deck engine normal start / stop. b) Deck Transmission gear shifting. c) Deck Engine smooth throttle control.	

Clause No.	Clause Description	Bidder's Response
	d) Neutral/brake control shifting. e) Pump batch/group programming option.	
iv)	Parameter display includes: a) Deck engine tachometer. b) Deck QUINTUPLEX pump flow rate meter. c) Deck QUINTUPLEX pump flow totalizer display. d) QUINTUPLEX pump suction pressure and discharge pressure. e) Rod loading in lbs (optional). f) Pump stroke rpm (optional).	
v)	Safety interlocks and warning display includes: a) Deck Engine emergency shutdown. b) Over pressure trip / idle. c) Instant neutral option. d) Engine Diagnostic information. e) Function and Warning indication. f) Power on indication. g) Deck Transmission gear indication. h) Deck Transmission Converter mode indication. i) Deck Transmission Lockup mode indication. j) Brake on indication. k) Deck Engine stop/check indication. l) Low QUINTUPLEX pump lube oil pressure indication. m) High QUINTUPLEX pump lube oil temperature indication.	
vi)	In addition to these pump rate K factor and other meter configuration data shall be easily to editable by a configuration page, to accommodate any change in sensor or device.	
vii)	All of the hardware / software interface involved in frac pumper control will be properly and adequately labelled in English. This Frac Pumper control HMI will be mounted under the Control Room rear window allowing the operator a full and clear view of pumping operations. Each section will be fully wired and connected to the relevant input connection plug on the Control Cabin External Data/Control Connection Panel through router or switch whichever required.	
4.5	**Blender/ Hydration/ CAS/ Sand dumper Remote Panel:**	
i)	A combined remote console or individual separate remote panel to be provided in datavan for Blender/ CAS/ Hydration/ Sand dumper units with suitable inter connections and compatibility through TCP/IP or equivalent open source industrial protocol network in data van.	
ii)	The each units HMI should be graphically designed showing each equipment in the unit as per process diagram with related process parameter aside the graphics (with real time up-dation) eg. augers in blender should be represented by screw auger graphics with RPM readings aside each auger.	
iii)	There should be provision for batch programming from remote for all units if possible; else the provision for batch programming from remote panel must	

Clause No.	Clause Description	Bidder's Response
	be there for blender unit. There should be a real time updated schedule display for at least blender / CAS unit.	
iv)	All trailer deck engine and transmission related status/ important operating parameters/ alarms/ warnings/ fault codes shall be obtained from CAN Bus network and displayed in the remote panel. Alarm / event HMI page must be configured for the same.	
3.6	**DATA ACQUISITION SYSTEM:**	
i)	The Digital Data Acquisition System (DDAS) shall function as a **centralized data acquisition platform** for analog, digital, and frequency inputs associated with hydraulic fracturing operations. The system shall acquire all critical operational data, including but not limited to: a. Analog signals: line pressure, dead string pressure, slurry density, etc. b. Frequency signals: turbine flowmeters, encoders, suction pump rate, discharge rate, auger RPM, pumping rates from frac pumper consoles, etc. c. Digital signals: blender parameters, chemical additive system data, hydration unit parameters, and other auxiliary unit data. All data shall be collected centrally, processed, and made available for real-time monitoring, display, recording, and reporting.	
ii)	**Data Acquisition and Processing** a. The DDAS shall interface with an **Industrial PC** located in the Control Room. **b.** The Industrial PC shall display, monitor, and record up **to 20 user-configurable input channels.** **c.** User selection of analog, digital, and frequency inputs shall be available through the Data Acquisition Software (DAS). **d.** The DAS shall provide: 1. Calibration and zero-offset settings for analog channels. 2. Configurable filtering options. 3. K-factor configuration for frequency channels. 4. Selection and mapping of digital signals as per operational requirements.	
iii)	**System Architecture:** a. The DDAS shall be based on an embedded processor architecture, housed in a protective enclosure. b. Signal connectors for intake shall be provided on an external connector console mounted on the Data Van. c. The DDAS shall communicate with the Industrial PC over an open industrial communication protocol (e.g., Ethernet, TCP/IP).	
iv)	**Data Refresh and Storage:** a. Signal refresh rate: 1 to 4 seconds. b. Local storage capacity: minimum **100 hours** for all analog/frequency channels at **1 sample per second.**	

Clause No.	Clause Description	Bidder's Response
	c. Storage medium: onboard or pluggable memory device. d. Data shall be transferrable to the Industrial PC or external devices in **ASCII text format**, compatible with third-party software such as **FracPro, GOHFER, KINETIX**, spreadsheets, or other data management software. **e. Communication with external PCs/laptops shall be via Ethernet/TCP-IP or open standard protocols.**	
v)	**Channel Capacity:** a. Minimum two data acquisition cards. b. Combined capacity: at least 16 analog channels and 12 frequency channels. c. Signals shall be conditioned and processed into a digital data stream with a resolution of minimum 5½ digits. d. Processed data shall be displayed on the HMI of the Industrial PC.	
vi)	**Data Storage and Job Management:** a. Internal flash memory shall store data from multiple jobs or long-duration jobs. b. Users shall be able to download stored data to external systems on a configurable schedule. c. The DDAS shall allow storage and transfer of job data independent of Industrial PC connection.	
vii)	**Operator Interface:** a. **A touch screen interface** shall be provided for system operation. b. The interface shall enable: 1. Channel scaling prior to acquisition. 2. Selection of measurement units (English, Metric, or SI), with the ability to mix units during operation. 3. Display of system time for user verification. 4. Menu-driven operator prompts for ease of use. c. Channel scaling shall be retained in memory even after power cycling. d. K-factors and calibration may be corrected during acquisition without interrupting data output or storage.	
viii)	a. There should be provision for calculated formula based channels where-in user can program different calculated variable on need basis. b. Different screen can be designed and data channels can be selected by user as per his display requirement in analog/ digital/ vertical- horizontal bar level meter format pages. c. Network configuration pages, Digital data stream configuration pages should be provided in the data acquisition software. d. Digital data from the Blender unit like density, suction/ discharge pump flow rates, Auger RPMs, Dry Chem rates, Tub level, various totalizers, shall be configurable in centralized data acquisition software. e. The DAS shall also acquire and configure operational data from auxiliary units including liquid chemical delivery rates from CAS, Hydration unit parameters (pH, viscosity, flow), and Sand Dumper unit parameters (load cell data, discharge rates) into the centralized system for unified monitoring and reporting.	
ix)	a. The complete system shall be packaged in a **robust protective enclosure** suitable for oilfield environments.	

Clause No.	Clause Description	Bidder's Response
	b. Enclosure shall be corrosion-resistant and designed for ease of operation and maintenance. c. Power supply: **220 VAC, 50 Hz** and/or **10–30 VDC**, with provisions for dual operation. d. All connectors shall be **environmentally resilient** for extended service life.	
x)	**Output and Connectivity** a. System outputs shall include: o RS-232 / Ethernet / TCP-IP connection to the Control Room Industrial PC. o A printer port for interfacing with a Control Room-mounted color laser printer. b. The DDAS shall be capable of displaying and recording acquired data with or without connection to the Industrial PC.	
3.7	**INDUSTRIAL COMPUTER:**	
i)	The following Industrial rugged Computer shall be supplied and installed in the Control Room. This Industrial Computer shall be rack mounted with suitable anti vibration mechanism, in the Control Room, to prevent damage during transportation.	
ii)	This Industrial Computer is connected to the DDAS for Data Acquisition purposes, and to the Control Room mounted Color Monitors and Printer. This Industrial Computer, fit for the purpose, shall have the latest configurations and loaded with licensed MS Windows based OS, essential drivers and licensed antivirus software (like Mccafe, Norton etc.) as available in the market. **Hard disk of this industrial computer to be SSD**	
iii)	It should be designed in such a way that in case of any hardware failures, repair or replacement can be effected easily, from the components which can be purchased from the OES/OEM or local market and the system can be restored back, loading necessary software and activation codes shall be described. Step by step procedure to restore the system from any untoward incident like any hardware failures, complete system crash is to provide to reduce time to repair.	
iv)	The list of recommended spares along with description and part numbers of the computer and its subassemblies shall be provided for keeping optimal inventory to quickly restore the system in case of such failures.	
v)	The software shall be provided with a perpetual license, with lifetime validity and without any requirement for periodic renewal or additional licensing cost. To restore the system in the event of system crash, the system should be supplied with all necessary licensed software with registration codes or should be supported by OEM for immediate restoration free of cost.	
3.8	**LAPTOP PC COMPUTER:**	

Clause No.	Clause Description	Bidder's Response
i)	Installed in the Control Room will be a second Computer that shall be provided to run a hydraulic fracturing modelling software like FracPro-PT (Pinnacle Tech) or GOHFER (Halliburton) or KINETIX (SLB) or equivalent. This second computer will be ruggedized PC Lap Top Computer that will be installed in the Control Room in an "anti-theft" mounting cradle. This Lap Top PC Computer will be supplied/loaded with latest licensed MS Windows operating system, latest licensed Microsoft Office (Word, Excel, Access etc.), & a licensed anti- virus software (like Mccafe, Norton etc.) software.	
ii)	A licensed copy of Fracturing simulator either FracPro-PT (Pinnacle Tech) or GOHFER (Halliburton) or KINETIX (SLB) with validity period of at least three years to be supplied. This has to receive relevant data from the Industrial Computer on real-time basis for running this software. **Hard disk of this computer to be of SSD.**	
iii)	Software to be supplied with lifetime validity & the same shall be provided for the entire system in portable storage media with registration codes to immediately restore the systems in case of any breakdown occurrence. These shall include all sufficient and necessary softwares, drivers, Operating system etc. inclusive of all registration and activation codes etc for restoring the computer independently from a system crash.	
3.9	**COMPUTER & MONITOR:**	
i)	The following shall be installed in the Frac Control Centre(Datavan): a) Primary Treater rugged workstation: This computer shall be loaded with software for the control of up to two (02) Blenders, one (01) Hydration Unit and one (01) Chemical Unit (CAS) as well as Data Management Software. Shall be equipped with two (02) LED monitors of twenty-four (24) inch or bigger. b) Secondary Treater rugged workstation: This computer shall be loaded with software for the control of up to two (02) Blenders, one (01) Hydration Unit and one (01) Chemical Unit (CAS) as well as Data Management Software. Shall be equipped with two (02) LED monitors of twenty-four (24) inch or bigger. c) FRAC Engineer rugged workstation(Primary): This computer shall be loaded with Data Management Software. Shall be equipped with two (2) monitors of twenty-four (24) inch or bigger. d) FRAC Engineer rugged workstation(Secondary): This computer shall be loaded with Data Management Software. Shall be equipped with two (2) monitors of twenty-four (24) inch or bigger. e) Frac Pump Operator rugged workstation(Primary): This computer shall be loaded with MPC (Multi Pump Control Software) for controlling up to twenty-four (24) pumping units. Shall be equipped with two (02) monitors of twenty-four (24) inch or bigger. f) Frac Pump Operator rugged workstation(Secondary): This computer shall be loaded with MPC (Multi Pump Control Software) for controlling up to twenty-four (24) pumping units. Shall be quipped with two (02) monitors of twenty-four (24) inch or bigger.	

Clause No.	Clause Description	Bidder's Response
	g) One (01) 44" Forty Four inch or bigger monitor shall be installed in the conference room area for monitoring the FRAC operation. h) Two (02) monitors of twenty-four (24) inch or bigger for stimulation software which can be connected to Laptop. i) The FRAC Engineer workstation shall be equipped with two (02) additional forty-four (44) inch or bigger wall mounted monitors and shall be connected to Data acquisition computer.	
3.10	**PRINTER:**	
i)	Installed in the Control Room one networked HP (or equivalent) colour laser print/copy/scan all-in-one device.	
3.11	**CABLES/ CONNECTORS:**	
i)	Supplied for use with the above hardware, shall be a complete set of interconnection cables and connectors.	
3.12	**INDUSTRIAL COMPUTER SOFTWARE PERFORMANCE:**	
i)	The Industrial Computer, with the pre-loaded Stimulation Monitoring software, when connected to the DDAS, be used for post analysis evaluation as well as on site real time monitoring and evaluation of the fracturing process. This system shall provide excellent quality control and pressure diagnostics. Data channel logged and system alarm log files can be exported out of industrial PC in excel/CSV file format. This system/software shall be capable of producing the following:	
	A) REAL TIME OR REPLAY MONITORING PLOTS ON THE COLOUR MONITORS When the DDAS system is connected via the Control Cabin External Data/Control Connection Panel to the required/ suitable transducers/sensors the software will, be able to display on the Control Room mounted colour monitors, during real time monitoring or in replay (after the DDAS has been disconnected via the Control Cabin External Data/Control Connection Panel from the required/suitable transducers /sensors) a simultaneous plot of the following parameters against elapsed time: a) Surface Treating Pressure. b) Down hole Pressure (Direct Calculated or Static String Derived as well as a Real Time fully compressible Foam Model for down hole pressure and foam quality calculations). c) Total Pump Rate or Wellhead Rate. d) Proppant Concentration. e) Cross linker Rate. f) pH of Gel. g) Temperature of Gel. h) Viscosity of Gel. i) A wellbore stage fluid displacement plot to show where the current stage(s) are in the treating string. j) A net pressure or fracturing pressure plot vs. the log of elapsed time. k) A staging bar graph plot to show design versus actual stage fluid volumes. l) Pressure vs. Square Root of Time. m) Pressure vs. Rate. n) Nolte Pressure Decline Difference vs. Dimensionless Time. o) Transient Skin vs. Time or Volume/Height. p) Skin Step Rate Analysis.	

Clause No.	Clause Description	Bidder's Response
	B) INFORMATION THAT SHALL BE DIGITALLY DISPLAYED IN REAL TIME OR DURING REPLAY IN THE LOWER RIGHT HAND WINDOW OF THE COLOR MONITORS REAL TIME OR REPLAY MONITORING PLOTS ON THE COLOR MONITORS When the DDAS system is connected via the Control Cabin External Data/Control Connection Panel to the required/ suitable transducers/sensors the software will be able to display in the lower right hand window of the Control Room mounted colour monitors, during real time monitoring or in replay (after the DDAS has been disconnected via the Control Cabin External Data/Control Connection Panel from the required/suitable transducers/sensors) the following information: a) Surface treating pressure. b) Down hole or bottom hole pressure. c) Annulus pressure. d) Friction pressure. e) Hydrostatic head. f) Transient skin. g) Fluid volumes and proppant totals per stage and for the entire job. h) Gel rate. i) Wellhead rate. j) Proppant concentration. k) pH. l) Temperature. m) Specific gravity of slurry. n) Gas and energized fluid rates.	
	C) REPORTS THAT Shall BE GENERATED BY THE PRINTER DURING MONITORING OR REPLAY When the DDAS system is connected via the Control Cabin External Data/Control Connection Panel to the required/ suitable transducers/sensors the software will be able to Generate through the Control Room printer during real time monitoring or in replay (after the DDAS has been disconnected via the Control Cabin External Data/Control Connection Panel from the required/suitable transducers/sensors) the following reports: a) Stage reports of gel total, slurry total, proppant total, additive totals. b) Averages for surface treating pressure, bottom-hole pressure, gel rate, slurry rate &proppant rate per stage. c) Step Rate analysis report. d) Square Root of Time Analysis Report (for closure). e) Nolte Pressure Decline Report for PK, GDK, and Radial Geometry models.	
	D) ACTIONS THAT SHALL BE AVAILABLE DURING MONITORING OR REPLAY When the DDAS system is connected via the Control Cabin External Data/Control Connection Panel to the required/ suitable transducers/sensors the software will be able to undertake during real time monitoring or in replay (after the DDAS has been disconnected via the	

Clause No.	Clause Description	Bidder's Response
	Control Cabin External Data/Control Connection Panel from the required/suitable transducers/sensors) the following actions: a) Simultaneous plot of up to six (6) parameters vs. another allowing six (6) parameters to be viewed on one plot. b) Step Rate analysis plot for extension and closure determination. c) Square root of time plot for closure determination. d) Pressure decline analysis for leak-off and fluid efficiency determination with G-function analysis. e) A data recorder allowing any combination up to twelve (12) to be printed in columns of data.	
ii)	A report generator will allow the system to generate numerous copies automatically to a HP/Canon bed plotter or a printer or any combination of the above plot options.	
iii)	Software versions to be provided for the entire system in portable storage media with registration codes to immediately restore the systems in case of any breakdown occurrence. These shall include all sufficient and necessary softwares, drivers, Operating system etc. inclusive of all registration and activation codes etc for restoring the computer independently from a system crash.	
3.13	**FRAC COMMUNICATION SYSTEM:**	
i)	The cabin shall be equipped with a complete set of communication radios for on site communication between personnel. The communication system shall include twelve (12) Motorola portable radios complete with headset and microphone. This unit provides a lightweight communication device with a broad frequency band range.	
ii)	The noise reduction microphones included with this radio provide clear voice communication in noisy environments. Two (02) radio charger stations shall be installed for charging the batteries on these units.	
iii)	Also installed in the cabin shall be one (1) Motorola mobile base station radio complete with hand microphone for communication from the EDC cabin to wellsite personnel.	
3.14	**POWER SUPPLY SYSTEM:**	
i)	The unit electrical system will utilize a 230 Volt, 50 Hz. AC power source that will originate from Generator set supplied with this unit. Integrated into the "power supply" system is an AC/DC power distribution system to ensure the correct distribution of the required power to the particular hardware components that are installed on this unit.	
ii)	Also supplied and installed on the unit and connected to the electrical system will be internal/external power supply switch, and a external power plug and 50 meters of power cable with male/female connectors for use with a customer supplied 230 VAC 50 Hz power supply.	
3.15	**NETWORK EQUIPMENT:**	

Clause No.	Clause Description	Bidder's Response
	i) Two (02) rack mounted Ethernet switches, one piece for the process network (mixing and pumping equipment) and one for the office network. ii) One (01) Wifi Access Point shall be installed and configured. iii) Mounted on the Unit shall be an aluminum mounting tube with a a Siemens (or equivalent) Omni Directional thin-wall fiberglass 2.4 GHz Wi-Fi, 12 dB outdoor Antenna – 12dB Outdoor that will provide 360 degree coverage in all directions. This Antenna will be connected by coaxial cables to a wireless Access Point that will be installed in the server rack room.	
3.16	**SATELLITE:**	
i)	The data van shall have satellite dish package for transmission and receipt of information on remote locations. This satellite dish package shall include as a minimum the following: a) Retractable satellite dish. b) Satellite modem. c) Auto acquirer controller. d) Wireless broadband router. e) Any other accessories required for data transmission.	
4.0	**Hand and Electronic Tool Kit:**	
	Supplied and carried in the Control Room will be a complete, set of hand tools, packaged in a portable case with pad lock to provide field personnel the necessary equipment to perform preventative maintenance. The following tools are included: Allen-hex drive blade set, 9 pieces, 050-3/6 Alignment tool set, 2 multipurpose tools Center punch, 3/32 inch point Crimping tool, with bolt cutter/stripper Hammer, ball peen, 4 ounce head Handle for hex. spline, nut driver blades, 3 inches Handle for hex. spline, nut driver blades, 4 inches Hex key set, short arm (metric) Knife, multipurpose, electrician's type Nut driver blade set, 9 pieces, 3/16 inch 10 ½ inch Scissors, electrician's type Spline drive blade set, 6 pieces, 048-096 inch Spring hooks push tool, pull tool Soldering iron, 12 V DC Solder aid, fork and hook Solder brush Solder, small coil Tweezers, reverse action, 4-3/4 inch Wire stripper/cutter, adjustable stop Wrench, adjustable, 4 inch Wrench, adjustable, 8 inch Wrench set ¼ inch drive sockets with ratchet, spinner and extensions Wrench set, 8 pieces, ignition type open end Attaché case with removable tool pallets Rugged multi-function digital meter	

Clause No.	Clause Description	Bidder's Response
	Programmable meter calibration unit Combination Wrench Set (3/8" to 1 ¼") And the other 0-400 LBS-ft Plain Screw Driver 6" x 10" – 1set Philips Screw Driver 6" x 10"- 1set Strap type filter Wrench	
	NOTE: ***If the bidder feels that for better performance and wherever required, the bidder shall install such equipment/Fittings/System.***	
5.0	**UNITIZATION AND COMPLETION:**	
i)	The above unit should also confirm the following specification: a) Installation of all electrical system. b) Installation of work lights	
ii)	**Any other equipment/fittings/system not spelled out in this document but shall be needed for completing the DATA VAN shall be provided.**	
iii)	The unit should be designed for stability and structural integrity at full loaded conditions.	
iv)	**Dirty outlets** a) All switches and outlets to match surrounding finish. b) Dirty Outlets (grey color, labelled "Dirty Outlet" and numbered). c) All circuits land in server rack room. d) Required numbers of dirty outlets to be installed in the appropriate locations and for all required equipment.	
v)	**Clean outlets** a) Clean Outlets (white color, labelled "Clean Outlet" and numbered). b) The clean circuit shall be split into required number of circuits. c) All circuits land in server rack room. d) Required numbers of clean outlets to be installed in the appropriate locations and for all required equipment.	
vi)	Workmanship should be of the best quality & appearance. The equipment shall be fabricated in accordance with industry accepted standards. Following is a partial list of examples: a) Flame cut edges shall be ground smooth. b) Sharp corners and edges to which operators and mechanics are vulnerable shall be ground smooth. c) Bolt holes for bolts shall be drilled (not torch cut) d) Welds shall be of good quality and sufficient strength. e) No sweated or brazed type hydraulic fittings will be used. f) Where applicable use self-locking nut.	
vii)	All steel & miscellaneous fittings to complete the unit	
viii)	This should include the following items: a) Installation of all other electrical systems (all electrical systems should be wired to a two pole two wire arrangement).	

Clause No.	Clause Description	Bidder's Response
	b) Lights for twenty-four-hour operation (entire lighting system should be shipped packed to avoid breakage during shipment). c) Installation of all pneumatic systems. d) Installation of all hydraulic systems. e) Pipe, hose brackets and racks. f) All steel and miscellaneous fittings to complete the unit. g) Steel toolbox containing: 1) Pipe Wrench 12" size 2 Nos. 2) Pipe Wrench 18" size 2 Nos. 3) Pipe Wrench 24" size 2 Nos. 4) Pipe Wrench 36" size 1 No. 5) Vice Grip Pliers 1 No. 6) Adjustable Wrench 6", 8", 10" 2 Nos. each 7) 5lb Sledge Hammer 2 Nos. 8) 10lb Sledge Hammer 2 Nos. 9) Combination Wrench Set (3/8" to 1 ¼") 2 Sets 10) Hack Saw with 10 Blades 2 Nos. 11) Circuit testing light 1 No. 12) Heavy duty ½" drive socket set (3/8" to 1 ¼") 1 Set 13) 10 piece Allen set Wrench 2 Sets 14) Plain Screw Driver 6" x 10" 2 Sets 15) Philips Screw Driver 6" x 10" 2 Sets 16) Strap type filter Wrench 1 No. 17) Fluke 85 or above digital multi-meter 1no 18) Tool box for hand carrying tools with Pad lock 2 Nos.	
ix)	Access steps/ladders with grab handles will be installed at convenient locations around the unit	
x)	OEM part number must be given along with supplier's part number for each and every sub assemblies.	
xi)	3 sets of catalogue to be supplied in both hard and soft copies for all installed components of the units along with the make and Model Part No. and Sl no. of assemblies , sub – assemblies.	
xii)	Complete testing of the equipment at manufacturer's plant. Testing to be include all function tests and the operational testing of the unit. Copies of all relevant test documentation/certificates should be supplied	
xiii)	Supplied with each unit should be three (3) copies, in English, of a complete operating, maintenance (including sub-assemblies, instrument sensors, wiring diagrams etc) (Note: OEM part numbers will be supplied along with the Suppliers part numbers) with two (2) soft copies	
xiv)	All hosing and wiring will be labelled or tagged on both ends for easy identification. All hosing or wiring in close proximity with hot surfaces (i.e. deck engine exhaust manifold) will be secured to a heat- shielded cable mount	
xv)	Layout diagram of the units should be sent to OIL only for information during the engineering stages. However, the supplier need not to take any approval from OIL to proceed unitization as per their schedule.	
6.0	**PAINTING:**	

Clause No.	Clause Description	Bidder's Response
i)	Unit to be sand blasted wherever required, one coat of primer followed by two coats of paint as specified below:	
ii)	Frame and Control console: RED-315	
iii)	Rim and Cab Top: Gold-44753	
iv)	Bumper: Gold & Red Stripes	
v)	OIL logo (to be provided at the time of unit manufacturer's)	
7.0	**SPARES:**	
7.1	**COMMISSIONING SPARES** The bidder has to supply all the spare parts free of cost, required for initial commissioning of the unit. All the consumables such as, lube oil, gear oil, hydraulic oil etc. except diesel fuel, required for commissioning should also be supplied.	
7.2	**OPERATIONAL CRITICAL SPARES:** Spares as given **under Table 1** in specified quantity shall be supplied along with each Data Van Trailer. Specific Description, quantity of each & every spares shall be indicated in the technical bid and Make, Part Nos. etc. shall be submitted along with the supply. Bidders shall include the price of these spares in the priced bid format. The bidder shall confirm in the technical bid that all spares given under **Table-1** will be supplied with the unit.	
a.	**AUTOMOBILE (TRAILER) SPARE PARTS LIST:** All spare parts for the Automobile (Trailer) in specified quantity as mentioned in **Table-1/Section A** shall be supplied along with the supply. Bidder / supplier to note that the spares mentioned in **Table-1/Section (A)** to be supplied shall be additional to the items fitted in each unit. Specific description, Quantity etc. of each item shall clearly be indicated in the technical bid. Make, Part Nos. etc. of each item shall be submitted by the supplier along with the supply. In case any of the spares mentioned in **Table-1/Section (A)** does not come as per bidder's design and the bidder has not quoted for such spares, the bidder shall clearly indicate the same. However, in case such spares are provided in the unit in future, the same shall be supplied by the bidder / supplier along with the supply without any extra cost to Oil India Limited (OIL).	
b.	**OTHER SPARES:**	

<table>
<tr><th>Clause No.</th><th>Clause Description</th><th>Bidder's Response</th></tr>
<tr><td></td><td>All OTHER spare in specified quantity as mentioned in Table-1 / Section (B) shall be supplied along with the supply.

Bidder / supplier to note that the spares mentioned in Table-1 / Section (B) to be supplied shall be additional to the items fitted in each unit.

Specific description, Quantity etc. of each item shall clearly be indicated in the technical bid. Make, Part Nos. etc. of each item shall be submitted by the supplier along with the supply.

In case any of the spares mentioned in Table-1 / Section (B) does not come as per bidder's design and the bidder has not quoted for such spares, the bidder shall clearly indicate the same. However, in case such spares are provided in the unit in future, the same shall be supplied by the bidder / supplier along with the supply without any extra cost to Oil India Limited (OIL).</td><td></td></tr>
<tr><td>c.</td><td>INSTRUMENTATION & CONTROL SYSTEM:

All spare parts for the instrumentation & control system in specified quantity as mentioned in Table-1 / Section (C) shall be supplied along with the supply.

Bidder / supplier to note that the spares mentioned in Table-1 / Section (C) to be supplied shall be additional to the items fitted in each unit.

Specific description, Quantity etc. of each item shall clearly be indicated in the technical bid. Make, Part Nos. etc. of each item shall be submitted by the supplier along with the supply.

In case any of the spares mentioned in Table-1 / Section (C) does not come as per bidder's design and the bidder has not quoted for such spares, the bidder shall clearly indicate the same. However, in case such spares are provided in the unit in future, the same shall be supplied by the bidder / supplier along with the supply without any extra cost to Oil India Limited (OIL).</td><td></td></tr>
<tr><td>7.3</td><td>RECOMMENDED SPARES:</td><td></td></tr>
<tr><td></td><td>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 without price of each item. Annual consumption of each spare should be furnished. The bidder should 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 and e-mail id of OEM for all items of the whole unit.

The bidder has to submit a complete spare parts list for the whole unit subgrouping major component in the following format as shown with example:

<table>
<tr><td>Name of the</td><td>Description of the item</td><td>Part no./ID</td><td>Frequency of</td><td>Make</td></tr>
</table>
</td><td></td></tr>
</table>

<table>
<tr><th>Claus e No.</th><th>Clause Description</th><th>Bidder's Respons e</th></tr>
<tr><td></td><td>
<table>
<tr><td>component /Sub com.</td><td></td><td>no. of item</td><td>replacement (in Hours / Day)</td><td></td></tr>
<tr><td></td><td></td><td></td><td></td><td></td></tr>
</table>
</td><td></td></tr>
<tr><td>8.0</td><td>UNDERTAKING:</td><td></td></tr>
<tr><td>a.</td><td>The bidders must submit a written undertaking (along with the technical bid) that they, themselves or through other sources, would be able to supply all the requisite spares (including bought out items, if any) & consumables and provide the maintenance services of their offered unit in OIL's operational areas for a minimum period of fifteen (15) years from the Certified date of completion of successful field commissioning of the unit.

The cost of such spares, consumables & maintenance services which may be utilized by Oil India Limited in future (beyond Warranty period and O&M Period) shall be extra and SHALL NOT BE considered by the bidder in their quoted prices in this tender.

Spares & repair services during Warranty period & warranty extension period (if any) for the item(s) under Warranty claim (if any) of the unit(s) shall be in the scope of the successful bidder (supplier).</td><td></td></tr>
<tr><td>9.0</td><td>TECHNICAL MANUALS, CATALOGUES AND CERTIFICATION FOR OPERATION AND MAINTENANCE OF THE UNIT:

The following Manuals & Catalogues (in English language) shall be supplied along with the Trailer Data Van unit. Manuals/ Part Catalogues provided shall be Custom Illustrated Manuals/Catalogues for the vehicle and equipment only, not a general Composite Manual/Catalogue.

The manuals supplied should be specific to the make / model of the equipment / part / components supplied in the Trailer Data Van unit. In case a comprehensive OEM catalogue is supplied of the equipment / part / components, then the respective make / model of the equipment / part / components supplied in the Trailer Data Van unit should be clearly marked / identified.

The bidder/supplier has to exhibit the Hard copy / soft copy of Parts Catalogue and Maintenance / Service Manual of Trailer Data Van unit to the Pre despatch Inspection Team of Oil India Limited and handover soft copies to the Pre Despatch Inspection team of Oil India Ltd. The Hard copy of the Parts Catalogue and Maintenance / Service Manual of Trailer Data Van unit may be submitted to Oil India Ltd along with the supply. The bidder has to submit a declaration along with the bid in this regard as per Annexure A1.

Bidder to confirm that the following will be provided along with supply:</td><td></td></tr>
</table>

Clause No.	Clause Description	Bidder's Response
1.	Preferably, 01 (One) set of Spare Parts Catalogue with Part Numbers and Workshop & Service Manual for all components / systems of Trailer like Trailer Axles, Brake System, Trailer Suspension, Electrical & Pneumatic Systems etc. All the manuals & catalogues shall contain only those components/systems that have been used in the unit i.e. the same must be CUSTOM ILLUSTRATED MANUALS/ CATALOGUES ONLY – not the generalized ones. The Spare Parts Catalogue with Part Numbers and Workshop & Service Manual shall be provided by the supplier in any one of the following forms: (a) Hard copy format (i.e. in printed form) OR (b) Soft copy format (i.e. in USB drive) The bidder/supplier has to exhibit the Hard copy / soft copy of Parts Catalogue and Maintenance / Service Manual of Data Van Trailer to the Pre despatch Inspection Team of Oil India Limited and handover soft copies to the Pre Despatch Inspection team of Oil India Ltd. The Hard copy of the Parts Catalogue and Maintenance / Service Manual of Data Van Trailer may be submitted to Oil India Ltd along with the supply. The bidder has to submit a declaration along with the bid in this regard as per Annexure A1.	
2.	03 (Three) sets of Operational manuals of the unit with categorical steps to operate the unit by an operator along with the functionality for each control switches, etc. and the operating range of the control parameters to be provided.	
3.	Supplier to supply 03 (Three) Sets of OEM's operation, maintenance and overhauling manuals of supplied models of Deck Engine, Pumps and all other sub-assemblies and their corresponding Spare part catalogue.	
4.	03 (Three) sets of the following schematics, layout drawings not limited to i. Equipment layout ii. Process flow drawing iii. Electrical, pneumatic and hydraulic schematic for operator panel are to be provided. iv. Control Panel wiring diagram, Termination panel details, Panel BOM with name of OEM & their part numbers.	
5.	The layout diagram of each system must enlist the components in it along with technical detail (Nomenclature).	
6.	All the components should also have nameplate embossed indicating original equipment manufacturer of these components, Make / Model their Part No., Sl No. and possible details as per industry standards. Wherever the mounting of the nameplate is not possible such detail must be made on layout sheet of the system in which the component is installed. This is not required for components pertaining to Automobile (i.e. Trailer) portion.	

Clause No.	Clause Description	Bidder's Response
7.	The O&M manuals and the spare part lists (three sets) to be provided in hard copy as well as in a soft copy. This is not required for components pertaining to Automobile (i.e. Trailer) portion.	
8.	Lubrication and Fluids: Lubrication fluids chart (permanent attached to Unit) should be provided listing fluids, lubricants and filter types which are required by the Equipment. Fluids should be identified by generic name (i.e., hydraulic oil) near the fill port for each fluid. The lettering should be in English, and colour should be black on a white or stainless-steel background. This is not required for components pertaining to Automobile (i.e. Trailer) portion.	
9.	Control Panel drawings with complete/ comprehensive Bill of Materials (BOM) with name of OEM & their part numbers.	
10.	Instrumentation wiring diagrams with end-to-end termination details.	
11.	The necessary licensed software in original packages along with user software backups are also to be supplied.	
NOTE	**COMMISSIONING OF THE UNIT SHALL NOT BE CONSIDERED AS COMPLETE UNTIL & UNLESS ALL ABOVE PRINTED MANUALS / CATALOGUES ARE SUPPLIED** Soft copies of documents shall be acceptable for components pertaining to Automobile (i.e. Trailer) portion.	
10.0	**Document(s) to be submitted along with the supply of each unit for government Registration etc.:** Following documents shall be submitted by the supplier along with the supply as mentioned hereunder:	
1.	Invoice(s) in the name of Oil India Limited, Duliajan, Assam-786602 in original. Notwithstanding any clause mentioned elsewhere in the NIT/tender, the Invoice for each of the complete unit shall be submitted in 02 (two) parts separately as under for registration purpose: i. Invoice for the DATA VAN Trailer unit with all items, components, machineries, equipment, tools, etc. fitted permanently on the Trailer unit. ii. Invoice for items, spares, accessories etc. supplied separately along with the complete unit. **Note:** 1. Trailer Chassis Number shall be mentioned in invoice(s) against above Sl. No. (i).	
2.		

Clause No.	Clause Description	Bidder's Response
	Sale Certificate for Trailer of Data Van unit (Form-21) in original. The documents shall be in the name of Oil India Limited, Duliajan, Assam-786602, sample format as per Motor Vehicle Act, 1988 & Central Motor Vehicle Rules, 1989 of India provided.	
3.	Road-Worthiness Certificate for Compliance to Emission and Noise Standards for Trailer of Data Van unit [Form-22, Form-22A (Part I), Form-22A (Part II)] in original. The documents shall be in the name of Oil India Limited, Duliajan, Assam-786602, sample format as per Motor Vehicle Act, 1988 & Central Motor Vehicle Rules, 1989 of India provided.	
4.	Certificate of Origin of the DATA VAN Trailer unit.	
5.	Pencil print of Vehicle Identification Number (VIN) i.e., Chassis Number of Trailer of the DATA VAN unit.	
6.	Certificate for the Trailer of the DATA VAN unit in original from Trailer manufacturer. Amongst others, the certificate shall contain following information: (i) Make & Model of Trailer. (ii) Vehicle Identification Number (VIN) i.e. Chassis Number of the Trailer. (iii) Month & Year of Manufacture of the Trailer.	
7.	Type Approval Certificate of Trailer of Data Van unit as per Clause No. 2.12.	
8.	Technical drawing of the Data Van Trailer along with Tractor (i.e. Tractor Trailer combination) indicating the Centre of Gravity, length, width, height, angle of approach, angle of departure etc.	
11.0	**HOMOLOGATION, UPLOADING OF VEHICLE DATABASE IN VAHAN / PARIVAHAN PORTAL, REGISTRATION OF THE TRAILER, PRINTING OF HSRP (High Security Registration Plate) , UPLOADING OF LID OF HSRP IN APPROPRIATE PORTAL** The bidder shall categorically confirm their compliance of the following clauses in the technical bid:	
a.	**In case the Trailer is manufactured outside India.** The vehicle details of Trailer in relevant VAHAN / Homologation / Parivahan portal of Ministry of Road Transport & Highways (MoRTH), Government of India shall be dealt by the bidder as per the applicable guidelines of Ministry of Road Transport & Highways (MoRTH) / Director General of Foreign Trade, Government of India at the time of supply. Homologation and uploading of vehicle data (i.e. Make, Model, Chassis Number) in VAHAN / PARIVAHAN portal by providing the requisite documents is under the scope of the successful bidder. **Temporary Registration (if required) and Permanent Registration in local RTO (Regional Transport Office) of the Govt of Assam is under the scope of successful bidder**. The documents pertaining to Oil India Ltd shall only be provided by Oil India Limited. All other	

Clause No.	Clause Description	Bidder's Response
	documents/ certificates pertaining to the vehicle shall be provided / submitted by the bidder. The cost of permanent registration in the form of Registration fee and initial Road tax to the Government of Assam shall be borne by the successful bidder. However, this cost will be reimbursed to the bidder on submission of Government Receipt as proof.	
b.	**In case the Trailer is manufactured in India** The bidder (supplier) shall be responsible and ensure that the vehicle details of Trailer are available in the relevant VAHAN / Parivahan portal of Ministry of Road Transport & Highways (MoRTH), Government of India in accordance with Motor Vehicle Act, 1988 & Central Motors Vehicles Rules, 1989 of India prior to delivery of the unit(s) to Oil India Limited. If the vehicle details are not available in VAHAN portal, it shall be the responsibility of the bidder to upload the same in VAHAN portal. Then the supplier shall arrange for temporary registration (if required) and **Permanent Registration in local RTO (Regional Transport Office) of the Govt of Assam**. The documents pertaining to Oil India Ltd shall only be provided by Oil India Limited. All other documents/ certificates pertaining to the vehicle shall be provided / submitted by the bidder. The cost of permanent registration in the form of Registration fee and initial Road tax to the Government of Assam shall be borne by the successful bidder. However, this cost will be reimbursed to the bidder on submission of Government Receipt as proof.	
12.1	The Data Van Trailer has to be registered separately. Combined registration of Data Van Trailer with any of the Tractor shall not be accepted.	
12. 2	Cost of Registration is **not to be considered** by the bidder while quoting their prices against this tender.	
13.0	**HIGH SECURITY REGISTRATION PLATE (HSRP):** On receipt of the government Registration Number, the supplier (successful bidder) shall supply the High Security Registration Plate (HSRP) through the Original Equipment Manufacturers of motor vehicle / dealer / any one of the agencies authorised by the Government of India / Assam to issue the High Security Registration Plate (HSRP) of each units. The supplier shall ensure to upload the HSRP details in relevant (FTA / HSRP) portal enabling the DTO / Oil India Ltd to issue download permanent Registration Certificate for the vehicle(s) as required for road drive of the vehicle. The cost of High Security Registration Plate (HSRP) shall be borne by the supplier (successful bidder). Bidder / supplier shall also ensure adherence to any subsequent revisions to the referred requirements that may be issued in future by Ministry of Road Transport & Highways (MoRTH), Government of India.	
14.0	**DEVIATIONS FROM THE SPECIFICATIONS:** The bidder shall enclose comprehensive list of intended deviations from the technical specifications clearly highlighting the reasons thereof, if any, sufficiently prior to Bid closing date & time for Tender amendment, etc. But OIL reserves the right for acceptance or rejection of the deviation(s).	

Clause No.	Clause Description	Bidder's Response
15.0	**BID SUBMISSION & DOCUMENTATIONS:** Bidders should submit their bids in the above tabular form mentioning their offered specification, Make, Model, necessary data, submitted/not submitted/ complied/not complied etc. as applicable to all the NIT terms and conditions including submitting the documents, leaflets as specified. Other details, if any, the bidder may mention the same by adding additional row(s)/separate sheet as the case may be. Bidder's response to all NIT stipulations should 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 acceptable. 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.	
15.1	**Following documents shall be submitted along with technical bid for evaluation –**	
1.	Technical leaflets with detailed specifications, Make & Model of Trailer unit, Trailer axle, Trailer suspension, brake, different equipment of DATA VAN etc. as per respective individual tender clauses.	
2.	GA (General Arrangement) drawing of the Data Van Trailer. The GA drawing shall have mention of major dimensions of Data Van Trailer (like length, height, width, etc.); estimated loading on individual axles of Trailer (when combined with offered Trailer unit); show the position of all major components & their mounting.	
3.	Undertaking(s) for supply of spares and service as per clauses mentioned elsewhere in the tender document.	
4.	Specific description, quantity etc. of each and every spares (for bid evaluation) as detailed in the Operational Critical Spares List provided in **clause 9.2 above** & Table-1 below.	
5.	List of Recommended Spares in clause **above.**	
6.	Checklist as per enclosed format shall be furnished along with the bid.	
7.	Any other document as applicable against clauses of this tender document.	

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TABLE-1: Ref. Clause No. 7.2 OPERATIONAL CRITICAL SPARES:

Total no. of Trailer Data Van units: 01 (one) no.

SECTION (A): AUTOMOBILE SPARE PARTS LIST:

AUTOMOBILE SPARE PARTS LIST for TRAILER -

Sl. No.	Item Description	Qty. for 01 No. unit
A	B	C
A.	**TRAILER AXLE:**	
1.	Wheel Stud with Nuts (Right Side) (Each set shall comprise of all the studs & nuts for one wheel)	02 Sets.
2.	Wheel Stud with Nuts (Left Side) (Each set shall comprise of all the studs & nuts for one wheel)	02 Sets.
3.	Wheel Hub Bearing (Right Side)	06 Nos.
4.	Wheel Hub Bearing (Left Side)	06 Nos.
5.	Wheel Rim (Right Side)	03 Nos.
6.	Wheel Rim (Left Side)	03 Nos.
7a.	In case of Tube type Tyres: Tyre with Tube	03 Nos.
7b.	In case of Tubeless type Tyres: Tubeless Tyre	03 Nos.
B.	**TRAILER BRAKES:**	
1.	Brake Servo Assembly - Trailer Wheel	04 Nos.
2.	Brake Shoe Assembly - Trailer Wheel	16 Nos.

SECTION (B): OTHER SPARES LIST:

Sl. No.	Item Description	Qty.	Bidder's Response
A	B	C	
1	Cable Drum with Cable for Pressure Transducer (50m long)	4	
2	Cable Drum with Cable Flow Pickup (50m long)	4	
3	Cable Drum with cable for Densitometer (25m long)	2	
4	UPS	2	
5	Rack Computer	1	
6	Standard Computer Monitor Workstation	2	
7	Big Computer Monitor Wall Mount	1	
8	DMH XDV	1	
9	Genset Fuel Filter Set	2	
10	Genset Oil Filter Set	2	
11	Genset Air Filters Set	2	
12	Battery Charger	1	
13	Wifi Antenna and Cable	1	
14	Rack mounted Ethernet switch	1	
15	Pressure Transducers HU 1502, 0-1034 bar (0-15.000 psi)	2	
16	Magnetic Pickup 2-pin	2	
17	DMH Power Cable (also for others)	1	
18	Bayonet Ethernet Cable inside	2	
19	Bayonet to RJ45 Ethernet Cable inside	2	
20	Cable Drum with Cable for Bayonet Ethernet to Bayonet Ethernet (100 m long)	2	

SECTION (C): INSTRUMENTATION & CONTROL SYSTEM:

Sl. No.	Item Description	Qty.	Bidder's Response
A	B	C	
1	Computer Workstation	3 no	
2	Twenty-four (24) inch or bigger monitor	2 nos.	
3	Forty Four (44") inch or bigger monitor	1 no.	
4	Cable Drum with cable for Densitometer (250 feet long)	2 nos.	
5	UPS	1 nos.	
6	Frequency Signal Cables (approx. 250 feet each)	2 nos	
7	Analog Signal Cables (approx. 250 feet each)	2 nos.	
8	Pressure Transducer Cables (approx. 250 feet each)	2 nos.	
9	Frac Pumping Unit Communication Cable (approx. 250 feet)	1 no.	
10	Blender Communication Cable (approx. 250 feet)	1 no.	
11	CAS Unit Communication Cable (approx. 250 feet)	1 no.	
12	Hydration Unit Communication Cable (approx. 250 feet)	1 no.	
13	Sand Dumper Communication Cable (approx. 250 feet), (if it is required in the system)	1 no.	
14	Magnetic Pickup Sensor Cable (approx. 250 feet)	1 no.	

Note:

1. All spares in specified quantity as indicated above shall be supplied along with the supply of the units.

2. Specific description, Quantity etc. of each item shall clearly be indicated in the technical bid. Make, Part Nos. etc. of each item shall be submitted by the supplier along with the supply.

3. Bidder shall also quote separately (without prices) 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.
4. If any spares mentioned in above Tables is / are not required, the bidder must mentione that the spares do not require for the unit.

5. In case the multiple quantity of an item named above is used in the Automobile portion (i.e. Trailer) of the Data Van Unit and the specifications of such item does not match with each other, then the supplier shall supply such item in a mixed manner comprising all the variants used in the Automobile portion (i.e. Trailer) of the Data Van Unit. The supplier shall first try to supply all the variants of such item preferably in equal/proportional quantity of each of the variant used in the Automobile portion (i.e. Trailer) of the Data Van Unit as far as possible. However, the total quantity of such item to be supplied must not be less than the quantity mentioned in above.

6. In case the specifications of the item named above used in left & right side of the Axle System/Suspension System/Brake System of the Automobile portion (i.e. Trailer) of the Data Van Unit does not match with each other of that particular system, the supplier shall first try to supply all the variants of such item preferably in equal/proportional quantity of each of the variant used in the Automobile portion (i.e. Trailer) of the Data Van Unit as far as possible. However, the total quantity of such item to be supplied must not be less than the quantity mentioned in above.

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Annexure- A1

To-

Oil India Limited,
Duliajan, Assam, India

Sub: Undertaking / Declaration regarding Type Approval Certificate, Parts Catalogue, Maintenance / Service Manual of OIL's Inhouse Hydraulic Fracturing Fleet.

Ref: Tender No. for Supply of Hydraulic Fracturing Unit.

We M/s _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ do hereby declare that we shall produce the following at the time of Pre Despatch Inspection of Hydraulic Fracturing Fleet at our premise-

1) Type Approval Certificates (Hard copy) of-

a) Tractor / Prime Mover
b) Trailers of Frac Pumpers
c) Trailer of Blender Unit
d) Trailer of Hydration Unit
e) Trailer of Frac Data Van
f) Truck Chassis of Sand Dumper

Photocopies / Softcopies (scan copy) of the above Type Approval Certificates will be handed over to Pre Despatch Inspection Team of Oil India Ltd

2) **Hard copy / soft copy of Parts Catalogue and Maintenance / Service Manual of-**

a) Tractor / Prime Mover
b) Trailers of Frac Pumpers
c) Trailer of Blender Unit
d) Trailer of Hydration Unit
e) Trailer of Frac Data Van
f) Truck mounted Sand Dumper

Soft copies of the above will be handed over to Pre Despatch Inspection Team of Oil India Ltd

M/s _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

(Name of Bidder)

A. REF. CLAUSE NO. 14.0 / 2.

SAMPLE COPY OF FORM- 21 (as referred above)

Following is a sample copy of **FORM 21** of Indian Motor Vehicle Act only. The certificate shall contain following minimum information –

FORM 21
[See Rules 47 (a) and (d)]
SALE CERTIFICATE

(To be issued by manufacturer ~~or dealer or registered E-rickshaw or E-cart Association (in case of E-rickshaw or E-cart) 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 **OIL INDIA LIMITED** against Purchase Order No. .....

Name of the buyer **OIL INDIA LIMITED**
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 number ~~or motor number in case of Battery Operated vehicles~~	.....
5.	Engine ~~or Motor~~ Power	.....
6.	Cubic capacity	.....
7.	Fuel used	.....
8.	Number of cylinders	.....
9.	Month and year of manufacture	.....
10.	Seating capacity (including driver)	.....
11.	Unladen Weight	.....
12.	Maximum axle weight and number and description of tyres ~~(in case of transport vehicles)~~	.....
a.	Front axle	.....
b.	Rear axle	.....
c.	Any other axle	.....
d.	Tandem axle	.....
13.	Colour	.....
14.	Gross Vehicle Weight Rating	.....
15.	Type of body	.....
16.	Wheelbase	.....

(Signature of the)

*Strike out whichever is inapplicable.

B. REF. CLAUSE NO. 14.0 / 3.
SAMPLE COPY OF FORM- 22 (as referred above)

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

FORM-22
[See rules 47(1) (g)]
ROAD-WORTHINESS CERTIFICATE FOR
COMPLIANCE TO EMISSION AND NOISE STANDARDS
(To be issued by the manufacturer along with the vehicle)

It is certified that the following vehicle complies with the provisions of the Motor Vehicles Act, 1988 and rules made thereunder or international standard namely EEC / ECE Regulations:

1. Model/Commercial Name of the vehicle: .....
2. Chassis Number: .....
   [Example: Vehicle Identification Number (VIN)]
3. Engine ~~or Motor~~ Number: .....
4. Applicable Emission Norms: .....
5. Emission, Sound Level for Horn and Pass by noise values of the above vehicle model, obtained during Type Approval Testing as per Central Motor Vehicles Rules, 1989 or ECE/EEC Regulations are given below:

i. Type Approval Certificate No.: .....
ii. Type of Fuel: .....
iii. Emission values for vehicle: .....

TABLE
Positive Ignition Engine or Compression Ignition Engine Vehicle

Sr. No.	Pollutant (as applicable)	Units (as applicable)	Value (upto 3 Decimal places)
(1)	(2)	(3)	(4)
1.	Carbon Monoxide (CO)	mg/km or mg/kWh or g/kWh	
2.	Hydrocarbon (THC/HC)	mg/km or mg/kWh or g/kWh	
3.	Non-Methane Hydrocarbon (NMHC)	mg/km or mg/kWh or g/kWh	
4.	Oxides of Nitrogen (NOx)	mg/km or mg/kWh or g/kWh	
5a.	HC+NOx	mg/km or mg/kWh or g/kWh	
5b.	THC+NOx	mg/km or mg/kWh or g/kWh	
6.	Methane (CH4)	mg/kWh	
7.	Ammonia (NH3)	PPM	
8.	Mass of Particulate Matter (PM)	mg/km or mg/kWh or g/kWh	
9.	Number of Particles (PN)	Numbers/km or Numbers/kWh	

iv. Noise level (as applicable):

a. Horn (for all vehicles other than agricultural tractors and construction equipment vehicles) as installed on the vehicle: ..... dB (A); (upto 1 decimal place)

b. Pass by or Bystander's position: ..... dB(A)

~~c. Driver-perceived or Operator's ear level (as applicable for agricultural tractors and construction equipment vehicles: ..... dB (A)~~

(Facsimile Signature of Manufacturer)

Note 1: This Form shall be issued with signature of the manufacturer duly printed in the Form itself by affixing facsimile signature in ink under the hand and seal, as applicable.

Note 2: In case of multiple combinations, values pertaining to any one test result in the test report to be provided. For V2, V3 cases- average value of the test result in the test report to be provided.

Note 3: While printing Form 22, the relevant pollutants in the table as applicable for the subject vehicles may only be listed.

C. REF. CLAUSE NO. 14.0 / 3.
SAMPLE COPY OF FORM 22-A

Following is a sample copy of **FORM 22-A (Part – I) & FORM 22-A (Part – II) of Indian Motor Vehicle Act** only. The certificate shall contain following minimum information. –

FORM 22-A
[See Rules 47 (g), 115, 124(2), 126-A and 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 the following vehicle complies with the provisions of the Motor Vehicles Act, 1988 and the rules made there under or international standard namely EEC / ECE Regulations, including the following mass emission norms:

1. Brand name of the vehicle : .....
2. Chassis number : .....
3. Engine number/~~Motor number (In case of battery operated vehicles)~~ : .....
4. Emission norms : .....

(Signature of 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.

FORM 22-A
[See Rules 47 (g), 115, 124(2), 126-A and 127]
INITIAL CERTIFICATE OF COMPLIANCE WITH POLLUTION STANDARDS, SAFETY STANDARDS OF COMPONENTS AND ROAD WORTHINESS
(FOR VEHICLES WHERE BODY IS FABRICATED SEPARATELY)
PART – II
(**TO BE ISSUED BY THE BODY BUILDER**)

Certified that body of the following vehicle has been fabricated by us and the same complies with the provisions of Motor Vehicles Act, 1988 and Rules made there under or international standard namely EEC / ECE Regulations:

1. Brand name of the vehicle : .....
2. Chassis number : .....
3. Engine number/~~Motor number (In case of battery operated vehicles)~~ : .....
4. ~~Bus Body Builder Accreditation Certificate Number~~ : .....

(Signature of 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.

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TECHNICAL SPECIFICATIONS FOR SAND DUMPER UNIT, QTY = 3 NOS

Note to bidder:

1. The bidder shall provide their response and mention applicable information/ Complied / Not Complied / Not Applicable / Make & Model etc. (as applicable) against individual clauses in this document.

2. The bidder shall mention details of Reference Document name / Serial number / Page number of bid for documentary evidence (if any).

3. The bidder shall submit the filled-up document along with their technical bid.

Technical Specifications

Clause No.	Clause Description	Bidder's Response
1.0	**GENERAL:** i) The truck mounted sand dumper unit shall be suitable for driving over national highways, state highways, district roads, rural /village roads, non-grade road surfaces and for use in the rough, windy, marshy/waterlogged and dusty terrain oil and gas field environments found in the Indian Oilfields. ii) The following describes the heavy-duty self-contained proppant carrying unit with four compartments of 5 Tonne capacity each. Proppant/ Sand box installed on a heavy-duty truck chassis Shall be capable of working on rough roads & in bad weather on round the clock basis. iii) Suitable to work in the following climatic conditions: Temperature range: 0°C - 50°C Average Rainfall: 350 cm Relative humidity: 98% at 35° C. iv) The components to be incorporated into this model Shall be so arranged to provide reasonable access for maintenance & ease of operation. Storage device for related accessories & commonly used auxiliary equipment shall be provided. v) Shall have inbuilt system to deliver different sizes of proppant to blender hopper. vi) Shall be able to carry Proppant in the compartments at least 10Ton, from proppant yard to well site. vii) The make & model, design etc. of all the Sand Dumper Units to be supplied finally shall be same & identical in all respects.	
2.0	**TRUCK:**	
2.1	**OVERALL DIMENSIONS OF THE COMPLETE UNIT:**	
i.	**Overall Width of complete unit:** Not more than **2600 mm.** The bidder shall mention the Overall Width of the complete unit in the technical bid.	
ii.	**Overall Height of complete unit:**	

Clause No.	Clause Description	Bidder's Response
	Not more than **4500 mm** from ground level. The bidder shall mention the Overall Height (from ground level) of the complete unit in the technical bid.	
iii.	**Overall Length of complete unit:** Not more than **12000 mm.** The bidder shall mention the Overall Length of the complete unit in the technical bid.	
iv.	**Ground Clearance:** Ground clearance shall be as per OEM of the offered Truck. The bidder shall mention & submit the minimum ground clearance of the Truck in the technical bid & GA Layout Diagram	
2.2	**OVERALL WEIGHT OF THE COMPLETE UNIT & GROSS VEHICLE WEIGHT (GVW) RATING OF TRUCK:**	
i.	The Total weight (mass) of the complete unit shall be as minimum as possible. Total weight (mass) is the weight of the complete unit i.e., total of weight of the Truck with Driver's cabin etc., weight of all equipment, items, tools, accessories, materials, spare wheels, hydraulic oil, all oil, handling fluid with tank, Proppant, Diesel etc. that are permanently mounted on the unit and are generally being carried & kept in the unit.	
ii.	The bidder shall mention the Total weight (mass) of the complete unit in the technical bid.	
iii.	Total weight (mass) of the complete unit during road drive must be within the Truck manufacturer's declared Gross Vehicle Weight (GVW) Rating of the offered Truck. The Truck manufacturer's declared Gross Vehicle Weight (GVW) Rating of the offered Truck shall not exceed **49000 kg.** This is required for permanent registration of the units as per as per Motor Vehicle Act, 1988 & Central Motor Vehicle Rules, 1989.	
iv.	The bidder shall mention the Truck manufacturer's declared gross vehicle weight (GVW) Rating of the offered Truck in the technical bid.	
2.3	**GENERAL ARRANGERMENT (GA) DRAWING OF COMPLETE UNIT:**	
i.	The bidder shall submit GA (General Arrangement) drawing of the offered complete unit (i.e., Truck with driver's cabin and all other items of the Sand Dumper Unit etc.) with major dimensions like overall length, overall height, overall width etc. of the complete unit and indicating the position of all major components & their mounting on the vehicle, estimated loading on individual axles along with the technical bid.	
ii.	Note:	

Clause No.	Clause Description	Bidder's Response
	"Complete unit" in above means Truck with Driver's cabin etc., all equipment, items, materials, spare wheels that are permanently mounted on the unit.	
2.4	**TRUCK CHASSIS AND PLATFORM:**	
i.	Brand new Truck chassis manufactured not prior to six months from the date of issuance of Purchase Order of Oil India Limited (OIL).	
ii.	The truck chassis must be of Make: Ashok Leyland/ Tata / Mahindra / Eicher / Bharat Benz / Volvo / Kenworth / International / Peterbilt 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 mounting of Sand Dumper Unit equipment items on the Truck chassis shall be the responsibility of the bidder.	
iii.	The bidder shall clearly mention the Make & Model of the offered Truck chassis in the technical bid.	
iv.	The bidder shall submit the technical leaflet /Brochure of the offered Truck chassis along with the technical bid. Note: In case of common technical leaflet / brochure containing multiple models of Truck chassis, bidder shall clearly indicate / highlight the offered model of Truck chassis in the technical leaflet.	
v.	In case the bidder offers more than one Truck chassis make & model in the technical bid, such bidder shall submit their technical specifications for each offered Truck chassis make & model unambiguously against the requirements of each clause of the tender document. Such bidder shall also to note that, the make & model, design etc. of all the Sand dumper Units to be supplied finally shall be same & identical in all respects in the event of order. The bidder to confirm the same in technical bid.	
vi.	In case the bidder offers more than one Make & Model Truck chassis along with all technical / supporting documents required for evaluation purpose, the price offered in price bid must be firm and unique (same) for all the makes and models. Bidder must submit a single price without any condition which should be valid for all offered makes & models quoted by the bidder. The bidder shall ensure and confirm the same in technical bid. Offers with conditional / optional price shall be rejected at any point of time.	
vii.	The supplier may, if required and at its sole discretion, engage a body builder to carry out the necessary body fabrication jobs, mounting of equipment etc. on the Truck chassis. However, the supplier shall solely be responsible for the execution of the entire project, including fabrication job, mounting of equipment etc. irrespective of whether they engage body builder or not.	
viii.	No preference shall be provided during evaluation for vehicle(s) with higher specifications. All Make/ Model of vehicle(s) meeting tender specifications shall be treated as equal and at par.	
ix.	In case the bidder offers more than one Truck chassis make & model in the technical bid, such bidder shall submit their technical specifications for each offered Truck chassis make & model unambiguously against the	

Clause No.	Clause Description	Bidder's Response
	requirements of each clause of the tender document. Such bidder shall also to note that, the make & model, design etc. of all the Sand Dumper Units to be supplied finally shall be same & identical in all respects in the event of order. The bidder to confirm the same in technical bid.	
x.	**SPARES & SERVICE (for Truck):**	
x.	The bidder shall submit a written undertaking (along with the technical bid) that they, themselves or through other sources, would be able to supply all the requisite spares (including bought out items, if any) & consumables and provide the maintenance services for their offered Truck in OIL operational area(s) in India for a minimum period of **fifteen (15)** years from the certified date of completion of successful field commissioning of the unit.	
xi.	The cost of such spares, consumables & maintenance services which may be utilized by Oil India Limited in future shall be extra and **SHALL NOT BE** considered by the bidder in their quoted prices in this tender.	
xii.	Spares, consumables (except diesel fuel) & maintenance services (if any) during commissioning shall be in the scope of the successful bidder (supplier). Notwithstanding anything mentioned in this clause, the bidder shall abide the Commissioning Clause mentioned elsewhere in the tender.	
2.5	**TRUCK ENGINE:**	
a)	One (01) number of water-cooled / liquid-cooled diesel engine of adequate power [not less than **600 hp** at rated rpm] as per Truck manufacturer suitable for road drive as well as equipment operations specified in the tender shall be provided. **Power for equipment operations specified in the tender shall be provided by Truck Engine only.**	
b)	The bidder shall mention & submit the following information in the technical bid:	
i.	Water-cooled / liquid-cooled diesel fuel Engine. (Yes/ No).	
ii.	Make & model of the offered Engine.	
iii.	Maximum power of the offered Engine in horse power (HP).	
iv.	Maximum torque of the offered Engine.	
v.	Technical specification catalogue/ brochure with the technical details of the offered Engine.	
2.6	**TRUCK ENGINE EMISSION NORMS:**	
i.	The offered Truck shall have to comply with the emission norms BS (Bharat Stage) –VI OBD Stage II / EURO-VI Stage-E. The emission norms shall comply Real Drive Emissions (RDE) and Portable Emissions Measurement System (PEMS).	

Clause No.	Clause Description	Bidder's Response
ii.	The bidder shall mention the emission norms of the offered Truck in the technical bid.	
2.7	**TRANSMISSION:**	
a)	The offered Truck chassis shall be provided with automatic / automated transmission having forward gears, neutral & reverse gear(s) with suitable **automatic gear shifter** and **without clutch pedal** as supplied with chassis by the manufacturer of the offered Truck The transmission shall be suitable for both road drive of the unit as well as Sand Dumper Unit operation. Suitable Transfer Case & PTOs (Power Take Off) as per design / requirement shall be provided. The bidder shall note that Manual Transmission with clutch pedal is not acceptable.	
b)	The bidder shall mention & submit the following information in the technical bid:	
i.	Type of offered transmission (automatic / automated transmission, with automatic gear shifter).	
ii.	Make & model of the offered transmission.	
iii.	Number of forward gears in the offered transmission.	
iv.	Number of reverse gear(s) in the offered transmission.	
v.	Technical specification catalogue/ brochure with technical details of the offered transmission.	
vi.	Mechanical power flow block diagram from Engine to Axle/ Wheels for Road drive indicating all major components like Transmission/ transfer case (if any) / PTOs / Axles/ Wheels etc.	
vii.	Mechanical power flow block diagram from Engine for Sand Dumper Unit operation, etc. indicating all major components like Transmission/ transfer case (if any) / PTOs etc.	
viii.	Make & model of the offered transfer case (if any).	
ix.	Technical specification catalogue/ brochure with technical details of the offered transfer case (if any).	
x.	Make & model of the offered PTO(s).	
xi.	Technical specification catalogue/ brochure with technical details of the offered PTO(s).	
2.8	**DRIVE (AXLE CONFIGURATION) & AXLES:**	
a)	**Drive (Axle Configuration):** The offered Truck chassis shall have following drive (Axle configuration): 8x4 drive [Total 04 Nos. of axles (including front & rear) with 02 Nos. of drive axles at Rear].	

Clause No.	Clause Description	Bidder's Response
b)	The bidder shall mention the drive of the offered Truck in the technical bid.	
c)	**Front Axle:** Two numbers **non powered** front axles as per design shall be provided. The front axle(s) shall be steer axles. The maximum permissible axle weight for single axle with two tyres in Transport mode is 7000 Kg as per Central Motor Vehicle Rules, 1989 of India. Bidder shall ensure that the loading on each front axle shall be within the axle capacity of the respective front axle in all conditions.	
d)	The bidder shall mention & submit the following information in the technical bid:	
i.	Total number of front axles in the offered Truck chassis.	
ii.	Total number of front steer axles.	
iii.	Total axle capacity of each front axle.	
iv.	Estimated Total loading on each front axle.	
v.	Loading on each front axle is within the axle capacity of the respective axle. (Yes / No).	
e)	**Rear Axle:** Two (02) numbers of powered rear drive axles as per design and meeting tender specifications shall be provided. Bidder shall ensure that the loading on the axles shall be within the axle capacity of the rear axles in all conditions. The maximum permissible total axle weight for tandem axles in transport mode is 21,000 Kg as per Central Motor Vehicle Rules, 1989 of India. Rear drive axles shall have differential lock facility with alarm/indicator.	
f)	The bidder shall mention & submit the following information in the technical bid:	
i.	Total number of rear axles in the offered Truck chassis.	
ii.	Total number of powered rear axles.	
iii.	Total rear axle capacity for both the axles.	
iv.	Estimated Total loading on both the axles.	
v.	Total Loading on rear axles is within the axle capacity of the rear axles. (Yes / No).	
vi.	Differential lock facility in rear axles with alarm /indicator (Yes/ No).	

Clause No.	Clause Description	Bidder's Response
vii.	Technical specification catalogue/ brochure with technical details of the offered rear axles (Yes / No).	
2.9	**STEERING:**	
i.	The offered Truck chassis shall have Power assisted Right Hand steering system (i.e., steering wheel shall be on the right-hand side inside the driver's cabin when viewed from the rear of the truck chassis). Truck chassis with Left Hand steering system shall not be acceptable.	
2.10	**SUSPENSION:**	
a)	**Front Suspension:** Heavy duty multi-leaf spring suspension shall be provided. Rubber/ Air/ Hydraulic suspension will not be accepted.	
b)	**Rear Suspension:** Preferably bogie suspension with leaf springs or suitable pneumatic suspension system shall be provided in rear. Hydraulic suspension will not be acceptable.	
c)	The bidder shall mention & submit the following information in the technical bid:	
i.	Type of offered rear suspension.	
ii.	Make & model of offered rear suspension.	
iii.	Technical specification catalogue/ brochure with technical details of the offered rear suspension system.	
2.11	**WHEELS & TYRES:**	
a)	The Truck chassis shall be fitted with Suitable wheels with Tube type / Tubeless type Tyre of adequate ply rating shall be provided. Single wheel on each side of each front axle (i.e., 02 Nos. of wheels in each front axle & total 04 Nos. of wheels for 02 Nos. front axles) and 02 Nos. of wheels on each side of each rear axle (i.e., total 04 Nos. of wheels in each rear axle & total 08 Nos. of wheels for 02 Nos. rear axles) shall be provided as per design specifications. It shall be bidder's endeavour to offer front and rear wheels of same size & type. Single giant tyre (s) are not acceptable. Suitable lifting and mounting arrangement facility for at least 01 number of wheel shall be provided in the Truck.	
b)	The bidder shall mention & submit the following information in the technical bid:	
i)	Total number of wheels in all the front axles.	

Clause No.	Clause Description	Bidder's Response
ii)	Type of Tyres (Tube type / Tubeless type) in the front axles.	
iii)	Tyre size of front axle wheels.	
iv)	Total number of wheels in all the rear axles.	
v)	Type of Tyres (Tube type / Tubeless type) in the rear axles.	
vi)	Tyre size of rear axle wheels.	
vii)	Mounting arrangement facility for spare wheel is provided in the Truck (Yes/No).	
2.12	**BRAKE:**	
i)	Service Brake: Multiple Circuit Pneumatic brake acting on all wheels with ABS shall be provided and to be operated from Driver's Cabin.	
ii)	Parking Brake: Suitable parking brake shall be provided in the Driver's Cabin to be used while parking the Truck. The parking brake shall be hand operated from Driver's Cabin. It shall automatically get engaged in the event of low/ no air pressure.	
iii)	Preferably buzzer warning for low air pressure to be provided.	
2.13	**ELECTRICAL SYSTEM:**	
i)	Suitable electrical starting, charging and lighting systems etc. shall be provided in the Truck.	
ii)	Suitable electrical master switch to disengage all electrical circuits from battery shall be provided in the Truck as per Truck manufacturer.	
iii)	Covered Battery Box shall be provided. Battery box shall **not** be located inside the Driver's Cabin.	
2.14	**TRUCK ENGINE FUEL TANK & DIESEL EXHAUST FLUID (DEF) TANK:**	
a)	Lockable truck engine fuel tank(s) of approximately not less than **400 Liters** total capacity shall be provided in the Truck chassis. Suitable strainer at the opening of the tank shall be provided to prevent entry of foreign materials. In case, the Truck engine comes with multiple fuel tanks, all the truck engine fuel tanks shall be connected to each other.	
b)	Suitable Diesel Exhaust Fluid (DEF) tank of adequate capacity shall be provided.	
c)	The bidder shall mention & submit the following information in the technical bid:	
i)	Number of fuel tank(s) in the Truck.	
ii)	Capacity of each fuel tank in the Truck.	
2.15	**DRIVER'S CABIN:**	

Clause No.	Clause Description	Bidder's Response
a)	The Driver's cabin of the Truck shall be ergonomically designed factory built (original built, supplied with the Truck chassis by the Truck manufacturer) Air Conditioned driver's cabin with seating capacity of minimum 02 (two) persons (including Driver). All the controls required for road drive of the unit Shall be clearly arranged to have easy access to the driver inside the Driver's cabin while driving the unit. The driver's seat & co-driver's seat Shall be comfortable and ergonomically designed with adjustable mechanism and shall have seat belts as per norms.	
b)	The Truck unit shall be fitted with dashboard inside the Driver Cabin with all standard gauges & fittings like air pressure gauges, charging system gauge, engine oil pressure gauge, engine temperature gauge, fuel gauge, Transmission oil pressure (if any) & Temperature meters (if any) etc. and any other items with warning displays, as per the Truck manufacturer.	
c)	The Truck unit dashboard shall have Speedometer indicating the speed in **Kilometers per hour** and the Odometer shall be with **Kilometers** calibration system.	
d)	The bidder shall mention & submit the following information in the technical bid:	
i)	Seating capacity (including driver) inside the Driver's cabin.	
2.16	**OTHER FITTINGS & ACCESSORIES:** The unit shall be driven on roads in India having traffic rules for Right Hand Drive vehicles only. Accordingly, the following fittings and accessories are to be fitted / provided in each Truck for safe movement of the unit on road. All the lightings/ controls etc. as mentioned below and as required for road drive are to be operated from the Driver's cabin of the Truck.	
i)	All standard accessories, fittings, lightings, safety features etc. as per the Truck manufacturer.	
ii)	Headlamps. **The photometry of the headlamps to suit "keep left" traffic.**	
iii)	Stop Lamps.	
iv)	Parking Lamps.	
v)	Fog Lamps.	
vi)	Direction Indicator Lamps.	
vii)	Hazard Warning Lamps.	
viii)	Sufficient side marker lights, top marker lights, rear & side reflectors.	
ix)	Driver Cabin Lights.	

Clause No.	Clause Description	Bidder's Response
x)	02 (Two) Nos. of adjustable search lights, mounted at top behind the Driver cabin of the Truck are to be fitted in the unit(s) for illuminating the rear equipment.	
xi)	Horn.	
xii)	Rear-view mirrors at both sides.	
xiii)	Blind spot mirrors, if possible.	
xiv)	Windscreen Wipers.	
xv)	Mudguard with mud flaps for all the wheels.	
xvi)	An audible back-up alarm is to be provided to sound when the Truck is put in reverse gear.	
xvii)	Well covered vertical exhaust with thermal non-conducting material / heatshield (as per the Truck manufacturer) located behind and projected above the top of the driver's cabin shall be provided. The exhaust pipe shall be such that rainwater ingression shall not be possible.	
xviii)	Suitable heavy duty attachment (Hook type or Pin type) at front & rear, capable of pulling / towing the unit from bogged down situation in slushy areas in oilfields from front as well as rear shall be provided.	
xix)	The Truck engine exhaust shall be fitted with suitable Spark Arrestor. The Spark Arrestor may be additional attachment to be fitted with the exhaust or there shall be chassis in-built internal mechanism to prevent discharge of open flame and sparks in the exhaust. The bidder shall confirm in the technical bid whether the Spark Arrestor shall be additional attachment or chassis in-built internal mechanism. In case Spark Arrestor is not needed or not recommended as per the Truck manufacturer as additional attachment, the bidder shall submit supporting document(s) from the Truck manufacturer or Truck manufacturer's dealer along with the technical bid.	
xx)	The Truck shall be fitted with Speed Limiting Device (SLD) & its accessories. The maximum road speed of the Truck with Speed Limiting Device shall preferably be **50 km/hour** without affecting the other performance parameters of the Truck in any manner. The speed limitation function shall not actuate the Truck's service braking system. The Speed Limiting Device shall be fail-safe and so designed to act on road drive only and it must not interfere the equipment operations in any way. The set speed shall be indicated on a plate in a conspicuous position in the Driver's compartment of the vehicle. Necessary certification/ documentation from appropriate authority/ entity regarding the speed limitation function or the SLD is to be accompanied along with the supply.	
xxi)	The Truck shall be fitted with Vehicle Tracking System (VTS) compatible for use in India.	

Clause No.	Clause Description	Bidder's Response
	The successful bidder (supplier) may also fit the VTS (compatible for use in India) after arrival of the unit in India. Necessary certification/ documentation from appropriate entity regarding the Vehicle Tracking System (VTS) is to be accompanied along with the supply.	
xxii)	The Truck shall preferably have Air Bags for Driver and the Co-driver.	
xxiii)	Wherever feasible, Side / Lateral Underrun Protective Device (SUPD)s, Front Underrun Protective Device (FUPD), Rear Underrun Protective Device (RUPD) shall be fitted in the unit. Note: 1. FUPD/ SUPD/ RUPD are structures that prevent smaller vehicles from getting underneath etc. during collision as per AIS 069, IS: 14812, IS: 14682 or similar standards. 2. The equipment manufacturer shall check the feasibility of providing the SUPDs, RUPDs during manufacturing and arrange to provide the same accordingly as per feasibility in the unit. FUPDs/ SUPDs/ RUPDs provided by the equipment manufacturer shall be of detachable type and shall not be permanently fitted / welded to the Truck chassis.	
xxiv)	Retro reflective marking (3M make or any other make, 50 mm width) on the front, rear and both side of the Driver's cabin as per the colour code- Front: White, Rear: Red and Sides: Yellow as per AIS: 090 / applicable standard.	
xxv)	01 (one) number Fire Extinguisher inside Driver's Cabin of Truck.	
xxvi)	01 (one) number First Aid Box inside Driver's Cabin of Truck.	
xxvii)	Wheel Wrench & Handle. In case, the wheel nuts at front and rear are of different sizes, then separate Wheel Wrench & Handle for both front & rear shall be supplied along with each unit.	
xxviii)	04 (four) numbers of wheel chocks.	
xxix)	02 (two) numbers minimum 30 MT capacity hydraulic jack with handle.	
xxx)	02 (two) numbers of complete spare wheel assembly (even in case of identical front & rear wheels)	
xxxi)	01 (one) number of pressure gauge for tyre pressure measurement.	
xxxii)	01 (one) number of Heavy-duty Grease Gun.	
xxxiii)	Any other standard items/accessories provided by the Truck manufacturer.	
2.17	**TOOL KIT FOR GENERAL MAINTENANCE OF TRUCK:** A toolkit consisting of tools given below shall be supplied along with each unit at supplier's cost:	

Clause No.	Clause Description	Bidder's Response
i)	Set of Ring Spanners [Sizes(mm): 6x7, 8x9, 10x11, 12x13, 14x15, 16x17, 18x19, 20x22, 21x23, 24x27, 25x28, 30x32], at least 01 number of each size.	
ii)	Set of Open-Ended Spanners [Sizes(mm): 6x7, 8x9, 10x11, 12x13, 14x15, 16x17, 18x19, 20x22, 21x23, 24x27, 25x28, 30x32], at least 01 number of each size.	
iii)	6 inch Long Nose Plier – 01 number.	
iv)	Screwdriver (Small, Medium, Long) – 03 numbers.	
v)	8 Inch Adjustable Wrench – 01 number.	
vi)	Hammer with Handle – 01 number.	
vii)	Chisel – 02 numbers.	
viii)	Centre Punch – 01 number.	
ix)	Drift Punch – 02 numbers.	
x)	File, Flat, Bastard Cut with Handle, 10 inch – 01 number.	
xi)	File, Flat, Smooth Cut with Handle, 10 inch – 01 number.	
xii)	Brass Punch – 01 number.	
xiii)	Oil Can – 01 number.	
xiv)	Allen key set (as applicable).	
xv)	Toolbox / Tool bag for above tools (not mounted on Truck) – Minimum 01 number or as required as per manufacturer's standard.	
xvi)	**Note:** The sizes of the above mentioned tools may change as per manufacturers standard.	
2.18	**TYPE APPROVAL CERTIFICATE:**	
a.	Type Approval Certificate of vehicle is required for the following activities in India: i) **Custom clearance** of the vehicle as per import policy conditions/guidelines of India Chapter-87 of ITC (HS), 2022, Schedule 1-Import Policy, Section: XVII, in case of imported vehicle from other countries to India. ii) **Homologation** (the formal process by which an official authority certifies that a product, especially a vehicle, meets specific regulatory standards for safety, performance, and environmental impact before it can be sold or used in a particular market/ region) / **Uploading the vehicle details in the relevant Government of India portal (VAHAN/ Parivahan portal**) for **registration** of vehicle as per Motor Vehicle Act, 1988 & Central Motor Vehicle Rules, 1989 of India which is mandatory for plying of the vehicle in roads in India.	
b.	In case the offered Truck is manufactured in India, it shall be compliant to Central Motor Vehicle Rules 1989 of India and its amendments.	

Clause No.	Clause Description	Bidder's Response
	In case the offered Truck is imported from other countries to India, the offered Truck shall be compliant with the import policy of Government of India. In both the case i.e. manufactured in India and imported from other countries to India, the bidder/supplier has to exhibit the original Type Approval Certificate of Truck, and submit a copy of the same to the Pre despatch Inspection Team of Oil India Limited. The original copy of the Type Approval Certificate has to be submitted to Oil India Ltd along with the supply. The bidder has to submit a declaration along with the bid in this regard as per Annexure A1. Submission of Type Approval Certificate of Truck shall be as per Central Motor Vehicle Rules of India in case of Truck manufactured in India or as per the import policy of Government of India, in case of imported vehicle, as on the date of supply.	
c.	In case of Truck manufactured in India, the list of Type Approval Certificate issuing agencies are mentioned in Central Motor Vehicle Rules, 1989 of India & its amendments. In case of imported vehicle from other countries to India, at the time of Customs clearance, a Type Approval Certificate/COP, of an international accredited agency including a notarized English translation thereof shall be furnished. This Type Approval Certificate shall stipulate that vehicle to be imported complies with all the ECE Regulations. The list of international accredited agencies approved for issuance of Type Approval Certificate is available on DGFT website, under Policy Circular No. 12 (RE- 2013)/2009-2014 dated 15.01.2014 issued by Ministry of Commerce & Industry, Department of Commerce, Director General of Foreign Trade, New Delhi subjecting "Type Approval issuing agencies under Policy Condition number 7 and 9 of Chapter 87 of ITC (HS) 2012".	
d.	Bidder/supplier shall ensure adherence to any subsequent revisions to the above referred Policy Circulars that may be issued in future by DGFT. Bidder shall note that, they shall be conversant with the policy of Government of India and Oil India Limited (OIL) shall not be liable in this regard whatsoever.	
e.	Type approval certification of individual components shall not be considered as vehicle Type approval certificate.	
f.	Notwithstanding anything mentioned elsewhere in this document, submission of Type Approval Certificate/ Conformity of Production (CoP) shall be as per the guideline of Government of India as on the date of supply.	
2.19	**SPECIAL NOTES:**	
i)	All lights shall be covered to the extent possible, with suitable guard to prevent damage. The guards shall have detachable provision.	
ii)	The electrical connections, other than those comes along with the Truck, shall be suitable to operate in oilfield areas. The lightings shall comply road vehicle lighting regulations. Screw-in bulbs shall not be used as far as possible. The electrical wirings shall be fixed and protected as to minimize accidental damage or undue wear. The wirings shall be insulated, and the electrical circuits shall be protected against overloading by fuses or automatic cut-outs. Adequate steps shall be taken to ensure electrical continuity and wherever necessary, components shall be bonded by copper straps. The junction boxes, if any, shall be sealed.	
iii)	Comprehensive Maintenance of sand dumper unit(s):	

Clause No.	Clause Description	Bidder's Response
	As mentioned elsewhere in the tender document.	
3.0	**PROPPANT BOX:**	
i)	Proppant delivery system shall meet API RP 19C and shall be Dustless unloading system. **Shall be able to operate from local control panel or from DATAVAN.**	
ii)	The proppant box shall have the following physical characteristics: Storage capacity of 50 Ton (Capable of holding equivalent proppant volume of 20/40 mesh Ottawa sand or equivalent, Sp. Gr. 2.65 & bulk density 1.65 gram/cc).	
iii)	Four compartments of 12.5 T each configuration with individual man-way & loading hatches with individual load cell to check quantity of proppant at any time.	
iv)	The proppant box shall have suitably covered to prevent rainwater or any other impurities to enter the boxes.	
v)	The dumper box is to be designed for providing on-site proppant storage volume of 50 tons of proppant.	
vi)	The proppant box shall contain four independent compartments, providing storage of multiple proppant types/sizes for improving measurement and control.	
vii)	Rear ladder to climb to the top of dumper shall be about 1½ ft from the ground level. 6mm thick M.S Plate to be welded on the other side (opposite to walkway) top of the dumper to provide a horizontal support for easy loading of proppant into dumper.	
viii)	Box type central feed chute through the 04 (Four) compartments with hydraulically operated vertical sand control gates in each compartment. A main hydraulically operated sand chute control to be located at tail end of the unit.	
ix)	Chutes shall be of: 6 mm or more thick MS with abrasion liners in impact zones. Belt shall be 3 ply or more, 6-10 mm thickness, abrasion resistant.	
x)	A main hydraulic lift cylinder is to be installed & shall be capable of raising the proppant box hydraulically to a 30–60 degree dump angle to assist in the gravity feed of proppant to the blender hopper.	
xi)	The main adjustable rear centrally mounted discharge chute with hydraulic lift/lower cylinder will be designed for smooth flow to a Frac Bender hopper and will be capable of raising the discharge chute up to a maximum height of 1.4 m from the ground when the Proppant Box is in the full raise position.	
xii)	6mm thick M.S Plate to be welded on the other side (opposite to walkway) top of the dumper to provide a horizontal support for easy loading of dumper.	
xiii)	Inside of the proppant box shall have rust proof lining.	
xiv)	Suitable Mass flow measurement facility to be incorporated by means of load cell etc. Mass flow rate readings shall be displayed at the local and remote panels. Provision to export the data to existing Datavan / DAS. Mass flow rate totalizer Shall be incorporated. Reset option to be included for totalizing the proppant delivery in each job.	
xv)	Each compartment of the dumper box shall be marked at every 5MT capacity for visual inspection.	
xvi)	Proppant delivery from individual compartments to the delivery belt Shall be controlled by both remote and manual operations.	
xvii)	Shall have Emergency shut-off system	
4.0	**HYDRAULIC SYSTEM:**	
i)	Powered from the PTO installed on the truck transmission Shall be a hydraulic pump that will provide power to the:	

Clause No.	Clause Description	Bidder's Response
	a) Four (04) hydraulic operated Proppant Compartment Open/Close (lift) Cylinders controls. b) Hydraulic operated Proppant Box Compartments open/close Slide Gate cylinders c) Proppant Transfer Conveyor Belt d) Proppant box main lift cylinder. e) Central feed chute opening cylinders. f) Main proppant chute opening cylinders. g) Proppant chute discharge lift cylinder. h) Proppant delivery system i) One (01) Hydraulic Cooler drive motor j) Proppant Discharge Chute Conveyor Lift/Lower/Pivot cylinders k) Blender Proppant Delivery Conveyor Belt. l) Any other hydraulic system	
ii)	All hydraulic control Shall be provided on both sides of the unit. Hydraulic system Shall also include: a) Hydraulic cooler. b) Hydraulic pressure gauges. c) Hydraulic motors/pumps Shall be of Rexroth / Sunstrand / Dennison /Commercial / Vickers /Parker/Sauer/Sauer danfoss/Eaton make.	
iii)	Hydraulic oil cooler Shall be designed in such a way that the temperature of the Hydraulic oil in the system does not exceed 70 degree centigrade in extreme ambient condition i.e.50 degree centigrade.	
iv)	All hydraulic filters used in the system Shall be of Donaldson/ Pall/ Fleet guard/Parker make.	
v)	Hydraulic system to be designed for operation of all the systems at 100% load simultaneously.	
vi)	PTO like transmission mounted PTO/ Engine mounted PTO/Transfer case etc. are for transferring power to mechanical drive/ hydraulic pumps etc, during job only. The PTO Shall drive respective equipment only after operator shifts control from road mode to PTO mode and in no case these Shall be in engaged position while driving on road.	
5.0	**CONTROL SYSTEM**	
	A fully equipped Control Panel easily accessible from the ground that will allow an Operator to manually control the Unit and have a clear view of the Discharge Chute outlet. This Control Panel will be equipped with a hinged weather cover and be fully engraved in English and will include the following Controls and Indication devices. The Control devices will include the following: • Diesel Engine stop/start • Diesel Engine Emergency Kill switch • Diesel Engine throttle • Four (4) Trailer mounted down rigger/jacks • Hydraulic operated Proppant Box Compartments open/close Slide Gate cylinder controls with position indicators • Proppant Transfer Conveyor Belt on/off/speed control • Blender Proppant Delivery Conveyor Belt on/off/speed control • Proppant Discharge Chute Conveyor Lift/Lower/Pivot cylinder controls • One (1) Power on/off switch • One (1) Light Switch • All other required control devices	

Clause No.	Clause Description	Bidder's Response

	The Indication devices will include the following:
	• Diesel Engine monitoring EDM Display Module monitoring screens each to display the following Diesel Engine data:
	  • Diesel Engine RPM
	  • Diesel Engine oil pressure/temperature
	  • Diesel Engine Coolant temperature
	  • Diesel Engine diagnostic fault indication and information
	• -Hydraulic Oil Pressure/Temperature
	• -One (1) Voltmeter
	-All other required indication devices	

6.0	**UNITIZATION AND COMPLETION:**	
i)	The above unit Shall also confirm the following specification: a) Installation of all electrical system. b) Installation of work lights. c) Installation of all pneumatic system. d) Installation of all hydraulic system.	
ii)	The unit Shall be designed for stability and structural integrity at full loaded conditions.	
iii)	Workmanship Shall be of good quality and appearance	
iv)	Workmanship Shall be of the best quality & appearance. The equipment shall be fabricated in accordance with industry accepted standards. Following is a partial list of examples: a) Flame cut edges shall be ground smooth. b) Sharp corners and edges to which operators and mechanics are vulnerable shall be ground smooth. c) Bolt holes for bolts shall be drilled (not torch cut) d) Welds shall be of good quality and sufficient strength. e) No sweated or brazed type hydraulic fittings will be used. f) Where applicable use self-locking nut.	
v)	All steel & miscellaneous fittings to complete the unit	

vi)	This Shall include the following items:
	a) Installation of all other electrical systems (all electrical systems Shall be wired to a two pole two wire arrangement).
	b) Lights for twenty-four-hour operation (entire lighting system Shall be shipped packed to avoid breakage during shipment).
	c) Installation of all pneumatic systems.
	d) Installation of all hydraulic systems.
	e) Pipe, hose brackets and racks.
	f) All steel and miscellaneous fittings to complete the unit.
	g) Steel toolbox containing:
	  1) Pipe Wrench 12" size 2 Nos.
	  2) Pipe Wrench 18" size 2 Nos.
	  3) Pipe Wrench 24" size 2 Nos.
	  4) Pipe Wrench 36" size 1 No.
	  5) Vice Grip Pliers 1 No.
	  6) Adjustable Wrench 6", 8", 10" 2 Nos. each
	  7) 5lb Sledge Hammer 2 Nos.
	  8) 10lb Sledge Hammer 2 Nos.
	  9) Combination Wrench Set (3/8" to 1 ¼") 2 Sets
	  10) Hack Saw with 10 Blades 2 Nos.
	  11) Circuit testing light 1 No.
	  12) Heavy duty ½" drive socket set (3/8" to 1 ¼") 1 Set
	  13) 10 piece Allen set Wrench 2 Sets
	  14) Plain Screw Driver 6" x 10" 2 Sets
	  15) Philips Screw Driver 6" x 10" 2 Sets	

Clause No.	Clause Description	Bidder's Response
	16) Strap type filter Wrench 1 No. 17) Fluke 85 or above digital multi-meter 1no 18) Tool box for hand carrying tools with Pad lock 2 Nos.	
vii)	Access steps/ladders with grab handles will be installed at convenient locations around the unit.	
viii)	A console for display / control of job in auto/Manual mode. A remote console to be provided in existing data van with suitable inter connections and compatibility for the existing remote data acquisition system.	
ix)	OEM part number must be given along with supplier's part number for each and every sub-assemblies.	
x)	3 sets of catalogue to be supplied in both hard and soft copies for all installed components of the units along with the make and Model Part No. and Sl no. of assemblies, sub – assemblies.	
xi)	Complete testing of the equipment at manufacturer's plant. Testing to be include all function tests and the operational testing of the unit. Copies of all relevant test documentation/certificates Shall be supplied	
xii)	Supplied with each unit Shall be three (3) copies, in English, of a complete operating, maintenance (including sub-assemblies, instrument sensors, wiring diagrams etc) (Note: OEM part numbers will be supplied along with the Suppliers part numbers) with two (2) soft copies.	
xiii)	Special instruments / attachments for setting user settable meter configuration parameters are to be provided.	
xiv)	All hosing and wiring will be labelled or tagged on both ends for easy identification. All hosing or wiring in close proximity with hot surfaces (i.e. engine exhaust manifold) will be secured to a heat- shielded cable mount	
xv)	Layout diagram of the units Shall be sent to OIL only for information during the engineering stages. However, the supplier need not to take any approval from OIL to proceed unitization as per their schedule.	
7.0	**PAINTING:**	
i)	Unit to be sand blasted wherever required, one coat of primer followed by two coats of paint as specified below:	
ii)	Frame and Control console: RED-315	
iii)	Rim and Cab Top: Gold-44753	
iv)	Bumper: Gold & Red Stripes	
v)	OIL logo (to be provided at the time of unit manufacturing)	
8.0	**MANUALS & P&ID:**	
i)	Operational manual of the unit with categorical steps to operate the unit by an operator along with the functionality for each control switches, etc. and the operating range of the control parameters to be provided.	
ii)	The layout diagram of each system must enlist the components in it along with technical detail (Nomenclature).	
iii)	All the components Shall also have nameplate embossed indicating original equipment manufacturer of these components, Make / Model their Part No., SL No. and possible details as per industry standards. Wherever the mounting of the nameplate is not possible such detail must be made on layout sheet of the system in which the component is installed.	
iv)	The O& M manuals and the spare part lists (three sets) to be provided in hard copy as well as in a soft copy.	
v)	The layout diagram of the total unit depicting the dimensions (length, breadth & height) and weight and the suppliers certificate mentioning all these details to be submitted.	
vi)	All manuals Shall be in ENGLISH language only both in Hard copy and soft copy.	
vii)	The manuals supplied shall be specific to the make / model of the equipment / part / components supplied in the units. In case a comprehensive OEM catalogue is supplied of the equipment / part /	

Clause No.	Clause Description	Bidder's Response
	components, then the respective make / model of the equipment / part / components supplied in the units Shall be clearly marked / identified.	
9.0	**SPARES:**	
9.1	**COMMISSIONING SPARES** The bidder has to supply all the spare parts free of cost, required for initial commissioning of the unit. All the consumables such as, lube oil, gear oil, hydraulic oil etc. except diesel fuel, required for commissioning should also be supplied.	
9.2	**OPERATIONAL CRITICAL SPARES:** Spares as given below in specified quantity shall be supplied along with each unit. Specific Description, quantity of each & every spares shall be indicated in the technical bid and Make, Part Nos. etc. shall be submitted along with the supply. Bidders shall include the price of these spares in the priced bid format. The bidder shall confirm in the technical bid that all spares as given below and given under **Table-1** will be supplied each sand dumper.	
9.2.1	**AUTOMOBILE SPARE PARTS LIST:** All spare parts for the Automobile in specified quantity as mentioned in **Table-1/Section A** shall be supplied along with the supply. Bidder / supplier to note that the spares mentioned in **Table-1/Section (A)** to be supplied shall be additional to the items fitted in each unit. Specific description, Quantity etc. of each item shall clearly be indicated in the technical bid. Make, Part Nos. etc. of each item shall be submitted by the supplier along with the supply. In case any of the spares mentioned in **Table-1/Section (A)** does not come as per bidder's design and the bidder has not quoted for such spares, the bidder shall clearly indicate the same. However, in case such spares are provided in the unit in future, the same shall be supplied by the bidder / supplier along with the supply without any extra cost to Oil India Limited (OIL).	
9.2.2	**HYDRAULICALLY OPERATED SAND CHUTE:** All spare parts for the pump in specified quantity as mentioned in **Table-1 / Section (B)** shall be supplied along with the supply. Bidder / supplier to note that the spares mentioned in **Table-1 / Section (B)** to be supplied shall be additional to the items fitted in each unit. Specific description, Quantity etc. of each item shall clearly be indicated in the technical bid. Make, Part Nos. etc. of each item shall be submitted by the supplier along with the supply. In case any of the spares mentioned in **Table-1 / Section (B)** does not come as per bidder's design and the bidder has not quoted for such spares, the bidder shall clearly indicate the same. However, in case such spares are provided in the unit in future, the same shall be supplied by the bidder / supplier along with the supply without any extra cost to Oil India Limited (OIL).	
9.2.3	**INSTRUMENTATION & CONTROL SYSTEM:**	

<table>
<tr><th>Clause No.</th><th>Clause Description</th><th>Bidder's Response</th></tr>
<tr><td></td><td>All spare parts for the instrumentation & control system in specified quantity as mentioned in Table-1 / Section (C) shall be supplied along with the supply.

Bidder / supplier to note that the spares mentioned in Table-1 / Section (C) to be supplied shall be additional to the items fitted in each unit.

Specific description, Quantity etc. of each item shall clearly be indicated in the technical bid. Make, Part Nos. etc. of each item shall be submitted by the supplier along with the supply.

In case any of the spares mentioned in Table-1 / Section (C) does not come as per bidder's design and the bidder has not quoted for such spares, the bidder shall clearly indicate the same. However, in case such spares are provided in the unit in future, the same shall be supplied by the bidder / supplier along with the supply without any extra cost to Oil India Limited (OIL).</td><td></td></tr>
<tr><td>9.3</td><td>NOTE: Note for Clause 9.2
1. All spares in specified quantity as indicated above shall be supplied along with the unit.
2. Specific description, Part Nos., Make etc. of each item shall clearly be indicated in the technical bid.</td><td></td></tr>
<tr><td>9.4</td><td>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 without price of the items. Annual consumption of each spare should be furnished. The bidder should 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 and E-mail ID of OEM for all items of the Truck.

The bidder has to submit a complete spare parts list for the unit subgrouping major component in the following format:

<table>
<tr><td>Name of the component /Sub com.</td><td>Description of the item</td><td>Part no./ID no. of item</td><td>Frequency of replacement (in Hours / Day)</td><td>Make</td></tr>
<tr><td></td><td></td><td></td><td></td><td></td></tr>
</table>
</td><td></td></tr>
<tr><td>10.0</td><td>UNDERTAKING:
The bidder shall submit a written undertaking (along with the technical bid) that they, themselves or through other sources, would be able to supply all the requisite spares (including bought out items, if any) & consumables and provide the maintenance services for their offered Truck in OIL operational area(s) in India for a minimum period of fifteen (15) years from the certified date of completion of successful field commissioning of the unit.

The cost of such spares, consumables & maintenance services which may be utilized by Oil India Limited in future (beyond Warranty period and O&M Period) shall be extra and SHALL NOT BE considered by the bidder in their quoted prices in this tender.</td><td></td></tr>
</table>

Clause No.	Clause Description	Bidder's Response
	Spares & repair services during Warranty period & warranty extension period (if any) for the item(s) under Warranty claim (if any) of the unit(s) shall be in the scope of the successful bidder (supplier).	
11.0	**TECHNICAL MANUAL AND CERTIFICATION FOR OPERATION AND MAINTENANCE OF THE UNIT:** The following Manuals & Catalogues (in English language) shall be supplied along with the unit for each unit. Manuals/ Part Catalogues provided shall be Custom Illustrated Manuals/Catalogues for the vehicle and equipment only, not a general Composite Manual/Catalogue. The manuals supplied should be specific to the make / model of the equipment / part / components supplied in the units. In case a comprehensive OEM catalogue is supplied of the equipment / part / components, then the respective make / model of the equipment / part / components supplied in the units should be clearly marked / identified. Bidder to confirm that the following will be provided along with supply:	
1.	Preferably, 01 (One) set of Spare Parts Catalogue with Part Numbers and Workshop & Service Manual for all components/systems of truck chassis like Engine, Transmission, PTO(s), transfer case (if any), axles, brakes, suspension, steering, electrical & pneumatic systems, etc. All the manuals & catalogues shall contain only those components/systems that have been used in the unit i.e. the same must be CUSTOM ILLUSTRATED MANUALS/ CATALOGUES ONLY – not the generalized ones. The Spare Parts Catalogue with Part Numbers and Workshop & Service Manual shall be provided by the supplier in any one of the following forms: (a) Hard copy format (i.e. in printed form) OR (b) Soft copy format (i.e. in USB drive) The bidder/supplier has to exhibit the Hard copy / soft copy of Parts Catalogue and Maintenance / Service Manual of Truck to the Pre despatch Inspection Team of Oil India Limited and handover soft copies to the Pre Despatch Inspection team of Oil India Ltd. The Hard copy of the Parts Catalogue and Maintenance / Service Manual of Truck may be submitted to Oil India Ltd along with the supply. The bidder has to submit a declaration along with the bid in this regard as per Annexure A1.	
2.	01 (One) set of Driver's manual in English language for vehicle, if provided by the Truck manufacturer.	
3.	03 (Three) sets of Operational manuals of the unit with categorical steps to operate the unit by an operator along with the functionality for each control switches, etc. and the operating range of the control parameters to be provided.	
4.	Supplier to supply 03 (Three) Sets of OEM's operation, maintenance and overhauling manuals of supplied models of Pumps and all other sub-assemblies and their corresponding Spare part catalogue.	
5.	03 (Three) sets of the following schematics, layout drawings not limited to i. Equipment layout	

Clause No.	Clause Description	Bidder's Response
	ii. Process flow drawing iii. Electrical, pneumatic and hydraulic schematic for operator panel are to be provided. iv. Control Panel wiring diagram, Termination panel details, Panel BOM with name of OEM & their part numbers.	
6.	The layout diagram of each system must enlist the components in it along with technical detail (Nomenclature).	
7.	All the components should also have nameplate embossed indicating original equipment manufacturer of these components, Make / Model their Part No., Sl No. and possible details as per industry standards. Wherever the mounting of the nameplate is not possible such detail must be made on layout sheet of the system in which the component is installed. This is not required for components pertaining to Truck chassis.	
8.	Lubrication and Fluids: Lubrication fluids chart (permanent attached to Unit) should be provided listing fluids, lubricants and filter types which are required by the Equipment. Fluids should be identified by generic name (i.e., hydraulic oil) near the fill port for each fluid. The lettering should be in English, and colour should be black on a white or stainless-steel background. This is not required for fluids pertaining to Truck chassis.	
9.	Control Panel drawings with complete/ comprehensive Bill of Materials (BOM) with name of OEM & their part numbers.	
10.	Instrumentation wiring diagrams with end-to-end termination details.	
11.	The necessary licensed software in original packages along with user software backups are also to be supplied.	
12. NOTE	**COMMISSIONING OF THE UNIT SHALL NOT BE CONSIDERED AS COMPLETE UNTIL & UNLESS ALL ABOVE PRINTED MANUALS / CATALOGUES ARE SUPPLIED.** **However, for manuals / catalogues pertaining to automobile part, soft copies are also acceptable.**	
13.0	**Document(s) to be submitted along with the supply of each unit for government Registration etc.:** Following documents shall be submitted by the supplier along with the supply as mentioned hereunder:	
a.	Invoice(s) in the name of Oil India Limited, Duliajan, Assam-786602 in original. Notwithstanding any clause mentioned elsewhere in the NIT/tender, the Invoice for each of the complete unit shall be submitted in 02 (two) parts separately as under for registration purpose: (i) Invoice for the complete unit. (Truck chassis with Driver's Cabin along with all items/ components / systems fitted permanently on the unit). (ii) Invoice for items, spares, accessories etc. supplied separately along with the unit. **Note:** Truck Chassis Number, Engine Number shall be mentioned in invoice(s) against above Sl. No. (i).	
b.	Sale Certificate (Form-21) in the name of Oil India Limited, Duliajan, Assam-786602 in original, sample format as per Motor Vehicle Act, 1988 & Central Motor Vehicle Rules, 1989 of India provided.	

Clause No.	Clause Description	Bidder's Response
c.	Road-Worthiness Certificate for Compliance to Emission and Noise Standards [Form-22, Form-22A (Part I), Form-22A (Part II)] in the name of Oil India Limited, Duliajan, Assam-786602 in original, sample format as per Motor Vehicle Act, 1988 & Central Motor Vehicle Rules, 1989 of India provided.	
d.	Certificate of Origin of the Sand Dumper Unit.	
e.	Pencil print of Vehicle Identification Number (VIN) i.e., Chassis Number of Truck chassis.	
f.	Certificate for the Truck chassis in original from Truck manufacturer. Amongst others, the certificate shall contain following information: (i) Make & Model of Truck. (ii) Vehicle Identification Number (VIN) i.e. Chassis Number. (iii) Month & Year of Manufacture of the Truck.	
g.	Necessary certification/ documentation from appropriate authority /entity regarding the speed limitation function or SLD (Speed Limiting Device) with speed limit.	
h.	Necessary certification/ documentation from appropriate authority/ entity regarding the Vehicle Tracking System (VTS)	
j.	Technical drawing of the complete unit indicating the Centre of Gravity, length, width, height, angle of approach, angle of departure, weight- etc.	
14.0	**HOMOLOGATION, UPLOADING OF VEHICLE DATABASE IN VAHAN / PARIVAHAN PORTAL, REGISTRATION OF THE TRUCK, PRINTING OF HSRP (High Security Registration Plate) , UPLOADING OF LID OF HSRP IN APPROPRIATE PORTAL** The bidder shall categorically confirm their compliance of the following clauses in the technical bid:	
14.1a	**In case the Truck unit is manufactured outside India.** The vehicle details of Truck unit in relevant VAHAN / Homologation / Parivahan portal of Ministry of Road Transport & Highways (MoRTH), Government of India shall be dealt by the bidder as per the applicable guidelines of Ministry of Road Transport & Highways (MoRTH) / Director General of Foreign Trade, Government of India at the time of supply. Homologation and uploading of vehicle data (i.e. Make, Model, Chassis Number, Engine number etc.) in VAHAN / PARIVAHAN portal by providing the requisite documents is under the scope of the successful bidder. **Temporary Registration (if required) and Permanent Registration in local RTO (Rgional Transport Office) of the Govt of Assam is under the scope of successful bidder**. The documents pertaining to Oil India Ltd shall only be provided by Oil India Limited. All other documents/ certificates pertaining to the vehicle shall be provided / submitted by the bidder.	
14.1b	**In case the Truck is manufactured in India** The bidder (supplier) shall be responsible and ensure that the vehicle details of Truck unit are available in the relevant VAHAN / Parivahan portal of Ministry of Road Transport & Highways (MoRTH), Government of India in accordance with Motor Vehicle Act, 1988 & Central Motors Vehicles Rules, 1989 of India prior to delivery of the unit(s) to Oil India Limited. If the vehicle details are not available in VAHAN portal, it shall be the responsibility of the bidder to upload the same in VAHAN portal. Then the supplier shall arrange for temporary registration (if required) and **Permanent Registration in local RTO (Rgional Transport Office) of the Govt of Assam**. The documents pertaining to Oil India Ltd shall only be	

Clause No.	Clause Description	Bidder's Response
	provided by Oil India Limited. All other documents/ certificates pertaining to the vehicle shall be provided / submitted by the bidder.	
14.2	In both the cases mentioned above, the cost of permanent registration in the form of Registration fee and initial Road tax to the Government of Assam shall be borne by the successful bidder. However, this cost will be reimbursed to the bidder on submission of Government Receipt as proof. The cost of registration not to be quoted by bidder against this tender as it will be reimbursed.	
15.0	**HIGH SECURITY REGISTRATION PLATE (HSRP):** On receipt of the government Registration Number, the supplier (successful bidder) shall supply the High Security Registration Plate (HSRP) through the Original Equipment Manufacturers of motor vehicle/ dealer/any one of the agencies authorised by the Government of India/Assam to issue the High Security Registration Plate (HSRP) of each units. The supplier shall ensure to upload the HSRP details in relevant (FTA/ HSRP) portal enabling the DTO /Oil India Ltd to issue download permanent Registration Certificate for the vehicle(s) as required for road drive of the vehicle. The cost of High Security Registration Plate (HSRP) shall be borne by the supplier (successful bidder). Bidder/supplier shall also ensure adherence to any subsequent revisions to the referred requirements that may be issued in future by Ministry of Road Transport & Highways (MoRTH), Government of India.	
16.0	**DEVIATIONS FROM THE SPECIFICATIONS:** The bidder shall enclose comprehensive list of intended deviations from the technical specifications, of any clearly highlighting the reasons thereof, if any, prior to Bid closing date & time for Tender amendment, etc. But OIL reserves the right for acceptance or rejection of the deviation(s).	
17.0	**BID SUBMISSION & DOCUMENTATIONS:** Bidders should submit their bids in the above tabular form mentioning their offered specification, Make, Model, necessary data, submitted/not submitted/ complied/not complied etc. as applicable to all the NIT terms and conditions including submitting the documents, leaflets as specified. Other details, if any, the bidder may mention the same by adding additional row(s)/separate sheet as the case may be. Bidder's response to all NIT stipulations should 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 acceptable. 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.	
17.1	Following documents shall be submitted along with technical bid for evaluation –	
a.	Technical leaflets with detailed specifications, Make & Model of chassis, engine, transmission, Power Take Off (PTOs), transfer case (if any), axle, suspension, steering, brake, pump, etc.	
b.	GA (General Arrangement) drawing of the offered complete unit (i.e. Truck with driver's cabin and all other items of the Sand dumper Truck Unit etc.) illustrating major dimensions of the complete unit and indicating the position of all major components & their mounting on the vehicle.	

Clause No.	Clause Description	Bidder's Response
c.	Undertaking(s) for supply of spares and service as per clauses mentioned elsewhere in the tender document.	
d.	Specific description, quantity etc. of each and every spares (for bid evaluation) as detailed in the Operational Critical Spares List provided in para 9.2 above & Table-1 below.	
e.	List of Recommended Spares as above.	
f.	Checklist as per enclosed format shall be furnished along with the bid.	
g.	Any other document as applicable against clauses of this tender document.	

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TABLE-1: Ref. Clause No. 9.2 OPERATIONAL CRITICAL SPARES:

SECTION (A): AUTOMOBILE SPARE PARTS LIST:

Total No. of Truck Mounted Sand Dumper Unit: 03 Nos.

Sl. No.	Item Description	Qty. for 01 No. unit (To be supplied along with each unit)
A	B	C
A.	**ENGINE:**	
1.	Fuel Filter	05 Nos.
2.	Engine Oil Filter	05 Nos.
3.	Air Filter Element	05 Nos.
4.	Fan Belt	04 Nos.
5.	Radiator Hose Set (Each set shall comprise of all upper & lower hoses)	02 Sets.
6.	Engine Mounting Set [Each set shall comprise of all the mountings (one each)]	01 Set.
7.	Radiator Assembly (Each Radiator Assembly shall consist of at least Top Tank, Radiator Core, Bottom Tank)	01 No.
8.	Water (Engine Coolant) Pump Assembly	01 No.
9.	Engine Oil Cooler Assembly	01 No.
B.	**ENGINE EXHAUST AFTERTREATMENT SYSTEM**	
1.	Diesel Exhaust Fluid (DEF) Filter	08 Nos.
2.	Diesel Particulate Filter	08 Nos.
3.	Nitrogen Oxide (NOx) Sensor	04 Nos.
C.	**TRANSMISSION:**	
C1.	**IN CASE OF AUTOMATIC TRANSMISSION:**	
1.	Transmission Filter (if any)	04 Nos.
2.	Transmission Mounting Set [Each set shall comprise of all the mountings (one each)]	01 Set.
3.	Gear Shifter Assembly (inside driver's Cabin)	01 No.
C2.	**IN CASE OF AUTOMATED TRANSMISSION:**	
1.	Transmission Filter (if any)	04 Nos.
2.	Transmission Mounting Set [Each set shall comprise of all the mountings (one each)]	01 Set.
3.	Gear Shifter Assembly (inside driver's Cabin)	01 No.
4.	Clutch Disc Assembly (if any)	01 No.
5.	Pressure Plate Assembly (if any)	01 No.
6.	Release Bearing (if any)	01 No.
7.	Release Bearing Fork (if any)	01 No.
D.	**POWER TAKE OFF (PTO):**	
1.	Oil Filter (if any)	04 Nos.
2.	Mounting Set [Each set shall comprise of all the mountings (one each)]	02 Nos.
3.	Oil Seal Set [Each Set shall comprise of all seals (one each)]	02 Sets.
E.	**FRONT AXLE:**	
1.	Wheel Stud with Nuts (Right Side) (Each set shall comprise of all the studs & nuts for one wheel)	01 Set.
2.	Wheel Stud with Nuts (Left Side) (Each set shall comprise of all the studs & nuts for one wheel)	01 Set.
3.	Wheel Hub Bearing (Right Side)	02 Nos.

Sl. No.	Item Description	Qty. for 01 No. unit (To be supplied along with each unit)
A	**B**	**C**
4.	Wheel Hub Bearing (Left Side)	02 Nos.
5.	Wheel Hub Oil Seal (Right Side)	02 Nos.
6.	Wheel Hub Oil Seal (Left Side)	02 Nos.
7.	Wheel Rim (Right Side)	01 No.
8.	Wheel Rim (Left Side)	01 No.
9a.	In case of Tube type Tyres: Tyre with Tube	01 No.
9b.	In case of Tubeless type Tyres: Tubeless Tyre	01 No.
F.	**REAR AXLE:**	
1.	Wheel Stud with Nuts (Right Side) (Each set shall comprise of all the studs & nuts for one wheel)	01 Set.
2.	Axle Stud with Nuts (Right Side) (Each set shall comprise of all the studs & nuts for one wheel)	01 Set.
3.	Wheel Stud with Nuts (Left Side) (Each set shall comprise of all the studs & nuts for one wheel)	01 Set.
4.	Axle Stud with Nuts (Left Side) (Each set shall comprise of all the studs & nuts for one wheel)	01 Set.
5.	Wheel Hub Oil Seal (Right Side)	04 Nos.
6.	Wheel Hub Oil Seal (Left Side)	04 Nos.
7.	Wheel Hub Bearing (Right Side)	04 Nos.
8.	Wheel Hub Bearing (Left Side)	04 Nos.
9.	Wheel Rim (Right Side)	04 Nos.
10.	Wheel Rim (Left Side)	04 Nos.
11a.	In case of Tube type Tyres: Tyre with Tube	02 Nos.
11b.	In case of Tubeless type Tyres: Tubeless Tyre	02 Nos.
12.	Differential Oil Seal Set [Each Set shall comprise of all seals (one each) of different differentials]	02 Sets.
13.	Differential Filter (if any)	02 Nos.
G.	**DRIVELINE (PROPELLER SHAFT):**	
1.	UJ Cross Assembly Set (Each set shall comprise all the different UJ crosses in complete required for the drivelines)	02 Sets.
2.	Centre Bearing with Rubber Cushion Assembly (if any)	01 No.
H.	**STEERING:**	
1.	Steering Oil Filter (if any)	02 Nos.
2.	Power Steering Hoses Set (Set shall comprise of all hoses used in steering system, one each)	01 Set.
3.	Steering Pump Assembly	01 No.
4.	Steering Gear Box Repair Kit (if any)	02 Sets.
I.	**BRAKE & PNEUMATICS:**	
1.	Foot Brake Valve- Assembly	01 No.
2.	Brake Servo Assembly - Front Wheel	04 Nos.
3.	Brake Servo Assembly - Rear Wheel	04 Nos.
4.	Air Dryer Assembly	02 Nos.
5.	Air Dryer Filter	08 Nos.
6.	Brake Shoe Assembly - Front Wheel	08 Nos.
7.	Brake Shoe Assembly - Rear Wheel	12 Nos.
8.	Pneumatic Circuit System Protection Valve	02 Nos.

Sl. No.	Item Description	Qty. for 01 No. unit (To be supplied along with each unit)
A	B	C
9.	Relay Valves Set (Set shall comprise of all the different relay valves fitted in the vehicle, one each)	01 Set.
10.	Quick Release Valves Set (Set shall comprise of all different quick release valves fitted in the vehicle, one each)	01 Set.
J.	**ELECTRICAL:**	
1.	Engine Self Starter Assembly	01 No.
2.	Alternator Assembly	01 No.
3.	Wiper Motor Assembly	01 No.
4.	Wiper Blade with Arm (Left)	01 Set.
5.	Wiper Blade with Arm (Right)	01 Set.
6.	Head Lamp Assembly (Left)	01 No.
7.	Head Lamp Assembly (Right)	01 No.
K.	**SUSPENSION:**	
1.	Leaf Spring Assembly (Front) (Set shall comprise of all the different leaf springs forming the suspension)	01 Set.
2.	Leaf Spring Assembly (Rear) (If any, in case of Bogie Suspension) (Set shall comprise of all the different leaf springs forming the suspension)	02 Sets.
3.	Rear Air Suspension Bellow (If any, in case of Air Suspension)	08 Nos.
4.	Torque Rod Bushing	08 Nos.

SECTION (B): SPARES for HYDRAULICALLY OPERATED SAND CHUTE LIST:

Shall provide matching spares for hydraulically operated sand chute

Sl. No.	Item Description	Qty. for 01 No. unit
A	B	C
i)	Spindles and tail plates	1 sets
ii)	Precision bearings	2 sets
iii)	Motors and controllers	2 sets
iv)	Pulley kits and timing belts	2 sets
v)	Wear strips and sprockets	2 sets
vi)	Complete belt assembly	1 sets
vii)	Drive tail kit	1 sets
viii)	Idler tail kit	1 sets

SECTION (C): INSTRUMENTATION & CONTROL SYSTEM SPARES LIST:

Spare to be incorporated:

Sl. No.	Item Description	Qty. for all 03 units
A	B	C
1.	Sand Dumper Control Unit	02 unit
2.	All sensors/controllers which are connected to the control unit	02 set
3.	All Load Cell	02 No of each type
4.	Mass flow measuring device and Totalizer	02 No of each type
5.	All Connecting cables from Sand Dumper to Frac Control Center (Datavan)	02 no of each type

Note:

1. All spares in specified quantity as indicated above shall be supplied along with the supply of the units.

2. Specific description, Quantity etc. of each item shall clearly be indicated in the technical bid. Make, Part Nos. etc. of each item shall be submitted by the supplier along with the supply.

3. 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. However, these additional spares, as suggested by the bidder will not be considered for Bid Evaluation purpose.

4. If any spares mentioned above is/are not required, the bidder must mentioned that the spares do not require for the unit.

5. In case the multiple quantity of an item named above is used in the Truck Chassis of the Frac Sand Dumper Unit and the specifications of such item does not match with each other, then the supplier shall supply such item in a mixed manner comprising all the variants used in the Truck Chassis of the Frac Sand Dumper Unit. The supplier shall first try to supply all the variants of such item preferably in equal/proportional quantity of each of the variant used in the Truck Chassis of the Frac Sand Dumper Unit as far as possible. However, the total quantity of such item to be supplied must not be less than the quantity mentioned in above.

6. In case the specifications of the item named above used in left & right side of the Axle System/Suspension System/Brake System of the truck of the Frac Sand Dumper Unit does not match with each other of that particular system, the supplier shall first try to supply all the variants of such item preferably in equal/proportional quantity of each of the variant used in the truck of the Frac Sand Dumper Unit as far as possible. However, the total quantity of such item to be supplied must not be less than the quantity mentioned in above.

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ANNEXURE-D

Annexure A1

To-

Oil India Limited,
Duliajan, Assam, India

Sub: Undertaking / Declaration regarding Type Approval Certificate, Parts Catalogue, Maintenance / Service Manual of OIL's Inhouse Hydraulic Fracturing Fleet.

Ref: Tender No. for Supply of Hydraulic Fracturing Unit.

We M/s _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ do hereby declare that we shall produce the following at the time of Pre Despatch Inspection of Hydraulic Fracturing Fleet at our premise-

1) Type Approval Certificates (Hard copy) of-

a) Tractor / Prime Mover
b) Trailers of Frac Pumpers
c) Trailer of Blender Unit
d) Trailer of Hydration Unit
e) Trailer of Frac Data Van
f) Truck Chassis of Sand Dumper

Photocopies / Softcopies (scan copy) of the above Type Approval Certificates will be handed over to Pre Despatch Inspection Team of Oil India Ltd

2) **Hard copy / soft copy of Parts Catalogue and Maintenance / Service Manual of-**

a) Tractor / Prime Mover
b) Trailers of Frac Pumpers
c) Trailer of Blender Unit
d) Trailer of Hydration Unit
e) Trailer of Frac Data Van
f) Truck mounted Sand Dumper

Soft copies of the above will be handed over to Pre Despatch Inspection Team of Oil India Ltd

M/s _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
(Name of Bidder)

A. REF. CLAUSE NO. 19.0. 2.

SAMPLE COPY OF FORM- 21 (as referred above)

Following is a sample copy of **FORM 21** of Indian Motor Vehicle Act only. The certificate shall contain following minimum information –

FORM 21
[See Rules 47 (a) and (d)]
SALE CERTIFICATE

(To be issued by manufacturer ~~or dealer or registered E-rickshaw or E-cart Association (in case of E-rickshaw or E-cart) 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 **OIL INDIA LIMITED** against Purchase Order No. .....

Name of the buyer **OIL INDIA LIMITED**
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 number ~~or motor number in case of Battery Operated vehicles~~	.....
5.	Engine ~~or Motor~~ Power	.....
6.	Cubic capacity	.....
7.	Fuel used	.....
8.	Number of cylinders	.....
9.	Month and year of manufacture	.....
10.	Seating capacity (including driver)	.....
11.	Unladen Weight	.....
12.	Maximum axle weight and number and description of tyres ~~(in case of transport vehicles)~~	.....
a.	Front axle	.....
b.	Rear axle	.....
c.	Any other axle	.....
d.	Tandem axle	.....
13.	Colour	.....
14.	Gross Vehicle Weight Rating	.....
15.	Type of body	.....
16.	Wheelbase	.....

(Signature of the manufacturer ~~or dealer or officer of Defence Department or registered E-rickshaw or E-cart Association~~)

*Strike out whichever is inapplicable.

B. REF. CLAUSE NO. 19.0.3
SAMPLE COPY OF FORM- 22 (as referred above)

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

FORM-22
[See rules 47(1) (g)]
ROAD-WORTHINESS CERTIFICATE FOR
COMPLIANCE TO EMISSION AND NOISE STANDARDS
(To be issued by the manufacturer along with the vehicle)

It is certified that the following vehicle complies with the provisions of the Motor Vehicles Act, 1988 and rules made thereunder or international standard namely EEC / ECE Regulations:

1. Model/Commercial Name of the vehicle: .....
2. Chassis Number: .....
   [Example: Vehicle Identification Number (VIN)]
3. Engine ~~or Motor~~ Number: .....
4. Applicable Emission Norms: .....
5. Emission, Sound Level for Horn and Pass by noise values of the above vehicle model, obtained during Type Approval Testing as per Central Motor Vehicles Rules, 1989 or ECE/EEC Regulations are given below:

i. Type Approval Certificate No.: .....
ii. Type of Fuel: .....
iii. Emission values for vehicle: .....

TABLE
Positive Ignition Engine or Compression Ignition Engine Vehicle

Sr. No.	Pollutant (as applicable)	Units (as applicable)	Value (upto 3 Decimal places)
(1)	(2)	(3)	(4)
1.	Carbon Monoxide (CO)	mg/km or mg/kWh or g/kWh	
2.	Hydrocarbon (THC/HC)	mg/km or mg/kWh or g/kWh	
3.	Non-Methane Hydrocarbon (NMHC)	mg/km or mg/kWh or g/kWh	
4.	Oxides of Nitrogen (NOx)	mg/km or mg/kWh or g/kWh	
5a.	HC+NOx	mg/km or mg/kWh or g/kWh	
5b.	THC+NOx	mg/km or mg/kWh or g/kWh	
6.	Methane (CH4)	mg/kWh	
7.	Ammonia (NH3)	PPM	
8.	Mass of Particulate Matter (PM)	mg/km or mg/kWh or g/kWh	
9.	Number of Particles (PN)	Numbers/km or Numbers/kWh	

iv. Noise level (as applicable):
a. Horn (for all vehicles other than agricultural tractors and construction equipment vehicles) as installed on the vehicle: ..... dB (A); (upto 1 decimal place)
b. Pass by or Bystander's position: ..... dB(A)
~~c. Driver perceived or Operator's ear level (as applicable for agricultural tractors and construction equipment vehicles: ..... dB (A)~~

(Facsimile Signature of Manufacturer)

Note 1: This Form shall be issued with signature of the manufacturer duly printed in the Form itself by affixing facsimile signature in ink under the hand and seal, as applicable.

Note 2: In case of multiple combinations, values pertaining to any one test result in the test report to be provided. For V2, V3 cases- average value of the test result in the test report to be provided.

Note 3: While printing Form 22, the relevant pollutants in the table as applicable for the subject vehicles may only be listed.

C. REF. CLAUSE NO. 19.0.3
SAMPLE COPY OF FORM 22-A

Following is a sample copy of **FORM 22-A (Part – I) & FORM 22-A (Part – II) of Indian Motor Vehicle Act** only. The certificate shall contain following minimum information. –

FORM 22-A
[See Rules 47 (g), 115, 124(2), 126-A and 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 the following vehicle complies with the provisions of the Motor Vehicles Act, 1988 and the rules made there under or international standard namely EEC / ECE Regulations, including the following mass emission norms:

1. Brand name of the vehicle : .....
2. Chassis number : .....
3. Engine number/~~Motor number (In case of battery operated vehicles)~~ : .....
Emission norms : .....

(Signature of 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.

FORM 22-A
[See Rules 47 (g), 115, 124(2), 126-A and 127]
INITIAL CERTIFICATE OF COMPLIANCE WITH POLLUTION STANDARDS, SAFETY STANDARDS OF COMPONENTS AND ROAD WORTHINESS
(FOR VEHICLES WHERE BODY IS FABRICATED SEPARATELY)
PART – II
(**TO BE ISSUED BY THE BODY BUILDER**)

Certified that body of the following vehicle has been fabricated by us and the same complies with the provisions of Motor Vehicles Act, 1988 and Rules made there under or international standard namely EEC / ECE Regulations:

1. Brand name of the vehicle : .....
2. Chassis number : .....
3. Engine number/~~Motor number (In case of battery operated vehicles)~~ : .....
~~4. Bus Body Builder Accreditation Certificate Number~~ : .....

(Signature of 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.

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SPECIFICATIONS OF TRAILER MOUNTED HYDRATION UNIT, QTY = 1 NO.

Note to bidder:

1. The bidder shall provide their response and mention applicable information/ Complied / Not Complied / Not Applicable / Make & Model etc. (as applicable) against individual clauses in this document.

2. The bidder shall mention details of Reference Document name / Serial number / Page number of bid for documentary evidence (if any).

3. The bidder shall submit the filled-up document along with their technical bid.

Technical Specifications

Clause No.	Clause Description	Bidder's Response
1.0	i. The Trailer mounted Hydration unit should be suitable for deployment in oil and gas fields across India. ii. The trailer mounted Hydration Unit shall be suitably designed detachable brand new **semi-trailer**, manufactured after issue of Oil India Limited (OIL)'s Purchase Order. The semi-trailer shall be mounted with all the Hydration unit machineries/ equipment, items as specified in the tender. The semi-trailer shall be coupled with any of the Tractor / Prime Mover as detailed elsewhere in the tender document. The Tractor Trailer combination vehicle should be suitable for driving over national highways, state highways, district roads, rural /village roads, non-grade road surfaces and for use in the rough, windy, marshy/waterlogged and dusty terrain oil and gas field environments found in the Indian Oilfields. **Note:** "Semi-trailer" means a Trailer, which is intended to be connected to a haulage Tractor, and which is so constructed that a portion of it is superimposed on and apart of whose weight is borne by the haulage Tractor i. The unit should be capable of operating in ambient temperature ranges of 0° C to +50° C in a 98% relative humidity. The unit with upgraded latest state of the art technology improved version will be acceptable for the basic configuration, accessories, instrumentation, control etc. without affecting the main frame of specification. ii. Suitable to work in the following climatic conditions: Altitude: 120 meter above mean sea level (msl) Temperature range: 0° C - 50°C Average Rainfall: 350 cm Relative humidity: 98% at 35° C. iii. The components in the unit should be arranged in such a manner for easy access for maintenance & ease of operation. Storage provision for related accessories & commonly used auxiliary equipment should be provided. iv. The operation of the unit should be controlled from remote panel. The remote-control system should allow the operation of the unit from a vantage point away from the unit. v. The components in the unit should be arranged in such a manner for easy access for maintenance & ease of operation. Storage provision for	

Clause No.	Clause Description	Bidder's Response
	related accessories & commonly used auxiliary equipment should be provided. vi. The bidder/supplier shall ensure adequate gap between Trailer deck and Trailer wheels, so as to ensure that the Trailer wheels do not touch the body of deck of the Trailer or any other machineries/equipment mounted on the Trailer while crossing speed breakers, potholes or any other uneven surface.	
2.0	**EQUIPMENT DETAILS:**	
2.1	**DIMENSIONS & WEIGHT OF HYDRATION UNIT**	
a.	**Length of Hydration unit Trailer:** As per design. However, the Length of offered Hydration unit Trailer should be such that when coupled with Tractor / Prime Mover, the **overall length of Tractor and Hydration unit Trailer combination**, i.e., Tractor coupled with the Trailer does not exceed **18750 mm**.	
a.1	The bidder shall mention the length of Hydration unit Trailer alone in the technical bid & the GA layout diagram.	
b.	**Width of Hydration unit Trailer:** Shall not exceed **2600 mm.**	
b.1	The bidder shall mention the overall width of Hydration unit Trailer alone in the technical bid & the GA layout diagram.	
c.	**Height of Hydration unit Trailer:** Shall not exceed **4500 mm** from ground level.	
c.1	The bidder shall mention the height of Hydration unit Trailer alone in the technical bid & the GA layout diagram.	
d.	**Weight (mass) of Hydration unit Trailer:** As per design. However, the Total combination weight (mass) of Tractor and Hydration unit Trailer combination, i.e., Tractor coupled with the Trailer shall be within **55,000 kg**.	
d.1	The bidder shall mention the weight (mass) of Hydration unit Trailer (with equipment mounted) alone in the technical bid.	
e.	**GENERAL ARRANGERMENT (GA) DRAWING OF HYDRATION UNIT TRAILER:** The bidder shall submit GA (General Arrangement) drawing of the Hydration unit Trailer. The GA drawing shall have mention of major dimensions of Hydration unit Trailer (like length, height, width, etc.); estimated loading on individual Rear axles of Trailer (when combined with offered Tractor unit); showing the position of all major components & their mounting. The GA drawing of the Hydration unit Trailer shall be submitted along with the technical bid by the bidder.	

Clause No.	Clause Description	Bidder's Response
2.2	**CHASSIS FRAME:**	
a.	All welded construction, robust, heavy-duty chassis of steel frame suitably welded and cross braced at close pitch to withstand the maximum load. The chassis shall provide maximum structural performance in terms of load carrying capacity, bending moment & deflection, maximum tensional stability and long life. Skirt rails, wherever possible shall be provided along the length of the Trailer. The main Chassis frame beam shall be around 450 mm (in height) near the centre of the Trailer (when viewed from the rear of the Trailer) and the chassis frame beam is to be reinforced & adequately sized as per manufacturer's standard practice in suspension area etc. to bear the designed load.	
b.	The bidder shall mention & submit the following information in the technical bid: Details of the chassis frame beam drawing mentioning the size of the chassis frame beam offered.	
2.3	**TRAILER AXLES:**	
a.	Trailer shall be provided with 03 (three) Nos. of axles at rear of the Trailer as per design and meeting tender specifications. The Trailer axles shall be compatible with the brake system. The bidder/supplier shall offer Trailer axles with total axle capacity of the Trailer triaxle to meet the design requirement considering the total weight of the complete unit with equipment, handling fluids, etc. in all conditions: Bidder shall ensure that the loading on the Trailer axles shall be within the axle capacity of the Trailer triaxle in all conditions.	
b.	The bidder shall mention & submit the following information in the technical bid for Hydration unit Trailer:	
(i)	Total number of Axles in the Trailer at rear.	
(ii)	Make & model of offered Trailer axles.	
(iii)	Total axle capacity of offered 03 Nos. of Trailer axles.	
(iv)	Estimated Total loading on Trailer triaxle with all the Permanently fixed equipment & fittings (in coupled condition with the Tractor)	
(v)	Total Loading on Trailer triaxle is within the axle capacity of Trailer triaxle in all conditions. (Yes / No).	
(vi)	Technical specification catalogue/brochure with technical details of the offered Trailer axles.	
2.4	**BRAKE SYSTEM:**	
a.	Pneumatic service brake system with ABS (anti-lock brake system) and parking brake system compatible with the Tractor shall be provided in the Trailer. The service brake system & parking brake system shall be operated from Tractor's driver Cabin.	

Clause No.	Clause Description	Bidder's Response
	The brake system shall also have provision for applying brake automatically to the Trailer axles in case of accidental disconnection of the pneumatic connections. The trailer shall have control valve for synchronized braking of "tractor and trailer" to enhance the safety. The brake system shall have palm coupling for quick coupling and detaching the air connections with the Tractor unit. All brake components shall be compatible with axles offered.	
2.5	**TRAILER SUSPENSION:**	
a.	Heavy duty Trailer suspension system suitable for movement of Tractor & Trailer mounted Hydration unit with full load in all types of road conditions typical to oilfield operation area/slushy plinths shall be provided. The suspension system shall be capable to bear the maximum designed load in all conditions.	
b.	The bidder shall mention & submit the following information in the technical bid:	
(i)	Type of offered Trailer Suspension.	
(ii)	Make & Model of offered Trailer Suspension.	
(iii)	Technical specification catalogue/ brochure with technical details of the offered Trailer suspension system.	
2.6	**TRAILER WHEELS & TYRES:**	
a.	The Trailer shall be fitted with suitable wheels with Tube type / Tubeless type Tyre of adequate ply rating. 02 (two) Nos. of wheels in each side of each axle i.e., total 04 (four) Nos. of wheels in each axle i.e., total 12 (twelve) Nos. of wheels in 03 Nos. of Trailer axles shall be provided as per design specifications. If possible, Trailer wheels / tyres shall be interchangeable with the Tractor unit. Bidder is to look into the tyres of Tractor Unit while selecting the Trailer tyres and vice-versa for compatibility of the Tractor and the Trailer unit with each other, if possible.	
b.	The bidder shall mention & submit the following information in the technical bid for Hydration unit Trailer:	
(i)	Total number of wheels in 03 Nos. of Trailer axles. (Axle-wise information to be provided).	
(ii)	Type of Tyres (Tube type / Tubeless type) in the Trailer axles.	
(iii)	Tyre size of Trailer axle wheels.	
2.7	**KINGPIN FOR COUPLING WITH TRACTOR UNIT:**	
a.	Suitable rubbing plate fully welded to the chassis frame and the **Kingpin of size not less than 3.5 inch** shall be provided. The make of the Kingpin	

Clause No.	Clause Description	Bidder's Response
	shall be of ASHLEY /HYWA / TATA / JOST / VOLVO / YORK / PLHT/ GF / SAF / HOLLAND or any other make. Height of rubbing plate shall match with the "Fifth Wheel" height in all load conditions of any / each of the Tractor units for proper coupling and locking. Proper coupling & locking etc. of the Hydration unit Trailer with each of the Tractor unit is to be ensured by the bidder/prospective supplier.	
b.	The bidder shall mention & submit the following information in the technical bid:	
(i)	Size of offered Trailer Kingpin.	
(ii)	Make & model of offered Trailer Kingpin.	
(iii)	Technical specification catalogue/ brochure with technical details of offered Trailer Kingpin.	
2.8	**LANDING GEAR:**	
a.	Retractable, mechanical type landing gear with sand-pad and having adequate capacity for taking the load on the Trailer when fully loaded shall be located conveniently at the front end of the Trailer. The make of the landing gear shall be of HYWA/ JOST / YORK / PLHT/ GF / SAF / HOLLAND or any other make with capacity as per design. The landing gear shall be so positioned that there is sufficient clearance behind the rear end of the Tractor unit, and it does not fault with the Tractor while taking the shortest turn.	
b.	The bidder shall mention & submit the following information in the technical bid:	
(i)	Make & model of offered Landing Gear.	
(ii)	Capacity of offered Landing Gear.	
(iii)	Technical specification catalogue/ brochure of the offered Landing Gear.	
2.9	**ELECTRICAL EQUIPMENT:**	
a.	Electrical system compatible with the electrical system of the offered Tractor unit shall be provided in the Trailer for road drive. Easily disconnect able / detachable electrical connections with the Tractor unit shall be provided.	
2.10	**TRAILER DECK:**	
a.	All welded steel construction with not less than 5mm thick MS chequered plate Trailer deck shall be provided, wherever feasible as per design. Trailer decks shall be of non-slip type.	
2.11	**PAINTING:**	
a.	Surface preparation through shot blasting. Minimum two coats of Zinc rich metal primer shall be applied. Minimum two final coats of suitable paint shall be applied.	

Clause No.	Clause Description	Bidder's Response
	Note: Surface primer, paints shall be suitable for corrosive handling fluids etc. used in oil & gas industry.	
2.12	**TYPE APPROVAL CERTIFICATE OF THE HYDRATION UNIT TRAILER:**	
a.	Type Approval Certificate of vehicle is required for the following activities in India: i) **Custom clearance** of the vehicle as per import policy conditions / guidelines of India Chapter-87 of ITC (HS), 2022, Schedule 1- Import Policy, Section: XVII, in case of imported vehicle from other countries to India. ii) **Homologation** (the formal process by which an official authority certifies that a product, especially a vehicle, meets specific regulatory standards for safety, performance, and environmental impact before it can be sold or used in a particular market/ region) / **Uploading the vehicle details in the relevant Government of India portal (VAHAN/ Parivahan portal**) for **registration** of vehicle as per Motor Vehicle Act, 1988 & Central Motor Vehicle Rules, 1989 of India which is mandatory for plying of the vehicle in roads in India.	
b.	In case the offered Trailer is manufactured in India, the offered Trailer shall be compliant to Central Motor Vehicle Rules 1989 of India and its amendments. In case the offered Trailer is imported from other countries to India, the offered Trailer shall be compliant with the import policy of Government of India. In both the case i.e. manufactured in India and imported from other countries to India, the bidder/supplier has to exhibit the original Type Approval Certificate of offered Trailer and submit a copy of the same to the Pre despatch Inspection Team of Oil India Limited. The original copy of the Type Approval Certificate has to be submitted to Oil India Ltd along with the supply. The bidder has to submit a declaration along with the bid in this regard as per Annexure A1. Submission of Type Approval Certificate of Trailer shall be as per Central Motor Vehicle Rules of India in case of Trailer manufactured in India or as per the import policy of Government of India, in case of imported vehicle, as on the date of supply.	
c.	In case of Trailer manufactured in India, the list of Type Approval Certificate issuing agencies are mentioned in Central Motor Vehicle Rules, 1989 of India & its amendments. In case of imported vehicle from other countries to India, at the time of Customs clearance, a Type Approval Certificate/COP, of an international accredited agency including a notarized English translation thereof shall be furnished. This Type Approval Certificate shall stipulate that vehicle to be imported complies with all the ECE (Economic Commission for Europe) Regulations. The list of international accredited agencies approved for issuance of Type Approval Certificate is available on DGFT (Director General of Foreign Trade) website, under Policy Circular No. 12 (RE- 2013)/2009-2014 dated 15.01.2014 issued by Ministry of Commerce & Industry, Department of Commerce, Director General of Foreign Trade, New Delhi subjecting "Type Approval issuing agencies under Policy Condition number 7 and 9 of Chapter 87 of ITC (HS) 2012".	

Clause No.	Clause Description	Bidder's Response
d.	Bidder/supplier shall ensure adherence to any subsequent revisions to the above referred Policy Circulars that may be issued in future by DGFT. Bidder shall note that, they shall be conversant with the policy of Government of India and Oil India Limited (OIL) shall not be liable in this regard whatsoever.	
e.	Type approval certification of individual components shall not be considered as vehicle Type approval certificate.	
f.	Notwithstanding anything mentioned elsewhere in this document, submission of Type Approval Certificate/ Conformity of Production (CoP) shall be as per the guideline of Government of India as on the date of supply.	
3.0	**OTHER GENERAL POINTS:**	
3.1	**ACCESSORIES & OTHER FITTINGS:** Hydration unit Trailer shall be fitted with the following fittings and accessories:	
a.	Mudguard with mud flaps for all Trailer wheels.	
b.	Suitable Heavy duty attachment (hook/loop) shall be provided at the rear of the Trailer, capable of pulling / towing the unit from bogged down situation in slushy areas in oilfields shall be provided.	
c.	Wherever feasible, Side / Lateral Underrun Protective Device (SUPD)s, Rear Underrun Protective Device (RUPD) shall be fitted in the unit. Note: 1. SUPD/ RUPD are structures that prevent smaller vehicles from getting underneath etc. during collision as per AIS 069, IS: 14812, IS: 14682 or similar standards. 2. The equipment manufacturer shall check the feasibility of providing the SUPDs, RUPDs during manufacturing and arrange to provide the same accordingly as per feasibility in the unit. SUPDs/ RUPDs provided by the equipment manufacturer shall be of detachable type and shall not be permanently fitted / welded to the Trailer chassis.	
d.	**TRAILER INFORMATION PLATE:** The Trailer shall be provided with a VIN plate fixed in a suitable place in the Trailer chassis (easily visible) containing, amongst others, the following information: a) Trailer Serial Number / Trailer Chassis No. as per Trailer manufacturer. b) Year and Month of Manufacture of the Trailer. c) Pay Load Capacity of the Trailer. d) Name & Address of Trailer Manufacturer etc.	
e.	Retro reflective marking (3M make or any other make, 50 mm width) on the rear and both side of the trailer as per the colour code Rear: Red and Sides: Yellow as per AIS: 090 / applicable standard.	
f.	Wheel Wrench & Handle.	

Clause No.	Clause Description	Bidder's Response
	Wheel Wrench & Handle for each size of wheel nuts shall be provided.	
g.	02 (two) numbers of wheel chocks.	
h.	01 (one) number of complete spare wheel assembly.	
3.2	**UNDERTAKING FOR SPARES & SERVICE:**	
a.	The bidder shall submit a written undertaking (along with the technical bid) that they, themselves or through other sources, would be able to supply all the requisite spares (including bought out items, if any) & consumables and provide the maintenance services for their offered Hydration unit Trailer in OIL operational area(s) in India for a minimum period of 15 (fifteen) years from the certified date of completion of successful field commissioning of the unit. The cost of such spares, consumables & maintenance services which may be utilized by Oil India Limited in future **(beyond Warranty period and O&M / Comprehensive Maintenance Period**) shall be extra and **SHALL NOT BE** considered by the bidder in their quoted prices in this tender. Spares & repair services during Warranty period & warranty extension period (if any) for the item(s) under Warranty claim (if any) of the unit(s) shall be in the scope of the successful bidder (supplier).	
3.3	**SPECIAL NOTES:**	
a.	All lights shall be covered to the extent possible, with suitable guard to prevent damage. The guards shall have detachable provision.	
b.	The electrical connections shall be suitable to operate in oilfield areas. The lightings shall comply road vehicle lighting regulations. Screw-in bulbs shall not be used as far as possible. The electrical wirings shall be fixed and protected as to minimize accidental damage or undue wear. The wirings shall be insulated, and the electrical circuits shall be protected against overloading by fuses or automatic cut-outs. Adequate steps shall be taken to ensure electrical continuity and wherever necessary, components shall be bonded by copper straps. The junction boxes, if any, shall be sealed.	
c.	The Trailer mounted Hydration unit offered by the bidder in the tender and to be supplied by a successful bidder (i.e. supplier) in future (if it happens) against this tender shall be identical and shall have same design in all respects.	
d.	**Comprehensive Maintenance of Trailer mounted Hydration unit(s):** As mentioned elsewhere in the tender document.	
4.0	**DECK ENGINE:**	
4.1	**DECK ENGINE (POWER SYSTEM):**	
	i. The deck mounted engine will be used to power the unit hydraulic drive system and other power requirements, like air & electrical, for operation of the unit: 1) Liquid cooled Cummins/Caterpillar/ HSD (High Speed Diesel) engine of 500 HP or more at rated rpm or higher capacity having	

Clause No.	Clause Description	Bidder's Response
	electronic fuel control mechanism suitable for operation enumerated above at description A. The engine should adhere to BS-VI/EURO-VI/TIER IV Final/equivalent emission norms. The engine should be suitable for use with diesel having 50ppm sulphur content. 2) The engine shall run in the following broad climatic conditions: i. Altitude – 150 meter above sea level (ASL) ii. Temperature range: 2 deg - 45 Deg C Max iii. Average Rainfall - 350cms iv. Relative humidity 95% at 35° C 3) A suitable fuel priming pump, preferably a mechanical pump, is to be provided to remove any air lock in the fuel system. 4) Suitable arrangement for keeping engine starting battery under locking arrangement and with safety cover from rain 5) Exhaust system: The Engine exhaust is to be designed properly with manifold, suitable muffler, spark arrester, rain cap and flexible exhaust connection as per norms of Oil Field Operation. The exhaust pipe shall be suitably wrapped by insulated material for safety of operators. Both External type and Internal type Spark arrester are acceptable. ii. The engine should be provided with adequate safety system like emergency kill/ rig saver. In no case, the engine should re-start without manual re-setting of all the safety systems. Suitable indicators should be provided in the control panel. iii. The engine should be vibration isolated from the trailer by means of suitable anti-vibration mounting. iv. Engine Starting System: Engine shall be equipped with Electric Starter and Charging Alternator System v. A Deck engine driven air compressor of sufficient capacity to meet the air requirement of diaphragm pump, pneumatic actuated valves or any other requirements as per the design. It should be inclusive of air tank and dryer. vi. The air required for the brake system and the pneumatic suspension of trailer shall be supplied by a separate air receiver with required valves which will receive air from the puller chassis. However, provision is to be provided for connecting the air receiver of trailer braking/ suspension system with the air receiver of the air compressor driven by the deck engine. vii. Hydration unit should be supplied with data diagnostic kit for diagnosing the fault code of deck engine. It shall preferably be a handheld reader having removable cartridges to support diagnosis of engine/ transmission. If a laptop is provided for the above, it should include software, adopters, and other accessories with licensed installation software.	
4.2	**FUEL TANKS:**	

Clause No.	Clause Description	Bidder's Response
	Aluminium/ SS minimum 150 gallons X 2 nos. with locking arrangement and fuel tank shut off. The tank shall have proper drain point with locking arrangement.	
4.3	**HYDRAULIC SYSTEM:**	
	i. The installed Hydraulic system should be a multi-Hydraulic pump system to provide power to the Hydraulic motors and other Hydraulic systems designed for the unit like Centrifugal pump, positive displacement pumps, agitators in the tanks & dry gel screws in mixing system. ii. Hydraulic system should also include: 1) Hydraulic cooler 2) Hydraulic pressure gauges 3) Flow Meter in Hydraulic Circuit iii. Hydraulic motors/pumps should be of Rexroth / Sundstrand / Dennison /Commercial / Vickers /Parker/Sauer/Sauer Danfoss/Eaton make. iv. Hydraulic oil cooler should be designed in such a way that the temperature of the Hydraulic oil in the system does not exceed 70 degree centigrade in extreme ambient condition i.e.50 degree centigrade. v. All Hydraulic filters used in the system should be of Donaldson/ Pall/ Fleet guard/Parkers make. **vi.** These Hydraulic systems should incorporate all equipment such as Hydraulic oil tank, suction filters, return filters, relief valves, control valves, coolers, breathers and trouble-shooting connections. **vii.** Hydraulic Hose Make: Acceptable hydraulic hose make are Parker / Gates / Eaton / Power Grip / Hansaflex only	viii.
5.0	**HYDRATION TANKS:**	
	i. One MS tank of capacity of minimum 200 barrels (31.8 m3) shall be provided with suitable structural reinforcement and internal protective coating for storing / handling fluid. ii. The tank should be designed with 6 interconnected compartments. Except first & Sixth compartment remaining four compartments should contain suitable mixing paddles / agitators to provide sufficient shear and residence time for Hydration and eliminate "dead zones". The fifth compartment shall have two mixers to shear the gel, increasing hydration rate, and prevent new gel from mixing with old gel. iii. Tank compartments should be designed to provide tortuous zig-zag liquid path for fluid passage from one compartment to another. iv. Provision should be made for the complete draining of all the compartments of the Hydration tank. A walkway with fold down safety railing should be provided to access to the entire tank top. v. Provision should be there to mix the dry polymer with the water from the reserve water tanks on the fly prior to feeding into the Hydration tank. The resulting gel should be successively passed into the first compartment, wherein the Hydration begins and should reach the	

Clause No.	Clause Description	Bidder's Response
	final compartment for discharge to the blender. The Hydration system aims to provide effectively hydrated gel based on FIFO (First In First Out) methodology. vi. Hydration tank should be fitted with drain mechanism with isolation valves aiming to drain all the left out liquid from the tank through suitably laid out piping. It should have sloped bottom to allow complete discharge of tank fluid from all compartments. The drain outlet should terminate through 4" butterfly valve and Fig 100/ 206/ 207 female connection. vii. Hydration tank should be fitted with enumerated level markers/ level tubes with positive isolation valves. System should contain man way at the top of the tank. Ladders to be provided for entry into the tank. Suitable level sensors to be provided in each compartment and level indications to be displayed on the control console. viii. Hydraulically operated Downriggers of sufficient capacity to be provided for load bearing while unit is loaded with water and put in operation.	
6.0	**POLYMER STORAGE BINS:**	
	i. Two nos. of Dry polymer storage bins of capacity 300 kg each to store & transport the polymer for on-the-fly mixing. ii. Bins shall be properly covered and easily accessible for maintenance /cleaning purpose with air vent outlet on the top. iii. Dry polymer feeding should be from the top of the bin. iv. Rounded bottoms to facilitate discharge of the Dry polymer from the Dry polymer Storage bin. v. Installed below each compartment of the Dry polymer Storage bin shall have a variable speed hydraulically driven variable speed dry polymer Delivery/Feed Auger with speed sensor (Proximity switch) with data connection to the control system that will feed Dry polymer at rates up to 126 lb/min (56 kg/min) into a "high shear" Dry polymer Injector/Mixer. vi. Each bin should be provided with the load cell arrangement for continuous measurement of weight of the bin. vii. Proper locking mechanism to be there for the dry polymer entry door/system so that no water ingression from outside.	
7.0	**Polymer Delivery/Feed Auger/mixing system:**	
	i. To produce a solution without lumps, polymer powder must be completely dispersed in water; mixing effect should be sufficiently turbulent to get homogeneous mixture. ii. Installed on the Unit will be two (02) Venturi/cyclone type "high shear" Dry polymer Injector/Mixers that will mix Dry polymer from the Dry polymer Delivery/Feed Auger with water from the unit mounted dry polymer centrifugal pump. iii. The suction side of each Injector/Mixer will be connected by a 3" line with pressure gauge to the discharge of the **polymer feed centrifugal pump** via a two (02) way remote controlled selector	

Clause No.	Clause Description	Bidder's Response
	valve to feed water to either of the Injector/Mixer. The discharge side of each Injector/Mixer will be connected to first Compartment of the Hydration Tank via a 4" line. iv. The polymer feed pump shall be variable speed, hydraulically driven, Mission (or equivalent) **4 x 3 x 11 Dry polymer Feed Centrifugal Pump** with mechanical seals. This pump shall feed clean water to the two (2) Venturi/cyclone type "high shear" Dry Chemical Additive Injector/Mixers. Installed on the lowest point of this Pump will be a valved drain opening. The suction side of this Centrifugal Pump will connect to the discharge side of the Suction Centrifugal Pump via a pneumatically activated butterfly valved 4" connection. The discharge side of this Centrifugal Pump will connect to either of the polymer Injector/Mixer via a 3" manifold with a remote controlled selector valve(s). v. Provision should be there to introduce liquid polymer gel concentrate to the mixing system either from the tanks in the hydration unit or from the external source**.**	
8.0	**LIQUID ADDITIVE TANKS & PUMPS:**	
	i. Four closed top Stainless Steel IBC UNDOT certified "Tote style" having capacity of 250 US gallon each should be provided for handling liquid additives. ii. Each Tank shall be equipped with a hydraulically powered stainless steel UN Approved agitator/stirrer and an Ultrasonic type Tank Level Sensor. Each tank will be equipped with suction/discharge connections. iii. The tanks shall have top hatch with enumerated level markers. iv. Interconnection shall be there among the tanks. v. Provision shall be there for complete draining of both the tanks. vi. The Unit shall have **Four (04) Liquid Chemical Additive Systems** each with a variable speed, hydraulically driven, stainless steel Waukesha Universal I or equivalent positive displacement type pumps with a **Coriolis type** (i.e. Endress and Hauser or equivalent) flow sensor for connection to the Unit Control system. Each of these pumps can be controlled manually or automatically from the Unit Control System and will have a valved suction connection to a Liquid Chemical Additive Tank. Each pump will have valved discharge connections to the 1st Compartment of hydration tank via the Static Mixer. Details of these pumps are as follows: Pump 1 & 2: 0.9 to 9 GPM (3.4 to 34 LPM) Pump 3 & 4: 1.7 to 17 GPM (6.4 to 64 LPM). vii. Interconnection should be there in the suction lines of these pumps. viii. Coriolis type (i.e. Endress and Hauser or equivalent) flow sensor shall be able to meter in the range of 0.25 to 15 US gallon/min.	
9.0	**MANIFOLD AND PUMP**	
9.1	**SUCTION MANIFOLD AND CENTRIFUGAL FEED PUMP:**	
	i. An input manifold shall be provided for connection to the water supply. The manifold should be equipped with Ten (10) numbers of pneumatically operated (with control console mounted pneumatic /	

Clause No.	Clause Description	Bidder's Response
	electronic switches) 4" butterfly valve with 4" Fig 100/ 206/ 207 female connections with cap and security chain. ii. A Hydraulically driven **Mission Magnum or equivalent 12 x 12 x 15 centrifugal pump** with mechanical seal capable of pumping clean water upto 120 BPM shall be installed on the unit. Installed on the lowest point of this Suction Pump shall be a drain opening with 1" Ball Valve. iii. The suction side of this pump should be connected to water / liquid intake manifold assembly which should be mounted at the possible lowest position through 10" line with a pneumatically activated butterfly valve. iv. The discharge from this pump will be fed to the Hydration tank (1st compartment) through 10" valved manifold system and to the educator for mixing with the dry polymer coming from the bin. This manifold system shall include Pressure Guage, Metering Valve, **MID (Magnetic Induction) or equivalent type flowmeter**, a Static Mixer and a pneumatically actuated butterfly valve. v. One positive displacement KCL feed pump with rate of 1 to 12 bbl/ min shall be installed with 4" butterfly valve & Check valve with 4" Fig 100/ 206/ 207 female connections with cap and security chain. The discharge from this feed pump shall be connected to the upstream of the above flowmeter. vi. The Suction Manifold shall also connect to the Hydration Tank Discharge Manifold via a 10" Crossover line with a pneumatically actuated butterfly valve. vii. There should be two numbers 2" chemical injection ports complete with isolation valves and check valves installed in the suction manifold. In addition, three numbers 2" chemical injection ports will be installed directly after the feed pump. Each chemical port shall be fitted with stainless steel isolations valves, check valves and cam lock connections.	
9.2	**DISCHARGE MANIFOLD AND PUMP:**	
	i. The discharge manifold shall be installed on opposite side of the suction manifold of the trailer, shall be equipped with Ten (10) numbers pneumatically operated (with control console mounted pneumatic/ electronic switches) 4" butterfly valve with FIG 100/ 206/ 207 male connections with cap and security chain to supply Frac fluid to the blender. ii. This manifold shall be directly connected to the last section (6th Compartment) of the Hydration tank. iii. There shall be three numbers 2" chemical injection ports installed directly in the manifold. Each chemical port shall be fitted with stainless steel isolation valves, check valves and cam lock connections. iv. There shall be one Hydration Tank 10" Bypass/Dilution line from the discharge side of the Suction Centrifugal Pump to the discharge manifold.	

Clause No.	Clause Description	Bidder's Response
	v. Connected to the 6th Compartments of the Hydration Tank prior to the Discharge Manifold will be a valved "Viscometer Loop" with a hydraulically driven **positive displacement Pump** and a Rheology kit (with connections to the Control System) that shall include a pressure gauge, a temperature sensor, a pH/ORP probe and a Endress & Hauser Promass 83I (or equivalent) Viscometer. The parameters are to be displayed at control console as well as at the DATA VAN.	
10.0	**CONTROL SYSTEM:**	
10.1	**CONTROL PLATFORM:**	
	i. An operator's control platform and tank access deck should be installed on this unit. The access deck should give the operator access to each of the chemical mixing tanks. This access deck should include non-slip grating and handrails for safety. The control platform should also include non-slip grating, access ladders and handrails. ii. Also installed on the operator's platform should be a control console with suitable weatherproof hinged cover with locking mechanism. All electronic Controls should be installed in a single NEMA 4 weather enclosure and the system should work on 12VDC/24VDC or inverter based 120VAC power supply from batteries. This control console will feature a control panel with permanently engraved labelling in English. Control panel should have mechanical gauges for all operating parameters or otherwise specified. The control panel assembly should be isolated from the unit by cable spring isolators or necessary vibration reduction mechanism.	
10.2	**CHEMICAL AUTOMATED SYSTEM:**	
	i. The automatic chemical control system is used to adjust the flow rates of dry gel powder based on the intake water flow rate and user set ratio in terms of percentage value with dry gel delivery rate indication. ii. The automatic chemical control system shall determine the desired chemical/liquid gel flow rate based on the Hydration unit feed flow rate and operator defined liquid gel/chemical ratio in percentage value. iii. The controls will automatically vary the dry and liquid gel flow rate through an electro-Hydraulic controller in order to match the actual dry / liquid gel (chemical) rates to the user set rates. Operator defined chemical rates can be manually changed at any time during the job. iv. Provision should be there to override the automated system and transfer the control to manual mode. The automatic chemical control system should display the measurable parameters of Hydration unit on the Local display along with an additional display console in the existing Frac Control Center (Data Van) via a TCP/IP link, with suitable wireless / wired communication link (approximately 50 m). 12V / 24V DC / 230V AC can be supplied from the data van for this additional display console to be supplied with the unit.	

Clause No.	Clause Description	Bidder's Response
	v. To restore the system in the event of system crash, the system should be supplied with all necessary licensed software/driver/operating system/network setting configuration with registration codes or should be supported by OEM for immediate restoration free of cost.	
10.3	**CONTROLS AND INSTRUMENTATION:**	
	i. A control and instrumentation system should be installed in the weatherproof enclosure. Each device should be installed on a non-corrosive control panel and should feature permanent labelling in English. All electronic controls should be installed in a single NEMA 4 weatherproof enclosure. The instrumentation and control Panel shall include all, but not limited to the following. A) Control Functions: a) All Pumps installed on the unit. b) Hydration Tank Hydraulically Driven Stirrer/Agitators. c) All Polymer Delivery/Feed Auger/mixing system. d) Injector/Mixer Water Inlet Selector Valve. e) Any other equipment which required control. B) Digital display or Gauges for indicating critical Engine and transmission parameters like: a) Engine rpm b) Engine water temperature c) Engine oil pressure d) Deck engine fuel consumption details **Note:** Engine parameters can also be displayed in a separate digital panel display. It shall be integrated to TCP/IP network for remote DATAVAN display and alarm/warning indications. C) Hydraulic oil temperature gauge of the Hydraulic oil tank D) Hydraulic pressure gauges / sensors (individual for closed loop circuits and combined for open loop systems). E) Air pressure gauge F) Engine Throttle G) Engine Start, stop H) Engine emergency stop I) Speed control of centrifugal feed pump J) Speed control for true positive displacement pumps K) Control for Pneumatic actuated Butterfly valves should be from suitable electronic / pneumatic control console system. This control console system should contain the mimic diagram of flow path containing valve arrangement. L) Feed flow total meter for the above M) Liquid gel / Chemical additive flow meters rate from Carioles meter or other installed flowmeters. N) Hydration tank mixers on/off and speed control O) Manual / Auto (Hydration) control P) Control for air operated loading unloading pump and status indication Q) pH, viscosity, temperature of Gel R) Two Dry gel auger RPM and delivery rate/ totalizer S) Liquid chemical delivery rates from pumps	

Clause No.	Clause Description	Bidder's Response
	T) Dry gel storage load cell indications and alarm indications for empty bin U) Tank Level indication V) KCL flow rate ii. Display of all the process parameters may be by either individual display meters or on a display console. Proper industrial grade shielded Cables to be provided for Blender, Hydration unit and Frac Control Center (Datavan) connections (60 mtrs each). iii. GPS hardware to be installed in the unit allowing remote status information on unit location and fuel level status. iv. The console should include all electrical signal and control connections (including a ground strap). The penetrations should be environmentally sealed; all wiring should be permanently numbered (to match electrical wiring schematics); and all connections are on terminal strips. All air connections should be via bulkhead connections. The cabinet should include a connector for connection to a data acquisition and control unit.	
11.0	**AUTOMATED SOFTWARE SYSTEM:**	
	i. The Automated Software System should automate the unit by controlling dry gel / liquid gel polymer delivery as well as the fluid level in the mixing chamber. The control system should be a microprocessor-based system that should utilize a touch sensitive graphical display of minimum 9 inch. ii. The Automated Software System control system should be interactive in that the job parameters may be adjusted during the job and should allow this unit to carry out complicated stimulation programs without operator assistance during the job. iii. The hardware should be rugged and protected in NEMA 4X enclosures. iv. The job-monitoring screen should allow the operator to view: • Job status • Chemical / liquid gel type • Current stage and number of stages • Individual flow rate for chemical/liquid gel • Total amount added of each chemical/liquid gel. v. The automated control system shall be able to control the hydration unit in three control modes- **[A] Hydration Unit Control:** vi. Allows an Operator to control Flow of fluids to/from the Unit. **[B] Automatic Chemical Control (ACC):** • Enable the unit to deliver chemical additives according to pre-programmed schedules expressed as a ratio of the base fluid rate. vii. When in the AUTOMATIC mode, the controller should calculate the chemical injection rates that are required to maintain the user-programmed chemical percentage ratios. The operator will program the concentration values, as well as the length for up to 50 individual stages. Each stage has the following user-programmable properties:	

Clause No.	Clause Description	Bidder's Response
	a. Volume per stage b. Chemical concentration ratio (in percentages) **[C] Automatic Tank Level Control (ALC):** 1) Enables the Hydration Unit to keep average level in Hydration Tank according to pre-programmed set points independently of discharge flow rate changes.	
12.0	**UNITIZATION AND COMPLETION:**	
i)	The above unit should also confirm the following specification: a) Installation of all electrical system. b) Installation of work lights. c) Installation of all pneumatic system. d) Installation of all hydraulic system.	
ii)	The unit should be designed for stability and structural integrity at full loaded conditions.	
iii)	Workmanship should be of the best quality & appearance. The equipment shall be fabricated in accordance with industry accepted standards. Following is apartial list of examples: 1. Flame cut edges shall be ground smooth. 2. Sharp corners and edges to which operators and mechanics are vulnerable shall be ground smooth. 3. Bolt holes for bolts shall be drilled (not torch cut) 4. Welds shall be of good quality and sufficient strength. 5. No sweated or brazed type hydraulic fittings will be used. 6. Where applicable use self-locking nut. 7. All hoses should be supported with support type clamps. 8. All hoses should be protected by well-secured rubber sleeves to prevent rubbing by frame etc. 9. All hosing and wiring will be labelled or tagged on both ends for easy identification. 10. All hosing or wiring in close proximity with hot surfaces (i.e. engine exhaust manifold) will be secured to a heat- shielded cable mount. 11. Hydraulic reservoirs should be completed with sight level gauge, clean outs, vent fill cap etc. 12. All hydraulic hoses, air hoses, electric lines etc. should be covered with protective sheathing where they come into contact with the hard surfaces that may cause premature wear due to chaffing or vibration. 13. Access steps with grab handles should be located at convenient locations around the unit. 14. Access ladder for radiator fill. 15. All hoses & wiring should be protected, easily accessible & symmetrically for easy identification & maintenance. 16. All reservoirs should be constructed of steel plate with sight level gauge, clean out, vent fill cap etc. 17. The complete testing of unit should be done at the manufacturer's factory & certificate should be produced. 18. Special instruments / attachments for setting user settable meter configuration parameters are to be provided. 19. Gps hardware	
iv)	Following hoses to be provided i) 4" Soft (discharge) hoses of the specification as follows: 1. 2 nos. of 25 ft length 2. 4 nos. of 20 ft length 3. 6 nos. of 15 ft length. ii) Construction: Tube, Cover and 2 ply textile braid construction	

Clause No.	Clause Description	Bidder's Response
	Material: 1. Tube: Chemigum (special Buna-N) compound or Nitrile 2. Cover: Special black neoprene (Wingprene) 3. Reinforcement: Synthetic high tensile textile (Vytacord) iii) Rating: Working pressure shall be 150psi iv) Hose couplings:4" MXF hammer union of FIG 100/206/207crimped connections. v) 4" Hard (suction) hoses of the specification as follows: 1. 4 nos. of 20 ft length, 2. 6 nos. of 15 ft length, 3. 6 nos. of 10 ft length vi) Internal wall: Vinyl Nitrile rubber, black durable vii) Inlays: Two layers of cord fabric spiralled and completely embedded steel spiral wire winding. viii) Outside wall: Vinyl Nitrile Rubber, black resistant to weathering and age resistant. The outside diameter of the hose should uniform all along the length. ix) Working pressure: 150 psi x) Hose couplings: 4" MXF hammer union of FIG 100 / 206/ 207 crimped connections.	
v)	The unit should be supplied with data diagnostic kit for diagnosing the fault code of deck engine. It shall preferably be a handheld reader having removable cartridges to support diagnosis of engine. If a laptop is provided for the above, it should include software, adopters and other accessories with licensed installation software.	
vi)	All steel & miscellaneous fittings to complete the unit	
13.0	**PAINTING:**	
i)	Unit to be sand blasted wherever required, one coat of primer followed by two coats of paint as specified below:	
ii)	Frame and Control console: RED-315	
iii)	Rim and Cab Top: Gold-44753	
iv)	Bumper: Gold & Red Stripes	
v)	OIL logo (to be provided at the time of unit manufacturing)	
14.0	**SPARES:**	
14.1	**COMMISSIONING SPARES** The supplier has to supply all the spare parts free of cost, required for initial commissioning of the unit. All the consumables such as, lube oil, gear oil, hydraulic oil etc. except diesel fuel, required for commissioning should also be supplied.	
14.2	**OPERATIONAL CRITICAL SPARES:** Spares as given **under Table 1** in specified quantity shall be supplied along with Hydration unit Trailer. Specific Description, quantity of each & every spares shall be indicated in the technical bid and Make, Part Nos. etc. shall be submitted along with the supply. Bidders shall include the price of these spares in the priced bid format. The bidder shall confirm in the technical bid that all spares given under **Table-1** will be supplied with the unit.	
14.2.1	**AUTOMOBILE (TRAILER) SPARE PARTS LIST:**	

Clause No.	Clause Description	Bidder's Response
	All spare parts for the Automobile (Trailer) in specified quantity as mentioned in **Table-1 / Section A** shall be supplied along with the supply. Bidder / supplier to note that the spares mentioned in **Table-1 / Section (A)** to be supplied shall be additional to the items fitted in the unit. Specific description, Quantity etc. of each item shall clearly be indicated in the technical bid. Make, Part Nos. etc. of each item shall be submitted by the supplier along with the supply.	
14.2.2	**DECK ENGINE SPARES:** All spare parts for the DECK ENGINE in specified quantity as mentioned in **Table-1 / Section (B)** shall be supplied along with the supply. Bidder / supplier to note that the spares mentioned in **Table-1 / Section (B)** to be supplied shall be additional to the items fitted in each unit. Specific description, Quantity etc. of each item shall clearly be indicated in the technical bid. Make, Part Nos. etc. of each item shall be submitted by the supplier along with the supply. In case any of the spares mentioned in **Table-1 / Section (B)** does not come as per bidder's design and the bidder has not quoted for such spares, the bidder shall clearly indicate the same. However, in case such spares are provided in the unit in future, the same shall be supplied by the bidder / supplier along with the supply without any extra cost to Oil India Limited (OIL).	
14.2.3	**PUMP & OTHER SPARES:** All spare parts for the pump in specified quantity as mentioned in **Table-1 / Section (C)** shall be supplied along with the supply. Bidder / supplier to note that the spares mentioned in **Table-1 / Section (C)** to be supplied shall be additional to the items fitted in each unit. Specific description, Quantity etc. of each item shall clearly be indicated in the technical bid. Make, Part Nos. etc. of each item shall be submitted by the supplier along with the supply. In case any of the spares mentioned in **Table-1 / Section (C)** does not come as per bidder's design and the bidder has not quoted for such spares, the bidder shall clearly indicate the same. However, in case such spares are provided in the unit in future, the same shall be supplied by the bidder / supplier along with the supply without any extra cost to Oil India Limited (OIL).	
14.2.4	**INSTRUMENTATION & CONTROL SYSTEM:** All spare parts for the instrumentation & control system in specified quantity as mentioned in **Table-1 / Section (D)** shall be supplied along with the supply. Bidder / supplier to note that the spares mentioned in **Table-1 / Section (D)** to be supplied shall be additional to the items fitted in each unit. Specific description, Quantity etc. of each item shall clearly be indicated in the technical bid. Make, Part Nos. etc. of each item shall be submitted by the supplier along with the supply. In case any of the spares mentioned in **Table-1 / Section (D)** does not come as per bidder's design and the bidder has not quoted for such spares, the bidder shall clearly indicate the same. However, in case such spares are	

<table>
<tr><th>Clause No.</th><th>Clause Description</th><th>Bidder's Response</th></tr>
<tr><td></td><td>provided in the unit in future, the same shall be supplied by the bidder / supplier along with the supply without any extra cost to Oil India Limited (OIL).</td><td></td></tr>
<tr><td>14.3</td><td>RECOMMENDED SPARES:</td><td></td></tr>
<tr><td></td><td>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 without price of each item. Annual consumption of each spare should be furnished. The bidder should 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 and e-mail id of OEM for all items of the whole unit.

The bidder has to submit a complete spare parts list for the whole unit subgrouping major component in the following format as shown with example:

<table>
<tr><td>Name of the component /Sub com.</td><td>Description of the item</td><td>Part no./ID no. of item</td><td>Frequency of replacement (in Hours / Day)</td><td>Make</td></tr>
<tr><td></td><td></td><td></td><td></td><td></td></tr>
</table>
</td><td></td></tr>
<tr><td>15.0</td><td>UNDERTAKING:</td><td></td></tr>
<tr><td></td><td>The bidders must submit a written undertaking (along with the technical bid) that they, themselves or through other sources, would be able to supply all the requisite spares (including bought out items, if any) & consumables and provide the maintenance services of their offered unit in OIL's operational areas for a minimum period of fifteen (15) years from the Certified date of completion of successful field commissioning of the unit.

The cost of such spares, consumables & maintenance services which may be utilized by Oil India Limited in future (beyond Warranty period and O&M /Comprehensive Maintenance Period) shall be extra and SHALL NOT BE considered by the bidder in their quoted prices in this tender.

Spares & repair services during Warranty period & warranty extension period (if any) for the item(s) under Warranty claim (if any) of the unit(s) shall be in the scope of the successful bidder (supplier).</td><td></td></tr>
<tr><td>16.0</td><td>TECHNICAL MANUALS, CATALOGUES AND CERTIFICATION FOR OPERATION AND MAINTENANCE OF THE UNIT:

The following Manuals & Catalogues (in English language) shall be supplied along with the Trailer mounted Hydration unit. Manuals/ Part Catalogues provided shall be Custom Illustrated Manuals/Catalogues for the vehicle and equipment only, not a general Composite Manual/Catalogue.

The manuals supplied should be specific to the make / model of the equipment / part / components supplied in the Trailer mounted Hydration unit. In case a comprehensive OEM catalogue is supplied of the equipment / part / components, then the respective make / model of the equipment /</td><td></td></tr>
</table>

Clause No.	Clause Description	Bidder's Response
	part / components supplied in the Trailer mounted Hydration unit should be clearly marked / identified. The bidder/supplier has to exhibit the Hard copy / soft copy of Parts Catalogue and Maintenance / Service Manual of Trailer mounted Hydration unit to the Pre despatch Inspection Team of Oil India Limited and handover soft copies to the Pre Despatch Inspection team of Oil India Ltd. The Hard copy of the Parts Catalogue and Maintenance / Service Manual of Trailer mounted Hydration unit may be submitted to Oil India Ltd along with the supply. The bidder has to submit a declaration along with the bid in this regard as per Annexure A1. Bidder to confirm that the following will be provided along with supply:	
1.	Preferably, 01 (One) set of Spare Parts Catalogue with Part Numbers and Workshop & Service Manual for all components / systems of Trailer like Trailer Axles, Brake System, Trailer Suspension, Electrical & Pneumatic Systems etc. All the manuals & catalogues shall contain only those components/systems that have been used in the unit i.e. the same must be CUSTOM ILLUSTRATED MANUALS/ CATALOGUES ONLY – not the generalized ones. The Spare Parts Catalogue with Part Numbers and Workshop & Service Manual shall be provided by the supplier in any one of the following forms: (a) Hard copy format (i.e. in printed form) OR (b) Soft copy format (i.e. in USB drive) The bidder/supplier has to exhibit the Hard copy / soft copy of Parts Catalogue and Maintenance / Service Manual of Hydration unit Trailer to the Pre despatch Inspection Team of Oil India Limited and handover soft copies to the Pre Despatch Inspection team of Oil India Ltd. The Hard copy of the Parts Catalogue and Maintenance / Service Manual of-Tractor / Prime Mover may be submitted to Oil India Ltd along with the supply. The bidder has to submit a declaration along with the bid in this regard as per Annexure A1.	
2.	03 (Three) sets of Operational manuals of the unit with categorical steps to operate the unit by an operator along with the functionality for each control switches, etc. and the operating range of the control parameters to be provided.	
3.	Supplier to supply 03 (Three) Sets of OEM's operation, maintenance and overhauling manuals of supplied models of Deck Engine, Pumps and all other sub-assemblies and their corresponding Spare part catalogue.	
4.	03 (Three) sets of the following schematics, layout drawings not limited to i. Equipment layout ii. Process flow drawing iii. Electrical, pneumatic and hydraulic schematic for operator panel are to be provided. iv. Control Panel wiring diagram, Termination panel details, Panel BOM with name of OEM & their part numbers.	

Clause No.	Clause Description	Bidder's Response
5.	The layout diagram of each system must enlist the components in it along with technical detail (Nomenclature).	
6.	All the components should also have nameplate embossed indicating original equipment manufacturer of these components, Make / Model their Part No., Sl No. and possible details as per industry standards. Wherever the mounting of the nameplate is not possible such detail must be made on layout sheet of the system in which the component is installed. This is not required for components pertaining to Automobile (i.e. Trailer) portion.	
7	The O&M manuals and the spare part lists (three sets) to be provided in hard copy as well as in a soft copy. This is not required for components pertaining to Automobile (i.e. Trailer) portion.	
8.	Lubrication and Fluids: Lubrication fluids chart (permanent attached to Unit) should be provided listing fluids, lubricants and filter types which are required by the Equipment. Fluids should be identified by generic name (i.e., hydraulic oil) near the fill port for each fluid. The lettering should be in English, and colour should be black on a white or stainless-steel background. This is not required for components pertaining to Automobile (i.e. Trailer) portion.	
9.	Control Panel drawings with complete/ comprehensive Bill of Materials (BOM) with name of OEM & their part numbers.	
10.	Instrumentation wiring diagrams with end-to-end termination details.	
11.	The necessary licensed software in original packages along with user software backups are also to be supplied.	
NOTE	**COMMISSIONING OF THE UNIT SHALL NOT BE CONSIDERED AS COMPLETE UNTIL & UNLESS ALL ABOVE PRINTED MANUALS / CATALOGUES ARE SUPPLIED** Soft copies of documents shall be acceptable for components pertaining to Automobile (i.e. Trailer) portion.	
17.0	**Document(s) to be submitted along with the supply of each unit for government Registration etc.:** Following documents shall be submitted by the supplier along with the supply as mentioned hereunder:	
1.	Invoice(s) in the name of Oil India Limited, Duliajan, Assam-786602 in original. Notwithstanding any clause mentioned elsewhere in the NIT/tender, the Invoice for the complete unit shall be submitted in 02 (two) parts separately as under for registration purpose: i. Invoice for the Hydration unit Trailer with all items, components, machineries, equipment, tools, etc. fitted permanently on the Trailer unit. ii. Invoice for items, spares, accessories etc. supplied separately along with the complete unit.	

Clause No.	Clause Description	Bidder's Response
	Note: Trailer Chassis Number shall be mentioned in invoice(s) against above Sl. No. (i).	
2.	Sale Certificate for Trailer of Hydration unit (Form-21) in original. The documents shall be in the name of Oil India Limited, Duliajan, Assam-786602, sample format as per Motor Vehicle Act, 1988 & Central Motor Vehicle Rules, 1989 of India provided.	
3.	Road-Worthiness Certificate for Compliance to Emission and Noise Standards for Trailer of Hydration unit [Form-22, Form-22A (Part I), Form-22A (Part II)] in original. The documents shall be in the name of Oil India Limited, Duliajan, Assam-786602, sample format as per Motor Vehicle Act, 1988 & Central Motor Vehicle Rules, 1989 of India provided.	
4.	Certificate of Origin of the Hydration unit Trailer.	
5.	Pencil print of Vehicle Identification Number (VIN) i.e., Chassis Number of Trailer of the Hydration unit.	
6.	Certificate for the Trailer of the Hydration unit in original from Trailer manufacturer. Amongst others, the certificate shall contain following information: (i) Make & Model of Trailer. (ii) Vehicle Identification Number (VIN) i.e. Chassis Number of the Trailer. (iii) Month & Year of Manufacture of the Trailer.	
7.	Type Approval Certificate of Trailer of Trailer mounted Hydration unit as per Clause No. 2.12.	
8.	Technical drawing of the Hydration Unit Trailer with equipment mounted on it as well as along with the Tractor in coupled condition (tractor trailer combination) indicating the Centre of Gravity, length, width, height, angle of approach, angle of departure etc.	
18.0	**HOMOLOGATION, UPLOADING OF VEHICLE DATABASE IN VAHAN / PARIVAHAN PORTAL, REGISTRATION OF THE TRAILER, PRINTING OF HSRP (High Security Registration Plate) , UPLOADING OF LID OF HSRP IN APPROPRIATE PORTAL** The bidder shall categorically confirm their compliance of the following clauses in the technical bid:	
a.	**In case the Trailer is manufactured outside India.** The vehicle details of Trailer in relevant VAHAN / Homologation / Parivahan portal of Ministry of Road Transport & Highways (MoRTH), Government of India shall be dealt by the bidder as per the applicable guidelines of Ministry of Road Transport & Highways (MoRTH) / Director General of Foreign Trade, Government of India at the time of supply. Homologation and	

Clause No.	Clause Description	Bidder's Response
	uploading of vehicle data (i.e. Make, Model, Chassis Number) in VAHAN / PARIVAHAN portal by providing the requisite documents is under the scope of the successful bidder. **Temporary Registration (if required) and Permanent Registration in local RTO (Rgional Transport Office) of the Govt of Assam is under the scope of successful bidder**. The documents pertaining to Oil India Ltd shall only be provided by Oil India Limited. All other documents/ certificates pertaining to the vehicle shall be provided / submitted by the bidder. The cost of permanent registration in the form of Registration fee and initial Road tax to the Government of Assam shall be borne by the successful bidder. However, this cost will be reimbursed to the bidder on submission of Government Receipt as proof.	
b.	**In case the Trailer is manufactured in India** The bidder (supplier) shall be responsible and ensure that the vehicle details of Trailer are available in the relevant VAHAN / Parivahan portal of Ministry of Road Transport & Highways (MoRTH), Government of India in accordance with Motor Vehicle Act, 1988 & Central Motors Vehicles Rules, 1989 of India prior to delivery of the unit(s) to Oil India Limited. If the vehicle details are not available in VAHAN portal, it shall be the responsibility of the bidder to upload the same in VAHAN portal. Then the supplier shall arrange for temporary registration (if required) and **Permanent Registration in local RTO (Rgional Transport Office) of the Govt of Assam**. The documents pertaining to Oil India Ltd shall only be provided by Oil India Limited. All other documents/ certificates pertaining to the vehicle shall be provided / submitted by the bidder. The cost of permanent registration in the form of Registration fee and initial Road tax to the Government of Assam shall be borne by the successful bidder. However, this cost will be reimbursed to the bidder on submission of Government Receipt as proof.	
18.1	Hydration unit Trailer has to be registered separately. Combined registration of Hydration unit Trailer with any of the Tractor shall not be accepted.	
18.2	Cost of Registration is **not to be considered** by the bidder while quoting their prices against this tender.	
19.0	**HIGH SECURITY REGISTRATION PLATE (HSRP):** On receipt of the government Registration Number, the supplier (successful bidder) shall supply the High Security Registration Plate (HSRP) through the Original Equipment Manufacturers of motor vehicle / dealer / any one of the agencies authorised by the Government of India / Assam to issue the High Security Registration Plate (HSRP) of the unit. The supplier shall ensure to upload the HSRP details in relevant (FTA / HSRP) portal enabling the DTO / Oil India Ltd to issue/ download permanent Registration Certificate for the vehicle(s) as required for road drive of the vehicle. The cost of High Security Registration Plate (HSRP) shall be borne by the supplier (successful bidder). Bidder / supplier shall also ensure adherence to any subsequent revisions to the referred requirements that may be issued in future by Ministry of Road Transport & Highways (MoRTH), Government of India.	
20.0	**DEVIATIONS FROM THE SPECIFICATIONS:**	

Clause No.	Clause Description	Bidder's Response
	The bidder shall enclose comprehensive list of intended deviations from the technical specifications clearly highlighting the reasons thereof, if any, sufficiently prior to Bid closing date & time for Tender amendment, etc. But OIL reserves the right for acceptance or rejection of the deviation(s).	
21.0	**BID SUBMISSION & DOCUMENTATIONS:** Bidders should submit their bids in the above tabular form mentioning their offered specification, Make, Model, necessary data, submitted/not submitted/ complied/not complied etc. as applicable to all the NIT terms and conditions including submitting the documents, leaflets as specified. Other details, if any, the bidder may mention the same by adding additional row(s)/separate sheet as the case may be. Bidder's response to all NIT stipulations should 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 acceptable. 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.	
21.1	**Following documents shall be submitted along with technical bid for evaluation –**	
1.	Technical leaflets with detailed specifications, Make & Model of Trailer unit, Trailer axle, Trailer suspension, brake, different equipment of Hydration unit etc. as per respective individual tender clauses.	
2.	GA (General Arrangement) drawing of the Trailer mounted hydration unit. The GA drawing shall have mention of major dimensions of Hydration unit trailer (like length, height, width, etc.); estimated loading on individual axles of Trailer (when combined with offered Tractor unit); show the position of all major components & their mounting.	
3.	Undertaking(s) for supply of spares and service as per clauses mentioned elsewhere in the tender document.	
4.	Specific description, quantity etc. of each and every spares (for bid evaluation) as detailed in the Operational Critical Spares List provided in **clause 14.2 above** & Table-1 below.	
5.	List of Recommended Spares in clause **above.**	
6.	Checklist as per enclosed format shall be furnished along with the bid.	
7.	Any other document as applicable against clauses of this tender document.	

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TABLE-1: Ref. Clause No. 14.2 OPERATIONAL CRITICAL SPARES:

SECTION (A): AUTOMOBILE SPARE PARTS LIST:

AUTOMOBILE SPARE PARTS LIST for TRAILER

Sl. No.	Item Description	Qty. for 01 No. unit	Bidder's Response
A	B	C	
A.	**TRAILER AXLE:**		
1.	Wheel Stud with Nuts (Right Side) (Each set shall comprise of all the studs & nuts for one wheel)	02 Sets.	
2.	Wheel Stud with Nuts (Left Side) (Each set shall comprise of all the studs & nuts for one wheel)	02 Sets.	
3.	Wheel Hub Bearing (Right Side)	06 Nos.	
4.	Wheel Hub Bearing (Left Side)	06 Nos.	
5.	Wheel Rim (Right Side)	03 Nos.	
6.	Wheel Rim (Left Side)	03 Nos.	
7a.	In case of Tube type Tyres: Tyre with Tube	03 Nos.	
7b.	In case of Tubeless type Tyres: Tubeless Tyre	03 Nos.	
B.	**TRAILER BRAKES:**		
1.	Brake Servo Assembly - Trailer Wheel	04 Nos.	
9.	Brake Shoe Assembly - Trailer Wheel	16 Nos.	

SECTION (B): DECK ENGINE:

Sl. No.	Item Description	Qty.	Bidder's Response
A	B	C	
1.	Fuel Filter Element	05 Sets.	
2.	Water Separator Filter Element	05 Nos.	
3.	Engine Oil Filter Element -	05 set.	
4.	Air Filter Element -	05 Nos.	
5.	Fan Belt/ Alternator Belt/ Compressor Belt	02 Sets.	
6.	Water Pump Repair Kit	01 Set.	
7.	Radiator Water Hose	3 nos.	
8.	Fuel Injector set	01 Set	
9.	Fuel Pump Assembly	01 No.	
10.	Fuel Pump Repair Kit	0 Set	
11.	Lube oil pump and distribution system	01 Set	
12.	Air cleaners & Air dryer assembly	01 Set	
13.	Engine Electric Starter Assembly	01 No.	
14.	Battery Charging Alternator Assembly	01 No.	
15.	Air Compressor Assembly	01 No.	

SECTION (C): PUMP & OTHER SPARES LIST:

Sl. No.	Item Description	Qty.	Bidder's Response
A	B	C	
1.	**Repair kit for Centrifugal Pump (**Mission (or equivalent) 4 x 3 x 1**) containing the following:**		
i)	Drive Shaft	04 Nos.	
ii)	Short Shaft	04 Nos.	
iii)	Rotor, Twin Wing, Alloy 88	04 Nos.	
iv)	Rotor, Twin Wing, 316SS	04 Nos.	
v)	Rotor, Single Wing, Alloy 88	04 Nos.	
vi)	Stud	16 Nos.	
vii)	Stud, Jacketed Cover	32 Nos.	
viii)	Pump Cover	02 Nos.	
ix)	Jacketed Cover	02 Nos.	
x)	Gear Case Assembly, SS	02 Nos.	
xi)	Gear Case Cover, SS	02 Nos.	
xii)	Gear, Drive Shaft, Spur	02 Nos.	
xiii)	Gear, Short Shaft, Spur	02 Nos.	
xiv)	Wing Nut	16 Nos.	
xv)	Hex Nut	16 Nos.	
xvi)	Oil Seal, Gear Case Cover	02 Nos.	
xvii)	Oil Seal, Gear Case Rear	04 Nos.	
xviii)	Grease Seal, Bearing Retainer	04 Nos.	
xix)	Bearing, Rear	04 Nos.	
xx)	Bearing, Front	04 Nos.	
xxi)	Bearing, Front	04 Nos.	
xxii)	Key, Gear	04 Nos.	
xxiii)	Drive Pin, Seal Seat and Sleeve	04 Nos.	
xxiv)	Dowel Pin, Cover Side, .245" x .85"	02 Nos.	
xxv)	Dowel Pin, Gear Case Side, .245" x 1.0"	02 Nos.	
xxvi)	Dowel Pin, Cover Side, .308" x .85"	02 Nos.	
xxvii)	Dowel Pin, Gear Case Side, .308" x 1.0"	02 Nos.	
xxviii)	Oil Plug, M20 x 1.5"	10 Nos.	
xxix)	Oil Level Indicator, M20 x 1.5	02 Nos.	
xxx)	Silicone Sealant	02 Nos.	
xxxi)	Jam Nut, Rotor	08 Nos.	
xxxii)	Shim Kit	04 Nos.	
xxxiii)	Spacer, Gear to Rear Bearing	04 Nos.	
xxxiv)	Bearing Spacer	04 Nos.	
2.	**Repair kit for Centrifugal Pump (**Mission or equivalent 12 x 12 x 15) **containing the following:**		
i)	Drive Shaft	04 Nos.	
ii)	Short Shaft	04 Nos.	
iii)	Rotor, Twin Wing, Alloy 88	04 Nos.	
iv)	Rotor, Twin Wing, 316SS	04 Nos.	
v)	Rotor, Single Wing, Alloy 88	04 Nos.	
vi)	Stud	16 Nos.	
vii)	Stud, Jacketed Cover	32 Nos.	
viii)	Pump Cover	02 Nos.	
ix)	Jacketed Cover	02 Nos.	
x)	Gear Case Assembly, SS	02 Nos.	
xi)	Gear Case Cover, SS	02 Nos.	
xii)	Gear, Drive Shaft, Spur	02 Nos.	
xiii)	Gear, Short Shaft, Spur	02 Nos.	

xiv)	Wing Nut	16 Nos.	
xv)	Hex Nut	16 Nos.	
xvi)	Oil Seal, Gear Case Cover	02 Nos.	
xvii)	Oil Seal, Gear Case Rear	04 Nos.	
xviii)	Grease Seal, Bearing Retainer	04 Nos.	
xix)	Bearing, Rear	04 Nos.	
xx)	Bearing, Front	04 Nos.	
xxi)	Bearing, Front	04 Nos.	
xxii)	Key, Gear	04 Nos.	
xxiii)	Drive Pin, Seal Seat and Sleeve	04 Nos.	
xxiv)	Dowel Pin, Cover Side, .245" x .85"	02 Nos.	
xxv)	Dowel Pin, Gear Case Side, .245" x 1.0"	02 Nos.	
xxvi)	Dowel Pin, Cover Side, .308" x .85"	02 Nos.	
xxvii)	Dowel Pin, Gear Case Side, .308" x 1.0"	02 Nos.	
xxviii)	Oil Plug, M20 x 1.5"	10 Nos.	
xxix)	Oil Level Indicator, M20 x 1.5	02 Nos.	
xxx)	Silicone Sealant	02 Nos.	
xxxi)	Jam Nut, Rotor	08 Nos.	
xxxii)	Shim Kit	04 Nos.	
xxxiii)	Spacer, Gear to Rear Bearing	04 Nos.	
xxxiv)	Bearing Spacer	04 Nos.	
3.	**Repair kit for Liquid additives positive displacement pumps containing the following:**		
i.	Stator	04 Nos.	
ii.	Motor	04 Nos.	
iii.	Complete transmission axis (rotor, joints, shaft)	04 Sets	
iv.	Complete Seals	16 Sets	
v.	O-rings for the seal box	16 Sets	
vi.	Set of bearings and support seal rings	16 Sets	
4.	**Repair kit for positive displacement discharge pumps containing the following:**		
i.	Stator	02 Nos.	
ii.	Motor	02 Nos.	
iii.	Complete transmission axis (rotor, joints, shaft)	02 Sets	
iv.	Complete Seals	08 Sets	
v.	O-rings for the seal box	08 Sets	
vi.	Set of bearings and support seal rings	08 Sets	
5.	**PNEUMATIC SYSTEM:**		
i.	Water Separator 5µm	1 No.	
ii.	Air Filter 0,01µm	6 Nos.	
iii.	Mist Oiler, 5mg/m³, 1/2"	1 No.	
iv.	Pressure control Valve, max. 16bar	1 No.	
v.	Desiccant Container	1 No.	
vi.	Filter element 5µm	3 Nos.	
vii.	Filter element 0,01µm	3 Nos.	
6.	**HYDRAULIC SYSTEM:**		
i.	Hydraulic Tank Suction filter element	16 Nos.	
ii.	Hydraulic Tank Return filter element	4 Nos.	
iii.	High Pressure filter element	4 Nos.	
iv.	Agitators hydraulic motors	02 Nos.	
v.	Liquid Chemical Hydraulic motor	04 Nos.	
vi.	Hydraulic Pump	4 Nos.	
vii.	Applicable Activation module (one of each type, maximum 5 in total)	5 Nos.	

SECTION (D): INSTRUMENTATION & CONTROL SYSTEM SPARES LIST:

Sl. No.	Item Description	Qty.	Bidder's Response
A	B	C	
1.	Liquid Additive Tank Level Sensor (Ultrasonic or Whichever applcable)	01 no.	
2.	Pressure Gauge	01 no.	
3.	pH Sensor	01 no.	
4.	Viscosity Meter	01 no.	
5.	Temperature Gauge	01 no.	
6.	Controller/Control Module	01 no.	
7.	Inverter/SMPS(whichever applicable)	01 no.	
8.	Emergency Shutdown Switch	01 no.	
9.	Hydration Tank Level Sensor	01 no.	

Note:

1. All spares in specified quantity as indicated above shall be supplied along with the supply of the units.

2. Specific description, Quantity etc. of each item shall clearly be indicated in the technical bid. Make, Part Nos. etc. of each item shall be submitted by the supplier along with the supply.

3. Bidder shall also quote separately (without prices) 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.
4. If any spares mentioned in above Tables is / are not required, the bidder must mentioned that the spares do not require for the unit.

5. In case the multiple quantity of an item named above is used in the Automobile portion (i.e. Trailer) of the Hydration Unit and the specifications of such item does not match with each other, then the supplier shall supply such item in a mixed manner comprising all the variants used in the Automobile portion (i.e. Trailer) of the Trailer mounted Hydration unit. The supplier shall first try to supply all the variants of such item preferably in equal/proportional quantity of each of the variant used in the Automobile portion (i.e. Trailer) of the Trailer mounted Hydration unit as far as possible. However, the total quantity of such item to be supplied must not be less than the quantity mentioned in above.

6. In case the specifications of the item named above used in left & right side of the Axle System / Suspension System / Brake System of the Automobile portion (i.e. Trailer) of the Trailer mounted Hydration unit does not match with each other of that particular system, the supplier shall first try to supply all the variants of such item preferably in equal/proportional quantity of each of the variant used in the Automobile portion (i.e. Trailer) of the Trailer mounted Hydration unit as far as possible. However, the total quantity of such item to be supplied must not be less than the quantity mentioned in above.

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Undertaking / Declaration

Annexure A1

To-

Oil India Limited,
Duliajan, Assam, India

Sub: Undertaking / Declaration regarding Type Approval Certificate, Parts Catalogue, Maintenance / Service Manual of OIL's Inhouse Hydraulic Fracturing Fleet.

Ref: Tender No. for Supply of Hydraulic Fracturing Unit.

We M/s _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ do hereby declare that we shall produce the following at the time of Pre Despatch Inspection of Hydraulic Fracturing Fleet at our premise-

1) Type Approval Certificates (Hard copy) of-

a) Tractor / Prime Mover
b) Trailers of Frac Pumpers
c) Trailer of Blender Unit
d) Trailer of Hydration Unit
e) Trailer of Frac Data Van
f) Truck Chassis of Sand Dumper

Photocopies / Softcopies (scan copy) of the above Type Approval Certificates will be handed over to Pre Despatch Inspection Team of Oil India Ltd

2) **Hard copy / soft copy of Parts Catalogue and Maintenance / Service Manual of-**

a) Tractor / Prime Mover
b) Trailers of Frac Pumpers
c) Trailer of Blender Unit
d) Trailer of Hydration Unit
e) Trailer of Frac Data Van
f) Truck mounted Sand Dumper

Soft copies of the above will be handed over to Pre Despatch Inspection Team of Oil India Ltd

M/s _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

(Name of Bidder)

A. REF. CLAUSE NO. 21.0.2

SAMPLE COPY OF FORM- 21 (as referred above)

Following is a sample copy of **FORM 21** of Indian Motor Vehicle Act only. The certificate shall contain following minimum information –

FORM 21
[See Rules 47 (a) and (d)]
SALE CERTIFICATE

(To be issued by manufacturer ~~or dealer or registered E-rickshaw or E-cart Association (in case of E-rickshaw or E-cart) 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 **OIL INDIA LIMITED** against Purchase Order No. .....

Name of the buyer **OIL INDIA LIMITED**
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 number ~~or motor number in case of Battery Operated vehicles~~	.....
5.	Engine ~~or Motor~~ Power	.....
6.	Cubic capacity	.....
7.	Fuel used	.....
8.	Number of cylinders	.....
9.	Month and year of manufacture	.....
10.	Seating capacity (including driver)	.....
11.	Unladen Weight	.....
12.	Maximum axle weight and number and description of tyres ~~(in case of transport vehicles)~~	.....
a.	Front axle	.....
b.	Rear axle	.....
c.	Any other axle	.....
d.	Tandem axle	.....
13.	Colour	.....
14.	Gross Vehicle Weight Rating	.....
15.	Type of body	.....
16.	Wheelbase	.....

(Signature of the manufacturer ~~or dealer or officer of Defence Department or registered E-rickshaw or E-cart Association~~)

*Strike out whichever is inapplicable.

B. REF. CLAUSE NO. 21.0.3
SAMPLE COPY OF FORM- 22 (as referred above)

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

FORM-22
[See rules 47(1) (g)]
ROAD-WORTHINESS CERTIFICATE FOR
COMPLIANCE TO EMISSION AND NOISE STANDARDS
(To be issued by the manufacturer along with the vehicle)

It is certified that the following vehicle complies with the provisions of the Motor Vehicles Act, 1988 and rules made thereunder or international standard namely EEC / ECE Regulations:

1. Model/Commercial Name of the vehicle: .....
2. Chassis Number: .....
   [Example: Vehicle Identification Number (VIN)]
3. Engine ~~or Motor~~ Number: .....
4. Applicable Emission Norms: .....
5. Emission, Sound Level for Horn and Pass by noise values of the above vehicle model, obtained during Type Approval Testing as per Central Motor Vehicles Rules, 1989 or ECE/EEC Regulations are given below:

i. Type Approval Certificate No.: .....
ii. Type of Fuel: .....
iii. Emission values for vehicle: .....

TABLE
Positive Ignition Engine or Compression Ignition Engine Vehicle

Sr. No.	Pollutant (as applicable)	Units (as applicable)	Value (upto 3 Decimal places)
(1)	(2)	(3)	(4)
1.	Carbon Monoxide (CO)	mg/km or mg/kWh or g/kWh	
2.	Hydrocarbon (THC/HC)	mg/km or mg/kWh or g/kWh	
3.	Non-Methane Hydrocarbon (NMHC)	mg/km or mg/kWh or g/kWh	
4.	Oxides of Nitrogen (NOx)	mg/km or mg/kWh or g/kWh	
5a.	HC+NOx	mg/km or mg/kWh or g/kWh	
5b.	THC+NOx	mg/km or mg/kWh or g/kWh	
6.	Methane (CH4)	mg/kWh	
7.	Ammonia (NH3)	PPM	
8.	Mass of Particulate Matter (PM)	mg/km or mg/kWh or g/kWh	
9.	Number of Particles (PN)	Numbers/km or Numbers/kWh	

iv. Noise level (as applicable):

a. Horn (for all vehicles other than agricultural tractors and construction equipment vehicles) as installed on the vehicle: ..... dB (A); (upto 1 decimal place)

b. Pass by or Bystander's position: ..... dB(A)

~~c. Driver perceived or Operator's ear level (as applicable for agricultural tractors and construction equipment vehicles: ..... dB (A)~~

(Facsimile Signature of Manufacturer)

Note 1: This Form shall be issued with signature of the manufacturer duly printed in the Form itself by affixing facsimile signature in ink under the hand and seal, as applicable.

Note 2: In case of multiple combinations, values pertaining to any one test result in the test report to be provided. For V2, V3 cases- average value of the test result in the test report to be provided.

Note 3: While printing Form 22, the relevant pollutants in the table as applicable for the subject vehicles may only be listed.

C. REF. CLAUSE NO. 21.0.3
SAMPLE COPY OF FORM 22-A

Following is a sample copy of **FORM 22-A (Part – I) & FORM 22-A (Part – II) of Indian Motor Vehicle Act** only. The certificate shall contain following minimum information. –

FORM 22-A
[See Rules 47 (g), 115, 124(2), 126-A and 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 the following vehicle complies with the provisions of the Motor Vehicles Act, 1988 and the rules made there under or international standard namely EEC / ECE Regulations, including the following mass emission norms:

1. Brand name of the vehicle : .....
2. Chassis number : .....
3. Engine number/~~Motor number (In case of battery operated vehicles)~~ : .....
Emission norms : .....

(Signature of 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.

FORM 22-A
[See Rules 47 (g), 115, 124(2), 126-A and 127]
INITIAL CERTIFICATE OF COMPLIANCE WITH POLLUTION STANDARDS, SAFETY STANDARDS OF COMPONENTS AND ROAD WORTHINESS
(FOR VEHICLES WHERE BODY IS FABRICATED SEPARATELY)
PART – II
(**TO BE ISSUED BY THE BODY BUILDER**)

Certified that body of the following vehicle has been fabricated by us and the same complies with the provisions of Motor Vehicles Act, 1988 and Rules made there under or international standard namely EEC / ECE Regulations:

1. Brand name of the vehicle : .....
2. Chassis number : .....
3. Engine number/~~Motor number (In case of battery operated vehicles)~~ : .....
~~4. Bus Body Builder Accreditation Certificate Number~~ : .....

(Signature of 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.

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SPECIFICATIONS OF TRAILER MOUNTED CHEMICAL ADDITIVE SYSTEM (CAS) UNIT, QTY = 1 NO.

Note to bidder:

1. The bidder shall provide their response and mention applicable information/ Complied / Not Complied / Not Applicable / Make & Model etc. (as applicable) against individual clauses in this document.

2. The bidder shall mention details of Reference Document name / Serial number / Page number of bid for documentary evidence (if any).

3. The bidder shall submit the filled-up document along with their technical bid.

Technical Specifications

Clause No.	Clause Description	Bidder's Response
1.0	i) The trailer mounted Chemical Additive System (CAS) is an oilfield fracturing chemical proportioning unit designed for batch mixing of chemicals and homogeneous proportioning of chemical additives delivery into fracturing slurry. ii) The Trailer mounted Chemical Additive System unit should be suitable for deployment in oil and gas fields across India. iii) The Trailer mounted Chemical Additive System Unit shall be suitably designed detachable brand new **semi-trailer**, manufactured after issue of Oil India Limited (OIL)'s Purchase Order. The semi-trailer shall be mounted with all the Chemical Additive System Unit machineries/ equipment, items as specified in the tender. The semi-trailer shall be coupled with any of the Tractor / Prime Mover as detailed elsewhere in the tender document. The Tractor Trailer combination vehicle should be suitable for driving over national highways, state highways, district roads, rural /village roads, non-grade road surfaces and for use in the rough, windy, marshy/waterlogged and dusty terrain oil and gas field environments found in the Indian Oilfields. **Note:** "Semi-trailer" means a Trailer, which is intended to be connected to a haulage Tractor and which is so constructed that a portion of it is superimposed on and apart of whose weight is borne by the haulage Tractor. iv) The unit should be suitable to work in the following climatic conditions: a) Altitude: 120 meter above mean sea level (msl) b) Temperature range: 0°C - 50°C c) Average Rainfall: 350 cm d) Relative humidity: 98% at 35° C. v) The unit with upgraded latest state of the art technology improved version will be acceptable for the basic configuration, accessories, instrumentation, control etc. without affecting the main frame of specification. vi) The operation of the unit should be controlled from remote panel. The remote-control system should allow the operation of the unit from a vantage point away from the unit. vii) The components in the unit should be arranged in such a manner for easy access for maintenance & ease of operation. Storage provision for related accessories & commonly used auxiliary equipment should be provided.	

Clause No.	Clause Description	Bidder's Response
	viii) The bidder/supplier shall ensure adequate gap between Trailer deck and Trailer wheels, so as to ensure that the Trailer wheels do not touch the body of deck of the Trailer or any other machineries/equipment mounted on the Trailer while crossing speed breakers, potholes or any other uneven surface.	
2.0	**EQUIPMENT DETAILS:**	
2.1	**DIMENSIONS & WEIGHT OF CHEMICAL ADDITIVE SYSTEM (CAS) TRAILER:**	
a.	**Length of the CAS Trailer:** As per design. However, the Length of the offered CAS Trailer should be such that when coupled with Tractor / Prime Mover, the overall length of Tractor and CAS Trailer combination, i.e., Tractor coupled with the Trailer does not exceed 18750 mm.	
a.1	The bidder shall mention the length of the CAS Trailer alone in the technical bid & the GA layout diagram.	
b.	**Overall width of CAS Trailer:** Shall not exceed **2600 mm.** The bidder shall mention & submit the following information in the technical bid: Overall width of the Trailer.	
b.1	The bidder shall mention the overall width of the CAS Trailer in the technical bid & the GA layout diagram.	
c.	Overall Height of the CAS Trailer: Shall not exceed 4500 mm from ground level.	
c.1	The bidder shall mention the Overall height of the CAS Trailer in the technical bid & the GA layout diagram.	
d.	Weight (mass) of the CAS Trailer: As per design. However, the Total combination weight (mass) i.e. GCW (Gross Combination Weight) of Tractor and CAS Trailer combination, i.e., Tractor coupled with the Trailer shall be within 55,000 kg.	
d.1	The bidder shall mention the weight (mass) of the CAS Trailer (with equipment mounted) alone in the technical bid.	
e.	GENERAL ARRANGERMENT (GA) DRAWING OF CAS TRAILER: The bidder shall submit GA (General Arrangement) drawing of the CAS Trailer. The GA drawing shall have mention of major dimensions of the CAS Trailer (like length, height, width, etc.); estimated loading on individual Rear axles of Trailer (when combined with offered Tractor unit); showing the position of all major components & their mounting. The GA drawing of the CAS Trailer shall be submitted along with the technical bid by the bidder.	
2.2	**CHASSIS FRAME:**	
i)	All welded construction, robust, heavy-duty chassis of steel frame suitably welded and cross braced at close pitch to withstand the maximum load. The chassis shall provide maximum structural performance in terms of load carrying capacity, bending moment & deflection, maximum tensional stability and long life. Skirt rails, wherever possible shall be provided along the length of the Trailer. The main Chassis frame beam shall be around 450 mm (in height) near the centre of the Trailer (when viewed from the rear of	

Clause No.	Clause Description	Bidder's Response
	the Trailer) and the chassis frame beam is to be reinforced & adequately sized as per manufacturer's standard practice in suspension area etc. to bear the designed load.	
ii)	The bidder shall mention & submit the following information in the technical bid: Details of the chassis frame beam drawing mentioning the size of the chassis frame beam offered.	
2.3	**TRAILER AXLES:**	
a.	The Trailer shall be provided with 03 (three) Nos. of axles at rear of the Trailer as per design and meeting tender specification. The Trailer axles shall be compatible with the brake system. The bidder/supplier shall offer Trailer axles with total axle capacity of the Trailer triaxle to meet the design requirement considering the total weight of the complete unit with equipment, handling fluids, etc. in all conditions. Bidder shall ensure that the loading on the Trailer axles shall be within the axle capacity of the Trailer triaxle with in all conditions.	
b.	The bidder shall mention & submit the following information in the technical bid:	
i)	Total number of Axles in the Trailer at rear.	
ii)	Make & model of offered Trailer axles.	
iii)	Total axle capacity of offered 03 Nos. of Trailer axles.	
iv)	Estimated total loading on Trailer triaxles with all the **permanently** fixed equipment & fittings **(in coupled condition with the Tractor)**	
v)	Total Loading on Trailer triaxle is within the axle capacity of Trailer triaxle in all conditions. (Yes / No).	
vi)	Technical specification catalogue/brochure with technical details of the offered Trailer axles.	
2.4	**BRAKE SYSTEM:**	
a.	Pneumatic service brake system with ABS (anti-lock brake system) and parking brake system compatible with the Tractor shall be provided in the Trailer. The service brake system & parking brake system shall be operated from Tractor's driver Cabin. The brake system shall also have provision for applying brake automatically to the Trailer axles in case of accidental disconnection of the pneumatic connections. The trailer shall have control valve for synchronized braking of "tractor and trailer" to enhance the safety. The brake system shall have palm coupling for quick coupling and detaching the air connections with the Tractor unit. All brake components shall be compatible with axles offered.	
2.5	TRAILER SUSPENSION:	
a.	Heavy duty Trailer suspension system suitable for movement of Tractor & CAS Trailer unit with full load in all types of road conditions typical to oilfield operation area/slushy plinths shall be provided. The suspension system shall be capable to bear the maximum designed load in all conditions.	
b.	The bidder shall mention & submit the following information in the technical bid:	
(i)	Type of offered Trailer Suspension.	
(ii)	Make & Model of offered Trailer Suspension.	
(iii)	Technical specification catalogue/ brochure with technical details of the offered Trailer suspension system.	
2.6	TRAILER WHEELS & TYRES	
a.	The Trailer shall be fitted with suitable wheels with Tube type / Tubeless type Tyre of adequate ply rating.	

Clause No.	Clause Description	Bidder's Response
	02 (two) Nos. of wheels in each side of each axle i.e., total 04 (four) Nos. of wheels in each axle i.e., total 12 (twelve) Nos. of wheels in 03 Nos. of Trailer axles shall be provided as per design specification. If possible, Trailer wheels / tyres shall be interchangeable with the Tractor unit. Bidder is to look into the tyres of Tractor Unit while selecting the Trailer tyres and vice-versa for compatibility of the Tractor and the Trailer unit with each other, if possible.	
b.	The bidder shall mention & submit the following information in the technical bid for the CAS Trailer:	
	Total number of wheels in 03 Nos. of Trailer axles. (Axle wise information to be provided)	
	Type of Tyres (Tube type / Tubeless type) in the Trailer axles.	
	Tyre size of Trailer axle wheels.	
2.7	**KINGPIN FOR COUPLING WITH TRACTOR UNIT:**	
a.	Suitable rubbing plate fully welded to the chassis frame and the **Kingpin of size not less than 3.5 inch** shall be provided. The make of the Kingpin shall be of ASHLEY /HYWA / TATA / JOST / VOLVO / YORK / PLHT/ GF / SAF / HOLLAND or any other make. Height of rubbing plate shall match with the "Fifth Wheel" height in all load conditions of any / each of the Tractor Unit for proper coupling and locking. Proper coupling & locking etc. of the CAS Trailer with each of the Tractor unit is to be ensured by the bidder/prospective supplier.	
b.	The bidder shall mention & submit the following information in the technical bid:	
(i)	Size of offered Trailer Kingpin.	
(ii)	Make & model of offered Trailer Kingpin.	
(iii)	Technical specification catalogue/ brochure with technical details of offered Trailer Kingpin.	
2.8	**LANDING GEAR:**	
a.	Retractable, mechanical type landing gear with sand-pad and having adequate capacity for taking the load on the Trailer when fully loaded shall be located conveniently at the front end of the Trailer. The make of the landing gear shall be of HYWA/ JOST / YORK / PLHT/ GF / SAF / HOLLAND or any other make with capacity as per design. The landing gear shall be so positioned that there is sufficient clearance behind the rear end of the Tractor unit, and it does not fault with the Tractor while taking the shortest turn	
b.	The bidder shall mention & submit the following information in the technical bid:	
(i)	Make & model of offered Landing Gear.	
(ii)	Capacity of offered Landing Gear.	
(iii)	Technical specification catalogue / brochure of the offered Landing Gear.	
2.9	**ELECTRICAL EQUIPMENT:**	
a.	Electrical system compatible with the electrical system of the offered Tractor unit shall be provided in the Trailer for road drive. Easily disconnect able / detachable electrical connections with the Tractor unit shall be provided.	
2.10	**TRAILER DECK:**	
a.	All welded steel construction with not less than 5mm thick MS chequered plate Trailer deck shall be provided, wherever feasible as per design. Trailer decks shall be of non-slip type.	
2.11	**PAINTING:**	
a.	Surface preparation through shot blasting. Minimum two coats of Zinc rich metal primer shall be applied. Minimum two final coats of suitable paint shall be applied.	

Clause No.	Clause Description	Bidder's Response
	Note: Surface primer, paints shall be suitable for corrosive handling fluids etc. used in oil & gas industry.	
2.12	**TYPE APPROVAL CERTIFICATE OF THE** CAS TRAILER UNIT:	
a.	Type Approval Certificate of vehicle is required for the following activities in India: i) Custom clearance of the vehicle as per import policy conditions / guidelines of India Chapter-87 of ITC (HS), 2022, Schedule 1- Import Policy, Section: XVII, in case of imported vehicle from other countries to India. ii) Homologation (the formal process by which an official authority certifies that a product, especially a vehicle, meets specific regulatory standards for safety, performance, and environmental impact before it can be sold or used in a particular market/ region) / Uploading the vehicle details in the relevant Government of India portal (VAHAN/ Parivahan portal) for registration of vehicle as per Motor Vehicle Act, 1988 & Central Motor Vehicle Rules, 1989 of India which is mandatory for plying of the vehicle in roads in India.	
b.	In case the offered Trailer is manufactured in India, the offered Trailer shall be compliant to Central Motor Vehicle Rules 1989 of India and its amendments. In case the offered Trailer is imported from other countries to India, the offered Trailer shall be compliant with the import policy of Government of India. In both the case i.e. manufactured in India and imported from other countries to India, the bidder/supplier has to exhibit the original Type Approval Certificate of offered Trailer and submit a copy of the same to the Pre despatch Inspection Team of Oil India Limited. The original copy of the Type Approval Certificate has to be submitted to Oil India Ltd along with the supply. The bidder has to submit a declaration along with the bid in this regard as per **Annexure A1**. Submission of Type Approval Certificate of Trailer shall be as per Central Motor Vehicle Rules of India in case of Trailer manufactured in India or as per the import policy of Government of India, in case of imported vehicle, as on the date of supply.	
c.	In case of Trailer manufactured in India, the list of Type Approval Certificate issuing agencies are mentioned in Central Motor Vehicle Rules, 1989 of India & its amendments. In case of imported vehicle from other countries to India, at the time of Customs clearance, a Type Approval Certificate/COP, of an international accredited agency including a notarized English translation thereof shall be furnished. This Type Approval Certificate shall stipulate that vehicle to be imported complies with all the ECE (Economic Commission for Europe) Regulations. The list of international accredited agencies approved for issuance of Type Approval Certificate is available on DGFT (Director General of Foreign Trade) website, under Policy Circular No. 12 (RE- 2013)/2009-2014 dated 15.01.2014 issued by Ministry of Commerce & Industry, Department of Commerce, Director General of Foreign Trade, New Delhi subjecting "Type Approval issuing agencies under Policy Condition number 7 and 9 of Chapter 87 of ITC (HS) 2012".	
d.	Bidder/supplier shall ensure adherence to any subsequent revisions to the above referred Policy Circulars that may be issued in future by DGFT.	

Clause No.	Clause Description	Bidder's Response
	Bidder shall note that, they shall be conversant with the policy of Government of India and Oil India Limited (OIL) shall not be liable in this regard whatsoever.	
e.	Type approval certification of individual components shall not be considered as vehicle Type approval certificate.	
f.	Notwithstanding anything mentioned elsewhere in this document, submission of Type Approval Certificate/ Conformity of Production (CoP) shall be as per the guideline of Government of India as on the date of supply.	
3.0	**OTHER GENERAL POINTS:**	
3.1	**ACCESSORIES & OTHER FITTINGS:** CAS Trailer shall be fitted with the following fittings and accessories:	
a.	Mudguard with mud flaps for all Trailer wheels.	
b.	Suitable Heavy duty attachment (hook/loop) shall be provided at the rear of the Trailer, capable of pulling / towing the unit from bogged down situation in slushy areas in oilfields.	
c.	Wherever feasible, Side / Lateral Underrun Protective Device (SUPD)s, Rear Underrun Protective Device (RUPD) shall be fitted in the unit. Note: 1. SUPD/ RUPD are structures that prevent smaller vehicles from getting underneath etc. during collision as per AIS 069, IS: 14812, IS: 14682 or similar standards. 2. The equipment manufacturer shall check the feasibility of providing the SUPDs, RUPDs during manufacturing and arrange to provide the same accordingly as per feasibility in the unit. SUPDs/ RUPDs provided by the equipment manufacturer shall be of detachable type and shall not be permanently fitted / welded to the Trailer chassis.	
d.	**TRAILER INFORMATION PLATE:** The Trailer shall be provided with a VIN plate fixed in a suitable place in the Trailer chassis (easily visible) containing, amongst others, the following information: a) Trailer Serial Number / Trailer Chassis No. as per Trailer manufacturer. b) Year and Month of Manufacture of the Trailer. c) Pay Load Capacity of the Trailer. d) Name & Address of Trailer Manufacturer etc.	
e.	Retro reflective marking (3M make or any other make, 50 mm width) on the rear and both side of the trailer as per the colour code- Rear: Red and Sides: Yellow as per AIS: 090 / applicable standard.	
f.	Wheel Wrench & Handle. Wheel Wrench & Handle for each size of wheel nuts shall be provided	
g	02 (two) numbers of wheel chocks.	
h.	01 (one) number of complete spare wheel assembly.	
3.2	**UNDERTAKING FOR SPARES & SERVICE:**	
	The bidder shall submit a written undertaking (along with the technical bid) that they, themselves or through other sources, would be able to supply all the requisite spares (including bought out items, if any) & consumables and provide the maintenance services for their offered CAS Trailer in OIL	

Clause No.	Clause Description	Bidder's Response
	operational area(s) in India for a minimum period of 15 (fifteen) years from the certified date of completion of successful field commissioning of the unit. The cost of such spares, consumables & maintenance services which may be utilized by Oil India Limited in future (beyond Warranty period and O&M/ Comprehensive Maintenance Period) shall be extra and SHALL NOT BE considered by the bidder in their quoted prices in this tender. Spares & repair services during Warranty period & warranty extension period (if any) for the item(s) under Warranty claim (if any) of the unit(s) shall be in the scope of the successful bidder (supplier).	
3.3	SPECIAL NOTES:	
a.	All lights shall be covered to the extent possible, with suitable guard to prevent damage. The guards shall have detachable provision.	
b.	The electrical connections shall be suitable to operate in oilfield areas. The lightings shall comply road vehicle lighting regulations. Screw-in bulbs shall not be used as far as possible. The electrical wirings shall be fixed and protected as to minimize accidental damage or undue wear. The wirings shall be insulated, and the electrical circuits shall be protected against overloading by fuses or automatic cut-outs. Adequate steps shall be taken to ensure electrical continuity and wherever necessary, components shall be bonded by copper straps. The junction boxes, if any, shall be sealed.	
c.	Comprehensive Maintenance of CAS Trailer As per common clause mentioned elsewhere in the tender document.	
4.0	**EQUIPMENT:**	
4.1	**DECK ENGINE:**	
	i. The deck mounted engine will be used to power the unit hydraulic drive system and other power requirements, like air & electrical, for operation of the unit: a. Liquid cooled Cummins/ Caterpiller HSD (High Speed Diesel) engine of minimum 400 HP at rated rpm or higher capacity having electronic fuel control mechanism suitable for operation enumerated above at description 1.0. The offered engine shall comply with BS-VI/EURO-VI/TIER IV Final/equivalent or higher emission standard as applicable in the in India at the time of delivery of the unit. The engine should be vibration isolated from the trailer by means of suitable anti-vibration mounting. b. The engine shall run in the following broad climatic conditions: i. Altitude – 150 meter above sea level (ASL) ii. Temperature range: 2 deg - 45 Deg C Max iii. Average Rainfall - 350cms iv. Relative humidity 95% at 35° C c. Suitable fuel priming pump, preferably a mechanical pump, is to be provided to remove any air lock in the fuel system. d. Exhaust system: The Engine exhaust is to be designed properly with manifold, suitable muffler, spark arrester, rain cap and flexible exhaust connection as per norms of Oil Field Operation. The exhaust pipe shall be suitably wrapped by insulated material for safety of operators. Both External type and Internal type Spark arrester are acceptable. ii. The engine should be provided with adequate safety system like emergency kill/ rig saver. In no case engine should re-start without manual re-setting of all the safety systems. Suitable indicators should be provided in the control panel.	

Clause No.	Clause Description	Bidder's Response
	iii. The engine should be vibration isolated from the trailer by means of suitable anti-vibration mounting. iv. Suitable arrangement for keeping engine starting battery under locking arrangement and with safety cover from rain. v. A Deck engine driven air compressor of sufficient capacity to meet the air requirement of diaphragm pump, pneumatic actuated valves or any other requirements as per the design. It should be inclusive of air tank and dryer. vi. The air required for the brake system and the pneumatic suspension of trailer shall be supplied by a separate air receiver with required valves which will receive air from the puller chassis. However, provision is to be provided for connecting the air receiver of trailer braking/ suspension system with the air receiver of the air compressor driven by the deck engine. vii. Engine Starting System: Engine shall be equipped with Electric Starter and Charging Alternator System **NOTE: The deck engine should be supplied with data diagnostic kit for diagnosing the fault code. It shall preferably be a handheld reader having removable cartridges to support diagnosis of engine. If a laptop is provided for the above, it should include software, adopters and other accessories with licensed installation software.**	
4.2	**FUEL TANKS:**	
	Aluminium/ SS minimum 150 gallons X 2 nos. with locking arrangement and fuel tank shut off. The tank shall have proper drain point with locking arrangement.	
4.3	**HYDRAULIC SYSTEM:**	
	i. The installed Hydraulic system should be a multi-Hydraulic pump system to provide power to the Hydraulic motors and other Hydraulic systems designed for the unit like Centrifugal pump, positive displacement pumps, agitators in the tanks & dry gel screws in mixing system. ii. Hydraulic system should also include: 1) Hydraulic cooler 2) Hydraulic pressure gauges 3) Flow meter in Hydraulic Circuits iii. Hydraulic Hose Make: Acceptable hydraulic hose make are Parker / Gates / Eaton / Power Grip / Hansaflex only iv. Hydraulic oil cooler should be designed in such a way that the temperature of the Hydraulic oil in the system does not exceed 70 degree centigrade in extreme ambient condition i.e.50 degree centigrade. v. All Hydraulic filters used in the system should be of Donaldson/ Pall/ Fleet guard/Parkers make. vi. These Hydraulic systems should incorporate all equipment such as Hydraulic oil tank, suction filters, return filters, relief valves, control	

Clause No.	Clause Description	Bidder's Response
	valves, coolers, breathers and trouble-shooting connections. Manway for ease of cleaning and trouble-shooting connections. vii. Multi-hydraulic pump system to provide power to the hydraulic motors driving the following: a) SIX (06) chemical injection pumps b) Eight (08) chemical tank stirrers c) Eight (08) chemical tote tanks **NOTE: Hydraulic system to be capable of working at 100% capacity of all the systems.**	
5.0	**FLUID HANDLING SYSTEM:**	
5.1	**CHEMICAL TANKS:**	
	i. Total 08(EIGHT) Stainless Steel IBC UNDOT certified "Tote style" tanks and shall be installed in a structural steel framework, equipped with an overhead walkway with fold down handrails, walkways and access steps to the Unit Control System. Tote tanks shall include, as a minimum, valve outlets, and fill ports with cam locks for each tank and a transportation tie down system. Interconnection between 1st four tanks and 2nd four tanks with pneumatic operated isolation valves in addition to manual isolation valves to be provided. ii. All the 08 tanks are of 350 gallon each capacity. iii. Installed in each tank should be a hydraulically driven mixing paddle. The paddle to be designed for efficient mixing of the chemicals. No solid lumps to be formed after mixing. iv. Easy access to the tanks (both internal and external) should be provided for inspection and maintenance. v. Corrosive Chemicals like Caustic Soda, Acidic salts will be mixed in these tanks. Stainless steel to be used for material of construction. vi. Calibrated tank volume gauge (measured in Metric units). vii. Manually operated drain valves to empty out all the contents of the tank. viii. Each Tank will be equipped with an Ultrasonic type of Tank Level Sensor Level sensor with display in control cabin.	
5.2	**SUCTION PUMP AND PIPING WATER INTAKE PUMP:**	
	i. Installed on the Unit and connected to the fill connections of one bank of four (04) Chemical Additive Tanks shall be a Chemical Additive Tank Fill Pump. One pump shall be connected to one bank of four (04) Chemical Additive Tanks. The two (02) pumps shall be variable speed, hydraulically driven, Gear type Pumps each with a 4.0 to 42 GPM (15 to 159) LPM) flow rate. Installed on each Pump will be a valved discharge manifold to one bank of four (04) Chemical Additive Tanks fill connections. ii. Mounted on the suction side of the pump will be one (1) 4" input connection with a 4" butterfly valve and a 4" Fig. 206 union male (wing) connection. The connection will be fitted with a cap with chain. iii. Discharge from this pump to be connected with all the tanks to fill the water/chemicals into the tanks. All these connections should	

Clause No.	Clause Description	Bidder's Response
	contain pneumatically operated isolation valves in addition to the manual isolation valves.	
5.3	**CHEMICAL ADDITIVE PUMPS:**	
	Installed on this unit shall be SIX (06) hydraulically driven liquid chemical additive pumps. Each chemical pump shall be as listed below: 1) Pump 1-4 - Waukesha 015U1series lobe pump (0.25 to 12 GPM at 0psi backpressure) or equivalent 2) Pumps 5-6 - Progressive Cavity Pump (0.4 to 17 GPM at 0psi backpressure) or equivalent	
5.4	**CLEAN UP SYSTEMS:** Installed on the Unit in front of the Chemical Additive Tanks and behind the Control Cabin, one on either side of the Unit, shall be two (02) 100-gallon (378 liters) Carbon Steel capacity Diesel Flush Tanks each with a Gear type Diesel Flush Pump. Installed on each Diesel Flush Pump shall be a valved discharge manifold to one bank of four (4) Chemical Additive Discharge Tanks discharge connections (after the Tank Discharge Check Valve) for clean-up purpose.	
5.5	**CLEAN-UP MANIFOLD:**	
	A clean up suction manifold to be installed with manually actuated stainless steel ball valves connected to each liquid chemical pump for individual system clean out. The ¾" clean up manifold suction shall be direct from a 100-gallon clean-up tank.	
5.6	**CHEMICAL PUMP HOSING:**	
	i. Each of the eight (08) 350-gallon tanks shall be plumbed to a dedicated chemical pump using *chemical resistant* suction hose with cam lock connections. Installed at the suction connection of each of these chemical pumps shall be two (2) stainless steel manually actuated ball valves. These valves shall be used to switch from chemical suction from the tote tanks to diesel suction for system clean up. ii. The discharge of each pump will be fitted with chemical resistant hose and/or stainless-steel tubing to a **Coriolis flow meter (Preferable make: E&H/ Emerson/ Krohne/ Siemens/ ABB)**. After the flow meter and located for convenient access shall be a chemical hose reel complete with 50' or 75' of chemical hose (depending on hose diameter). iii. The hoses shall connect to a discharge manifold of chemical additive pumps and shall be equipped with compatible stainless steel female connectors to connect with the inlet manifold of either with the hydration or blender unit.	
6.0	**CONTROL SYSTEM:**	
6.1	**CONTROL PLATFORM & CONTROL CABIN:**	
	i. An operator's control platform should be installed on this unit. The access deck should give the operator access to each of the chemical mixing tanks. This access deck should include non-slip grating and handrails for safety. The control platform should also include non-slip grating, access ladders and handrails. Also installed on the operator's platform should be a control cabin with operating console. The cabin should be designed to protect the control console during storage and harsh weather. ii. Also, the control cabin should be installed on the platform for easy operations. Cabin should be placed in such a way to provide good	

Clause No.	Clause Description	Bidder's Response
	view of the tanks during operation. Cabin external dimensions should be under the overall dimensions limits of the unit specified above. Cabin should contain insulated walls, doors, roof and floor. Cabin should be installed with Air Conditioning unit of suitable capacity. Access doors on both side of the cabin with transparent windows. The cabin should be weatherproof tight enclosure. Cabin should accommodate 3-4 operating personnel. Cabin should contain Internal lights and Dome lights for outside.	
6.2	**CHEMICAL AUTOMATED SYSTEM:**	
	i. The automatic chemical control system is used to pump liquid chemicals into the frac fluid under changing flow rate conditions. The automatic chemical control system should determine the desired chemical flow rate based on the suction flow rate of the unit that the chemicals that are being injected into (blender or hydration unit) and operator defined percentage value or flow rate of individual chemical. ii. The controls should enable to maintain desired flow rates with least deviation. iii. Provision to enter the input flow rate of blender and or the individual chemical flow rate set points for maintaining the chemical flow rates accordingly. iv. Provision for entering / changing chemical percentage values at any time during the job. The system should allow the operator to input multiple stages (up to 50). v. The operator to input the following information per chemical pump: 1) Stage Volume (litres) 2) Percentage of the input flow rate (%) vi. The automatic chemical control system should display the following on the LCD display along with an additional display provision in the console in the Data Van of OIL, with suitable wired / wireless communication link through Ethernet / TCP/IP / any open source industrial protocol. 12V / 24V DC / 230V AC can be supplied from the data van for the display. 1) Job Status 2) Operator Defined Chemical Tags 3) Liquid Chemical Rates 4) Liquid Chemical Totals 5) Actual Liquid Chemical percentages 6) Blender(s) Input Suction Rates 7) Chemical Automated Control System software 8) **Software Validity:** The software shall be provided with a perpetual license, with lifetime validity and without any requirement for periodic renewal or additional licensing cost. 9) **Backup & Recovery:** The vendor shall provide a portable backup storage device containing all necessary software, drivers, operating system, and activation codes to enable independent restoration of the computer system in the event of a system crash or breakdown.	
6.3	**MANUAL CONTROLS AND INSTRUMENTATION:**	

Clause No.	Clause Description	Bidder's Response
	i. The control panel assembly should be isolated from the unit by cable spring isolators. The following AUTO/ Manual controls and instrumentation should be included in this panel: **A) Power unit controls and instrumentation** a) Deck Engine throttle control b) Deck Engine shutdown normal c) Deck Engine shutdown emergency d) One (1) J1939 CANBUS gauge giving misc. engine information including fault codes, engine oil pressure if applicable, engine coolant temperature and engine RPM e) Fuel consumption details f) Hydraulic discharge pressures of all closed loop pumps and open loop pump header pressures. g) Auto/manual delivery auger switch / controls h) Agitation / mixing system controls i) Power switch j) Work light switch k) Pneumatic valve controls **B) Liquid chemical pump systems controls, display and instrumentation** a) SIX (06) manual chemical pump speed controls b) SIX (06) auto/manual control selector switches c) Display of SIX (06) Chemical Additive Pump Flow Rate along with Totalizer d) Display of SIX (06) Chemical Additive Tank Level Indicators **C) Miscellaneous controls necessary to complete the unit** a) Eight (08) tank mixing paddle speed controls b) One (1) chemical tank slide control c) One (1) battery disconnect switch d) One (1) work light switch (on/off) A console for display / control of job in Auto/Manual mode. A remote console to be provided in data van with suitable inter connections and compatibility through Open industrial protocols like TCP/IP cables for the data acquisition in Frac Control Centre (Datavan).	
7.0	**ILLUMINATION:**	
i)	The unit should have an inbuilt electrical system to provide sufficient LED Light illumination to enable emergency operation during night hour operations. At least six flood lights (2 at front, 2 nos. at rear and 2 nos. near Middle of the Unit shall be provided in the unit for all round illumination.	
ii)	These lamps should have independent individual switches with the master switch located at the operation control panel. These lights should be mounted in such a way they can be rotated as per requirement.	
iii)	The lights should be protected with an outer detachable cover to prevent them from physical damage.	
8.0	**UNITIZATION AND COMPLETION:**	
i)	The above unit should also confirm the following specification: a) Installation of all electrical system. b) Installation of work lights. c) Installation of all pneumatic system. d) Installation of all hydraulic system.	
ii)	The unit should be designed for stability and structural integrity at full loaded conditions.	

Clause No.	Clause Description	Bidder's Response
iii)	Workmanship should be of the best quality & appearance. The equipment shall be fabricated in accordance with industry accepted standards. Following is a partial list of examples: 1. Flame cut edges shall be ground smooth. 2. Sharp corners and edges to which operators and mechanics are vulnerable shall be ground smooth. 3. Bolt holes for bolts shall be drilled (not torch cut) 4. Welds shall be of good quality and sufficient strength. 5. No sweated or brazed type hydraulic fittings will be used. 6. Where applicable use self-locking nut. 7. All hoses should be supported with support type clamps. 8. All hoses should be protected by well-secured rubber sleeves to prevent rubbing by frame etc. 9. All hosing and wiring will be labelled or tagged on both ends for easy identification. 10. All hosing or wiring in close proximity with hot surfaces (i.e. engine exhaust manifold) will be secured to a heat- shielded cable mount. 11. Hydraulic reservoirs should be completed with sight level gauge, clean outs, vent fill cap etc. 12. All hydraulic hoses, air hoses, electric lines etc. should be covered with protective sheathing where they come into contact with the hard surfaces that may cause premature wear due to chaffing or vibration. 13. Access steps with grab handles should be located at convenient locations around the unit. 14. Access ladder for radiator fill. 15. Access steps/ladders with grab handles will be installed at convenient locations around the unit. 16. All hoses & wiring should be protected, easily accessible & symmetrically for easy identification & maintenance. 17. All reservoirs should be constructed of steel plate with sight level gauge, clean out, vent fill cap etc. 18. The complete testing of unit should be done at the manufacturer's factory & certificate should be produced. 19. Special instruments / attachments for setting user settable meter configuration parameters are to be provided. 20. GPS hardware	
iv)	A console for display / control of job in auto/Manual mode. A remote console to be provided in existing data van with suitable inter connections and compatibility for the existing remote data acquisition system.	
v)	The unit should be supplied with data diagnostic kit for diagnosing the fault code of deck engine. It shall preferably be a handheld reader having removable cartridges to support diagnosis of engine. If a laptop is provided for the above, it should include software, adopters and other accessories with licensed installation software.	
vi)	All electrical / pneumatic/ hydraulic schematic for the trailer chassis, cabin, process operator panel and interconnection if any to be provided.	
9.0	**PAINTING:**	
i)	Unit to be sand blasted wherever required, one coat of primer followed by two coats of paint as specified below:	
ii)	Frame and Control console: RED-315	
iii)	Rim and Cab Top: Gold-44753	
iv)	Bumper: Gold & Red Stripes	
v)	OIL logo (to be provided at the time of unit manufacturing)	
10.0	**MANUALS & P&ID:**	
i)	Operational manual of the unit with categorical steps to operate the unit by an operator along with the functionality for each control switches, etc. and the operating range of the control parameters shall be provided.	

Clause No.	Clause Description	Bidder's Response
ii)	The layout diagram of each system must enlist the components in it along with technical detail (Nomenclature). The following schematics, layout drawings not limited to 1. Equipment layout. 2. Process flow drawing. 3. Electrical, pneumatic and hydraulic schematic etc.	
iii)	All the components should also have nameplate embossed indicating original equipment manufacturer of these components, Make / Model their Part No., SL No. and possible details as per industry standards. Wherever the mounting of the nameplate is not possible such detail must be made on layout sheet of the system in which the component is installed.	
iv)	The O& M manuals and the spare part lists (three sets) to be provided in hard copy as well as in a soft copy.	
v)	The layout diagram of the total unit depicting the dimensions (length, breadth & height) and weight and the suppliers certificate mentioning all these details to be submitted.	
vi)	All manuals should be in ENGLISH language only both in Hard copy and soft copy.	
vii)	The manuals supplied shall be specific to the make / model of the equipment / part / components supplied in the units. In case a comprehensive OEM catalogue is supplied of the equipment / part / components, then the respective make / model of the equipment / part / components supplied in the units should be clearly marked / identified.	
11.0	**SPARES:**	
11.1	**COMMISSIONING SPARES** The supplier has to supply all the spare parts free of cost, required for initial commissioning of the unit. All the consumables such as, lube oil, gear oil, hydraulic oil etc. except diesel fuel, required for commissioning should also be supplied.	
11.2	**OPERATIONAL CRITICAL SPARES:** Spares as given under Table 1 in specified quantity shall be supplied along with CAS Trailer. Specific Description, quantity of each & every spares shall be indicated in the technical bid and Make, Part Nos. etc. shall be submitted along with the supply. Bidders shall include the price of these spares in the priced bid format. The bidder shall confirm in the technical bid that all spares given under **Table-1** will be supplied with the unit.	
11.2.1	**AUTOMOBILE** (TRAILER) SPARE PARTS LIST: All spare parts for the Automobile in specified quantity as mentioned in **Table-1/Section A** shall be supplied along with the supply. Bidder / supplier to note that the spares mentioned in **Table-1/Section (A)** to be supplied shall be additional to the items fitted in each unit. Specific description, Quantity etc. of each item shall clearly be indicated in the technical bid. Make, Part Nos. etc. of each item shall be submitted by the supplier along with the supply. In case any of the spares mentioned in **Table-1/Section (A)** does not come as per bidder's design and the bidder has not quoted for such spares, the bidder shall clearly indicate the same. However, in case such spares are provided in the unit in future, the same shall be supplied by the bidder / supplier along with the supply without any extra cost to Oil India Limited (OIL).	

Clause No.	Clause Description	Bidder's Response
11.2.6	**DECK ENGINE SPARES:** All spare parts for the DECK ENGINE in specified quantity as mentioned in **Table-1 / Section (B)** shall be supplied along with the supply. Bidder / supplier to note that the spares mentioned in **Table-1 / Section (B)** to be supplied shall be additional to the items fitted in each unit. Specific description, Quantity etc. of each item shall clearly be indicated in the technical bid. Make, Part Nos. etc. of each item shall be submitted by the supplier along with the supply. In case any of the spares mentioned in **Table-1 / Section (B)** does not come as per bidder's design and the bidder has not quoted for such spares, the bidder shall clearly indicate the same. However, in case such spares are provided in the unit in future, the same shall be supplied by the bidder / supplier along with the supply without any extra cost to Oil India Limited (OIL).	
11.2.5	**PUMP & OTHER SPARES:** All spare parts for the pump in specified quantity as mentioned in **Table-1 / Section (C)** shall be supplied along with the supply. Bidder / supplier to note that the spares mentioned in **Table-1 / Section (C)** to be supplied shall be additional to the items fitted in each unit. Specific description, Quantity etc. of each item shall clearly be indicated in the technical bid. Make, Part Nos. etc. of each item shall be submitted by the supplier along with the supply. In case any of the spares mentioned in **Table-1 / Section (C)** does not come as per bidder's design and the bidder has not quoted for such spares, the bidder shall clearly indicate the same. However, in case such spares are provided in the unit in future, the same shall be supplied by the bidder / supplier along with the supply without any extra cost to Oil India Limited (OIL).	
11.2.4	**INSTRUMENTATION & CONTROL SYSTEM:** All spare parts for the instrumentation & control system in specified quantity as mentioned in **Table-1 / Section (D)** shall be supplied along with the supply. Bidder / supplier to note that the spares mentioned in **Table-1 / Section (D)** to be supplied shall be additional to the items fitted in each unit. Specific description, Quantity etc. of each item shall clearly be indicated in the technical bid. Make, Part Nos. etc. of each item shall be submitted by the supplier along with the supply. In case any of the spares mentioned in **Table-1 / Section (D)** does not come as per bidder's design and the bidder has not quoted for such spares, the bidder shall clearly indicate the same. However, in case such spares are provided in the unit in future, the same shall be supplied by the bidder / supplier along with the supply without any extra cost to Oil India Limited (OIL).	
11.3	**NOTE: Note for Clause 11.2** 1. All spares in specified quantity as indicated above shall be supplied along with the unit. 2. Specific description, Part Nos., Make etc. of each item shall clearly be indicated in the technical bid.	
11.4	**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	

<table>
<tr><th>Clause No.</th><th>Clause Description</th><th>Bidder's Response</th></tr>
<tr><td></td><td>of the equipment without price of each item. Annual consumption of each spare should be furnished. The bidder should 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 and e-mail ID of OEM for all items of the whole unit.

The bidder has to submit a complete spare parts list for the whole unit subgrouping major component in the following format as shown with example:

<table>
<tr><td>Name of the component /Sub com.</td><td>Description of the item</td><td>Part no./ID no. of item</td><td>Frequency of replacement (in Hours / Day)</td><td>Make</td></tr>
<tr><td></td><td></td><td></td><td></td><td></td></tr>
</table>
</td><td></td></tr>
<tr><td>12.0</td><td>UNDERTAKING:</td><td></td></tr>
<tr><td></td><td>The bidders must submit a written undertaking (along with the technical bid) that they, themselves or through other sources, would be able to supply all the requisite spares (including bought out items, if any) & consumables and provide the maintenance services of their offered unit in OIL's operational areas for a minimum period of fifteen (15) years from the Certified date of completion of successful field commissioning of the unit.

The cost of such spares, consumables & maintenance services which may be utilized by Oil India Limited in future (beyond Warranty period and O&M / comprehensive maintenance Period) shall be extra and SHALL NOT BE considered by the bidder in their quoted prices in this tender.

Spares & repair services during Warranty period & warranty extension period (if any) for the item(s) under Warranty claim (if any) of the unit(s) shall be in the scope of the successful bidder (supplier).</td><td></td></tr>
<tr><td>13.0</td><td>TECHNICAL MANUAL, CATALOGUES AND CERTIFICATION FOR OPERATION AND MAINTENANCE OF THE UNIT:

The following Manuals & Catalogues (in English language) shall be supplied along with the CAS Trailer unit. Manuals/ Part Catalogues provided shall be Custom Illustrated Manuals/Catalogues for the vehicle and equipment only, not a general Composite Manual/Catalogue.

The manuals supplied should be specific to the make / model of the equipment / part / components supplied in the CAS Trailer. In case a comprehensive OEM catalogue is supplied of the equipment / part / components, then the respective make / model of the equipment / part / components supplied in the CAS Trailer should be clearly marked / identified.

The bidder/supplier has to exhibit the Hard copy / soft copy of Parts Catalogue and Maintenance / Service Manual of Trailer of CAS unit to the Pre despatch Inspection Team of Oil India Limited and handover soft copies to the Pre Despatch Inspection team of Oil India Ltd. The Hard copy of the Parts Catalogue and Maintenance / Service Manual of Trailer of CAS unit may be submitted to Oil India Ltd along with the supply. The bidder has to submit a declaration along with the bid in this regard as per Annexure A1.

Bidder to confirm that the following will be provided along with supply:</td><td></td></tr>
</table>

Clause No.	Clause Description	Bidder's Response
1.	Preferably, 01 (One) set of Spare Parts Catalogue with Part Numbers and Workshop & Service Manual for all components / systems of Trailer like Trailer Axles, Brake System, Trailer Suspension, Electrical & Pneumatic Systems etc. All the manuals & catalogues shall contain only those components/systems that have been used in the unit i.e. the same must be CUSTOM ILLUSTRATED MANUALS/ CATALOGUES ONLY – not the generalized ones. The Spare Parts Catalogue with Part Numbers and Workshop & Service Manual shall be provided by the supplier in any one of the following forms: (a) Hard copy format (i.e. in printed form) OR (b) Soft copy format (i.e. in USB drive) The bidder/supplier has to exhibit the Hard copy / soft copy of Parts Catalogue and Maintenance / Service Manual of Trailer of the CAS unit to the Pre despatch Inspection Team of Oil India Limited and handover soft copies to the Pre Despatch Inspection team of Oil India Ltd. The Hard copy of the Parts Catalogue and Maintenance / Service Manual of-Tractor / Prime Mover may be submitted to Oil India Ltd along with the supply. The bidder has to submit a declaration along with the bid in this regard as per Annexure A1.	
2.	03 (Three) sets of Operational manuals of the unit with categorical steps to operate the unit by an operator along with the functionality for each control switches, etc. and the operating range of the control parameters to be provided.	
3.	Supplier to supply 03 (Three) Sets of OEM's operation, maintenance and overhauling manuals of supplied models of Deck Engine, Pumps and all other sub-assemblies and their corresponding Spare part catalogue.	
4.	03 (Three) sets of the following schematics, layout drawings not limited to i. Equipment layout ii. Process flow drawing iii. Electrical, pneumatic and hydraulic schematic for operator panel are to be provided. iv. Control Panel wiring diagram, Termination panel details, Panel BOM with name of OEM & their part numbers.	
5.	The layout diagram of each system must enlist the components in it along with technical detail (Nomenclature).	
6.	All the components should also have nameplate embossed indicating original equipment manufacturer of these components, Make / Model their Part No., Sl No. and possible details as per industry standards. Wherever the mounting of the nameplate is not possible such detail must be made on layout sheet of the system in which the component is installed. This is not required for components pertaining to Automobile (i.e. Trailer) portion.	
7.	The O&M manuals and the spare part lists (three sets) to be provided in hard copy as well as in a soft copy. This is not required for components pertaining to Automobile (i.e. Trailer) portion.	
8.	Lubrication and Fluids: Lubrication fluids chart (permanent attached to Unit) should be provided listing fluids, lubricants and filter types which are required by the Equipment. Fluids should be identified by generic name (i.e., hydraulic oil) near the fill port for each fluid. The lettering should be in English, and colour should be black on a white or stainless-steel background.	

Clause No.	Clause Description	Bidder's Response
	This is not required for components pertaining to Automobile (i.e. Trailer) portion.	
9.	Control Panel drawings with complete/ comprehensive Bill of Materials (BOM) with name of OEM & their part numbers.	
10.	Instrumentation wiring diagrams with end-to-end termination details.	
11.	The necessary licensed software in original packages along with user software backups are also to be supplied.	
NOTE	**COMMISSIONING OF THE UNIT SHALL NOT BE CONSIDERED AS COMPLETE UNTIL & UNLESS ALL ABOVE PRINTED MANUALS / CATALOGUES ARE SUPPLIED** Soft copies of documents shall also be acceptable for components pertaining to Automobile (i.e. Trailer) portion.	
14.0	**Document(s) to be submitted along with the supply of each unit for government Registration etc.:** Following documents shall be submitted by the supplier along with the supply as mentioned hereunder:	
1.	Invoice(s) in the name of Oil India Limited, Duliajan, Assam-786602 in original. Notwithstanding any clause mentioned elsewhere in the NIT/tender, the Invoice for CAS Trailer unit shall be submitted in 02 (two) parts separately as under for registration purpose: i. Invoice for the CAS Trailer unit with all items, components, machineries, equipment, tools, etc. fitted permanently on the Trailer unit. ii. Invoice for items, spares, accessories etc. supplied separately along with the complete unit. **Note:** Trailer Chassis Number shall be mentioned in invoice(s) against above Sl. No. (i).	
2.	Sale Certificate for Trailer of CAS Unit (Form-21) in original. The documents shall be in the name of Oil India Limited, Duliajan, Assam-786602, sample format as per Motor Vehicle Act, 1988 & Central Motor Vehicle Rules, 1989 of India provided.	
3.	Road-Worthiness Certificate for Compliance to Emission and Noise Standards for Trailer of CAS unit [Form-22, Form-22A (Part I), Form-22A (Part II)] in original. The documents shall be in the name of Oil India Limited, Duliajan, Assam-786602, sample format as per Motor Vehicle Act, 1988 & Central Motor Vehicle Rules, 1989 of India provided.	
4.	Certificate of Origin of the Trailer of the CAS unit.	
5.	Pencil print of Vehicle Identification Number (VIN) i.e., Chassis Number of Trailer of the CAS unit.	
6.	Certificate for the Trailer of the CAS unit in original from Trailer manufacturer. Amongst others, the certificate shall contain following information: (i) Make & Model of Trailer.	

Clause No.	Clause Description	Bidder's Response
	(ii) Vehicle Identification Number (VIN) i.e. Chassis Number of the Trailer. (iii) Month & Year of Manufacture of the Trailer.	
7.	Type Approval Certificate of Trailer of CAS unit as per Clause No. 2.12.	
8.	Technical drawing of the CAS Trailer as well as along with the Tractor in coupled condition indicating the Centre of Gravity, length, width, height, angle of approach, angle of departure etc.	
15.0	HOMOLOGATION, UPLOADING OF VEHICLE DATABASE IN VAHAN / PARIVAHAN PORTAL, REGISTRATION OF THE TRAILER, PRINTING OF HSRP (High Security Registration Plate) , UPLOADING OF LID OF HSRP IN APPROPRIATE PORTAL The bidder shall categorically confirm their compliance of the following clauses in the technical bid:	
a.	In case the Trailer is manufactured outside India. The vehicle details of Trailer in relevant VAHAN / Homologation / Parivahan portal of Ministry of Road Transport & Highways (MoRTH), Government of India shall be dealt by the bidder as per the applicable guidelines of Ministry of Road Transport & Highways (MoRTH) / Director General of Foreign Trade, Government of India at the time of supply. Homologation and uploading of vehicle data (i.e. Make, Model, Chassis Number) in VAHAN / PARIVAHAN portal by providing the requisite documents is under the scope of the successful bidder. Temporary Registration (if required) and Permanent Registration in local RTO (Rgional Transport Office) of the Govt of Assam is under the scope of successful bidder. The documents pertaining to Oil India Ltd shall only be provided by Oil India Limited. All other documents/ certificates pertaining to the vehicle shall be provided / submitted by the bidder. The cost of permanent registration in the form of Registration fee and initial Road tax to the Government of Assam shall be borne by the successful bidder. However, this cost will be reimbursed to the bidder on submission of Government Receipt as proof.	
b.	In case the Trailer is manufactured in India The bidder (supplier) shall be responsible and ensure that the vehicle details of Trailer are available in the relevant VAHAN / Parivahan portal of Ministry of Road Transport & Highways (MoRTH), Government of India in accordance with Motor Vehicle Act, 1988 & Central Motors Vehicles Rules, 1989 of India prior to delivery of the unit(s) to Oil India Limited. If the vehicle details are not available in VAHAN portal, it shall be the responsibility of the bidder to upload the same in VAHAN portal. Then the supplier shall arrange for temporary registration (if required) and Permanent Registration in local RTO (Rgional Transport Office) of the Govt of Assam. The documents pertaining to Oil India Ltd shall only be provided by Oil India Limited. All other documents/ certificates pertaining to the vehicle shall be provided / submitted by the bidder. The cost of permanent registration in the form of Registration fee and initial Road tax to the Government of Assam shall be borne by the successful bidder. However, this cost will be reimbursed to the bidder on submission of Government Receipt as proof.	
15.1	CAS Trailer has to be registered separately. Combined registration of the CAS Trailer with any of the Tractor shall not be accepted.	

Clause No.	Clause Description	Bidder's Response
15. 2	Cost of Registration is not to be considered by the bidder while quoting their prices against this tender.	
16.0	**HIGH SECURITY REGISTRATION PLATE (HSRP):** On receipt of the government Registration Number, the supplier (successful bidder) shall supply the High Security Registration Plate (HSRP) through the Original Equipment Manufacturers of motor vehicle / dealer / any one of the agencies authorised by the Government of India / Assam to issue the High Security Registration Plate (HSRP) of the CAS Trailer. The supplier shall ensure to upload the HSRP details in relevant (FTA / HSRP) portal enabling the DTO / Oil India Ltd to issue / download permanent Registration Certificate for the vehicle(s) as required for road drive of the vehicle. The cost of High Security Registration Plate (HSRP) shall be borne by the supplier (successful bidder). Bidder / supplier shall also ensure adherence to any subsequent revisions to the referred requirements that may be issued in future by Ministry of Road Transport & Highways (MoRTH), Government of India.	
17.0	**DEVIATIONS FROM THE SPECIFICATIONS:** The bidder shall enclose comprehensive list of intended deviations from the technical specifications, clearly highlighting the reasons thereof, if any, sufficiently prior to Bid closing date & time for Tender amendment, etc. But OIL reserves the right for acceptance or rejection of the deviation(s).	
18.0	**BID SUBMISSION & DOCUMENTATIONS:** Bidders should submit their bids in the above tabular form mentioning their offered specification, Make, Model, necessary data, submitted/not submitted/ complied/not complied etc. as applicable to all the NIT terms and conditions including submitting the documents, leaflets as specified. Other details, if any, the bidder may mention the same by adding additional row(s)/separate sheet as the case may be. Bidder's response to all NIT stipulations should 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 acceptable. 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.	
18.1	**Following documents shall be submitted along with technical bid for evaluation –**	
1.	Technical leaflets with detailed specifications, Make & Model of Trailer unit, Trailer axle, Trailer suspension, brake, different equipment of CAS etc. as per respective individual tender clauses.	
2.	GA (General Arrangement) drawing of the Chemical Additive System (CAS) Trailer. The GA drawing shall have mention of major dimensions of Frac Pumper Trailer (like length, height, width, etc.); estimated loading on individual axles of Trailer (when combined with offered Trailer unit); showing the position of all major components & their mounting.	
3.	Undertaking(s) for supply of spares and service as per clauses mentioned elsewhere in the tender document.	
4.	Specific description, , quantity etc. of each and every spares (for bid evaluation) as detailed in the Operational Critical Spares List provided in clause 11.2 above & Table-1 below	
5.	List of Recommended Spares in clause **11.3 above.**	

ANNEXURE-F

Clause No.	Clause Description	Bidder's Response
6.	Checklist as per enclosed format shall be furnished along with the bid.	
7.	Any other document as applicable against clauses of this tender document.	

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TABLE-1: Ref. Clause No. 11.2 OPERATIONAL CRITICAL SPARES:

SECTION (A): AUTOMOBILE SPARE PARTS LIST:

AUTOMOBILE SPARE PARTS LIST for TRAILER

Sl. No.	Item Description	Qty.	Bidder's Response
A	B	C	
A.	TRAILER AXLE:		
1.	Wheel Stud with Nuts (Right Side) (Each set shall comprise of all the studs & nuts for one wheel)	02 Sets.	
2.	Wheel Stud with Nuts (Left Side) (Each set shall comprise of all the studs & nuts for one wheel)	02 Sets.	
3.	Wheel Hub Bearing (Right Side)	06 Nos.	
4.	Wheel Hub Bearing (Left Side)	06 Nos.	
5.	Wheel Rim (Right Side)	03 Nos.	
6.	Wheel Rim (Left Side)	03 Nos.	
7a.	In case of Tube type Tyres: Tyre with Tube	03 Nos.	
7b.	In case of Tubeless type Tyres: Tubeless Tyre	03 Nos.	
B.	TRAILER BRAKES:		
1.	Brake Servo Assembly - Trailer Wheel	04 Nos.	
9.	Brake Shoe Assembly - Trailer Wheel	16 Nos.	

SECTION (B): DECK ENGINE:

Sl. No.	Item Description	Qty.	Bidder's Response
A	B	C	
1.	Fuel Filter Element	10 Sets.	
2.	Water Separator Filter Element	10 Nos.	
3.	Engine Oil Filter Element -	10 set.	
4.	Air Filter Element -	10 Nos.	
5.	Fan Belt/ Alternator Belt/ Compressor Belt	02 Sets.	
6.	Water Pump Repair Kit	01 Set.	
7.	Radiator Water Hose	3 nos.	
8.	Fuel Injector set	01 Set	
9.	Fuel Pump Assembly	01 No.	
10.	Fuel Pump Repair Kit	0 Set	
11.	Lube oil pump and distribution system	01 Set	
12.	Air cleaners & Air dryer assembly	01 Set	
13.	Engine Electric Starter Assembly	01 No.	
14.	Battery Charging Alternator Assembly	01 No.	

SECTION (C): PUMP & OTHER SPARES LIST:

Sl. No.	Item Description	Qty.	Bidder's Response
A	B	C	
1.	**Repair kit for Chemical additive pumps (**Waukesha 015U1series lobe pump or equivalent**) containing the following: As Applicable**		
i)	Drive Shaft	04 Nos.	
ii)	Short Shaft	04 Nos.	
iii)	Rotor, Twin Wing, Alloy 88	04 Nos.	
iv)	Rotor, Twin Wing, 316SS	04 Nos.	
v)	Rotor, Single Wing, Alloy 88	04 Nos.	
vi)	Stud	16 Nos.	
vii)	Stud, Jacketed Cover	32 Nos.	
viii)	Pump Cover	02 Nos.	
ix)	Jacketed Cover	02 Nos.	
x)	Gear Case Assembly, SS	02 Nos.	
xi)	Gear Case Cover, SS	02 Nos.	
xii)	Gear, Drive Shaft, Spur	02 Nos.	
xiii)	Gear, Short Shaft, Spur	02 Nos.	
xiv)	Wing Nut	16 Nos.	
xv)	Hex Nut	16 Nos.	
xvi)	Oil Seal, Gear Case Cover	02 Nos.	
xvii)	Oil Seal, Gear Case Rear	04 Nos.	
xviii)	Grease Seal, Bearing Retainer	04 Nos.	
xix)	Bearing, Rear	04 Nos.	
xx)	Bearing, Front	04 Nos.	
xxi)	Bearing, Front	04 Nos.	
xxii)	Key, Gear	04 Nos.	
xxiii)	Drive Pin, Seal Seat and Sleeve	04 Nos.	
xxiv)	Dowel Pin, Cover Side, .245" x .85"	02 Nos.	
xxv)	Dowel Pin, Gear Case Side, .245" x 1.0"	02 Nos.	
xxvi)	Dowel Pin, Cover Side, .308" x .85"	02 Nos.	
xxvii)	Dowel Pin, Gear Case Side, .308" x 1.0"	02 Nos.	
xxviii)	Oil Plug, M20 x 1.5"	10 Nos.	
xxix)	Oil Level Indicator, M20 x 1.5	02 Nos.	
xxx)	Silicone Sealant	02 Nos.	
xxxi)	Jam Nut, Rotor	08 Nos.	
xxxii)	Shim Kit	04 Nos.	
xxxiii)	Spacer, Gear to Rear Bearing	04 Nos.	
xxxiv)	Bearing Spacer	04 Nos.	
2.	**Repair kit for Chemical additive pumps (**Waukesha 018U1series lobe pump or equivalent**) containing the following: AS applicable**		
i)	Drive Shaft	04 Nos.	
ii)	Short Shaft	04 Nos.	
iii)	Rotor, Twin Wing, Alloy 88	04 Nos.	
iv)	Rotor, Twin Wing, 316SS	04 Nos.	
v)	Rotor, Single Wing, Alloy 88	04 Nos.	
vi)	Stud	16 Nos.	
vii)	Stud, Jacketed Cover	32 Nos.	
viii)	Pump Cover	02 Nos.	
ix)	Jacketed Cover	02 Nos.	
x)	Gear Case Assembly, SS	02 Nos.	
xi)	Gear Case Cover, SS	02 Nos.	
xii)	Gear, Drive Shaft, Spur	02 Nos.	
xiii)	Gear, Short Shaft, Spur	02 Nos.	
xiv)	Wing Nut	16 Nos.	
xv)	Hex Nut	16 Nos.	

xvi)	Oil Seal, Gear Case Cover	02 Nos.	
xvii)	Oil Seal, Gear Case Rear	04 Nos.	
xviii)	Grease Seal, Bearing Retainer	04 Nos.	
xix)	Bearing, Rear	04 Nos.	
xx)	Bearing, Front	04 Nos.	
xxi)	Bearing, Front	04 Nos.	
xxii)	Key, Gear	04 Nos.	
xxiii)	Drive Pin, Seal Seat and Sleeve	04 Nos.	
xxiv)	Dowel Pin, Cover Side, .245" x .85"	02 Nos.	
xxv)	Dowel Pin, Gear Case Side, .245" x 1.0"	02 Nos.	
xxvi)	Dowel Pin, Cover Side, .308" x .85"	02 Nos.	
xxvii)	Dowel Pin, Gear Case Side, .308" x 1.0"	02 Nos.	
xxviii)	Oil Plug, M20 x 1.5"	10 Nos.	
xxix)	Oil Level Indicator, M20 x 1.5	02 Nos.	
xxx)	Silicone Sealant	02 Nos.	
xxxi)	Jam Nut, Rotor	08 Nos.	
xxxii)	Shim Kit	04 Nos.	
xxxiii)	Spacer, Gear to Rear Bearing	04 Nos.	
xxxiv)	Bearing Spacer	04 Nos.	
3.	**Repair kit for Chemical additive pumps (**Progressive Cavity Pump 3-L3 or equivalent**) containing the following: As Applicable**		
i.	Stator	02 Nos.	
ii.	Motor	02 Nos.	
iii.	Complete transmission axis (rotor, joints, shaft)	02 Sets	
iv.	Complete Seals	08 Sets	
v.	O-rings for the seal box	08 Sets	
vi.	Set of bearings and support seal rings	08 Sets	
4.	**Repair kit for Chemical additive pumps (**Progressive Cavity Pump 3-L4 or equivalent**) containing the following: As Applicable**		
i.	Stator	02 Nos.	
ii.	Motor	02 Nos.	
iii.	Complete transmission axis (rotor, joints, shaft)	02 Sets	
iv.	Complete Seals	08 Sets	
v.	O-rings for the seal box	08 Sets	
vi.	Set of bearings and support seal rings	08 Sets	
5.	**OTHERS:**		
i.	Diesel Flush Pump**:**	02 Nos.	
ii.	Water filling pump	04 Nos.	
6.	**PNEUMATIC SYSTEM:**		
i.	Water Separator 5µm	1 No.	
ii.	Air Filter 0,01µm	6 Nos.	
iii.	Mist Oiler, 5mg/m³, 1/2"	1 No.	
iv.	Pressure control Valve, max. 16bar	1 No.	
v.	Desiccant Container	1 No.	
vi.	Filter element 5µm	3 Nos.	
vii.	Filter element 0,01µm	3 Nos.	
7.	**HYDRAULIC SYSTEM:**		
i.	Hydraulic Tank Suction filter element	16 Nos.	
ii.	Hydraulic Tank Return filter element	4 Nos.	
iii.	High Pressure filter element	4 Nos.	
iv.	Agitators hydraulic motors	02 Nos.	
v.	Liquid Chemical Hydraulic motor	04 Nos.	
vi.	Hydraulic Pump	4 Nos.	
vii.	Applicable Activation module (one of each type, maximum 5 in total)	5 Nos.	

SECTION (D): INSTRUMENTATION & CONTROL SYSTEM SPARES LIST:

More Spares if required to be incorporated:

Sl. No.	Item Description	Qty.	Bidder's Response
A	B	C	
1.	All Level Sensors/Transmitters (Ultrasonic)	02 each type.	
2.	All Coriolis Mass flowmeters of various ranges	02 each type.	
3.	Flow Controller	02 Nos.	
4.	All Pressure Gauges (if required in the unit)	01 each type.	
5.	All Temperature Gauges (if required in the unit)	01 each type.	
6.	Inverter (if required in the unit)	01 No.	
7.	SMPS (if required in the unit)	01 No.	
8.	Solenoid Valves (if required in the unit)	01 each type.	
9.	Toggle Switch	05 Nos.	
10.	Flow meter	08 Nos	
11.	Control Module	02 Nos.	
12.	Emergency Shutdown Switch	02 Nos.	

Note:

1. All spares in specified quantity as indicated above shall be supplied along with the supply of the units.

2. Specific description, Quantity etc. of each item shall clearly be indicated in the technical bid. Make, Part Nos. etc. of each item shall be submitted by the supplier along with the supply.

3. Bidder shall also quote separately for any additional spares (without price) 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.

4. If any spares mentioned in above table is/are not required, the bidder must mentioned that the spares do not require for the unit.

5. In case the multiple quantity of an item named above is used in the Automobile portion (i.e. Trailer) of the CAS Unit and the specifications of such item does not match with each other, then the supplier shall supply such item in a mixed manner comprising all the variants used in the Automobile portion (i.e. Trailer) of the CAS Unit. The supplier shall first try to supply all the variants of such item preferably in equal/proportional quantity of each of the variant used in the Automobile portion i.e.Trailer of the CAS Unit as far as possible. However, the total quantity of such item to be supplied must not be less than the quantity mentioned in above.

6. In case the specifications of the item named above used in left & right side of the Axle System/Suspension System/Brake System of the Automobile portion (i.e. Trailer) of the Frac Pumper Unit does not match with each other of that particular system, the supplier shall first try to supply all the variants of such item preferably in equal/proportional quantity of each of the variant

used in the Automobile portion i.e.Trailer of the CAS Unit as far as possible. However, the total quantity of such item to be supplied must not be less than the quantity mentioned in above.

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ANNEXURE-F

Annexure-A1

To-

Oil India Limited,
Duliajan, Assam, India

Sub: Undertaking / Declaration regarding Type Approval Certificate, Parts Catalogue, Maintenance / Service Manual of OIL's Inhouse Hydraulic Fracturing Fleet.

Ref: Tender No. for Supply of Hydraulic Fracturing Unit.

We M/s _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ do hereby declare that we shall produce the following at the time of Pre Despatch Inspection of Hydraulic Fracturing Fleet at our premise-

1) Type Approval Certificates (Hard copy) of-

a) Tractor / Prime Mover
b) Trailers of Frac Pumpers
c) Trailer of Blender Unit
d) Trailer of Hydration Unit
e) Trailer of Frac Data Van
f) Truck Chassis of Sand Dumper

Photocopies / Softcopies (scan copy) of the above Type Approval Certificates will be handed over to Pre Despatch Inspection Team of Oil India Ltd

2) **Hard copy / soft copy of Parts Catalogue and Maintenance / Service Manual of-**

a) Tractor / Prime Mover
b) Trailers of Frac Pumpers
c) Trailer of Blender Unit
d) Trailer of Hydration Unit
e) Trailer of Frac Data Van
f) Truck mounted Sand Dumper

Soft copies of the above will be handed over to Pre Despatch Inspection Team of Oil India Ltd

M/s _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
(Name of Bidder)

A. REF. CLAUSE NO. 19.0. 2.

SAMPLE COPY OF FORM- 21 (as referred above)

Following is a sample copy of **FORM 21** of Indian Motor Vehicle Act only. The certificate shall contain following minimum information –

FORM 21
[See Rules 47 (a) and (d)]
SALE CERTIFICATE

(To be issued by manufacturer 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 **OIL INDIA LIMITED** against Purchase Order No. .....

Name of the buyer **OIL INDIA LIMITED**
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 number	.....
5.	Engine Power	.....
6.	Cubic capacity	.....
7.	Fuel used	.....
8.	Number of cylinders	.....
9.	Month and year of manufacture	.....
10.	Seating capacity (including driver)	.....
11.	Unladen Weight	.....
12.	Maximum axle weight and number and description of tyres ~~(in case of transport vehicles)~~	.....
a.	Front axle	.....
b.	Rear axle	.....
c.	Any other axle	.....
d.	Tandem axle	.....
13.	Colour	.....
14.	Gross Vehicle Weight Rating	.....
15.	Type of body	.....
16.	Wheelbase	.....

(Signature of the manufacturer)

*Strike out whichever is inapplicable.

B. REF. CLAUSE NO. 19.0.3
SAMPLE COPY OF FORM- 22 (as referred above)

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

FORM-22
[See rules 47(1) (g)]
ROAD-WORTHINESS CERTIFICATE FOR
COMPLIANCE TO EMISSION AND NOISE STANDARDS
(To be issued by the manufacturer along with the vehicle)

It is certified that the following vehicle complies with the provisions of the Motor Vehicles Act, 1988 and rules made thereunder or international standard namely EEC / ECE Regulations:

1. Model/Commercial Name of the vehicle: .....
2. Chassis Number: .....
   [Example: Vehicle Identification Number (VIN)]
3. Engine ~~or Motor~~ Number: .....
4. Applicable Emission Norms: .....
5. Emission, Sound Level for Horn and Pass by noise values of the above vehicle model, obtained during Type Approval Testing as per Central Motor Vehicles Rules, 1989 or ECE/EEC Regulations are given below:

i. Type Approval Certificate No.: .....
ii. Type of Fuel: .....
iii. Emission values for vehicle: .....

TABLE
Positive Ignition Engine or Compression Ignition Engine Vehicle

Sr. No.	Pollutant (as applicable)	Units (as applicable)	Value (upto 3 Decimal places)
(1)	(2)	(3)	(4)
1.	Carbon Monoxide (CO)	mg/km or mg/kWh or g/kWh	
2.	Hydrocarbon (THC/HC)	mg/km or mg/kWh or g/kWh	
3.	Non-Methane Hydrocarbon (NMHC)	mg/km or mg/kWh or g/kWh	
4.	Oxides of Nitrogen (NOx)	mg/km or mg/kWh or g/kWh	
5a.	HC+NOx	mg/km or mg/kWh or g/kWh	
5b.	THC+NOx	mg/km or mg/kWh or g/kWh	
6.	Methane (CH4)	mg/kWh	
7.	Ammonia (NH3)	PPM	
8.	Mass of Particulate Matter (PM)	mg/km or mg/kWh or g/kWh	
9.	Number of Particles (PN)	Numbers/km or Numbers/kWh	

iv. Noise level (as applicable):
a. Horn (for all vehicles other than agricultural tractors and construction equipment vehicles) as installed on the vehicle: ..... dB (A); (upto 1 decimal place)
b. Pass by or Bystander's position: ..... dB(A)

(Facsimile Signature of Manufacturer)

Note 1: This Form shall be issued with signature of the manufacturer duly printed in the Form itself by affixing facsimile signature in ink under the hand and seal, as applicable.
Note 2: In case of multiple combinations, values pertaining to any one test result in the test report to be provided. For V2, V3 cases- average value of the test result in the test report to be provided.

Note 3: While printing Form 22, the relevant pollutants in the table as applicable for the subject vehicles may only be listed.

C. REF. CLAUSE NO. 19.0.3
SAMPLE COPY OF FORM 22-A

Following is a sample copy of **FORM 22-A (Part – I) & FORM 22-A (Part – II) of Indian Motor Vehicle Act** only. The certificate shall contain following minimum information. –

FORM 22-A
[See Rules 47 (g), 115, 124(2), 126-A and 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 the following vehicle complies with the provisions of the Motor Vehicles Act, 1988 and the rules made there under or international standard namely EEC / ECE Regulations, including the following mass emission norms:

1. Brand name of the vehicle : .....
2. Chassis number : .....
3. Engine number/~~Motor number (In case of battery operated vehicles)~~ : .....
Emission norms : .....

(Signature of 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.

FORM 22-A
[See Rules 47 (g), 115, 124(2), 126-A and 127]
INITIAL CERTIFICATE OF COMPLIANCE WITH POLLUTION STANDARDS, SAFETY STANDARDS OF COMPONENTS AND ROAD WORTHINESS
(FOR VEHICLES WHERE BODY IS FABRICATED SEPARATELY)
PART – II
(**TO BE ISSUED BY THE BODY BUILDER**)

Certified that body of the following vehicle has been fabricated by us and the same complies with the provisions of Motor Vehicles Act, 1988 and Rules made there under or international standard namely EEC / ECE Regulations:

1. Brand name of the vehicle : .....
2. Chassis number : .....
3. Engine number : .....

(Signature of 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.

****

SPECIFICATIONS OF TRAILER MOUNTED BLENDER UNIT, QTY = 1 NO.

Note to bidder:

1. The bidder shall provide their response and mention applicable information/ Complied / Not Complied / Not Applicable / Make & Model etc. (as applicable) against individual clauses in this document.

2. The bidder shall mention details of Reference Document name / Serial number / Page number of bid for documentary evidence (if any).

3. The bidder shall submit the filled-up document along with their technical bid.

Technical Specifications

Clause No.	Clause Description	Bidder's Response
1.0	The trailer mounted blender unit should be capable of mixing and pumping proppant laden slurries with a maximum sand concentration of 20 PPA (pound proppant added per gallon). The Trailer mounted blender unit shall be suitably designed detachable brand new **semi-trailer**, manufactured after issue of Oil India Limited (OIL)'s Purchase Order. The semi-trailer shall be mounted with all the blender unit machineries/ equipment, items as specified in the tender. The semi-trailer shall be coupled with any of the Tractor / Prime Mover as detailed elsewhere in the tender document. The Tractor Trailer combination vehicle should be suitable for driving over national highways, state highways, district roads, rural /village roads, non-grade road surfaces and for use in the rough, windy, marshy/waterlogged and dusty terrain oil and gas field environments found in the Indian Oilfields. **Note:** "Semi-trailer" means a Trailer, which is intended to be connected to a haulage Tractor and which is so constructed that a portion of it is superimposed on and apart of whose weight is borne by the haulage Tractor. The unit should be capable of operating in ambient temperature ranges of 0° C to +50° C in a 98% relative humidity. The unit with upgraded latest state of the art technology improved version will be acceptable for the basic configuration, accessories, instrumentation, control etc. without affecting the main frame of specification. Suitable to work in the following climatic conditions: Altitude: 125 meter above mean sea level (msl) Temperature range: 0°C - 50°C Average Rainfall: 350 cm Relative humidity: 98% at 35° C. iii) The unit should have the following basic performance characteristics / specifications: Max. Clean Fluid rate: 70 bpm Max. Slurry Fluid discharge rate at 20 PPA – 40 bpm Max. discharge pressure: 100 psi Max. discharge density: 20 PPA at discharge rate of 40 bpm Max. Dry chemical rate: 100 lpm iv) The operation of the unit should be controlled locally as well as from remote panel located in Frac Control Unit (datavan). The remote-control system should allow the operation of the unit from a vantage point away from the unit.	

Clause No.	Clause Description	Bidder's Response
	v) The components in the unit should be arranged in such a manner for easy access for maintenance & ease of operation. Storage provision for related accessories & commonly used auxiliary equipment should be provided. 2) All components and systems should be assembled in a manner so as to provide ease of maintenance. 3) The bidder/supplier shall ensure adequate gap between Trailer deck and Trailer wheels, so as to ensure that the Trailer wheels do not touch the body of deck of the Trailer or any other machineries/equipment mounted on the Trailer while crossing speed breakers, potholes or any other uneven surface.	
2.0	**EQUIPMENT DETAILS:**	
2.1	**DIMENSIONS & WEIGHT OF BLENDER TRAILER**	
a.	**Length of Blender Unit Trailer:** As per design. However, the Length of each offered Blender Trailer should be such that when coupled with Tractor / Prime Mover, the **overall length of Tractor and Blender Trailer combination**, i.e., Tractor coupled with the Trailer does not exceed **18750 mm**.	
a.1	The bidder shall mention the length of each Blender Trailer alone in the technical bid & the GA layout diagram.	
b.	**Width of each Blender Trailer:** Shall not exceed **2600 mm.**	
b.1	The bidder shall mention the width of each Blender Trailer alone in the technical bid & the GA layout diagram.	
c.	**Height of each Blender Trailer:** Shall not exceed **4500 mm** from ground level.	
c.1	The bidder shall mention the height of each Blender Trailer alone in the technical bid & the GA layout diagram.	
d.	**Weight (mass) of Blender Trailer:** As per design. However, the Total combination weight (mass) of Tractor and Blender Trailer combination, i.e., Tractor coupled with the Trailer shall be within 55,000 kg.	
d.1	The bidder shall mention the weight (mass) of the Blender Unit Trailer (with equipment mounted) alone in the technical bid.	
e.	**GENERAL ARRANGERMENT (GA) DRAWING OF BLENDER TRAILER:** The bidder shall submit GA (General Arrangement) drawing of the Blender Trailer. The GA drawing shall have mention of major dimensions of Blender Trailer (like length, height, width, etc.); estimated loading on individual Rear axles of Trailer (when combined with offered Tractor unit); showing the position of all major components & their mounting. The GA drawing of the Blender Trailer shall be submitted along with the technical bid by the bidder.	

Clause No.	Clause Description	Bidder's Response
2.2	**CHASSIS FRAME:**	
a.	All welded construction, robust, heavy-duty chassis of steel frame suitably welded and cross braced at close pitch to withstand the maximum load. The chassis shall provide maximum structural performance in terms of load carrying capacity, bending moment & deflection, maximum tensional stability and long life. Skirt rails, wherever possible shall be provided along the length of the Trailer. The main Chassis frame beam shall be around 450 mm (in height) near the centre of the Trailer (when viewed from the rear of the Trailer) and the chassis frame beam is to be reinforced & adequately sized as per manufacturer's standard practice in suspension area etc. to bear the designed load.	
b.	The bidder shall mention & submit the following information in the technical bid: Details of the chassis frame beam drawing mentioning the size of the chassis frame beam offered.	
2.3	**TRAILER AXLES:**	
a.	The Blender Unit Trailer shall be provided with 03 (three) Nos. of axles at rear of the Trailer as per design and meeting tender specifications. The Trailer axles shall be compatible with the brake system. The bidder/supplier shall offer Trailer axles with total axle capacity of the Trailer triaxle to meet the design requirement considering the total weight of the complete unit with equipment, handling fluids, etc. in all conditions: Bidder shall ensure that the loading on the Trailer axles shall be within the axle capacity of the Trailer triaxle in all conditions.	
b.	The bidder shall mention & submit the following information in the technical bid for each Blender Trailer:	
(i)	Total number of Axles in the Trailer at rear.	
(ii)	Make & model of offered Trailer axles.	
(iii)	Total axle capacity of offered 03 Nos. of Trailer axles.	
(iv)	Estimated Total loading on Trailer triaxle. (in coupled condition with the Tractor)	
(v)	Total Loading on Trailer triaxle is within the axle capacity of Trailer triaxle in all conditions. (Yes / No).	
(vi)	Technical specification catalogue/brochure with technical details of the offered Trailer axles.	
2.4	**BRAKE SYSTEM:**	
a.	Pneumatic service brake system with ABS (anti-lock brake system) and parking brake system compatible with the Tractor shall be provided in the Trailer. The service brake system & parking brake system shall be operated from Tractor's driver Cabin.	

Clause No.	Clause Description	Bidder's Response
	The brake system shall also have provision for applying brake automatically to the Trailer axles in case of accidental disconnection of the pneumatic connections. The trailer shall have control valve for synchronized braking of "tractor and trailer" to enhance the safety. The brake system shall have palm coupling for quick coupling and detaching the air connections with the Tractor unit. All brake components shall be compatible with axles offered.	
2.5	**TRAILER SUSPENSION:**	
a.	Heavy duty Trailer suspension system suitable for movement of Tractor & Blender Trailer unit with full load in all types of road conditions typical to oilfield operation area/slushy plinths shall be provided. The suspension system shall be capable to bear the maximum designed load in all conditions.	
b.	The bidder shall mention & submit the following information in the technical bid:	
(i)	Type of offered Trailer Suspension.	
(ii)	Make & Model of offered Trailer Suspension.	
(iii)	Technical specification catalogue/ brochure with technical details of the offered Trailer suspension system.	
2.6	**TRAILER WHEELS & TYRES:**	
a.	The Trailer shall be fitted with suitable wheels with Tube type / Tubeless type Tyre of adequate ply rating. 02 (two) Nos. of wheels in each side of each axle i.e., total 04 (four) Nos. of wheels in each axle i.e., total 12 (twelve) Nos. of wheels in 03 Nos. of Trailer axles shall be as per design specifications. If possible, Trailer wheels / tyres shall be interchangeable with the Tractor unit. Bidder is to look into the tyres of Tractor Unit while selecting the Trailer tyres and vice-versa for compatibility of the Tractor and the Trailer unit with each other, if possible.	
b.	The bidder shall mention & submit the following information in the technical bid for each Blender Trailer:	
(i)	Total number of wheels in 03 Nos. of Trailer axles. (Axle-wise information to be provided).	
(ii)	Type of Tyres (Tube type / Tubeless type) in the Trailer axles.	
(iii)	Tyre size of Trailer axle wheels.	
2.7	**KINGPIN FOR COUPLING WITH TRACTOR UNIT:**	
a.	Suitable rubbing plate fully welded to the chassis frame and the **Kingpin of size not less than 3.5 inch** shall be provided. The make of the Kingpin shall be of ASHLEY /HYWA / TATA / JOST / VOLVO / YORK / PLHT/ GF / SAF / HOLLAND or any other make. Height of rubbing plate shall match with the "Fifth Wheel" height in all load conditions of any / each of the Tractor units	

Clause No.	Clause Description	Bidder's Response
	for proper coupling and locking. Proper coupling & locking etc. of the BLENDER Trailer with each of the Tractor unit is to be ensured by the bidder/prospective supplier.	
b.	The bidder shall mention & submit the following information in the technical bid:	
(i)	Size of offered Trailer Kingpin.	
(ii)	Make & model of offered Trailer Kingpin.	
(iii)	Technical specification catalogue/ brochure with technical details of offered Trailer Kingpin.	
2.8	**LANDING GEAR:**	
a.	Retractable, mechanical type landing gear with sand-pad and having adequate capacity for taking the load on the Trailer when fully loaded shall be located conveniently at the front end of the Trailer. The make of the landing gear shall be of HYWA/ JOST / YORK / PLHT/ GF / SAF / HOLLAND or any other make with capacity as per design. The landing gear shall be so positioned that there is sufficient clearance behind the rear end of the Tractor unit, and it does not fault with the Tractor while taking the shortest turn.	
b.	The bidder shall mention & submit the following information in the technical bid:	
(i)	Make & model of offered Landing Gear.	
(ii)	Capacity of offered Landing Gear.	
(iii)	Technical specification catalogue/ brochure of the offered Landing Gear.	
2.9	**ELECTRICAL EQUIPMENT:**	
a.	Electrical system compatible with the electrical system of the offered Tractor unit shall be provided in the Trailer for road drive. Easily disconnect able / detachable electrical connections with the Tractor unit shall be provided.	
2.10	**TRAILER DECK:**	
a.	All welded steel construction with not less than 5mm thick MS chequered plate Trailer deck shall be provided, wherever feasible as per design. Trailer decks shall be of non-slip type.	
2.11	**PAINTING:**	
a.	Surface preparation through shot blasting. Minimum two coats of Zinc rich metal primer shall be applied. Minimum two final coats of suitable paint shall be applied. Note: Surface primer, paints shall be suitable for corrosive handling fluids etc. used in oil & gas industry.	
2.12	**TYPE APPROVAL CERTIFICATE OF THE BLENDER TRAILER:**	
a.	Type Approval Certificate of vehicle is required for the following activities in India:	

Clause No.	Clause Description	Bidder's Response
	i) **Custom clearance** of the vehicle as per import policy conditions / guidelines of India Chapter-87 of ITC (HS), 2022, Schedule 1- Import Policy, Section: XVII, in case of imported vehicle from other countries to India. ii) **Homologation** (the formal process by which an official authority certifies that a product, especially a vehicle, meets specific regulatory standards for safety, performance, and environmental impact before it can be sold or used in a particular market/ region) / **Uploading the vehicle details in the relevant Government of India portal (VAHAN/ Parivahan portal**) for **registration** of vehicle as per Motor Vehicle Act, 1988 & Central Motor Vehicle Rules, 1989 of India which is mandatory for plying of the vehicle in roads in India.	
b.	In case the offered Trailer is manufactured in India, the offered Trailer shall be compliant to Central Motor Vehicle Rules 1989 of India and its amendments. In case the offered Trailer is imported from other countries to India, the offered Trailer shall be compliant with the import policy of Government of India. In both the case i.e. manufactured in India and imported from other countries to India, the bidder/supplier has to exhibit the original Type Approval Certificate of offered Trailer and submit a copy of the same to the Pre despatch Inspection Team of Oil India Limited. The original copy of the Type Approval Certificate has to be submitted to Oil India Ltd along with the supply. The bidder has to submit a declaration along with the bid in this regard as per Annexure A1. Submission of Type Approval Certificate of Trailer shall be as per Central Motor Vehicle Rules of India in case of Trailer manufactured in India or as per the import policy of Government of India, in case of imported vehicle, as on the date of supply.	
c.	In case of Trailer manufactured in India, the list of Type Approval Certificate issuing agencies are mentioned in Central Motor Vehicle Rules, 1989 of India & its amendments. In case of imported vehicle from other countries to India, at the time of Customs clearance, a Type Approval Certificate/COP, of an international accredited agency including a notarized English translation thereof shall be furnished. This Type Approval Certificate shall stipulate that vehicle to be imported complies with all the ECE (Economic Commission for Europe) Regulations. The list of international accredited agencies approved for issuance of Type Approval Certificate is available on DGFT (Director General of Foreign Trade) website, under Policy Circular No. 12 (RE- 2013)/2009-2014 dated 15.01.2014 issued by Ministry of Commerce & Industry, Department of Commerce, Director General of Foreign Trade, New Delhi subjecting "Type Approval issuing agencies under Policy Condition number 7 and 9 of Chapter 87 of ITC (HS) 2012".	
d.	Bidder/supplier shall ensure adherence to any subsequent revisions to the above referred Policy Circulars that may be issued in future by DGFT. Bidder shall note that, they shall be conversant with the policy of Government of India and Oil India Limited (OIL) shall not be liable in this regard whatsoever.	
e.	Type approval certification of individual components shall not be considered as vehicle Type approval certificate.	

Clause No.	Clause Description	Bidder's Response
f.	Notwithstanding anything mentioned elsewhere in this document, submission of Type Approval Certificate/ Conformity of Production (CoP) shall be as per the guideline of Government of India as on the date of supply.	
3.0	**OTHER GENERAL POINTS:**	
3.1	**ACCESSORIES & OTHER FITTINGS:** Each Blender Trailer shall be fitted with the following fittings and accessories:	
a.	Mudguard with mud flaps for all Trailer wheels.	
b.	Suitable Heavy duty attachment (hook/loop) shall be provided at the rear of the Trailer, capable of pulling / towing the unit from bogged down situation in slushy areas in oilfields shall be provided.	
c.	Wherever feasible, Side / Lateral Underrun Protective Device (SUPD)s, Rear Underrun Protective Device (RUPD) shall be fitted in the unit. Note: 1. SUPD/ RUPD are structures that prevent smaller vehicles from getting underneath etc. during collision as per AIS 069, IS: 14812, IS: 14682 or similar standards. 2. The equipment manufacturer shall check the feasibility of providing the SUPDs, RUPDs during manufacturing and arrange to provide the same accordingly as per feasibility in the unit. SUPDs/ RUPDs provided by the equipment manufacturer shall be of detachable type and shall not be permanently fitted / welded to the Trailer chassis.	
d.	**TRAILER INFORMATION PLATE:** The Trailer shall be provided with a VIN plate fixed in a suitable place in the Trailer chassis (easily visible) containing, amongst others, the following information: a) Trailer Serial Number / Trailer Chassis No. as per Trailer manufacturer. b) Year and Month of Manufacture of the Trailer. c) Pay Load Capacity of the Trailer. d) Name & Address of Trailer Manufacturer etc.	
e.	Retro reflective marking (3M make or any other make, 50 mm width) on the rear and both side of the trailer as per the colour code- Rear: Red and Sides: Yellow as per AIS: 090 / applicable standard.	
f.	Wheel Wrench & Handle. Wrench & Handle for each size of wheel nuts shall be provided.	
g.	02 (two) numbers of wheel chocks.	
h.	01 (one) number of complete spare wheel assembly.	
3.2	**UNDERTAKING FOR SPARES & SERVICE:**	
a.	The bidder shall submit a written undertaking (along with the technical bid) that they, themselves or through other sources, would be able to supply all the requisite spares (including bought out items, if any) & consumables and provide the maintenance services for their offered Blender Trailer in OIL	

Clause No.	Clause Description	Bidder's Response
	operational area(s) in India for a minimum period of 15 (fifteen) years from the certified date of completion of successful field commissioning of the unit. The cost of such spares, consumables & maintenance services which may be utilized by Oil India Limited in future **(beyond Warranty period and O&M / Comprehensive Maintenance Period**) shall be extra and **SHALL NOT BE** considered by the bidder in their quoted prices in this tender. Spares & repair services during Warranty period & warranty extension period (if any) for the item(s) under Warranty claim (if any) of the unit(s) shall be in the scope of the successful bidder (supplier).	
3.3	**SPECIAL NOTES:**	
a.	All lights shall be covered to the extent possible, with suitable guard to prevent damage. The guards shall have detachable provision.	
b.	The electrical connections shall be suitable to operate in oilfield areas. The lightings shall comply road vehicle lighting regulations. Screw-in bulbs shall not be used as far as possible. The electrical wirings shall be fixed and protected as to minimize accidental damage or undue wear. The wirings shall be insulated, and the electrical circuits shall be protected against overloading by fuses or automatic cut-outs. Adequate steps shall be taken to ensure electrical continuity and wherever necessary, components shall be bonded by copper straps. The junction boxes, if any, shall be sealed.	
C.	In case of procurement of multiple [i.e. more than 01 (one)] unit against this tender, all the trailer units offered by the bidder in the tender and to be supplied by a successful bidder (i.e. supplier) in future against this tender shall be identical and shall have same design in all respects.	
4.0	**DECK ENGINE:**	
1.	The deck mounted engine will be used to power the unit hydraulic drive system and other power requirements, like air & electrical, for operation of the unit:	
2.	Water cooled Cummins/ Caterpiller HSD (High Speed Diesel) engine of 580-620 HP at rated rpm or higher capacity having electronic fuel control mechanism suitable for operation enumerated above at description 1.0. The offered engine shall comply with BS-VI/EURO-VI/TIER IV Final/equivalent or higher emission standard as applicable in the in India at the time of delivery of the unit. The engine should be vibration isolated from the trailer by means of suitable anti-vibration mounting.	
3.	The engine shall run in the following broad climatic conditions: i. Altitude – 150 meter above sea level (ASL) ii. Temperature range: 2 deg - 45 Deg C Max iii. Average Rainfall - 350cms Relative humidity 95% at 35° C	
4.	Suitable fuel priming pump, preferably a mechanical pump, is to be provided to remove any air lock in the fuel system.	
5.	Exhaust system: The Engine exhaust is to be designed properly with manifold, suitable muffler, spark arrester, rain cap and flexible exhaust connection as per norms of Oil Field Operation. The exhaust pipe shall be suitably wrapped by insulated material for safety of operators. Both External type and Internal type Spark arrester are acceptable.	
6.	The engine should be provided with adequate safety system like emergency kill/ rig saver. In no case engine should re-start without manual re-setting	

Clause No.	Clause Description	Bidder's Response
	of all the safety systems. Suitable indicators should be provided in the control panel.	
7.	The engine should be vibration isolated from the trailer by means of suitable anti-vibration mounting.	
8.	Suitable arrangement for keeping engine starting battery under locking arrangement and with safety cover from rain	
9.	A Deck engine driven air compressor of sufficient capacity to meet the air requirement of diaphragm pump, pneumatic actuated valves or any other requirements as per the design. It should be inclusive of air tank and dryer.	
10.	The air required for the brake system and the pneumatic suspension of trailer shall be supplied by a separate air receiver with required valves which will receive air from the puller chassis. However, provision is to be provided for connecting the air receiver of trailer braking/ suspension system with the air receiver of the air compressor driven by the deck engine.	
11.	The deck engine should be supplied with data diagnostic kit for diagnosing the fault code. It shall preferably be a handheld reader having removable cartridges to support diagnosis of engine. If a laptop is provided for the above, it should include software, adopters and other accessories with licensed installation software.	
12.	Engine Starting System: Engine shall be equipped with Electric Starter and Charging Alternator System	
5.0	**HYDRAULIC SYSTEMS:**	
1.	The installed hydraulic system should be a multi-hydraulic pump system to provide power to the hydraulic motors and other hydraulic systems designed for the unit like Centrifugal pumps, sand screw Augurs, Agitators, Paddle assembly etc. Hydraulic system should also include: a) Hydraulic cooler b) Hydraulic pressure gauges c) Flow meter in Hydraulic Circuits d) Hydraulic motors/pumps should be of Rexroth / Sundstrand / Dennison /Commercial / Vickers /Parker/Sauer/Sauer Danfoss/Eaton make. e) Hydraulic Hose Make: Acceptable hydraulic hose make are Parker / Gates / Eaton / Power Grip / Hansaflex only	
2.	Hydraulic oil cooler shall be designed in such a way that the temperature of the hydraulic oil in the system does not exceed 70 degree centigrade in extreme ambient condition i.e. 50 degree centigrade.	
3.	All hydraulic filters used in the system shall be of Donaldson/Pall/Fleet guard/Parkers make.	
4.	These hydraulic systems shall incorporate all equipment such as hydraulic oil tank, suction filters, return filters, relief valves, control valves, coolers, breathers and trouble-shooting connections etc.	
5.	Multi-hydraulic pump system to provide power to the hydraulic motors driving the following: 1. Suction centrifugal pump. 2. Discharge centrifugal pump. 3. Two (2) Dry chemical additive system. 4. FOUR (4) Liquid additive systems. 5. Two (2) proppant delivery augers. 6. One (1) hopper lifting mechanism.	

Clause No.	Clause Description	Bidder's Response
	7. One (1) tub mixing agitator. 8. Proppant auger lift system. Hydraulic system to be capable of working at 100% capacity of all the systems	
6.0	**MIXING SYSTEM:**	
6.1	**SUCTION PUMP AND MANIFOLDS:**	
1.	A hydraulically driven Mission/MCM 12x12x15 centrifugal pump or Equivalent with mechanical seals, capable of pumping base fluids at rates more than 70 BBL/min from supply tanks to the blender tub.	
2.	Pump to be Installed on the driver side of the RH drive unit (Right side when seen from standing behind sand screw augers)	
3.	Mounted on the suction side of the pump with dual sided suction manifolds (passenger and driver side) each equipped with twelve (12) 4" input connections with a pneumatically operated (with control console mounted pneumatic switches). Each connection is screened to prevent foreign object debris from damaging the equipment downstream. Each input connection shall include a 4" butterfly valve and 4" FIG. 206 union male (wing) connection. Each connection to be fitted with a cap with chain.	
4.	The discharge side of this centrifugal pump shall include a 10" piping run to the inlet of the blender tub. The piping run shall include a 10" magnetic flowmeter(Make: Yokogawa/ Endress+Hauser/ Emerson/ Siemens/ ABB/ KROHNE) and turbine flowmeter. Installed before the inlet to the blender tub will be a 10" remote hydraulically actuated butterfly valve with throttling control in the control station.	
5.	Suction manifold to be of maximum possible length so that the connections can be given to the farthest tanks/ hydration unit.	
6.	The suction manifold piping of the unit shall have a tub bypass line. The tub bypass line shall include a 10" bypass line from the discharge manifold of the suction pump to the discharge manifold of the discharge pump. This bypass line shall be equipped with a 10" remote controlled bypass valve for quick change over to flushing or other type operations. There should be a Pneumatic actuated valve interconnection line of suitable diameter between the suction and discharge manifolds.	
6.2	**BLENDER TUB:**	
1.	The unit shall have 12-barrel volumetric capacity blender tub design that can mix slurries at densities of up to 20 PPA at 40 bpm The tub shall be designed to delivers consistent blending of high-density slurries.	
2.	This unit shall have high density fracturing fluid mixing system to yield highly consistent slurry mixtures over a broad range of fluid discharge rates and densities.	
3.	Intended maximum proppant concentration of 20 PPA at 40 bpm	
4.	A tub mounted hydraulically driven agitator to be installed on this unit to create additional mixing energy in the tub to ensure a consistent slurry mixture. The agitator and tub side walls shall be specially designed for the suspension of solids in the slurry gel and de-aeration of the slurry prior to entering the discharge slurry pump.	

Clause No.	Clause Description	Bidder's Response
5.	The high-density fracturing fluid mixing system design shall be capable of thoroughly blending frac slurries up to 20 PPA. In addition, the tub design shall allow a wide range of discharge rates with no depreciation in the performance of the mixing system. So that, at low discharge rates, smaller volumes can be used in the tub to help reduce mixing time of the fluid in the tub thereby keeping the reaction time of the system to density changes to a minimum.	
6.	The high-density fracturing fluid mixing system design shall be capable of thoroughly blending frac slurries up to 20 PPA. In addition, the tub design shall allow a wide range of discharge rates with no depreciation in the performance of the mixing system. So that, at low discharge rates, smaller volumes can be used in the tub to help reduce mixing time of the fluid in the tub thereby keeping the reaction time of the system to density changes to a minimum.	
7.	A pump prime-up line shall be installed on both sides of the blender tub. Also, with the prime up line there shall be a FIG 1502 2" connection (wing) with low pressure piping returning fluid back to the top of the tub.	
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9.	The blender tub should incorporate latest fluid level control system.	
10.	Provision to be there to control the Blender Tub level in Automatic mode as well as Manual mode by controlling the Suction centrifugal pump speed.	
11.	The fluid level measurement system should be non-contact with a provision to nullify vortex and froth.	
12.	The blender tub assembly should be installed on the rear of trailer between the control cabin and augers.	
13.	Safe tub overflow system to be provided. Overflow fluid should be diverted to the ground level via pipes/hoses instead of direct overflow from all sides of tub.	
14.	Tub handles the highly corrosive fluids so the metallurgy of tub should be of SS 304 with internal 3mm FRP coating.	
6.3	**DISCHARGE PUMP AND MANIFOLDS:**	
1.	A hydraulically driven Mission/MCM 12x14x22 discharge centrifugal pump or equivalent with mechanical seal capable of pumping from the blender tub proppant laden slurries upto 20 PPA at rates up to 40 bpm should be installed on the unit.	
2.	The suction side of this discharge centrifugal pump shall be connected to the bottom of the blender tub. Installed close to the actual discharge of the discharge centrifugal pump will be a valved prime-up line to the blender tub.	
3.	The discharge piping from the discharge centrifugal pump shall include a 10" piping run to the discharge manifold of the unit. The piping run shall include a 10" magnetic flowmeter(Make: Yokogawa/ Endress+Hauser/ Emerson/ Siemens/ ABB/ KROHNE) and turbine flowmeter. Discharge piping shall be extra heavy piping. Installed in the discharge piping shall be a pressure transducer.	

Clause No.	Clause Description	Bidder's Response
4.	This unit shall include dual sided discharge manifolds that shall consist of ten (08) 4" FIG 207 union female (thread) connections per manifold. Each FIG. 207 union connection shall include a 4" butterfly valve.	
5.	A nuclear densitometer shall be provided for discharge density measurement. The blender control system shall calculate Pounds Proppant Added (PPA).	
6.	One 2" nipple should be fitted in the suction of the discharge pump for cross link chemical dosing.	
7.	Two nos. of additional 2" Sample point provision with detachable extension pipes and bends should be made on discharge side near the 4" discharge connections, for crosslinked slurry sampling.	
6.4	**PROPPANT LOADING AUGERS:**	
1.	Installed at rear of the unit will be two (02) 12" hydraulically driven, variable speed augers with the capacity to transport minimum 22,500 lb./min. of proppant to the blender tub. At the base of the augers will be one steel hopper. Maximum height of the hopper when on the ground without extensions installed will not exceed 40". The blender hopper shall be configured in such a way that two nos. of sand trucks can be unloaded simultaneously.	
2.	The auger assembly shall be hydraulically raised and lowered into the appropriate positions for either highway or blending purposes. A mechanical locking arrangement to be installed to hold the augers in transport position once it has been hydraulically set. Grease fittings should be installed in all metal-to-metal rotating / sliding assemblies.	
3.	These augers should be extremely accurate and fully calibrated. The metallurgy of auger should be of CS.	
4.	The proppant loading auger should be designed in such a way so that it can display the quantum of proppant that has been added to the fluid during the operation and should be capable of working singularly or combined in either manual or automatic operation (with automatic density control).	
5.	Proppant mass flow rate to be displayed at control cabin along with proppant totalizer.	
6.	RPM Sensors at top of the sand loading augers should be protected with a metallic cover fitting.	
7.	Each augur should have a provision to adjust the speed separately and the speed control facility should be installed in the control panel.	
6.5	**DRY CHEMICAL ADDITIVE SYSTEM:**	
	i. The unit should have a Two (2) hydraulically driven dry chemical additive systems equipped with a hydrator, a hopper, precision metering auger, a pickup sensor with cable for connection to the dry additive rate, encoder speed sensor and industrial components and total digital meters system installed in the unit control console. ii. Auger screws are utilized to propel the dry chemical into the hydrator. The system will feed dry chemical additives into the blending chamber at following rates: 1) System 1: 0 to 30 lpm 2) System 2: 30 to 100 lpm	

Clause No.	Clause Description	Bidder's Response
	Fluid is supplied to the hydrators from the suction centrifugal pump via a bypass lines. The dry chemical hydrator is isolated from the suction system by valves.	
6.6	**LIQUID ADDITIVE SYSTEM:**	
	i. The unit shall have four (4) liquid chemical additive systems. ii. Each liquid additive system shall include a hydraulically driven variable speed chemical pump with a coriolis style flowmeter iii. There shall be four (4) stainless steel tanks, 500 liters each iv. Approximate liquid chemical rates are as follows: 1) Pump 1: Flow Rate- 05 to 30 LPM 2) Pump 2- Flow Rate- 20 to 40 LPM 3) Pump 3- Flow Rate- 30 to 75 LPM 4) Pump 4- Flow Rate- 50 to 130 LPM v. Installed in the discharge manifold on the driver's side of this unit shall be four (4) chemical injection stingers. Each stinger shall be stainless steel and shall include a check valve. Installed on the side of the tub shall be four (4) chemical injection elbows for pumping chemical into the tub.	
7.0	**CONTROL:**	
7.1	**CONTROL CONSOLE/ CABIN:**	
	i. There shall be an operator's control platform installed between the blender tub and the deck engine. This platform shall include floor grating, platform handrails and a swing out handrail section. Grating installed in this platform shall be either fiber decking or grip strut decking. ii. The operator's platform shall be installed with a weather enclosure with console for 3-4 operating persons. The weather enclosure shall be designed to protect the control console during storage and harsh weather. The console and platform will be installed rear section of the platform such that the operator will have a clear and unhindered view of the blender tub through a large window in the cabin. iii. Cabin external dimensions should be under the overall specified dimensions limits of the unit. iv. Cabin should be installed with Air Conditioning unit of suitable capacity. v. Access doors on both side of the cabin with sliding transparent windows vi. Cabin should contain Internal lights and Dome lights for outside. vii. GPS hardware to be installed in control cabin.	
7.2	**CONTROL SYSTEMS:**	
	i. Blender may be operated in manual as well as automatic mode.	

Clause No.	Clause Description	Bidder's Response
	ii. All the automatic systems should have manual override system separately. Also, during manual operation all blender-operating parameters should be monitored on the gauges / HMI in the manual control console.	
7.3	**MANUAL CONTROL CONSOLE:**	
	i. Installed in the weather enclosure shall be a manual control and instrumentation system. Each device shall be installed on a non-corrosive control panel and shall feature permanent labelling in English. All electronic controls shall be installed in a single weather enclosure. Any mechanical, pneumatic, or hydraulic control shall be installed in a separate panel. All cabling coming into the control console shall terminate into cord grips. **A. Power unit controls and instrumentation:** 1. Two (2) deck engine stop controls 2. Two (2) deck engine start controls 3. Two (2) engine throttle controls 4. One (1) emergency kill control (tied to both engine e-kills) 5. Two (2) CANBUS gauges giving misc. engine information including: 6. Engine tachometer 7. Engine oil pressure 8. Engine coolant temperature 9. Fault codes **B. Blender system controls:** 1. Three (3) proppant auger speed controls 2. Three (3) proppant auger auto/manual selector switches 3. Four (4) liquid chemical pump speed controls (if equipped) 4. Four (4) liquid chemical pump auto/manual selector switches (if equipped) 5. Two (2) dry chemical feeder speed controls (if equipped) 6. Two (2) dry chemical feeder auto/manual selector switches (if equipped) 7. One (1) proppant auger lift control 8. One (1) auto discharge pump control 9. One (1) tub paddle speed control 10. One (1) fuel level gauge 11. One (1) hydraulic temperature gauge **C. Tub level system including:** 1. One (1) manual suction centrifugal pump speed control 2. One (1) auto/manual tub level control selector 3. One (1) auto tub level trim adjustment **Air panel (next to console) including:** 4. One (1) discharge centrifugal pump drive clutch 5. One (1) discharge centrifugal pump gearbox shifter **Hydraulic panel (next to console) including:** 6. One (1) blender tub discharge valve control 7. One (1) blender tub bypass valve control 8. One (1) tub inlet valve control 9. One (1) tub drain valve control 10. One (1) discharge crossover valve control 11. One (1) suction crossover valve control	

Clause No.	Clause Description	Bidder's Response
	Gauge panel (above console) including: 12. One (1) suction drive pressure gauge 13. One (1) suction charge pressure gauge 14. One (1) discharge pressure gauge 15. Three (3) auger hydraulic drive pressure gauges 16. Three (3) auger hydraulic charge pressure gauges 17. One (1) suction pump system hydraulic pressure gauge 18. One (1) open loop pressure gauge 19. One (1) pneumatic pressure gauge ii. A console for display / control of job in Auto/Manual mode. A remote console to be provided in Frac Control Center(Datavan) with suitable inter connections and compatibility through Open industrial protocols like TCP/IP including network cables for data acquisition system in Frac Control Center(Datavan).	
7.4	**AUTOMATED BLENDER CONTROL SYSTEM:**	
	i. The Automatic blender control / monitoring system should be a microprocessor-based system that undertakes full automatic control and monitoring of the blender. ii. The system should consist of two modules: controller/ monitoring modules, one to be located in blender cabin and the other in Frac Control Center(datavan), which should in turn feed the parameters to the Data Acquisition computer through Open industrial protocols like TCP/IP network. They should have preferably a graphical operator input / output interface designed to survive the rugged, mobile environment. iii. The system should automate a fracturing blender by controlling slurry density and chemical delivery. This electronic hardware and software should meet the most upto date field use specifications and requirements. This system should allow the blender to carry out the most completed stimulation programs including "Ramp Fracs" without operator assistance based on the job profile programmed into the control system. iv. The system should be an interactive system. Any of the user defined values for any operation / stage should be adjusted while the system is performing that operation / stage or before the system reaches that operation / stage. **A. AUTOMATIC CHEMICAL CONTROL SYSTEM:** 1. The automatic chemical control system is used to ratio liquid and dry chemicals into the frac fluid under changing flow rate conditions. The automatic chemical control system shall determine the desired chemical flowrate based on the blender tub suction rate and shall vary the hydraulic flow to the dry and liquid chemical hydraulic motors through an electro-hydraulic controller to match the actual chemical rate to the desired chemical rate. 2. The system shall allow the operator to input multiple stages and shall require the operator to input the following information per chemical feeder: a) Stage volume b) Ratio	

Clause No.	Clause Description	Bidder's Response
	B. AUTOMATIC DENSITY CONTROL (ADC) FUNCTION: 1. The ADC function should allow up to twenty (20) pre-programmable stages. The input data that may be entered through the controller / monitoring module touch screen / a pushbutton interface with numeric pad and hotkeys and a LCD display should be as follows: i. Operator Input a) Volume per stage b) Proppant specific gravity c) Proppant bulk density d) Fluid specific gravity e) Starting density f) Ending density ii. Feedback Sensors a) Auger speed b) Clean side flow rate c) Dirty side flow rate d) Densitometer **C. JOB MONITORING FUNCTION:** The controller / monitoring module touch screen should allow the operator to view the following: 1. For ADC functions: a) Current stage and number of stages b) Suction rate / total c) Discharge rate / total d) Target proppant concentration (density set point for that stage). e) Calculated proppant concentration based on i) The proppant delivery rate to tub (through screw rpm) and clean flow rate. User input of specific gravity of proppant. ii) From algorithm based on the suction clean fluid rate and discharge proppant laden slurry flow rates. iii) Provision for users to select the one of the proppant concentration mechanisms for operation in Auto mode. f) (Measured from both mechanism). g) Proppant total h) Proppant rate and total (measured from proppant augers) 2. For external blender functions: a) Two (2) external pressures. b) It should communicate with CAS and Hydration unit. v. There should be one module containing digital display of pressures / density vs. time plot on the blender panel. The display is required at both the places i.e. in the OIL Data Van / DAS system and Blender Control Panel. This will facilitate frac engineer to monitor the job online from blender itself. vi. All job monitoring data should be transferred to a auxiliary PC computer Laptop via RS 232 connection for full data acquisition purposes. Open industrial protocols like TCP/IP based network communication can be used between the blender and the Data Acquisition system provided in the data van / DAQ system. But a suitable interface is to be provided to transfer the data to the	

Clause No.	Clause Description	Bidder's Response
	computer in the data van having Open industrial protocols like TCP/IP based network connection. Rugged Industrial Laptop with latest configuration should be kept in the control cabin. **Hard disk of this industrial computer shall be SSD.** For additional safety the above system should be covered in a separate housing with locking facility. Interface software must also be supplied along with laptop to run the system.	
8.0	**ILLUMINATION:**	
i)	The unit should have an inbuilt electrical system to provide sufficient LED Light illumination to enable emergency operation during night hour operations. At least six flood lights (2 at front, 2 nos. at rear and 2 nos. near Middle of the unit) shall be provided in the unit for all round illumination.	
ii)	These lamps should have independent individual switches with the master switch located at the operation control panel. These lights should be mounted in such a way they can be rotated as per requirement.	
iii)	The lights should be protected with an outer detachable cover to prevent them from physical damage.	
9.0	**UNITIZATION AND COMPLETION:**	
	The above unit should also confirm the following specification: a) Installation of all electrical system. b) Installation of work lights. c) Installation of all pneumatic system. d) Installation of all hydraulic system.	
i)	The unit should be designed for stability and structural integrity at full loaded conditions.	
ii)	A console for display / control of job in auto/Manual mode. A remote console to be provided in existing data van with suitable inter connections and compatibility for the existing remote data acquisition system.	
iii)	Workmanship should be of the best quality & appearance. The equipment shall be fabricated in accordance with industry accepted standards. Following is a partial list of examples: 1. Flame cut edges shall be ground smooth. 2. Sharp corners and edges to which operators and mechanics are vulnerable shall be ground smooth. 3. Bolt holes for bolts shall be drilled (not torch cut) 4. Welds shall be of good quality and sufficient strength. 5. No sweated or brazed type hydraulic fittings will be used. 6. Where applicable use self-locking nut. 7. All hoses should be supported with support type clamps. 8. All hoses should be protected by well-secured rubber sleeves to prevent rubbing by frame etc. 9. All hosing and wiring will be labelled or tagged on both ends for easy identification. 10. All hosing or wiring in close proximity with hot surfaces (i.e. engine exhaust manifold) will be secured to a heat- shielded cable mount. 11. Hydraulic reservoirs should be completed with sight level gauge, clean outs, vent fill cap etc.	

Clause No.	Clause Description	Bidder's Response
	12. All hydraulic hoses, air hoses, electric lines etc. should be covered with protective sheathing where they come into contact with the hard surfaces that may cause premature wear due to chaffing or vibration. 13. Access steps with grab handles should be located at convenient locations around the unit. 14. Access ladder for radiator fill. 15. All hoses & wiring should be protected, easily accessible & symmetrically for easy identification & maintenance. 16. All reservoirs should be constructed of steel plate with sight level gauge, clean out, vent fill cap etc. 17. The complete testing of unit should be done at the manufacturer's factory & certificate should be produced. 18. Special instruments / attachments for setting user settable meter configuration parameters are to be provided. 19. GPS hardware	
iv)	Following hoses shall be provided: 1. 4" Soft (discharge) hoses of the specification as follows: Construction: Tube, Cover and 2 ply textile braid construction Material: Tube: Chemigum (special Buna-N) compound or Nitrile Cover: Special black neoprene (Wingprene) Reinforcement: Synthetic high tensile textile (Vytacord) Rating: Working pressure shall be 150psi Hose couplings:4" MXF hammer union of FIG 100/206/207crimped connections. 2. 4" Hard (suction) hoses of the specification as follows: Internal wall: Vinyl Nitrile rubber, black durable Inlays: Two layers of cord fabric spiraled and completely embedded steel spiral wire winding. Outside wall: Vinyl Nitrile Rubber, black resistant to weathering and age resistant. The outside diameter of the hose should uniform all along the length. Working pressure: 150 psi Hose couplings: 4" MXF hammer union of FIG 100 / 206/ 207 crimped connections. 3. Two steel toolboxes with locking facility for storage of special tools, operational accessories & miscellaneous fittings. 4. Fire extinguisher – ONE No.	
v)	The unit should be supplied with data diagnostic kit for diagnosing the fault code of deck engine. It shall preferably be a handheld reader having removable cartridges to support diagnosis of engine. If a laptop is provided for the above, it should include software, adopters and other accessories with licensed installation software.	
vi)	All steel & miscellaneous fittings to complete the unit	
vii)	This should include the following items: a) Installation of all other electrical systems (all electrical systems should be wired to a two pole two wire arrangement). b) Lights for twenty-four-hour operation (entire lighting system should be shipped packed to avoid breakage during shipment). c) Installation of all pneumatic systems.	

Clause No.	Clause Description	Bidder's Response
	d) Installation of all hydraulic systems. e) Pipe, hose brackets and racks. f) All steel and miscellaneous fittings to complete the unit. g) Steel toolbox containing: 1) Pipe Wrench 12" size 2 Nos. 2) Pipe Wrench 18" size 2 Nos. 3) Pipe Wrench 24" size 2 Nos. 4) Pipe Wrench 36" size 1 No. 5) Vice Grip Pliers 1 No. 6) Adjustable Wrench 6", 8", 10" 2 Nos. each 7) 5lb Sledge Hammer 2 Nos. 8) 10lb Sledge Hammer 2 Nos. 9) Combination Wrench Set (3/8" to 1 ¼") 2 Sets 10) Hack Saw with 10 Blades 2 Nos. 11) Circuit testing light 1 No. 12) Heavy duty ½" drive socket set (3/8" to 1 ¼") 1 Set 13) 10 piece Allen set Wrench 2 Sets 14) Plain Screw Driver 6" x 10" 2 Sets 15) Philips Screw Driver 6" x 10" 2 Sets 16) Strap type filter Wrench 1 No. 17) Fluke 85 or above digital multi-meter 1no 18) Tool box for hand carrying tools with Pad lock 2 Nos. h) One set of tools for operations, routine maintenance of unit. i) Complete set of Special tools/wrenches for pump serving maintenance.	
viii)	OEM part number must be given along with supplier's part number for each and every sub assemblies.	
ix)	Complete testing of the equipment at manufacturer's plant. Testing to be include all function tests and the operational testing of the unit. Copies of all relevant test documentation/certificates should be supplied	
x)	Supplied with each unit should be three (3) copies, in English, of a complete operating, maintenance (including sub-assemblies, instrument sensors, wiring diagrams etc) (Note: OEM part numbers will be supplied along with the Suppliers part numbers) with two (2) soft copies	
xi)	Special instruments / attachments for setting user settable meter configuration parameters are to be provided.	
xii)	All hosing and wiring will be labelled or tagged on both ends for easy identification. All hosing or wiring in close proximity with hot surfaces (i.e. deck engine exhaust manifold) will be secured to a heat- shielded cable mount	
xiii)	Layout diagram of the units should be sent to OIL only for information during the engineering stages. However, the supplier need not to take any approval from OIL to proceed unitization as per their schedule.	
10.0	**PAINTING:**	
i)	Unit to be sand blasted wherever required, one coat of primer followed by two coats of paint as specified below:	
ii)	Frame and Control console: RED-315	
iii)	Rim and Cab Top: Gold-44753	
iv)	Bumper: Gold & Red Stripes	

Clause No.	Clause Description	Bidder's Response
v)	OIL logo (to be provided at the time of unit manufacturer's)	
11.0	**SPARES:**	
11.1	**COMMISSIONING SPARES** The bidder has to supply all the spare parts free of cost, required for initial commissioning of the unit. All the consumables such as, lube oil, gear oil, hydraulic oil etc. except diesel fuel, required for commissioning should also be supplied.	
11.2	**OPERATIONAL CRITICAL SPARES:** Spares as given **under Table 1** in specified quantity shall be supplied along with each Blender Trailer. Specific Description, quantity of each & every spares shall be indicated in the technical bid and Make, Part Nos. etc. shall be submitted along with the supply. Bidders shall include the price of these spares in the priced bid format. The bidder shall confirm in the technical bid that all spares given under **Table-1** will be supplied with the unit.	
a.	**AUTOMOBILE (TRAILER) SPARE PARTS LIST:** All spare parts for the Automobile (Trailer) in specified quantity as mentioned in **Table-1 / Section A** shall be supplied along with the supply. Bidder / supplier to note that the spares mentioned in **Table-1 / Section (A)** to be supplied shall be additional to the items fitted in each unit. Specific description, Quantity etc. of each item shall clearly be indicated in the technical bid. Make, Part Nos. etc. of each item shall be submitted by the supplier along with the supply. In case any of the spares mentioned in **Table-1 / Section (A)** does not come as per bidder's design and the bidder has not quoted for such spares, the bidder shall clearly indicate the same. However, in case such spares are provided in the unit in future, the same shall be supplied by the bidder / supplier along with the supply without any extra cost to Oil India Limited (OIL).	
b.	**DECK ENGINE SPARES:** All spare parts for the DECK ENGINE in specified quantity as mentioned in **Table-1 / Section (B)** shall be supplied along with the supply. Bidder / supplier to note that the spares mentioned in **Table-1 / Section (B)** to be supplied shall be additional to the items fitted in each unit. Specific description, Quantity etc. of each item shall clearly be indicated in the technical bid. Make, Part Nos. etc. of each item shall be submitted by the supplier along with the supply. In case any of the spares mentioned in **Table-1 / Section (B)** does not come as per bidder's design and the bidder has not quoted for such spares, the bidder shall clearly indicate the same. However, in case such spares are	

Clause No.	Clause Description	Bidder's Response
	provided in the unit in future, the same shall be supplied by the bidder / supplier along with the supply without any extra cost to Oil India Limited (OIL).	
c.	**PUMP & OTHER SPARES:** All spare parts for the pump in specified quantity as mentioned in **Table-1 / Section (C)** shall be supplied along with the supply. Bidder / supplier to note that the spares mentioned in **Table-1 / Section (C)** to be supplied shall be additional to the items fitted in each unit. Specific description, Quantity etc. of each item shall clearly be indicated in the technical bid. Make, Part Nos. etc. of each item shall be submitted by the supplier along with the supply. In case any of the spares mentioned in **Table-1 / Section (C)** does not come as per bidder's design and the bidder has not quoted for such spares, the bidder shall clearly indicate the same. However, in case such spares are provided in the unit in future, the same shall be supplied by the bidder / supplier along with the supply without any extra cost to Oil India Limited (OIL).	
d.	**INSTRUMENTATION & CONTROL SYSTEM:** All spare parts for the instrumentation & control system in specified quantity as mentioned in **Table-1 / Section (D)** shall be supplied along with the supply. Bidder / supplier to note that the spares mentioned in **Table-1 / Section (D)** to be supplied shall be additional to the items fitted in each unit. Specific description, Quantity etc. of each item shall clearly be indicated in the technical bid. Make, Part Nos. etc. of each item shall be submitted by the supplier along with the supply. In case any of the spares mentioned in **Table-1 / Section (D)** does not come as per bidder's design and the bidder has not quoted for such spares, the bidder shall clearly indicate the same. However, in case such spares are provided in the unit in future, the same shall be supplied by the bidder / supplier along with the supply without any extra cost to Oil India Limited (OIL).	
11.3	**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 without price of each item. Annual consumption of each spare should be furnished. The bidder should 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 and e-mail id of OEM for all items of the whole unit. The bidder has to submit a complete spare parts list for the whole unit subgrouping major component in the following format as shown with example:	

<table>
<tr><th>Clause No.</th><th>Clause Description</th><th>Bidder's Response</th></tr>
<tr><td></td><td>
<table>
<tr><th>Name of the component /Sub com.</th><th>Description of the item</th><th>Part no./ID no. of item</th><th>Frequency of replacement (in Hours / Day)</th><th>Make</th></tr>
<tr><td></td><td></td><td></td><td></td><td></td></tr>
</table>
</td><td></td></tr>
<tr><td>11.4</td><td>OTHER ACCESSORIES:

OTHER ACCESSORIES as given below in TABLE-2 in specified quantity shall be supplied along with each unit.</td><td></td></tr>
<tr><td>12.0</td><td>UNDERTAKING:</td><td></td></tr>
<tr><td>a.</td><td>The bidders must submit a written undertaking (along with the technical bid) that they, themselves or through other sources, would be able to supply all the requisite spares (including bought out items, if any) & consumables and provide the maintenance services of their offered unit in OIL's operational areas for a minimum period of fifteen (15) years from the Certified date of completion of successful field commissioning of the unit.

The cost of such spares, consumables & maintenance services which may be utilized by Oil India Limited in future (beyond Warranty period and O&M Period) shall be extra and SHALL NOT BE considered by the bidder in their quoted prices in this tender.

Spares & repair services during Warranty period & warranty extension period (if any) for the item(s) under Warranty claim (if any) of the unit(s) shall be in the scope of the successful bidder (supplier).</td><td></td></tr>
<tr><td>13.0</td><td>TECHNICAL MANUALS, CATALOGUES AND CERTIFICATION FOR OPERATION AND MAINTENANCE OF THE UNIT:

The following Manuals & Catalogues (in English language) shall be supplied along with the Trailer Blender unit. Manuals/ Part Catalogues provided shall be Custom Illustrated Manuals/Catalogues for the vehicle and equipment only, not a general Composite Manual/Catalogue.

The manuals supplied should be specific to the make / model of the equipment / part / components supplied in the Trailer Blender unit. In case a comprehensive OEM catalogue is supplied of the equipment / part / components, then the respective make / model of the equipment / part / components supplied in the Trailer Blender unit should be clearly marked / identified.

The bidder/supplier has to exhibit the Hard copy / soft copy of Parts Catalogue and Maintenance / Service Manual of Trailer Blender unit to the Pre despatch Inspection Team of Oil India Limited and handover soft copies to the Pre Despatch Inspection team of Oil India Ltd. The Hard copy of the Parts Catalogue and Maintenance / Service Manual of Trailer Blender unit may be submitted to Oil India Ltd along with the supply. The bidder has to submit a declaration along with the bid in this regard as per Annexure A1.

Bidder to confirm that the following will be provided along with supply:</td><td></td></tr>
</table>

Clause No.	Clause Description	Bidder's Response
1.	Preferably, 01 (One) set of Spare Parts Catalogue with Part Numbers and Workshop & Service Manual for all components / systems of Trailer like Trailer Axles, Brake System, Trailer Suspension, Electrical & Pneumatic Systems etc. All the manuals & catalogues shall contain only those components/systems that have been used in the unit i.e. the same must be CUSTOM ILLUSTRATED MANUALS/ CATALOGUES ONLY – not the generalized ones. The Spare Parts Catalogue with Part Numbers and Workshop & Service Manual shall be provided by the supplier in any one of the following forms: (a) Hard copy format (i.e. in printed form) OR (b) Soft copy format (i.e. in USB drive) The bidder/supplier has to exhibit the Hard copy / soft copy of Parts Catalogue and Maintenance / Service Manual of Blender Trailer to the Pre despatch Inspection Team of Oil India Limited and handover soft copies to the Pre Despatch Inspection team of Oil India Ltd. The Hard copy of the Parts Catalogue and Maintenance / Service Manual of Blender Trailer may be submitted to Oil India Ltd along with the supply. The bidder has to submit a declaration along with the bid in this regard as per Annexure A1.	
2.	03 (Three) sets of Operational manuals of the unit with categorical steps to operate the unit by an operator along with the functionality for each control switches, etc. and the operating range of the control parameters to be provided.	
3.	Supplier to supply 03 (Three) Sets of OEM's operation, maintenance and overhauling manuals of supplied models of Deck Engine, Pumps and all other sub-assemblies and their corresponding Spare part catalogue.	
4.	03 (Three) sets of the following schematics, layout drawings not limited to i. Equipment layout ii. Process flow drawing iii. Electrical, pneumatic and hydraulic schematic for operator panel are to be provided. iv. Control Panel wiring diagram, Termination panel details, Panel BOM with name of OEM & their part numbers.	
5.	The layout diagram of each system must enlist the components in it along with technical detail (Nomenclature).	
6.	All the components should also have nameplate embossed indicating original equipment manufacturer of these components, Make / Model their Part No., Sl No. and possible details as per industry standards. Wherever the mounting of the nameplate is not possible such detail must be made on layout sheet of the system in which the component is installed.	
7.	The O&M manuals and the spare part lists (three sets) to be provided in hard copy as well as in a soft copy. This is not required for components pertaining to Automobile (i.e. Trailer) portion.	
8.	Lubrication and Fluids: Lubrication fluids chart (permanent attached to Unit) should be provided listing fluids, lubricants and filter types which are	

Clause No.	Clause Description	Bidder's Response
	required by the Equipment. Fluids should be identified by generic name (i.e., hydraulic oil) near the fill port for each fluid. The lettering should be in English, and colour should be black on a white or stainless-steel background. This is not required for components pertaining to Automobile (i.e. Trailer) portion.	
9.	Control Panel drawings with complete/ comprehensive Bill of Materials (BOM) with name of OEM & their part numbers.	
10.	Instrumentation wiring diagrams with end-to-end termination details.	
11.	The necessary licensed software in original packages along with user software backups are also to be supplied.	
NOTE	**COMMISSIONING OF THE UNIT SHALL NOT BE CONSIDERED AS COMPLETE UNTIL & UNLESS ALL ABOVE PRINTED MANUALS / CATALOGUES ARE SUPPLIED** Soft copies of documents shall be acceptable for components pertaining to Automobile (i.e. Trailer) portion.	**To check the applicability of this clause**
14.0	**Document(s) to be submitted along with the supply of each unit for government Registration etc.:** Following documents shall be submitted by the supplier along with the supply as mentioned hereunder:	
1.	Invoice(s) in the name of Oil India Limited, Duliajan, Assam-786602 in original. Notwithstanding any clause mentioned elsewhere in the NIT/tender, the Invoice for each of the complete unit shall be submitted in 02 (two) parts separately as under for registration purpose: i. Invoice for the Blender Trailer unit with all items, components, machineries, equipment, tools, etc. fitted permanently on the Trailer unit. ii. Invoice for items, spares, accessories etc. supplied separately along with the complete unit. **Note:** Trailer Chassis Number shall be mentioned in invoice(s) against above Sl. No. (i).	
2.	Sale Certificate for Trailer of Blender unit (Form-21) in original. The documents shall be in the name of Oil India Limited, Duliajan, Assam-786602, sample format as per Motor Vehicle Act, 1988 & Central Motor Vehicle Rules, 1989 of India provided.	
3.	Road-Worthiness Certificate for Compliance to Emission and Noise Standards for Trailer of Blender unit [Form-22, Form-22A (Part I), Form-22A (Part II)] in original.	

Clause No.	Clause Description	Bidder's Response
	The documents shall be in the name of Oil India Limited, Duliajan, Assam-786602, sample format as per Motor Vehicle Act, 1988 & Central Motor Vehicle Rules, 1989 of India provided.	
4.	Certificate of Origin of the Blender Trailer unit.	
5.	Pencil print of Vehicle Identification Number (VIN) i.e., Chassis Number of Trailer of the Blender unit.	
6.	Certificate for the Trailer of the Blender unit in original from Trailer manufacturer. Amongst others, the certificate shall contain following information: (i) Make & Model of Trailer. (ii) Vehicle Identification Number (VIN) i.e. Chassis Number of the Trailer. (iii) Month & Year of Manufacture of the Trailer.	
7.	Type Approval Certificate of Trailer of Blender unit as per Clause No. 2.12.	
8.	Technical drawing of the Blender Unit with equipment permanently mounted on it as well as Trailer along with Tractor (i.e. Tractor Trailer combination in coupled condition) indicating the Centre of Gravity, length, width, height, angle of approach, angle of departure etc.	
15.0	**HOMOLOGATION, UPLOADING OF VEHICLE DATABASE IN VAHAN / PARIVAHAN PORTAL, REGISTRATION OF THE TRAILER, PRINTING OF HSRP (High Security Registration Plate) , UPLOADING OF LID OF HSRP IN APPROPRIATE PORTAL** The bidder shall categorically confirm their compliance of the following clauses in the technical bid:	
a.	**In case the Trailer is manufactured outside India.** The vehicle details of Trailer in relevant VAHAN / Homologation / Parivahan portal of Ministry of Road Transport & Highways (MoRTH), Government of India shall be dealt by the bidder as per the applicable guidelines of Ministry of Road Transport & Highways (MoRTH) / Director General of Foreign Trade, Government of India at the time of supply. Homologation and uploading of vehicle data (i.e. Make, Model, Chassis Number) in VAHAN / PARIVAHAN portal by providing the requisite documents is under the scope of the successful bidder. **Temporary Registration (if required) and Permanent Registration in local RTO (Regional Transport Office) of the Govt of Assam is under the scope of successful bidder**. The documents pertaining to Oil India Ltd shall only be provided by Oil India Limited. All other documents/ certificates pertaining to the vehicle shall be provided / submitted by the bidder. The cost of permanent registration in the form of Registration fee and initial Road tax to the Government of Assam shall be borne by the successful bidder. However, this cost will be reimbursed to the bidder on submission of Government Receipt as proof.	
b.	**In case the Trailer is manufactured in India** The bidder (supplier) shall be responsible and ensure that the vehicle details of Trailer are available in the relevant VAHAN / Parivahan portal of Ministry of Road Transport & Highways (MoRTH), Government of India in accordance with Motor Vehicle Act, 1988 & Central Motors Vehicles Rules, 1989 of India prior to delivery of the unit(s) to Oil India Limited.	

Clause No.	Clause Description	Bidder's Response
	If the vehicle details are not available in VAHAN portal, it shall be the responsibility of the bidder to upload the same in VAHAN portal. Then the supplier shall arrange for temporary registration (if required) and **Permanent Registration in local RTO (Regional Transport Office) of the Govt of Assam**. The documents pertaining to Oil India Ltd shall only be provided by Oil India Limited. All other documents/ certificates pertaining to the vehicle shall be provided / submitted by the bidder. The cost of permanent registration in the form of Registration fee and initial Road tax to the Government of Assam shall be borne by the successful bidder. However, this cost will be reimbursed to the bidder on submission of Government Receipt as proof.	
15.1	The Blender Trailer has to be registered separately. Combined registration of Blender Trailer with any of the Tractor shall not be accepted.	
15.2	Cost of Registration is **not to be considered** by the bidder while quoting their prices against this tender.	
16.0	**HIGH SECURITY REGISTRATION PLATE (HSRP):** On receipt of the government Registration Number, the supplier (successful bidder) shall supply the High Security Registration Plate (HSRP) through the Original Equipment Manufacturers of motor vehicle / dealer / any one of the agencies authorised by the Government of India / Assam to issue the High Security Registration Plate (HSRP) of each units. The supplier shall ensure to upload the HSRP details in relevant (FTA / HSRP) portal enabling the DTO / Oil India Ltd to issue download permanent Registration Certificate for the vehicle(s) as required for road drive of the vehicle. The cost of High Security Registration Plate (HSRP) shall be borne by the supplier (successful bidder). Bidder / supplier shall also ensure adherence to any subsequent revisions to the referred requirements that may be issued in future by Ministry of Road Transport & Highways (MoRTH), Government of India.	
17.0	**DEVIATIONS FROM THE SPECIFICATIONS:** The bidder shall enclose comprehensive list of intended deviations from the technical specifications clearly highlighting the reasons thereof, if any, sufficiently prior to Bid closing date & time for Tender amendment, etc. But OIL reserves the right for acceptance or rejection of the deviation(s).	
18.0	**BID SUBMISSION & DOCUMENTATIONS:** Bidders should submit their bids in the above tabular form mentioning their offered specification, Make, Model, necessary data, submitted/not submitted/ complied/not complied etc. as applicable to all the NIT terms and conditions including submitting the documents, leaflets as specified. Other details, if any, the bidder may mention the same by adding additional row(s)/separate sheet as the case may be. Bidder's response to all NIT stipulations should 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 acceptable. 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.	

Clause No.	Clause Description	Bidder's Response
18.1	**Following documents shall be submitted along with technical bid for evaluation –**	
1.	Technical leaflets with detailed specifications, Make & Model of Trailer unit, Trailer axle, Trailer suspension, brake, different equipment of Blender etc. as per respective individual tender clauses.	
2.	GA (General Arrangement) drawing of the Blender Trailer. The GA drawing shall have mention of major dimensions of Blender Trailer (like length, height, width, etc.); estimated loading on individual axles of Trailer (when combined with offered Trailer unit); show the position of all major components & their mounting.	
3.	Undertaking(s) for supply of spares and service as per clauses mentioned elsewhere in the tender document.	
4.	Specific description, quantity etc. of each and every spares (for bid evaluation) as detailed in the Operational Critical Spares List provided in **clause 11.2 and clause 11.4 above** & Table-1 and Table- 2 below.	
5.	List of Recommended Spares in clause **11.3 above.**	
6.	Checklist as per enclosed format shall be furnished along with the bid.	
7.	Any other document as applicable against clauses of this tender document.	

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TABLE-1: Ref. Clause No. 11.2 OPERATIONAL CRITICAL SPARES:

SECTION (A): AUTOMOBILE SPARE PARTS LIST:

Total no. of Trailer Blender units: 01 (one) no.

AUTOMOBILE SPARE PARTS LIST for TRAILER

Sl. No.	Item Description	Qty. for 01 No. unit
A	B	C
A.	**TRAILER AXLE:**	
1.	Wheel Stud with Nuts (Right Side) (Each set shall comprise of all the studs & nuts for one wheel)	02 Sets.
2.	Wheel Stud with Nuts (Left Side) (Each set shall comprise of all the studs & nuts for one wheel)	02 Sets.
3.	Wheel Hub Bearing (Right Side)	06 Nos.
4.	Wheel Hub Bearing (Left Side)	06 Nos.
5.	Wheel Rim (Right Side)	03 Nos.
6.	Wheel Rim (Left Side)	03 Nos.
7a.	In case of Tube type Tyres: Tyre with Tube	03 Nos.
7b.	In case of Tubeless type Tyres: Tubeless Tyre	03 Nos.
B.	**TRAILER BRAKES:**	
1.	Brake Servo Assembly - Trailer Wheel	04 Nos.
2.	Brake Shoe Assembly - Trailer Wheel	16 Nos.

SECTION (B): DECK ENGINE:

Sl. No.	Item Description	Qty. for 01 No. unit
A	B	C
1.	Fuel Filter Element	05 Sets.
2.	Water Separator Filter Element	05 Nos.
3.	Engine Oil Filter Element -	05 Set.
4.	Air Filter Element -	05 Nos.
5.	Fan Belt/ Alternator Belt/ Compressor Belt	02 Sets.
6.	Water Pump Repair Kit	01 Set.
7.	Radiator Water Hose	03 nos.
8.	Fuel Injector set	01 Set
9.	Fuel Pump Assembly	01 No.
10.	Fuel Pump Repair Kit	01 Set
11.	Lube oil pump and distribution system	01 Set
12.	Air cleaners & Air dryer assembly	01 Set
13.	Engine Electric Starter Assembly	01 No.
14.	Battery Charging Alternator Assembly	01 No.
15.	Air Compressor Assembly	01 No.

SECTION (C): PUMP & OTHER SPARES LIST:

Sl. No.	Item Description	Qty.	Bidder's Response
A	B	C	
1.	**Centrifugal Pump (12x12x15) repair kit containing the following:**		
i.	Casing	01 No.	
ii.	Impeller	01 No.	
iii.	Shaft	01 No.	
iv.	Shaft Sleeve	01 No.	
v.	Mechanical seal	03 Nos.	
vi.	Bearing outboard	01 No..	
vii.	Bearing inboard	01 No.	
2.	**Centrifugal Pump (12x14x22) repair kit containing the following:**		
i.	Casing	01 No.	
ii.	Impeller	01 No.	
iii.	Shaft	01 No.	
iv.	Shaft Sleeve	01 No.	
v.	Mechanical seal	03 Nos.	
vi.	Bearing outboard	01 No..	
vii.	Bearing inboard	01 No.	
3.	**DRY CHEMICAL ADDITIVE SYSTEM:**		
i.	System 1: 0 to 30 lpm	01 No.	
ii.	System 2: 30 to 100 lpm	01 No.	
4.	**LIQUID ADDITIVE SYSTEM:**		
i.	Pump 1: Flow Rate- 05 to 30 LPM	01 No.	
ii.	Pump 2- Flow Rate- 20 to 40 LPM	01 No.	
iii.	Pump 3- Flow Rate- 30 to 75 LPM	01 No.	
iv.	Pump 4- Flow Rate- 50 to 130 LPM	01 No.	
5.	**OTHERS:**		
i.	Butterfly Valve of each size	**6 Nos. EACH**	
ii.	Victaulic Coupling Gasket each size	4 **Nos. EACH**	
iii.	Pneumatic Actuator for small size Butterfly valves	2 Nos.	
iv.	Pneumatic Actuator for large size Butterfly valves	2 Nos.	
6.	**PNEUMATIC SYSTEM:**		
i.	Water Separator 5µm	1 No.	
ii.	Air Filter 0,01µm	6 Nos.	
iii.	Mist Oiler, 5mg/m³, 1/2"	1 No.	
iv.	Pressure control Valve, max. 16bar	1 No.	
v.	Desiccant Container	1 No.	
vi.	Filter element 5µm	3 Nos.	
vii.	Filter element 0,01µm	3 Nos.	
7.	**HYDRAULIC SYSTEM:**		
i.	Hydraulic Tank Suction filter element	16 Nos.	
ii.	Hydraulic Tank Return filter element	4 Nos.	
iii.	High Pressure filter element	4 Nos.	
iv.	Sand Augers hydraulic motor	3 Nos.	
v.	C-Pump hydraulic motor	2 Nos.	
vi.	Dry Chemical hydraulic motor	4 Nos.	
vii.	Liquid Chemical Hydraulic motor	2 Nos.	

viii.	Axial Piston Hydraulic Double Pump	1 No.	
ix.	Applicable Activation module (one of each type, maximum 5 in total)	5 Nos.	

SECTION (D): INSTRUMENTATION & CONTROL SYSTEM SPARES LIST:

Sl. No.	**Item Description**	**Qty.**	**Bidder's Response**
A	**B**	**C**	
1.	All Temperature Sensors	2 each type.	
2.	All Pressure Sensors	2 each type.	
3.	All Level Sensor	2 each type.	
4.	RPM Sensor	2 each type	
5.	All Pressure Gauges	1 each type.	
6.	All Temperature Gauges	1 each type.	
7.	Solenoid Valves	1 each type.	
8.	Toggle Switch	05 Nos.	
9.	Emergency Shutdown Switch	02 Nos.	
10.	Controller	01 No.	

Note:

1. All spares in specified quantity as indicated above shall be supplied along with the supply of the units.

2. Specific description, Quantity etc. of each item shall clearly be indicated in the technical bid. Make, Part Nos. etc. of each item shall be submitted by the supplier along with the supply.

3. Bidder shall also quote separately (without prices) 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
4. If any spares mentioned in above Tables is / are not required, the bidder must mentioned that the spares do not require for the unit.

5. In case the multiple quantity of an item named above is used in the Automobile portion (i.e. Trailer) of the Blender Unit and the specifications of such item does not match with each other, then the supplier shall supply such item in a mixed manner comprising all the variants used in the Automobile portion (i.e. Trailer) of Blender Unit. The supplier shall first try to supply all the variants of such item preferably in equal/proportional quantity of each of the variant used in the Automobile portion (i.e. Trailer) of the Blender Unit as far as possible. However, the total quantity of such item to be supplied must not be less than the quantity mentioned in above.

6. In case the specifications of the item named above used in left & right side of the Axle System / Suspension System / Brake System of the Automobile portion (i.e. Trailer) of the Blender Unit does not match with each other of that particular system, the supplier shall first try to supply all the variants of such item preferably in equal/proportional quantity of each of the variant used in the Automobile portion (i.e. Trailer) of the Blender Unit as far as possible. However, the total quantity of such item to be supplied must not be less than the quantity mentioned in above.

TABLE-2: Ref. Clause No. 11.4 OTHER ACCESSORIES:

Sl. No.	Item Description	Quantity (No)	Bidder's Response
1	4" 10 ft. long hard hose suction with end connections (M x F) FIG 100 for suction	**8**	
2	4" 15 ft. long hard hose with end connections (M x F) FIG 100 for suction	8	
3	4" 20 ft. long hard hose with end connections (M x F) FIG 100 for suction	8	
4	4" 15 ft. long soft hose with end connections (M x F) FIG 100 for discharge	8	
5	4" 20 ft. long soft hose with end connections (M x F) FIG 100 for discharge	10	
6	4" 25 ft. long soft hose with end connections (M x F) FIG 100 for discharge	10	
7	4" FIG 100 'T' connection M x F x F	8	
8	4" 2 ft. long M x M FIG 100 change over	2	
9	4" 2 ft. long F x F FIG 100 change over	2	
10	4" FIG 100 Bend (900) M x F	2	
11	2" 25 ft. long hard hose with end connections (M x F) FIG 100 for discharge having working pressure rating of 15000 psi	2	
12	2" 25 ft. long hard hose with end connections (M x F) FIG 100 for discharge having working pressure rating of 15000 psi	2	
Note: Hose rack / racks should be provided on the blender for about 20 nos of 4" hoses.			

Annexure A1

Oil India Limited,
Duliajan, Assam, India

Sub: Undertaking / Declaration regarding Type Approval Certificate, Parts Catalogue, Maintenance / Service Manual of OIL's Inhouse Hydraulic Fracturing Fleet.

Ref: Tender No. for Supply of Hydraulic Fracturing Unit.

We M/s _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ do hereby declare that we shall produce the following at the time of Pre Despatch Inspection of Hydraulic Fracturing Fleet at our premise-

1) Type Approval Certificates (Hard copy) of-

a) Tractor / Prime Mover
b) Trailers of Frac Pumpers
c) Trailer of Blender Unit
d) Trailer of Hydration Unit
e) Trailer of Frac Data Van
f) Truck Chassis of Sand Dumper

Photocopies / Softcopies (scan copy) of the above Type Approval Certificates will be handed over to Pre Despatch Inspection Team of Oil India Ltd

2) **Hard copy / soft copy of Parts Catalogue and Maintenance / Service Manual of-**

a) Tractor / Prime Mover
b) Trailers of Frac Pumpers
c) Trailer of Blender Unit
d) Trailer of Hydration Unit
e) Trailer of Frac Data Van
f) Truck mounted Sand Dumper

Soft copies of the above will be handed over to Pre Despatch Inspection Team of Oil India Ltd

M/s _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
(Name of Bidder)

A. REF. CLAUSE NO. 18.0 / 2.
SAMPLE COPY OF FORM- 21 (as referred above)

Following is a sample copy of **FORM 21** of Indian Motor Vehicle Act only. The certificate shall contain following minimum information –

FORM 21
[See Rules 47 (a) and (d)]
SALE CERTIFICATE

(To be issued by manufacturer ~~or dealer or registered E-rickshaw or E-cart Association (in case of E-rickshaw or E-cart) 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 **OIL INDIA LIMITED** against Purchase Order No. .....

Name of the buyer **OIL INDIA LIMITED**
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 number ~~or motor number in case of Battery Operated vehicles~~	.....
5.	Engine ~~or Motor~~ Power	.....
6.	Cubic capacity	.....
7.	Fuel used	.....
8.	Number of cylinders	.....
9.	Month and year of manufacture	.....
10.	Seating capacity (including driver)	.....
11.	Unladen Weight	.....
12.	Maximum axle weight and number and description of tyres ~~(in case of transport vehicles)~~	.....
a.	Front axle	.....
b.	Rear axle	.....
c.	Any other axle	.....
d.	Tandem axle	.....
13.	Colour	.....
14.	Gross Vehicle Weight Rating	.....
15.	Type of body	.....
16.	Wheelbase	.....

(Signature of the manufacturer ~~or dealer or officer of Defence Department or registered E-rickshaw or E-cart Association~~)

*Strike out whichever is inapplicable.

B. REF. CLAUSE NO. 18.0 / 3.
SAMPLE COPY OF FORM- 22 (as referred above)

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

FORM-22
[See rules 47(1) (g)]
ROAD-WORTHINESS CERTIFICATE FOR
COMPLIANCE TO EMISSION AND NOISE STANDARDS
(To be issued by the manufacturer along with the vehicle)

It is certified that the following vehicle complies with the provisions of the Motor Vehicles Act, 1988 and rules made thereunder or international standard namely EEC / ECE Regulations:

1. Model/Commercial Name of the vehicle: .....
2. Chassis Number: .....
   [Example: Vehicle Identification Number (VIN)]
3. Engine ~~or Motor~~ Number: .....
4. Applicable Emission Norms: .....
5. Emission, Sound Level for Horn and Pass by noise values of the above vehicle model, obtained during Type Approval Testing as per Central Motor Vehicles Rules, 1989 or ECE/EEC Regulations are given below:

i. Type Approval Certificate No.: .....
ii. Type of Fuel: .....
iii. Emission values for vehicle: .....

TABLE
Positive Ignition Engine or Compression Ignition Engine Vehicle

Sr. No.	Pollutant (as applicable)	Units (as applicable)	Value (upto 3 Decimal places)
(1)	(2)	(3)	(4)
1.	Carbon Monoxide (CO)	mg/km or mg/kWh or g/kWh	
2.	Hydrocarbon (THC/HC)	mg/km or mg/kWh or g/kWh	
3.	Non-Methane Hydrocarbon (NMHC)	mg/km or mg/kWh or g/kWh	
4.	Oxides of Nitrogen (NOx)	mg/km or mg/kWh or g/kWh	
5a.	HC+NOx	mg/km or mg/kWh or g/kWh	
5b.	THC+NOx	mg/km or mg/kWh or g/kWh	
6.	Methane (CH4)	mg/kWh	
7.	Ammonia (NH3)	PPM	
8.	Mass of Particulate Matter (PM)	mg/km or mg/kWh or g/kWh	
9.	Number of Particles (PN)	Numbers/km or Numbers/kWh	

iv. Noise level (as applicable):

a. Horn (for all vehicles other than agricultural tractors and construction equipment vehicles) as installed on the vehicle: ..... dB (A); (upto 1 decimal place)

b. Pass by or Bystander's position: ..... dB(A)

~~c. Driver perceived or Operator's ear level (as applicable for agricultural tractors and construction equipment vehicles: ..... dB (A)~~

(Facsimile Signature of Manufacturer)

Note 1: This Form shall be issued with signature of the manufacturer duly printed in the Form itself by affixing facsimile signature in ink under the hand and seal, as applicable.

Note 2: In case of multiple combinations, values pertaining to any one test result in the test report to be provided. For V2, V3 cases- average value of the test result in the test report to be provided.

Note 3: While printing Form 22, the relevant pollutants in the table as applicable for the subject vehicles may only be listed.

C. REF. CLAUSE NO. 18.0 / 3.
SAMPLE COPY OF FORM 22-A

Following is a sample copy of **FORM 22-A (Part – I) & FORM 22-A (Part – II) of Indian Motor Vehicle Act** only. The certificate shall contain following minimum information. –

FORM 22-A
[See Rules 47 (g), 115, 124(2), 126-A and 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 the following vehicle complies with the provisions of the Motor Vehicles Act, 1988 and the rules made there under or international standard namely EEC / ECE Regulations, including the following mass emission norms:

1. Brand name of the vehicle : .....
2. Chassis number : .....
3. Engine number/~~Motor number (In case of battery operated vehicles)~~ : .....
4. Emission norms : .....

(Signature of 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.

FORM 22-A
[See Rules 47 (g), 115, 124(2), 126-A and 127]
INITIAL CERTIFICATE OF COMPLIANCE WITH POLLUTION STANDARDS, SAFETY STANDARDS OF COMPONENTS AND ROAD WORTHINESS
(FOR VEHICLES WHERE BODY IS FABRICATED SEPARATELY)
PART – II
(**TO BE ISSUED BY THE BODY BUILDER**)

Certified that body of the following vehicle has been fabricated by us and the same complies with the provisions of Motor Vehicles Act, 1988 and Rules made there under or international standard namely EEC / ECE Regulations:

1. Brand name of the vehicle : .....
2. Chassis number : .....
3. Engine number/~~Motor number (In case of battery operated vehicles)~~ : .....
4. ~~Bus Body Builder Accreditation Certificate Number~~ : .....

(Signature of 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.

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SPECIFICATION FOR SKID MOUNTED FRAC CHEMICAL LAB UNIT, QTY = 1 NO.

Clause No	Description	Bidder's Response
1.	**General** i) The Mobile Hydraulic Fracturing Field Chemical Laboratory & Workshop (hereinafter called Lab Unit) shall be a self-contained, transportable, containerized laboratory mounted on skid. ii) The Lab Unit will support on-site quality control and validation of fracturing fluids and associated chemicals during field operations. iii) Skid mounted unit is a stand-alone facility for testing all the parameters required for execution of FRAC JOB. All of this is done from a clean, weatherproof workspace with accommodations for comforts for oil/gas company personnel, upgraded latest state of the art technology, complete with all the safety features. iv) The unit shall have two compartments with interconnection. One compartment shall be for Chemical lab and the other one shall be the workshop. v) Shall have robust QA/QC. vi) This unit will be provided with essential computer hardware/software tools for onboard testing and analysing of chemical parameters and allowing the equipment to monitor, display, record and analyse the chemical data required for the FRAC job. vii) The unit shall be designed with suitable Noise, Vibration and Harshness (NVH) considerations considering the delicate instrumentation and electronics inside the unit. ISO-certified container with climate controlled with HVAC, Fireproof & chemical-resistant lining with explosion-proof lighting. viii) The unit will be capable of operating during prolonged periods in climatic conditions with an ambient temperature range of 0 °C to +50° C and for use in the rough, windy, humid (Relative humidity in ranges of 40-98%) and dusty environments found in the Indian oilfields. ix) This unit shall also include the stimulation laboratory which will aid the on-site quality control of various stimulation formulations/ processes. x) The components to be incorporated into this model should be so arranged to provide reasonable access for maintenance & ease of operation. Storage device for related accessories & commonly used auxiliary equipment should be provided. xi) This laboratory shall support the following: 1. API RP 39 / ISO 13503 (Frac fluid testing). 2. Hydration testing of guar / polymer. 3. Crosslinker delay & stability test. 4. Breaker efficiency & gel residue analysis. 5. Water analysis (pH, TDS, hardness, iron, bacteria). 6. Compatibility testing of produced water & chemicals.	

	xii) The physical dimension of the unit should not exceed the following: • Length: 20 ft • Width : 8 ft • Height : 8 ft	
2.	**CHEMICAL LAB CUM WORKSHOP**	
2.1	**CHEMICAL LAB COMPERTMENT:** 1) Chemical Lab shall have an aluminium alloy external surface and be fully insulated, it should contain lockable compartments to carry tools, and other miscellaneous devices and fittings etc. This compartment shall be fitted with air conditioner system designed as per the requirement. 2) This cabin shall include the following equipment with the tentative specification: **1) Fluid & Chemical Testing:** i) Rheometer (HPHT): 0–200°C, 0–20,000 psi. a. Type: High Pressure High Temperature (HPHT) Rotational Rheometer b. Temperature Range: Ambient to 200 °C (±1 °C) c. Pressure Range: Up to 20,000 psi d. Shear Rate Range: 0.01 to 1,000 s^{-1} e. Viscosity Range: 1 – 1,000,000 cP f. Measuring Geometry: Couette / concentric cylinder g. **Applications:** Crosslinked gel testing, breaker efficiency, fluid stability under simulated downhole conditions. ii) FANN 50 Viscometer. a. Type: Rotational Viscometer (digital, LV or RV series) b. Temperature Range: Ambient to 90 °C (with temperature bath) c. Speed Range: 0.1 – 200 rpm d. Viscosity Range: 1 – 2,000,000 cP e. Accuracy: ±1% full scale f. **Applications:** Routine viscosity checks on hydrated gels, polymers, slickwater. iii) Waring Blender (2 L) for guar hydration tests. a. Capacity: 2 L jar (polycarbonate / stainless steel) b. Speed: 10,000 – 20,000 rpm c. Controls: 2-speed with pulse function d. Safety: Overload protection e. Applications: Hydration testing of guar and polymer powders, dispersion of additives. iv) Heated Water Bath (ambient to 100°C). a. Capacity: 10 – 20 L b. Temperature Range: Ambient +5 °C to 100 °C (±0.5 °C) c. Control: Digital PID controller with timer	

d. **Applications:** Controlled heating of breaker test cells, gel samples, surfactant solutions.

v) Hot Plate with Magnetic Stirrer (**2 nos**).

a. Surface Material: Ceramic-coated or stainless steel
b. Temperature Range: Ambient to 350 °C
c. Stirring Speed: 100 – 1500 rpm
d. Load Capacity: ≥ 2 L beaker
e. **Applications:** Mixing of chemicals, polymer hydration, surfactant evaluation.

vi) Breaker Test Cells (pressurized, 6-set).

a. Capacity: 500 ml per cell (set of 6 cells minimum)
b. Pressure Rating: Up to 1,000 psi
c. Temperature Range: Ambient to 150 °C
d. Construction: Stainless steel with sealing caps
e. **Applications:** Testing oxidative / enzymatic breaker efficiency under simulated conditions.

2) Water & Brine Analysis:

i) pH Meter (digital, bench-top).

a. Range: 0 – 14 pH
b. Resolution: 0.01 pH
c. Accuracy: ±0.01 pH
d. Temperature Compensation: Automatic (ATC)
e. Applications: Monitoring optimal crosslinker & breaker performance, water testing.

ii) Conductivity/TDS Meter.

a. Range: 0 – 200 mS/cm
b. Resolution: 0.1 µS/cm
c. TDS Conversion: Built-in (0 – 100 g/L)
d. Applications: Brine salinity, scaling risk, water quality validation.

iii) Spectrophotometer (UV-Vis) for iron, sulphates, chemical concentration.

a. Wavelength Range: 200 – 800 nm
b. Spectral Bandwidth: 2 nm
c. Accuracy: ±0.5 nm
d. Display: Digital / PC-based software
e. Applications: Measurement of iron content, sulfate, surfactant concentration, scale inhibitor dosage.

iv) Turbidity Meter.

a. Range: 0 – 1000 NTU
b. Resolution: 0.01 NTU
c. Accuracy: ±2% of reading
d. Applications: Clarity check of frac fluids, polymer residue monitoring, water quality control.

v) Water Hardness & Alkalinity Test Kits.

	vi) Bacteria Test Kit (field ATP or dip-slide). **3) General Laboratory equipment:** i) Analytical Balance (0.1 mg accuracy). a. Capacity: 200 g minimum b. Readability: 0.1 mg c. Repeatability: ±0.1 mg d. Applications: Polymer, chemical additive, breaker weighing. ii) Top-loading Balance (up to 10 kg). a. Capacity: 10 kg b. Readability: 0.1 g c. Applications: Bulk chemical preparation, hydration tests. iii) Oven (drying, up to 200°C). a. Temperature Range: Ambient to 200 °C b. Chamber Volume: 50 – 100 L c. Control: Digital with over-temp protection d. Applications: Drying of glassware, polymer residue tests. iv) Refrigerator/Freezer (0 to -20°C). a. Range: 0 to –20 °C b. Capacity: 100 – 200 L c. Applications: Storage of temperature-sensitive surfactants, biocides, enzymes. v) Glassware Set (graduated cylinders, flasks, beakers, pipettes). vi) Sand sieves (standard kit plus key screens for different sizes of sieves for the proppants to be pumped) vii) Fume Hood (ducted). a. Type: Chemical-resistant with exhaust blower b. Airflow: 0.5 m/s minimum face velocity c. Size: 4–6 ft width d. Construction: FRP/SS interior, acid/solvent resistant e. Applications: Safe handling of volatile solvents, acids, oxidizers, biocides. 3) Lab cabin is also fully equipped with Personal Protective Equipment for mixing and testing of hazardous chemicals. 4) **Desktop Computer**: One no. suitable desktop computer shall be installed in the lab compartment for recording and report generation. The computer shall have latest MS operating system.	
2.2	**WORKSHOP COMPERTMENT:** One workshop shall be manufactured for carrying out various repair jobs to be carried out during the frac operation. The workshop shall have all the necessary vices, tools and tackles etc.	

2.3	**Safety Systems & Utilities:** The compartment shall have the provision for the following: i) Eye wash station. ii) Fire extinguishers iii) PPE cabinets iv) Water: 500 L tank + DI system. v) Compressed Air/Nitrogen system. vi) Fire suppression and spill containment. vii) One sink of sufficient capacity to be installed. viii) Provision shall be made for running water inside the chemical lab compartment with leak proof plumbing.	
2.4	**ILLUMINATIONS & OTHER ACCESSORIES** i) The compartments shall be sufficiently illuminated from inside. ii) Four nos. of LED lights shall be fixed outside on the four corners of the unit.	
2.5	**POWER SUPPLY SYSTEM** i) The unit electrical system will utilize a 230 Volt, 50 Hz. AC power source that will originate from Generator set or an external power source. Integrated into the "power supply" system is an AC/DC power distribution system to ensure the correct distribution of the required power to the particular hardware components that are installed on this unit. ii) Also supplied and installed on the unit and connected to the electrical system will be internal/external power supply switch, and an external power plug and 50 meters of power cable with male/female connectors for use with a customer supplied 230 VAC 50 Hz power supply. iii) Shall install necessary clean power and dirty power outlets at counter space height and at other location for providing power to the instruments/computer/other electrical items as required.	
3.	**SPARE PARTS FOR THE LAB EQUIPMENT.** Necessary spare for the lab equipment installed in this unit shall be supplied.	
4.	**UNITIZATION AND COMPLETION** i) The above unit should also confirm the following specification: Installation of all electrical system. Installation of work lights ii) The unit should be designed for stability and structural integrity at full loaded conditions. iii) All the instruments shall be mounted on countertop. iv) Shall provide necessary & comfortable seating arrangement for the Lab personnel.	

	v) **All testing equipment shall be properly mounted on the bench, so that during transportation the equipment shall not be displaced from its place and shall not be damaged.** vi) All steel & miscellaneous fittings to complete the unit. vii) Lockable doors and sliding windows shall be provided. viii) This should include the following items: a) Installation of all other electrical systems (all electrical systems should be wired to a two pole two wire arrangement) b) Lights for twenty four hour operation (entire lighting system should be shipped packed to avoid breakage during shipment) c) Pipe, hose brackets and racks d) All steel and miscellaneous fittings to complete the unit ix) Access steps/ladders with grab handles will be installed at convenient locations around the unit. x) OEM part number must be given along with supplier's part number for each and every sub assemblies. xi) 3 sets of catalogue for all installed components of the units along with the make and Model Part No. and Sl no. of assemblies , sub – assemblies. xii) Complete testing of the equipment at manufacturer's plant. Testing to be include all function tests and the operational testing of the unit. Copies of all relevant test documentation/certificates should be supplied. xiii) Supplied with each unit should be three (3) copies, in English, of a complete operating, maintenance (including sub-assemblies, instrument sensors, wiring diagrams etc) (Note: OEM part numbers will be supplied along with the Suppliers part numbers) with two (2) soft copies xiv) Workmanship should be of the best quality & appearance. The equipment shall be fabricated in accordance with industry accepted standards. Following is a partial list of examples: a) Flame cut edges shall be ground smooth b) Sharp corners and edges to which operators and mechanics are vulnerable shall be ground smooth c) Bolt holes for bolts shall be drilled (not torch cut) d) Welds shall be of good quality and sufficient strength e) No sweated or brazed type hydraulic fittings will be used f) Where applicable use self locking nut.	
5.	**Manual & P&ID** i) Operational manual of the unit with categorical steps to operate the unit by an operator along with the functionality for each control	

	switches, etc. and the operating range of the control parameters to be provided. ii) Supplier to supply OEM's operation, iii) The layout diagram of each system must enlist the components in it along with technical detail (Nomenclature). iv) All the components should also have nameplate embossed indicating original equipment manufacturer of these components, Make / Model their Part No., SL No. and possible details as per industry standards. Wherever the mounting of the nameplate is not possible such detail must be made on layout sheet of the system in which the component is installed. v) The O& M manuals and the spare part lists (three sets) to be provided in hard copy as well as in a soft copy. vi) The layout diagram of the total unit depicting the dimensions (length, breadth & height) and weight and the suppliers certificate mentioning all these details to be submitted. vii) All manuals should be in ENGLISH language only both in Hard copy and soft copy. viii) The manuals supplied should specific to the make / model of the equipment / part / components supplied in the units. In case a comprehensive OEM catalogue is supplied of the equipment / part / components, then the respective make / model of the equipment / part / components supplied in the units should be clearly marked / identified.	
6.	**Bidder shall provide the critical spares along with this supply**	

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ANNEXURE-I

SPECIFICATION OF FRAC MANIFOLD SYSTEM, QTY = 1 NO.

Clause	Description	Bidder's response
1.0	**GENERAL:**	
	The FRAC MANIFOLD SYSTEM Shall be skid mounted, robust, 15,000 PSI working pressure and complying to API 6A. It Shall be a modular frac manifold system to connect with TEN (10) nos. of FRAC PUMPERS and ONE (01) BLENDER UNITS. Shall have lifting lugs in suitable position for lifting and placement of the manifold.	
2.0	**SUCTION MANIFOLD:**	
	Shall have two separate suction manifolds. For Blender Connection: TEN (10) 4" FIG 207 For FRAC PUMPER Connection: TEN (10) 4" FIG 206 Shall be completed with required manual/pneumatic operated valves and fittings.	
3.0	**DISCHARGE MANIFOLD:**	
	SIZE: 02 (TWO) nos. 4" NB. The Discharge manifold working pressure: 15,000 psi. The Discharge manifold flow rate: 80 BPM FRAC PUMPER Connection: TEN (10) 3" FIG 1502. Well Connection: Four (04), 3" FIG 1502. Shall be completed with required manual/pneumatic operated valves and fittings.	
4.0	**LOOSE EQUIPMENT:**	
	Shall provide necessary loose equipment as required.	
Note:	**The Connection for both discharge and suction manifold shall confirm to the connections mentioned in the Specifications of the FRAC PUMPER & BLENDER units and necessary changes may be done accordingly.**	

SPECIFICATION OF X MAS TREE ISOLATION TOOL, QTY = 2 NOS.

Clause	Description	Bidder's Response
1.0	**GENERAL:**	
	The tree saver or well head isolation tool is to be designed to protect the wellhead against high pressures and abrasive fluids during pressure pumping operations. With pressure ratings up to 15,000 psi it could eliminate the need to upgrade the wellhead to account from formation breakdown pressures during the completion. The use of the isolation tool enhances safety at the well site, extends the life of wellhead equipment and eliminates damage to valves. Deployment of the isolation tool shall be streamlined and flexible. The wellhead isolation tool should have the ability to be installed with the well subdued or under pressure without the aid of a workover rig.	
2.0	**FEATURES:**	
2.1	i. Isolation of the production tree and wellhead from treatment pressures and abrasive and corrosive fluids. ii. Working pressure rating of 15,000 psi. iii. Secondary pressure containment during fracturing. iv. Sealing in tubing sizes ranging from 2⅞ to 4½. v. Dual-barrier seal during stimulation, with flexibility to add a third barrier. vi. Ability to reenergize mandrel packing. vii. Goat head designed to mitigate erosion. viii. Mechanical lockdown functionality by locking the plates, adding a secondary pressure containment during fracturing jobs. ix. Stroke length of minimum 1.90m – 2.50m to suitably isolate 5,000 psi & 10,000 psi rated API 6A X-Mas tree. (X-Mas tree detailed drawing with WF Spool & Hanger Shall be shared). x. High-strength, erosion-resistant mandrel assembly. xi. Redundant cup seals. xii. Insertion and retraction pressure of 10,000-psi maximum wellbore pressure.	
2.2	The isolation tool shall be easy to install and remove with minimal manpower intervention. The lower flanged connection shall be compatible with either of the following/ with or without suitable adapter flange. a) 2.9/16" 10,000 psi with BX-153 RTJ b) 2.9/16" 5,000 psi with RX-27 RTJ The tree should be fitted with suitable frac head with 05 (Five) nos. Weco Female 1502 3" 15,000 psi rated connection to receive frac/ treatment fluid from high pressure discharge pump. Suitable remote actuated plug valves of adequate bore size shall be provided to isolate well head pressures from prior to insertion and after removal of isolation mandrel assembly from and out of well, with remote actuated bleed valves for pressure equalizing/ balancing. All associated high-pressure hoses, accessories to be provided along with the isolation tool. Hydraulic Power Unit with rated pressure and control system for operation of the isolation tool/ tree saver should be provided as a unitized package Detailed drawing, flow control, hydraulic drawing, P&ID shall be provided with the isolation tool.	

	Adequate amount of spares (Cups, packing elements, nose, cup holder, gauge ring, etc) to be part of the package.	
3.0	**SERVICE & MAINTENANCE GURANTEE**	
3.1	**Supplier to provide a 3 Year warranty against remedy of defects and spares supply for 10 Years**	

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ANNEXURE-K

TECHNICAL SPECIFICATION FOR SKID MOUNTED CENTRIFUGAL PUMP, QTY = 2 NOS

Clause No.	Clause Description	Bidder's Response
1.	**GENERAL:** Skid mounted portable type Diesel Engine driven Centrifugal pump set complete with coupling, Foot Valve with strainer, Flexible Hose for suction & delivery end with ANSI B 150 class end connections, Tail Pieces, Hose clamps/Flanges, Bends with Socket, Pressure Gauges etc. complete set mounted on robust constructed self-loading OIL FIELD Skid for inter location movement. Suitable to work in the following climatic conditions: o Altitude: 120 meter above mean sea level (msl) o Temperature range: 0°C - 50°C o Average Rainfall: 350 cm o Relative humidity: 98% at 35° C.	
2.	**PUMP:** 1. **Type:** 10 x 12 Centrifugal Pump conforming to API Standard 610 / IS 15657 / ISO 13709(Pump Design) and IS 9137 Hydraulic Parameters of the Pump / other applicable IS Codes. Bidders to confirm the same categorically in their bid. 2. **Make:** Mission/MCM or equivalent 3. **Service:** Continuous **NOTE:** #Continuous duty means pump having service operation on full load for a period of 8 hours to 24 hours per day as per Hydraulic Institute Standard application. 4. **Capacity:** **a)** **D**ischarge: 4000 GMP (Minimum). **b)** Head: 60 m **c)** Suction: Flooded 5. **Suction condition:** Negative, 4 Mtrs (pump need to take a suction from a minimum depth of 4 Mtrs) 6. **Liquid to be handled:** Pump should be able to handle following fluids Salinity/Fresh water etc.	
3.	**Suction & discharge Manifold:** The unit shall have a suction and discharge manifold of the following configuration: **Suction Side:** Shall have six (06) inlet point with 6" butterfly valve with 6" Fig 100/ 206/ 207 female connections with cap and security chain. The suction manifold shall be connected to the suction end of the pump. **Discharge Side:** Shall have five (05) inlet point with 4" butterfly valve with 4" Fig 100/ 206/ 207 female connections with cap and security chain. The discharge manifold shall be connected to the discharge end of the pump.	
4.	**Prime mover (Diesel engine):** 1. The prime mover engine should be a four stroke, diesel engine rated for continuous power. The HP of the engine should be such that, the engine is capable of developing a Net BHP suitable for meeting the specified pump ratings. The minimum engine HP should be 15% higher than the maximum pump HP rating. Necessary power calculation to be forwarded along with the bid. 2. Make: **Caterpillar/Cummins**	

3. The engine shall conform to ISO:3046/BS5514/IS 10000 specifications and shall be rated for continuous, power with an overload power rating of 110% of the continuous power corresponding to engine application, for a period of 1hr. within a period of 12 hrs of operation. The engine governing should be in accordance with Class A-2 governing specified in BS: 5514/IS 10,000.
4. The engine should comprise of the following sub systems:
   a) Cooling System: The cooling system of the engine should be air-cooled comprising of all necessary assembly.
   b) Air Intake System: The air intake system of the engine should comprise a heavy duty oil bath type/ dry type air cleaner and an air intake manifold.
   c) Starting System: The staring system of the engine should be a 12 volt electric starting system comprising of a Maintenance free battery of reputed make, battery leads, engine mounted battery charging alternator and a starting ring fitted to the engine flywheel . Battery shall be maintenance free, lead acid type mounted near the alternator. Battery should be housed in a hard rubber or polypropylene case with provision for venting. Required cables should be furnished and sized to satisfy circuit requirements.
   d) Exhaust System: The exhaust system should comprise of an air cooled exhaust manifold, stainless steel exhaust flexible connection, exhaust silencer, and spark arrestor and piping connections.
   e) Fuel System: The fuel system should comprise of mechanical governor, fuel injectors, fuel pump, fuel filter assembly, fuel lines and a fuel tank having storage capacity to meet the fuel requirement of 12 hours of full load operation.
   f) Lubricating System: The lubricating system should comprise of gear driven lubricating oil pump, lubricating oil filter with a replaceable filter element, lubricating oil pan, oil level dipstick and crankcase breather.
   g) Instrument Panel: The instrument panel should include the following:
      i. Lubricating oil pressure gauge
      ii. Starting switch
      iii. Digital / mechanical tachometer and Hour Meter
      iv. Ammeter
      v. Engine #Low lube oil pressure# indication display red lamp
   h) Engine Safety Controls: Safety shut off/ trip system for tripping the engine in the event of
      i. Low lubricating oil pressure
      ii. Engine over speed
      iii. Engine High temperature
   i) Other Features:
      i. Flywheel
      ii. Lifting eyes
      iii. Guards over belt drive (blower fan drive, charging alternator drive pulley).
      iv. Standard painting
      v. SAE standard rotation

   j) General Notes:
      i. The engine shall conform to ISO 3046/BS 5514/ IS 1000 specifications and shall be rated for continuous power with an over load power rating of 110% of the continuous power corresponding to engine application, for a period of 1 hr. within a period of 12 hrs. of operation.
      ii. The engine governing should be in accordance with Class A-2 governing specified in BS: 5514/ IS 10000.
      iii. The bidder should submit the following information along with relevant performance rating curves and engine product catalogues.
         a. Gross HP developed at rated RPM
         b. Deduction for blower fan & charging alternator
         c. Net HP developed at rated RPM

	d. Fuel consumption at rated power as well as 110%, 75% and 50% of rated load.	
5.	**Drive Arrangement:** The Engine will bear a Twin Disc friction type clutch PTO. (The design calculation to be forwarded along with the offer for evaluation at OILS's end.) The drive arrangement will involve flow of prime mover power through a flywheel mounted clutch PTO to the input shaft of the pump. The couplings to be used (preferably meta-flex type) in the drive arrangement must be specified by the bidder in the offer along with necessary design data for evaluation at OIL's end. All the drive couplings must be suitably protected by non # sparking type coupling guards, with a facility for inspection of the condition of the couplings without removing the whole coupling guard.	
6.	**SKID**: Pump & Prime Mover are to be mounted on an oil field type 2 runner skid. The size of the skid should be rigid to withstand vibration of the unit and large enough to provide for sufficient working space around the pump set. The skid floor should be covered with antiskid checkered plate. The skid should have lifting lugs at appropriate position for ease of lifting. The skid shall also have forklift slots and protective frame for transportation.	
7.	**OPERATIONAL CRITICAL SPARES:** Spares as given **under Table 1** in specified quantity shall be supplied along with each unit. Specific Description, quantity of each & every spares shall be indicated in the technical bid and Make, Part Nos. etc. shall be submitted along with the supply. Bidders shall include the price of these spares in the priced bid format. The bidder shall confirm in the technical bid that all spares given under **Table-1** will be supplied with the unit.	
8.	**Tools:** 1(One) Set each of Special tools for maintenance of each pump should be included in the offer. Details of such tools should be mentioned separately in the offer.	
9.	**Certificates and Documents to be submitted:** The following documents must be forwarded along with the supply of equipment: a) Certified test results b) Certificate of hydrostatic testing c) Manufacturers certificate of authenticity d) Certificate of test / conformance of pump etc. e) Operation and Maintenance manuals, parts list manuals and Troubleshooting Charts/Manuals of pump, engine, Gear Box, and all other accessory equipment - One set each per pump set. **Note:** Special Tools, Catalogues, Manuals, Spare Parts should be separately packed in water proof pouch/box clearly indicating the OIL's Purchase order no. and the description on the package.	
10.	**Data Sheet:** **Bidder shall provide the data sheet with the unit.** **A. DATA SHEET (PUMP)** MAKE MODEL PUMP TYPE SERVICE LIQUID HANDLED OFFERED RATED SPEED	

	OFFERED RATED PRESSURE DISCHARGE VOLUME@OFFERED SPEED PUMP SUCTION AND DISCHARGE END APPROX HP REQUIREMENT AS PER NIT PARAMETERS EFFICIENCY OF THE PUMP NPSH REQUIRED PUMPING TEMPERATURE LUBRICATION COUPLING TYPE MATERIAL OF CONSTRUCTION PUMP BODY, CASING IMPELLER SHAFT SHAFT SLEEVE **B. DATA SHEET (ENGINE)** MAKE MODEL TYPE RATED SPEED REFERENCE OF STANDARDS ENGINE NET HP METHOD OF STARTING METHOD OF COOLING	
11.	**PAINTING:** Surface preparation through shot blasting. Minimum two coats of Zinc rich metal primer shall be applied. Minimum two final coats of suitable paint shall be applied. Note: Surface primer, paints shall be suitable for corrosive handling fluids etc. used in oil & gas industry.	
12.	**UNDERTAKING**: The bidders must submit a written undertaking (along with the technical bid) that they, themselves or through other sources, would be able to supply all the requisite spares (including bought out items, if any) & consumables and provide the maintenance services of their offered unit in OIL's operational areas for a minimum period of fifteen (15) years from the Certified date of completion of successful field commissioning of the unit. The cost of such spares, consumables & maintenance services which may be utilized by Oil India Limited in future **(beyond Warranty period and O&M Period**) shall be extra and **SHALL NOT BE** considered by the bidder in their quoted prices in this tender. Spares & repair services during Warranty period & warranty extension period (if any) for the item(s) under Warranty claim (if any) of the unit(s) shall be in the scope of the successful bidder (supplier).	

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TABLE-1: Ref. Clause No. 6. OPERATIONAL CRITICAL SPARES:

Quantity of Pumps: 02 Nos.

Sl. No.	Item Description	Qty.	Bidder's Response
A	**B**	**C**	
1.	**Centrifugal Pump (10x12) repair kit containing the following:**		
i.	Casing	02 No.	
ii.	Impeller	02 No.	
iii.	Shaft	02 No.	
iv.	Shaft Sleeve	02 No.	
v.	Mechanical seal	06 Nos.	
vi.	Bearing outboard	02 No..	
vii.	Bearing inboard	02 No.	

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SPECIFICATIONS OF SKID MOUNTED TRIPLEX PUMP, QTY = 1 NO.

Technical Specifications

Clause No.	Clause Description	Bidder's Response
1.0	i) The Skid mounted Triplex Pumping unit should be suitable for deployment in oil and gas fields across India. ii) Suitable to work in the following climatic conditions: o Altitude: 120 meter above mean sea level (msl) o Temperature range: 0°C - 50°C o Average Rainfall: 350 cm o Relative humidity: 98% at 35° C. ii) Application: Typical application includes hydraulic fracturing, acid fracturing & high-pressure pumping etc. of water, high viscous fluid, and brine etc. iii) The triplex pump shall be used as Annulus Pumping. The Pumping unit with sufficient HP to meet the requirement to carry out pumping and maintaining pressure in the annulus during fracturing job. iv) All components and systems should be assembled in a manner so as to provide ease of maintenance.	
2.0	**EQUIPMENT DETAILS:**	
3.0	**PUMPING SYSTEM:**	
3.1	**HIGH PRESSURE PUMP:**	
i)	One (01) number. TRIPLEX PUMP with replaceable plungers, valves and stuffing box packing having at least Maximum Pressure of 10,000 psi. **INPUT POWER: 120-300 BHP**	
ii)	Plunger size of range 1.0" to 2.75" diameter with Working pressure of 10000 psi or higher to be fitted.	
iii)	Make & Model of Pump: Note: The pump shall be any one of following make: 1) Gardner Denver 2) National Oilwell Varco 3) SPM 4) MSI 5) Weatherford	
iv)	Duty type: "Intermittent Service"	
v)	The pump will be operated at different speeds to have a wide range of discharge volume against various pressure rating. The pump should be equipped with internal reduction gear or chain drive arrangement with proper reduction ratio to those discharge condition.	
vi)	A suitable size removable type suction cavitation eliminator / pulsation dampener to be fitted to the suction manifold. The cavitation eliminator / pulsation dampener should also include ½" bleed line which includes a ball valve and pressure gauge.	
vii)	Additional fluid end: One no. fluid end of equal plunger size with suction manifold should also be supplied separately along with the unit. The fluid end should be fitted with all sub-assemblies like plunger, valves, valve seats etc. complete in all respect.	

Clause No.	Clause Description	Bidder's Response
viii)	The bidder has to furnish the performance curve of the pump with selected plunger along with data sheet & technical leaflet of the offered pump along with the bid. **The offered make and model of the pump & fluid ends along with the performance curve of the pump with selected plunger along with data sheet & technical leaflet to be provided along with the technical bid.**	
3.2	**PUMP LUBRICATION:**	
i)	For lubrication of plunger & packing, suitable lubricating system either of slow speed drip lubrication type (e.g. air over oil design) or provision for regular greasing along with required accessories.	
ii)	Power end should be pressure lubricated either by crank shaft driven lube pump or by hydraulically driven lube oil pump to ensure proper lubrication at slow speed of the pump. The power end lubrication system should include a lube oil pump, oil cooler, oil filter, oil temperature gauge, system relief valve and lube oil reservoir with the following accessories: • Suction strainer • Sight level glass • Filling port • Breather	
iii)	If a chain drive system is used, proper lubrication system has to be installed for the chain drive and the chain with the sprockets should be enclosed in leak-proof metal enclosure with provision for periodic inspection.	
3.3	**ENGINE:**	
i)	The engine shall be liquid cooled, turbo-charged diesel fuel (HSD) engine of make **Caterpillar/Cummins** developing required power at rated RPM suitable to drive TRIPLEX PUMP of range 120-300 BHP at rated RPM.	
ii)	**The offered engine shall be ZONE 2 COMPLIANCE, as the unit shall be used in ZONE-2 HAZARDOUS AREAS.**	
iii)	The offered engine shall comply with BS-VI/EURO-VI/TIER IV Final/equivalent or higher emission standard as applicable in the in India at the time of delivery of the unit. The engine should be vibration isolated from the trailer by means of suitable anti-vibration mounting.	
iv)	The rating should be in accordance with BS 5514-1:1987, or ISO 3046/1-1986 and duty should be suitable for PUMPING Operation: The engine will run in the following broad climatic conditions: i. Altitude – 150 meter above sea level (ASL) ii. Temperature range: 2 deg - 45 Deg C Max iii. Average Rainfall - 350cms iv. Relative humidity 95% at 35° C	
v)	The Engine exhaust is to be designed properly with manifold, suitable muffler, spark arrester, rain cap and flexible exhaust connection as per norms of Oil Field Operation. The exhaust pipe shall be suitably wrapped by insulated material for safety of operators. Both External type and Internal type Spark arrester are acceptable	
vi)	Suitable arrangement for keeping engine starting battery under locking arrangement and with safety cover from rain.	
vii)	The engine safety system should be equipped with the following:	

Clause No.	Clause Description	Bidder's Response
	i. Engine protection devices comply to Zone 2 requirement ii. Emergency shut off. iii. Automatic tripping of the engine with alarm for the following conditions: low lube oil pressure, high water temperature, over speed and high lube oil temperature. iv. There should be a master switch to isolate the battery from powering the engine when the unit is not operation to prevent drain out of the battery.	
viii)	All engine operations like Start/ Stop, Throttle control, Emergency stop etc. shall be performed from control cabin or from the Frac Control Center (datavan). Also, alternative arrangement should be made to perform the above operation from engine control panel.	
ix)	The engine shall be suitable to run throughout the entire operation of the fracturing along with all accessories as detailed elsewhere including lighting system of control panel and air supply wherever required.	
x)	All the engine performance parameters like lube oil pressure and temperature, water temperature, engine rpm etc. should be displayed in the control cabin of the unit and in the Frac Control Centre (datavan) along with additional gauges mounted near the engine for the parameters.	
xi)	Engine Starting System: Engine shall be equipped with Electric Starter and Charging Alternator System.	
xii)	Other engine accessories to be provided are: i. Charging Alternator. ii. Engine Electric starter. iii. Air cleaners & Air dryer assembly. iv. Fuel filtration system. v. Lube oil pump and distribution system. vi. Lube oil filters and oil pan sight gauge. vii. Fuel filters. Air compressor.	
xiii)	Bidder must forward following details of the unit along with their offer. i. Maximum Power Generated by Engine ii. Maximum Power Consumption by TRIPLEX Pump. iii. Maximum Power consumption in each Hydraulic Circuits. iv. Maximum Power Consumption of Auxiliary Equipment Maximum Power Generated by Engine shall be at least 10 % more that the total maximum power required for Unit Full load Operation.	
xiv)	**The offered make and model of the engine along with datasheets to be provided along with the technical bid.**	
3.4	**AUXILIARY SYSTEMS:**	
i)	Plunger lube system and pump brake system should be provided. In case pneumatic system is provided for the Plunger lube system and pump brake system, air compressor of sufficient capacity driven by the engine of the unit to meet the air requirement as per the design should be provided inclusive of air tank and dryer.	
ii)	12V and/or 24V electrical system	
iii)	Battery box (with battery disconnect switches) with 12V automotive type batteries of suitable capacity to meet the electrical requirement of control panel, engine ECM, work light, starting system of power pack.	

Clause No.	Clause Description	Bidder's Response
iv)	Engine driven Alternator of sufficient capacity for charging of battery bank of the unit.	
v)	Strobe light above triplex pumps to indicate run status of Triplex pump.	
3.5	**TRANSMISSION:**	
i)	One Allison/ Caterpillar/ Twin Disc power shift transmission should be attached to the engine and should drive the triplex pump through Dana/Spicer/Twin Disc heavy duty one piece drive shaft assembly. The transmission should have: 1) Net input HP: 120-300 BHP. 2) Max input speed : Matching with maximum engine RPM. 3) Torque convertor. 4) Transmission power shift. 5) DC electrically activated hydraulic shift assembly with lockup inhibitor or advanced electronic shift system as per design. 6) Lockup clutch. 7) Output shaft disc brake. 8) Transmission oil cooler. 9) Transmission oil pump. 10) The transmission should be so designed to ensure optimum rated performance of the Triplex pump. 11) Safety interlocks like overpressure tripping. 12) There should be smooth transmission while shifting gears and there should not be any down in discharge pump pressure while shifting to higher gears. **The offered make and model of the transmission along with datasheets to be provided along with the technical bid.**	
ii)	The engine/transmission should be vibration isolated from the trailer by means of anti-vibration mounts at rear and engine vibration trunnion mount at the front.	
iii)	The **drive line** should be utilized for connecting transmission to the Triplex pump. It should be a Dana/ Twin disc/Spicer that should not exceed the manufacturers' recommended maximum angle. The drive line should include a removable metal guard. A viscous torsional vibration dampener as per OEM design should be included and mounted between the universal joint drive shaft assembly and Triplex pump input flange to protect the engine and transmission from inherent vibrations created by the Triplex pump.	
3.6	**FUEL TANK FOR ENGINE:**	
i)	Suitable diesel tank with adequate capacity for 10 hours of continuous operation at peak load to be installed near the engine to provide sufficient suction to the engine fuel pump along with suitable strainer at the opening of the tank to prevent entry of foreign materials & locking arrangement shall be provided.	
ii)	Cleaning facility with suitable drain plug and locking arrangement for the tank shall be provided. Fuel level in the tank should be displayed in the instrument panel of the control cabin along with dip gauge facility.	

Clause No.	Clause Description	Bidder's Response
iii)	A hydraulically operated pump with filtration system should be provided for filling of diesel tank into Engine Tank from Barrel/drum.	
3.7	**HYDRAULIC TRANSMISSION:**	
i)	The first system should power the engine radiator fan motor and should incorporate a hydraulic pump system directly driven from the mounted engine.	
ii)	The second system should power the engine dual hydraulic starting system powered by the power pack.	
iii)	These hydraulic systems should incorporate all equipment such as hydraulic oil tank, suction filters, return filters, relief valves, control valves, coolers, breathers and troubleshooting connections.	
iv)	All variable displacement hydraulic pump and motor should be hydraulic displacement control type only.	
v)	All hydraulic direction control valve should have mechanical actuation system. In case of Pilot operated direction control valve, pilot signal should be hydraulic.	
vi)	Make of the hydraulic motors/ pumps shall be Sauer Danfoss / Sauer Bibus/ Sun strand / Parker / Denison / Rexroth / Linde / Vickers/ Eaton.	
vii)	Hydraulic oil cooler should be designed in such a way that the temperature of the hydraulic oil in the system does not exceed 70° C in extreme ambient temperature of 50° C.	
viii)	Hydraulic Hose Make: Parker / Gates / Eaton / Power Grip / Hansaflex	
ix)	Hydraulic Fitting: JIC (Imperial) or ERMETO (Metric)	
x)	All hydraulic filters used in the system should be of Donaldson/ Pall/Fleet guard/ Parker make.	
3.8	**MANIFOLD:**	
3.8.1	**SUCTION MANIFOLD:**	
i)	One 6" suction manifold to be fitted to the pump suction. The suction manifold shall able to take suction from at least two points having two nos. of 4" FIG 100 / 206/ 207 Male union connections to facilitate dual suction. Each connection should contain manually operated 4" butter fly valve.	
3.8.2	**DISCHARGE MANIFOLD:**	
i)	Discharge manifold shall to connected to the pump discharge and shall able to discharge fluid from two points having 2" FIG 1502 female flange with a 2" FIG 1502 plug valve and FIG 1502 blind.	
ii)	The Pressure Transducer (Viatran or equivalent) to be mounted directly on the pump through 2" FIG 1502 wing nut connection. All Treating iron should be of SPM/ FMC / MSI/ PARVEEN/ Alnas	
3.9	**Triplex Pump Skid:**	
i)	**Skid with lifting frame shall be in line with offshore crash skid with four lifting lugs.**	

Clause No.	Clause Description	Bidder's Response
Note for clause 3.0	**The bidder shall submit the Pumping network Schematic in the technical bid.**	
4.0	**CONTROL PANEL, INSTRUMENTATION & MONITORING SYSTEM AND ILLUMINATION:**	
4.1	**CONTROL PANEL & INSTRUMENTATION:**	
i)	Panel shall be weatherproof (IP-66) & above and shall have provision of front opening with proper side hinge & Locking System. The necessary hinge, screw, nuts& bolts used in the panel should be SS. There shall be proper illumination on the panel. Necessary power supply for the panel DC/AC, inverter/converter shall be mounted inside the panel or a suitable location near the panel with proper enclosure. All nuts, bolts, screws etc. used for mounting the panel and its modules shall be non-rusting type.	
ii)	The control panel shall be suitable for use in IEC Zone-2. All electronic/electrical instruments and equipment to be used in hazardous area shall fulfil the following: a. Item shall be of a type and specification conforming to the relevant standards as specified in the Regulation 107(2) of Oil Mines Regulation-2017 and complying the provisions therein. b. Bidder shall provide documents specifying the type, details of specification, reference of the particular standard, test criteria as per the standards and status of testing, place of testing, copies of test reports from Indian Government Laboratory or NABL accredited laboratory or IECEx accredited laboratory or ATEX notified body which is not a part of manufacture's facilities along with their offer against this tender. c. In this regard, Bidder may refer OMR-2017, Notification dated 18th October 2017, published in the Gazette of India, under Ministry of Labour and Employment, Directorate General of Mines Safety, published on 2nd November 2017. Copy of the gazette notification shall be attached for reference.	
iii)	The unit shall be operated, monitored & controlled from remote console which is placed inside the Frac Control Center (Datavan) a vantage point approximately 50 meters from the unit. A sleeve/ armor protected cable, suitably located on the side of the unit, shall be used for connection of the remote console.	
iv)	The AC operating power for the instruments shall be 230±10 V, 50 Hz and DC operating power for the instruments shall be 12/24V. Inverter shall be 12/24VDC to 230VAC.	
v)	The inside of the door should depict a permanent block/flow diagram of the operating process and list of start-up and shutdown procedure.	
vi)	The Mechanical gauges installed in the control panel shall be liquid filled type to dampen vibration when the unit is in operation. The control panel shall be installed with suitable anti vibration pads. The gauges to be provided shall be dual scale, English / Metric wherever possible.	

Clause No.	Clause Description	Bidder's Response
vii)	The following parameters are **mandatory** and shall be made available **both locally at the pump/Local Control unit** and **remotely on the HMI located in the Frac Control Centre (Datavan):** • **suction and discharge pressure of triplex pump** • **pump discharge flow rate** • **pump strokes per minute**	
viii)	All-important parameters of the unit shall be indicated in the control panel. The parameters/ controls that are required to be installed in this local gauge cabinet will be as follows: 1. Engine coolant temperature gauge. 2. Engine oil pressure gauge. 3. Engine RPM. 4. Hydraulic oil pressure gauge. 5. Hydraulic Temperature gauge. 6. Air Pressure gauge. 7. Transmission oil temperature gauge. 8. Gear shifter for transmission gear shifting with break option. 9. Triplex pump Lube oil temperature gauge. 10. Triplex pump power end lube oil pressure gauge along with one (01) no. additional pressure gauge for direct power end lube oil pressure. 11. Triplex pump discharge pressure. 12. Triplex pump flow rate meter. 13. Emergency shut down. 14. Normal shut down. 15. Lights on / off. 16. Transmission shifter. 17. Hooter/Alarm. 18. All controls of the pumps. 19. All controls of the valves. 20. Engine Throttle control **21. Any other control/switch required for operating the pumping equipment.** **22.** Connector provisions like: Diagnostic tool connector, remote connector for Frac Control Centre (datavan) based on TCP/IP or other equivalent Open industrial protocol network.	
ix)	A touch screen based Human Machine Interface (HMI) enabling to control the unit. The following shall be of plug and play type in a TCP/IP network, covering normal operational aspect along with safety interlocks. The unit can communicate in TCP/IP network in Daisy chain/ Star/ combination or ring topology.	
x)	The Multi pumper control system shall be provided with an additional manual All-Stop button connected to each pumper via hard wired connection from a control system enclosure installed in Frac Control Centre (datavan) to enable a hard-wired shutdown of all pumps in an emergency situation.	
xi)	**Normal operation includes:** 1. Engine normal start / stop. 2. Transmission gear shifting. 3. Engine smooth throttle control. 4. Neutral/brake control shifting. 5. Pump batch/group programming option. **Parameter display includes:** 1. Engine tachometer. 2. Triplex pump flow rate meter. 3. Triplex pump suction pressure (optional) and discharge pressure.	

Clause No.	Clause Description	Bidder's Response
	4. Rod loading in lbs (optional). 5. Pump stroke rpm (optional). **Safety interlocks and warning display includes:** 1. Discharge Pressure High Shut Down 2. Engine emergency shutdown. 3. Over pressure trip / idle. 4. Instant neutral option. 5. Engine Diagnostic information.Function and Warning indication. 6. Power on indication. 7. Transmission gear indication. 8. Transmission Converter mode indication. 9. Transmission Lockup mode indication. 10. Brake on indication. 11. Engine stop/check indication. 12. Low triplex pump lube oil pressure indication 13. High triplex pump lube oil temperature indication	
xii)	In addition to the above pump rate K factor and other meter configuration data shall be easily editable by a configuration page, to accommodate any change in sensor or device.	
xiii)	The system shall be properly and adequately labelled in English. This unit control HMI will be mounted inside the Frac Control Centre (Datavan), Control cabin rear window allowing the operator a full and clear view of pumping operations. Each section will be fully wired and connected to the relevant input connection plug on the Control Cabin External Data/Control Connection Panel through router or switch whichever required.	
4.2	**DATA ACQUISITION & CONTROL SYSTEM:**	
i)	The unit shall have an independent standalone portable Data Acquisition System (DAS) which shall be supplied with unit. It should be a portable, suitcase type weatherproof inclusive of all necessary electronic hardware, power supply modules, cables, software in a rugged industrial laptop required as per design. The rugged industrial laptop shall be with the latest configurations, along with all necessary accessories. The DAS should have the suitable interfacing module to capture all the parameters which shall be required for smooth and reliable operation of the unit. Necessary Pressure Sensors (Transducers), Temperature Sensors, Frequency Sensors, and Flowmeters shall be equipped in the Frac Pumping Unit to acquire all critical data such as suction and discharge pressure, pump discharge flow rate, pump strokes per minute, engine RPM, torque, power output, lube oil temperature and pressure, coolant temperature, and vibration/frequency signals, and shall transmit the same to the Data Acquisition and Control System for real-time monitoring, recording, analysis, and safe operation of the unit.	
ii)	The Data Acquisition System should have the following features: 1. Digitally record and store in real time the various data inputs. 2. Graphically displays for charting & trending in real time the various data inputs. 3. Output/ Print the recorded data as Excel data sheets, like .csv files in ASCII format and printable curve diagrams.	

Clause No.	Clause Description		Bidder's Response
	4. Software should have provision for configuring data transfer, i.e., ASCII data in serial data transmission and/or XML data in open protocol digital transmission mode, for interfacing with third party hydro fracturing simulation software. 5. Real time editing of displayed graphics and curves. 6. Adjustable time spans. 7. Append and pause files during operation. 8. User defined parameter trace selection in X-Axis. 9. The data channels should have facility to change scale range and calibration and should support mathematical functions like addition of discharge rates of pumps etc. 10. To restore the DAS system in the event of system crash, the DAS system should be supplied with all necessary licensed softwares with registration codes or should be supported by OEM for immediate restoration free of cost.		
iii)	**The Data Acquisition System (DAS) software shall be provided with a perpetual license, with lifetime validity and without any requirement for periodic renewal or additional licensing cost.**		
iv)	**The Data Acquisition System will feature data retrieval capability via laptop or pen drive or Ethernet.**		
5.0	**TREATING IRON**		
i)	All Treating iron should be of SPM/ FMC / MSI/ PARVEEN/ Alnas		
ii)	High pressure treating iron and low-pressure appliances should be mounted on the truck with a rack and hanger / tool box.		
iii)	The following items are to be supplied with this unit:		
	Items	**Quantity (Nos)**	
1.	Pressure relief valve pressure setting up to 15000 psi 2" FIG 502 M	**4**	
2.	Pressure relief valve pressure setting up to 15000 psi 3" FIG 1502 M	**4**	
3.	3" long sweep swivel joint style 10 with (M X F) FIG 1502 unions:	**12**	
4.	3" long sweep swivel joint style 50 with (M X F) FIG 1502 unions	**12**	
5.	2" long sweep swivel joint style 50 with (MXF) FIG 1502 unions	**12**	
6.	2" long sweep swivel joint style 10 with (MXF) FIG 1502 unions	**12**	
7.	3" stream flow check valves will be of clapper type standard flow without needle valve. The needle valve may be installed on blind FIG 1502 female (drilled for ½" needle valve) with one "T" connection (3" x 2") with 2" hammer valves FIG 1502	**6**	
8.	2" stream flow check valves will be of clapper type standard flow without needle valve. The needle valve may be installed on blind FIG 1502 female (drilled for ½" needle valve) with one "T" connection (3" x 2") with 2" hammer valves FIG 1502	**6**	

Clause No.	Clause Description		Bidder's Response
9.	3" plug valve c/w FIG 1502 w/p 15000psi	**12**	
10.	2" x 2" plug valve c/w Fig1502 MXF w/p 15000 psi	**12**	
11.	2" x 2" x 2" Y connection MxFxF FIG 1502	**8**	
12.	2" x 2" x 2" T connection MxFxF FIG 1502	**4**	
13.	3" x 3" x 2" T connection MxFxF FIG 1502	**4**	
6.0	**UNITIZATION AND COMPLETION:**		
i)	The unit should be supplied with data diagnostic kit for diagnosing the fault code of engine and transmission (if applicable). It shall preferably be a handheld reader having removable cartridges to support diagnosis of engine/ transmission. If a laptop is provided for the above, it should include software, adopters and other accessories with licensed installation software.		
ii)	The equipment described herein should be fabricated in accordance with industry accepted standards.		
iii)	Installation of all electrical systems. All wiring systems will be produced as moulded cables and recorded as system kits.		
iv)	Circuit protective device mechanism (Fuses) for local & remote-controlled panel. Resettable circuit breaker is also acceptable		
v)	The above unit should also confirm the following specification: a) Installation of all electrical system. b) Installation of work lights. c) Installation of all pneumatic system. d) Installation of all hydraulic system.		
vi)	The unit should be designed for stability and structural integrity at full loaded conditions.		
vii)	Workmanship should be of the best quality & appearance. The equipment shall be fabricated in accordance with industry accepted standards. Following is a partial list of examples: 1. Flame cut edges shall be ground smooth. 2. Sharp corners and edges to which operators and mechanics are vulnerable shall be ground smooth. 3. Bolt holes for bolts shall be drilled (not torch cut) 4. Welds shall be of good quality and sufficient strength. 5. No sweated or brazed type hydraulic fittings will be used. 6. Where applicable use self-locking nut. 7. All hoses should be supported with support type clamps. 8. All hoses should be protected by well-secured rubber sleeves to prevent rubbing by frame etc. 9. All hosing and wiring will be labelled or tagged on both ends for easy identification. 10. All hosing or wiring in close proximity with hot surfaces (i.e. engine exhaust manifold) will be secured to a heat- shielded cable mount. 11. Hydraulic reservoirs should be completed with sight level gauge, clean outs, vent fill cap etc.		

Clause No.	Clause Description	Bidder's Response
	12. All hydraulic hoses, air hoses, electric lines etc. should be covered with protective sheathing where they come into contact with the hard surfaces that may cause premature wear due to chaffing or vibration. 13. Access steps with grab handles should be located at convenient locations around the unit. 14. Access ladder for radiator fill. 15. All hoses & wiring should be protected, easily accessible & symmetrically for easy identification & maintenance. 16. All reservoirs should be constructed of steel plate with sight level gauge, clean out, vent fill cap etc. 17. The complete testing of unit should be done at the manufacturer's factory & certificate should be produced. 18. Special instruments / attachments for setting user settable meter configuration parameters are to be provided. 19. Gps hardware	
viii)	All steel & miscellaneous fittings to complete the unit	
ix)	This should include the following items: a) Installation of all pneumatic systems. b) Installation of all hydraulic systems. c) Pipe, hose brackets and racks. d) All steel and miscellaneous fittings to complete the unit. e) Steel toolbox containing: 1) Pipe Wrench 12" size 2 Nos. 2) Pipe Wrench 18" size 2 Nos. 3) Pipe Wrench 24" size 2 Nos. 4) Pipe Wrench 36" size 1 No. 5) Vice Grip Pliers 1 No. 6) Adjustable Wrench 6", 8", 10" 2 Nos. each 7) 5lb Sledge Hammer 2 Nos. 8) Combination Wrench Set (3/8" to 1 ¼") 2 Sets 9) Heavy duty ½" drive socket set (3/8" to 1 ¼") 1 Set 10) 10 piece Allen set Wrench 2 Sets 11) Plain Screw Driver 6" x 10" 2 Sets 12) Philips Screw Driver 6" x 10" 2 Sets 13) Strap type filter Wrench 1 No. 14) Tool box for hand carrying tools with Pad lock 2 Nos. f) One set of tools for operations, routine maintenance of unit. g) Complete set of Special tools/wrenches for pump serving maintenance.	
x)	A console for display / control of job in auto/Manual mode. A remote console to be provided in existing FRAC CONTROL CENTRE (datavan) with suitable inter connections and compatibility for the existing remote data acquisition system.	
xi)	OEM part number must be given along with supplier's part number for each and every sub assemblies.	
xii)	2 sets of catalogue to be supplied in both hard and soft copies for all installed components of the units along with the make and Model Part No. and Sl no. of assemblies , sub – assemblies.	
xiii)	Complete testing of the equipment at manufacturer's plant. Testing to be include all function tests and the operational testing of the unit. Copies of all relevant test documentation/certificates should be supplied	

Clause No.	Clause Description	Bidder's Response
xiv)	Supplied with each unit should be two (02) copies, in English, of a complete operating, maintenance (including sub-assemblies, instrument sensors, wiring diagrams etc) (Note: OEM part numbers will be supplied along with the Suppliers part numbers) with two (2) soft copies	
xv)	Special instruments / attachments for setting user settable meter configuration parameters are to be provided.	
xvi)	All hosing and wiring will be labelled or tagged on both ends for easy identification. All hosing or wiring in close proximity with hot surfaces (i.e. engine exhaust manifold) will be secured to a heat- shielded cable mount	
xvii)	Layout diagram of the units should be sent to OIL only for information during the engineering stages. However, the supplier need not to take any approval from OIL to proceed unitization as per their schedule.	
7.0	**PAINTING:**	
i)	Unit to be sand blasted wherever required, one coat of primer followed by two coats of paint as specified below:	
ii)	OIL logo (to be provided at the time of unit manufacturing)	
8.0	**SPARES:**	
8.1	**COMMISSIONING SPARES** The supplier has to supply all the spare parts free of cost, required for initial commissioning of the unit. All the consumables such as, lube oil, gear oil, hydraulic oil etc. except diesel fuel, required for commissioning should also be supplied.	
8.2	**OPERATIONAL CRITICAL SPARES:** Spares as given **under Table 1** in specified quantity shall be supplied along with each Frac Pumper Trailer. Specific Description, quantity of each & every spares shall be indicated in the technical bid and Make, Part Nos. etc. shall be submitted along with the supply. Bidders shall include the price of these spares in the priced bid format. The bidder shall confirm in the technical bid that all spares given under **Table-1** will be supplied with the unit.	
a.	**ENGINE SPARES:** All spare parts for the ENGINE in specified quantity as mentioned in **Table-1 / Section (A)** shall be supplied along with the supply. Bidder / supplier to note that the spares mentioned in **Table-1 / Section (A)** to be supplied shall be additional to the items fitted in each unit. Specific description, Quantity etc. of each item shall clearly be indicated in the technical bid. Make, Part Nos. etc. of each item shall be submitted by the supplier along with the supply.	

Clause No.	Clause Description	Bidder's Response
	In case any of the spares mentioned in **Table-1 / Section (A)** does not come as per bidder's design and the bidder has not quoted for such spares, the bidder shall clearly indicate the same. However, in case such spares are provided in the unit in future, the same shall be supplied by the bidder / supplier along with the supply without any extra cost to Oil India Limited (OIL).	
b.	**PUMP SPARES:** All spare parts for the pump in specified quantity as mentioned in **Table-1 / Section (B)** shall be supplied along with the supply. Bidder / supplier to note that the spares mentioned in **Table-1 / Section (B)** to be supplied shall be additional to the items fitted in each unit. Specific description, Quantity etc. of each item shall clearly be indicated in the technical bid. Make, Part Nos. etc. of each item shall be submitted by the supplier along with the supply. In case any of the spares mentioned in **Table-1 / Section (B)** does not come as per bidder's design and the bidder has not quoted for such spares, the bidder shall clearly indicate the same. However, in case such spares are provided in the unit in future, the same shall be supplied by the bidder / supplier along with the supply without any extra cost to Oil India Limited (OIL).	
c.	**INSTRUMENTATION & CONTROL SYSTEM:** All spare parts for the instrumentation & control system in specified quantity as mentioned in **Table-1 / Section (C)** shall be supplied along with the supply. Bidder / supplier to note that the spares mentioned in **Table-1 / Section (C)** to be supplied shall be additional to the items fitted in each unit. Specific description, Quantity etc. of each item shall clearly be indicated in the technical bid. Make, Part Nos. etc. of each item shall be submitted by the supplier along with the supply. In case any of the spares mentioned in **Table-1 / Section (C)** does not come as per bidder's design and the bidder has not quoted for such spares, the bidder shall clearly indicate the same. However, in case such spares are provided in the unit in future, the same shall be supplied by the bidder / supplier along with the supply without any extra cost to Oil India Limited (OIL).	
8.3	**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 without price of each item. Annual consumption of each spare should be furnished. The bidder should 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 and e-mail id of OEM for all items of the whole unit.	

<table>
<tr><th>Clause No.</th><th>Clause Description</th><th>Bidder's Response</th></tr>
<tr><td></td><td>The bidder has to submit a complete spare parts list for the whole unit subgrouping major component in the following format as shown with example:

<table>
<tr><td>Name of the component/Sub com.</td><td>Description of the item</td><td>Part no./ID no. of item</td><td>Frequency of replacement (in Hours / Day)</td><td>Make</td></tr>
<tr><td></td><td></td><td></td><td></td><td></td></tr>
</table>
</td><td></td></tr>
<tr><td>9.0</td><td>UNDERTAKING:</td><td></td></tr>
<tr><td>a.</td><td>The bidders must submit a written undertaking (along with the technical bid) that they, themselves or through other sources, would be able to supply all the requisite spares (including bought out items, if any) & consumables and provide the maintenance services of their offered unit in OIL's operational areas for a minimum period of fifteen (15) years from the Certified date of completion of successful field commissioning of the unit.

The cost of such spares, consumables & maintenance services which may be utilized by Oil India Limited in future (beyond Warranty period and O&M Period) shall be extra and SHALL NOT BE considered by the bidder in their quoted prices in this tender.

Spares & repair services during Warranty period & warranty extension period (if any) for the item(s) under Warranty claim (if any) of the unit(s) shall be in the scope of the successful bidder (supplier).</td><td></td></tr>
<tr><td>10.0</td><td>TECHNICAL MANUALS, CATALOGUES AND CERTIFICATION FOR OPERATION AND MAINTENANCE OF THE UNIT:

The following Manuals & Catalogues (in English language) shall be supplied along with the unit. Manuals/ Part Catalogues provided shall be Custom Illustrated Manuals/Catalogues for the vehicle and equipment only, not a general Composite Manual/Catalogue.

The manuals supplied should be specific to the make / model of the equipment / part / components supplied in unit. In case a comprehensive OEM catalogue is supplied of the equipment / part / components, then the respective make / model of the equipment / part / components supplied in the unit should be clearly marked / identified.

The bidder/supplier has to exhibit the Hard copy / soft copy of Parts Catalogue and Maintenance / Service Manual of unit to the Pre despatch Inspection Team of Oil India Limited and handover soft copies to the Pre Despatch Inspection team of Oil India Ltd. The Hard copy of the Parts Catalogue and Maintenance / Service Manual of unit may be submitted to Oil India Ltd along with the supply. The bidder has to submit a declaration along with the bid in this regard as per Annexure A1.

Bidder to confirm that the following will be provided along with supply:</td><td></td></tr>
</table>

Clause No.	Clause Description	Bidder's Response
1.	Preferably, 01 (One) set of Spare Parts Catalogue with Part Numbers and Workshop & Service Manual for all components / systems of unit etc. All the manuals & catalogues shall contain only those components/systems that have been used in the unit i.e. the same must be CUSTOM ILLUSTRATED MANUALS/ CATALOGUES ONLY – not the generalized ones. The Spare Parts Catalogue with Part Numbers and Workshop & Service Manual shall be provided by the supplier in any one of the following forms: (a) Hard copy format (i.e. in printed form) OR (b) Soft copy format (i.e. in USB drive) The bidder/supplier has to exhibit the Hard copy / soft copy of Parts Catalogue and Maintenance / Service Manual of the unit to the Pre despatch Inspection Team of Oil India Limited and handover soft copies to the Pre Despatch Inspection team of Oil India Ltd. The Hard copy of the Parts Catalogue and Maintenance / Service Manual of-Tractor / Prime Mover may be submitted to Oil India Ltd along with the supply. The bidder has to submit a declaration along with the bid in this regard as per Annexure A1.	
2.	02 (Two) sets of Operational manuals of the unit with categorical steps to operate the unit by an operator along with the functionality for each control switches, etc. and the operating range of the control parameters to be provided.	
3.	Supplier to supply 02 (Two) Sets of OEM's operation, maintenance and overhauling manuals of supplied models of Engine, Pumps and all other sub-assemblies and their corresponding Spare part catalogue.	
4.	02 (Two) sets of the following schematics, layout drawings not limited to i. Equipment layout ii. Process flow drawing iii. Electrical, pneumatic and hydraulic schematic for operator panel are to be provided. iv. Control Panel wiring diagram, Termination panel details, Panel BOM with name of OEM & their part numbers.	
5.	The layout diagram of each system must enlist the components in it along with technical detail (Nomenclature).	
6.	All the components should also have nameplate embossed indicating original equipment manufacturer of these components, Make / Model their Part No., Sl No. and possible details as per industry standards. Wherever the mounting of the nameplate is not possible such detail must be made on layout sheet of the system in which the component is installed.	
7.	The O&M manuals and the spare part lists (three sets) to be provided in hard copy as well as in a soft copy.	
8.	Lubrication and Fluids: Lubrication fluids chart (permanent attached to Unit) should be provided listing fluids, lubricants and filter types which are required by the Equipment. Fluids should be identified by generic name (i.e., hydraulic oil) near the fill port for each fluid. The lettering should be in English, and colour should be black on a white or stainless-steel background.	

Clause No.	Clause Description	Bidder's Response
9.	Control Panel drawings with complete/ comprehensive Bill of Materials (BOM) with name of OEM & their part numbers.	
10.	Instrumentation wiring diagrams with end-to-end termination details.	
11.	The necessary licensed software in original packages along with user software backups are also to be supplied.	
NOTE	**COMMISSIONING OF THE UNIT SHALL NOT BE CONSIDERED AS COMPLETE UNTIL & UNLESS ALL ABOVE PRINTED MANUALS / CATALOGUES ARE SUPPLIED** Soft copies of documents shall also be acceptable for components pertaining to Automobile (i.e. Trailer) portion.	
11.0	**DEVIATIONS FROM THE SPECIFICATIONS:** The bidder shall enclose comprehensive list of intended deviations from the technical specifications, clearly highlighting the reasons thereof, if any, sufficiently prior to Bid closing date & time for Tender amendment, etc. But OIL reserves the right for acceptance or rejection of the deviation(s).	
12.0	**BID SUBMISSION & DOCUMENTATIONS:** Bidders should submit their bids in the above tabular form mentioning their offered specification, Make, Model, necessary data, submitted/not submitted/ complied/not complied etc. as applicable to all the NIT terms and conditions including submitting the documents, leaflets as specified. Other details, if any, the bidder may mention the same by adding additional row(s)/separate sheet as the case may be. Bidder's response to all NIT stipulations should 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 acceptable. 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.	
12.1	**Following documents shall be submitted along with technical bid for evaluation –**	
1.	Technical leaflets with detailed specifications, of the unit etc. as per respective individual tender clauses.	
2.	GA (General Arrangement) drawing of the unit. The GA drawing shall have mention of major dimensions of unit (like length, height, width, etc.); estimated weight (when combined all the equipment/system on the unit); show the position of all major components & their mounting.	
3.	Undertaking(s) for supply of spares and service as per clauses mentioned elsewhere in the tender document.	
4.	Specific description, quantity etc. of each and every spares (for bid evaluation) as detailed in the Operational Critical Spares List provided in **clause 8.2 above** & Table-1 below.	

Clause No.	Clause Description	Bidder's Response
5.	List of Recommended Spares in clause **8.3 above.**	
6.	Checklist as per enclosed format shall be furnished along with the bid.	
7.	Any other document as applicable against clauses of this tender document.	

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TABLE-1: Ref. Clause No. 8.2 OPERATIONAL CRITICAL SPARES:

Total no. of Triplex Pump: 01 (ONE) no.

SECTION (A): ENGINE:

Sl. No.	Item Description	Qty. for 01 No. unit	Bidder's response
A	**B**	**C**	**D**
1.	Fuel Filter Element	10 Sets.	
2.	Water Separator Filter Element	10 Nos.	
3.	Engine Oil Filter Element -	10 set.	
4.	Air Filter Element -	10 Nos.	
5.	Fan Belt/ Alternator Belt/ Compressor Belt	02 Sets.	
6.	Water Pump Repair Kit	01 Set.	
7.	Radiator Water Hose	3 nos.	
8.	Fuel Injector set	01 Set	
9.	Fuel Pump Assembly	01 No.	
10.	Fuel Pump Repair Kit	01 Set	
11.	Lube oil pump and distribution system	01 Set	
12.	Air cleaners & Air dryer assembly	01 Set	
13.	Engine Electric Starter Assembly	01 No.	
14.	Battery Charging Alternator Assembly	01 No.	

SECTION (B): PUMP SPARES LIST:

Sl. No.	Item Description	Qty. for 01 No. unit	Bidder's response
A	**B**	**C**	**D**
1.	**Pump repair kit containing the following:**		
i.	Bearing oil seal	01 No. each for DE & NDE.	

ii.	Suction valve cover gasket	06 Nos. each.	
iii.	Discharge valve cover gasket	06 Nos. each.	
iv.	Packing, oil stop head	06 Sets.	
v.	Seal, suction to fluid cylinder	06 Sets.	
2.	Plunger	03 Nos.	
3.	Stuffing box	03 Nos.	
4.	Stuffing Box Seal	12 Nos.	
5.	**Complete Fluid Valve assy. including valve seat, spring etc.**		
i.	Suction valve assy.	06 Nos.	
ii.	Discharge valve assy	06 Nos.	
6.	**Fluid Valve with inserts as applicable,**		
i.	Suction	06 Nos.	
ii.	Discharge	06 Nos.	
7.	Complete packing assembly	12 Nos.	
8.	Complete Packing rings set	12 Sets	
9.	Valve spring, suction and discharge	03 Nos. each.	
10.	Pump lube oil filter	04 Nos.	
11.	Packing Nut	04 Nos.	
12.	Header Ring	03 Nos.	
13.	Pressure Ring	06 Nos.	
14.	Transmission oil filter	04 Nos.	
15.	Heavy duty Pressure gauge	02 Nos.	

SECTION (C): INSTRUMENTATION & CONTROL SYSTEM SPARES LIST:

Sl. No.	Item Description	Qty. for 01 No. unit	Bidder's response
A	**B**	**C**	**D**
1.	All Temperature Sensors	02 each type.	
2.	All Pressure Sensors	02 each type.	
3.	Flowmeter	02 Nos	
4.	SPM Sensor	01 Nos	
5.	Controller	01 No.	
6.	All Pressure Gauges	01 each type.	
7.	All Temperature Gauges	01 each type.	
8.	Inverter	01 No.	
9.	SMPS	01 No.	
10.	Solenoid Valves	01 each type.	
11.	Toggle Switch	5 Nos.	
12.	Emergency Shutdown Switch	02 Nos	

Note:

1. All spares in specified quantity as indicated above shall be supplied along with the supply of the units.

2. Specific description, Quantity etc. of each item shall clearly be indicated in the technical bid. Make, Part Nos. etc. of each item shall be submitted by the supplier along with the supply.

3. Bidder shall also quote separately (without prices) 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.
4. If any spares mentioned in above Tables is / are not required, the bidder must mentioned that the spares do not require for the unit.

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Annexure- A1

To-

Oil India Limited,
Duliajan, Assam, India

Sub: Undertaking / Declaration regarding Type Approval Certificate, Parts Catalogue, Maintenance / Service Manual of OIL's Inhouse Hydraulic Fracturing Fleet.
Ref: Tender No. for Supply of Hydraulic Fracturing Unit.

We M/s _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ do hereby declare that we shall produce the following at the time of Pre Despatch Inspection of Hydraulic Fracturing Fleet at our premise-

1) Type Approval Certificates (Hard copy) of-

a) Tractor / Prime Mover
b) Trailers of Frac Pumpers
c) Trailer of Blender Unit
d) Trailer of Hydration Unit
e) Trailer of Frac Data Van
f) Truck Chassis of Sand Dumper

Photocopies / Softcopies (scan copy) of the above Type Approval Certificates will be handed over to Pre Despatch Inspection Team of Oil India Ltd

2) **Hard copy / soft copy of Parts Catalogue and Maintenance / Service Manual of-**

a) Tractor / Prime Mover
b) Trailers of Frac Pumpers
c) Trailer of Blender Unit
d) Trailer of Hydration Unit
e) Trailer of Frac Data Van
f) Truck mounted Sand Dumper

Soft copies of the above will be handed over to Pre Despatch Inspection Team of Oil India Ltd

M/s _ _ _ _ __ _ _ _ __ _ _ __ _ _
(Name of Bidder)

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PART - B

Annexure - H		**AA: General Notes to Bidders** **BB: Additional Notes to Bidders**
Appendix - A1		**Public Procurement (Preference To Make In India) order (PPP-MII Order).**
Appendix - A2		**Policy for providing preference to Domestically Manufactured Iron & Steel Products (DMI & SP)**
Appendix - A3		**Amendment to DMI&SP vide Gazette notification No. S-13026/1/2020-IDD dated 31.12.2020, Ministry of Steel for certain amendment to DMI&SP policy**
Appendix - A4		**Restrictions on procurement from a bidder of a country which shares a land border with India.**
General Terms & Conditions	:	**General Terms & Conditions" for e-Procurement as per Booklet No. MM/GLOBAL/E-01/2005 for E-procurement (ICB Tenders).**
Proforma - 1	:	**Format for Bid Security**
Proforma - 2	:	**Format for Integrity Pact**
Proforma - 3	:	**Format for Performance Security**
Proforma - 4	:	**Format for undertaking towards submission of authentic information/ documents**
Exhibits – I, II & III	:	**Format for undertaking towards compliance of restriction on procurement from a bidder of a country which shares a land border with India**
Proforma - 6		**Form 10F**
Proforma - 7	:	**Format for No Business Connection or Permanent Establishment Certificate**
Proforma - 8	:	**Format for undertaking towards compliance of Financial Criteria**
Proforma - 9	:	**Format for Annual Turn Over and Networth Certificate**
Proforma - 10	:	**Format for Corporate Guarantee towards Financial Standing**
Proforma - 11	:	**Format for Authorization letter For attending Tender Opening**
Proforma – 12	:	**Format for Exception / Deviation**
Proforma – 13	:	**Format for Undertaking For Local Content**
Proforma – 14	:	**Format for Power of Attorney / Authorization letter (Regarding authority for submission of bid)**
Proforma – 15	:	**Format for Bidders financial standing**
Proforma – 16 A **Proforma – 16 B**	:	**Format for declaration that bidder is not under holiday list/delisted/blacklisted/debarred** **Format for declaration of NCLT / NCLAT /DRT /DRAT/ Court Receivership/ Liquidation**
Proforma – 17	:	**Format for Inspection Certificate to be issued by Independent Inspection Agencies against Document Verification Clause**
Proforma - 18	:	**Format for Bank Guarantee linked with Advance Payment**
Proforma -19	:	**Format for Insurance surety bond for Bid security and Performance security**
Proforma -20	:	**Format for Sustainable Development (SD) and Environment, Social & Governance (ESG) Policy**

ANNEXURE – H

AA: GENERAL NOTES TO BIDDERS:

1.0 Bidders without having E-tender Login ID and Password should complete their online registration at least 7 (seven) days prior to the scheduled bid closing date and time of the tender. For online registration, Bidder may visit the OIL's E-tender site https://etender.srm.oilindia.in/irj/portal

1.1 Necessary Login ID & Password will be issued by OIL only after submitting the complete online registration by the Bidder. In the event of late registration/incomplete registration by Bidder, OIL INDIA LIMITED shall not be responsible for late allotment of User ID & Password and request for bid closing date extension on that plea shall not be entertained by Company.

2.0 The tender will be governed by "General Terms & Conditions" for e-Procurement as per Booklet No. MM/GLOBAL/E-01/2005 for E-procurement (ICB Tenders) including Amendments & Addendum to "General Terms & Conditions" for e-Procurement. 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 BEC / BRC shall prevail.

3.0 Bid must be submitted online through OIL's e-procurement portal. Bid submitted in any other form will be rejected.

4.0 Bidders are requested to go through **the '*Vendor User Manual*', '*Guidelines to Bidders for participating in OIL e-tenders*', '*New Instruction to bidders for submission of bid*' and '*Vendor User Manual for e-tendering*'** available in the e-portal home page before submitting offer in the e-portal.

5.0 Bids are invited online under **SINGLE STAGE TWO BID SYSTEM**. Bidders must prepare the **TECHNO-COMMERCIAL BID (UNPRICED)** as well as the **PRICED BID** separately and upload both these bids in OIL's e-procurement portal at the designated fields separately assigned. Please 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/costs. The "Price Bid" must contain the price schedule and the bidder's commercial terms and conditions. Bidder not complying with above submission procedure will be rejected. Please do refer the User Manual provided on the portal on the procedure "How to create Response for submitting offer."

5.1 **The bidder has to submit both the "TECHNO-COMMERCIAL UNPRICED BID" and "PRICED BID" through electronic form in the OIL's e-Tender portal within the Bid Closing Date and Time stipulated in the e-Tender. Details of prices as per Price Bid format (Price Schedule) to be uploaded as attachment in the Attachment Tab "Notes and Attachments". Any offer not complying with above submission procedure will be rejected as per Bid Rejection Criteria mentioned in the tender.**

Notes and Attachments	➔	**Only price details should be uploaded**
Technical attachments	➔	**All technical bid documents except price details**

Bidders are requested to go through the 'New Vendor Manual', 'Guidelines to Bidders for participating in OIL e-tenders', 'New Instruction to bidders for submission of bid' and 'Vendor User Manual for e-tendering' available in the e-portal home page before submitting offer in system.



5.2 In Technical Bid opening, only Technical Rfx will be opened. Therefore, the bidder should ensure that "TECHNO-COMMERCIAL UNPRICED BID should contain details as mentioned in the technical specifications as well as BEC/ BRC and upload the same in the Technical RFx Response-> User - > Technical Bid. No price should be given in above Technical Rfx otherwise the offer will be rejected. Please go through the help document in details before uploading the document and ensure uploading of technical bid in the Technical RFx Response-> User - > Technical Bid only. The "PRICE BID" must contain the price schedule and the bidder's commercial terms and conditions. Details of prices as per Price Schedule can be uploaded as Attachment under the attachment option under "Notes & Attachments".

6.0 **For the convenience of the qualified Bidders and to improve transparency, the rates/costs quoted by bidders against OIL's e-tenders shall be available for online viewing by such Bidders whose price bids are opened by Company. A Bidder can view item-wise rates/costs of all other such peer bidders against the tender immediately after price bid opening, if the e-tender is floated by Company with PRICE CONDITION. In case the Price Bid is invited by Company through attachment form under "Notes & Attachments" (i.e., NO PRICE CONDITION), Bidder must upload their detailed Price-Bid as per the prescribed format under "Notes & Attachment", in addition to filling up the "Total Bid Value" Tab taking into account the cost of all individual line items and other applicable charges like freight, tax, duties, levies etc.. Under NO PRICE Condition (i.e. Price Bid in attachment form), the "Total Bid Value" as calculated & quoted by the Bidder shall only be shared amongst the eligible bidders and Company will not assume any responsibility whatsoever towards calculation errors/omissions therein, if any. Notwithstanding to sharing the "Total Bid Value" or the same is whether filled up by the Bidder or not, Company will evaluate the cost details to ascertain the inter-se-ranking of bidders strictly as per the unloaded attachment and Bid Evaluation Criteria only. Online view of pries as above shall be available to the Bidders only upto seven days from the date of Price-Bid opening of the e-tender.**

7.0 In case of SINGLE STAGE TWO BID SYSTEM, priced bids of only those bidders will be opened whose offers are found to be techno-commercially & financially acceptable.

8.0 The prices must be strictly submitted as per the price bid format only uploaded under tab "Notes & Attachment". The prices/rates offered against the tender must remain firm through delivery and not subject to variation on any account. A bid submitted with an adjustable price condition shall be treated as non-responsive and rejected. No discount whatsoever should be quoted separately. Rates/prices quoted must be net of all discount.

9.0 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 bidder's risk and may result in rejection of its offer without seeking any clarifications.

10.0 **BID SECURITY:**

All the Bids must be accompanied by Bid Security for the amount as mentioned in the NIT *or an equivalent amount in freely convertible currency and shall be in the form of Insurance Surety Bonds/DD/FDR (account OIL INDIA LIMITED)/NEFT/RTGS/Electronic fund transfer to designated account of OIL/online payment through OIL's e-portal/Bank Guarantee (BG) (including e-Bank Guarantee) in OIL's prescribed format* **(PROFORMA – 1)** *or as an irrevocable Letter of Credit (L/C) from any of the following Banks .*

a) Any schedule Indian Bank or Any Branch of an International bank situated in India and registered with Reserve Bank of India as scheduled foreign bank in case of domestic bidder, or

b) In case of foreign bidder, the bank guarantee can be accepted from any scheduled bank in India or from International bank who has its branch in India registered with Reserve Bank of India, or

c) Any foreign Bank which is not a Scheduled Bank in India, provided the Bank Guarantee issued by such Bank is counter-guaranteed by any Branch situated in India of any Scheduled Bank incorporated in India or Bid security shall also be acceptable through online payment modes.

Bank Guarantee issued by a Scheduled Bank in India at the request of some other Non-Schedule Bank of India shall not be acceptable. Bank Guarantees issued by Banks in India should be on non-judicial stamp paper of requisite value, as per Indian Stamp Act, purchased in the name of the Banker.

10.1 Any bid not accompanied by Bid Security (in Original) will be rejected outright without any further reference.

10.2 In case of Online payment of Bid Security, bidder shall submit Online transaction details to OIL as proof of submission of Bid security. The online payment of Bid Security amount should be received in OIL's bank account on or before the Bid closing date and time failing which the offer will be rejected outright without any further reference.

10.3 Bid Security shall be issued from any scheduled Indian Bank or any branch of an International Bank situated in India and registered with the Reserve Bank of India as scheduled foreign Bank in case of domestic suppliers.

10.4 In case of overseas suppliers, the Bid Security can be accepted from any scheduled bank in India or from an International Bank having its branch in India registered with the Reserve Bank of India.

10.5 Bid Security issued by any foreign Bank which is not a scheduled Bank in India can also be accepted, provided the same is counter-guaranteed by any Branch situated in India of any scheduled Bank incorporated in India.

10.6 Bank Guarantee issued by a scheduled Bank in India at the request of some other non-scheduled Bank in India shall not be accepted.

10.7 Bank Guarantees issued by a Bank in India should be on non-judicial Stamp Paper/Franking receipt of requisite value, as per Indian Stamp Act, purchased in the name of the Banker or the Seller.

10.8 Bank Guarantee/Letter of Credit with condition other than those mentioned in OIL's prescribed format shall not be accepted.

10.9 The Bank Guarantee issued by a Bank amongst others shall contain the complete address of the Bank including Phone Nos., Fax Nos., E-mail address, Code Nos. of the authorized signatory with full name and designation and Branch Code.

10.10 The bidders will extend the validity of the Bid Security, if and whenever specifically advised by OIL, at the

bidder's cost.

10.11 The Bid Security shall not accrue any interest during its period of validity or extended validity. OIL shall not be liable to pay any bank charges, commission or interest on the amount of Bid Security.

10.12 In case, the Bid Security in the form of a Bank Guarantee/ Letter of Credit is found to be not genuine or issued by a fake banker or issued under the fake signatures, the bid submitted by the concerned bidder shall be rejected and the bidder shall be banned from participating in future tenders in accordance with the provisions of Company's Banning Policy, 2023. Further, the Bid Security submitted by such bidder shall be invoked without any further reference, besides other penal action, as the Company may think appropriate.

10.13 In case of Bank Guarantee, The Bank Guarantee issuing bank branch must ensure the following:

The Bank Guarantee issued by the bank must be routed through SFMS platform as per the following details:

(i) MT 760/MT 760 COV for issuance of bank guarantee.

(ii) MT 760/MT 767 COV for amendment of bank guarantee.

[Tender Number should reflect in the SFMS text under MT 760/MT 760 COV]

The above message/intimation shall be sent through SFMS by the BG issuing Bank branch to ICICI Bank, Duliajan Branch, IFSC Code- ICIC0000213, Branch Address: ICICI Bank Ltd, Kunja Bhavan, Daily Bazaar, Duliajan, Dibrugarh, Assam – 786602. The Bank details are as under:

	Bank Details of Beneficiary	
A	Bank Name	ICICI BANK LTD.
B	Branch Name	DULIAJAN
C	Branch Address	KUNJA BHAVAN, DAILY BAZAAR, DULIAJAN, DIBRUGARH, ASSAM – 786602
D	IFSC Code	ICIC0000213
E	Unique identifier code (Field 7037)	OIL503988890
F	Company name	Oil India Limited

The vendor shall submit to OIL the copy of the SFMS message as sent by the issuing bank branch along with the original bank guarantee.

10.14 The Bid Security of the unsuccessful bidders will be returned after finalization of tender whereas the Bid Security of the successful bidder will be discharged on such bidder's furnishing the Performance Security to OIL against the Purchase Order secured by the bidder within the stipulated time frame. The successful bidder will however, extend validity of the Bid Security till such time the Performance Security is furnished.

10.15 The Bid Security will be forfeited:

a) If a bidder withdraws his bid during the period of validity of bid or any extension thereof duly agreed by the bidder,

OR

b) If the successful Bidder do not accept the order or fails to furnish the Performance Security within 30 days of placement of order or before the expiry of Bid Security (unless extended), whichever is earlier.

10.16 Bidders are requested to contact OIL within 6 months of Bid submission for return of their Bid Security. A copy of Bid security and Tender No. against which the Bid security was submitted should be sent to concerned dealing officer of OIL for return of the Bid security.

10.17 For timely return of Bid Security, bidders shall submit following details alongwith their technical bid.

- For Bank Guarantee((BG) or Irrevocable Letter of Credit (L/C) = Name, Email id, Phone number and Address where the Bid Security is to be returned by Courier.

- Online payment = Name, Email id, Phone number and Bank details (Bank Name, Branch Name, Branch Address, IFSC Code, Unique identifier code, Company name) where the Bid Security amount shall be returned by Online transfer.

In case of non-submission of above details, return of Bid Security may be delayed.

10.18 In case of online payment of Bid Security amount, refund will be made in [INR] using the exchange rate prevailing as on the date of actual receipt of Bid Security amount by OIL. The refund amount shall not (in any case) exceed the amount actually received by OIL.

10.19 If Bid Security /Earnest Money Deposit (EMD) is not applicable. Instead of EMD /Bid Security, all the bidders shall be required to sign a "Bid Security Declaration" accepting that if they withdraw or modify their Bids during the period of validity, or if they are awarded the contract and they fail to sign the contract, or to submit a performance security before the deadline defined in the NIT/ Purchase order, they shall be suspended for the period of 2 (two) years. This suspension of two years shall be automatic without conducting any enquiry. Bidders shall submit "Bid Securing Declaration" as per enclosed PROFORMA – 1A along with their Technical bids.

10.20 INSTRUCTIONS FOR FURNISHING "BID SECURITY DEPOSIT" BY "INSURANCE SURETY BOND"

a) The Insurance Surety Bond shall be from an Insurer as per guidelines issued by Insurance Regulatory and Development Authority of India (IRDAI).

b) The Company shall be the Creditor, the Bidder shall be the Principal debtor and the Insurance company/Insurer shall be the Surety in respect of the Insurance Surety Bond to be issued by the Insurer.

c) The Insurance Surety Bond should be on Non-Judicial stamp paper/e-stamp paper of appropriate value as per Stamp Act prevailing in the state(s) where the Insurance Surety Bond is submitted or is to be acted upon or the rate prevailing in State where the Insurance Surety Bond is executed, whichever is higher. The Stamp Paper/e-stamp paper shall be purchased in the name of Bidder/Insurer issuing the Insurance Surety Bond.

d) The expiry date and values should be arrived at in accordance with instructions provided in the "Forwarding Letter" of the Tender.

e) The Insurance Surety Bond by bidders will be given from Insurer as specified in the Tender.

f) A letter from the issuing insurer of the requisite Insurance Surety Bond confirming that the said Insurance Surety Bond / all future communication relating to the Insurance Surety Bond shall be forwarded to the Purchaser at its address as mentioned at "ITB".

g) Bidder must indicate the full postal address of the Insurer along with the Insurer 's E-mail / Phone from where the Insurance Surety Bond has been issued.

h) Bidder must indicate Name, Address, Contact number and official Email ID of the Controlling Office of the Surety Issuing Branch or any web portal link, from whom /where the Surety Bond can be got confirmed by the Company.

10.21 **Submission of Bid Security and Performance Security in the form of Electronic Bank Guarantee (e-BG)**

Oil India Ltd. has now adopted Electronic Bank Guarantee (e-BG) for Bid Security and Performance Security in addition to the existing provisions. Electronic Bank Guarantee (e-BG) is a digitally signed BG issued by banks which is transmitted directly from banks to beneficiaries in electronic form through a platform provided by National E-Governance Services Limited (NeSL).

Submission of Bid Security/Performance Security, as applicable, in the form of Electronic bank Guarantee (e-BG) is also acceptable:

Sl. No.	Bank Name	Sl. No.	Bank Name
1	AU Small Finance Bank	18	Indian Bank
2	Axis bank	19	Indian Overseas Bank
3	Bank of Baroda	20	Induslnd Bank
4	Bank of India	21	Karnataka Bank
5	Bank of Maharashtra	22	Karur Vysya Bank
6	Canara Bank	23	Kotak Mahindra Bank
7	Central Bank of India	24	Punjab and Sind bank
8	City Union Bank	25	Punjab National Bank
9	DBS Bank	26	RBL Bank
10	DCB Bank	27	Standard Chartered
11	Dhanlaxmi Bank	28	State Bank of India
12	Federal bank	29	South Indian Bank
13	HDFC Bank	30	Tamilnad Mercantile Bank Ltd
14	HSBC Bank	31	UCO Bank
15	ICICI Bank	32	Union Bank of India
16	IDBI Bank	33	Yes Bank
17	IDFC First Bank		

Beneficiary details for issue of e-BG are:

Sl. No.	**Particulars**	**Details**
1	Name	Oil India Limited
2	PAN	AAACO2352C
3	Date of Incorporation	18-02-1959
4	Email ID	tuhin_roy@oilindia.in
5	Mobile No.	9954487595
6	Local Address	Materials Department, Oil India Limited, Duliajan, Assam-786602

7	Registered Address	Duliajan, Dibrugarh, Assam-786602

11.0 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 scribing tender no. and due date to GM Materials, Materials Department, Oil India Limited, Duliajan- 786602, Assam on or before 13:00 hrs (IST) on the Bid Closing Date mentioned in the Tender.

a) Original Bid Security.
b) Any other documents which have been particularly asked for in this tender for submission.

11.1 Bidders must ensure that their bid is uploaded in the system before the tender closing date and time. Also, they must ensure that above documents which are to be submitted in a sealed envelope are also submitted at the above-mentioned address before the bid closing date and time, failing which the offer shall be rejected.

12.0 **AMENDMENT OF TENDER DOCUMENTS:**
At any time prior to the deadline for submission of bids, the Company may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the tender Documents through issuance of Corrigendum(s)/Addendum(s).

12.1 The Corrigendum(s)/ Addendum(s) will be uploaded in OIL's E-Tender Portal in the Tab "Technical Rfx" and under External Area - "Amendments" folder. The Company may, at its discretion, extend the deadline for bid submission. Bidders are expected to take the Corrigendum(s)/ Addendum(s) into account in preparation and submission of their bid. Bidders are to check from time to time the e-tender portal ["Technical RFx" Tab and under the folder "Amendments"] for any amendments to the bid documents before submission of their bids. No separate intimation shall be sent to the Bidders.

13.0 Any deviation(s) from the tender specification should be clearly highlighted specifying justification in support of deviation.

14.0 Original Bid Closing Date shall be considered by OIL for evaluation of BRC Criteria in case of any extension of the original bid closing date.

15.0 Prior to the detailed evaluation, OIL will determine the substantial responsiveness of each bid to the requirement of the Bidding Documents. For purpose of these paragraphs, a substantially responsive bid is one, which conforms to all the terms and conditions of the Bidding Document without material deviations or reservation. A material deviation or reservation is one which affects in any substantial way the scope, quality, or performance of work, or which limits in any substantial way, in-consistent way with the bidding documents, the Company's right or the bidder's obligations under the contract, and the rectification of which deviation or reservation would affect unfairly the competitive position of other bidders presenting substantial responsive bids. OIL's determination of bid's responsiveness is to be based on the contents of the Bid itself without recourse to extrinsic evidence.

15.1 To ascertain the substantial responsiveness of the bid, OIL reserves the right to ask the bidder for clarification in respect of clauses covered under BRC also and such clarifications fulfilling the BRC clauses in toto must be received on or before the deadline given by OIL, failing which the offer will be summarily rejected. However, bidder(s) must note that there should not be any additional financial involvement arising out of such post tender clarifications.

15.2 To assist in the examination, evaluation and comparison of bids, normally no clarifications shall be sought from the Bidders. However, for assisting in the evaluation of the bids especially on the issues where the Bidder confirms compliance in the evaluation and contradiction exists on the same issues due to lack of required supporting documents in the Bid (i.e. document is deficient or missing), or due to some statement at other place of the Bid (i.e. reconfirmation of confirmation) or vice versa, clarifications may be sought by OIL at its discretion. The request for clarification and the response shall be in writing and no change in the price or substance of the bid shall be sought, offered or permitted.

16.0 A job executed by a bidder for its own organization/subsidiary cannot be considered as experience for the purpose of meeting BRC/BEC.

17.0 Indian Bidders shall indicate the following in their offer:

(i) Ex-Works unit and total price as per price bid format including packing, forwarding and insurance; all costs as well as duties and taxes paid or payable on components and raw materials incorporated or to be incorporated in the goods, inspection, testing and loading on transport carrier etc.

(ii) The quoted price shall be deemed to be inclusive of all taxes and duties except "Goods and Services Tax" (hereinafter called GST) (i.e. IGST or CGST and SGST/UTGST applicable in case of interstate supply or intra state supply respectively and GST compensation Cess (if applicable).

(iii) Built in CIF value of import for raw material and components incorporated or to be incorporated in the goods and included in quoted price. The bidder shall provide description of such material, quantity, rate, value etc.

(iv) Inland transportation charges from dispatch point to designated Project Site/dump area/dump yard including loading and unloading of materials at site. The prices should be inclusive of all taxes, duties, levies etc.

18.0 Foreign Bidders shall indicate the following in their offer:

(i) Bidders shall submit their unit & total prices on FOB – International Port of Shipment, and C&F – Port of entry, India basis as detailed out in the Price Schedule. The request for different price basis is merely to facilitate the comparison of bids and will not in any way limit the OIL's right to contract on different terms.

(ii) Bidder shall also quote for Ocean Freight charges (including stowage charges) upto the port of entry, India, in the price schedule. The request for separate FOB Price and Ocean Freight is merely to facilitate the comparison of bids.

19.0 All shipments of material and containerised cargo shall be made by suitable vessels certified for seaworthiness and complying with National/ International safety regulations.

19.1 Seller shall inform the shipping details (Vessel details, Estimated Time of Arrival etc.) immediately on receipt of Bill of Lading. Detention & Demurrages, if any, due to early arrival of vessel, shall be to bidder's account.

20.0 In case of placement of order, OIL reserves the right to convert the order from FOB Port of export to C&F Kolkata term considering the ocean freight quoted by the bidder in their offer. In case the order is converted to C&F Kolkata Port, the performance security amount shall also be enhanced considering the quoted ocean freight charges.

20.1 Bidder should confirm in their quotation that in case of C&F order, their nominated freight forwarder should provide Delivery Order under Single Window facility having office of local agent in India at Kolkata and offer 14 days free detention time of containers at discharging port.

21.0 In case a Foreign Bidder's offer is based on certain component sourced within India, additional terms & condition specified elsewhere in the bid document shall be applicable in respect to such components.

22.0 In case any payment receipt of the foreign bidder against the order is subject to tax deduction at source in India, the Bidder shall quote their prices gross of Indian income tax. i.e., inclusive of Indian Income Tax at the applicable prevailing rate as per Indian Income Tax rules. OIL shall deduct at source the tax as applicable while making payments against each invoice for the services in India. Certificate for Tax Deducted at Source (TDS) shall be provided to the Seller.

23.0 Both Indian bidder and Foreign bidder must note that no trans-shipment en route is permitted. However, under exceptional circumstances, trans-shipment maybe allowed with prior consent of OIL. No charges shall be payable for such transshipment and consequent handling/storage of the goods.

24.0 Indian bidders are required to indicate both Ex-works as well as FOR Destination price by road. OIL reserves the right to place order on FOR (despatching station) or FOR (destination) terms. Offered rates should be kept firm through delivery/despatch.

25.0 Currency once quoted will not be allowed to be changed. OIL shall not be compensating for any exchange rate fluctuation.

26.0 **ROAD DESPATCH**

a) In the event of an order other than FOR Destination terms, the material will be required to despatch through OIL's approved transporters (which will be specified in the order) on "Door Delivery" basis. [Note: Sundry Consignment with weight lesser than 03(three) Tons shall be delivered at OIL's approved transporters godown.]

b) For orders placed on FOR Destination basis, the material will be required to despatch through reputed Bank approved transporters only on Door Delivery basis. In case OIL is required to collect the material from transporters Godown, extra expenditure incurred thereof will be recovered from the Bidder/seller.

c) The Seller shall ensure with Transport Company the delivery of materials within a reasonable transit period. Seller shall also obtain from transporter, particulars of Lorry Number, Transporter's Challan Number, destination of lorry (if transhipment is involved), Transporter's Agent at destination, if any, etc. and intimate same to OIL.

27.0 Net. Weight, Gross Weight & Volume, Indian Agent's Name and its Commission, Payment Terms, Ocean Freight/Air Freight Charges, Port of Loading, Delivery period, Country of origin with manufacturer's name, etc. should be clearly mentioned in the bid.

28.0 **SHORT SHIPMENTS**

Seller should thoroughly check all items in the packing before effecting shipment. If any item(s) are found short packed in sound boxes on examination at project site, Seller shall be responsible to supply short packed items free of charge on receipt of advice from Purchaser.

29.0 **IMPORTANT NOTES**:

Bidders shall take note of the following important points while participating in OIL's e-procurement tender:

a) Bid should be submitted online in OIL's E-procurement site up to 11.00 Hrs. (IST) (Server Time) on the date as mentioned and will be opened on the same day at 14.00 Hrs. (IST) at the office of the GM-Materials in presence of the authorized representatives of the bidders.

b) Bidders are advised in their own interest to ensure that their bids are uploaded in system before the closing date and time of the bid. The documents in physical form (if any, required as per tender), if received by the Company after the deadline for submission prescribed by the Company shall be rejected and shall be returned to the Bidders in unopened condition.

30.0 OIL shall be entering into an Integrity Pact, **if applicable** with the bidders as per format enclosed vide **PROFORMA - 2** 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 have been signed by the bidder's authorized signatory who sign the Bid. If any bidder refuses to sign Integrity Pact or declines to submit Integrity Pact with the offer, their bid shall be rejected straightway.

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

SHRI RAM PHAL PAWAR, IPS (Retd.),
Former Director, NCRB, MHA
E-mail: rpawar61@hotmail.com; ramphal.pawar@ips.gov.in

SHRI AJIT MOHAN SHARAN, IAS (Retd.)
Former Secretary, Ministry of Ayush, Govt. of India
E-mail: ams057@gmail.com

Dr. Ved Prakash, ITS (Retd.)
Flat No. 902, Plot No. GH-26,
Rainbow Apartments, Sector-43,
Gurgaon-122009
Mob No.9810546996
E-mail: ved60prakash@gmail.com

30.1 In case of a joint venture, all the partners of the joint venture should sign the Integrity Pact;

30.2 In the event of any dispute between the management and the contractor relating to those contracts where Integrity Pact is applicable, in case, both the parties are agreeable, they may try to settle dispute through mediation before the panel of IEMs in a time bound manner. If required, the organizations may adopt any mediation rules for this purpose. In case, the dispute remains unresolved even after mediation by the panel of IEMs, the organization may take further action as per the terms and conditions of the contract. The fees/expenses on dispute resolution shall be equally shared by both the parties.

31.0 To participate in OIL's E-procurement tender, bidders should have a legally valid digital certificate of Class 3 with Organizations Name and Encryption certificate as per Indian IT Act from the licensed Certifying Authorities operating under the Root Certifying Authority of India (RCAI), Controller of Certifying Authorities (CCA) of India (http://www.cca.gov.in). Digital Signature Certificates having "Organization Name" field as "Personal" are not acceptable.

31.1 Digital Signature Certificate comes in a pair of Signing/verification and Encryption/decryption certificate. Bidder should have both the Signing/verification and Encryption/Decryption certificate for Signing and encryption, decryption purpose respectively. The driver needs to be installed once, without which the DSC will not be recognized. While participating on e-Tendering the DSC token should be connected to your system.

31.2 Encryption certificate is mandatorily required for submission of bid. In case bidder created response with one certificate (using encryption key) and bidder change his Digital Signature Certificate then old certificate [Used for encryption] is required in order to decrypt his encrypted response for getting the EDIT mode of the response. Once decryption is done, bidder may use new DSC certificate for uploading and submission of their offer. It is the sole responsibility of the bidder to keep their DSC certificate properly. In case of loss of the certificate, OIL INDIA LIMITED is not responsible.

32.0 **PERFORMANCE SECURITY**

Unless otherwise specified, the Seller shall furnish Performance Security to Purchaser in the form of, Insurance Surety Bonds, account payee Bank Draft/Cashier's cheque/Banker's cheque/NEFT/RTGS/ Electronic fund transfer to designated account of OIL or Fixed Deposit Receipt (FDR) (account OIL INDIA LIMITED) or Bank Guarantee (including e-Bank Guarantee) or irrevocable Letter of Credit (LC) within 30 days of notification of purchase order/contract for the value and validity as per terms of Purchase order/contract. Performance Security shall be strictly as per the format prescribed vide **PROFORMA-3** to this document.

32.1 Performance Security shall be issued from any scheduled Indian Bank or any branch of an International Bank situated in India and registered with the Reserve Bank of India as scheduled foreign Bank in case of domestic suppliers.

32.2 In case of overseas suppliers, the Performance Security can be accepted from any scheduled bank in India or from an International Bank having its branch in India registered with the Reserve Bank of India.

32.3 Performance Security issued by any foreign Bank which is not a scheduled Bank in India can also be

accepted, provided the same is counter-guaranteed by any Branch situated in India of any scheduled Bank incorporated in India.

32.4 Bank Guarantee issued by a scheduled Bank in India at the request of some other non-scheduled Bank in India shall not be accepted.

32.5 Purchaser reserves the right to cancel the order and forfeit the corresponding Bid Security, in case of failure on the part of Seller to submit Performance Security as above.

32.6 The amount of Performance Security and the date of expiry of the Performance Security shall be as specified in the LOA/Purchase Order. Unless specified otherwise, the amount of Performance Security in case of Procurement of Goods shall be 3% of order value (excluding taxes & duties).

32.7 The Performance Security shall be in the denomination of the currency of Purchase Order or in equivalent US Dollars converted at the B.C. Selling Rate of State Bank of India, Kolkata main branch on the date of Purchase Order.

32.8 Bank Guarantees issued by a Bank in India should be on non-judicial Stamp Paper/Franking receipt of requisite value, as per Indian Stamp Act, purchased in the name of the Banker or the Seller.

32.9 Bank Guarantee/Letter of Credit with condition other than those mentioned in OIL's prescribed format shall not be accepted.

32.10 The Bank Guarantee issued by a Bank amongst others shall contain the complete address of the Bank including Phone Nos., Fax Nos., E-mail address, Code Nos. of the authorized signatory with full name and designation and Branch Code.

32.11 The Performance Security shall be payable to Purchaser as compensation for any breach or loss resulting from Supplier's failure to fulfil its obligations under the Purchase Order/Contract. In the event of such default on the part of Seller, the Performance Security shall be encashed unconditionally and the proceeds thereof shall be forfeited without any further reference to the Seller. In such an eventuality, the Seller shall be liable to face penal actions including debarment as per OIL's Banning Policy, 2023.

32.12 The Performance Security specified above must be valid for three (3) months beyond the Warranty Period (if any) indicated in the Purchase Order/Contract agreement. The Performance Security shall be discharged by Purchaser not later than 30 days following its expiry after completion of obligations under the order/contract. In the event of any extension to the contractual validity or delay in supply/ execution or extension of Warranty Period of the Purchase Order/Contract, validity of the Performance Security shall be extended by the Seller/Contractor by the equivalent period.

32.13 The Performance Security shall not accrue any interest during its period of validity or extended validity. OIL shall not be liable to pay any bank charges, commission or interest on the amount of Performance Security.

32.14 Failure of the successful Bidder to comply with the requirements of above clauses shall constitute sufficient grounds for annulment of the award and forfeiture of their Bid Security or Performance Security. The defaulting party shall also be debarred from business as per OIL's Banning Policy, 2023

32.15 In case, the Performance Security in the form of a Bank Guarantee/ Letter of Credit is found to be not genuine or issued by a fake banker or issued under the fake signatures, the LOI/Purchase Order issued/placed on the bidder shall be treated as cancelled forthwith and the bidder shall be banned from participating in future tenders in accordance with the provisions of Company's Banning Policy, 2023. Further, the Bid Security submitted by such bidder shall be invoked without any further reference, besides other penal action, as the Company may think appropriate.

32.16 In case of Bank Guarantee, The Bank Guarantee issuing bank branch must ensure the following:
The Bank Guarantee issued by the bank must be routed through SFMS platform as per the following details:

(i) MT 760/MT 760 COV for issuance of bank guarantee.

(iii) MT 760/MT 767 COV for amendment of bank guarantee.

[Tender Number should reflect in the SFMS text under MT 760/MT 760 COV]

The above message/intimation shall be sent through SFMS by the BG issuing Bank branch to ICICI Bank, Duliajan Branch, IFSC Code- ICIC0000213, Branch Address: ICICI Bank Ltd, Kunja Bhavan, Daily Bazaar, Duliajan, Dibrugarh, Assam – 786602. The Bank details are as under:

	Bank Details of Beneficiary	
A	Bank Name	ICICI BANK LTD.
B	Branch Name	DULIAJAN
C	Branch Address	KUNJA BHAVAN, DAILY BAZAAR, DULIAJAN, DIBRUGARH, ASSAM – 786602
D	IFSC Code	ICIC0000213
E	Unique identifier code (Field 7037)	OIL503988890
F	Company name	Oil India Limited

The vendor shall submit to OIL the copy of the SFMS message as sent by the issuing bank branch along with the original bank guarantee.

32.17 In case of online payment, refund will be made in [INR] using the exchange rate prevailing as on the date of actual receipt of Performance Bank Guarantee amount. The refund amount shall not (in any case) exceed the amount actually received.

32.18 In case Annual Maintenance Contract (AMC) is required and OIL intends to enter into a separate contract with the successful bidder for AMC, the Successful bidder must undertake to submit separate Performance Security against the AMC at the applicable rate & validity to be stipulated in the contract. (3% of annualized contract value valid for three months beyond entire execution period).

32.19 INSTRUCTIONS FOR FURNISHING "PERFORMANCE SECURITY DEPOSIT" BY "INSURANCE SURETY BOND"

a) The Insurance Surety Bond shall be from an Insurer as per guidelines issued by Insurance Regulatory and Development Authority of India (IRDAI).

b) The Company shall be the Creditor, the Contractor shall be the Principal debtor and the Insurance company/Insurer shall be the Surety in respect of the Insurance Surety Bond to be issued by the Insurer.

c) The Insurance Surety Bond should be on Non-Judicial stamp paper/e-stamp paper of appropriate value as per Stamp Act prevailing in the state(s) where the Insurance Surety Bond is submitted or is to be acted upon or the rate prevailing in State where the Insurance Surety Bond is executed, whichever is higher. The Stamp Paper/e-stamp paper shall be purchased in the name of Contractor /Insurer issuing the Insurance Surety Bond.

d) The expiry date and values should be arrived at in accordance with instructions provided in the “Forwarding Letter” of the Tender.

e) The Insurance Surety Bond by Contractors will be given from Insurer as specified in the Tender.

f) A letter from the issuing insurer of the requisite Insurance Surety Bond confirming that the said Insurance Surety Bond / all future communication relating to the Insurance Surety Bond shall be forwarded to the Purchaser at its address as mentioned at "ITB".

g) Contractor must indicate the full postal address of the Insurer along with the Insurer 's
E-mail / Phone from where the Insurance Surety Bond has been issued.

h) Contractor must indicate Name, Address, Contact number and official Email ID of the Controlling Office of the Surety Issuing Branch or any web portal link, from whom /where the Surety Bond can be got confirmed by the Company.

33.0 Bidder upload completely filled up Commercial Check List **(Annexure – D)** and Bid Evaluation matrix (Technical) **(Annexure – E)** and Bid Evaluation Matrix (BRC) **(Annexure – F)** failing which their offer may be liable for rejection.

34.0 **PAYMENT TERMS**

Refer to "General Terms & Conditions" for e-Procurement as per Booklet No. MM/GLOBAL/E-01/2005 for E-procurement (ICB Tenders) including Amendments & Addendum to "General Terms & Conditions" for e- Procurement.

35.0 **EFFECTIVE DATE OF CONTRACT/ORDER**:

Unless otherwise specified in the contrary, the date of LOA will be the start of the Contract/Order for all practical purposes.

36.0 **As per Notification no. 30/2024-Customs dated 23.07.2024, items appearing in List 33 (See S. No. 404 of the Table) shall only be eligible for Nil rate of Customs Duty towards import (for foreign bidders) as per Govt. Policy in vogue. However, IGST at actual shall be applicable as per Govt. Policy in vogue.** Indian bidders are requested to quote actual rate of GST with HSN code.

Overseas Bidders are not required to include Customs Duty and IGST components in their quoted cost, since all applicable taxes & Duties in India shall be to the account of Oil India Limited.

In the event of an order on indigenous bidder, OIL will issue Project Authority Certificate (PAC) under Deemed Export Benefit Scheme, where import content is declared by the bidder for availing Custom Duty benefit on the import content.

~~Supplier shall arrange to provide all necessary documents (invoice etc.) to OIL for applying Essentiality Certificate on receipt of request from OIL, if any. Further, Suppliers shall affect dispatch only on receipt of relevant certificates/shipment clearance from OIL, failing which all related liabilities shall be to Supplier's account.~~

~~In the event of order, the successful bidder shall submit proforma/commercial invoice atleast **30 days before** effecting Delivery/Dispatch of the items for processing Essentiality Certificate (EC) application.~~

37.0 Quantity of Individual item may be increased or decrease at the time of final placement of order. The minimum FOB/FCA charges in case of partial order for reduced quantity/enhanced quantity shall have to be indicated by the bidder. In case, this is not indicated specifically, the charges quoted would be pro-rata calculated and the same will be binding on the bidder.

38.0 **FURNISHING FRAUDULENT INFORMATION/ DOCUMENT**:

If it is found that a Bidder has furnished fraudulent document/information, the Bid Security/ Performance Security shall be forfeited and the party will be debarred for a period of 3(three) years from date of detection of such fraudulent act, besides the legal action. In case of major and serious fraud, period of debarment may be enhanced. In this regard, bidders are requested to submit an Undertaking as per **PROFORMA - 4** along with their offer failing which their offer shall be liable for rejection.

39.0 **COUNTRY OF ORIGIN**

Shall mean the place where the goods/products is/are manufactured or supplied from or the services are rendered.

39.1 Bidders shall indicate Country of Origin item-wise. In case of mixed country of origin, percentage distribution of contents with respect to each country of origin must be stated.

39.2 In case of imported items, the successful bidder shall submit "Certificate of Origin" issued only by "Chambers of Commerce" along with the shipping document.

40.0 **GOODS & SERVICES TAX(GST)**

1. For the purposes of levy and imposition of GST, the expressions shall have the following meanings:

   (a) GST - means any tax imposed on the supply of goods and/or services under GST Law.
   (b) Cess – means any applicable cess, existing or future on the supply of Goods and Services as per Goods and Services Tax (Compensation to States) Act,2017.
   (c) GST Law - means IGST Act 2017, CGST Act 2017, UTGST Act, 2017 and SGST Act, 2017and all related ancillary Rules and Notifications issued in this regard from time to time.

2. The rates quoted by the bidders shall be inclusive of all taxes, duties and levies. However, bidders are required to provide separately the rate and amount of all types of taxes, duties and levies. In case, the quoted information related to various taxes, duties & levies subsequently proves wrong, incorrect or misleading, OIL will have no liability to reimburse the difference in the duty/ tax, if the finally assessed amount is on the higher side and OIL will have to right to recover the difference in case the rate of duty/ taxes finally assessed is on the lower side. Further, bidders have to clearly show the amount of GST separately in the Tax Invoices. Further, it is the responsibility of the bidders to make all possible efforts to make their accounting / IT system GST compliant in order to ensure availability of Input Tax Credit (ITC) to Oil India Ltd.

3. Offers without giving any of the details of the taxes (Including rates and amounts) as specified above will be considered as inclusive of all taxes including GST. When a bidder mentions taxes as extra without specifying the rates & amount, the offer will be loaded with maximum value towards taxes received against the tender for comparison purposes. If the bidder emerges as lowest bidder after such loading, in the event of order on that bidder, taxes mentioned by OIL on the Purchase Order/ Contracts will be binding on the bidder.

4. Bidders are required to pass on the benefit arising out of introduction of GST, including seamless flow of Input Tax Credit, reduction in Tax Rate on inputs as well as final goods by way of reduction of price as contemplated in the provision relating to Anti-Profiteering Measure vide Section 171 of the CGST Act, 2017. Accordingly, for supplies made under GST, the bidders should confirm that benefit of lower costs has been passed on to OIL by way of lower prices/taxes and also provide details of the same as applicable. OIL reserves the right to examine such details about costs of inputs/input services of the bidders to ensure that the intended benefits of GST have been passed on to OIL.

5. Oil India Ltd. shall declare the value of free issue of materials and services, if any, involved in the execution of the contract. The Contractor should consider the same while working out the GST liability, if any. Further in cases where GST is leviable on any facilities provided by OIL and used by bidders and the consideration for which is recovered by OIL in the form of reduction in the invoice raised by bidders then OIL will raise GST invoices on such transactions and the same will be reimbursed by bidders.

6. **When Input tax credit is available for Set Off**
   Evaluation of L-1 prices shall be done based on Quoted price after deduction of Input Tax Credit (ITC) of GST, if available to OIL.OIL shall evaluate the offers on the basis of the quoted rates only and any claim subsequently by the bidders for additional payment/liability shall not be admitted and has to be borne by the bidders.

   When Input tax credit is NOT available for Set Off
   Evaluation of L-1 prices shall be done based on Quoted price only. OIL shall evaluate the offers on the basis of the quoted rates only and any claim subsequently by the bidders for additional payment/liability shall not be admitted and has to be borne by the bidders.

7. Bidders agree to do all things not limited to providing GST compliant Tax Invoices or other documentation as per GST law relating to the supply of goods and/or services covered in the instant contract like raising of and /or acceptance or rejection of credit notes / debit notes as

the case may be, payment of taxes, timely filing of valid statutory Returns for the tax period on the Goods and Service Tax Network (GSTN), submission of general information as and when called for by OIL in the customized format shared by OIL in order to enable OIL to update its database etc. that may be necessary to match the invoices on GSTN common portal and enable OIL to claim input tax credit in relation to any GST payable under this Contract or in respect of any supply under this Contract.

8. In case Input Tax Credit of GST is denied or demand is recovered from OIL by the Central / State Authorities on account of any non-compliance by bidders, including non-payment of GST charged and recovered, the Vendor/Supplier/Contractor shall indemnify OIL in respect of all claims of tax, penalty and/or interest, loss, damages, costs, expenses and liability that may arise due to such non-compliance. OIL, at its discretion, may also withhold/recover such disputed amount from the pending payments of the bidders.

40.1 In case there is a requirement to obtain registration by the bidder under the Indian laws (including but not limited to GST) for carrying out the transaction proposed under the tender/contract, bidder shall be the sole responsible person for obtaining such registration. Further, any cost associated with obtaining any such registration or complying with Indian laws (including but not limited to GST) shall be borne by the bidder solely. Any additional tax burden (including interest and penalty etc.) arising out of non-compliance of this requirement by the bidder will be to the bidder's account.

40.2 In no case OIL shall bear any additional liability for the arrangement between bidder and its suppliers/sub-vendors for complying with 'local content'.

41.0 **PUBLIC PROCUREMENT POLICY AND PURCHASE PREFERENCE TO MICRO AND SMALL ENTERPRISES:**

Bidders to note that Govt. of India under Micro, Small and Medium Enterprises Development (MSMED) Act 2006, has proclaimed the Public Procurement Policy, 2012 with effect from 1st April, 2012 in respect of procurement of goods and services, produced and provided by micro and small enterprises, by its Ministries, Departments and Public Sector Undertakings for promotion and development of Micro and Small Enterprises. Clause on applicability of Public Procurement Policy for procurement of goods from Micro and Small Enterprises (MSE) in the tender is furnished in "General Terms & Conditions" for e-Procurement as per Booklet No. MM/GLOBAL/E-01/2005 for E-procurement (ICB Tenders) including Amendments & Addendum to "General Terms & Conditions" for e-Procurement. Bidders are requested to take note of the same and to submit their offers accordingly.

41.1 Categorisation and various criteria applicable to MSE bidders shall be guided by the Gazette notification no. CG-DL-E-26062020-220191 dated 26.06.2020 and Amendment vide Gazette Notification no. CG-DL-E-16062021-227649 dated 16th June, 2021 , CG-DL-E-21032025-261838 elated 21.03.2025 issued by Ministry of Micro, Small and Medium Enterprises.

The bidder claiming as MSE status (MSE-General, MSE-SC/ST, MSE -Woman) against this tender has to submit following documents for availing the benefits applicable to MSEs:

i. Udyam Registration No. with Udyam Registration certificate

Note: *In case bidding MSE is owned by Schedule Caste or Schedule Tribe entrepreneur, valid documentary evidence issued by the agency who has registered the bidder as MSE owned by SC/ ST entrepreneur/ Woman Entrepreneurs should also be enclosed.*

41.2 For availing benefits of Purchase Preference under Public Procurement Policy, the interested MSE Bidders must ensure that they are the manufacturer of tendered item(s) and registered with the appropriate authority for the said item(s). The technical offer of such MSE Bidders must include a valid copy of relevant MSE Certificate issued by appropriate authority specifying the item as per tender. Purchase Preference of 15% (fifteen percent) shall be extended to the eligible MSE Bidder (i.e. Manufacturer of tendered goods for procurement) over non-MSE L1 Bidder and PO shall be awarded for full tender quantity on such MSE bidder, subject to matching their quoted rates/costs with non-MSE L1 Bidder.

42.0 **PUBLIC PROCUREMENT (PREFERENCE TO MAKE IN INDIA) ORDER (PPP-MII Order).**

Public Procurement (Preference to Make in India), Order 2017 issued by Department for Promotion of Industry and Internal Trade (DPIIT), Government of India vide notification no. No. P-45021/2/2017-PP (BE-II) dated 16.09.2020 and as amended time to time shall be applicable for procurement. Bidders are required to go through details of the Policy while submitting their bid.

42.1 MOP&NG vide Notification No File No.FP-20013/2/2017-FP-PNG-Part (4) (E-41432) dated 26.04.2022 has modified Para 14 of the PPP-MII Order (Appendix A1) as below:

a. Limit for exemption of small purchase under Para 4 of the PPP-Mll Order, 2017 shall be Rs. 1 crore.
b. Local value addition through services such as transportation, insurance, installation, commissioning, training and after sales services support like AMC/CMC etc. shall continue to be considered in local content calculation.
c. HP-HT operations in upstream oil and gas business activities shall be exempted from applicability of the Order.

43.0 **POLICY FOR PROVIDING PREFERENCE TO DOMESTICALLY MANUFACTURED IRON & STEEL PRODUCTS (DMI&SP):**

Policy for providing preference to domestically manufactured Iron and Steel products in govt. procurement, notified vide Gazette of India No 324 dated 29.05.2019 read with clarifications, if any issued by MoS on the policy **shall be applicable / not applicable for this tender (Refer special notes of tender)**. Bidders are required to confirm acceptance to the conditions of this policy.

Bidders who comply with all the provisions specified in **APPENDIX - A2** attached to this Tender Document and submit all the undertakings and documents applicable under the revised policy shall only be accepted.

43.1 Vide Gazette notification No. S-13026/1 /2020- IDD dated 31.12.2020, Ministry of Steel has issued certain amendment to the aforesaid policy. A copy of the said Gazette notification is also enclosed as **APPENDIX - A3**. Steel Policy notified vide Notification No. CG-DL-E-01042025-262208 dated 01.04.2025 and as amended from time to time by Ministry of Steel, Government of India is **applicable / not applicable for this tender (Refer special notes of tender)**. Bidders are requested to take note of the same and to submit their offers accordingly, wherever applicable.

44.0 **APPLICABILITY OF BANNING POLICY OF OIL INDIA LIMITED:**

"Banning Policy dated 17th March, 2023 as uploaded in OIL's website (www.oilindia.in) in line the provisions of Office Memorandum no. F.1/20/2018-PPD dated 02.11.2021 issued by Department of Expenditure, Ministry of Finance, Govt of India will be applicable against the tender (and order in case of award) to deal with any agency (bidder/contractor/supplier/vendor/service provider) who commits deception, default, fraud or indulged in other misconduct of whatsoever nature in the tendering process and/or order execution processes.

The bidders who are on Holiday/Banning/Suspension list of OIL on due date of submission of bid/ during the process of evaluation of the bids, the offers of such bidders shall not be considered for bid opening/evaluation/award. If the bidding documents were issued inadvertently/downloaded from website, the offers submitted by such bidders shall also not be considered for bid opening/evaluation/Award of Work."

At any time prior to the deadline for submission of bids, the Company may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the tender Documents through issuance of Corrigendum(s)/Addendum(s). Bidders are expected to take the Corrigendum(s)/ Addendum(s) into account in preparation and submission of their bid. No separate intimation for Corrigendum(s)/Addendum(s) published by OIL shall be sent to the Bidders.

44.1 The bidder shall fill up and submit proforma of declaration of Blacklisting / Holiday Listing/ NCLT / NCLAT /DRT /DRAT/ COURT RECEIVERSHIP/ LIQUIDATION (as per Proforma – 16) along with the technical bid).

45.0 **OPPORTUNITY TO STARTUP AND MICRO & SMALL ENTERPRISES:**

In case a Startup (*defined as per Ministry of Commerce and Industry (Department of Industrial Policy and Promotion, DIPP*) latest notification]/ MSE is interested in supplying the tendered item but does not meet the Pre-Qualifying Criteria (PQC)/ Proven Track Record (PTR) indicated in the tender document, the Startup/MSE is requested to write a detailed proposal separately, and not against the present tender requirement, to the tender issuing authority about its product. Such proposals shall be accompanied by relevant documents in support of MSE (where applicable) or in case of Startup, following documents shall be given:

1. Certificate of Recognition issued by the Department of Industrial Policy and Promotion, Ministry of Commerce and Industry, Government of India.
2. Certificate of incorporation.
3. Audited Profit & Loss (P&L) Statement of all the Financial Years since incorporation. In case where the Balance sheet has not been prepared, bidder shall submit a certificate in original from its CEO/CFO stating the turnover of the bidding entity separately for each Financial Years since incorporation along with a declaration stating the reason for not furnishing the audited P&L Statement. This certificate shall be endorsed by a Chartered Accountant/Statutory Auditor.

The Proposal shall be examined by OIL and OIL may consider inviting a detailed offer from the Startup/MSE with the intent to place a TRIAL or TEST Order, provided the Startup/MSE meets the Quality and Technical Specifications.

In case the Startup/MSE is successful in the Trial Order, the vendor shall be considered for PQC exemption/relaxation (as the case may be) for the next tender for such item till the time it remains a Startup/MSE.

46.0 **TAX COLLECTIBLE AT SOURCE (TCS):**

Tax Collectible at Source (TCS) applicable under the Income-tax Law and charged by the SUPPLIER shall also be payable by OIL along with consideration for procurement of goods/materials/ equipment. If TCS is collected by the SUPPLIER, a TCS certificate in prescribed Form shall be issued by the SUPPLIER to OIL within the statutory time limit.

Payment towards applicable TCS u/s 206C (IH) of Income Tax Act, 1961 will be made to the supplier provided they are claiming it in their invoice and on submission of following undertaking along with the invoice stating that:

a. TCS is applicable on supply of goods invoiced to OIL as turnover of the supplier in previous year was more than Rs. 10 Cr. and
b. Total supply of goods to OIL in FY …….. (As applicable) exceeds Rs. 50 Lakh and
c. TCS as charged in the invoice has already been deposited (duly indicating the details such as challan No. and date) or would be deposited with Exchequer on or before the due date and
d. TCS certificate as provided in the Income Tax Act will be issued to OIL in time.

However, Performance Security deposit will be released only after the TCS certificate for the amount of tax collected is provided to OIL. Supplier will extend the performance bank guarantee (PBG), wherever required, till the receipt of TCS certificate or else the same will be forfeited to the extent of amount of TCS, if all other conditions of Purchase order are fulfilled.

The above payment condition is applicable only for release of TCS amount charged by supplier u/s 206C (I H) of Income tax Act, 1961.

47.0 CERTIFICATION OF DOCUMENTS BY INDEPENDENT THIRD-PARTY INSPECTION AGENCIES (TPIA):

47.1 Oil India Limited (OIL) has engaged the following 17 (Seventeen) Independent Inspection Agencies for a period of 04 (Four) years up to 06.06.2028 to verify and certify various documents submitted by the bidders required against BEC/BRC of the tender:

Sl. No.	Name of Independent Inspection Agency	Contact E-mail ID
i.	M/s. Alfred H Knight India Private Limited	a. rkjain@ahkgroup.com; b. pradeep.mathur@ahkgroup.com ; c. info@ ahkgroup.com
ii.	M/s. TUV India Private Limited	a. noida@tuv-nord.com b. mumbai@tuv-nord.com c. salim@tuv-nord.com
iii.	M/s Conformity India International Private Limited	a. mktg@ciindia.in
iv.	M/s Ravi Energic Private Limited	a. baroda@ravienergic.com b. tpia@ravienergic.com
v.	M/s SGS India Private Limited	a. dhaval.vora@sgs.com b. sgs.india@sgs.com
vi.	M/s Assure Quality Management Certification Services Private Limited	a. aqmcs@aqmcs.com
vii.	M/s. IRCLASS Systems and Solutions Private Limited	a. industrial_services@irclass.org b. Bhavesh.satam@irclass.org
viii.	M/s. TÜV Rheinland (India) Pvt. Ltd.	a. Shailesh.deotale@ind.tuv.com b. Kaushal.gohil@ind.tuv.com c. info@ind.tuv.com d. ravi.kumar@ind.tuv.com
ix.	M/s Gulf LIoyds (India) Ltd.	a. contact@gulfllloyds.com b. inspection@gulfllloyds.com
x.	M/s Baltic Testing India Pvt. Ltd.	a. office@balticcontrolindia.com
xi.	M/s Sanmarg Engineering Validation & Assessment	a. Amitra@sanmargeva.com
xii.	M/s Meenar Global Consultants LLP	a. sales@mgellp.in
xiii.	M/s Rites Limited	a. nrinspn@rites.com b. info@rites.com c. sbu.ninsp@rites.com
xiv.	M/s Bureau Veritas (India) Private Limited	a. bvindia.corporate@bureauveritas.com
xv.	M/s TUV SUD South Asia Private Limited	a. Hemant.chavan@tuvsud.com b. Jayashree.rane@tuvsud.com
xvi.	M/s Adornment Engineers India Private Limited	a. jks@adornmentengineers.com

xvii.	M/s TCRC Inspections Pvt. Ltd.	a. admin@tereinspections.com b. ashismallick@teregroup.com c. tenders@teregroup.com

47.2 Bidders are required to have their documents, as mandated under the Bid Evaluation Criteria (BEC) / Bid Rejection Criteria (BRC) of the tender, verified and certified by any one of the empanelled Independent Third-Party Inspection Agencies listed above. The Inspection Certificate, duly issued by the selected agency, must be submitted along with the Technical Bid. All costs related to verification and certification by the Third-Party Inspection Agencies shall be borne solely by the respective bidders. Payments in this regard shall be made directly by the bidders to the Inspection Agencies. OIL shall not be held responsible for any payment-related dispute between the bidders and the inspection agencies.

47.3 The verified and certified documents must be submitted along with the Technical Bid. Any bid submitted with un-verified supporting documents shall not be considered. However, in case a bidder submits its bid along with all relevant supporting documents as per BEC/BRC without getting all/some of them verified by the designated Independent Inspection agency, such bid can be provisionally considered, provided it is accompanied by an **Undertaking by the Bidder on their official letterhead towards submission of the duly verified and certified copies/ Inspection Certificate within 07 (Seven) days from the actual date of bid opening to be sent to address Office of GM-MATERIALS, Materials Department, Oil India Limited, Duliajan -786602, Assam, India and copy of the verified documents to email id : tuhin_roy@oilindia.in.** No reminders or clarifications will be issued by the Company in this regard, and failure to submit the verified/ certified documents within the stipulated time shall result in outright rejection of the bid, at the sole risk and responsibility of the bidder. If a bidder does not submit the undertaking towards submission of third party certification within 7 days from date of Bid Closing date, but certified document reaches us within the cut-off date of above seven (7) days, then such bids shall be considered.

47.4 The methodology of verification/certification of documents followed by the agencies is broadly as under, but not limited to:

(a) It is the sole responsibility of the bidders intending to participate in the tender to thoroughly understand the requirements of the tender, particularly the documents required under BEC/BRC. The bidders must present all relevant documents to any of the empanelled third-party certifying agencies for verification/certification. Neither OIL nor the Inspection Agencies shall be responsible for the selection or appropriateness of the documents submitted for verification. It is entirely the bidder's responsibility to ensure that the appropriate documents are verified/certified in support of BEC/BRC compliance.

(b) The concerned Independent Third-Party Inspection Agencies shall depute their qualified/competent inspector to the Bidder's premises to check the original documents and certify the copies which the bidder shall submit along with their bids. OIL will reserve the right to ask the inspection agencies to verify the documents with source, if required at no extra cost to OIL. Verification/Certification of documents by OIL's empanelled third-party inspection agencies shall not automatically make the bidder techno-commercially-acceptable or eligible for award of contract.

(c) Verification/Certification of documents are normally categorized as under:

i General Requirement:

- Check Bidder's PAN Card
- Check Bidder's GST Certificate
- Check Bidder's Certificate of Incorporation
- Power of Attorney

ii Additional Documents : (If applicable against the tender)

- Bidders general structure and organization

- Joint Ventures Agreements – To cross-check with JV Partners
- Consortium Agreements – To cross-check with Consortium Partners
- Holding/Parent/Subsidiary/Sister Subsidiary/Co-Subsidiary Company – To check the Share Holding pattern, Corporate Guarantee etc.

iii Technical Criteria

- To check Experience Proof- Completion Certificates, Reference contact verification, Original Work Order/Contract Copy and any other document(s), if called for vide BEC/BRC of the Tender.
- Health, Safety and Environmental Management Policy

iv Financial Criteria

- Line of credit, if incorporated in the tender.

Notes:

(i) Bidder's self-declared undertakings, Audited Balance Sheet & Profit-loss statement and/or CA certificate having UDIN are not required to be verified by the TPI agency. If any documents, LOI/LOA/Contracts, etc., submitted towards BEC/BRC experience criteria are issued by Oil India Limited, such documents need not be verified by TPI agency.

(ii) Undertaking from TPI Agency as per format (**Proforma-17)** enclosed should be submitted along with the Bid.

(iii) **In case of clarifications sought by OIL against BEC/BRC, supporting documents (historical in nature) to those submitted in the original bid will also have to be verified from the same TPI agency which has originally verified their bid documents. OIL shall categorically mention the documents that are to be submitted with TPI verification in the clarification sought. In case the bidder fails to submit the TPI verified documents, as sought by OIL, as part of their clarification, their offer will be liable for rejection.**

47.0 **RESTRICTIONS ON PROCUREMENT FROM A BIDDER OF A COUNTRY SHARING LAND BORDER WITH INDIA:**

Ministry of Finance of Govt. of India, Department of Expenditure, Public procurement Division vide office memorandum F. No. 6/18/2019-PPD dated 23rd July, 2020(order-Public Procurement no.1) has proclaimed the insertion of Rule 144 (xi) in the General Financial Rules (GFRs), 2017 w.e.f. 23rd July, 2020 regarding restrictions on procurement from a bidder of a country which shares a land border with India on the grounds of defence of India on matters directly or indirectly related thereto including national security. Clause on applicability of above restriction is furnished as **APPENDIX – A4** of the tender document. Bidders are requested to take note of the clauses and submit their offers accordingly, wherever applicable.

"Any bidder from a country which shares a land border with India will be eligible to bid in any procurement whether of goods, services or works, only if the bidder is registered with the competent authority"

Bidders must submit duly sealed & signed undertaking as per format provided vide, "**Exhibits – I, II & III**" along with the technical bid.

48.0 **TAX RESIDENCY CERTIFICATE CLAUSE:**

1. In accordance with Income Tax Act, 1961 Foreign bidders shall undertake in their Technical bid that in the event of placement of order on them, they shall submit below documents within 15 days from the date of issue of Purchase order. The documents are required to be furnished by OIL to Income Tax Department for complying with the requirements for making remittances to non-residents as per Income Tax Act, 1961 (as amended from time to time):

(a) Tax residency certificate (Current) from the Government /Tax Department of the country of residence;
(b) Form 10F as per Rule 21 AB of the Indian Income Tax Rules, 1962; (**PROFORMA - 6)**
(c) No Permanent Establishment in India Declaration (**PROFORMA – 7**)

2. Payment to Foreign supplier shall be released only after receipt of the above documents. Any delay in submission of Tax Residency Certificate (TRC), Form No. 10 F and No Permanent Establishment in India Declaration within specified time may lead to the Income Tax Department directing OIL to deduct tax at a higher rate than at which it may otherwise have directed. Such increased tax liability shall be recovered from the Foreign Supplier.

3. However, in the cases of pure supply of goods (other than the cases of procurement of software or any other intellectual property). the following modalities will be adopted:

a. **If there exists a DT AA between India and the country of tax residency of the supplier:**
Since the above amendment in Section 9(1) would not have any bearing on DTAA provisions, the receipts of the supplier may continue to be treated as non-taxable under DTAA subject to fulfilment of following conditions:

(i) Remittances are to be made exclusively for supply of goods and no service of any kind is to be rendered by the non-resident whether in or outside India.
(ii) Risk and title to the goods passes from the non-resident supplier to OIL outside India.
(iii) Payment would be received by the non-resident supplier outside India; and
(iv) The non-resident, at its option,
Furnishes copy of a valid Tax Residency Certificate (TRC), Form 10F and confirms that it does not have a Permanent Establishment (PE) in India in terms of the applicable Double Taxation Avoidance Agreement (DTAA)
OR
A nil Tax Deduction Certificate from the Income Tax Authority of India with requisite jurisdiction.

b. **If the non-resident s9:1pplier obtains a certificate u/s. 197 /195(3)-** TDS need to be deducted as per the directions contained in such certificate.
c. **In any other case- (i.e. where there is no DTAA) and supply involves pure supply of goods and payment exceeds Rs. 2 Crore as per amendment u/s 9(I):**
The non-resident shall be deemed to constitute Business connection in India and in such a situation TDS has to be made based on a 197 /195(3)/195(2) certificate issued by the Income Tax Authorities in India in order to avoid any future litigation."

49.0 **ANTI-DUMPING DUTY:**
The Clause No. 3.0 in Section-'E' (Special Terms & Conditions for Tubulars) of General Terms & Conditions for Global Tender (MM-GLOBAL/E-01-2005- July 2012) on Anti-Dumping Duty stands deleted. The following guidelines are to be noted and considered by the bidder for submission of bid.

1. Government of India vide Notification No. 18/2016-Customs(ADD) dated 17.05.2016 has imposed, Anti-Dumping Duty and in respect of Seamless Pipes & Tubes, of an external diameter not exceeding 355.6 mm or 14" OD originating in, or exported from the People's Republic of China and imported into India. In case the product offered is exported by from any of the parties from People's Republic of China or originating from People's Republic of China and imported into India, the Anti-Dumping Duty shall be applicable.

The Anti-Dumping Duty on shall be at a rate which is equivalent to difference between the landed value of the subject goods and the amount mentioned in the corresponding entry in column (9) of the table furnished vide aforementioned Notification provided the landed value is less than the value specified in column (9) and in the currency and as per unit of measurement as specified in the above Notification.

The Anti-Dumping Duty so calculated as per the above Notification shall be loaded on the CIF

Landed value of such Foreign bidders (with Customs Duty as applicable on the Bid Closing Date of the Tender) excluding inland transportation to destination, on whom the Anti-Dumping Duty is applicable. The evaluation of the offers will be done after loading the offers as above. Foreign bidders are required to indicate the ·gross/nett weight of the goods offered by them originating in, or exported from the People's Republic of China and imported into India, in MT in their Technical Bids for the purpose of calculation of the Anti-Dumping Duty amount.

In case of the indigenous bidders, they should note that OIL will not be liable to reimburse any amount on account of Anti-Dumping duty for the materials imported by them from People's Republic of China for execution of the contract and any Anti-Dumping Duty payable against import by them from People's Republic of China shall be to their account. Indigenous bidders are required to categorically confirm acceptance of the· same in their Technical bids failing which offers will be liable for rejection.

2. All bidders must categorically mention the country of origin of the products offered by them' in their offers. In the event categorical mention of country of origin of their offered products is not made in their offer, the offer will be summarily rejected.

50.0 Bidders to refer to Ministry of Finance, Govt of India's Notification, No. 18/2016-Customs (ADD) dated 17.05.2016 and subsequent amendment vide Notification No. No. 7/2017-Customs (ADD) dated 17.02.2017 (including its latest modifications/amendments, if any) for detailed guidelines in this regard.

In case of Items where Third Party Inspection clause is present:

After placement of Purchase order the successful bidder shall submit Soft copy of Third Party Inspection certificate and other certificates stipulated in the PO to the following in advance after completion of Third Party Inspection:

GM- Materials, OIL INDIA LIMITED, Duliajan, Assam, Pin – 786602

After successful verification of the documents by OIL, despatch clearance shall be provided and payment shall be made by OIL.

51.0 **Financing of trade receivables of Micro and Small Enterprises (MSEs) through Trade Receivables Discounting System (TReDS) platform.**

Based on the initiatives of Government of India to help MSE vendors get immediate access to liquid fund based on Buyers credit rating by discounting, OIL has registered itself on TReDS platform with M/s RXIL , M/s A TREDS Ltd. (Invoice Mart), M/s Mynd Solutions Private Limited, M/s C2FO Factoring Solutions Private Limited, M/s. KredX Platform Private Limited. The list of approved/authorized entities is as under:

Sl. No	Name of the Approved/ Authorised Entity	TReDS Payment System Approved/ Authorised
1	M/s Receivables Exchange of India Limited (RXIL)	RXIL
2	M/s A TREDS Ltd	INVOICE MART
3	M/s Mynd Solutions Private Limited,	Mlxchange
4	M/s C2FO Factoring Solutions Private Limited,	C2treds
5	M/s. KredX Platform Private Limited	DTX

MSE vendors can avail this benefit by registering themselves with any of the exchanges providing e-discounting / electronic factoring services on TReDS platform and following the procedures defined therein, provided OIL is also participating in such TReDS Platform as a Buyer.

(i) MSE Vendor should be aware that all costs relating to availing the facility of discounting on TReDS platform including but not limited to Registration charges, Transaction charges for financing, Discounting Charges, Interest on financing, or any other charges known by any name shall be borne by MSE Vendor.

(ii) MSE Vendor hereby agrees to indemnify, hold harmless and keep OIL and its affiliates, Directors, officers, representatives, agents and employees indemnified, from any and all damages, losses, claims and liabilities (including legal costs) which may arise from Sellers submission, posting or display, participation, in any manner, on the TReDS Platform or from the use of Services or from the Buyer's breach of any of the terms and conditions of the Usage Terms or of this Agreement and any Applicable Law on a full indemnity basis.

(iii) OIL shall not be liable for any special, indirect, punitive, incidental, or consequential damages or any damages whatsoever (including but not limited to damages for loss of profits or savings, business interruption, loss of information), whether in contract, tort, equity or otherwise or any other damages resulting from using TReDS platform for discounting their (MSE Vendor's) invoices.

Note:

(i) Buyer means OIL who has placed Purchase Order/ Contract on a MSE Vendor (Seller).

(ii) Seller means a MSE vendor, who has been awarded Purchase Order/ Contract by OIL (Buyer).

52.0. Bidders to note that interpretation of all foreign trade terms shall be as per INCOTERMS 2020.

53.0. Clarification of Bids / Shortfall Documents.

During evaluation and comparison of bids, OIL may, at its discretion, ask the bidder for clarifications on the bid. The request for clarification shall be given in writing by email/registered/speed post, asking the bidder to respond by a specified date, and also mentioning therein that, if the bidder does not comply or respond by the date, his bid will be evaluated based on the submission. Depending on the outcome, such bids are to be ignored or considered further. No change in prices or substance of the bid shall be sought, offered or permitted. No post-bid clarification at the initiative of the bidder shall be entertained. The shortfall information/documents should be sought only in case of historical documents which pre-existed at the time of the tender opening and which have not undergone change since then. (Example: if the Permanent Account Number, registration with GST has been asked to be submitted and the tenderer has not provided them, these documents may be asked for with a target date as above). So far as the submission of documents is concerned with regard to qualification criteria, after submission of the tender, only related shortfall documents should be asked for and considered. For example, if the bidder has submitted a supply order without its completion/performance certificate, the certificate can be asked for and considered. However, no new supply order should be asked for so as to qualify the bidder.

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BB: ADDITIONAL NOTES TO THE BIDDER

1.0 BIDDER TO ADHERE:

The bidder shall be deemed to have examined the complete Bid Document including technical specifications, terms & conditions, all attachments & annexure thereto and taken due cognizance of the contents to their full satisfaction prior to submitting Bid. Any lack of information shall not relieve the Seller in any way of its responsibility to fulfil obligations under the purchase order/contract in entirety.

2.0 EFFECTIVE DATE OF CONTRACT/ ORDER:

Unless otherwise specified in the contrary, the date of LOA will be the start of the Contract/Order for all practical purposes.

3.0 CONFIDENTIAL INFORMATION:

The Seller/Bidder shall treat all designs, drawings, specifications, data or information supplied by OIL (whether written or verbal) as confidential and shall use its best endeavours to ensure that such design, drawings, data or information is not divulged to any third party, except with the consent of OIL, where necessary for the purpose of performance of its obligation and subject to similar undertakings being obtained from such third parties to treat such design, drawings, data or information in like confidence other than designs, drawings, data or information which at the time of proposed disclosure are within the public knowledge or in the Seller's possession.

4.0 PATENT AND OTHER RIGHTS:

4.1. The Seller shall fully indemnify OIL against any action, claim or demand, costs and expenses arising from or incurred by reason of any infringement or alleged infringement of any letter, patent, design, trademark or name, copy right or other legally protected rights in respect of any plant, work, materials to be supplied or any arrangement, system or method of using, fixing or working to be employed by the Seller.

4.2. In the event of any claim or demand being made or action brought against OIL in respect of any of the aforesaid matters, OIL shall notify the Seller thereof as soon as possible and Seller shall conduct with the assistance of OIL if necessary, but at his own expense, all negotiation for the settlement of such matter and any legal proceeding, litigation/arbitration involved or which may arise there from. Notwithstanding above, OIL reserves the right to initiate action against the seller.

5.0 ASSIGNMENT:

5.1. The Seller shall not transfer or assign the consequent Contract or any part thereof without the prior consent in writing from OIL. Any permitted transfer/assignment or subletting shall not relieve the Seller of any of his obligations, which might have arisen before such permission was given.

5.2. The Seller shall not sublet the consequent Contract or any part thereof without the prior consent in writing from OIL. Any permitted subletting shall not relieve the Seller of any of his obligations under the contract/purchase order and shall be wholly responsible for compliance of the terms of the Contract/Purchase Order.

6.0 TAXES, DUTIES & LEVIES:

6.1. DOMESTIC SUPPLIER:

(a) Domestic Seller shall be responsible for all taxes/duties/ licence fee etc. incurred until the delivery of goods to the Purchaser. However, GST (Goods & Service Tax) as applicable on the finished product shall be reimbursed by the Purchaser.

(b) GST at applicable rate (s) shall be payable for the supplies to be made against this purchase order/ contract. However, supplier is required to take note of the Anti-Profiteering clause provisioned in GST and raise/submit supply invoice(s) incorporating the following details:

(i) OIL-Provisional GSTIN:
(ii) GST Registration Details of Supplier:
(iii) Item-wise HSN Code:
(iv) Applicable Rate of GST:

(v) Total amount of benefit passed on to OIL due to reduction in rate of Tax (if so) or from Input Tax Credit by way of commensurate reduction in Prices under Anti Profiteering clause:

In addition to above, the Supplier must submit an undertaking to OIL certifying that the benefit accrued to them on account of reduction in tax rate(s) or from Input Tax Credit has been entirely passed on to OIL under anti-profiteering provision of GST Act, 2017

(c) For the purposes of levy and imposition of GST, the expressions shall have the following meanings:

(i) "GST" means any tax imposed on the supply of goods and/or services under GST Law.
(ii) "Cess" means any applicable cess, existing or future on the supply of Goods and Services as per Goods and Services Tax (Compensation to States) Act, 2017.
(iii) "GST Law" means IGST Act 2017, CGST Act 2017, UTGST Act, 2017and SGST Act, 2017and all related ancillary Rules and Notifications issued in this regard from time to time.

(d) Vendor/Supplier/Contractor is required to pass on the benefit arising out of introduction of GST, including seamless flow of Input Tax Credit, reduction in Tax Rate on inputs as well as final goods by way of reduction of price as contemplated in the provision relating to Anti-Profiteering Measure vide Section 171 of the CGST Act, 2017. Accordingly, for supplies made under GST, the Vendor/Supplier/Contractor must confirm that benefit of lower costs has been passed on to OIL by way of lower prices/taxes and must also provide details of the same as applicable. OIL reserves the right to examine such details about costs of inputs/input services of the Vendor/Supplier/Contractor to ensure that the intended benefits of GST have been passed on to OIL.

(e) Vendor/Supplier/Contractor agrees to do all things but not limited to providing GST compliant Tax Invoices or other documentation as per GST law relating to the supply of goods and/or services covered in the instant contract like raising of and/or acceptance or rejection of credit notes/ debit notes as the case may be, payment of taxes, timely filing of valid statutory Returns for the tax period on the Goods and Service Tax Network (GSTN), submission of general information as and when called for by OIL in the customized format shared by OIL in order to enable OIL to update its database etc. that may be necessary to match the invoices on GSTN common portal and also for claiming input tax credit in relation to any GST payable under this Contract or in respect of any supply under this Contract.

(f) In case Input Tax Credit of GST is denied to OIL or demand is recovered from OIL by the Central State Authorities on account of any non-compliance by Vendor/Supplier/Contractor, including non-payment of GST charged and recovered, the Vendor/Supplier/Contractor shall indemnify OIL in respect of all such claims of tax, penalty and/or interest, loss, damages, costs, expenses and liability that may arise due to such non-compliance. OIL, at its discretion, may also withhold/recover such an amount demanded and recovered by the authorities/ state authorities from the pending payments of the Vendor/Supplier/Contractor.

(g) In case of ICB tender, wherever OIL issues Project Authority Certificate to domestic Seller for availing duty-free import of raw material and component, any variation in the custom duty within the contractual completion period of the purchase order/contract shall be to Purchaser's account on CIF value of import declared by the Seller in its Bid.

(h) All taxes, stamp duties and other levies for the services including installation/commissioning, Training etc. shall be to the Seller's account.

(i) Income Tax on the value of the Services rendered by the Seller in connection with installation/commissioning, training etc. shall be deducted at source from the invoices at the appropriate rate under the I.T. Act & Rules from time to time.

(j) Tax deduction certificate shall be issued by Purchaser for the Tax deducted at source as per provision of Act.

(k) GST TDS shall be applicable for as per the provisions of the CGST Act 2017

6.2 FOREIGN SUPPLIER:

a) All taxes, duties and levies imposed outside India shall be the responsibility of the Seller and charges thereof are included in the item rates and shall be to the Seller's account.

b) All taxes, duties and levies imposed inside India on the ordered materials/goods shall be borne by the Purchaser. However, taxes, levies as may be payable in India on services, if included any in the order/contract, including the installation & Commissioning, training etc. shall be to Seller's account.

c) Income Tax on the value of the Services rendered by the Seller in connection with installation, commissioning, training etc. shall be deducted at source from the invoices at the appropriate rate under the I.T. Act & Rules from time to time.

d) Tax deduction certificate shall be issued by Purchaser for the Tax deducted at source as per provisions of Act.

e) As per Income Tax Act, 1961 Foreign bidders should submit (along with their technical bid) following particulars, which are required to be furnished by OIL to Income Tax Department for complying with the requirements for making remittances to non-residents as per Income Tax Act, 1961 (as amended from time to time):

(i) Whether the non-resident has a Fixed Place Permanent Establishment (PE) or a Dependent Agency PE in India, in terms of the Double Taxation Avoidance Agreement (DTAA) between India and his country of tax residence through which the non-resident carries on business activities in relation to its engagement by OIL and if, yes, address of the Fixed Place PE or name & address of the Dependent Agent?

(ii) Whether by carrying on activities in relation to its engagement by OIL, the non-resident constitutes an Installation/Construction PE or a Service PE in India in terms of the DTAA between India and his country of tax residence?

(iii) If the non-resident has PE in India, whether the remittances to be made to him under his engagement by OIL are attributable to such PE?

(iv) If the remittances to be made to the non-resident under his engagement by OIL are attributable to a PE which it has in India, what quantum of the profits resulting to the non-resident from his engagement by OIL, can be said to be attributable to the role played by the PE, and the basis of arriving at such quantum?

(v) If no part of the remittances to be made to the non-resident under his engagement by OIL is attributable to a PE which it has in India, what are the reasons for the same?

(vi) Non-resident's complete address (not necessarily in India), e-mail address. phone number with International Dialling code.

(vii) If the non-resident has an Indian Income Tax Permanent Account Number (PAN), what is that PAN?

(viii) Country of tax residence of the non-resident supported by a TRC issued by the Government of country or specified territory to the effect that the person named therein is a resident of that country or specified territory.

(ix) In accordance with Rule 21AB of the Income-tax Rules, 1962, along with the TRC, the non-resident shall also furnish the requisite information in the prescribed "Form 10F".

(x) A declaration as to the country which can be regarded as the non-resident's principal place of business. This could be the same as his country of tax residence or different depending on facts.

(xi) Whether the non-resident is constituted as a company, a partnership firm, or any other form of business organization.

f) In view of above and in accordance with Income Tax Act, 1961 Foreign bidders shall undertake in their Technical bid that in the event of placement of order on them, they shall submit below documents within 15 days from the date of issue of Purchase order. The documents are required to be furnished by OIL to Income Tax Department for complying with the requirements for making remittances to non-residents as per Income Tax Act, 1961 (as amended from time to time):

- Tax Residency Certificate (TRC)
- Form No. 10F
- No Business Connection or Permanent Establishment Certificate

g) Payment to Foreign supplier shall be released only after receipt of the above documents. Any delay in submission of Tax Residency Certificate (TRC), Form No. 10F and/or PE within the specified time may lead to the Income Tax Department directing OIL to deduct tax at a higher rate than at which it would otherwise have been deducted. Such increased tax liability shall be recovered from the Foreign Supplier.

h) In addition to above particulars, the Foreign supplier should also provide any other information as may be required later for determining the taxability of the amount to be remitted to the non-resident. Further, the Foreign supplier shall be liable to intimate the subsequent changes (if any) to the information submitted against any of the above particulars, along with full details.

7.0 CHANGE IN LAW:

7.1. In the event of introduction of any new legislation or any change or amendment or enforcement of any Act or Law, rules or regulations of Government of India or State Government(s) or Public Body which becomes effective after the tender closing date and which results in increase in rate of taxes and duties on the supply of goods/services to PURCHASER under the PURCHASE ORDER (other than personnel and Corporate taxes), the SUPPLIER shall be indemnified for any such increased taxes and duties by the PURCHASER subject to the production of documentary proof to the satisfaction of the PURCHASER to the extent which directly is attributable to such introduction of new legislation or change or amendment as mentioned above and adjudication by the competent authority & the courts wherever levy of such taxes / duties are disputed by PURCHASER.

7.2. Similarly, in the event of introduction of new legislation or any change or amendment or enforcement of any Act or Law, rules or regulations of Government of India or State Government(s) or Public Body which becomes effective after the tender closing date and which results in any decrease in the rate of taxes and duties on the supply of goods/services to PURCHASER, (other than personnel and Corporate taxes), the SUPPLIER shall pass on the benefits of such reduced cost, taxes or duties to the PURCHASER, to the extent which is directly attributable to such introduction of new legislation or change or amendment as mentioned above.

7.3. All taxes & duties (except where otherwise expressly provided in the Purchase Order) as may be levied/ imposed in consequences of execution of the Services or in relation thereto or in connection therewith as per the Acts, Laws, Rules, Regulations in force on the tender closing date, shall be to SUPPLIER's account. Any increase/decrease in the rate of such duties, taxes after the tender closing date, but within the contractual completion/mobilization date as stipulated in the PURCHASE ORDER will be to the account of PURCHASER.

7.4. Any increase in the rate of taxes & duties after the delivery completion/ mobilization date or during the extended period will be to the SUPPLIER's account, where delay in completion /mobilization period is attributable to the SUPPLIER. However, any decrease in the rate of taxes and duties after the delivery completion/ mobilization date will be to PURCHASER's account.

7.5. The prices given in the Price Bid are based on the applicable tariff as indicated by the SUPPLIER. In case this information subsequently proves to be wrong, incorrect or misleading, PURCHASER will have no liability to reimburse/pay to the SUPPLIER the excess duties, taxes, fees, if any finally levied / imposed by the concerned authorities. However, in such an event, PURCHASER will have the right to recover the difference in case the rate of duty/tax finally assessed is on the lower side.

7.6. Notwithstanding the provision contained in clause 7.1 to 7.4 above, the Purchaser shall not bear any liability in respect of:

(i) Personal taxes on the personnel deployed by Purchaser, his sub-contractor, Agents etc.
(ii) Corporate taxes and Fringe benefit tax in respect of Supplier and all of their sub- contractors, agents etc.
(iii) Other taxes & duties including Customs Duty, and GST in addition to new taxes etc. in respect of sub-contractors, vendors, agents etc of the Supplier.
(iv) Any liability on the Seller, which was accrued under the old law or contract, which the Contractor is obligated to pay either to the PURSHASER or to the Government Authority.

7.7. The above provisions would be applicable only in case of variation in rate of taxes and duties on supply of goods/services to PURCHASER and not applicable on taxes and duties on input (goods and services).

7.8. Any claim or reduction on account of change in law shall be accompanied with undertaking that the provisions of anti-profiteering clause under GST Act have been complied with.

8.0 TRANSFER OF TITLE AND RISK OF LOSS:

8.1. For Indigenous Material(s):

The transfer of property and risk in Indigenous Material(s) shall be deemed to take place as follows:

a) For despatch on FOB Despatch Station basis: On handing over the Material(s) to the carrier against receipt of clean Railway Receipt/Truck or Lorry Receipt and such receipt having been handed over to OIL.
b) For delivery on DDP Destination basis: On receipt of the Material(s) by OIL at the destination station.

8.2. For Imported Material(s):

The transfer of property and risks in Imported Material(s) shall be deemed to take place as follows:

a) For FOB/FCA deliveries: On handing over the Material(s) to the carrier and issue of clean Bill of Lading/Airway Bill (except for freight to pay) and its transmission to OIL.
b) For CIF/C&F deliveries: Transfer of title and risk of loss passes to OIL when delivered on board the ship by vendor who pays the transportation cost upto the destination port or to the designated destination airport (as per INCOTERMS).

9.0 LIMITATION OF LIABILITY:

Notwithstanding any other provisions except only in cases of wilful misconduct and/or criminal acts;

a) Notwithstanding any other provisions herein to the contrary, except only in cases of willful misconduct and/or criminal acts and/or criminal negligence, neither the SELLER nor the PURCHASER shall be liable to the other, whether in Contract, tort, or otherwise, for any consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided however that this exclusion shall not apply to any obligation of the SELLER to pay Liquidated Damages to the COMPANY and/or COMPANY's right to forfeit the Performance Bank Guarantee(s) in terms of the contract.

b) Notwithstanding any other provisions incorporated elsewhere in the purchase order/contract, the aggregate liability of the Seller in respect of this contract, whether under Contract, in tort or otherwise, shall not exceed 100% of the Contract price, provided however that this limitation

shall not apply to the cost of repairing or replacing defective equipment by the Seller, or to any obligation of the Seller to indemnify the Purchaser with respect to Intellectual Property Rights or liquidated damage or Performance Bank Guarantee.

c) Purchaser shall indemnify and keep indemnified Seller harmless from and against any and all claims, costs, losses and liabilities in excess of the aggregate liability amount in terms of clause (b) above.

d) The consideration or object of the purchase order/contract/agreement must remain lawful all the time till completion of successful execution. Consideration or object of the purchase order/contract/agreement is lawful unless -

- it is forbidden by law; or
- is of such nature that, if permitted, it would defeat the provisions of any law; or
- is fraudulent; or involves or implies, injury to the person or property of another; or
- the Court regards it as immoral, or opposed to public policy;

In each of these cases, the consideration or object is said to be unlawful and such purchase order/contract/agreement of which the consideration or object is unlawful is void and cannot be enforced.

10.0 INDEMNITY AGREEMENT:

10.1. Except as provided hereof, Seller agrees to protect, defend, indemnify and hold Purchaser harmless from and against all claims, suits, demands and causes of action, liabilities, expenses, cost, liens and judgments of every kind and character, without limit, which may arise in favour of Seller's employees, agents, sellers and sub-sellers or their employees on account of bodily injury or death, or damage to personnel/properly as a result of the operations contemplated hereby, regardless of whether or not the said claims, demands or causes of action arise out of the negligence or otherwise, in whole or in part or other faults.

10.2. Except as provided hereof, Purchaser agrees to protect, defend, indemnify and hold Seller harmless from and against all claims, suits, demands and causes of action, liabilities, expenses, cost, liens and judgments of every kind and character, without limit, which may arise in favour of Purchaser's employees, agents, sellers and sub-sellers or their employees on account of bodily injury or death, or damage to personnel/properly as a result of the operations contemplated hereby, regardless of whether or not said claims, demands or causes of action arise out of the negligence or otherwise, in whole or in part or other faults.

11.0 TRANSIT INSURANCE:

11.1. All goods supplied under the consequent purchase order shall be fully insured in the freely convertible currency against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery.

11.2. The Seller shall ensure that in effecting despatch of materials, the primary responsibility of the shipper/carriers/transporter for safe movement is always retained so that the Purchaser’s interests are fully safeguarded and are in no way jeopardized. The Seller shall furnish the cost of materials against each shipment/consignment.

11.3. Against Purchase Orders placed on overseas/foreign Supplier, where shipment is on FOB/FCA or CFR basis, marine insurance shall be the responsibility of the Purchaser. The Supplier/Seller shall send OIL information of the proposed shipment/consignment well in advance by e-mail/courier to enable OIL to take necessary action for the marine/air/transit insurance of the shipment/consignment. Any failure by the Vendor to do so shall place the consignment at the Vendor’s risk. However, in case the delivery is on CIF/CIP terms, the marine insurance is to be arranged and paid for by the Seller naming the Purchaser as beneficiary.

11.4. Against Purchase Orders placed on domestic/indigenous Suppliers, where delivery is on FOB Despatch Station basis, the transit insurance from FOB point onwards shall be arranged and borne by the Purchaser. The Supplier/Seller shall send OIL information of the proposed shipment/consignment in OIL’s

web site www.oil-india.com (Under Vendor Category > Transit Declaration. Any failure by the Vendor to do so shall place the consignment at the Vendor's risk. However, in case of delivery on DDP Destination basis, transit insurance shall be arranged and paid by the Seller naming the Purchaser as the beneficiary.

11.5. Purchase orders against which the transit/marine insurance is to be arranged by OIL, the Seller/Supplier must comply the following, failing which the entire risk & responsibility pertaining to the shipment/consignment shall be to Seller's account:

(a) Overseas/Foreign Supplier: The Seller shall notify OIL's Shipping Office at Kolkata, India in advance per e-mail/courier all information on the proposed shipment/consignment for Purchaser to take necessary action for the marine/air/transit insurance.

(b) Shipment must be made under deck In the event of Seller's inability to ship the material under deck, Purchasers prior concurrence must be obtained for shipping consignment over deck and all details must be faxed to Purchaser and the port consignee for arranging insurance accordingly.

(c) Domestic/Indigenous Supplier: Seller shall notify the despatch details to Purchaser immediately and update the consignment details in OIL's website www.oil-india.com (Under for Vendor -> Transit Declaration).

11.6. Seller must notify the shipment/despatch details to Purchaser immediately.

12.0 PROGRESS REPORT:

12.1. In consistent with the agreed terms, upon demand from Purchaser, upon receipt of purchase order, the Seller shall submit a time schedule for all key events during the execution of the order, so as to monitor the progress.

12.2. Based on the above time schedule the Seller shall furnish a monthly report on the progress of the order to the Purchaser. Without assuming any obligations, Purchaser may review the progress from time to time and advise the seller to take necessary corrective action to improve and to have a catch-up programme any time, if found not satisfactory.

12.3. Notwithstanding the above, if Seller fails to catch up and does not make satisfactory progress, Purchaser can notify the Seller in writing for take necessary action to make it good. If the Seller does not comply with the notice, the Purchaser shall be at liberty to take over the job and get it done by alternative source at the risk and cost of Seller.

13.0 LANGUAGE:

All related documents as well as subsequent correspondences between the Seller and the Purchaser shall be in English language only.

14.0 REPEAT ORDER:

Purchaser reserves the right to place repeat order or extend the ordered quantity against any/all items within the currency of the purchase order up to 50% of the original ordered quantity on same terms & conditions and rate(s) not exceeding the original ordered rate(s).

15.0 SUB-CONTRACTS / ASSIGNMENT:

15.1. Subcontracting/assigning to third parties shall not take place either in whole or in part without the prior written consent of the Purchaser, which the Purchaser may grant or deny as per its discretion and violation of same shall entitle the Purchaser to cancel the order in whole or in part and claim damages.

15.2. Purchase Order shall be issued in the name of bidder only and no request for issuance of the Purchase Order to a third party shall be entertained.

16.0 TIME IS THE ESSENCE OF PURCHASE ORDER/CONTRACT:

The time and the date of delivery/completion as stipulated in the contract/purchase order shall be deemed to be the essence of the contract/purchase order.

17.0 DELIVERY:

17.1. **For Foreign Bidders only:**

In case of Imported Material, the foreign Supplier shall make shipment only after prior approval of the OIL's Shipping Office at Kolkata, email: oilcalsh@oilindia.in. Demurrage, if any, on account of not obtaining approval from OIL, prior to shipment, will be seller accounts.

Prior to shipment, Supplier is required to furnish Commercial Invoice for OIL to complete import formalities. Also, the supplier shall arrange to obtain shipment clearance prior to shipment of materials from Head-Kolkata Branch, Oil India Limited, 15A, Hemanta Basu Sarani, Kolkata-700001, E-Mail: oilcalsh@oilindia.in. The supplier shall affect shipment only on receipt of shipment clearance from OIL, failing which all related liabilities shall be to supplier's account.

17.1.1. Delivery shall be deemed to have been made in case of FOB/FCA purchase order/contract, when the goods have been loaded on board of the designated vessel or aircraft at the designated port or place of shipment, securely packed and unless otherwise determined, shall be deemed to be the date of the relative Bill of Lading or Airway Bill. The date of Bill of Lading (excluding the freight forwarder nomination time) shall be considered as the date of delivery for overseas/foreign Sellers.

17.1.2. However, in case of CFR/CIF/CIP purchase order/contract, the date of IGM (Import General Manifesto) shall be considered as the date of delivery for overseas/foreign Sellers.

17.2. **For Indian Bidders only:**

~~Requisite Certificate for claiming concessional GST, wherever applicable shall be obtained by OIL from competent authority after receipt of supplier's invoice. Suppliers are requested not to dispatch ordered materials without receiving such Certificates from OIL, failing which liabilities, if any, shall be to supplier's account.~~

In case of indigenous purchase order on domestic Supplier, delivery shall be deemed to have been completed based on the order terms as under:

(a) FOB Despatching Station basis: The date of LR/ GR/ RR/ Airway Bill/Courier Dockets (as applicable) shall be considered as the date of delivery.

(b) DDP Destination basis: The date of receipt of goods at designated site/destination by the Purchaser or its authorised Consultant/Representative shall be considered as the date of delivery.

(c) All FOC (Free of Cost) items or Warranty replacement items must be supplied on DDP (Delivery Duty Paid) up to Destination basis without any cost to OIL.

18.0 INGREDIENTS DISCLOSURE:

(a) If any of the items ordered constitute or contain "hazardous or toxic chemicals" or "hazardous substances" or flammable or hazardous "petroleum products" or "dangerous goods" as defined by International Air Transport Association (IATA) or State or local law, rule or regulation, Seller shall provide at the time of delivery all required notices and information and approval from OIL before shipment. Seller agrees to maintain such information current and shall provide Buyer with any amended, altered or revised information on a timely basis. Seller warrants that the goods supplied under this Agreement do not contain any substance whose use is prohibited under International Air Transport Association (IATA) or State or local law, rule or regulation.

(b) Prior to and with the shipment of the goods purchased, Seller agrees to furnish to Buyer sufficient warning and notice in writing (including appropriate placarding and labels on goods, containers, packing and vehicles used for shipment) of any "hazardous substance" which is an ingredient or a part of any of the goods, together with such special handling instructions as may be necessary to advise Buyer and third parties, including transportation carriers and Buyer's employees, as to the degree of care and precaution that will best prevent bodily injury or property damage in the handling, transportation, processing, use, recycling or disposal of the goods.

19.0 PACKING & MARKING OF GOODS/EQUIPMENT:

19.1. Packing of goods must be sufficiently robust to withstand multiple handling during transit for delivery to their final destination so that contents do not get damaged. Protection of the plant and equipment against corrosion or deterioration must be given special attention. In case of overseas Suppliers, the packing should be sea-worthy/air-worthy.

19.2. Machined steel and iron parts are to be heavily greased/varnished as prevention against rust.

19.3. In the case of internal combustion engines, compressors and similar equipment, internal parts are to be sprayed with an inhibitor or water splitting preservative and all openings should be suitably covered with tape/cap to prevent ingress of water.

19.4. Boxes/ Packing cases containing electrical/ electronic equipment are to be waterproof lined.

19.5. All items must have their respective identification marks painted/ embossed on them.

19.6. Crates or boxes should have a list of items contained therein secured to the exterior by means of an enveloping piece of tin sheet nailed to the wood. A duplicate list should also be included inside the crate with the contents.

19.7. Items prone for pilfering should be packed in boxes and not in bags.

19.8. The Seller shall be responsible for damage of goods either in full or in part and for corrosion and/or deterioration of the plant and equipment during transit due to inadequate/insufficient packing or due to noncompliance with the above Para Nos. 19.1 to 19.4 depending upon the nature of items and as such shall be obligated to repair or replace the damaged goods or plant or equipment in full or in parts thereof, at free of cost to OIL within a reasonable period of time.

19.9. Items that can be packed in bundles must be secured with strong wires or bands near each end and at regular intervals along the length to prevent splaying and ensure rigidity. Bundles must be suitably tagged using labels which are securely fastened by the ties clearly stencilled with mark, number and port mark.

19.10. Bundles or pieces must be adequately painted and marked as per item specifications.

19.11. In case of tubular, the weight of each bundle should not exceed 2 MT.

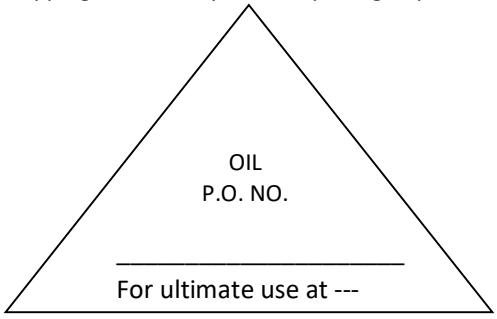
19.12. All spares are to be labelled with purchaser's order number and item number in addition to seller's part number, if any.

19.13. Electrical equipment must be suitable for use in humid and tropical climate and be specially treated / finished to prevent deterioration / corrosion. Insulation is to be non-hygroscopic and preferably vacuum dried and pressure impregnated.

19.14. Each box/crate/pallet/piece should be clearly marked on atleast two sides with OIL's Purchase order number, consignee name and address, consignment note number, package number and total number of packages.

19.15. <u>Shipping Mark in case of foreign order to be despatched by sea/air:</u>

Please put the following shipping mark clearly on each package / piece:



In addition to the shipping mark as shown above, packages must be marked on two sides with net and gross weights in kilograms and measurements in centimetres and country of origin. For pieces over 1 MT these dimensions must be marked on all sides to facilitate identification in case of shipping marks becoming obliterated.

All packages, wherever possible, should have a label placed inside bearing a clear impression of the external, mark, number and port mark.

19.16. Shipment confirmation by overseas/foreign Suppliers:
The foreign Seller shall advise the Purchaser by email or fax immediately after the shipment is affected with details of name of shipping line and vessel/airline and flight number, date of shipment, port of shipment, number and date of Bill of Lading/AWB, terms of delivery, number of packages, weight and volume of consignment and brief description of goods.

19.17. Road Despatch by domestic Suppliers:

19.17.1. In the event of an order other than DDP Destination terms on indigenous Seller, the materials shall be despatched through OIL's approved transporter/carrier (which will be specified in the order) on "Door Delivery" basis.

19.17.2. For orders placed on DDP Destination basis on indigenous Seller, the materials shall be despatched through reputed Bank approved transporters/carriers only on Door Delivery basis. In case OIL is required to collect the material from transporters godown, extra expenditure incurred thereof will be recovered from the Seller.

19.18. Rail Despatch by domestic Suppliers:
In case of Rail despatch, the indigenous Seller shall be fully responsible for arranging the required railway wagons/rake. Tubular consignment will be despatched preferably in open type wagons. In case of despatch by other wagons, prior approval of OIL is to be taken. Height of the wagons should not exceed 4.6 metres.

19.19. Weight and Size Limitation of Packages:

Category	Length (Mtrs.)	Width (Mtrs.)	Height (Mtrs.)	Capacity (MT)
Truck	5.185	1.98	1.98	9
Normal Trailer	10.98	2.44	2.44	18
Semi Low Bed Trailer	10.98	3.05	3.05	20
Low Bed Trailer	6.71	3.05	3.81	18

Above dimensional restrictions must not be violated without prior approval from the Purchaser. The finished packing should be in the form of a box under the limited dimensions.

20.0 TRANSPORTATION:

20.1. OVERSEAS/FOREIGN SUPPLIER:

a) Where the Seller is required to undertake delivery of goods on FOB terms, documentation, handling &inland transportation upto putting the ordered goods on the board at port of loading shall be arranged and paid by the Seller. The total order value includes all such costs/FOB charges etc. For the orders issued on FOB/FCA terms, OIL reserves the right to convert the order from FOB/FCA Port of export to C&F Kolkata term considering the ocean/air freight quoted by Seller in their offer. In such case, seller shall submit enhanced performance security amount considering the quoted ocean freight charges as notified by OIL.

b) Where the Seller is required to undertake the delivery of goods on CFR or CIF basis, documentation, handling & transportation of goods upto the port of discharge in the country of destination, as specified in the purchase order, shall be arranged and paid by the Seller. The total

order value includes all such associated costs upto the port of discharge in the country of destination.

c) In case of air-shipment of sundry consignments (gross weight upto 100Kg), OIL may nominate its Air-cargo Consolidation Service Provider to receive such duly packed consignments at their warehouse nearer to the gateway airport from various Sellers for arranging onward air-shipment upto the destination airport in India on consolidation basis. Seller, in consultation with the nominated air-cargo consolidation Service Provider, shall arrange for and bear all costs associated with preparation of documents, handling & inland transportation of such consignments upto the warehouse/gateway airport against purchase orders placed on FOB/FCA (by air) terms.

d) All shipments of material and containerised cargo shall be made by suitable vessels certified for seaworthiness and complying with National/ International safety regulations and age (vintage) of the vessel being less than 25 years.

20.2. DOMESTIC/INDIGENOUS SUPPLIER:

a) Where the Seller is required to undertake delivery of goods on FOB despatch station basis, the cost of handling & loading of goods on the carrier of Purchaser's nominated transporter/rail shall be arranged and paid by the Seller. The total order value includes all such associated costs.

b) Where the Seller is required to undertake delivery of goods on DDP destination basis, handling & transportation of goods upto the designated site of the Purchaser, as specified in the purchase order, shall be arranged and paid by the Seller. The total order value includes all such associated costs.

20.3. Both Indian bidder and Foreign bidder must note that no trans-shipment en route is permitted. However, under exceptional circumstances, trans-shipment maybe allowed with prior consent of OIL. No charges shall be payable for such transhipment and consequent handling/storage of the goods.

21.0 DOCUMENTATION (FOR OVERSEAS/ FOREIGN SUPPLIERS):

21.1. This is a very important requirement. Seller is required to strictly follow this requirement and shall forward the document, as mentioned below, by air mail / courier immediately after the shipment is made:

	Addressee	**List of Documents**	**No. of copies**
(A)	To Purchaser's Banker through whom the L/C is established:	i) Clear negotiable Bill of Lading (Complete set)/ AWB duly signed and without any overwriting	-1
		ii) Negotiable Copy of Invoice	-1
		iii) Certificate of Origin copy	-1
		iv) Declaration of Third-Party Inspection (TPI) Agency as per **Proforma C** in **original, whenever involved**	-1

(B)	To Head (Kolkata Office) Oil India Limited 15A, Hemanta Basu Sarani Kolkata-700 001 Fax No. (91) 33-22101390/ 22202596	i) ii) iii) iv) v) vi) vii) viii) ix)	Copy of non-negotiable Bill of Lading/ AWB Copy of non-negotiable invoice signed as in original in all pages Certificate of Origin Packing List Catalogues/ Literature, wherever applicable Safety data sheet sets (in case of chemicals) Tax Residency Certificate Form No 10F (PROFORMA - D). No Business Connection or Permanent Establishment Certificate (PROFORMA - E).	-3 -5 -3 -2 -1 -2 -1 -1 -1
(C)	To concerned purchase official, Oil India Limited (To be incorporated sphere wise)	i) ii) iii) iv) v)	Copy of non-negotiable Bill of Lading / AWB Copy of non-negotiable invoice Test / Inspection / TPI Certificate, If any (**Original**+Copy) Literature / Catalogue, if applicable Packing List	-1 -1 -2 -1 -1
(D)	To concerned finance official, Oil India Limited (To be incorporated sphere wise)	i) ii)	Copy of non-negotiable invoice Bill of Lading/AWB/ House AWB	-1 -1

Note: Literature/ catalogue is not required in case of spares (unless otherwise stated in the main order)

21.2. The Seller shall be responsible for making available the shipping documents as mentioned above to the Purchaser's bankers and to Purchaser's Kolkata office within seven (7) days (3 days in case of shipment from ports nearby Kolkata port like Singapore) prior to the listed arrival of the vessel at Kolkata port. For air consignments, documents should be received within seven (7) days from date of dispatch. If the documents are not made available as requested, it will not be possible for Purchaser to clear the consignments through Customs at the discharging port in time and the same will accrue demurrage. Such demurrage and other expenses incurred by Purchaser due to late submission of documents (both negotiable and non-negotiable) or submission of incorrect documents by the Seller will be recoverable fully from the Seller/their Indian agent.

22.0 <u>DOCUMENTATION (FOR DOMESTIC/INDIGENOUS SUPPLIERS):</u>

22.1. Preparation and submission of proper documents by Seller is one of the very important requirements. The Seller must strictly follow the instructions.

22.2. Seller shall ensure that all the documents have clear reference of OIL's Purchase Order number.

22.3. Seller shall forward the documents, as mentioned below, by courier service immediately after the dispatch is made:

(I) WHERE PAYMENT AGAINST DIRECT SUBMISSION OF DESPATCH DOCUMENTS TO COMPANY:

A)	To concerned finance official Oil India Limited	i) ii) iii) iv) v) vi) vii) viii) ix)	Bill in original + one copy Copy of the C-Note/RR Copy of Mill Inspection Certificate, if any Copy of Third-Party Inspection Certificate, if any. Copy of Delivery Challan TPI Declaration as per Proforma C enclosed. (Original) Copy of Tax Invoice Copy of packing list. Documentary evidence of payment of Customs Duty, if any
B)	To concerned receiving official Oil India Limited	i) ii) iii) iv) v) vi) vii) viii)	Clear Consignee copy of RR/C-Note-Original+1 copy Copy of Tax Invoice Delivery Challan (Original) Packing list (Original) Mill inspection certificate, if any (Original) Third Party Inspection certificate, if any (Original) TPI Declaration as per Proforma C Enclosed-One Copy Warranty Certificate (Original)
C)	To concerned purchase official Oil India Limited		One set consisting copies of all the documents as mentioned in (B) above

Note: *Where payment term is after receipt and acceptance of materials, the complete set of documents meant for Chief General Manager (A/P) as indicated in para 22.3 (I) (A) should be submitted to Dy. General Manager Materials (Receiving).*

(II) WHEREVER DOCUMENTS TO BE NEGOTIATED THROUGH BANK:

(A)	To purchaser's Bankers (SBI/UBI/UCO /CANARA/ALLAHABAD BANK): One complete set of documents comprising of following + One extra set Above documents should be sent to Banker with clear instructions to them that the extra set of copies of above documents must be sent to Chief General Manager (A/P), OIL along with the intimation from Bank.	i) ii) iii) iv) v) vi) vii) viii) ix)	Clear Consignee copy of C-Note/ RR-Original Bill – Original Mill Inspection Certificate, if any – 1 copy Third Party Inspection certificate, if any – 1 copy Declaration by Third Party Inspector – 1 copy Delivery Challan – 1 copy Tax Invoice-Original Packing List – 1 copy Warranty Certificate – 1 copy Documentary evidence of payment of Customs Duty, if any
(B)	To concerned finance official Oil India Limited	i) ii) iii) iv) v) vi) vii) viii) ix) x)	Bill (Original + One Copy) Copy of the C-Note/RR Copy of Mill inspection certificate, if any Copy of Third-Party inspection certificate, if any Copy of delivery Challan Declaration by Third Party Inspector as per Proforma C enclosed. (Original) Copy of Tax Invoice Copy of packing list. Copy of warranty certificate Documentary evidence of payment of customs duty, if any
C)	To concerned receiving official Oil India Limited	i) ii) iii) iv)	Clear Consignee copy of RR / C-Note-Original +1 copy Copy of Tax Invoice Delivery Challan (Original) Packing list (Original)

		v) vi) vii) viii)	Mill inspection certificate, if any (Original) Third Party Inspection certificate, if any (Original) Copy of declaration by third party inspector as per Proforma C enclosed Warranty Certificate (Original)
D)	To concerned purchase official Oil India Limited		One set consisting of copies of the documents as mentioned in (B) above

23.0 INSPECTION AND TEST:

23.1. The Purchaser reserves the right to inspect and/or to test the goods/ equipment through its inspector to confirm that goods being supplied are in conformity to the order specifications.

23.2. The required inspection/test and place where such inspection/test is to be conducted shall be as specifically mentioned under the Technical Specifications/Special Conditions of Purchase Order/ Contract.

23.3. The Seller shall notify the Purchaser giving the date for inspection of the materials after its readiness so that purchaser may depute its inspector. The Purchaser shall communicate to the Seller the detail of inspector being deputed. In case of third-party inspection, the Seller shall notify the third-party inspection agency as provided in the purchase order/contract and shall also simultaneously inform the Purchaser and co-ordinate the inspection/testing of materials through the designated third-party inspection agency. In all such cases, the Seller shall give sufficient notice period as mentioned in the purchase order so as to mobilize the inspector.

23.4. The inspection/test may be conducted at Seller's works or at the final destination. When the inspection is carried out at Seller's, all facilities for inspection/testing including man-power, equipment etc. shall be provided by the Seller without any extra cost to the Purchaser.

23.5. Should any goods after inspection fails to conform to the specification, the Purchaser can reject such materials and the Seller shall have to replace such rejected materials/components complying with the required specifications without any extra cost to Purchaser.

23.6. Purchaser having inspected goods at Seller's works and cleared for despatch does not waive the right of the Seller/Purchaser to inspect the materials at final destination after arriving at Purchaser's site.

23.7. As may be necessary or specified in the purchase order, pre-despatch inspection may also be carried out by a team of officials from the relevant discipline of OIL.

23.8. Any and all expenses incurred in connection with test, preparation of report and analysis made by qualified laboratories, necessary technical documents, testing documents and drawings shall be at Seller's expense.

23.9. Arrangement for any inspection/ Certification required by Indian statutory authority shall be to Seller's account.

23.10. Nothing mentioned at sub-clauses under 23.0, shall in any way relieve the Seller from any warranty or other obligations under the purchase order/contract.

24.0 PRICE REDUCTION SCHEDULE FOR DELAY IN DELIVERY:

24.1. Subject to Force Majeure clause, if the Seller fails to deliver any or all ordered goods or to perform the service within the time period as specified in the purchase order, the Purchaser shall, without prejudice to other remedial measures under the purchase order, deduct from the purchase order price, a sum calculated (Liquidated damage) on the basis of the purchase order price, including subsequent modifications.

24.2. Deductions shall apply as per following formula:

In case of delay attributable to seller in delivery of ordered goods or delay in completion as per order terms, price reduction @ 0.5% per week of delay or part thereof of the value of the goods in respect of which default in delivery takes place, subject to a maximum of 7.5 % of the total supply order value (excluding site work). GST and other charges on account of deduction will be required to be paid by supplier/seller.

24.3. In case of package items (ordered as a complete system), the price adjustment shall be applicable on the entire order value of that package and not on the value of the undelivered portions (even though a billing breakup has been approved).

24.4. In case of purchase of bulk items where tolerance limit is specified (e.g. pipes, cables etc.), price adjustment clause shall be applicable on the actual quantity supplied, within the tolerance limit, instead of Purchase Order quantity.

24.5. In case of delay in delivery on the part of Seller, the invoice / document value shall be reduced as above and payment shall be released accordingly by the Purchaser.

24.6. In the event the invoice value is not reduced appropriately for the delay by the Seller, the Purchaser reserves the right to deduct the amount so calculated, from any amount falling due to the Seller or by recovery against the performance guarantee.

24.7. Both Seller and Purchaser agree that the above percentages of price reduction are genuine pre-estimates of the loss/damage which the Purchaser would have suffered on account of delay/ breach on the part of the Seller and the said amount will be payable on demand without there being any proof of the actual loss or damage caused by such breach/delay. Decision of the Purchaser in the matter of applicability of price reduction shall be final and binding.

25.0 FORCE MAJEURE:

25.1. In the event of either party being rendered unable by Force Majeure to perform any obligations required to be performed by them under the purchase order the relative obligations of the party affected by such force majeure shall upon notification to the other party be suspended for the period during which force majeure event lasts. The cost and loss sustained by the either party shall be borne by the respective parties.

25.2. The term force majeure as employed herein shall mean Acts of God such as earthquake, hurricane, typhoon, flood, volcanic activity etc.; war (declared /undeclared); riot, revolts, rebellion, terrorism, sabotage by persons other than the SELLER's Personnel; fires, explosions, ionizing radiation or contamination by radio-activity or noxious gas, if not caused by SELLER's fault; declared epidemic/pandemic or disaster; acts and regulations of respective Govt. of the two parties, namely the PURCHASER and the SELLER and civil commotions, lockout not attributable to the SELLER

25.3. Upon occurrence of such cause(s) and upon its termination, the party alleging that it has been rendered unable as aforesaid thereby, shall notify the other party by a registered letter duly certified by the statutory authorities immediately but not later than 7(seven) days of the alleged beginning and ending thereof giving full particulars and satisfactory evidence in support of its claim.

25.4. Time for performance of the relative obligations suspended by the force majeure shall then be extended by the period for which such cause lasts. The extension of time shall be the sole remedy of the Seller for any delay under this clause and the Seller shall not be entitled in addition to or in lieu of such extension to claim any damages or compensation on any account whatsoever whether under the law governing contracts or any other law in force, and the Seller hereby waives and disclaims any and all contrary rights.

25.5. If the force majeure conditions persist for a period exceeding two (2) months, the Purchaser reserves the right to cancel the purchase order in full or in part.

26.0 TERMINATION OF PURCHASE ORDER:

26.1. Termination for Non-performance:

26.1.1. The Purchaser without prejudice to any other remedy for breach of purchase order, by giving a written notice for non-performance to the Seller, may terminate the purchase order in whole or in part for following reasons:

i. In case a specified delivery schedule is not adhered to or the progress of the manufacturer or supply of the item is not satisfactory and is not in accordance with the progress schedule, or
ii. In case Seller fails to deliver any or all part of the goods within the time period specified in the purchase order, or
iii. If the Seller fails to perform any other obligation under the purchase order, and
iv. If the Seller, in the either of the above condition, does not cure his failure within a stipulated period of 30 days (or such a longer period may authorize by the Purchaser in writing) after receipt of notice of non-performance from the Purchaser.
v. In case Seller fails to deliver any or all part of the goods as per specifications, stipulated in the Purchase Order.

26.1.2. In the event the Purchaser terminates the purchase order in whole or in part, pursuant to clause 26.1.1, the Purchaser may procure, in the manner as deemed fit, goods similar to those undelivered and the Seller shall be liable to the Purchaser for any excess costs for such similar goods. However, the Seller shall continue performance of the purchase order to the extent not terminated. In such situation, Purchaser at its option shall forfeit the performance security without further any notice to the Seller.

26.1.3. In case of termination of the purchase order, due to reason mentioned at para 26.1.1, the vendor shall be put on holiday as per the provision of Banning Policy, 2023 of the Purchaser.

26.2. Termination on account of Death:

If the Seller is an individual or a proprietary concern and the individual or the proprietor dies or if the Seller is a partnership concern and one of the partner dies then unless, the Purchaser is satisfied that the legal representative of the individual or the proprietary concern or the surviving partners are capable of carrying out and completing purchase order, the Purchaser is entitled to cancel the purchase order for the uncompleted part without being in any way liable for any compensation payment to the estate of the deceased Seller and/or to the surviving partners of the Seller's firm on account of the cancellation of purchase order. The decision of the Purchaser in such assessment shall be final & binding on the parties. In the event of such cancellation, the Purchaser shall not hold the estate of the deceased Seller and/or the surviving partners of Seller's firm liable for any damages for non-completion of the purchase order.

26.3. Termination in case of Liquidation/Bankruptcy/Insolvency:

26.3.1. In the event that the Seller, at any time during the term of the purchase order, becomes insolvent or makes a voluntary assignment of its assets for the benefit of creditors or is adjudged bankrupt, then the Purchaser shall, by a notice in writing have the right to terminate the purchase order and all the rights &privileges of the Seller hereunder shall stand terminated forthwith.

26.3.2. However, Purchaser shall be at liberty to give the Receiver or Liquidator or other person, the option of carrying out the purchase order subject to his providing a guarantee upto an amount to be agreed upon by Purchaser for due and faithful performance of the purchase order.

26.4. Termination for Convenience:

26.4.1. The Purchaser may, by written notice sent to the Seller, terminate the purchase order, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Purchaser's convenience, the extent to which performance of work under the purchase order is terminated and the date upon which such termination becomes effective.

26.4.2. The goods that are complete and ready for shipment within 30 days after the Seller's receipt of notice of termination shall be purchased by the Purchaser at the purchase order terms and prices. For the remaining goods the Purchaser may opt:

(a) to have any portion completed and delivered at the purchase order terms and prices, and/or
(b) to cancel the remainder and pay to the Seller an agreed amount for partially completed goods and for materials and parts previously procured by the Seller.

26.5. Termination due to change of ownership and Assignment:
In case the SUPPLIER's rights and /or obligations under the Purchase Order and/or the SELLER's rights, title and interest to the equipment/ material, are transferred or assigned without the PURCHASER's written consent, the PURCHASER may at its option, terminate this Purchase Order. PURCHASER shall not be however under any obligation to accord consent to the SUPPLIER for change of ownership & assignment of the contract.

26.6. Notwithstanding any provisions herein to the contrary, the Purchase Order may be terminated at any time by the SELLER on giving 07(Seven) days written notice to the SELLER due to any other reason not covered under the above Article from 26.1 to 26.5 and in the event of such termination the PURCHASER shall not be liable to pay any cost or damage to the SELLER except for payment for the goods, already delivered as per the Purchase Order upto the date of termination.

26.7. On termination of the Purchase Order, without prejudice to any other right or remedy available to OIL under the Purchase Order, in the event of OIL suffering any loss on account of delayed delivery or non-delivery or inferior quality of the material, OIL reserves the right to claim and recover damages from the Vendor in respect thereof.

26.8. Termination for submission of fraudulent documents:
If any information given by a bidder is found to be incorrect in any particular considered by OIL to be relevant for the evaluation of the bid/ tender, or is found by OIL to misrepresent or conceal facts, or if any of the documents submitted by the bidder in support of or relevant to the bid/ tender is found by OIL to be forged, false or fabricated, OIL shall reject the bid, and without prejudice to any other right(s) of action or remedy available to OIL, OIL shall forfeit the Earnest Money given by the bidder list as per the provision of Banning Policy, 2023 of OIL. If prior to the discovery of the incorrect information, misrepresentation or forged, false or fabricated document (s), the bid has resulted in a Purchase Order/Contract, the Purchase Order/Contract shall be liable to be terminated by OIL. In such situation the performance security / EMD shall be forfeited.

27.0 GENERAL HEALTH, SAFETY & ENVIRONMENT (HSE) GUIDELINES:
(Applicable in case of the Tenders/Purchase Orders involving Fabrication, Installation and Commissioning at Purchaser's site)

27.1. It will be solely the SELLER's responsibility to fulfill and to comply all the legal formalities with respect to the Health, Safety and Environmental aspects of the entire job (namely; the person employed by him, the equipment, the environment, etc.)

27.2. It will be entirely the responsibility of the Supplier/ his Supervisor/representative to ensure strict adherence to all HSE measures and statutory rules during operation in OIL's installations and safety of workers engaged by him. The crew members will not refuse to follow any instruction given by company's Installation Manager/ Safety Officer/ Engineer/ Official/ Supervisor/ Junior Engineer for safe operation.

27.3. Any compensation arising out of the job carried out by the SELLER whether related to pollution, Safety or Health will be paid by the Seller only.

27.4. Any compensation arising due to accident of the Seller's personnel while carrying out the job, will be payable by the Seller.

27.5. When there is a significant risk to health, environment or safety of a person or place arising because of a non-compliance of HSE Measures Purchaser shall have the right to direct the Seller to cease work until the non-compliance is corrected.

28.0 APPLICABLE LAW AND JURISDICTION OF COURT:

28.1. The consequent Contract/Purchase Order shall be deemed to be a Contract made under, governed by and construed in accordance with the laws of India for the time being in force and shall be subject to the sole and exclusive jurisdiction of the Commercial Courts situated in Dibrugarh(or the Place where the contract is executed) and Principal Bench of Gauhati High Court(or the High Court under whose territorial jurisdiction, the place falls, where the contract is executed).

28.2. The consequent Contract/Purchase Order including all matter connected with the Contract/Purchase Order, shall be governed by the laws of India (both substantive and procedural) for the time being in force and shall be subject to exclusive jurisdiction of Courts, mentioned hereinabove. Foreign companies, operating in India or entering into Joint ventures in India, shall also be governed by the laws of India and shall be subject to sole and exclusive jurisdiction of above Courts.

29.0 SETTLEMENT OF DISPUTES AND ARBITRATION:

29.1. ARBITRATION (APPLICABLE FOR SUPPLIER/CONTRACTOR OTHER THAN PSU/GOVT. DEPARTMENTS AND MSMEs):

29.1.1. Except as otherwise provided elsewhere in the purchase order, if any dispute, difference, question or disagreement arises between the parties or their respective representatives or assignees, in connection with construction, meaning, operation, effect, interpretation of the consequent purchase order/contract or breach thereof which parties are unable to settle mutually or through mutually appointed Outside Expert Committee (OEC), the same shall be referred to Arbitration as provided hereunder:

29.1.2. A party wishing to commence arbitration proceeding shall invoke Arbitration Clause by giving 30 days' notice to the other party. The notice invoking arbitration shall specify all the points of dispute with details of the amount claimed to be referred to arbitration at the time of invocation of arbitration and not thereafter. If the claim is in foreign currency, the claimant shall indicate its value in Indian Rupee for the purpose of constitution of the arbitral tribunal.

29.1.3. The number of arbitrators and the appointing authority shall be as under:

Claim Amount (excluding claim for interest and counter claim, if any)	Number of Arbitrator	Appointing Authority
Upto Rs.5.00 Crore	Not Applicable	Not Applicable
Above Rs.5.00 Crore and Upto Rs. 25 Crore	Sole Arbitrator	OIL
Above Rs. 25 Crore	Three Arbitrators	One Arbitrator by each party and the 3rd Arbitrator, who shall be the Presiding Arbitrator, by the two Arbitrators.

29.1.4. The parties agree that they shall appoint only those persons as arbitrators who accept the conditions of the arbitration clause. No person shall be appointed as Arbitrator or Presiding Arbitrator who does not accept the conditions of the arbitration clause.

29.1.5. If any of the Arbitrators so appointed dies, resigns, becomes incapacitated or withdraws for any reason from the proceedings, it shall be lawful for the concerned party/arbitrators to appoint another person in his place in the same manner as aforesaid. Such person shall proceed with the reference from the stage where his predecessor had left if both parties consent for the same; otherwise, he shall precede de novo.

29.1.6. Parties agree that neither shall be entitled for any pre-reference or pendente-lite interest on its claims. Parties agree that any claim for such interest made by any party shall be void.

29.1.7. If after commencement of the arbitration proceedings, the parties agree to settle the dispute mutually or refer the dispute to conciliation, the arbitrators shall put the proceedings in abeyance until such period as requested by the parties.

29.1.8. Each party shall be responsible to decide for the travel and stay etc. of the arbitrator pointed by it. Claimant shall also be responsible for planning for travel/ stay arrangements of the Presiding Arbitrator and the expenses incurred shall be shared equally by the parties.

29.1.9. In case of sole arbitrator, OIL shall make all necessary arrangements for his travel, stay and the expenses incurred shall be shared equally by the parties.

29.1.10. The Arbitration shall be held at the place from where the contract /purchase order has been awarded. However, parties to the contract / purchase order can agree for Venue of Arbitration, different from the place of arbitration within India for the convenience of all concerned.

29.1.11. The fees to arbitrator(s) shall be governed by the Fourth Schedule of the Arbitration and Conciliation Act, 1996. The fees to the arbitrator(s) and secretarial expenses shall be paid in following manner:

(i) 20% of the fees on submission of Statement of Claim and Counter Claim by the Claimant and Respondent respectively
(ii) 20% of the fees on completion of pleadings
(iii) 20% of the fees on commencement of the hearing
(iv) 40% of the Fees on conclusion of hearing and before passing of final award.

However, subject to agreement by the Parties, the arbitrator(s) may determine a lump sum amount to be paid towards arbitrator's fees and secretarial expenses by the parties on commencement of the proceedings, which is to be adjusted against first instalment of payment, as prescribed in sl.(ii) above.

29.1.12. The Arbitrator(s) shall give reasoned and speaking award and it shall be final and binding on the parties.

29.1.13. Subject to aforesaid, provisions of the Arbitration and Conciliation Act, 1996 and any statutory modifications or re-enactment thereof shall apply to the arbitration proceedings under this clause.

29.1.14. It is agreed and undertaken by the Parties that irrespective of country of origin of the SELLER, the arbitration proceedings shall be governed by the Arbitration and Conciliation Act, 1996 and under no circumstances, the proceedings shall be construed as International Arbitration.

29.2. ARBITRATION (APPLICABLE IN CASE OF PURCHASE ORDER AWARDED ON CPSE AND GOVT. DEPARTMENTS/ORGANIZATIONS):

In the event of any dispute or difference relating to the interpretation and application of the provisions of commercial contract(s) between Central Public Sector Enterprises (CPSEs)/ Port Trusts inter se and also between CPSEs and Government Departments/Organizations (excluding disputes concerning Railways, Income Tax, Customs & Excise Departments), such dispute or difference shall be taken up by either party for resolution through AMRCD as mentioned in DPE OM No. 4(1)/2013-DPE(GM)/FTS-1835 dated 22-05-2018.

The Committee of Secretaries at the First level (tier) shall finalise its decision within 3(three) months after having received the reference/notice in writing regarding the dispute from the concerned aggrieved party.

Any party aggrieved with the decision of the Committee at the First level (tier) may prefer an appeal before the Cabinet Secretary at the Second level (tier) within 15 days from the date of receipt of decision of the Committee at First level, through its administrative Ministry/Department, whose decision will be final and binding on all concerned.

The Arbitration and Conciliation Act 1996 shall not be applicable to the Arbitration under this clause.

29.3. ARBITRATION (APPLICABLE TO MICRO, SMALL AND MEDIUM ENTERPRISE)

In the event of any dispute or difference relating to, arising from or connected with the Purchase Order, efforts shall be made to resolve the dispute(s) amicably by mutual consultation and in case such dispute(s) cannot be resolved through mutual consultation, then same shall be resolved through the procedure as prescribed in Section-18 of the Micro, Small and Medium Enterprises Development Act, 2006

30.0 RESOLUTION OF DISPUTES THROUGH CONCILIATION BY OUTSIDE EXPERT COMMITTEE (OEC):
(Not applicable in cases valuing less than Rs 25 lakhs)

30.1. If any dispute, difference, question or disagreement arises between the parties hereto or their respective representatives or assignees, in connection with construction, meaning, operation, effect, interpretation of the purchase order/contract or breach thereof which parties are unable to settle mutually, subject to consent of the Seller, the Purchaser at its discretion may first refer to conciliation through Outside Expert Committee (OEC) to be constituted by CMD, OIL as provided hereunder.

30.2. The party desirous of resorting to conciliation shall send a notice of 30 (thirty) days to the other party of its intention of referring the dispute for resolution through OEC. The notice invoking conciliation shall specify all the points of disputes with details of the amount claimed to be referred to OEC and the party concerned shall not raise any new issue thereafter.

30.3. CMD, OIL shall nominate three outside Experts, one each from Financial/commercial, Technical and Legal fields from the Panel of Outside Experts maintained by OIL who shall together be referred to as OEC (Outside Experts Committee).

30.4. Parties shall not claim any interest on claims/counterclaims from the date of notice invoking conciliation till execution of settlement agreement, if so arrived at. In case, parties are unable to reach a settlement, no interest shall be claimed by either party for the period from the date of notice invoking conciliation till the date of OEC recommendations in any further proceeding.

30.5. The Proceedings of the OEC shall be broadly governed by Part III of the Arbitration and Conciliation Act, 1996 including any modifications thereof.

30.6. The parties shall be represented by their in-house employees/executives. No party shall bring any advocate or outside consultant/advisor/agent. Ex-officers of OIL who have handled the matter in any capacity directly or indirectly shall not be allowed to attend and present the case before OEC on behalf of Contractor. However, ex- employees of parties may represent their respective organizations.

30.7. OEC shall hear both the parties and recommend possible terms of settlement between the parties. The recommendations of OEC shall be non-binding and the parties may decide to accept or not to accept the same or may accept part of the recommendation. Parties shall be at liberty to accept the OEC recommendation with any modification they may deem fit.

30.8. Where recommendations are acceptable to both the parties, a settlement agreement will be drawn up in terms of the OEC recommendations or with such modifications as may be agreed upon by the parties. The settlement agreement shall be signed by both the parties. This settlement agreement shall have the same legal status and effect as that of an arbitration award on agreed terms on the substance of the dispute rendered by an arbitral tribunal under Section 30 of the Arbitration and Conciliation Act, 1996.

30.9. OIL will share all other guidelines regarding reconciliation through OEC with the supplier when it resorts to settlement through OEC. Both parties agree to adhere to these guidelines.

30.10. All the expenditure incurred in the OEC proceedings shall be shared by the parties in equal proportion. The parties shall maintain account of expenditure and present to the other for the purpose of sharing on conclusion of the OEC proceedings.

If the parties are not able to resolve the dispute through OEC or do not opt for conciliation through OEC, the party may invoke arbitration clause as provided in the contract / purchase order.

It is expected to conclude a case by OEC within 8-10 weeks. The place of conciliation shall be Guwahati for all purchase orders issued from the Field HQ, Duliajan and Pipeline HQ, Guwahati, whereas, New Delhi shall be the Place of Conciliation for all other Purchase Orders issued by other spheres of OIL.

Solicitation or any attempt to bring influence of any kind on either OEC Members or PURCHASER is completely prohibited in conciliation proceedings and PURCHASER reserves the absolute right to close the conciliation proceedings at its sole discretion if it apprehends any kind of such attempt made by the SELLER or its representatives.

31.0 <u>EXCLUSIONS</u>

Parties agree that following matters shall not be referred to conciliation or arbitration or OEC:

i) Any claim, difference or dispute relating to, connected with or arising out of OIL's decision to initiate any proceedings for suspension or debarment or banning, or decision to suspend or to ban or to debar business dealings with the Bidder / Seller and/or with any other person involved or connected or dealing with bid / contract / bidder / Supplier.

ii) Any claim, difference or dispute relating to, connected with or arising out of OIL's decision under the provisions of Integrity Pact executed between OIL and the Bidder / Supplier.

iii) Any claim, difference or dispute relating to, connected with or arising out of OIL's decision to comply with any order or directive of any statutory or government authority.

32.0 SET-OFF:

Any sum of money due and payable to the Seller (including Security Deposit refundable to them) under the consequent order or any other purchase order may be appropriated by Oil India Limited and set-off against any claim of Oil India Limited (or such other person or persons contracting through Oil India Limited) for payment of a sum of money arising out of the purchase order or under any other purchase order made by the Seller with Oil India Limited (or such other person or persons contracting through Oil India Limited).

33.0 DISPOSAL OF REJECTED MATERIALS AT PURCHASER'S SITE:

In case any material is rejected by the Purchaser after receipt at site, the Seller shall be informed about the same including the reasons for rejection. Seller shall also be advised about the location where the rejected materials are lying at risk and cost of the Seller. The Seller shall also be advised to remove or dispose of the materials within 4(four) weeks from the date of notice, failing which the Purchaser will be entitled to dispose-off the materials at risk and cost of the Seller.

34.0 ERRING / DEFAULTING AGENCIES:

Erring and defaulting agencies like bidder, Seller, supplier, vendor, service provider will be dealt as per OIL's Banning Policy dated 17th March, 2023 available in OIL's website: www.oil-india.com. Moreover, OIL reserves the right to take legal or any other action on the basis of merit of the case.

35.0 LIABILITY OF UNION GOVERNMENT OF INDIA:

It is expressly understood and agreed upon by and between SUPPLIER and PURCHASER that PURCHASER is entering into this agreement solely on its own behalf and not on behalf of any other person or entity. In particular, it is expressly understood and agreed that Union of India is not a party to this agreement and has no liabilities, obligations or rights, whatsoever hereunder. It is expressly understood and agreed that PURCHASER is an independent legal entity with power and authority to enter into contracts solely on its own behalf under the applicable laws of India and general principles of the Contract law. The bidder/ Supplier expressly agrees, acknowledges and understands that Purchaser is not an agent, representative or delegate of the Union of India. It is further understood and agreed that Union of India is not and shall not be liable for any acts, omissions, commissions, breaches or other wrongs arising out of the contract. Accordingly, bidder/ SUPPLIER hereby expressly waives, releases and foregoes any and all actions or claims, including cross claims, impleader claims or counter claims against the Union of India arising out of the Purchase Order and covenants not to sue the Union of India as to any manner, claim, cause of action or thing whatsoever arising of or under the Purchase Order.

36.0 WAIVERS:

It is fully understood and agreed that none of the terms and conditions of this agreement shall be deemed waived by either party unless such waiver is executed in writing only by the duly authorized representatives of both the parties. The failure of either party to execute any right shall not act as a waiver of such right by such party.

37.0 SEVERABILITY:

Should any provision of this agreement be found to be invalid, illegal or otherwise not enforceable by any court of law, such finding shall not affect the remaining provisions hereto and they shall remain binding on the parties hereto.

38.0 SIGNING OF BIDS:

Bids are to be submitted online in etender portal. The bid including all uploaded documents shall be signed by duly authorized representative of the bidder holding a Power of Attorney to bind the Bidder to the contract. The letter of authorisation (as per Proforma-L) shall be indicated by written Power of Attorney accompanying the Bid.

39.0 BIDDERS FINANCIAL STANDING:

The bidder should not be under liquidation, court receivership or similar proceedings, should not be bankrupt. Bidder to upload undertaking (as per Proforma-M) to this effect with bid.

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APPENDIX – A1

PUBLIC PROCUREMENT (PREFERENCE TO MAKE IN INDIA) ORDER (PPP-MII Order).

No. P-45021/2/2017-PP (BE-II)
Government of India

Ministry of Commerce and Industry
Department for Promotion of Industry and Internal Trade
(Public Procurement Section)

Udyog Bhawan, New Delhi
Dated: 16[1h] September, 2020

To

All Central Ministries/Departments/CPSUs/AII concerned

Subject: Public Procurement (Preference to Make in India), Order 2017- Revision; regarding.

Department for Promotion of Industry and Internal Trade, in **partial modification [Paras 2, 3, 5, 10 & 13] of Order No.P-45021/2/2017-B.E.-II dated 15.6.2017 as amended by Order No.P-45021/2/2017-B.E.-II dated 28.05.2018, Order No.P- 45021/2/2017-B.E.-11 dated 29.05.2019 and Order No.P-45021/2/2017-B.E.-II dated 04.06.2020, hereby issues the revised 'Public Procurement (Preference to Make in India), Order 2017" dated 16.09.2020 effective with immediate effect.**

Whereas it is the policy of the Government of India to encourage 'Make in India' and promote manufacturing and production of goods and services in India with a view to enhancing income and employment, and

Whereas procurement by the Government is substantial in amount and can contribute towards this policy objective, and

Whereas local content can be increased through partnerships, cooperation with local companies, establishing production units in India or Joint Ventures (JV) with Indian suppliers, increasing the participation of local employees in services and training them,

Now therefore the following Order is issued:

1. This Order is issued pursuant to Rule 153 (iii) of the General Financial Rules 2017.

2. **Definitions:** For the purposes of this Order:

'Local content' means the amount of value added in India which shall, unless otherwise prescribed by the Nodal Ministry, be the total value of the item procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties) as a proportion of the total value, in percent.

'Class-I local supplier' means a supplier or service provider, whose goods, services or works offered for procurement, meets the minimum local content as prescribed for 'Class-I local supplier' under this Order.

'Class-II local supplier' means a supplier or service provider, whose goods, services or works offered for procurement, meets the minimum local content as prescribed for 'Class-II local supplier' but less than that prescribed for 'Class-I local supplier' under this Order.

'Non - Local supplier' means a supplier or service provider, whose goods, services or works offered for procurement, has local content less than that prescribed for 'Class-II local supplier' under this Order.

'L1' means the lowest tender or lowest bid or the lowest quotation received in a tender, bidding process or other procurement solicitation as adjudged in the evaluation process as per the tender or other procurement solicitation.

'Margin of purchase preference' means the maximum extent to which the price quoted by a "Class-I local supplier" may be above the L1 for the purpose of purchase preference.

'Nodal Ministry' means the Ministry or Department identified pursuant to this order in respect of a particular item of goods or services or works.

'Procuring entity' means a Ministry or department or attached or subordinate office of, or autonomous body controlled by, the Government of India and includes Government companies as defined in the Companies Act.

'Works' means all works as per Rule 130 of GFR- 2017, and will also include *'turnkey works'.*

3. Eligibility of 'Class-I local supplier'/ 'Class-II local supplier'/ 'Non-local suppliers' for different types of procurement

(a) In procurement of all goods, services or works in respect of which the Nodal Ministry / Department has communicated that there is sufficient local capacity and local competition, only 'Class-I local supplier', as defined under the Order, shall be eligible to bid irrespective of purchase value.

(b) Only 'Class-I local supplier' and 'Class-II local supplier', as defined under the Order, shall be eligible to bid in procurements undertaken by procuring entities, except when Global tender enquiry has been issued. In global tender enquiries, 'Non-local suppliers' shall also be eligible to bid along with 'Class-I local suppliers' and 'Class-II local suppliers'. In procurement of all goods, services or works, not covered by sub- para 3(a) above, and with estimated value of purchases less than Rs. 200 Crore, in accordance with Rule 161(iv) of GFR, 2017, Global tender enquiry shall not be issued except with the approval of competent authority as designated by Department of Expenditure.

(c) For the purpose of this Order, works includes Engineering, Procurement and Construction (EPC) contracts and services include System Integrator (SI) contracts.

3A. Purchase Preference

(a) Subject to the provisions of this Order and to any specific instructions issued by the Nodal Ministry or in pursuance of this Order, purchase preference shall be given to 'Class-I local supplier' in procurements undertaken by procuring entities in the manner specified here under.

(b) In the procurements of goods or works, which are covered by para 3(b) above and which are divisible in nature, the 'Class-I local supplier' shall get purchase preference over 'Class-II local supplier' as well as 'Non-local supplier', as per following procedure:

i. Among all qualified bids, the lowest bid will be termed as L1. If L1 is 'Class-I local supplier', the contract for full quantity will be awarded to L1.

ii. If L1 bid is not a 'Class-I local supplier', 50% of the order quantity shall be awarded to L1. Thereafter, the lowest bidder among the 'Class-I local supplier' will be invited to match the L1 price for the remaining 50% quantity subject to the Class-I local supplier's quoted price falling within the margin of purchase preference, and contract for that quantity shall be awarded to such 'Class-I local supplier' subject to matching the L1 price. In case such lowest eligible 'Class-I local supplier' fails to match the L1 price or accepts less than the offered quantity, the next higher 'Class-I local supplier' within the margin of purchase preference shall be invited to match the L1 price for remaining quantity and so on, and contract shall be awarded accordingly. In case some quantity is still left uncovered on Class-I local suppliers, then such balance quantity may also be ordered on the L1 bidder.

(c) In the procurements of goods or works, which are covered by para 3(b) above and which are not divisible in nature, and in procurement of services where the bid is evaluated on price alone, the 'Class-I local supplier' shall get purchase preference over 'Class-II local supplier' as well as 'Non-local supplier', as per following procedure:

i. Among all qualified bids, the lowest bid will be termed as L1. If L1 is 'Class-I local supplier', the contract will be awarded to L1.

ii. If L1 is not 'Class-I local supplier', the lowest bidder among the 'Class-I local supplier', will be invited to match the L1 price subject to Class-I local supplier's quoted price falling within the margin of purchase preference, and the contract shall be awarded to such 'Class-I local supplier' subject to matching the L1 price.

iii. In case such lowest eligible 'Class-I local supplier' fails to match the L1 price, the 'Class-I local supplier' with the next higher bid within the margin of purchase preference shall be invited to match the L1 price and so on and contract shall be awarded accordingly. In case none of the 'Class-I local supplier' within the margin of purchase preference matches the L1 price, the contract may be awarded to the L1 bidder.

(d) "Class-II local supplier" will not get purchase preference in any procurement, undertaken by procuring entities.

3B. Applicability in tenders where contract is to be awarded to multiple bidders - In tenders where contract is awarded to multiple bidders subject to matching of L1 rates or otherwise, the 'Class-I local supplier' shall get purchase preference over 'Class-II local supplier' as well as 'Non-local supplier', as per following procedure:

a) In case there is sufficient local capacity and competition for the item to be procured, as notified by the nodal Ministry, only Class I local suppliers shall be eligible to bid. As such, the multiple suppliers, who would be awarded the contract, should be all and only 'Class I Local suppliers'.

b) In other cases, 'Class II local suppliers' and 'Non local suppliers' may also participate in the bidding process along with 'Class I Local suppliers' as per provisions of this Order.

c) If 'Class I Local suppliers' qualify for award of contract for at least 50% of the tendered quantity in any tender, the contract may be awarded to all the qualified bidders as per award criteria stipulated in the bid documents. However, in case 'Class I Local suppliers' do not qualify for award of contract for at least 50% of the tendered quantity, purchase preference should be given to the 'Class I local supplier' over 'Class II local suppliers'/ 'Non local suppliers' provided that their quoted rate falls within 20% margin of purchase preference of the highest quoted bidder considered for award of contract so as to ensure that the 'Class I Local suppliers' taken in totality are considered for award of contract for at least 50% of the tendered quantity.

d) First purchase preference has to be given to the lowest quoting 'Class-I local supplier', whose quoted rates fall within 20% margin of purchase preference, subject to its meeting the prescribed criteria for award of contract as also the constraint of maximum quantity that can be sourced from any single supplier. If the lowest quoting 'Class-I local supplier', does not qualify for purchase preference because of aforesaid constraints or does not accept the offered quantity, an opportunity may be given to next higher 'Class-I local supplier', falling within 20% margin of purchase preference, and so on.

e) To avoid any ambiguity during bid evaluation process, the procuring entities may stipulate its own tender specific criteria for award of contract amongst different bidders including the procedure for purchase preference to 'Class-I local supplier' within the broad policy guidelines

stipulated in sub-paras above.

4. **Exemption of small purchases**: Notwithstanding anything contained in paragraph 3, procurements where the estimated value to be procured is less than Rs. 5 lakhs shall be exempt from this Order. However, it shall be ensured by procuring entities that procurement is not split for the purpose of avoiding the provisions of this Order.

5. **Minimum local content:** The 'local content' requirement to categorize a supplier as 'Class-I local supplier' is minimum 50%. For 'Class-II local supplier', the 'local content' requirement is minimum 20%. Nodal Ministry/ Department may prescribe only a higher percentage of minimum local content requirement to categorize a supplier as 'Class-I local supplier'/ 'Class-II local supplier'. For the items, for which Nodal Ministry/ Department has not prescribed higher minimum local content notification under the Order, it shall be 50% and 20% for 'Class-I local supplier'/ 'Class-II local supplier' respectively.

6. **Margin of Purchase Preference**: The margin of purchase preference shall be 20%.

7. **Requirement for specification in advance**: The minimum local content, the margin of purchase preference and the procedure for preference to Make in India shall be specified in the notice inviting tenders or other form of procurement solicitation and shall not be varied during a particular procurement transaction.

8. **Government E-marketplace**: In respect of procurement through the Government E- marketplace (GeM) shall, as far as possible, specifically mark the items which meet the minimum local content while registering the item for display, and shall, wherever feasible, make provision for automated comparison with purchase preference and without purchase preference and for obtaining consent of the local supplier in those cases where purchase preference is to be exercised.

9. **Verification of local content:**

   a. The 'Class-I local supplier'/ 'Class-II local supplier' at the time of tender, bidding or solicitation shall be required to indicate percentage of local content and provide self-certification that the item offered meets the local content requirement for 'Class-I local supplier'/ 'Class-II local supplier', as the case may be. They shall also give details of the location(s) at which the local value addition is made.

   b. In cases of procurement for a value in excess of Rs. 10 crores, the 'Class-I local supplier'/ 'Class-II local supplier' shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.

   c. Decisions on complaints relating to implementation of this Order shall be taken by the competent authority which is empowered to look into procurement-related complaints relating to the procuring entity.

   d. Nodal Ministries may constitute committees with internal and external experts for independent verification of self-declarations and auditor's/ accountant's certificates on random basis and in the case of complaints.

   e. Nodal Ministries and procuring entities may prescribe fees for such complaints.

   f. False declarations will be in breach of the Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible

under law.

g. A supplier who has been debarred by any procuring entity for violation of this Order shall not be eligible for preference under this Order for procurement by any other procuring entity for the duration of the debarment. The debarment for such other procuring entities shall take effect prospectively from the date on which it comes to the notice of other procurement entities, in the manner prescribed under paragraph 9h below.

h. The Department of Expenditure shall issue suitable instructions for the effective and smooth operation of this process, so that:

   i. The fact and duration of debarment for violation of this Order by any procuring entity are promptly brought to the notice of the Member-Convenor of the Standing Committee and the Department of Expenditure through the concerned Ministry /Department or in some other manner;

   ii. on a periodical basis such cases are consolidated and a centralized list or decentralized lists of such suppliers with the period of debarment is maintained and displayed on website(s);

   iii. in respect of procuring entities other than the one which has carried out the debarment, the debarment takes effect prospectively from the date of uploading on the website(s) in the such a manner that ongoing procurements are not disrupted.

10. **Specifications in Tenders and other procurement solicitations:**

a. Every procuring entity shall ensure that the eligibility conditions in respect of previous experience fixed in any tender or solicitation do not require proof of supply in other countries or proof of exports.

b. Procuring entities shall endeavour to see that eligibility conditions, including on matters like turnover, production capability and financial strength do not result in unreasonable exclusion of 'Class-I local supplier'/ 'Class-II local supplier' who would otherwise be eligible, beyond what is essential for ensuring quality or creditworthiness of the supplier.

c. Procuring entities shall, within 2 months of the issue of this Order review all existing eligibility norms and conditions with reference to sub-paragraphs 'a' and 'b' above.

d. Reciprocity Clause

   i. When a Nodal Ministry/Department identifies that Indian suppliers of an item are not allowed to participate and/ or compete in procurement by any foreign government, due to restrictive tender conditions which have direct or indirect effect of barring Indian companies such as registration in the procuring country, execution of projects of specific value in the procuring country etc., it shall provide such details to all its procuring entities including CMDs/CEOs of PSEs/PSUs, State Governments and other procurement agencies under their administrative control and GeM for appropriate reciprocal action.

   ii. Entities of countries which have been identified by the nodal Ministry/Department as not allowing Indian companies to participate in their Government procurement for any item related to that nodal Ministry shall not be allowed to participate in Government procurement in India for all items related to that nodal Ministry/ Department, except for the list of items published by the Ministry/ Department permitting their participation.

   iii. The stipulation in (ii) above shall be part of all tenders invited by the Central Government

procuring entities stated in (i) above. All purchases on GeM shall also necessarily have the above provisions for items identified by nodal Ministry/ Department.

iv. State Governments should be encouraged to incorporate similar provisions in their respective tenders.

v. The term 'entity' of a country shall have the same meaning as under the FOi Policy of DPIIT as amended from time to time.

e. Specifying foreign certifications/ unreasonable technical specifications/ brands/ models in the bid document is restrictive and discriminatory practice against local suppliers. If foreign certification is required to be stipulated because of non- availability of Indian Standards and/or for any other reason, the same shall be done only after written approval of Secretary of the Department concerned or any other Authority having been designated such power by the Secretary of the Department concerned.

f. "All administrative Ministries/Departments whose procurement exceeds *Rs.* 1000 Crore per annum shall notify/ update their procurement projections every year, including those of the PSEs/PSUs, for the next 5 years on their respective website."

10A. Action for non-compliance of the Provisions of the Order: In case restrictive or discriminatory conditions against domestic suppliers are included in bid documents, an inquiry shall be conducted by the Administrative Department undertaking the procurement (including procurement by any entity under its administrative control) to fix responsibility for the same. Thereafter, appropriate action, administrative or otherwise. shall be taken against erring officials of procurement entities under relevant provisions. Intimation on all such actions shall be sent to the Standing Committee.

11. **Assessment of supply base by Nodal Ministries**: The Nodal Ministry shall keep in view the domestic manufacturing / supply base and assess the available capacity and the extent of local competition while identifying items and prescribing the higher minimum local content or the manner of its calculation, with a view to avoiding cost increase from the operation of this Order.

12. **Increase in minimum local content:** The Nodal Ministry may annually review the local content requirements with a view to increasing them, subject to availability of sufficient local competition with adequate quality.

13. **Manufacture under license/ technology collaboration agreements with phased indigenization**: While notifying the minimum local content, Nodal Ministries may make special provisions for exempting suppliers from meeting the stipulated local content if the product is being manufactured in India under a license from a foreign manufacturer who holds intellectual property rights and where there is a technology collaboration agreement / transfer of technology agreement for indigenous manufacture of a product developed abroad with clear phasing of increase in local content.

13A. In procurement of all goods, services or works in respect of which there is substantial quantity of public procurement and for which the nodal ministry has not notified that there is sufficient local capacity and local competition, the concerned nodal ministry shall notify an upper threshold value of procurement beyond which foreign companies shall enter into a joint venture with an Indian company to participate in the tender. Procuring entities, while procuring such items beyond the notified threshold value, shall prescribe in their respective tenders that foreign companies may enter into a joint venture with an Indian company to participate in the tender. The procuring Ministries/Departments shall also make special provisions for exempting such joint ventures from meeting the stipulated minimum local content requirement, which shall be increased in a phased manner.

14. **Powers to grant exemption and to reduce minimum local content:** The administrative Department undertaking the procurement (including procurement by any entity under its administrative control),

with the approval of their Minister-in-charge, may by written order, for reasons to be recorded in writing,

a. reduce the minimum local content below the prescribed level; or
b. reduce the margin of purchase preference below 20%; or
c. exempt any particular item or supplying entities from the operation of this Order or any part of the Order.

A copy of every such order shall be provided to the Standing Committee and concerned Nodal Ministry / Department. The Nodal Ministry / Department concerned will continue to have the power to vary its notification on Minimum Local Content.

15. **Directions to Government companies**: In respect of Government companies and other procuring entities not governed by the General Financial Rules, the administrative Ministry or Department shall issue policy directions requiring compliance with this Order.

16. **Standing Committee**: A standing committee is hereby constituted with the following membership:

Secretary, Department for Promotion of Industry and Internal Trade-Chairman Secretary, Commerce-Member
Secretary, Ministry of Electronics and Information Technology-Member Joint Secretary (Public Procurement), Department of Expenditure-Member Joint Secretary (DPIIT)-Member-Convenor

The Secretary of the Department concerned with a particular item shall be a member in respect of issues relating to such item. The Chairman of the Committee may co-opt technical experts as relevant to any issue or class of issues under its consideration.

17. **Functions of the Standing Committee**: The Standing Committee shall meet as often as necessary, but not less than once in six months. The Committee

a. shall oversee the implementation of this order and issues arising therefrom, and make recommendations to Nodal Ministries and procuring entities.
b. shall annually assess and periodically monitor compliance with this Order
c. shall identify Nodal Ministries and the allocation of items among them for issue of notifications on minimum local content
d. may require furnishing of details or returns regarding compliance with this Order and related matters
e. may, during the annual review or otherwise, assess issues, if any, where it is felt that the manner of implementation of the order results in any restrictive practices, cartelization or increase in public expenditure and suggest remedial measures
f. may examine cases covered by paragraph 13 above relating to manufacture under license/ technology transfer agreements with a view to satisfying itself that adequate mechanisms exist for enforcement of such agreements and for attaining the underlying objective of progressive indigenization
g. may consider any other issue relating to this Order which may arise.

18. **Removal of difficulties**: Ministries /Departments and the Boards of Directors of Government companies may issue such clarifications and instructions as may be necessary for the removal of any difficulties arising in the implementation of this Order.

19. **Ministries having existing policies**: Where any Ministry or Department has its own policy for

preference to local content approved by the Cabinet after 1st January 2015, such policies will prevail over the provisions of this Order. All other existing orders on preference to local content shall be reviewed by the Nodal Ministries and revised as needed to conform to this Order, within two months of the issue of this Order.

20. **Transitional provision**: This Order shall not apply to any tender or procurement for which notice inviting tender or other form of procurement solicitation has been issued before the issue of this Order.

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File No: FP-20013/2/2017-FP-PNG-Part (4) (E-41432)
Government of India
Ministry of Petroleum and Natural Gas
(Flagship Programme Cell)

Shastri Bhawan, New Delhi
Dated 26th April, 2022

Sub: Public Procurement (Preference to Make in India) (PPP-Mil) Order, 2017-reg.

Sir/Madam,

I am directed to refer to this Ministry's letter of even number dated 23.02.2022 regarding Policy to Provide Purchase Preference (linked with local content) (PP-LC) in all Public Sector Undertakings under the Ministry of Petroleum and Natural Gas (MoP&NG) and to say that Public Procurement (Preference to Make in India) Order, 2017 issued by DPIIT and as amended time to time shall be applicable to all the Public Sector Unde1takings and their wholly owned subsidiaries under MoP&NG; Joint Ventures that have 51 % or more equity by one or more Public Sector Undertakings under MoP&NG; attached and subordinate offices of MoPNG w.e.f. 01.04.2022.

2. Moreover, as per para 14 of the PPP-MII Order, the following modifications in the order shall be applicable on the procuring entities under this Ministry:

a. Limit for exemption of small purchase under para 4 of the PPP-MII Order, 2017 shall be Rs. 1 crore.
b. Local value addition through services such as transportation, insurance, installation, commissioning, training and after sales services support like AMC/ CMC etc. shall continue to be considered in local content calculation.
c. HP-HT operations in upstream oil and gas business activities shall be exempted from applicability of the Order.

3. This issues with the approval of Hon'ble Minister, Petroleum and Natural Gas.

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APPENDIX – A2

POLICY FOR PROVIDING PREFERENCE TO DOMESTICALLY MANUFACTURED IRON & STEEL PRODUCTS

(*The detailed Steel Policy notified vide Notification No. 324 dated 29-05-2019 and as amended from time to time by Ministry of Steel, GOI is applicable for this tender and may be referred from Ministry's website-also attached herewith.*)

1.0 Background

1.1 This policy provides preference to Domestically Manufactured Iron and Steel Products (DMI&SP).

1.2 Definitions

1.3 Bidder may be a domestic/ foreign manufacturer of iron & steel or their selling agents/ authorized distributors/ authorized dealers/ authorized supply houses or any other company engaged in the bidding of projects funded by Government agencies.

1.4 Domestically Manufactured Iron & Steel Products (DMI&SP) are those iron and steel products which are manufactured by entities that are registered and established in India, including in Special Economic Zones (SEZs). In addition, such products shall meet the criteria of domestic minimum value-addition as per Appendix-A of revised steel policy.

1.5 Domestic Manufacturer is a manufacturer of iron & steel products conforming to guidelines in section 7 and confirming to the definition of 'manufacturer' as per Central Excise Act.

1.6 Government for the purpose of the Policy means Government of India.

1.7 Government agencies include Government PSUs, Societies, Trusts and Statutory bodies set up by the Government.

1.8 MoS shall mean Ministry of Steel, Government of India.

1.9 Net Selling Price shall be the invoiced price excluding net domestic taxes and duties.

1.10 Semi-Finished Steel shall mean Ingots, billet, blooms and slabs, which can be subsequently processed to finished steel.

1.11 Finished Steel shall mean Flat and Long products, which can be subsequently processed into manufactured items.

1.12 Iron & Steel Product(s) shall mean such iron and steel product(s) which are mentioned in Appendix A of revised Steel Policy.

1.13 Domestic value addition shall be the net selling price (invoiced price excluding net domestic taxes and duties) minus the landed cost of imported input materials at the manufacturing plant in India (including all customs duties) as a proportion of the net selling price, in percent. The 'domestic value addition' definition shall be in line with the DPIIT (formerly DIPP) guidelines, and shall be suitably amended in case of any changes by DPIIT in the future. For the purpose of this policy document, domestic value addition and local content have been used interchangeably.

1.14 The policy is applicable to iron & steel products as provided in Appendix A of revised Steel Policy.

1.15 Appendix A of revised Steel Policy contains list of iron & steel products which are to be exclusively domestically manufactured and cannot be imported without the approval of the Ministry of Steel

1.16 The policy is applicable to purchase of iron & steel products by private agencies for fulfilling an EPC contract and/or any other requirement of Ministry or Department of Government or their PSUs.

1.17 For iron and steel products in Appendix A of revised Steel Policy, the procurement process is open only to the manufacturers / suppliers having the capability of meeting / exceeding the domestic value addition targets. Manufacturers / suppliers not meeting the domestic value addition targets are not eligible to participate in the bidding.

1.18 The bidders who are selling agents/ authorized distributors/ authorized dealers/ authorized supply houses of the domestic manufacturers of iron & steel products are eligible to bid on behalf of the domestic manufacturers under the policy. However, this shall be subject to the following conditions:

1.19 The bidder shall furnish the authorization certificate issued by the domestic manufacturer for selling domestically manufactured iron & steel products.

1.20 The bidder shall furnish the Affidavit of self-certification issued by the domestic manufacturer to the procuring agency declaring that the iron & steel products is domestically manufactured in terms of the domestic value addition prescribed.

1.21 It shall be the responsibility of the bidder to furnish other requisite documents required to be issued by the domestic manufacturer to the procuring agency as per the policy.

1.22 Domestic value addition requirement

1.23 Minimum domestic value addition requirement to qualify the product as a domestically manufactured iron & steel product mentioned in Appendix A of revised Steel Policy.

1.24 Domestic value addition shall be the net selling price (invoiced price excluding net domestic taxes and duties) minus the landed cost of imported input materials at the manufacturing plant in India (including all customs duties) as a proportion of the net selling price, in per cent.

1.25 In case the iron & steel products are made using domestic input steel (semi-inished/ finished steel), invoices of purchases from the actual domestic producers along with quantities purchased and the other related documents must be furnished to OIL.

1.26 In case the iron & steel products have imported input steel, the invoices of purchases from the actual producers along with quantities purchased and the other related documents must be furnished separately. To derive the extent of domestic value addition, the weighted average of both (imported & domestic) input steel shall be considered to ensure that the minimum stipulated domestic value addition requirement of the policy is complied with.

1.27 It is recommended that each bidder participating in the tender process should calculate the domestic value addition using the formula below so as to ensure the domestic value addition claimed is consistent with the minimum stipulated domestic value addition requirement of the policy.

1.28 Domestic value addition (%) = (Net selling price of Final Product–Landed cost of imported input steel at plant) * 100/ (Net Selling Price of Final Product)

1.29 Certification and audit

1.30 For products in Appendix A of revised Steel Policy, each domestic manufacturer shall furnish the Affidavit of self-certification to OIL declaring that the iron & steel products are domestically manufactured in terms of the domestic value addition prescribed. The bidders who are sole selling agents / authorized distributors / authorized dealers / authorized supply houses of the domestic manufacturers of iron & steel products are eligible to bid on behalf of domestic manufacturers under the policy. The bidder shall furnish the Affidavits of self-certification issued by the domestic manufacturers and the certifications issued by the statutory auditors, to OIL declaring that the iron & steel products are domestically manufactured in terms of the domestic value addition prescribed. The Affidavit of self-certification shall be furnished in Form 1 attached.

1.31 It shall be the responsibility of the domestic manufacturer to ensure that the products so claimed are domestically manufactured in terms of the domestic value addition prescribed for the product. The bidder shall also be required to provide a domestic value addition certificate on half-yearly basis (Sep 30 and Mar 31), duly certified by the Statutory Auditors of the domestic manufacturer, that the claims of domestic value addition made for the product during the preceding 6 months are in accordance with the Policy. Such

certificate shall be filed within 60 days of commencement of each half year, to OIL and shall continue to be filed till the completion of supply of the said products.

1.32 OIL shall accept the Affidavit of self-certification regarding domestic value addition in a steel product submitted by a bidder. It shall not normally be the responsibility of OIL to verify the correctness of the claim. The onus of demonstrating the correctness of the same shall be on the bidder when asked to do so.

1.33 In case a complaint is received by OIL against the claim of a bidder regarding domestic value addition in iron & steel products, OIL shall have full rights to inspect and examine all the related documents and take a decision. In case any clarification is needed, matter may be referred to MoS with a request for technical assistance.

1.34 Any complaint referred to OIL shall be disposed off within 4 weeks of the reference along with submission of all necessary documents. The bidder shall be required to furnish the necessary documentation in support of the domestic value addition claimed in iron & steel products to OIL within 2 weeks of filing the complaint.

1.35 In case, the matter is referred to the Ministry of Steel, the grievance redressal committee setup under the MoS shall dispose of the complaint within 4 weeks of its reference and receipt of all documents from the bidder after taking in consideration, the view of the OIL. The bidder shall be required to furnish the necessary documentation in support of domestic value addition claimed in iron & steel products to the grievance redressal committee under MoS within 2 weeks of the reference of the matter. If no information is furnished by the bidder, the grievance redressal committee may take further necessary action, in consultation with OIL to establish bonafides of claim.

1.36 The cost of assessing the prescribed extent of domestic value addition shall be borne by OIL if the domestic value addition is found to be correct as per the certificate. However, if it is found that the domestic value addition as claimed is incorrect, the cost of assessment will be payable by the bidder who has furnished an incorrect certificate.

1.37 Sanctions

1.38 In case of wrong declaration by the bidder of the prescribed domestic value addition it will lead to rejection of their bid or cancellation of PO and Forfeiture of EMD/SD as the case may be and blacklisting of such manufacturer/ service provider.

FORM-1

Format for Affidavit of Self Certification regarding Domestic Value Addition in Iron & Steel Products/capital goods to be provided on Rs.100/- Stamp Paper Date:

I _____S/o, D/o, W/o, _____ Resident of _____
_____ hereby solemnly affirm and declare as under:

That I will agree to abide by the terms and conditions of the policy of Government of India issued vide Notification No: _____.

That the information furnished hereinafter is correct to the best of my knowledge and belief and I undertake to produce relevant records before the procuring agency (ies) for the purpose of assessing the domestic value addition.

That the domestic value addition for all inputs which constitute the said iron & steel products has been verified by me and I am responsible for the correctness of the claims made therein.

That in the event of the domestic value addition of the product mentioned herein is found to be incorrect and not meeting the prescribed value-addition criteria, based on the assessment of procuring agency (ies) for the purpose of assessing the domestic value-addition, I will be disqualified from any Government tender for a period of 36 months. In addition, I will bear all costs of such an assessment.

That I have complied with all conditions referred to in the Notification No._____ wherein preference to domestically manufactured iron & steel products in Government procurement is provided and that the OIL is hereby authorized to forfeit and my EMD/SD. I also undertake to pay the assessment cost and pay all penalties as specified in the tender document No. ……..

I agree to maintain the following information in the Company's record for a period of 8 years and shall make this available for verification to any statutory authority.

i. Name and details of the Bidder (Registered Office, Manufacturing unit location, nature of legal entity)
ii. Date on which this certificate is issued
iii. Iron & Steel Products for which the certificate is produced
iv. Procuring agency to whom the certificate is furnished (OIL)
v. Percentage of domestic value addition claimed and whether it meets the threshold value of domestic value addition prescribed
vi. Name and contact details of the unit of the manufacturer (s)
vii. Net Selling Price of the iron & steel products
viii. Freight, insurance and handling till plant
ix. List and total cost value of input steel (imported) used to manufacture the iron & steel products
x. List and total cost of input steel which are domestically sourced.
xi. Please attach domestic value addition certificates from suppliers, if the input is not in house.
xii. For imported input steel, landed cost at Indian port with break-up of CIF value, duties & taxes, port handling charges and inland freight cost.

For and on behalf of (Name of firm / entity)
Authorized signatory (To be duly authorized by the Board of Directors)
<Insert Name, Designation and Contact No.>
.....

Notes:

1.0 For iron and steel products in Appendix A, the procurement process is open only to the manufacturers / suppliers having the capability of meeting / exceeding the domestic value addition targets. Manufacturers / suppliers not meeting the domestic value addition targets are not eligible to participate in the bidding.

2.0 Each domestic manufacturer shall furnish the Affidavit of self-certification to OIL declaring that the iron & steel products are domestically manufactured in terms of the domestic value addition prescribed.

3.0 Domestic value addition requirement

3.1 Minimum domestic value addition requirement to qualify the product as a domestically manufactured iron & steel product mentioned in Appendix A of revised Steel Policy.

3.2 Domestic value addition shall be the net selling price (invoiced price excluding net domestic taxes and duties) minus the landed cost of imported input materials at the manufacturing plant in India (including all customs duties) as a proportion of the net selling price, in per cent.

3.2.1 In case the iron & steel products are made using domestic input steel (semi-finished/ finished steel), invoices of purchases from the actual domestic producers along with quantities purchased and the other related documents must be furnished to OIL.

3.2.2 In case the iron & steel products have imported input steel, the invoices of purchases from the actual producers along with quantities purchased and the other related documents must be furnished separately. To derive the extent of domestic value addition, the weighted average of both (imported & domestic) input steel shall be considered to ensure that the minimum stipulated domestic value addition requirement of the policy is complied with. It shall be the responsibility of the bidder to furnish other requisite documents required to be issued by the domestic manufacturer to the procuring agency as per the policy.

4.0 It shall be the responsibility of the domestic manufacturer to ensure that the products so claimed are domestically manufactured in terms of the domestic value addition prescribed for the product. The bidder shall also be required to provide a domestic value addition certificate on half-yearly basis (Sep 30 and Mar 31), duly certified by the Statutory Auditors of the domestic manufacturer, that the claims of domestic value addition made for the product during the preceding 6 months are in accordance with the Policy. Such certificate shall be filed within 60 days of commencement of each half year, to OIL and shall continue to be filed till the completion of supply of the said products.

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APPENDIX - A4

RESTRICTIONS ON PROCUREMENT FROM A BIDDER OF A COUNTRY WHICH SHARES A LAND BORDER WITH INDIA

1.0 Ministry of Finance of Govt. of India, Department of Expenditure, Public procurement Division vide office memorandum F. No. 6/18/2019-PPD dated 23rd July, 2020 (order-Public Procurement no.1) has proclaimed the insertion of Rule 144 (xi) in the General Financial Rules (GFRs), 2017 w.e.f. 23rd July, 2020 and amended vide O.M. No. F.7/10/2021-PPD (1) dated 23.02.2023 (order public procurement no. 4) from Procurement Policy Division, Department of Expenditure, Ministry of Finance forwarded by Department of Public Enterprises vide O.M. No. F. No. DPE/7 (4)/2017-Fin dated 24.02.2023 regarding restrictions on procurement from a bidder of a country which shares a land border with India on the grounds of defence of India on matters directly or indirectly related thereto including national security. Bidders are requested to take note of the following clauses and submit their offers accordingly wherever applicable.

Bidders must submit duly sealed & signed undertaking as per format provided vide, "Exhibits - I, II & III" along with the technical bid.

1.0 Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the· bidder is registered with the Competent Authority [Registration Committee constituted by the Department for Promotion of Industry and Internal Trade (DPIIT)]. Further, any bidder (including bidder from India) having specified Transfer of Technology (ToT) arrangement with an entity from a country which shares a land border with India, shall also require to be registered with the same competent: authority to be eligible to bid in this tender.

2.0 "Bidder" (including the term 'tenderer', 'consultant' or 'service provider' m certain contexts) means any person or from or company, including any persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.

3.0 "Bidder (or entity) from a country which shares a land border with India" for the purpose of this Order means:

a. An entity incorporated, established or registered in such a country; or
b. A subsidiary of an entity incorporated, established or registered in such a country; or
c. An entity substantially controlled through entities incorporated, established or registered in such a country; or
d. An entity whose beneficial owner is situated in such a country; or
e. An Indian (or other) agent of such an entity; or A natural person who is a citizen of such a country; or
f. A consortium or joint venture where any member of the consortium or joint venture falls under any of the above

4.0 The beneficial owner for the purpose of para 3.0 above will be as under:

4.1 In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercises control through other means.

Explanation:
a. "Controlling ownership interest" means ownership of or entitlement to more than twenty-five percent of shares or capital or profits of the company.
b. "Control" shall include the right to appoint majority of the directors or to control the management: or policy decisions including by virtue of their shareholding or management rights or shareholder's agreements or voting agreements.

4.2 In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;

4.3 In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement: to more than fifteen percent of the property or capital or profits of such association or body of individuals;

4.4 Where no natural person is identified under (4.1) or (4.2) or (4.3) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;

4.5 In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.

5.0 An Agent is a person employed to do any act for another, or to represent another in dealings with third person.

6.0 The successful bidder shall not be allowed to sub-contract works to any contractor from a country which shares a land border with India unless such contractor is registered with the Competent Authority.

7.0 Validity of Registration: The registration should be valid at the time of submission of bid and at the time of acceptance of bid. If the bidder was validly registered at the time of acceptance/placement of order, registration shall not be a relevant consideration during contract execution.

8.0 Undertaking regarding compliance: The bidders are required to provide undertakings as per **Exhibits - I, II & III** along with their bid towards compliance of the above guidelines for participation in this tender. If the undertakings given by a bidder whose bid is accepted is found to be false, this would be a ground for debarment/ action as per OIL's Banning Policy and further legal action in accordance with law.

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PROFORMA – 1

BID SECURITY FORM

To:
M/s. OIL INDIA LIMITED,
MATERIALS DEPARTMENT

Whereas ..... (hereinafter called 'the Bidder') has submitted their Bid No. ..... dated..... against OIL INDIA LIMITED, DULIAJAN, ASSAM, INDIA (hereinafter called the Purchaser) 's tender No..... for the supply of ..... (hereinafter called 'the Bid')
KNOW ALL MEN by these presents

That we .....of .....having our registered office at ..... (hereinafter called 'the Bank') are bound unto the Purchaser, in the sum of ..... for which payment well and truly to be made to the said Purchaser, the Bank binds itself, its successors and assigns by these presents.

Sealed with the said Bank this .....day of .....

THE CONDITIONS of this obligation are :

1. If the Bidder withdraws their Bid during the period of Bid validity specified by the Bidder,
or
2. If the Bidder, having been notified of the acceptance of their bid by the Purchaser during the period of bid validity :
   a) fails or refuses to accept the order ; or
   b) fails or refuses to furnish the performance security
   or
3. If the Bidder furnishes fraudulent document/information in their bid.

We undertake to pay to the Purchaser up to the above amount upon receipt of their first written demand (by way of letter /fax/Email) without the Purchaser having to substantiate their demand, provided that in their demand the Purchaser will note that the amount claimed by it is due to it owing to the occurrence of any of the conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to and including _____ (Bidder to indicate specific date as mentioned in the tender), and any demand in respect thereof should reach the Bank not later than the above date.

The details of the Issuing Bank and Controlling Bank are as under:

A. Issuing Bank:

BANK FAX NO:
BANK EMAIL ID:
BANK TELEPHONE NO.:
IFSC CODE OF THE BANK:

B. Controlling Office:

Address of the Controlling Office of the BG issuing Bank:
Name of the Contact Person at the Controlling Office with Mobile No. and e-mail address:

Notwithstanding anything contained herein:

a) Our liability under this Bank Guarantee shall is restricted up to Rs ..... .
b) This guarantee shall be valid till ..... .

c) We are liable to pay the guarantee amount or any part thereof under this Bank Guarantee only and only if you serve upon us a written claim or demand on or before ..... (Date of Expiry of BG PLUS one year claim period).
d) At the end of the claim period that is on or after . . . . … (Date of expiry of the Bank Guarantee Plus Minimum of 1 year claim period shall be stipulated) all your rights under this Guarantee shall stand extinguished and we shall be discharged from all our liabilities under this Guarantee irrespective of receipt of original Bank Guarantee duly discharged, by Bank.

Name of the Contact Person at the Controlling Office with Mobile No. and e-mail address:

SIGNATURE AND SEAL OF THE GUARANTORS _____
Designation: _____
Name of Bank: _____
Address: _____

Date: _____
Place: _____

****

PROFORMA – 1 (A)

BID SECURITY DECLARATION

To,

M/s. Oil India Limited
……,
…….

Sub: ……
Tender No:…….

Dear Sir,

After examining/reviewing provisions of above referred tender documents (including all corrigendum/ Addenda), we M/s. …… (Name of Bidder) have submitted our offer/bid no……

We, M/s.....(Name of Bidder) hereby understand that, according to your conditions, we are submitting this Declaration for Bid Security.

We understand that we will be put on watch list/holiday/banning list (as per policies of OIL INDIA in this regard), if we are in breach of our obligation(s) as per following:

1. have withdrawn/modified/amended, impairs or derogates from the tender, my/our Bid during the period of bid validity specified in the form of Bid; or

2. having been notified of the acceptance of our Bid by the OIL INDIALIMITED during the period of bid validity:

   (a) fail or refuse to execute the Contract, if required, or
   (b) fail or refuse to furnish the Contract Performance Security, in accordance provisions of tender document.
   (c) Fail or refuse to accept 'arithmetical corrections' as per provision of tender document.

3. having indulged in corrupt/fraudulent/collusive/coercive practice as per procedure.

Place:
Date:

[Signature of Authorized Signatory of Bidder]

Name:
Designation:
Seal:

****

PROFORMA – 2

MODIFIED IP DOCUMENT DATED 30.05.2025

INTEGRITY PACT

Between

Oil India Limited (OIL) hereinafter referred to as "The Principal"

And

(Name of the bidder).....hereinafter referred to as "The Bidder"

Preamble:

The Principal intends to award, under laid down organizational procedures, contract/s for ----------. The Principal values full compliance with all relevant laws and regulations, and the principles of economic use of resources, and of fairness and transparency in its relations with its Bidder/s.

In order to achieve these goals, the Principal cooperates with the renowned international Non-Governmental Organization "Transparency International" (TI). Following TI's national and international experience, the Principal will appoint an external independent Monitor who will monitor the tender process for compliance with the principles mentioned above.

Section: 1 -Commitments of the Principal

(1) The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:

(i) No employee of the Principal, personally or through family members, will in connection with the tender for, or during execution of a contract, demand, take a promise for or accept, for him/herself or third person, any material or immaterial benefit which he/she is not legally entitled to.

(ii) The Principal will, during the tender process treat all Bidders with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidders the same information and will not provide to any Bidder confidential/additional information through which the Bidder could obtain an advantage in relation to the tender process.

(iii) The Principal will exclude from the process all known prejudiced persons.

(2) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the relevant Anti-Corruption Laws of India, or if there be a substantive suspicion in this regard, the Principal will inform the Chief Vigilance Officers and in addition can initiate disciplinary actions.

Section: 2 -Commitments of the Bidder~~/Contractor~~

(1) The Bidder commits itself to take all measures necessary to prevent corruption. During his participation in the tender process, the Bidder commits himself to observe the following principles:

(i) The Bidder will not, directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or immaterial benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during subsequent contract execution, if awarded.

(ii) The Bidder will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, Subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.

(iii) The Bidder(s) will not commit any offence under the relevant Anticorruption Laws of India, further, the Bidder(s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.

(iv) The Bidder will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.

(v) Bidders to disclose any transgressions with any other public/government organization that may impinge on the anti-corruption principle. The date of such transgression, for the purpose of disclosure by the bidders in this regard, would be the date on which cognizance of the said transgression was taken by the competent authority. The period for which such transgressions (s) is/are to be reported by the bidders shall be the last **three years** to be reckoned from date of bid submission. The transgression (s), for which cognizance was taken even before the said period of three years, but are pending conclusion, shall also be reported by the bidders.

(vi) The Bidder(s) of foreign origin shall disclose the name and address of the Agents/ representatives in India, if any. Similarly, the Bidder(s) of Indian Nationality shall furnish the name and address of the foreign principals, if any. Further, all the payments made to the Indian agent/ representative have to be in India Rupees only.

(vii) Bidders not to pass any information provided by Principal as part of business relationship to others and not to commit any offence under PC/ IPC Act;

(2) The Bidder will not instigate third persons to commit offences outlined above or be an accessory to such offences.

(3) The Bidder signing Integrity Pact shall not approach the Courts while representing the matters to IEMs and he/she will await their decision in the matter.

Section 3 -Disqualification from tender process and exclusion from future Contracts

If the Bidder, before contract award has committed a transgression through a violation of Section 2 or in any other form such as to put his reliability or risibility as Bidder into question, the Principal is entitled to disqualify the Bidder from the tender process, for such reason.

1. If the Bidder has committed a transgression through a violation of Section 2 such as to put his reliability or credibility into question, the Principal is entitled also to exclude the Bidder from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of the transgression. The severity will be determined by the circumstances of the case, in particular the number of transgressions, the position of the transgressions within the company hierarchy of the Bidder and the amount of the damage. The exclusion will be imposed for a minimum of 6 months and maximum of 2 years.

2. The Bidder accepts and undertakes to respect and uphold the Principal's Absolute right to resort to and impose such exclusion and further accepts and undertakes not to challenge or question such exclusion on any ground, including the lack of any hearing before the decision to resort to such exclusion is taken. This undertaking is given freely and after obtaining independent legal advice.

3. If the Bidder can prove that he has restored/recouped the Damage caused by him and has installed a suitable corruption prevention system, the Principal may revoke the exclusion prematurely.

4. A transgression is considered to have occurred if in light of available evidence, no reasonable doubt is possible.

5. Integrity Pact, in respect of a particular contract, shall be operative from the date Integrity Pact is signed by both the parties or as mentioned in Section 9 - Pact Duration whichever is later. Any violation of the same would entail disqualification of the bidders and exclusion from future business dealings.

Section 4 -Compensation for Damages

(1) If the Principal has disqualified the Bidder from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover from the Bidder liquidated damages equivalent to Earnest Money Deposit / Bid Security.

(2) The bidder agrees and undertakes to pay the said amounts without protest or demur subject only to condition that if the Bidder can prove and establish that the exclusion of the Bidder from the tender process has caused no damage or less damage than the amount or the liquidated damages, the Bidder shall compensate the Principal only to the extent of the damage in the amount proved.

Section 5 -Previous transgression

(1) The Bidder declares that no previous transgression occurred in the last 3 years with any other company in any country conforming to the TI approach or with any other Public Sector Enterprise in India that could justify his exclusion from the tender process.

(2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process for such reason.

Section: 6 -Equal treatment of all Bidders/Contractor/Subcontractors

(1) The Principal will enter into Pacts on identical terms with all bidders.

(2) The Bidder undertake(s) to procure from all subcontractors a commitment in conformity with this Integrity Pact. The Bidder shall be responsible for any violation(s) of the provisions laid down in this agreement/Pact by any of its sub-contractors/sub-vendors.

(3) The Principal will disqualify from the tender process all bidders who do not sign this Pact or violate its provisions.

Section: 7 -Criminal charges against violating Bidders/Contractors/ Subcontractors

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor, which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the Vigilance Office.

Section: 8 -External Independent Monitor/Monitors

(1) The Principal appoints competent and credible Independent External Monitor (IEM) for this Pact.

(2) The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the Chairperson of the Board of the Principal.

(3) The Bidder accepts that the Monitor has the right to access without restriction to all Project documentation of the Principal including that provided by the Bidder. The Bidder will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors. The Monitor is under contractual obligation to treat the information and documents of the Bidder/Contractor/Subcontractor with confidentiality.

(4) The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the Principal and the Bidder. The parties offer the Monitor the option to participate in such meetings.

(5) As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of the Principal and request the Management to discontinue or heal the violation, or to take other relevant action. The monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action. However, the Independent External Monitor shall give an opportunity to the bidder to present its case before making its recommendations to the Principal.

(6) The Monitor will submit a written report to the Chairperson of the Board of the Principal within 8 to 10 weeks from the date of reference or intimation to him by the 'Principal' and, should the occasion arise, submit proposals for correcting problematic situations.

(7) If the Monitor has reported to the Chairperson of the Board a Substantiated suspicion of an offence under relevant Anti-Corruption Laws of India, and the Chairperson has not, within reasonable time, taken visible action to proceed against such offence or reported it to the Vigilance Office, the Monitor may also transmit this information directly to the Central Vigilance Commissioner, Government of India.

(8) The word 'Monitor' would include both singular and plural.

(9) In case of any complaints referred under IP Program, the role of IEMs is advisory and the advice of IEM is non-binding on the Organization. However, as IEMs are invariably persons with rich experience who have retired as senior functionaries of the government, their advice would help in proper implementation of the IP.

Section:9 -Pact Duration

This Pact begins when both parties have legally signed it. It expires for the Contractor 12 months after the last payment under the respective contract, and for all other Bidders 6 months after the contract has been awarded.

If any claim is made/ lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged/determined by Chairperson of the Principal.

Section:10 -Other provisions

(1) This agreement is subject to Indian Law. Place of performance and jurisdiction is the Registered Office of the Principal. The Arbitration clause provided in the main tender document / contract shall not be applicable for any issue / dispute arising under Integrity Pact.

(2) Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.

(3) In case of a joint venture, all the partners of the joint venture should sign the Integrity Pact. In case of sub-contracting, the principal contractor shall be solely responsible for the adherence to the provisions of IP by the sub-contractor (s).

(4) Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intensions.

…….	**……..**
For the Principal	**For the Bidder/Contractor**
Date :	Witness 1: .....
Place :	Witness 2: .....

****

PROFORMA – 3

PERFORMANCE SECURITY FORM

To:
M/s. OIL INDIA LIMITED,
MATERIALS DEPARTMENT

WHEREAS _____ (Name and address of Contractor) (hereinafter called "Contractor") had undertaken, in pursuance of Contract No. _____ to execute (Name of Contract and Brief Description of the Work) _____ (hereinafter called "the Contract").

AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you with a Bank Guarantee as security for compliance with Contractor's obligations in accordance with the Contract.

AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee; NOW THEREFORE we hereby affirm that we are Guarantors on behalf of the Contractor, up to a total of (Amount of Guarantee in figures) _____ (in words _____), such amount being payable in the types and proportions of currencies in which the Contract price is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of guarantee sum as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein. We hereby waive the necessity of your demanding the said debt from the Contractor before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract or the work to be performed thereunder or of any of the Contract documents which may be made between you and the Contractor shall in any way cease us from any liability under this guarantee, and we hereby waive notice of such change, addition or modification.

This guarantee is valid until the ----------day of ----------

The details of the Issuing Bank and Controlling Bank are as under:

A. Issuing Bank:

BANK FAX NO:
BANK EMAIL ID:
BANK TELEPHONE NO.:
IFSC CODE OF THE BANK:

B. Controlling Office:

Address of the Controlling Office of the BG issuing Bank:
Name of the Contact Person at the Controlling Office with Mobile No. and e-mail address:

Notwithstanding anything contained herein:

a) Our liability under this Bank Guarantee shall is restricted up to Rs ..... .
b) This guarantee shall be valid till ..... .
c) We are liable to pay the guarantee amount or any part thereof under this Bank Guarantee only and only if you serve upon us a written claim or demand on or before ..... (Date of Expiry of BG PLUS one year claim period).
d) At the end of the claim period that is on or after . . . . … (Date of expiry of the Bank Guarantee Plus Minimum of 1 year claim period shall be stipulated) all your rights under this Guarantee shall stand extinguished and we shall be discharged from all our liabilities under this Guarantee irrespective of receipt of original Bank Guarantee duly discharged, by Bank.

Name of the Contact Person at the Controlling Office with Mobile No. and e-mail address:

SIGNATURE AND SEAL OF THE GUARANTORS _____
Designation: _____
Name of Bank: _____
Address: _____

Date: _____
Place: _____

****

UNDERTAKING BY VENDOR ON SUBMISSION OF BANK GUARANTEE

To,

Oil India Limited,
Materials Department,
Duliajan, Assam - 786602

We, M/s…….. are submitting the Bid Security/ Performance Security (strike out whichever not applicable) in favour of Oil India Limited, Duliajan in the form of bank guarantee bearing Reference No. ……for an amount of INR…… valid up to …… as per terms and conditions of Tender / Contract No. .....

BG issuing bank details:

Bank: Branch: IFS Code:	
Contact Details E-mail Addresses:	Mobile No.: Telephone No.: Fax No.:
Correspondence Address H No/Street/City:	State: Country: Pin Code:

Declaration:
We have arranged to send the confirmation of issuance of the bank guarantee via SFMS portal through our bank using the details mentioned in the tender and hereby confirming the correctness of the details mentioned.

Authorized Signature: _____
Name: _____
Vendor Code: _____
Email ID: _____
Mobile No.: _____

Enclosure: Original bank guarantee

****

PROFORMA - 4

FORMAT OF UNDERTAKING BY BIDDERS TOWARDS SUBMISSION OF AUTHENTIC INFORMATION/DOCUMENTS

(To be typed on the letter head of the bidder)

Ref. No_____ Date _____

To,

General Manager (Materials)
Materials Department
Oil India Limited, Duliajan

Sub: Undertaking of authenticity of information/documents submitted
Ref: Your tender No._____ Dated _____

Sir,

With reference to our quotation no. …… dated…… against your above-referred tender, we hereby undertake that no fraudulent information/documents have been submitted by us.

We take full responsibility for the submission of authentic information/documents against the above cited bid.

We also agree that, during any stage of the tender/contract agreement, in case any of the information/documents submitted by us are found to be false/forged/fraudulent, OIL has right to reject our bid at any stage including forfeiture of our EMD and/or PBG and/or cancel the award of contract and/or carry out any other penal action on us, as deemed fit.

Yours faithfully,
For (type name of the firm here)

Signature of Authorised Signatory

Name :
Designation :
Phone No.
Place :
Date :

(Affix Seal of the Organization here, if applicable)

Format for Undertaking by Bidders towards compliance of Order No. F.7/10/2021-PPD (1) dated 23.02.2023 issued by Department of Expenditure, Ministry of Finance, Govt. of India

Exhibit - I

UNDERTAKING TOWARDS COMPLIANCE OF PROVISIONS FOR RESTRICTIONS ON PROCUREMENT FROM A BIDDER OF A COUNTRY WHICH SHARES LAND BORDER WITH INDIA

We, M/s _____ , have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; we certify that we are not from such a country/or if from such a country, have been registered with the Competent Authority. We hereby certify that we fulfil all requirements in this regard and are eligible to be considered. (*wherever applicable, evidence of valid registration by the Competent Authority shall be attached*)

Yours faithfully,

For (type name of the firm here)

Signature of Authorised Signatory

Name:

Designation:

Phone No.·

Place:

Date:

(Affix Seal of the Organization here, if applicable)

****

Exhibit – II

UNDERTAKING FOR WORKS INVOLVING POSSIBILITY OF SUB-CONTRACTIONG

We, M/s _____ , have read the clause regarding restnct10ns on procurement from a bidder of a country which shares a land border with India and on sub-contracting to contractors from such-countries, we certify that we are not from such a country/or if from such a country, have been registered with the Competent Authority and will not sub-contract any work to a contractor from such countries unless such contractor is registered with the Competent Authority. We hereby certify that we fulfil all requirements in this regard and is eligible to be considered. (*wherever applicable, evidence of valid registration by the Competent Authority shall be attached*)

Yours faithfully,

For (type name of the firm here)

Signature of Authorized Signatory

Name:

Designation:

Phone No.

Place:

Date:

(Affix Seal of the Organization. here, if applicable)

****

Exhibit – III

ADDITIONAL UNDERTAKING BY BIDDER IN CASES OF SPECIFIED TRANSFER OF TECHNOLOGY

We, M/s _____ , have read the clause regarding restrictions on procurement from a bidder having Transfer of Technology (ToT) arrangement. We certify that we do not have any ToT arrangement requiring registration with the competent authority.

OR

We, M/s _____ , have read the clause regarding restrictions on procurement from a bidder having Transfer of Technology (ToT) arrangement:. We certify that we have valid registration to participate in this procurement. (*Evidence of valid registration by the Competent Authority shall be attached*)

Yours faithfully,

For (type name of the firm here)

Signature of Authorised Signatory

Name:

Designation:

Phone No.

Place:

Date:

(Affix Seal of the Organization here, if applicable)

****

PROFORMA - 6

FORM NO. 10F

[See sub-rule (1) of rule 21AB]

Information to be provided under sub-section (5) of section 90 or sub-section (5) of section 90A of the Income-tax Act, 1961

I..... *son/daughter of Shri..... in the capacity of..... (designation) do provide the following information, relevant to the previous year..... *in my case/in the case offor the purposes of sub-section (5) of *section 90/section 90A:—

Sl. No.	***Nature of information***	**:**	***Details #***
(*i*)	Status (individual, company, firm etc.) of the assessee	:	
(*ii*)	Permanent Account Number or Aadhaar Number of the assessee if allotted	:	
(*iii*)	Nationality (in the case of an individual) or Country or specified territory of incorporation or registration (in the case of others)	:	
(*iv*)	Assessee's tax identification number in the country or specified territory of residence and if there is no such number, then, a unique number on the basis of which the person is identified by the Government of the country or the specified territory of which the assessee claims to be a resident	:	
(*v*)	Period for which the residential status as mentioned in the certificate referred to in sub-section (4) of section 90 or sub-section (4) of section 90A is applicable	:	
(*vi*)	Address of the assessee in the country or territory outside India during the period for which the certificate, mentioned in (*v*) above, is applicable	:	

2. I have obtained a certificate referred to in sub-section (4) of section 90 or sub-section (4) of section 90A from the Government of ..... (name of country or specified territory outside India)

Signature: .....
Name: .....
Address: .....
Permanent Account Number or Aadhaar Number .....

Verification

I ..... do hereby declare that to the best of my knowledge and belief what is stated above is correct, complete and is truly stated.

Verified today the ..... day of.....

.....

Signature of the person providing the information

Place: .....

Notes **:**

1. *Delete whichever is not applicable.
2. #Write N.A. if the relevant information forms part of the certificate referred to in sub-section (4) of section 90 or sub-section (4) of section 90A.

PROFORMA - 7

(On the official Letter Head of the Bidder)

NO BUSINESS CONNECTION OR PERMANENT ESTABLISHMENT CERTIFICATE

Date:

To

Oil India Limited
Duliajan, Assam
India - 786602

Sir,

Sub: No Business Connection or Permanent Establishment declaration for FY…….

This is to certify that……(Name of the bidder/contractor) is a company incorporated in ……(country). We are resident of ……..(country) and the services have been rendered in ……(country). We do not have any business connection in India as per the provision of Section 9 of the Indian Income Tax Act 1961 or any Permanent Establishment as defined in Article 5 of the India and……..(country) DTAA.

We hereby certify that we will notify OIL in case of any change in the status as certified above.

We also affirm that we shall hold you indemnified, if in future, anything is found contrary to the above and your company faces any issues or demand under Indian Income Tax Act due to any wrong or misstatement by us.

For ……

Authorised Signatory

*(**Note** – Please refer definition of the Business Connection and Permanent Establishment in the relevant DTAA)*

Definition of Business Connection

"Business connection" as defined in Section 9 of the Income Tax Act shall include any business activity carried out through a person who, acting on behalf of the non-resident,—

(a) Has and habitually exercises in India, an authority to conclude contracts on behalf of the non-resident, unless his activities are limited to the purchase of goods or merchandise for the non-resident; or
(b) Has no such authority, but habitually maintains in India a stock of goods or merchandise from which he regularly delivers goods or merchandise on behalf of the non-resident; or
(c) Habitually secures orders in India, mainly or wholly for the non-resident or for that non-resident and other non-residents controlling, controlled by, or subject to the same common control, as that non-resident:

Provided that such business connection shall not include any business activity carried out through a broker, general commission agent or any other agent having an independent status, if such broker, general commission agent or any other agent having an independent status is acting in the ordinary course of his business:

Provided further that where such broker, general commission agent or any other agent works mainly or wholly on behalf of a non-resident(hereafter in this proviso referred to as the principal non -resident) or on behalf of such non-resident and other non-residents which are controlled by the principal non- resident or have a controlling interest in the principal non-resident or are subject to the same common control as the principal non-resident, he shall not be deemed to be a broker, general commission agent or an agent of an independent status.

PROFORMA - 8

FORMAT FOR CERTIFICATE OF COMPLIANCE OF FINANCIAL CRITERIA
(*ON THE OFFICIAL PAD OF THE BIDDER TO BE EXECUTED BY THE AUTHORIZED SIGNATORY OF THE BIDDER*)

Ref: Clause No. A.2 (3.0) - Financial Criteria of the BEC
Tender No.: _____

I …… the authorized signatory(s) of.....(Company or firm name of address) do hereby affirm and declare as under:-

The balance sheet/Financial Statements for the financial year _____ (as the case may be) has actually not been audited as on the Original Bid closing Date.

Place :…….
Date :……. **Signature of the authorized signatory**

Note: ***This certificate are to be issued only considering the time required for preparation of Financial Statements i.e. if the last date of preceding financial / accounting year falls within the preceding six months reckoned from the original bid closing date.***

PROFORMA – 9

CERTIFICATE OF ANNUAL TURNOVER & NETWORTH

TO BE ISSUED BY PRACTISING **CHARTERED ACCOUNTANTS' FIRM** ON THEIR LETTER HEAD

TO WHOM IT MAY CONCERN

This is to certify that the following financial positions extracted from the audited financial statements of M/s..... (Name of the Bidder) for the last three (3) completed accounting years up to …… **(as the case may be)** are correct.

YEAR	TURNOVER In INR (Rs.) Crores/ USD Million*	NET WORTH In INR (Rs.) Crores / USD Million*

Annual Financial Turnover of the bidder from operations shall mean: "Aggregate value of the realization of amount made from the sale, supply or distribution of goods or on account of services rendered, or both, by the company (bidder) during a financial year" as per the Companies Act, 2013 Section 2 (91).

Net worth shall mean: "Share capital + Reserves created out of profits and securities Premium – Aggregate value of accumulated losses (excluding revaluation reserves) – deferred expenditure – Miscellaneous Expenditure to the extent not written off and carried forward Loss - Reserves created out of write back of depreciation and amalgamation"

*Rate of conversion (if used any): USD 1.00 = INR …….

Place:
Date:
UDIN:
Seal:

Membership Code & Registration No.:
Signature

Applicable for Global Tenders.

PROFORMA – 10

PARENT/ ULTIMATE PARENT/ HOLDING COMPANY'S CORPORATE GUARANTEE TOWARDS FINANCIAL STANDING
(Delete whichever not applicable)
(TO BE EXECUTED ON COMPANY'S LETTER HEAD)

DEED OF GUARANTEE

THIS DEED OF GUARANTEE executed at ..... this ..... day of ..... by M/s .....(mention complete name) a company duly organized and existing under the laws of ..... (insert jurisdiction/country), having its Registered Office at.....herein after called "the Guarantor" which expression shall, unless excluded by or repugnant to the subject or context thereof, be deemed to include its successors and permitted assigns.

WHEREAS M/s. Oil India Limited (hereinafter referred to as OIL) has invited offers vide their Tender No…… for……and M/s……..(Bidder) intends to bid against the said tender and desires to have Financial support of M/s…… [Parent / Ultimate Parent/Holding Company(Delete whichever not applicable)] and whereas Parent/Ultimate Parent/Holding Company(Delete whichever not applicable) represents that they have gone through and understood the requirements of subject tender and are capable and committed to provide the Financial support as required by the bidder for qualifying and successful execution of the contract, if awarded to the bidder.

Now, it is hereby agreed by the Guarantor to give this Guarantee and undertakes as follows:

1. The Guarantor confirms that the Bidder is a 100% subsidiary of the Guarantor.
2. The Guarantor agrees and confirms to provide the Audited Annual Reports of any of the preceding 03(three) financial/accounting years reckoned from the original bid closing date.
3. The Guarantor have an annual financial turnover of minimum INR…….. Cr or USD …….. during any of the preceding 03(three) financial/ accounting years reckoned from the original bid closing date.
4. Net worth of the Guarantor is positive for preceding financial/ accounting year.
5. The Guarantor undertakes to provide financial support to the Bidder for executing the project/job, in case the same is awarded to the Bidder.
6. The Guarantor represents that:
   (a) this Guarantee herein contained shall remain valid and enforceable till the satisfactory execution and completion of the work (including discharge of the warranty obligations) awarded to the Bidder.
   (b) the liability of the Guarantor, under the Guarantee, is limited to the 100% of the order value between the Bidder and OIL. This will, however, be in addition to the forfeiture of the Performance Guarantee furnished by the Bidder.
   (c) this Guarantee has been issued after due observance of the appropriate laws in force in India.
   (d) this Guarantee shall be governed and construed in accordance with the laws in force in India and subject to the exclusive jurisdiction of the courts of New Delhi, India.
   (e) this Guarantee has been given without any undue influence or coercion, and that the Guarantor has fully understood the implications of the same.
   (f) the Guarantor has the legal capacity, power and authority to issue this Guarantee and that giving of this Guarantee and the performance and observations of the obligations hereunder do not contravene any existing laws.

for and on behalf of (Parent/Ultimate Parent/ Holding Company) (Delete whichever not applicable) Witness: 1. 2.	for and on behalf of (Bidder) Witness: 1. 2.

PROFORMA - 11

PROFORMA OF AUTHORISATION LETTER FOR ATTENDING TENDER OPENING

Ref No. Date

TO,
GM- MATERIALS
MATERIALS DEPARTMENT
P.O. DULIAJAN, PIN-786602
DIST. DIBRUGARH, ASSAM, INDIA

Dear Sir,

Sub: OIL's Tender No. _____

For _____Mr _____has been authorized to be present at the time of opening of above tender due on at on my/our behalf.

Yours faithfully

Signature of Bidder

Name: Designation :

For & on behalf of :

Copy to: Mr _ _ _ _ _ _ for information and for production before the (MM) at the opening of bids.

****

PROFORMA – 12

EXCEPTION / DEVIATION PROFORMA

OIL expects the bidders to fully accept the terms and conditions of the bidding documents. However, should the bidder experience some exception and deviations to the terms of the bidding documents, the same should be indicated here and put in unpriced bid. In order to be considered responsive, Bidder's offer must specifically include the following statement :

(a) We certify that our offer complies with all NIT requirements and specifications without any deviations.

Or

(b) We certify that our offer complies with all NIT requirements and specifications with the following deviations :

Clause No. of Bidding Document	Full compliance/ not agreed	Exception/ deviations taken by the Bidders	Remarks

Signature of the Bidder

Name :

Seal of the company

****

PROFORMA – 13

UNDERTAKING FOR LOCAL CONTENT
(To be submitted in the letter head of the bidder)

Tender No. _____

We,_____ (Name of the bidder) have submitted Bid against Tender No. _____dated _____ for_____.

We hereby undertake that we meet the mandatory minimum local content requirement as mandated by Public Procurement (Preference to Make in India) Order, 2017 of Department for Promotion of Industry and Internal Trade (DPIIT), Govt. of India as revised vide Order No. P-45021/2/2017-PP (BE-II) dated 16th September 2020 (and as amended time to time) with modifications as notified vide MoPNG Order No. FP-20013/2/2017-FP-PNG-Part (4) (E-41432) dated 26th April 2022 (including subsequent amendments thereof, if any). The percentage of Local Content is _____ %.

We further declare that the percentage of Local content for the tendered Goods/Services has been calculated in conjunction with the directive issued by Ministry of Petroleum and Natural Gas vide notification no. FP-20013/2/2017-FP- PNG-Part (4) (E-41432) dated 26.03.2024.

For and on behalf of _____
Authorized signatory _____
Name _____
Designation _____
Contact No. _____

****

PROFORMA – 14

LETTER OF AUTHORITY

TO,
GM- MATERIALS
MATERIALS DEPARTMENT
P.O. DULIAJAN, PIN-786602
DIST. DIBRUGARH, ASSAM, INDIA

Dear Sir,

Sub: OIL's Tender No. _____

We _____of _____ confirm that Mr. _____ (Name and address) is authorised to represent us to Bid, negotiate and conclude the agreement on our behalf with you against OIL's Tender No. _____for any commercial /Legal purpose etc.

We confirm that we shall be bound by all and whatsoever our said representative shall commit.

Authorised Person's Signature: _____
Name: _____
Designation: _____

Yours faithfully,
Signature:
Name & Designation _____
For & on behalf of _____

Note: This letter of authority shall be on printed letter head of the Bidder and shall be signed by a person competent and having the power of attorney (power of attorney shall be annexed) to bind such Bidder.

****

Proforma – 15

UNDERTAKING FOR BIDDERS FINANCIAL STANDING

TO,
GM- MATERIALS
MATERIALS DEPARTMENT
P.O. DULIAJAN, PIN-786602
DIST. DIBRUGARH, ASSAM, INDIA

Dear Sir,

Sub: OIL's Tender No. _____

We, _____ (Name of the bidder) have submitted Bid against Tender No. _____dated _____**.** We hereby undertake that we are not under liquidation, court receivership or similar proceedings, we are not bankrupt.

For and on behalf of _____
Authorized signatory _____
Name _____
Designation _____
Contact No. _____

****

Proforma – 16 A

DECLARATION THAT BIDDER IS NOT UNDER HOLIDAY LIST/DELISTED/BLACKLISTED/DEBARRED

To,
GM- MATERIALS
MATERIALS DEPARTMENT
P.O. DULIAJAN, PIN-786602
DIST. DIBRUGARH, ASSAM, INDIA

TENDER NO. _____

Tender Description: _____

Sub: Undertaking/Declaration regarding Holiday List, debarment etc.

Ref: Tender No. _____

a) We, ____(Name of the bidder) solemnly affirm that we have read and understood OIL's Banning Policy as available at OIL's website https://www.oil-india.com/banning-policy and accept the Banning Policy in toto without any demur, protest, reservations and agree to be bound by the said Policy.

b) We, hereby declare that neither our company nor any of its allied concerns, partners or associates or directors or proprietors involved in any capacity, are currently put on holiday list/banning list by OIL debarring us/them from carrying on business dealings with OIL.

c) We, also hereby declare that neither our company nor any of its allied concerns, partners or associates or directors or proprietors involved in any capacity, have not been involved in any previous transgressions in the last 3 years with any other company in any country conforming to the TI (Transparency International) approach or with any other Public Sector Enterprise in India that could justify his exclusion from the tender process.

d) We, disclose the following allied concerns, partners or associates or directors or proprietors involved in any capacity in terms of the definition of Allied firms given in the "Banning Policy" of Oil India Limited:

Sl. No.	Name	Address	PAN No.	GST No.	OIL Vendor Code

Place: _____
Date: _____

_____
(Name & Signature of the authorized signatory of the bidder)

****

Proforma – 16 B

PROFORMA OF DECLARATION OF NCLT / NCLAT /DRT /DRAT/ COURT RECEIVERSHIP/ LIQUIDATION

TO,
GM- MATERIALS
MATERIALS DEPARTMENT
P.O. DULIAJAN, PIN-786602
DIST. DIBRUGARH, ASSAM, INDIA

Dear Sir,

Sub: OIL's Tender No. _____

We hereby declare that we are not undergoing insolvency resolution process or liquidation or bankruptcy proceeding as on date. In respect of corrupt or fraudulent practice (s), except as indicated below:-

(Here give particulars of blacklisting or holiday listing and /or inquiry and in the absence thereof state "NIL")

In understood that if this declaration is found to be false in any particular , Oil India Limited shall have the right to reject my / our bid, and if the bid has resulted in a contract, the contract is liable to be terminated without prejudice to any other right or remedy (include blacklisting or holiday listing) available to Oil India Limited.

For and on behalf of _____
Authorized signatory _____
Name _____
Designation _____
Contact No. _____

****

Proforma - 17

PROFORMA FOR UNDERTAKING FROM THIRD PARTY DOCUMENT VERIFICATION INSPECTION AGENCY

(To be submitted on official letter head)

TO,
GM- MATERIALS
MATERIALS DEPARTMENT
P.O. DULIAJAN, PIN-786602
DIST. DIBRUGARH, ASSAM, INDIA

Sir

SUB : OIL's tender No. …….

M/s_____having registered office at _____intend to participate in the above referred tender of OIL INDIA LIMITED.

The tender conditions stipulated that the bidder shall submit documents pertaining to Bid Evaluation Criteria / Bid Rejection Criteria (BEC / BRC), duly verified and certified by designated independent Third Party Document Verification Inspection Agency.

In this regard , we hereby certify that copies of documents pertaining to Bid Evaluation Criteria / Bid Rejection Criteria (BEC / BRC), submitted to us by the bidder. M/s _____have been verified and certified by us with originals and found to be genuine and authentic. We have signed and stamped on the copies of all the verified and certified documents having_____nos. pages.

Note: In the event of any requirement, OIL reserves the right to ask the inspection agencies to verify the documents with source, if required at no extra cost to OIL.

Thanking you,

Authorized Person's Signature:_____

Name:_____

****

Proforma – 18

FORMAT FOR BANK GUARANTEE LINKED WITH ADVANCE PAYMENT

TO,
OIL INDIA LIMITED, DULIAJAN - 786 602 ASSAM, INDIA

WHEREAS.....(Name of the Seller) (herein after called 'the Seller') has undertaken, in pursuance of Order No……..dated...../...../..... to supply..... (description of Goods and Services) hereinafter called 'the Contract'.

AND WHEREAS it has been stipulated by you in the said Contract that the Seller shall furnish you with a Bank Guarantee from a recognized Bank for the sum specified therein as security for advance payment in accordance with the Contract.

AND WHEREAS we have agreed to give the Seller a Guarantee:

THEREFORE, we hereby affirm that we are Guarantors responsible to you, on behalf of the seller, upto a total of…… (Amount of the Guarantee in words and figures) and we undertake to pay you, upon first written demand declaring the Seller to be in default under the contract and without cavil or argument and sum or sums within the limits of…… ..... (Amount of Guarantee) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

This Guarantee is valid until the ..... day of .....

The details of the issuing bank and controlling bank are as under:

A. Issuing Bank

1. Full address of the bank:
2. Email address of the bankers:
3. Mobile nos. of the contact persons:

B. Controlling Office

1. Address of the controlling office of the BG issuing banks:
2. Name of the contact persons at the controlling office with their mobile nos. and email address:

Signature & Seal of the guarantors

Date ……..

…… Witness

****

Proforma – 19

PROFORMA OF "INSURANCE SURETY BOND" FOR "BID SECURITY"

(To be stamped in accordance with the Stamp Act)

To **M/s OIL INDIA LIMITED,** **Address:** **PIN- XXXXXXX**	**Insurance Surety Bond (ISB) No.**	
	Date of ISB	
	ISB Valid up to (Expiry date)	
	Claim period up to (indicate date of expiry of claim period which includes minimum three months from the expiry date)	
	Stamp Sl. No./e-Stamp Certificate No.	

WHEREAS, (Name of Bidder) _____ (hereinafter called "the Bidder") has submitted their offer Dated _____ for the provision of certain services (hereinafter called "the Bid") against OIL INDIA LIMITED, Duliajan, Assam, India (hereinafter called the Company's) Tender No. _____ KNOW ALL MEN BY these presents that we _____ (Name & address of the "Insurer") _____ having our registered office at _____ (hereinafter called " Insurer "), its successors and assignees, unconditionally and irrevocably undertake to pay forthwith to the Company an amount of Rs. …… (Rupees …….. only) (hereinafter referred to as the "Surety Bond") as our primary obligation without any demur, reservation, recourse, contest or protest and without reference to the Bidder, if the Bidder shall fail to fulfil or comply with all or any of the conditions mentioned below or referred in the Tender document in this regards.

Any such written demand made by the Company stating that the Bidder is in default of the due and faithful fulfilment and compliance with the aforesaid conditions shall be final, conclusive and binding on the Surety, Insurer.

SEALED with the said Insurer this _____day of _____20 _____

THE CONDITIONS of these obligations are:

1. If the Bidder withdraws their Bid within its original/extended validity; or

2. The Bidder modifies/ revises their bid suomoto; or

3. The Bidder does not accept the contract; or

4. The Bidder does not furnish Performance Security Deposit within the stipulated time as per tender/contract; or

5. If it is established that the Bidder has submitted fraudulent documents or has indulged into corrupt and fraudulent practice.

NOW, THEREFORE, the Surety Insurer hereby, unconditionally and irrevocably, guarantees and affirms as follows:

1. The Surety Bond shall not be affected by any change in the constitution or winding up of the Bidder or the Surety Insurer or any absorption, merger or amalgamation of the Bidder or the Surely Insurer with any other person.

2. In order to give full effect to this Surety Bond, the Company shall be entitled to treat the Surety Insurer as the principal debtor:

3. The Surety Insurer declares that it has the power to issue this Surety Bond and discharge the obligations contemplated herein, the undersigned is duly authorised and has full power to execute this Surety Bond for and on behalf of the Surety Insurer.

4. Notwithstanding anything contained herein:

a) The Insurer's liability under this Insurance Surety Bond shall not exceed (currency in figures) . . . . . (currency in words only).

b) This Insurance Surety Bond shall remain in force upto _____ and any extension(s) thereof; and

c) The Surety insurer shall be released and discharged from all liability under this Insurance Surety Bond unless a written claim or demand is issued to the insurer on or before the midnight of …….. (indicate date of expiry of claim period which includes minimum **three months** from the expiry of this Insurance Surety Bond) and any extension(s) thereof. If a claim has been received by us within the said date, all the rights of Company under this Insurance Surety Bond shall be valid and shall not cease until we have satisfied that claim.

In witness whereof the insurer, through its authorized officer, has set its hand and stamp on this

_____day of_____20____at_____.

Witness: **Issuing Authority:**

…… ……

(Signature) Signature of the Authorised Signatory)

…… ……

(Name) (Name)

…… ……

(Designation & official address) (Designation with Insurer Stamp)

Authorised Vide

Power of Attorney No……

Date.....

INSTRUCTIONS FOR FURNISHING "BID SECURITY DEPOSIT" BY "INSURANCE SURETY BOND"

a) The Insurance Surety Bond shall be from an Insurer as per guidelines issued by Insurance Regulatory and Development Authority of India (IRDAI).

b) The Company shall be the Creditor, the Bidder shall be the Principal debtor and the Insurance company/Insurer shall be the Surety in respect of the Insurance Surety Bond to be issued by the Insurer.

c) The Insurance Surety Bond should be on Non-Judicial stamp paper/e-stamp paper of appropriate value as per Stamp Act prevailing in the state(s) where the Insurance Surety Bond is submitted or is to be acted upon or the rate prevailing in State where the Insurance Surety Bond is executed, whichever is higher. The Stamp Paper/e-stamp paper shall be purchased in the name of Bidder/Insurer issuing the Insurance Surety Bond.

d) The expiry date and values should be arrived at in accordance with instructions provided in the "Forwarding Letter" of the Tender.

e) The Insurance Surety Bond by bidders will be given from Insurer as specified in the Tender.

f) A letter from the issuing insurer of the requisite Insurance Surety Bond confirming that the said Insurance Surety Bond / all future communication relating to the Insurance Surety Bond shall be forwarded to the Purchaser at its address as mentioned at "ITB".

g) Bidder must indicate the full postal address of the Insurer along with the Insurer's E-mail / Phone from where the Insurance Surety Bond has been issued.

h) Bidder must indicate Name, Address, Contact number and official Email ID of the Controlling Office of the Surety Issuing Branch or any web portal link, from whom / where the Surety Bond can be got confirmed by the Company.

PROFORMA OF "INSURANCE SURETY BOND" FOR "PERFORMANCE SECURITY"

(To be stamped in accordance with the Stamp Act)

To **M/s OIL INDIA LIMITED,** **Address:** **PIN- XXXXXXX**	**Insurance Surety Bond (ISB) No.**	
	Date of ISB	
	ISB Valid up to (Expiry date)	
	Claim period up to (indicate date of expiry of claim period which includes minimum three months from the expiry date)	
	Stamp Sl. No./e-Stamp Certificate No.	

WHEREAS, (Name and address of Contractor) _____ (hereinafter called "Contractor") had undertaken, in pursuance of Contact No. _____ to execute (Name of Contract and Brief Description of the Work) _____ (hereinafter called "the Contract").

AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you with an Insurance Surety Bond (ISB) as security for compliance with Contractor's obligations in accordance with the Contract.

AND WHEREAS we (May incorporate the Insurer) have agreed to give the Contractor such an Insurance Surety Bond; NOW THEREFORE we hereby affirm that we are Insurer on behalf of the Contractor, up to a total of (Amount of ISB in figures) _____ (in words _____), such amount being payable in the types and proportions of currencies in which the Contract price is payable, and we, undertake to pay you, upon your first written demand stating the default/breach committed by the Contractor without cavil or arguments, any sum or sums within the limits of guarantee sum as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein. We hereby waive the necessity of your demanding the said debt from the Contractor before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract or the work to be performed thereunder or of any of the Contract documents which may be made between you and the Contractor shall in any way cease us from any liability under this ISB, and we hereby waive notice of such change, addition or modification.

NOW, THEREFORE, the Surety Insurer hereby, unconditionally and irrevocably, guarantees and affirms as follows:

1. The Surety Bond shall not be affected by any change in the constitution or winding up of the Contractor or the Surety Insurer or any absorption, merger or amalgamation of the Contractor or the Surely Insurer with any other person.

2. In order to give full effect to this Surety Bond, the Company shall be entitled to treat the Surety Insurer as the principal debtor.

3. The Surety Insurer declares that it has the power to issue this Surety Bond and discharge the obligations contemplated herein, the undersigned is duly authorised and has full power to execute this Surety Bond for and on behalf of the Surety Insurer.

4. Notwithstanding anything contained herein:

a) The Insurer's liability under this Insurance Surety Bond shall not exceed (currency in figures) ..... (currency in words only) . . . . .

b) This Insurance Surety Bond shall remain in force upto _____ and any extension(s) thereof; and

c) The Surety insurer shall be released and discharged from all liability under this Insurance Surety Bond unless a written claim or demand is issued to the insurer on or before the midnight of

…….. (indicate date of expiry of claim period which includes minimum **three months** from the expiry of this Insurance Surety Bond) and any extension(s) thereof. If a claim has been received by us within the said date, all the rights of Company under this Insurance Surety Bond shall be valid and shall not cease until we have satisfied that claim.

In witness whereof the insurer, through its authorized officer, has set its hand and stamp on this

_____day of_____20___at _____.

Witness: **Issuing Authority:**

…… ……

(Signature) Signature of the Authorised Signatory)

…… ……

(Name) (Name)

…… ……

(Designation & official address) (Designation with Insurer Stamp)

Authorised Vide

Power of Attorney No……

Date.....

INSTRUCTIONS FOR FURNISHING "PERFORMANCE SECURITY DEPOSIT" BY "INSURANCE SURETY BOND"

a) The Insurance Surety Bond shall be from an Insurer as per guidelines issued by Insurance Regulatory and Development Authority of India (IRDAI).

b) The Company shall be the Creditor, the Contractor shall be the Principal debtor and the Insurance company/ Insurer shall be the Surety in respect of the Insurance Surety Bond to be issued by the Insurer.

c) The Insurance Surety Bond should be on Non-Judicial stamp paper/e-stamp paper of appropriate value as per Stamp Act prevailing in the state(s) where the Insurance Surety Bond is submitted or is to be acted upon or the rate prevailing in State where the Insurance Surety Bond is executed, whichever is higher. The Stamp Paper/e-stamp paper shall be purchased in the name of Contractor / Insurer issuing the Insurance Surety Bond.

d) The expiry date and values should be arrived at in accordance with instructions provided in the "Forwarding Letter" of the Tender.

e) The Insurance Surety Bond by Contractors will be given from Insurer as specified in the Tender.

f) A letter from the issuing insurer of the requisite Insurance Surety Bond confirming that the said Insurance Surety Bond / all future communication relating to the Insurance Surety Bond shall be forwarded to the Purchaser at its address as mentioned at "ITB".

g) Contractor must indicate the full postal address of the Insurer along with the Insurer's E-mail / Phone from where the Insurance Surety Bond has been issued.

h) Contractor must indicate Name, Address, Contact number and official Email ID of the Controlling Office of the Surety Issuing Branch or any web portal link, from whom / where the Surety Bond can be got confirmed by the Company.

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Proforma – 20

Format for Sustainable Development (SD) and Environment, Social & Governance (ESG) Questionnaire.

Explanatory Note-ESG Questionnaire for Suppliers & Vendors

1 Emissions Reporting

What are Greenhouse Gas (GHG) Emissions?

Greenhouse gas (GHG) emissions refer to gases that trap heat in the Earth's atmosphere, contributing to global warming and climate change. These include carbon dioxide (CO2), methane (CIL), and nitrous oxide (N2O), among others. GHG emissions are generated from various sources, such as burning fossil fuels, industrial activities, and deforestation.

What are Scope 1 and Scope 2 Emissions?

- **Scope 1 Emissions:** Direct emissions from sources owned or controlled by your company (e.g., fuel combustion in company-owned vehicles, boilers, and generators).
- **Scope 2 Emissions:** Indirect emissions from purchased electricity, steam, heating, and cooling consumed by your company. These emissions occur at the power generation source but are attributed to your business due to electricity consumption.

How to Calculate GHG Emissions?

Emissions are typically calculated using the following formula:
GHG Emissions (kg CO2e) = Consumption data x Emission Factor

- **Consumption Data:** Fuel consumption (liters), electricity use (kWh), etc.
- **Emission Factor:** Standard values published by organizations like the IPCC

Examples:

1. **Fuel Consumption-Based Calculation (Scope 1):**
   - If you use 1,000 liters of diesel in company vehicles, and the emission factor for diesel is 2.68 kg CO2e per liter, your emissions are: 1,000x2.68=2,680 kg CO2e
2. Electricity Consumption-Based Calculation (Scope 2):
   - If your facility consumes 5,000 kWh of electricity, and the emission factor for your electricity provider is 0.4 kg $C0_2e$ per kWh, your emissions are: 5,000x0.4=2,000 kg $C0_2e$

Sample Responses:

Question	Sample Response
What was the GHG emission for FY24	**a)** Scope 1: 10,500 kg CO2e **b)** Scope 2: 8,200 kg CO2e
What was the GHG emission per unit revenue for FY24?	a) Scope 1: 2.5 kg CO2e per INR 1,000 revenue **b)** Scope 2: 1.8 kg CO2e per INR 1,000 revenue

Questionnaire for vendors and suppliers			Response
1. Emissions	What was the GHG emission for the last financial year ?	a) Scope 1 GHG emissions (kg CO_2e)	
		b) Scope 2 GHG emissions (kg CO_2e)	
	What was the GHG emission per unit of revenue for the last financial year?	a) Scope 1 GHG emissions (kg CO_2e)	
		b) Scope 2 GHG emissions (kg CO_2e)	
2. Decarbonization strategy & targets	Do you have a Net Zero target? If yes, please state the year		
	Do you have an emissions reduction target? If yes, are the targets absolute emissions based, or intensity based?		
	Please state the target for reduction in next financial year	a) Scope 1 GHG emissions/emissions intensity	
		b) Scope 2 GHG emissions/emissions intensity	
	Please provide information on a few decarbonization initiatives undertaken (describe the initiatives and their respective impact)		
3. Waste & Water Mgt.	Do you have any initiatives for waste management including solid wastes, liquid wastes and hazardous waste?		
	Do you have any initiatives for water management including monitoring of water consumption and withdrawals, and if applicable, treatment of wastewater?		
4. Disclosures	Are your current emissions verified? If yes, please name the assuring body		
	Are your emissions targets validated (eg: SbTi)? If yes, please name the methodology		
	Are you rated by any of the ESG rating agencies? If yes, please specify the agency and rating		

Suppliers and vendors may refer to the explanatory note for any questions or clarifications pertaining to any of the questions above.

2 Decarbonization Strategy & Targets

Net Zero and Emission Reduction Targets

- **Net Zero Target:** A Net Zero target refers to a commitment to reducing emissions to as close to zero as possible, with residual emissions offset by carbon capture or other means. OIL would like to know if your organization has set any targets of becoming net zero, and if so, what is the targeted year.

- **There are 2 types of defining the target:**

  Absolute Reduction: A fixed percentage decrease in emissions over a period (e.g., 10% reduction by 2030).
  Intensity-Based Reduction: Reduction in emissions per unit of production or revenue (e.g., 15% reduction per product by 2025).

Sample Responses:

Question	Sample Response
Do you have a Net Zero target? If yes, please state the year	Yes, by 2040
Do you have an emissions reduction target? If yes, are the targets absolute emissions based, or intensity based?	Yes, we aim for an absolute 40% reduction by 2030, and 100% by 2040
Please state the target for reduction in FY24.	a) Scope 1: 10% absolute reduction b) Scope 2: 10% absolute reduction
Please provide information on a few initiatives undertaken (describe the initiatives)	Afforestation EV inclusion Electrification of gas-based equipment Renewable energy setup
How much of the reduction targets have been achieved till date? (eg: more than 80% achieved, less than 20% etc)	~5 % reduction has been achieved

3. Waste & Water

Management Waste

Management Initiatives

In order to answer the question regarding waste management initiatives, vendors and suppliers may mention few of the initiatives that their organizations have undertaken that may include (but are not limited to):

- Recycling and reusing materials
- Proper disposal of hazardous waste
- Reducing landfill waste through composting or waste-to-energy programs

Water Conservation Initiatives

Similar to the waste management initiatives, in order to answer the question regarding water conversation initiatives, vendors and suppliers may mention few of the initiatives that their organizations have undertaken that may include (but are not limited to):

- Monitoring water consumption with meters
- Installing water-efficient fixtures
- Treating wastewater before discharge

Sample Responses:

Question	sample Response
Do you have any initiatives for waste management including solid wastes, liquid wastes and hazardous waste?	Yes, we recycle 60% of our production waste and have SOPs in place for proper dispose of hazardous materials.
Do you have any initiatives for water management including monitoring of water consumption and withdrawals, and if applicable, treatment of wastewater?	Yes, we have meters to monitor water withdrawals and have a wastewater treatment process.

4. Disclosures

Verification & Validation of Emissions Data

- **Current emissions verification:** There are certain third-party agencies that verify an organization's emissions. These organizations provide independent assessments to ensure transparency and accuracy in emissions reporting. Verification by such agencies enhances credibility and aligns businesses with best sustainability practices. In case your organization's current emissions are validated by such a third-party agency, please specify the name of such an agency.

- **Emissions target validation:** If you have a target of reducing your carbon footprint, certain organizations validate the roadmap of achieving a lower carbon footprint. In case you have prepared a roadmap and submitted it to SBTi or Transition Pathways Initiatives, and have received certificates that have validated the targets, please specify the agency that has validated your targets.

- **ESG Ratings:** Certain agencies assess organizations based on their disclosures, monitoring capabilities, and control measures, among other factors. Some of these agencies, such as CDP and S&P, are globally recognized for their ratings. If your organization has received a rating from any of these agencies, please specify the agency's name and your assigned rating.

Sample Responses:

Question	Sample Response
Are your current emissions verified? If yes, please name the assuring body	Yes, verified by XYZ agency
Are your emissions targets validated (eg: SbTi)? If yes, please name the methodology	Yes, validated by SBTi
Are you rated by any of the ESG rating agencies? If yes, please specify the agency and rating	Yes, CDP rating: D.

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