



OIL INDIA LIMITED
(A Government of India Enterprises)
PO : Duliajan – 786602
Assam (India)

TELEPHONE NO: (91-374) 2808719

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FORWARDING LETTER

Tender No. : SDI0136P19 DT: 21.12.2018
Tender Fee : NIL
Bid Security : Applicable
Bidding Type : SINGLE STAGE COMPOSITE BID SYSTEM
Bid Closing on : 07.03.2019 (11.00 HRS IST)
Bid Opening on : 07.03.2019 (14.00 HRS IST)
Performance Security : Applicable
Integrity Pact : Not Applicable

"The items covered by this enquiry shall be used by Oil India Limited in the PEL/ML areas which are issued/renewed after 01/04/99 and hence Nil Customs Duty during import will be applicable. However, concessional rate of GST @5% against Essentiality Certificate for invoice value Rs 1 Lakhs and above will be applicable.

In the event of order, OIL will issue Essentiality Certificate (EC), where concessional rate of GST @5% will be applicable. Supplier shall affect dispatch only on receipt of these certificates from OIL, failing which all related liabilities shall be to Supplier's account".

OIL invites Bids for **SUPPLY OF WIRELESS TRANSMITTER** through its e-Procurement site under **SINGLE STAGE COMPOSITE BID SYSTEM**. The bidding documents and other terms and conditions are available at Booklet No. MM/LOCAL/E-01/2005 for E-Procurement LCB Tenders. The prescribed Bid Forms for submission of bids are available in the Technical RFX -> External Area - > Tender Documents

The general details of tender can be viewed by opening the RFX [Tender] under RFX and Auctions. The details of items tendered can be **found in the Item Data and details uploaded under Technical RFX.**

The tender will be governed by:

- a) For technical support on various matters viz. Online registration of vendors, Resetting of Passwords, submission of online bids etc, vendors should contact OIL's

ERP MM Deptt at following: Tel Nos = **0374-2807178** , 0374-2807171 , 0374-2807192 ,
Email id = erp_mm@oilindia.in.

b) **OIL's office timings are as below:**

	Time (in IST)
Monday – Friday	07.00 AM to 11.00 AM; 12.30 PM to 03.30 PM
Saturday	07.00 AM to 11.00 AM
Sunday and Holidays	Closed

Vendors should contact OIL officials at above timings only.

c) **OIL Bank Details :**

	Bank Details of Beneficiary	
a	Bank Name	STAE BANK OF INDIA
b	Branch Name	Duliajan
c	Branch Address	Duliajan, Dist-Dibrugarh
d	Banker Account No.	10494832599
e	Type of Account	Current Account
f	IFSC Code	SBIN0002053
g	MICR Code	786002302
h	SWIFT Code	SBININBB479
i	Contact No.	9435554859
j	Contact Person Name	Mr. K.L.K.Banik, AGM
k	Fax No.	0374-2802729
l	Email Id	sbi.02053@sbi.co.in

- d) “General Terms & Conditions” for e-Procurement as per Booklet No. MM/LOCAL/E-01/2005 for E-Procurement of Indigenous Tenders.
- e) Technical specifications and Quantity as per **Annexure – 1A**.
- f) The prescribed Bid Forms for submission of bids are available in the Technical RFx-> External Area - > Tender Documents.
- g) Amendments to the NIT after its issue will be published on OIL's website only. Revision, clarification, addendum, corrigendum, time extension etc. to the tender will be hosted on OIL website only. No separate notification shall be issued in the press. Prospective bidders are requested to visit website regularly to keep themselves updated.
- h) Any sum of money due and payable to the contractor (including Security Deposit refundable to them) under this or any other contract 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 sum of money arising out of this

contract or under any other contract made by the contractor with Oil India Limited (or such other person or persons contracting through Oil India Limited).

- i) Bidders are advised to fill up the Technical bid check list (**Annexure EEE**) and Response sheet (**Annexure FFF**) given in MS excel format in Technical RfX -> External Area -> Tender Documents. The above filled up document to be uploaded in the **Technical Attachment**. For details please refer “Vendor User Manual” / “NEW INSTRUCTIONS”

Special Notes:

1.0

- a) Bidders who do not have E-tender Login ID and Password should complete their online registration **at least seven (7) 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>
- b) 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.
- c) **MSE Units** (Manufacturers/Service Providers only and not their dealers/distributors) who are already registered with District Industry Centers or Khadi & Village Industries Commission or Khadi & Village Industries Board or Coir Board or National Small Industries Corporation or Directorate of Handicrafts & Handloom or any other body specified by Ministry of MSME are **exempted from payment of Bid Security (EMD)** irrespective of their monetary limit, product category and capacity mentioned in their registration, **subject to submission of valid MSE registration certificate issued by appropriate authority.**
- d) For availing benefits under Public Procurement Policy (**Purchase preference**), the interested MSE Bidders must ensure that they are the **manufacturers of the tendered item(s) and registered with the appropriate authority for the said item(s)**. Bids without EMD shall be rejected, if the technical offer does not include a valid copy of relevant MSE Certificate issued by appropriate authority specifying the item as per tender. Therefore, it is in the interest of such MSE Vendors to furnish a copy of complete certificate to the concerned tender handling officer of **OIL at least seven (7) days prior to the scheduled Bid Closing Date of the tender**, seeking clarification/confirmation as to whether their MSE certificate is eligible for EMD exemption or not. **Late communication in this regard and request for bid closing date extension on that plea shall not be entertained by Company.**

NOTE:

In case of MSE/PSUs/ Govt. Bodies / eligible institutions etc., they must apply to concerned tender handling officer, Materials Department, Oil India Limited, P.O. Duliajan, Assam-786602 for waiver of EMD upto one week prior to the Bid closing date (or as amended in e-portal).

2.0 The tender is invited under SINGLE STAGE- COMPOSITE BID SYSTEM. The bidders are required to submit both the “TECHNO-COMMERCIAL UNPRICED BID” and “PRICED BID” through electronic format in the OIL’s e-Tender portal within the Bid Closing Date and Time stipulated in the e-Tender.

2.1 Please ensure that Technical Bid / all technical related documents related to the tender are uploaded in the Technical RFX Response-> Technical Attachment only. For details please refer “NEW INSTRUCTIONS”. Please refer Annex-BB for price schedule.

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

- a) **Original Bid Security**
- b) **Detailed Catalogue (if any)**
- c) **Any other document required to be submitted in original as per tender requirement**

All documents submitted in physical form should be signed on all pages by the authorised signatory of the bidder and to be submitted in Duplicate.

4.0 Benefits to Micro & Small Enterprises (MSEs) as per OIL’s Public Procurement Policy for Micro and Small Enterprises (MSEs) shall be given. Bidders are requested to go through ANNEXURE – I of MM/LOCAL/E-01/2005 for E-Procurement of Indigenous Tenders for more details.

5.0 Bidders are requested to examine all instructions, forms, terms and specifications in the bid. Failure to furnish all information required as per the NIT or submission of offers not substantially responsive to the bid in every respect will be at the bidders risk and may result in rejection of its offer without seeking any clarifications.

6.0 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.

7.0 Bid must be submitted electronically only through OIL’s e-procurement portal. Bid submitted in any other form will be rejected.

8.0 The tender shall be governed by the Bid Rejection & Bid Evaluation Criteria given in enclosed **Annexure-CCC**. However, if any of the Clauses of the Bid Rejection Criteria / Bid Evaluation Criteria (as per **Annexure-CCC**) contradict the Clauses of the tender and / or “General Terms & Conditions” as per Booklet No. MM/LOCAL/E-01/2005 for E-Procurement of Indigenous Tenders elsewhere, those in the BEC / BRC shall prevail.

9.0 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 the company, failing which the offer will be summarily rejected.

10.0 Please do refer the User Manual provided on the portal on the procedure How to create Response for submitting offer.

11.0 If Bank Guarantee is submitted towards ‘Bid Security’, then bidders have to ensure that the Bank Guarantee issuing bank indicate the name and detailed address (including e-mail) of their higher office from where confirmation towards genuineness of the Bank Guarantee can be obtained.

12.0 Bidders are requested to refer to the enclosed **Annexure – BBB** for the Taxes and Duties clauses under GST regime.

13.0 Delivery/collection Instructions in cases where transportation is in OIL's scope:

(i) the suppliers shall be required to deliver the Sundry consignments of weight less than 3 (Three) Tons at the godown/office/collection point of OIL's authorized transporter in various cities.

(ii) consignments weighing more than 3(Three) Tons shall be collected from the supplier's premises/loading points by OIL's authorized transporter.

(iii) the names of OIL's current authorized transporters are:

- a) M/s Western Carriers (India) Ltd.
- b) M/s DARCL Logistics Limited

Bidder's are requested to note the above delivery/collection instructions while submitting their offers.

14.0 While submitting the offers bidders are requested to refer to the enclosed **Annexure – BB (Price Bid Format and Evaluation Criteria)**.

15.0 **The applicable GST on the Liquidated Damage if any, shall have to be borne by the Seller. Accordingly, the Liquidated Damage shall be recovered from the seller along with applicable GST.**

16.0 Bidders should fill-up and submit alongwith their bid an **UNDERTAKING** towards **authenticity of information/documents** furnished by them, as per enclosed **ANNEXURE-K**.

Please do refer "**NEW INSTRUCTION TO BIDDER FOR SUBMISSION**" for the above two points and also please refer "**New Vendor Manual (effective 12.04.2017)**" available in the login Page of the OIL's E-tender Portal.



Oil India Limited e-Procurement

User ID *

Password *

Logon Problems? [Get Support](#)

[Supplier Enlistment for E-Tender](#)

[Important Note for New Portal Users:](#)

[Click here to View Compatibility Settings](#)

[General Guidelines to bidders](#)

[Click for User Manuals](#)

Click here for
the New
Manual &
Instruction

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NOTE:

Bidders should submit their bids (preferably in tabular form) explicitly mentioning compliance / non compliance to all the NIT terms and conditions of NIT.

Yours Faithfully

Sd-

**(B BORAH)
SPO (IP)
FOR GM-MATERIALS**

Tender No & Date: SDI0136P19 DT: 21.12.2018

BID REJECTION CRITERIA (BRC) / BID EVALUATION CRITERIA (BEC)

The following BRC/BEC will govern the evaluation of the bids received against this tender. Bids that do not comply with stipulated BRC/BEC in full will be treated as non responsive and such bids shall prima-facie be rejected. Bid evaluation will be done only for those bids that pass through the “Bid Rejection Criteria” as stipulated in this document.

Other terms and conditions of the enquiry shall be as per General Terms and Conditions vide MM/LOCAL/E-01/2005 for E-Procurement of Indigenous Tenders. However, if any of the Clauses of the Bid Rejection Criteria / Bid Evaluation Criteria (BRC / BEC) contradict the Clauses of the tender or MM/LOCAL/E-01/2005 elsewhere, those in the BRC / BEC shall prevail.

<u>Criteria</u>	Complied / Not Complied. (Remarks if any)
<p>1.0 BID REJECTION CRITERIA (BRC):</p> <p>The bid shall conform generally to the specifications, terms and conditions given in this document. Notwithstanding the general conformity of the bids to the stipulated specifications, the following requirements will have to be particularly met by the Bidders without which the same will be considered as non-responsive and rejected.</p> <p>A) TECHNICAL:</p> <p>1.0 Qualification: Bidder should have experience of design, engineering, supply and commissioning of minimum one number of similar system during last 5(Five) years as on original stipulated Bid Closing Date.</p> <p>Similar system implies Wireless Process monitoring system used for measurement & monitoring of industrial process parameters.</p> <p>1.1 Documentary evidence to substantiate the above experience shall be submitted in the form of copy of relevant Purchase Order along with</p> <p>a) Installation and commissioning certificate in respect of satisfactory execution of the Purchase Order Or</p> <p>b) Customer/user certifying that the system is operating satisfactorily.</p> <p>2.0 Bidder will quote for all the items under this tender, so that bidder's design of the wireless system for the field devices to operate successfully remain intact.</p> <p>Note: Documentary evidence in respect of the above should be submitted in the form of copies of relevant Purchase Orders along with copies of any of the documents in respect of satisfactory execution of each of those Purchase Orders,</p>	

such as –

- (i) Satisfactory Inspection Report (OR)
- (ii) Satisfactory Supply Completion / Installation Report (OR)
- (iii) Consignee Received Delivery Challans (OR)
- (iv) Central Excise Gate Pass / Tax Invoices issued under relevant rules of Central Excise/VAT/GST (OR)
- (v) any other documentary evidence that can substantiate the satisfactory execution of each of the purchase orders cited above.

Note:

a) The Purchase Order date need not be within 5 (five) years preceding original bid closing date of this tender. However, the execution of supply should be within 5 (five) years preceding original bid closing date of this tender.

b) Satisfactory supply/completion/installation report (if submitted) should be issued on client's official letterhead with signature and stamp

B) FINANCIAL

a) Annual Financial Turnover of the bidder during **any of preceding 03 (three) financial / accounting years from the original bid closing date** should be at least **Rs 15.10 Lakhs.**

b) Net Worth of the firm should be Positive for preceding financial / Accounting year. (FY=2017-2018)

Note -For (a) & (b): 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 certifying that 'the balance sheet/Financial Statements for the financial year..... (As the case may be) has actually not been audited so far'.

Notes:

a) For proof of Annual Turnover & Net worth any one of the following document must be submitted along with the 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 ANNEXURE-J.

OR

ii) Audited Balance Sheet along with Profit & Loss account.

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.

C) COMMERCIAL:

i) Validity of the bid shall be minimum 90 days from the Bid Closing Date.

ii) Bid security:

The bid must be accompanied by Bid Security of **Rs. 60,400.00** in OIL's prescribed format as Bank Guarantee in favour of OIL. The Bid Security may be submitted manually in sealed envelope superscribed with Tender no. and Bid Closing date to DGM-Materials, Materials Department, Oil India Limited, Duliajan- 786602, Assam on or before the Bid Closing Date and Time mentioned in the Tender. **The Bank Guarantee towards Bid Security shall be valid for 6 months from Bid closing date. (i.e. 30.09.2019)**

Bid Security may also be paid online on or before the Bid Closing Date and Time mentioned in the Tender.

If bid security in ORIGINAL of above mentioned Amount and Validity is not received or paid online within bid closing date and time, the bid submitted through electronic form will be rejected without any further consideration.

For exemption for submission of Bid Security, please refer Clause No. 8.16 of General Terms and Conditions vide MM/LOCAL/E-01/2005 for E-Procurement of Indigenous Tenders.

The format of Bank Guarantee towards Bid Security (Annexure – VII) has been amended to Annexure – VII (Revised) and bidders should submit Bank Guarantee towards Bid Security as per Annexure – VII (Revised) only.

iii) Bids are invited under “Single Stage Composite Bid System”. Bidders have to submit both the “Techno-commercial Unpriced Bids” and “Priced Bids” through electronic form in the OIL’s e-Tender portal within the bid Closing date and time stipulated in the e-tender. The Techno-commercial Unpriced bid is to be submitted as per scope of works and Technical specification of the tender and the priced bid as per the online Commercial bid format. For details of submission procedure, please refer relevant para of General Terms and Conditions vide MM/LOCAL/E-01/2005 for E-Procurement of Indigenous Tenders.

iv) Performance Security:

The successful bidder shall submit Performance Security @ 10% of PO value within 30 days of receipt of the formal purchase order failing which OIL reserves the right to cancel the order and forfeit the Bid Security. Bidders should undertake in their bids to submit Performance Security as stated above.

The Performance Security shall be in the following form :

A Bank Guarantee in the prescribed OIL's format valid for 90 days beyond delivery period and applicable warranty/guarantee period (if any).

The validity requirement of Performance Security is assuming despatch within stipulated delivery period and confirmation to all terms and conditions of order. In case of any delay in despatch or non-confirmation to all terms and conditions of order, validity of the Performance Security is to be extended suitably as advised by OIL.

v) The prices offered will have to be firm through delivery and not subject to variation on any account. A bid submitted with an adjustable price will be treated as non-responsive and rejected.

vi) Bids received after the bid closing date and time will be rejected. Similarly, modifications to bids received after the bid closing date & time will not be considered.

vii) All the Bids must be Digitally Signed using "Class 3" digital certificate with Organisation's name (*e-commerce application*) 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. The bid signed using other than "Class 3 with Organisation's Name" digital certificate, will be rejected.

viii) Price should be maintained in the "online price schedule" only. The price submitted other than the "online price schedule" shall not be considered.

ix) A bid shall be rejected straightway if it does not conform to any one of the following clauses:

(a) Validity of bid shorter than the validity indicated in the Tender.

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

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

(d) Annual Turnover of a bidder lower than the Annual turnover mentioned in the Tender.

x) DELIVERY :

DELIVERY PERIOD FOR THE ITEMS TO BE 24 WEEKS FROM THE DATE OF RECEIPT OF THE PURCHASE ORDER BY THE BIDDER.

NOTE: FOR CLAUSE NOS. C(ii) & C(iv) OF BID SECURITY/EMD AND PBG

The bidders/successful bidders are requested to advise the Bank Guarantee issuing bank to comply with the following and ensure to submit, the receipt of the copy of SFMS message as sent by the issuing bank branch, along with the

original bank guarantee in Oil's tender issuing office:

The bank guarantee issued by the bank must be routed through SFMS platform as per following details:

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

The above message/intimation shall be sent through SFMS by the BG issuing bank branch to Axis Bank, Duliajan Branch, IFS Code - UTIB0001129, Branch Address - AXIS Bank Ltd, Duliajan Branch, Daily Bazar, Jyotinagar, Duliajan, District - Dibrugarh, PIN- 786602

2.0 BID EVALUATION CRITERIA (BEC)

The bids conforming to the terms and conditions stipulated in the tender and considered to be responsive after subjecting to the Bid Rejection Criteria as well as verification of original of any or all documents/ documentary evidences pertaining to BRC, will be considered for further evaluation as per the Bid Evaluation Criteria given below. The original Bid Closing Date shall be considered by OIL for evaluation of BRC criteria even in case of any extension of the original Bid Closing Date.

A) TECHNICAL:

- i) The bid will be evaluated strictly as per NIT specification, terms & conditions.

B) COMMERCIAL:

- i) To evaluate the inter-se-ranking of the offers, all Taxes / Levies will be considered as per prevailing Govt. guidelines as applicable on the bid opening date for entire tendered quantity. Bidders may check this with the appropriate authority before submitting their offer

- ii) A job executed by a bidder for its own organization / subsidiary cannot be considered as experience for the purpose of meeting BEC.

- iii) 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 the company, failing which the offer will be summarily rejected.

NOTE:

Bidders should submit their bids (preferably in tabular form) explicitly mentioning compliance / non compliance to all the terms and conditions of NIT.

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TECHNICAL SPECIFICATIONS WITH QUANTITY

Tender No & Date: SDI0136P19 DT: 21.12.2018

	Complied / Not Complied. (Remarks if any)
<p><u>ITEM NO. 10</u></p> <p><u>"WIRELESS TEMPERATURE TRANSMITTER: QTY = 02 NOS</u></p> <ol style="list-style-type: none"> 1. TYPE: TEMPERATURE TRANSMITTER 2. MODEL : BIDDER TO SPECIFY 3. RANGE: 0-100 DEG C 4. INPUT TYPE: 3 WIRE RTD PT100,SINGLE INPUT 5. ACCURACY: ± 0.5 % 6. AMBIENT TEMPERATURE & HUMIDITY: 0 TO 500C & 50 TO 99% RH 7. ELECTRICAL AREA CLASSIFICATION: IEC ZONE-1 GR. IIA/IIB/IIC T3 8. ENCLOSURE: IP65 MINIMUM 9. INTRINSICALLY SAFE: YES 10. ELECTRONIC HOUSING: MFG. STD. 11. CABLE ENTRY: ½ IN NPT(F) 12. ELECTRONIC HOUSING: MFG. STD. 13. MOUNTING BRACKET : (304 SS) WITH PLATE AND NUTS FOR 2 INCH NB PIPE MOUNTING 14. TRANSMITTER POWER : TRANSMITTER TO BE SUPPLIED WITH EASY TO REPLACE BATTERY.VENDOR TO SPECIFY BATTERY LIFE WHICH SHOULD BE MINIMUM 2 YRS WITH UPDATE TIME 10 SECONDS WITH MASH NETWORK AND ALL DEVICES CONFIGURED AS I/O AND REPEATERS. 15. TRANSMITTER OUT PUT: WIRELESS 16. TRANSMITTER UPDATE RATE: SELECTABLE BETWEEN 10 SECONDS TO 60 SECONDS WITH MESH NETWORK AND ALL DEVICES CONFIGURED AS I/O AND REPEATERS. 17. ANTENA TYPE: OMNI DIRECTIONAL, INTERNAL WITHIN THE SENSOR HOUSING/ INTEGRALLY MOUNTED 18. SIGNAL RANGE: NOMINAL 100 M WITHOUT ANY REPEATER AND NOT LIMITED TO LINE OF SIGHT 19. FREQUENCY: 2.4 G HZ LICENCE FREE ISM BAND 20. WIRELESS PROTOCOL: WIRELESS HART/ ISA 100.11A 21. LOCAL DISPLAY: REQUIRED 22. NETWORK: WIRELESS NETWORK, MUST BE CONFIGURED ON MASH TOPOLOGY AND AS I/O & REPEATER 23. TRANSMITTER CONFIGURATION: LOCAL/VIA GATEWAY OVER THE NETWORK 24. SELF-DIAGNOSTIC: REQUIRED 25. STABILITY: +/- 0.5% OF URL FOR 2 YEARS 26. SECURITY: SHOULD COMPLY BASIC INDUSTRIAL STANDARDS 	
<p><u>ITEM NO. 20</u></p> <p><u>"WIRELESS PRESSURE TRANSMITTER - QTY = 03 NOS</u></p> <ol style="list-style-type: none"> 1. TYPE: GAUGE PRESSURE TRANSMITTER 2. .PRESSURE TRANSMITTER MODEL: BIDDER TO SPECIFY 	

3. RANGE :0-5 KG/CM2
4. AMBIENT TEMPERATURE & HUMIDITY: 0 TO 500C & 50 TO 99% RH
5. MEASURING PRINCIPLE: PIZO RESISTANCE/CAPACITANCE WITH PROCESS ISOLATION THROUGH DIAPHRAGM.
6. OVER RANGE PROTECTION:130% OF FULL RANGE
7. TX. DIAPHRAGM & OTHER WETTED PARTS: SS316
8. FILL FLUID: SILICONE
9. PROCESS TEMPERATURE: 0-100 DEG C
10. ELECTRICAL AREA CLASSIFICATION: IEC ZONE-1 GR. IIA/IIB/IIC T3
11. ENCLOSURE: IP65 MINIMUM
12. INTRINSICALLY SAFE: YES
13. ELECTRONIC HOUSING: MFG. STD.
14. MANIFOLD: 2 VALVE SS 316 RATED FOR 4000PSI, ½ IN NPT (F)
CONNECTION FOR PROCESS END. VENDOR TO SUPPLY TRANSMITTER AND MANIFOLD AS SINGLE UNIT
15. MOUNTING BRACKET: (304 SS) WITH PLATE AND NUTS FOR 2 INCH NB PIPE MOUNTING
16. TRANSMITTER POWER : TRANSMITTER TO BE SUPPLIED WITH EASY TO REPLACE BATTERY.VENDOR TO SPECIFY BATTERY LIFE WHICH SHOULD BE MINIMUM
2 YRS WITH UPDATE TIME 10 SECONDS WITH MESH NETWORK AND ALL DEVICES CONFIGURED AS I/O AND REPEATERS.
17. TRANSMITTER OUT PUT: WIRELESS
18. TRANSMITTER UPDATE RATE: SELECTABLE BETWEEN 10 SECONDS TO 60 SECONDS
WITH MASH NETWORK AND ALL DEVICES CONFIGURED AS I/O AND REPEATERS.
19. ANTENA TYPE: OMNI DIRECTIONAL, INTERNAL WITHIN THE SENSOR HOUSING/
INTEGRALLY MOUNTED
20. SIGNAL RANGE: NOMINAL 100 M WITHOUT ANY REPEATER AND NOT LIMITED TO
LINE OF SIGHT
21. FREQUENCY: 2.4 G HZ LICENCE FREE ISM BAND
22. WIRELESS PROTOCOL: WIRELESS HART/ ISA 100.11A
23. LOCAL DISPLAY: REQUIRED
24. NETWORK: WIRELESS NETWORK, MUST BE CONFIGURED ON MASH TOPOLOGY AND
AS I/O & REPEATER
25. TRANSMITTER CONFIGURATION: LOCAL/VIA GATEWAY OVER THE NETWORK
26. ACCURACY: +/- 0.5 % OF CALIBRATED SPAN OR BETTER
27. STABILITY: +/- 0.5% OF URL FOR 2 YEARS
28. RANGEABILITY: 50:1 OR BETTER
29. SECURITY: SHOULD COMPLY BASIC INDUSTRIAL STANDARDS
30. SELF-DIAGNOSTIC: REQUIRED

ITEM NO. 30

"WIRELESS PRESSURE TRANSMITTER – QTY = 07 NOS

1. TYPE: GAUGE PRESSURE TRANSMITTER
2. PRESSURE TRANSMITTER MODEL: BIDDER TO SPECIFY
3. RANGE :0-10 KG/CM²
4. AMBIENT TEMPERATURE & HUMIDITY: 0 TO 50C & 50 TO 99% RH
5. MEASURING PRINCIPLE: PIZO RESISTANCE/CAPACITANCE WITH PROCESS ISOLATION THROUGH DIAPHRAGM.
6. OVER RANGE PROTECTION:130% OF FULL RANGE
7. TX. DIAPHRAGM & OTHER WETTED PARTS: SS316
8. FILL FLUID: SILICONE
9. PROCESS TEMPERATURE: 0-100 DEG C
10. ELECTRICAL AREA CLASSIFICATION: IEC ZONE-1 GR. IIA/IIB/IIC T3
11. ENCLOSURE: IP65 MINIMUM
12. INTRINSICALLY SAFE: YES
13. ELECTRONIC HOUSING: MFG. STD.
14. MANIFOLD: 2 VALVE SS 316 RATED FOR 4000PSI, ½ IN NPT (F) CONNECTION FOR PROCESS END. VENDOR TO SUPPLY TRANSMITTER AND MANIFOLD AS SINGLE UNIT
15. MOUNTING BRACKET: (304 SS) WITH PLATE AND NUTS FOR 2 INCH NB PIPE MOUNTING
16. TRANSMITTER POWER : TRANSMITTER TO BE SUPPLIED WITH EASY TO REPLACE BATTERY.VENDOR TO SPECIFY BATTERY LIFE WHICH SHOULD BE MINIMUM 2 YRS WITH UPDATE TIME 10 SECONDS WITH MESH NETWORK AND ALL DEVICES CONFIGURED AS I/O AND REPEATERS.
17. TRANSMITTER OUT PUT: WIRELESS
18. TRANSMITTER UPDATE RATE: SELECTABLE BETWEEN 10 SECONDS TO 60 SECONDS WITH MASH NETWORK AND ALL DEVICES CONFIGURED AS I/O AND REPEATERS.
19. ANTENA TYPE: OMNI DIRECTIONAL, INTERNAL WITHIN THE SENSOR HOUSING/ INTEGRALLY MOUNTED
20. SIGNAL RANGE: NOMINAL 100 M WITHOUT ANY REPEATER AND NOT LIMITED TO LINE OF SIGHT
21. FREQUENCY: 2.4 G HZ LICENCE FREE ISM BAND
22. WIRELESS PROTOCOL: WIRELESS HART/ ISA 100.11A
23. LOCAL DISPLAY: REQUIRED
24. NETWORK: WIRELESS NETWORK, MUST BE CONFIGURED ON MASH TOPOLOGY AND AS I/O & REPEATER
25. TRANSMITTER CONFIGURATION: LOCAL/VIA GATEWAY OVER THE NETWORK
26. ACCURACY: +/- 0.5 % OF CALIBRATED SPAN OR BETTER
27. STABILITY: +/- 0.5% OF URL FOR 2 YEARS
28. RANGEABILITY: 50:1 OR BETTER
29. SECURITY: SHOULD COMPLY BASIC INDUSTRIAL STANDARDS
30. SELF-DIAGNOSTIC: REQUIRED

ITEM NO. 40

"WIRELESS PRESSURE TRANSMITTER – QTY = 02 NOS

1. TYPE: GAUGE PRESSURE TRANSMITTER
2. .PRESSURE TRANSMITTER MODEL: BIDDER TO SPECIFY
3. RANGE :0-50 KG/CM2
4. AMBIENT TEMPERATURE & HUMIDITY: 0 TO 500C & 50 TO 99% RH
5. MEASURING PRINCIPLE: PIZO RESISTANCE/CAPACITANCE WITH PROCESS ISOLATION THROUGH DIAPHRAGM.
6. OVER RANGE PROTECTION:130% OF FULL RANGE
7. TX. DIAPHRAGM & OTHER WETTED PARTS: SS316
8. FILL FLUID: SILICONE
9. PROCESS TEMPERATURE: 0-100 DEG C
10. ELECTRICAL AREA CLASSIFICATION: IEC ZONE-1 GR. IIA/IIB/IIC T3
11. ENCLOSURE: IP65 MINIMUM
12. INTRINSICALLY SAFE: YES
13. ELECTRONIC HOUSING: MFG. STD.
14. MANIFOLD: 2 VALVE SS 316 RATED FOR 4000PSI, ½ IN NPT (F)
CONNECTION FOR PROCESS END. VENDOR TO SUPPLY TRANSMITTER AND
MANIFOLD AS
SINGLE UNIT
15. MOUNTING BRACKET: (304 SS) WITH PLATE AND NUTS FOR 2 INCH NB PIPE
MOUNTING
16. TRANSMITTER POWER : TRANSMITTER TO BE SUPPLIED WITH EASY TO
REPLACE BATTERY.VENDOR TO SPECIFY BATTERY LIFE WHICH SHOULD BE
MINIMUM
2 YRS WITH UPDATE TIME 10 SECONDS WITH MESH NETWORK AND ALL
DEVICES
CONFIGURED AS I/O AND REPEATERS.
17. TRANSMITTER OUT PUT: WIRELESS
18. TRANSMITTER UPDATE RATE: SELECTABLE BETWEEN 10 SECONDS TO 60
SECONDS
WITH MASH NETWORK AND ALL DEVICES CONFIGURED AS I/O AND REPEATERS.
19. ANTENA TYPE: OMNI DIRECTIONAL, INTERNAL WITHIN THE SENSOR
HOUSING/
INTEGRALLY MOUNTED
20. SIGNAL RANGE: NOMINAL 100 M WITHOUT ANY REPEATER AND NOT
LIMITED TO
LINE OF SIGHT
21. FREQUENCY: 2.4 G HZ LICENCE FREE ISM BAND
22. WIRELESS PROTOCOL: WIRELESS HART/ ISA 100.11A
23. LOCAL DISPLAY: REQUIRED
24. NETWORK: WIRELESS NETWORK, MUST BE CONFIGURED ON MASH
TOPOLOGY AND
AS I/O & REPEATER
25. TRANSMITTER CONFIGURATION: LOCAL/VIA GATEWAY OVER THE
NETWORK
26. ACCURACY: +/- 0.5 % OF CALIBRATED SPAN OR BETTER
27. STABILITY: +/- 0.5% OF URL FOR 2 YEARS
28. RANGEABILITY: 50:1 OR BETTER

29. SECURITY: SHOULD COMPLY BASIC INDUSTRIAL STANDARDS
 30. SELF-DIAGNOSTIC: REQUIRED

ITEM NO. 50

"WIRELESS PRESSURE TRANSMITTER – 03 NOS

1. TYPE: GAUGE PRESSURE TRANSMITTER
2. PRESSURE TRANSMITTER MODEL: BIDDER TO SPECIFY
3. RANGE :0-80 KG/CM2
4. AMBIENT TEMPERATURE & HUMIDITY: 0 TO 50C & 50 TO 99% RH
5. MEASURING PRINCIPLE: PIZO RESISTANCE/CAPACITANCE WITH PROCESS ISOLATION THROUGH DIAPHRAGM.
6. OVER RANGE PROTECTION:130% OF FULL RANGE
7. TX. DIAPHRAGM & OTHER WETTED PARTS: SS316
8. FILL FLUID: SILICONE
9. PROCESS TEMPERATURE: 0-100 DEG C
10. ELECTRICAL AREA CLASSIFICATION: IEC ZONE-1 GR. IIA/IIB/IIC T3
11. ENCLOSURE: IP65 MINIMUM
12. INTRINSICALLY SAFE: YES
13. ELECTRONIC HOUSING: MFG. STD.
14. MANIFOLD: 2 VALVE SS 316 RATED FOR 4000PSI, ½ IN NPT (F)
 CONNECTION FOR PROCESS END. VENDOR TO SUPPLY TRANSMITTER AND MANIFOLD AS SINGLE UNIT
15. MOUNTING BRACKET: (304 SS) WITH PLATE AND NUTS FOR 2 INCH NB PIPE MOUNTING
16. TRANSMITTER POWER : TRANSMITTER TO BE SUPPLIED WITH EASY TO REPLACE BATTERY.VENDOR TO SPECIFY BATTERY LIFE WHICH SHOULD BE MINIMUM
 2 YRS WITH UPDATE TIME 10 SECONDS WITH MESH NETWORK AND ALL DEVICES CONFIGURED AS I/O AND REPEATERS.
17. TRANSMITTER OUT PUT: WIRELESS
18. TRANSMITTER UPDATE RATE: SELECTABLE BETWEEN 10 SECONDS TO 60 SECONDS
 WITH MASH NETWORK AND ALL DEVICES CONFIGURED AS I/O AND REPEATERS.
19. ANTENA TYPE: OMNI DIRECTIONAL, INTERNAL WITHIN THE SENSOR HOUSING/
 INTEGRALLY MOUNTED
20. SIGNAL RANGE: NOMINAL 100 M WITHOUT ANY REPEATER AND NOT LIMITED TO
 LINE OF SIGHT
21. FREQUENCY: 2.4 G HZ LICENCE FREE ISM BAND
22. WIRELESS PROTOCOL: WIRELESS HART/ ISA 100.11A
23. LOCAL DISPLAY: REQUIRED
24. NETWORK: WIRELESS NETWORK, MUST BE CONFIGURED ON MASH TOPOLOGY AND
 AS I/O & REPEATER
25. TRANSMITTER CONFIGURATION: LOCAL/VIA GATEWAY OVER THE NETWORK

- 26. ACCURACY: +/- 0.5 % OF CALIBRATED SPAN OR BETTER
- 27. STABILITY: +/- 0.5% OF URL FOR 2 YEARS
- 28. RANGEABILITY: 50:1 OR BETTER
- 29. SECURITY: SHOULD COMPLY BASIC INDUSTRIAL STANDARDS
- 30. SELF-DIAGNOSTIC: REQUIRED

ITEM NO. 60

"WIRELESS PRESSURE TRANSMITTER – QTY = 01 NO

- 1. TYPE: GAUGE PRESSURE TRANSMITTER
- 2. .PRESSURE TRANSMITTER MODEL: BIDDER TO SPECIFY
- 3. RANGE :0-150 KG/CM2
- 4. AMBIENT TEMPERATURE & HUMIDITY: 0 TO 500C & 50 TO 99% RH
- 5. MEASURING PRINCIPLE: PIZO RESISTANCE/CAPACITANCE WITH PROCESS ISOLATION THROUGH DIAPHRAGM.
- 6. OVER RANGE PROTECTION:130% OF FULL RANGE
- 7. TX. DIAPHRAGM & OTHER WETTED PARTS: SS316
- 8. FILL FLUID: SILICONE
- 9. PROCESS TEMPERATURE: 0-100 DEG C
- 10. ELECTRICAL AREA CLASSIFICATION: IEC ZONE-1 GR. IIA/IIB/IIC T3
- 11. ENCLOSURE: IP65 MINIMUM
- 12. INTRINSICALLY SAFE: YES
- 13. ELECTRONIC HOUSING: MFG. STD.
- 14. MANIFOLD: 2 VALVE SS 316 RATED FOR 4000PSI, ½ IN NPT (F)
CONNECTION FOR PROCESS END. VENDOR TO SUPPLY TRANSMITTER AND MANIFOLD AS SINGLE UNIT
- 15. MOUNTING BRACKET: (304 SS) WITH PLATE AND NUTS FOR 2 INCH NB PIPE MOUNTING
- 16. TRANSMITTER POWER : TRANSMITTER TO BE SUPPLIED WITH EASY TO REPLACE BATTERY.VENDOR TO SPECIFY BATTERY LIFE WHICH SHOULD BE MINIMUM
2 YRS WITH UPDATE TIME 10 SECONDS WITH MESH NETWORK AND ALL DEVICES CONFIGURED AS I/O AND REPEATERS.
- 17. TRANSMITTER OUT PUT: WIRELESS
- 18. TRANSMITTER UPDATE RATE: SELECTABLE BETWEEN 10 SECONDS TO 60 SECONDS
WITH MASH NETWORK AND ALL DEVICES CONFIGURED AS I/O AND REPEATERS.
- 19. ANTENA TYPE: OMNI DIRECTIONAL, INTERNAL WITHIN THE SENSOR HOUSING/
INTEGRALLY MOUNTED
- 20. SIGNAL RANGE: NOMINAL 100 M WITHOUT ANY REPEATER AND NOT LIMITED TO
LINE OF SIGHT
- 21. FREQUENCY: 2.4 G HZ LICENCE FREE ISM BAND
- 22. WIRELESS PROTOCOL: WIRELESS HART/ ISA 100.11A
- 23. LOCAL DISPLAY: REQUIRED
- 24. NETWORK: WIRELESS NETWORK, MUST BE CONFIGURED ON MASH TOPOLOGY AND
AS I/O & REPEATER

- 25. TRANSMITTER CONFIGURATION: LOCAL/VIA GATEWAY OVER THE NETWORK
- 26. ACCURACY: +/- 0.5 % OF CALIBRATED SPAN OR BETTER
- 27. STABILITY: +/- 0.5% OF URL FOR 2 YEARS
- 28. RANGEABILITY: 50:1 OR BETTER
- 29. SECURITY: SHOULD COMPLY BASIC INDUSTRIAL STANDARDS
- 30. SELF-DIAGNOSTIC: REQUIRED

ITEM NO. 70

"Wireless Adapter:- QTY = 02 NOS

- 1. TYPE: WIRELESS ADOPTER/CONVERTER
- 2. MODEL: BIDDER TO SPECIFY
- 3. INPUT TYPE: CONVERT 4-20 MA SIGNAL (OF RADAR LEVEL TRANSMITTER, MAKE ROSEMOUNT, MODEL 5600) TO WIRELESS SIGNAL. IN ORDER TO COMMUNICATE WITH THE SMART WIRELESS GATEWAY, AND ULTIMATELY THE HOST SYSTEM, THE ADOPTER/CONVERTER MUST BE CONFIGURED TO COMMUNICATE OVER THE WIRELESS NETWORK
- 4. AMBIENT TEMPERATURE & HUMIDITY: 0 TO 50C & 50 TO 99% RH
- 5. ELECTRICAL AREA CLASSIFICATION: IEC ZONE-1 GR. IIA/IIB/IIC T3
- 6. ENCLOSURE: IP65 MINIMUM
- 7. INTRINSICALLY SAFE: YES
- 8. ELECTRONIC HOUSING: MFG. STD.
- 9. MOUNTING : REQUIRED ACCESSORIES LIKE CONDUIT ETC. TO MOUNT THE ADOPTER/CONVERTER TO THE WIRED HART TRANSMITTER (RADAR LEVEL TRANSMITTER, MAKE ROSEMOUNT, MODEL 5600) TO BE SUPPLIED WITH THE ADOPTER
- 10. POWER: NO ADDITIONAL POWER SUPPLY REQUIRED, POWERED WHEN CONNECTED TO A POWERED LOOP. IT SHOULD NOT EFFECT THE 4–20 MA SIGNAL ON THE LOOP
- 11. TRANSMITTER OUT PUT: WIRELESS
- 12. TRANSMITTER UPDATE RATE: SELECTABLE BETWEEN 10 SECOND TO 60 SECOND
- 13. ANTENA TYPE: OMNI DIRECTIONAL, INTERNAL WITHIN THE SENSOR HOUSING/ INTEGRALLY MOUNTED
- 14. SIGNAL RANGE: NOMINAL 100 M WITHOUT ANY REPEATER AND NOT LIMITED TO LINE OF SIGHT
- 15. WIRELESS RANGE: 2.4 G HZ LICENCE FREE ISM BAND
- 16. WIRELESS PROTOCOL: WIRELESS HART/ ISA 100.11A
- 17. NETWORK: WIRELESS NETWORK MUST BE PRE CONFIGURED WITH MASH TOPOLOGY AND SUPPLIED AS I/O AND REPEATER CONFIGURATION
- 18. TRANSMITTER CONFIGURATION: LOCAL/VIA GATEWAY OVER THE NETWORK
- 19. SECURITY: SHOULD COMPLY BASIC INDUSTRIAL STANDARDS

ITEM NO. 80

"Wireless Monitoring system: Gateway – 01 SET

System specification::

Gateway:

1. Type: Gateway shall be with remote Antenna Mounting. For seamless communication, Gateway shall be provided with detachable remote antenna and 100-meter cable between gateway and antenna. Gateway shall be Redundant with max. change over time of 1min.
2. Update Rate: Update rate of measuring device will be max. 10 seconds with MESH Topology & all Device as I/O & Repeater configurations.
3. Serial Communication: Modbus TCP/IP, Ethernet, Modbus RTU Via RS485
4. Network: Wireless network communication shall be Self Organized Mesh topology
5. Protocol: Wireless HART/ ISA 100.11a
6. Frequency: 2.4 GHz Range (license free ISM Band)
7. Security: Should comply basic industrial standards, necessary documents should be provided.
8. Number of Device: The system shall be scalable upto 100nos. of input device without any addition of Gateway with update rates of max. 10 Seconds with Mesh network configurations and all device configured as I/O & Repeater
9. Input Power supply: 24 V DC
10. Electro-Magnetic interface effect: CE stamped / Complies with EN61326-1:2006
11. Electronic Housing / Protection: Suitable for safe area, control room installation, IP 54 minimum
12. Accessories: One no of HMI(PC) with required accessories like minimum 17 inch monitor, key board, mouse, to be hook up with the Gateway. HMI to be loaded with required software for storage of the data, monitoring the parameters, trend, alarm, report etc. HMI should have minimum below configuration/ equivalent: Windows 10 with 4 GB RAM, 100GB Memory, intel core i5, 3.0 Ghz processor
There will be one minimum 42 Inch LCD/LED wall mounted monitor for display of the data and to be hookup with the system with following minimum specification:

Video: Size: Minimum 42 inch, Resolution : 1920 X 1080, Minimum Input & Output : as per system requirement with at least one PC input (D-Sub), two USB Port. Share Content easily with USB's, Clear image panel, Smoother images for greater clarity, filtering, having in built facility to be protected from lightning, Surge and Humidity, to be supplied with all standard accessories like accessories for mounting, speaker cables etc.

ITEM NO. 90

" Repeater Unit – - QTY = 01 SET

Repeater unit for seamless wireless communication across all its transmitters.

Technical Specification:

1. Battery & battery life: Field replaceable batter of minimum 2 years of life with an update time of 1 minute & shall not affect measuring device update rates. Repeater with external power supply will not be acceptable.

<p>2. Network: Wireless network communication shall be Self Organized Mesh topology.</p> <p>3. Frequency: 2.4 GHz Range (license free ISM Band)</p> <p>4. Update Rate: Update rate of measuring device will be max. 10 seconds with MESH Topology & all Device as I/O & Repeater configurations.</p> <p>5. Wireless Protocol: Wireless HART/ ISA 100.11a</p> <p>6. Security: Should comply basic industrial standards, necessary documents should be provided.</p> <p>7. Electrical Area Classification: IEC Zone-1 Gr. IIA/IIB/IIC T3</p> <p>8. Enclosure: IP65 minimum</p> <p>9. Operating temperature & Humidity: 0 to 500C & 50 to 99% RH</p> <p>10. Intrinsically Safe: Yes</p> <p>11. Electronic Housing: Mfg. Std.</p> <p>12. MOUNTING BRACKET: (304 SS) WITH PLATE AND NUTS FOR 2 INCH NB PIPE MOUNTING</p> <p>13. Antena Type: Omni Directional, internal within the sensor housing/ integrally mounted</p> <p>14. Wireless Range: 2.4 G Hz Licence Free ISM band</p> <p>15. Network: Wireless network must be pre configured with mash topology and supplied as I/O and repeater configuration</p> <p>16. Configuration: Local/Via gateway over the network"</p>	
<p><u>ITEM NO. 100</u></p> <p><u>Supervisory Support – QTY = 01 AU</u></p>	

Special Terms and conditions: (FOR ALL THE ITEMS)

Bidder to comply with/ confirm in writing against each of the following Special Terms & Conditions along with the bid as per requirement of the respective term and condition. Moreover, bidder also must provide the necessary documents along with the bid or along with the materials as mentioned in these Special Terms & Conditions. Accordingly provide the filled up checklist enclosed as Annexure-STC/Transmitter(WL)-01 along with the bid.

1.The wireless field devices must be microprocessor based with the capability to perform basic sensor diagnostics. Wireless transmitters should include an LCD that displays at least the process variable, device tag, battery life/voltage, network identifier and status.

2. Vendor to offer the instrument meeting the functional requirements detailed under specification of the materials and shall provide necessary technical catalogues/specification sheets for the quoted items along with his bid.

3. Wireless network shall be a two-way communication link among intelligent measurement and control devices operating in the 2.4 GHz Industrial, Scientific and Medical (ISM) radio band confirming to IEEE 802.15.4.

4. Wireless gateways will enable communication between host applications and wireless field devices in the wireless network. Gateways support one or more access points. A gateway and its access points must be included in every wireless network. The wireless network/architecture shall be designed to be an easy to use and reliable considering following requirements to be fulfilled simultaneously.

a) Response time/scan time of all measuring device of max. 10 secs or below.

b) All measuring devices with MESH Topology pre-configuration.

c) All device pre-configured as I/O + Repeaters.

- d) The system shall be scalable up to minimum 50 numbers of measuring device without adding Gateway at later stage.
- e) All the repeaters shall be self-power through low power battery. Repeaters with external power supply will not be acceptable.

5. Wireless network shall be a secure and robust mesh networking technology support peer to peer communication. Each device/gateway in the mesh network shall also serve as a router for messages from other devices as a default configuration for entire network (not as future configuration in the field) and other capacity planning for all requirement of this tender.

6. Wireless gateway shall be provided with the network manager for configuration of the network, scheduling communication between wireless devices, device communication routing and network diagnostics to monitor and report the health of the wireless network. Path of communication from device to Gateway shall be decided by the system automatically. Diagnostics data transfer which includes configuration shall be supported by the wireless network.

7. Wireless gateway shall be provided with serial Modbus TCP/IP and/or Ethernet TCP/IP connection with bidder supplied workstation/HMI. Bidder shall provide necessary interface details for the same. The wireless devices shall be located and installed in such a way that continuous communication with gateway is established. Vender shall ensure Redundant path of communication from each measuring device to Gateway (Including Gateway) with Self Organized Mesh Network.

8. The system shall have the security to communicate only with the device configured and avoid interference from other Wi-Fi devices around which are not configured.

9. Documents:

- a) Bidder shall provide minimum 01 set of necessary documentation for installation, maintenance and troubleshooting of all the devices along with the materials. Documentation shall be in English only with both softcopy and hardcopy.
- b) Calibration Certificate, IP protection certificate of transmitters to be provided along with the materials.
- c) Security of the network should comply basic industrial standards, necessary documents to be provided along with the bid.

10. Items to be used in Hazardous area:

- 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) In reference to Point No. (a) above, Bidder shall supply 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 the materials.
- c) However, Bidder must supply copy of such certificate along with the bid.

(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 or any subsequent notification.)

11. Existing SCADA connectivity:

There should be a provision of MODBUS communication from the system (from the Workstation/Date logger/ Gateway at the control room). Vendor to provide the MODBUS address of the parameters measured (for onward configuration of the same in SCADA by OIL)

12. Warranty: Bidder will provide minimum warranty of 12 months against smooth operation of the wireless system from the date of commissioning. Bidder to confirm

13. One set any special Tools/Tackles/Hardware/Software/Cable required for filed configurations shall be supplied by vendor.

14. License for all the 'Licensed Software' to be provided along with the materials. All the equipment, accessories, software supplied should be compatible to each other and work as a system.

15. Successful commissioning of the wireless system is in bidder's scope. Bidder will design the wireless system for the transmitters & adopter etc. and must quote for all the items under this tender, so that bidder's design of the system to operate successfully remain intact.

16. Bidder shall provide supervisory services during installation and commissioning of the entire wireless system including configuring & connecting the gateway with transmitters and to ensure the successful commissioning of the whole system. OIL will arrange the required tubing and fittings for process connection for the transmitters; carry out the physical installation of the transmitters (including the process connection of the transmitter) and other accessories under the supervision/ as per instruction of the bidder. Bidder to quote for the job separately.

17. The offer should be submitted in a tabular form specifying the specification against NIT specifications for each point and indicating deviation if any. Offer in any other form will not be acceptable.

NOTE:
Bidders should submit their bids (preferably in tabular form) explicitly mentioning compliance / non compliance to all the terms and conditions of the NIT.

Annexure- STC/Transmitter(WL)-01

Checklist against Special Terms & conditions and against 'Note' mentioned under BEC/BRC:				
Sl no.	Special Terms and Conditions	Complied/ Confirmed (Yes/No)	Deviation/ comments if any	document no./ Doc. Ref. no/ Annexure no. of the doc./letter no etc. vide which it is compiled /confirmed (for easy identification of the relevant document)
1	The wireless field devices must be microprocessor based with the capability to perform basic sensor diagnostics. Wireless transmitters should include an LCD that displays at least the process variable, device tag, battery life/voltage, network identifier and status. Bidder to confirm			
2	Vendor to offer the instrument meeting the functional requirements detailed under specification of the materials and shall provide necessary technical catalogues/specification sheets for the quoted items along with his bid. Bidder to provide.			
3	Wireless network shall be a two-way communication link among intelligent measurement and control devices operating in the 2.4 GHz Industrial, Scientific and Medical (ISM) radio band confirming to IEEE 802.15.4. Bidder to confirm			
4	Wireless gateways will enable communication between host applications and wireless field devices in the wireless network. Gateways support one or more access points. A gateway and its access points must be included in every wireless network. The wireless network/architecture shall be designed to be an easy to use and reliable considering following requirements to be fulfilled simultaneously.			
	a) Response time/scan time of all measuring device of max. 10 secs or below. Bidder to confirm			
	b) All measuring devices with MESH Topology pre-configuration. Bidder to confirm			
	c) AI device pre-configured as I/O + Repeaters.			

	Bidder to confirm			
	d) The system shall be scalable up to minimum 100 numbers of measuring device without adding Gateway at later stage. Bidder to confirm			
	e) All the repeaters shall be self-power through low power battery. Repeaters with external power supply will not be acceptable. Bidder to confirm			
5	Wireless network shall be a secure and robust mesh networking technology support peer to peer communication. Each device/gateway in the mesh network shall also serve as a router for messages from other devices as a default configuration for entire network (not as future configuration in the field) and other capacity planning for all requirement of this tender. Bidder to confirm.			
6	Wireless gateway shall be provided with the network manager for configuration of the network, scheduling communication between wireless devices, device communication routing and network diagnostics to monitor and report the health of the wireless network. Path of communication from device to Gateway shall be decided by the system automatically. Diagnostics data transfer which includes configuration shall be supported by the wireless network. Bidder to confirm.			
	Wireless gateway shall be provided with serial Modbus TCP/IP and/or Ethernet TCP/IP connection with bidder supplied workstation/HMI. Bidder shall provide necessary interface details for the same.			
7	The wireless devices shall be located and installed in such a way that continuous communication with gateway is established. Vender shall ensure Redundant path of communication from each measuring device to Gateway (Including Gateway) with Self Organised Mesh Network. Bidder to confirm.			
8	The system shall have the security to communicate only with the device configured and avoid interference from other Wi-Fi devices around which are not configured. Bidder to confirm.			
	Documents: a) Bidder shall provide minimum 01 set of necessary documentation for installation, maintenance and troubleshooting of all the devices along with the materials. Documentation shall be in English only with both softcopy and hardcopy. Bidder to confirm			
9	b) Calibration Certificate, IP protection certificate of transmitters to be provided along with the materials. Bidder to confirm			

	c) Security of the network should comply basic industrial standards, bidder to confirm & necessary documents to be provided along with the bid.			
	Hazardous area application: 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. Bidder to confirm.			
	b) In relation to point no. (a)above, Bidder should supply 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 the materials. Bidder to confirm.			
10	c) However, Bidder must supply copy of such certificate along with the bid.			
11	Existing SCADA connectivity: There should be a provision of MODBUS communication from the system (from the Workstation/Date logger/ Gateway at the control room). Vendor to provide the MODBUS address of the parameters measured (for onward configuration of the same in SCADA by OIL). Bidder to confirm			
12	Warranty: Bidder will provide minimum warranty of 12 months against smooth operation of the wireless system from the date of commissioning. Bidder to confirm			
13	One set of any special Tools/Tackles/Hardware/Software/Cable required for filed configurations shall be supplied by vendor. Bidder to confirm			
14	Licence for all the 'Licenced Software' to be provided along with the materials. All the equipment, accessories, software supplied should be compatible to each other and work as a system. Bidder to confirm			
15	Successful commissioning of the wireless system is in bidder's scope. Bidder will design the wireless system for the transmitters & adopter etc. and must quote for all the items under this tender, so that bidder's design of the system to operate successfully remain intact. Bidder to confirm			

16	<p>Bidder shall provide supervisory services during installation and commissioning of the entire wireless system including configuring & connecting the gateway with transmitters and to ensure the successful commissioning of the whole system. OIL will arrange the required tubing and fittings for process connection for the transmitters; carry out the physical installation of the transmitters (including the process connection of the transmitter) and other accessories under the supervision/ as per instruction of the bidder. Bidder to quote for the job separately.</p>			
17	<p>Since successful commissioning of the system is in bidder's scope, bidder should visit the site to verify the site of installation of the wireless transmitters, gateway etc. and the system as a whole to explore the requirement of all necessary accessories to make the system functional. OIL will provide necessary assistance to obtain the permission for such visit and depute concerned engineer for such visit at site. However, cost of such visit (to & fro fare, lodging etc. for the visiting personnel) will be on Bidder's account.</p>			
18	<p>The offer should be submitted in a tabular form specifying the specification against NIT specifications for each point and indicating deviation if any. Offer in any other form will not be acceptable. Bidder to comply.</p>			

Technical Bid Checklist**Annexure-EEE**

Tender No.			
Bidder's Name :			
		Compliance by Bidder	
Sl. NO.	BEC / TENDER REQUIREMENTS	Indicate 'Confirmed' / 'Not Confirmed' / Not applicable	Indicate Corresponding page ref. of unpriced bid or Comments
1	Confirm that validity has been offered as per NIT.		
2	Confirm that Bid Security / Earnest Money has been submitted as per NIT (Wherever Applicable) ?		
3	Confirm that you shall submit Performance security (in the event of placement of order) (Wherever Applicable) ?		
4	Confirm that duly signed Integrity Pact has been submitted as per NIT (Wherever Applicable) ?		
5	Confirm that you have submitted documentary evidence of successfully executing one Purchase order as stipulated in NIT in any of the preceding 5 financial years (*)		
6	Confirm that you have submitted Balance Sheet and Profit and Loss Account of any of the preceding 3 financial years certified by a chartered accountant.		
7	Confirm that the bid has been signed using Class 3 digital certificate with Organisation's Name as per NIT.		
8	Confirm that you have not taken any exception/deviations to the NIT .		

NOTE: Please fill up the greyed cells only.

(*) Purchase Orders along with copies of any of the documents in respect of satisfactory execution of the Purchase Orders should be submitted – (i) Satisfactory Inspection Report (OR) (ii) Satisfactory Supply Completion / Installation Report (OR) (iii) Consignee Received Delivery Challans (OR) (iv) Central Excise Gate Pass / Tax , Invoices issued under relevant rules of Central Excise / VAT (OR) (v) any other documentary evidence that can substantiate the satisfactory execution of the purchase order cited above.

Response Sheet

Annexure-FFF

Tender No.
Bidders Name

Bidders Response Sheet

Sl No.	Description	Remarks
1	Place of Despatch	
2	Whether Freight charges have been included in your quoted prices	
3	Whether Insurance charges have been included in your quoted prices	
4	Make of quoted Product	
5	Offered Validity of Bid as per NIT	
6	Bid Security Submitted (if applicable)	
6	Details of Bid Security Submitted to OIL (if applicable)	
	a) Bid Security Amount (In Rs):	
	b) Bid Security Valid upto:	
7	Whether you shall submit Performance Security in the event of placement of order on you (if applicable)	
8	Integrity Pact Submitted (if applicable)	
9	Whether you have submitted documentary evidence of successfully executing one Purchase order as stipulated in NIT in any of the preceding 5 financial years (*)	
10	Whether you have submitted Balance Sheet and Profit and Loss Account of any of the preceding 3 financial years certified by a chartered accountant.	
11	Delivery Period in weeks from placement of order	
12	Complied to Payment terms of NIT (if applicable) otherwise to Standard Payment Terms of OIL or not.	
13	If bidder is MSE whether you have quoted your own product	
14	If Bid security submitted as Bank Guarantee, Name and Full Address of Issuing Bank including Telephone, Fax Nos and Email id of branch manager	

NOTE: Please fill up the greyed cells only.

(*) Purchase Orders along with copies of any of the documents in respect of satisfactory execution of the Purchase Orders should be submitted – (i) Satisfactory Inspection Report (OR) (ii) Satisfactory Supply Completion / Installation Report (OR) (iii) Consignee Receipted Delivery Challans (OR) (iv) Central Excise Gate Pass / Tax , Invoices issued under relevant rules of Central Excise / VAT (OR) (v) any other documentary evidence that can substantiate the satisfactory

**(TO BE FILLED UP BY ALL THE VENDOR IN THEIR OWN LETER HEAD)
(ALL FIELDS ARE MANDATORY)**

Tender No. :.....
Name of Beneficiary :M/s.....
Vendor Code :.....
Address :.....
.....
Phone No. (Land Line) :.....
Mobile No. :.....
E-mail address :.....
Bank Account No. (Minimum
Eleven Digit No.) :.....
Bank Name :.....
Branch :.....
Complete Address of your
Bank :.....
IFSC Code of your Bank
a) RTGS :.....
b) NEFT :.....
PAN :.....
VAT Registration No. :.....
CST Registration No. :.....
Service Tax Registration No. :.....
Provident Fund Registration :.....

I/We confirm and agree that all payments due to me/us from Oil India Limited can be remitted to our above mentioned account directly and we shall not hold Oil India Limited responsible if the amount due from Oil India Limited is remitted to wrong account due to incorrect details furnished by us.

Office Seal

.....
Signature of Vendor

Counter Signed by Banker:
Seal of Bank:

Enclosure: Self attested photocopies of the following documents-

- 1) PAN Card
- 2) VAT Registration Certificate
- 3) Service Tax Registration
- 4) CST Registration
- 5) Provident Registration Certificate
- 6) Cancelled cheque of the bank account mentioned above (in original).
- 7) Bank Statement not older than 15 days on the date of submission.