



DIRECTORATE GENERAL OF HYDROCARBONS
(Ministry of Petroleum & Natural Gas)
OIDB Bhawan, Plot No. 2, Sector 73, Noida-201301, UP
Phone: 0120-247 2000, Fax- 247 2049.

NOTICE INVITING TENDER (NATIONAL UNDER TWO BID SYSTEM)

Directorate General of Hydrocarbons (DGH) invites bids under “Two Bid System” from eligible domestic bidders (see Annexure-II of tender) for the following Services:

Bid Document No	:	MM-11013(13)/2/2017-DGH/C-3256/ENQ/094
Description of Work	:	Design, Development, Customization, Configuration, Cloud Hosting and Installation and Commissioning of the “Real Time Measurement System (RTMS)” software on the DGH Cloud Servers along with onsite O&M
Bid Downloading date	:	05/12/2017 to 03/01/2018
Pre Bid Conference Date, Time & Location	:	19/12/2017, 1100 Hrs at DGH Noida
Bid Closing Date & Time	:	03/01/2018 at 1400 hrs.(IST)
Bid Opening Date & Time	:	03/01/2018 at 1500 hrs.(IST)

Prospective bidders should download the Complete Tender Documents from DGH’s web site www.dghindia.gov.in or Government of India’s Public Procurement Portal <http://eprocure.gov.in/cppp/> , till Bid Closing Date / Time as above. Addendum/ Corrigendum, if any, to the tender documents shall be uploaded on aforementioned websites only. Hence, bidders may visit the same regularly till the bid submission date.

**Directorate General of Hydrocarbons
Ministry of Petroleum & Natural Gas
Govt. of India, New Delhi, INDIA**

Phone No : (+91)-120-2472000
Tele Fax : (+91)-120-2472049

OIDB Bhawan, Tower A, Plot No. 2,
Sector – 73, NOIDA-201301, INDIA

FORWARDING LETTER FOR INVITATION TO BID

To,

Sir/s,

The Directorate General of Hydrocarbons (DGH) invites sealed tenders in duplicate for providing below mentioned services.

The salient features of the tender are:

1	Tender No.	:	<u>MM-11013(13)/2/2017-DGH/C-3256/ENQ/094</u>
2	Brief Description of the Service	:	Design, Development, Customization, Configuration, Cloud Hosting and Installation & Commissioning of the “Real Time Measurement System (RTMS)” software on the DGH Cloud Servers along with onsite O&M
3	Type of Bid	:	National Open Tender under 2 Bid System (Techno-commercial Bid & Price Bid)
4	Pre Bid Conference Date, Time & Venue	:	19/12/2017, 11:00 Hrs at DGH, OIDB Bhawan, Tower A, Plot No. 2, Sector 73 Noida 201301
5	Last Date & time for Submission of Pre Bid Queries	:	13/12/2017, 02:00 PM Two(2) representatives of each bidder shall be allowed to participate in the pre bid conference. Bidder must send email confirmation regarding their participation in pre bid conference along with their queries to mm@dghindia.gov.in on or before 2 PM of 13/12/2017
6	Bid Closing Time & Date	:	1400 Hrs (IST) on 03/01/2018
7	Place of Submission	:	Directorate General of Hydrocarbons (DGH), OIDB Bhawan, Tower A, Plot No. 2, Sector – 73, Noida -201 301. India.
8	Bid Opening Time, Date & Place	:	Techno-commercial bid : 1500 Hrs. (IST) of the Bid Closing Day at the same address as above. Price bid : Opening time and date shall be intimated to techno-commercially qualified bidders.
9	Bid validity	:	90 days from bid closing date.

10	Amount of Bid Bond (original Bid Bond to be enclosed with the Techno-commercial Bid only)	:	Rs. 12.60 Lakhs Bid Bond in the form of a Bank Guarantee to be valid for 45 days beyond the validity of the bids asked for in the Bid Documents.
11	Amount of Performance Guarantee to be submitted only by the Successful Bidder.	:	10% of the Contract value to be submitted within 21 days of the letter of Award (LoA). Bidders should ensure that the Performance Bank Guarantee should be valid for a period extending to 6 months beyond the expiry of the tenure of the contract.
12	Signing of Contract	:	Contract is to be signed within 30 days of date of issue of LoA.
13	Mobilization & Commencement of work	:	As per scope of Work.
14	Duration of the Contract	:	5 Years from date of commencement.
15	Liquidated damages	:	<ol style="list-style-type: none"> 1. Liquidated Damages will be levied @0.5% per week, not more than 5% of the proportionate contract cost for item Sl nos. 1 & 2, for the delay beyond duration(s)/ schedule(s) as mentioned in the contract 2. Liquidated Damages will be levied @0.5% per week, not more than 5% of the respective work order value for item Sl nos. 3, 5, 6 & 7 for the delay beyond duration(s)/ schedule(s) as mentioned in the contract

Other details and terms/conditions are as per the following Annexures.

You are invited to submit your bid against the above tender.

Thanking you,

Yours faithfully

HOD (MM)
For Directorate General of Hydrocarbons

Encl: As above

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INSTRUCTIONS TO BIDDERS

1.0 ELIGIBILITY AND EXPERIENCE OF THE BIDDER:- (Please refer **Annexure-II**).

2.0 PRE BID CONFERENCE: Pre Bid Conference shall be held on 19/12/2017 at 1100 Hrs at DGH Office Noida. Two(2) representatives of each bidder shall be allowed to participate in the pre bid conference. Bidder must send email confirmation regarding their participation in pre bid conference along with their queries to mm@dghindia.gov.in on or before 2 PM of 13/12/2017

3.0 COST OF BIDDING

The bidder shall be solely liable to bear all costs and expenses associated with the preparation and submission of its bid, and DGH will in no case be held responsible or liable for payment of any costs associated with the preparation or submission of the said bids irrespective of the outcome of the bidding process as also in case the entire bidding process or part thereof is nullified/ cancelled due to any reason whatsoever.

A. THE BIDDING DOCUMENT

4.0 CONTENT OF BIDDING DOCUMENTS

4.1 The services required, bidding procedures and contract terms are described in the bidding document. In addition to the Invitation for Bids, the bidding documents include:

Annexure-I : Instructions to Bidders with following Appendices.

- Appendix-1 : Bid submission proforma.
- Appendix-2 : Bid Bond Bank Guarantee proforma.
- Appendix-3 : Bank Guarantee for Performance Security
- Appendix-4 : Proforma of Authorization Letter for Attending Tender Opening.
- Appendix-5 : Undertaking / Declaration.
- Appendix-6 : Proforma for Changes/Modifications Sought by Bidders.
- Appendix-7 : Bidders Past Services (Similar) Proforma

Annexure-II : Bid Evaluation Criteria

Annexure-IIIA : Model Contract & General Conditions of Contract (GCC)

Annexure-IIIB : Special Conditions of the Contract

Annexure-IV : Scope of work, Technical Specifications

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4.2 The bidder is expected to examine all instructions, forms, terms and specifications in the bidding documents. Failure to furnish all information required by the bidding documents will be at the bidder's risk. Tenders not complying with tender conditions and not conforming to tender specifications will result in the rejection of its bid without seeking any clarifications.

5.0 AMENDMENT OF BID DOCUMENT

5.1 At any time prior to the deadline for submission of bids, DGH may at its own discretion and for any reason whatsoever whether at its own initiative or in response to a clarification requested by a bidder, modify the Bid Documents by the issuance of an Addendum.

5.2 The Addendum will be hoisted on DGH's & Gol's CPPP websites. All are advised to visit DGH website periodically to update themselves about modifications to the Bid, if any, in order to submit their offer accordingly.

5.3 In order to allow the bidders reasonable time to take the amendment into account in preparing their bids, the DGH may at its discretion, extend the deadline for the submission of Bids and any such extension will be conveyed to the bidders through DGH's website.

B. PREPARATION OF BIDS

6.0 LANGUAGE AND SIGNING OF BID

6.1 The bid prepared by the bidder and all correspondence and documents relating to the bid exchanged by the Bidder and the DGH shall be written in English language. Supporting documents and printed literature furnished by the Bidder may be in another language provided they are accompanied by an accurate translation of the relevant passages in English, in which case, for purposes of interpretation of the bid, the translation shall prevail. However, the said translations should be certified by some official translator.

6.2 Bids shall be submitted in the prescribed bid proforma as per **appendices of Annexure-I**. The prescribed proforma at Appendices of **Annexure-I**, duly filled in and signed should be returned intact whether quoting for any item or not. When items are not being tendered for, the corresponding space should be defaced by some such words as "Not Quoting".

6.3 In the event of the space on the bid proforma being insufficient for the required purpose, additional pages may be added. Each such additional page must be numbered consecutively, showing the tender number and should be duly signed. In such cases reference to the additional page(s) must be made in the bid.

6.4 The bid proforma referred to above, if not returned or if returned but not duly filled in will be liable to result in rejection of the bid.

6.5 The Bidders are advised in their own interest to ensure that all the points brought out in the check list are complied with in their bid failing which the offer is liable to be rejected.

6.6 The bids can only be submitted in the name of the Bidder in whose name the bid documents were issued by DGH. The bid papers, duly filled in and complete in all respects shall be submitted together with requisite information and Annexures / Appendices. It shall be complete and free from ambiguity, change or interlineations.

6.7 The bidder should indicate at the time of quoting against this tender their full postal and fax addresses and also similar information in respect of their authorized agents in India, if any.

6.8 The Bidder shall sign its bid with the exact name of the firm to whom the contract is to be issued. The bid shall be signed by a duly authorised officer and in the case of a Company, the same shall be sealed with the company seal or otherwise appropriately executed under seal.

6.9 The bidder shall clearly indicate their legal constitution and the person signing the bid shall state his capacity and also source of his ability to bind the Bidder.

6.10 The power of attorney or authorization, or any other document consisting of adequate proof of the ability of the signatory to bind the bidder, shall be annexed to the bid. Any bid not supported by adequate proof of the signatory's authority shall be rejected outrightly by DGH.

6.11 The Bidder, in each tender, will have to give a certificate in its offer, that the terms and conditions as laid down in this bidding document are acceptable to it in toto.

6.12 Any interlineations, erasures or overwriting shall be valid only if they are initialed by the person or persons signing the bid.

6.13 The original bid should be signed manually by the authorized signatory(ies) of the bidder.

6.14 The complete bid including the prices must be written by the bidders in indelible ink. Bids and/or prices written in pencil will be rejected.

7.0 COMPLIANCE WITH THE REQUIREMENTS OF BID EVALUATION CRITERIA (BEC) AND ALL OTHER TENDER CONDITIONS:

7.1 Advice to bidders for avoiding rejection of their offers:

DGH has to finalize its purchase / contracts within a limited time schedule. Therefore, it may not be feasible for DGH to seek clarifications in respect of incomplete offers.

Prospective bidders are advised to ensure that their bids are complete in all respects and conform to DGH's terms, conditions and bid evaluation criteria of the tender. Bids not complying with DGH's requirement may be rejected without seeking any clarification.

8.0 DOCUMENTS COMPRISING THE BID

8.1 Techno-commercial Bid:

8.1.1 The bid prepared by the Bidder shall comprise the following components, duly completed:

a) The power of attorney or authorisation, or any other document consisting of adequate proof of the ability of the signatory to bind the bidder.

b) All **Appendices to Annexures** duly filled in and signed

c) Price Format. (**Annexure-V**) (Without indicating Prices)

d) Documentary evidence establishing that the Bidder is eligible to bid and is qualified to perform the contract if its bid is accepted. The documentary evidence of the Bidder's qualifications to perform the Contract if its bid is accepted, shall establish to the DGH's satisfaction :

(i) that the Bidder has the financial, technical and production capability necessary to perform the Contract.

(ii) that the Bidder meets **all** the criteria prescribed in the Bid Evaluation Criteria **(Annexure-II)**.

e) Documentary evidence that the goods and services to be supplied / rendered by the Bidder are eligible goods & services and conform to the requirements of bidding documents. The documentary evidence of conformity of the services to the bidding documents may be in the form of literature, drawings and data and shall consist of:

(i) A detailed description of essential technical and performance characteristics of the services.

(ii) An item by item commentary on the DGH's technical specifications demonstrating conformity to the provisions of the technical specifications of the bidding document.

f) Bid security.

g) The bidder should submit a declaration to the effect that neither the bidder themselves, nor any of its allied concerns, partners or associates or directors or proprietors involved in any capacity, are currently serving any banning orders issued by DGH debaring them from carrying on business dealings with DGH.

8.2 Price Bid

8.2.1 The Bidder shall complete the appropriate price schedule furnished in the bidding document, indicating the services to be provided.

9.0 BID PRICES

9.1.1 The bidders shall indicate on the appropriate price schedule the net unit prices (wherever applicable) .

9.1.2 Prices quoted by the bidder shall be firm during the bidder's performance of the contract and not subject to variation on any account.

9.1.3 Discount: Bidders are advised not to indicate any separate discount. Discount, if any, should be merged with the quoted prices. Discount of any type, indicated separately, will not be taken into account for evaluation purpose. However, in the event of such an offer, without considering discount, is found to be lowest, DGH shall avail such discount at the time of award of contract.

9.2 Concessions permissible under statutes

Bidder, while quoting against this tender, must take cognizance of all concessions permissible under the statutes including the benefit under Goods and Service Tax Law, failing which it will have to bear extra cost where Bidder does not avail exemptions/ concessional rates of levies like GST, Customs Duty, etc. DGH will not take responsibility towards this. However, DGH may provide necessary assistance, wherever possible, in this regard.

9.2.1 Bidders may take note there would be NO customs duty exemption available for business tendered with DGH.

9.3 **Income Tax Liability**

The bidder will have to bear all Income Tax liability both corporate and personal tax.

9.4 **GST Liability:**

The bidder will have to bear all GST liability, as applicable except in case of services provided by Goods Transport Agency (GTA) and Services provided by a service provider from outside India not having a fixed establishment or permanent address in India as prescribed under GST Law (amended from time to time)

The Bidder should quote the applicable GST, clearly indicating the rate and the amount of GST included in the bid and the classification of the respective service (as per GST law) under which the GST is payable.

In the contracts involving multiple services or involving supply of certain goods / materials along with the services, the Bidder should give separate break-up for cost of goods and cost of various services, and accordingly quote GST as applicable for the taxable services.

In case the applicability of GST is not quoted explicitly in the offer by the Bidder, the offer will be considered as inclusive of all liabilities of GST. DGH will not entertain any future claim in respect of GST against such offers.

In case, the quoted information related to various taxes and duties subsequently proves wrong, incorrect or misleading:-

- a) DGH will have no liability to reimburse the difference in the duty / tax, if the finally assessed amount is on the higher side.
- b) DGH will have the right to recover the difference in case the rate of duty / tax finally assessed is on the lower side.

The service provider should have a valid registration with the concerned authorities of GST and a copy of such registration certificate should be submitted along with the offer. In case the registration certificate for the quoted category of service is not available at the time of submission of offer, an undertaking should be furnished for submission of copy of requisite GSTIN certificate along with the first invoice under the contract.

(i) GST on contracts for transportation of goods by road in a goods carriage (Applicable for Goods Transport where the contract is for transportation / logistics and not the service/ turnkey contracts where transportation is a part):

In this case, since the liability to pay GST is on DGH as receiver of the service, the Bidder shall not include GST in the quoted prices.

As the above statutory provisions are frequently reviewed by the Government, the bidders are advised to check the latest position in their own interest and DGH will not bear any responsibilities for incorrect assessment of statutory levies by any bidder

10.0 **BID CURRENCIES**

10.1 The Bidders are to quote in Indian Currency only.

11.0 MODE OF PAYMENT

In all cases, DGH shall make payments only through Electronic Payment mechanism (viz. NEFT/RTGS /ECS). Bidders should invariably provide the following particulars alongwith their offers:

1. Name & Complete Address of the Supplier / Contractor as per Bank records.
2. Name & Complete Address of the Bank with Branch details.
3. Type of Bank account (Current / Savings/Cash Credit).
4. Bank Account Number (indicate 'Core Bank Account Number', if any).
5. IFSC / NEFT Code (11 digit code) / MICR code, as applicable, alongwith a cancelled cheque leaf.
6. Permanent Account Number (PAN) under Income Tax Act;
7. TIN/Sales Tax Registration Number (for supply of Goods) and GST Registration Number (for supply of Services), as applicable.
8. E-mail address of the vendor / authorized official (for receiving the updates on status of payments)."
9. Confirmation as to whether the bidder belong to the category of Micro, Small and Medium Enterprises as defined in the "Micro, Small and Medium Enterprises Development Act, 2006 (MSMEDA)". If yes, specify the category of Micro, Small or Medium Enterprises and whether the enterprise is in manufacturing or service industry, along with valid documentary evidence.
10. Any other details as required by the remitting bank.

For receiving payment through NEFT / RTGS, the bank/branch in which the bidder is having account and intends to have the payment should be either an NEFT enabled bank or SBI branch with core banking facility.

12.0 VAGUE AND INDEFINITE EXPRESSIONS

12.1 Bids qualified by vague and indefinite expressions such as "Subject to availability" etc. will not be considered.

13.0 PERIOD OF VALIDITY OF BIDS

13.1 The Bid shall be valid for acceptance for the period as indicated in the "Invitation for Bid" (hereinafter referred to as validity period) and shall not be withdrawn on or after the opening of bids till the expiration of the validity period or any extension agreed thereof.

13.2 In exceptional circumstances, prior to expiry of the original bid validity period, the DGH may request the bidder for a specified extension in the period of validity. The requests and the responses shall be made in writing. The Bidder will undertake not to vary/modify the bid during the validity period or any extension agreed thereof. Bidder agreeing to the request for extension of validity of offer shall be required to extend the validity of Bid Security correspondingly.

14.0 BID SECURITY

14.1 The Bid Security is required to protect the DGH against the risk of Bidder's conduct which would warrant the security's forfeiture in pursuance to clause 13.7.

14.2 MSEs eligible as per Ministry of MSME's guidelines, and Government Departments will be exempted from Bid Security, provided the bidder submits necessary evidence for eligibility, along with the bid.

14.3 The Bidders not covered under Para 13.2 above must enclose with their offer (in case of two bid systems, with techno-commercial bid) bid security valid for a period of 45 (forty-five) days beyond the bid validity period asked for in the tender. The amount for bid security has been indicated in the "Invitation For Bid".

14.4 The Bid Security shall be acceptable in any of the following forms:

(i) An account payee Demand Draft in favour of Directorate General of Hydrocarbons & payable at Delhi.

(ii) A Bank Guarantee as per Appendix-3 issued from any of the Commercial Banks in India on non-judicial stamp paper of requisite value, as per Indian Stamp Act, purchased in the name of the Banker.

14.5 DGH shall not be liable to pay any bank charges, commission or interest on the amount of Bid Security.

14.6 Subject to provisions in para 13.2 above, offers without Bid Security will be ignored.

14.7 The Bid Security shall be forfeited:

a) If Bid is withdrawn during the validity period or any extension thereof duly agreed by the Bidder.

b) If Bid is varied or modified in a manner not acceptable to DGH during the validity period or any extension of the validity duly agreed by the Bidder.

c) If a Bidder, having been notified of the acceptance of its bid, fails to furnish Security Deposit/Performance Bank Guarantee (Performance Security) within 21 days of notification of such acceptance.

14.8 The Bid Security of unsuccessful Bidders will be returned on finalization of the bid. The Bid Security of successful bidder will be returned on receipt of Security Deposit/Performance Bond (Performance Security).

15.0 TELEFAX / e-MAIL / XEROX / PHOTOCOPY BIDS AND THE BIDS CONTAINING SCANNED SIGNATURE:

15.1 Telefax / e-mail / Xerox / Photocopy bids and bids with scanned signature will not be considered.

Original bids should be signed manually failing which they shall be rejected.

C. SUBMISSION AND OPENING OF BIDS

16.0 SEALING AND MARKING OF BIDS.

16.1 Offers are to be submitted in triple sealed covers. The first inner sealed cover will contain Techno-Commercial bids having all details but with price column blanked out. **However a tick mark (✓) shall be provided against each item of the price bid format to indicate that there is a quote against this item in the Priced Commercial bid** This cover will clearly be super scribed with "Techno-Commercial bid" along with tender number and item description. The second sealed inner cover will contain only the price schedule duly filled in and signed and will be clearly super scribed with "Price Bid" along with tender number. These two covers shall be put into outer cover and sealed. The outer cover should duly bear the tender number and date of closing/opening prominently underlined, along with the address of this office.

16.2 The original and all copies of the bid shall be typed or written in indelible ink and shall be signed by the bidder or a person duly authorized to bind the bidder to the contract. The authorization shall be indicated by written power of attorney / board resolution / agency agreement etc. accompanying the bid. The person or persons signing the bid documents shall initial all pages of the bid, except for un-amended printed literature.

16.3 The right to reject any bid which fails to comply with the above instructions is reserved. Only one bid should be included in one cover.

16.4 Price bids, which remain unopened with DGH, will be returned to the concerned bidders within 5 (five) working days of receipt of Performance Guarantee Bond(s) from the successful bidder(s).

16.5 Any change in quotation after opening of the tender WILL NOT BE CONSIDERED.

16.6 DGH will not be responsible for the loss of tender form or for the delay in postal transit.

16.7 Incomplete or conditional submissions, and those with deviations/ subjective or counter conditions/ quantity restrictions or those not accompanied by the requisite documents and information shall be liable to be rejected and no further correspondence / enquiries on this issue by the Bidder shall be entertained.

16.8 Any terms and conditions attached/printed overleaf of the Bidder Bidder's offer will not be binding on DGH .

16.9 DGH is not bound to accept the lowest offer and reserves the right to reject any and / or every tender without assigning any reason whatsoever and/or place order on one or more Bidders and/or carry out negotiations with any Bidder in the manner considered appropriate by the DGH. DGH also reserves right to reject any Un-workable offer.

17.0 DEADLINE FOR SUBMISSION OF BIDS

17.1 The Bid must be received by the DGH at the address specified in Invitation for Bids not later than **1400 Hrs** (IST) on the notified date of closing of the tender. Offers sent by hand delivery should be put in the Tender Box at the specified office not later than **1400 Hrs.** (IST) on the specified date. All out-station tenders, if sent by post, should be sent under registered cover.

18.0 LATE BIDS

18.1 Bidders are advised in their own interest to ensure that bid reaches the specified office well before the closing date and time of the bid.

18.2 Any bid received after dead line for submission of bid, will be rejected and returned unopened.

19.0 MODIFICATION AND WITHDRAWAL OF BIDS

19.1 No bid may be modified after the dead line for submission of bids.

20.0 OPENING OF BIDS

20.1 The bid will be opened at **1500 Hrs. (IST)** on the date of opening indicated in "Invitation for Bid". The Bidder or his authorized representative may be present at the time of opening of bid on the specified date, but a letter in the form annexed at **Appendix-4** hereto must be forwarded to this office along with bid and a copy of this letter must be produced in the office by the person attending the opening of bid. Unless this letter is presented by him, he may not be allowed to attend the opening of bid.

20.2 In case of unscheduled holiday on the closing/opening day of bid, the next working day will be treated as scheduled prescribed day of closing/opening of bid, the time notified remaining the same.

D. EVALUATION OF BIDS

21.0 EVALUATION AND COMPARISON OF BIDS

21.1 Evaluation and comparison of bids will be done as per provisions of Bid Evaluation Criteria at **Annexure-II**.

22.0 UNSOLICITED POST TENDER MODIFICATIONS

22.1 Unsolicited post-tender modification will lead to straight away rejection of the offer.

23.0 EXAMINATION OF BID

23.1 The DGH will examine the bids to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed and whether the bids are generally in order.

23.2 DGH will determine the conformity of each bid to the bidding documents. Bids falling under the purview of "Rejection Criteria" of the bid Evaluation Criteria of the bidding document will be rejected.

24.0 SPECIFICATIONS

24.1 The Bidder must note that its Bid will be rejected in case the tender stipulations are not complied with strictly or the services offered do not conform to the required specifications indicated therein. The lowest Bid will be determined from among those Bids which are in full conformity with the required specifications.

25.0 PURCHASE PREFERENCE

25.1 DGH reserves its right to allow to the Indian Small Scale Sector purchase preference facility as admissible under the existing policy.

26.0 CONTACTING DGH

No bidder shall contact the DGH on any matter relating to its bid, from the time of the opening to the time the contract is awarded.

E. AWARD OF CONTRACT

27.0 AWARD CRITERIA.

DGH will award the contract to the successful bidder whose bid has been determined to be **in full conformity to the bid** documents and has been determined as the lowest evaluated bid, provided further that the Bidder is determined to be qualified to perform the Contract satisfactorily.

28.0 DGH'S RIGHT TO ACCEPT ANY BID AND TO REJECT ANY OR ALL BIDS.

28.1 DGH reserves the right to reject, accept or prefer any bid and to annul the bidding process and reject all bids at any time prior to award of contract, without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the ground for DGH's action. The DGH also reserves to itself the right to accept any bid in part or split the order between two or more bidders.

29.0 NOTIFICATION OF AWARD (NOA)

29.1 Prior to the expiration of the period of bid validity, DGH will notify the successful bidder in writing that its bid has been accepted.

29.2 The notification of award will constitute the formation of the contract.

29.3 Upon the successful bidder's furnishing performance security, pursuant to clause **31**, the contract shall be signed between the parties as per clause **30.0**

30.0 MOBILISATION PERIOD

Successful bidder shall be required to mobilise complete equipment along with crew (only crew in case of Operation and Maintenance Contracts) for commencement of services at the specified site within the time period stipulated in the Forwarding Letter of this invitation to bid.

31.0 SIGNING OF CONTRACT

31.1 The successful bidder is required to sign a **formal detailed** contract with DGH within a maximum period of **30** days of date of LoA. Until the contract is signed, the LoA shall remain binding amongst the two parties. In case of delay in signing the contract on the part of DGH, contractor shall be paid 80% of the applicable rates falling due as per the contractual obligations on adhoc basis, till formal signing of the contract, after which the balance of due payments shall be released / adjusted against regular bills. However no payment will be made and mobilization will not be deemed completed, when the delay is on the part of the contractor to sign the contract, as per draft contract at **Annexure-III A to Annexure-V** along with respective appendices thereto, of the tender.

32.0 PERFORMANCE SECURITY

32.1 Within 21 (Twenty-one) days from the date of issue of LOA / NOA by DGH, the successful Bidder shall furnish the Performance Security in accordance with the conditions of the contract in the form provided at **Appendix-3 of Annexure-I** and must be in the form of Bank Guarantee from any Nationalised / scheduled Bank in India on non-judicial stamp paper of requisite value, as per Indian Stamp Act, purchased in the name of the Banker.

32.2 The performance security specified above must be valid for 3 (three) months (covering the warranty period) plus 3 months to lodge claim, if any, beyond the contract period. The Performance Security will be discharged by DGH not later than 30 days following its expiry. In the event of any extension of the Contract period, Bank Guarantee should be extended by Contractor by the period equivalent to the extended period.

32.3 The performance security shall be payable to DGH as compensation for any loss resulting from Contractor's failure to fulfil its obligations under the Contract.

32.4 The Performance Security will not accrue any interest during its period of validity or extended validity.

32.5 Failure of the successful Bidder to comply with the requirements of clause **31.0** above shall constitute sufficient grounds for the annulment of the award and forfeiture of the bid security as per clause **13.7(c)**.

33.0 CORRESPONDENCE

33.1 DGH's fax address is (+91)-120-2472049.

33.2 All correspondence from Bidders/ contractor shall be made to the office of the HoD (MM), Directorate General of Hydrocarbons, OIIB Bhawan, Tower A, Plot No. 2, Sector - 73, Noida- 201 301, India.

33.3 All correspondence shall bear reference to DGH's bid document number.

34.0 UNSOLICITED COMMUNICATIONS

34.1 In case any bidder makes any unsolicited communication in any manner, after techno-commercial bid has been opened, the bid submitted by the particular bidder shall be summarily rejected, irrespective of the circumstances for such unsolicited communication.

34.2 Further, if the tender has to be closed because of such rejection, and the job has to be re-tendered, then the particular bidder shall not be allowed to bid in the re-tender.

34.3 The above provision will not prevent any bidder from making representation in connection with processing of tender directly and only to DG, DGH. However, if such representation is found by DG, DGH to be un-substantiative and / or frivolous and if the tender has to be closed because of the delays / disruptions caused by such representations and the job has to be re-tendered, then such bidder will not be allowed to participate in the re-invited tender.

34.4 In case, any bidder while making such representations DG, DGH also involves other officials of DGH and / or solicits / invokes external intervention other than as may be permitted under the law and if the tender has to be closed because of the delays / disruptions caused by such interventions and has to be re-tendered, then the particular bidder will not be allowed to participate in the re-invited tender.

BID SUBMISSION PERFORMA

Tender No.....

Bidder's Name & Address:

Telephone No : ; FAX NO:
e-Mail ID: _____.

Directorate General of Hydrocarbons
OIDB Bhawan, Tower A, Plot No. 2, Sector – 73, Noida -201 301, India.

Dear Sirs,

1. I/We hereby offer to supply the Items / Services detailed in schedule hereto or such portion thereof as you specify in the Acceptance of Tender at the price given in the said schedule and agree to hold this offer valid for the validity period indicated in the Forwarding Letter of this tender document.

2. I / We have understood and complied with the "Instructions to Bidders" at **Annexure-I**, "Bid Evaluation Criteria" at **Annexure-II** and accepted the "General Terms and Conditions" at **Annexure-III A** & "Special Conditions of Contract" at **Annexure-III B** for providing services and have thoroughly examined and complied with the Scope of Supply / Work, Specifications etc at **Annexure-IV**, hereto and am/are fully aware of the nature of the service required and my/our offer is to provide services strictly in accordance with the requirements.

3. I / We declare that all the information given and documents submitted by me/ us in our bid are true, correct and genuine. I/We further agree that if any of the information given in bid or in any of documents submitted in support of bid for the award of tender is found to be untrue or incorrect or false or forged, action as deemed fit may be initiated by DGH at its sole discretion. We hereby undertake that in case of submission of any documents by us in bid or in any of documents submitted in support of bid for the award of tender is found to be fraudulent, we will be liable for penal actions at any stage of the tender / contract, at our risk & cost.

Yours faithfully,

Signature of the Bidder

Name _____

Dated _____

Seal of the Company

Signature of witness

Address

Note : This form should be returned along with offer duly signed.

**Proforma of Bank Guarantee towards Bid Security
BID BOND**

Ref. No.....

Bank Guarantee No.....

Dated

To,

Directorate General of Hydrocarbons
OIDB Bhawan, Tower A, Plot No. 2, Sector - 73, Noida -201 301, India.

Dear Sirs,

1. Whereas Directorate General of Hydrocarbons, having its office at OIDB Bhawan, Tower A, Plot No. 2, Sector - 73, Noida -201 301, India. (hereinafter called 'DGH' which expression unless repugnant to the context or meaning thereof shall mean and include all its successors, administrators, executors and assignees) has floated a Tender No. _____ and M/s _____ having Head/Registered office at _____ (hereinafter called the 'Bidder' which expression unless repugnant to the context or meaning thereof shall mean and include all its successors, administrators, executors and permitted assignees) have submitted a bid Reference No..... and Bidder having agreed to furnish as a condition precedent for participation in the said tender an unconditional and irrevocable Bank Guarantee of Indian Rupees (in figures) _____ (Indian Rupees (in words) _____ only) for the due performance of Bidder's obligations as contained in the terms of the Notice Inviting Tender (NIT) and other terms and conditions contained in the Bidding documents supplied by DGH which amount is liable to be forfeited on the happening of any contingencies mentioned in said documents.

2. We (name of the bank) _____ registered under the laws of _____ having its head/registered office at _____ (hereinafter referred to as "the Bank" which expression, unless repugnant to the context or meaning thereof, shall mean and include all its successors, administrators, executors and permitted assignees) do hereby guarantee and undertake to pay immediately on the first demand by DGH, the amount of Indian Rs. (in figures) _____ (Indian Rupees (in words) _____ only) in aggregate at any time without any demur and recourse, and without DGH having to substantiate the demand. Any such demand made by DGH shall be conclusive and binding on the Bank irrespective of any dispute or difference raised by the Bidder.

3. The Bank confirms that this guarantee has been issued with observance of appropriate laws of the country of issue.

4. The Bank also agree that this guarantee shall be irrevocable and governed and construed in accordance with Indian Laws and subject to exclusive jurisdiction of Indian Courts of the place from where the Bank Guarantee has been issued..

5. This guarantee shall be irrevocable and shall remain in force up to _____ which **includes fortyfive days** after the period of bid validity and any demand in respect thereof should reach the Bank not later than the aforesaid date.

6. Notwithstanding anything contained hereinabove, our liability under this Guarantee is limited to Indian Rs (in figures) _____ (Indian Rupees (in words) _____ only)

and our guarantee shall remain in force until (indicate the date of expiry of bank guarantee) _____.

Any claim under this Guarantee must be received by us before the expiry of this Bank Guarantee. If no such claim has been received by us by the said date, the rights of DGH under this Guarantee will cease. However, if such a claim has been received by us by the said date, all the rights of DGH under this Guarantee shall be valid and shall not cease until we have satisfied that claim. In witness whereof, the Bank, through its authorized officer, has set its hand and stamp on this day of at

WITNESS NO. 1

(Signature)
Full name and official
address (in legible letters)

(Signature)
Full name, designation and
official address (in legible
letters) with Bank stamp.

Attorney as per Power of
Attorney No.....
Dated

WITNESS NO. 2

(Signature)
Full name and official
address (in legible letters)

Notes:

11. The expiry date as mentioned in clause 5 & 6 should be arrived at by adding 30 days to the date of expiry of the bid validity unless otherwise specified in the bidding documents.

Proforma of Bank Guarantee towards Performance Security.

PERFORMANCE GUARANTEE

Ref. No. Bank Guarantee No.

Dated.

To,
Directorate General of Hydrocarbons,
OIDB Bhawan, Tower A, Plot No. 2, Sector - 73, Noida -201 301, India.

Dear Sirs,

1.1 In consideration of Directorate General of Hydrocarbons, having its Office at OIDB Bhawan, Tower A, Plot No. 2, Sector - 73, Noida -201 301, India, (hereinafter referred to as 'DGH', which expression shall, unless repugnant to the context or meaning thereof, include all its successors, administrators, executors and assignees) having entered into a CONTRACT No. _____ dated _____ (hereinafter called 'the CONTRACT' which expression shall include all the amendments thereto) with M/s _____ having its registered/head office at _____ (hereinafter referred to as the 'CONTRACTOR') which expression shall, unless repugnant to the context or meaning thereof include all its successors, administrators, executors and assignees) and DGH having agreed that the CONTRACTOR shall furnish to DGH a performance guarantee for Indian Rupees for the faithful performance of the entire CONTRACT.

1.2 We (name of the bank) _____ registered under the laws of _____ having head/registered office at _____ (hereinafter referred to as "the Bank", which expression shall, unless repugnant to the context or meaning thereof, include all its successors, administrators, executors and permitted assignees) do hereby guarantee and undertake to pay immediately on first demand in writing any /all moneys to the extent of Indian Rs (in figures) _____ (Indian Rupees (in words) _____) without any demur, reservation, contest or protest and/or without any reference to the CONTRACTOR. Any such demand made by DGH on the Bank by serving a written notice shall be conclusive and binding, without any proof, on the bank as regards the amount due and payable, notwithstanding any dispute(s) pending before any Court, Tribunal, Arbitrator or any other authority and/or any other matter or thing whatsoever, as liability under these presents being absolute and unequivocal. We agree that the guarantee herein contained shall be irrevocable and shall continue to be enforceable until it is discharged by DGH in writing. This guarantee shall not be determined, discharged or affected by the liquidation, winding up, dissolution or insolvency of the CONTRACTOR and shall remain valid, binding and operative against the bank.

1.3 The Bank also agrees that DGH at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor, in the first instance, without proceeding against the CONTRACTOR and notwithstanding any security or other guarantee that DGH may have in relation to the CONTRACTOR's liabilities.

1.4 The Bank further agrees that DGH shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said CONTRACT or to extend time of performance by the said CONTRACTOR(s) from time to time or to postpone for any time or from time to time exercise of any of the powers vested in DGH against the said CONTRACTOR(s) and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said CONTRACTOR(s) or for any forbearance, act or omission on the part of DGH or any indulgence by DGH to the said

CONTRACTOR(s) or any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

1.5 The Bank further agrees that the Guarantee herein contained shall remain in full force during the period that is taken for the performance of the CONTRACT and all dues of DGH under or by virtue of this CONTRACT have been fully paid and its claim satisfied or discharged or till DGH discharges this guarantee in writing, whichever is earlier.

1.6 This Guarantee shall not be discharged by any change in our constitution, in the constitution of DGH or that of the CONTRACTOR.

1.7 The Bank confirms that this guarantee has been issued with observance of appropriate laws of the country of issue.

1.8 The Bank also agrees that this guarantee shall be governed and construed in accordance with Indian Laws and subject to the exclusive jurisdiction of Indian Courts of the place from where the Bank Guarantee has been issued.

1.9 Notwithstanding anything contained herein above, our liability under this Guarantee is limited to Indian Rs. (in figures) _____ (Indian Rupees (in words) _____) and our guarantee shall remain in force until _____.(indicate the date of expiry of bank guarantee).

Any claim under this Guarantee must be received by us before the expiry of this Bank Guarantee. If no such claim has been received by us by the said date, the rights of DGH under this Guarantee will cease. However, if such a claim has been received by us within the said date, all the rights of DGH under this Guarantee shall be valid and shall not cease until we have satisfied that claim.

In witness whereof, the Bank through its authorised officer has set its hand and stamp on this day of20__ at

WITNESS NO. 1

(Signature)
Full name and official
address (in legible letters)

(Signature)
Full name, designation and
address (in legible letters)
with Bank stamp

Attorney as per power of
Attorney No.....
Dated

WITNESS NO. 2

(Signature)
Full name and official
address (in legible letters)

AUTHORISATION LETTER FOR ATTENDING TENDER OPENING

NO.

Date.....

To,

The
Directorate General of Hydrocarbons.
OIDB Bhawan, Tower A, Plot No. 2, Sector – 73, Noida -201 301, India.

Subject : **Tender No.**----- **due on**-----

Sir,

Mr..... has been authorised to be present at the time of opening of above tender due on..... at, on my/our behalf.

Yours faithfully

Signature of Bidder

Copy to: Mr.for information and for production before the HoD (MM) at the time of opening of bids.

Undertakings / Declaration

1. GST Registration (*strike off whichever is not applicable*)

We have submitted a copy of valid registration certificate under GST law.

OR

We undertake to submit copy of requisite GST registration certificate along with the first invoice under the contract

2. We declare that neither we, the bidders, nor any of our allied concerns, partners or associates or directors or proprietors involved in any capacity with this tender, are currently serving any banning orders issued by DGH debarring them from carrying on business dealings with DGH.

Signature of the Bidder

.....

Name.....

Seal of the Company

Appendix-6 to Annexure-I

**PROFORMA FOR CHANGES/ MODIFICATIONS SOUGHT BY BIDDERS
TO THE BIDDING CONDITIONS**

DGH expects the bidders to fully accept the terms and conditions of the bidding documents. However, changes/ modifications to the terms and conditions of bidding documents, if any proposed, can be communicated in the following proforma, in case pre-bid is not held. This can be used even in cases where pre-bid is held, to inform about the proposals in advance to the pre-bid date.

Clause No. of Bidding Document	Full compliance/ not agreed	Changes/ modifications proposed by the Bidders	REMARKS

Signature of the Bidder

.....

Name.....

Seal of the Company

Note:- Bids maintaining or taking exceptions/deviations shall be rejected straightaway

Appendix-7 to Annexure-I

Bidders Past Services (Similar) Proforma

Sl	Contract Reference Number	Name & Address of Client	Period		Description of Services completed successfully	Remarks
			From	To		
1						
2						
3						
4						
5						

Signature of the Bidder

.....

Name.....

Seal of the Company

.....

BID REJECTION CRITERIA/BID EVALUATION CRITERIA

I. Bid Rejection Criteria (BRC)

A. VITAL CRITERIA FOR ACCEPTANCE OF BIDS

Bidders are advised not to take any exception/deviations to the bid document. Exceptions/ deviations, if any, along with suggested changes are to be communicated by Fax / Courier, so as to reach DGH within stipulated date as mentioned in the tender. DGH after processing such suggestions may, through an addendum to the bid document, communicate to the bidders the changes in its bid document, if any, through DGH's website. Still, if exceptions /deviations are maintained in the bid, such conditional/ non-conforming bids shall not be considered and shall be rejected.

A. Technical

The following vital technical conditions should be strictly complied with failing which the bid will be rejected:

1.0 Bid should be complete, covering all the scope of job/ supply and should conform to the technical specifications indicated in the bid documents, duly supported with technical catalogues/ literatures wherever required. Incomplete and non-conforming bids will be rejected outright.

2.0 Eligibility and experience of the bidder:-

2.1 Bidder, as a System Integrator, has to quote for all the items as per the technical specifications / price format of the bid document.

2.2 The bidder must be either (i) OEM i.e. developer of the quoted product or (ii) authorised distributor/ dealer of the quoted product, with back-up authority letter from the OEM who authorised them to market their product, provided further that such an authority letter is valid at the time of bid opening. Offers without back-up authority from manufacturer will not be considered. Required warranty cover of the manufacturers for the product will be provided by such supplier

2.3 The annual turnover of the firm should not be less than Rs. 1.89 Cr in each of the last three years (FY14-15, FY15-16 and FY16-17). Necessary supporting documents such certificate issued by a practicing chartered/ cost accountant certifying the Annual Turnover and audited Balance Sheet and Profit and Loss Account etc should be submitted along with this offer.

2.4 The bidder must have experience of the following in public/private listed companies or Central/ State Government departments in India or any reputed company abroad, during the past 03 years, from the date of bid closing

- a) Design, Development, Customization, Configuration, Cloud Hosting, Installation and commissioning of at least 1 no. of Application Software in Central Server (Cloud Server) for Real Time Data Acquisition, Processing the data and Handling the Software System.

- b) Operation & Maintenance of Application Software hosted in Central Server (Cloud Server) for Real Time Data Acquisition, Processing and Handling System, for at least 01 Year.
- c) Data collection from FRTU/aggregators and integrating them with the application software hosted in Central Server (Cloud Server), for at least 01 Year.

Documentary evidences like service contracts/ purchase orders / Operation & maintenance contracts/ equivalent documents showing operations of such jobs must be submitted along with the bid.

2.5 HR Availability: Bidder must have at least 10 Professionals, including Software Designer, Developer & Customizer; Mobile App developer, Web developers and Web Designers, programmer, Database administrator on its payroll since last 6 Months.

2.6 Documents to be submitted for the above shall be in the form of:

(i) Self-attested photocopies of relevant pages of contract document showing Contract/ Purchase Order Number, period of contract and Detailed Scope of Supply etc.

(ii) Self-attested photocopies of original completion Certificate(s) or payment certificates or any other documents which substantiate completion of the jobs, issued by the client(s) with contact details of the issuing person/organization (e-mail address, Phone Number, Fax number etc.)

B. Commercial

The following vital commercial conditions should be strictly complied with failing which the bid will be rejected:

1.0 Bid should be submitted (in Two Bid system) in two separate envelopes. The Techno Commercial bid shall contain all details but with the price column of the price bid format blanked out. However a tick mark (✓) shall be provided against each item of the price bid format to indicate that there is a quote against this item in the Priced Commercial bid. The Priced bid shall contain only the prices duly filled in as per the price bid format. Offers with techno commercial bid containing prices shall be rejected outright.

2.0 Acceptance of terms & conditions:

The bidder must confirm unconditional acceptance of “General Conditions of Contract”, “Special Conditions of Contract” and “Instruction to Bidders”.

2.1 Offers of following kinds will be rejected:

- a) Offers made without Bid Security/Bid Bond/Bank Guarantee along with the offer (Refer clause 16 of Instruction to Bidders at Annexure I).
- b) Fax / e-Mail / Photo copy offers and bids with scanned signature. Original bids which are not signed manually.
- c) Offers made by Agents/Consultants/Retainers/Representatives/Associates of foreign principals.
- d) Offers which do not confirm unconditional validity of the bid for the period indicated in the Forwarding Letter of this Bid Documents.
- e) Offers where prices are not firm during the entire duration of the contract and/or with any qualifications.
- f) Offers which do not conform to DGH’s price bid format.
- g) Offers which do not conform to the mobilization period indicated in the bid.
- h) Offers which do not conform to the contract period indicated in the bid.

- j) Offers and all attached documents not signed by the authorised person.
- k) Offers not accompanied with a copy of valid registration certificate under Service Tax Rules or an undertaking for submission of copy of requisite service tax registration certificate along with the first invoice under the contract. (Not Applicable for Service providers from outside India, who do not have any fixed establishment or permanent address in India).
- l) Offers not accompanied with a declaration to the effect that the bidder do not have any fixed establishment or permanent address in India. (Applicable for Service providers from outside India, who do not have any fixed establishment or permanent address in India).
- m) Offers not accompanied with a declaration that neither the bidders themselves, nor any of its allied concerns, partners or associates or directors or proprietors involved in any capacity, are currently serving any banning orders issued by DGH debarring them from carrying on business dealings with DGH.

2.2 The offers of the bidders indicating/disclosing prices in techno-commercial (un-priced bid) or at any stage before opening of price-bid shall be straightaway rejected.

3.0 Bidder shall bear, within the quoted rates, the Personnel Tax as applicable in respect of their personnel and their sub-contractor's personnel, arising out of this contract. Bidder shall also bear, within the quoted rates, the Corporate Tax, as applicable, on the income arising out of this contract.

4.0 Indian agent is not permitted to represent more than one foreign bidder (Supplier/ Manufacturer/ Contractor) in a particular tender. In case an Indian agent represents more than one foreign bidder (Supplier/ Manufacturer/ Contractor) in a particular tender, then offers of such foreign bidders (Suppliers/ Manufacturers/ Contractors) shall be rejected in that tender.

II. BID EVALUATION CRITERIA

A. **Technical Evaluation criteria and Process**

1. The Bidder shall necessarily submit as a part of the Bid Document, the Technical Bid detailing his credentials for executing this project and the highlights of the services proposed with respect to scope of work defined in the Bid Document and the benefits that would accrue to DGH. The Evaluation Committee appointed for this purpose will do this evaluation. The Technical Bid will contain all the information required to evaluate the bidder's suitability to DGH for the purpose of this project.
2. The guidelines for evaluation have been designed to facilitate the objective evaluation of the Technical Bid submitted by the bidder. The information furnished by the bidders in the technical bid shall be the basis for this evaluation. In case any of the information is not made available, the Committee will assign zero (0) marks to that item.
3. While evaluating the Technical Bid, DGH reserves the right to seek clarifications from the Bidders. Bidders shall be required to furnish such clarifications in a timely manner.
4. DGH also reserves the right to seek additions, modifications and other changes to the submitted Bid. Bidders shall be required to furnish such additions / modifications / other changes in a timely manner.

B. **Evaluation of Technical Bid**

The technical evaluation of the bidders will be done based on the criteria and marking system as specified as follows:

S.N.	Criteria	Graded Marks	Maximum Marks	Testimonials to be submitted
1	Certifications (OEM)		10	
i.	ISO 9001 certification	3		Copy of valid certificate
ii	ISO 27001 certification	4		Copy of valid certificate
iii	CMMI certification level-III+	3		Copy of valid certificate
2	Past Performance		30	
i.	Order of Design, Development, Customization, Configuration, Cloud Hosting, Installation and Commissioning of Application Software in Central Server (Cloud Server) for Real Time Data Acquisition, Processing and Handling System. - 05 marks per order/ contract and completion certificate	10		Copy of work order/ contracts along with completion certificate
ii.	Experience in Operation & Maintenance of Application Software hosted in Central Server (Cloud Server) for Real Time Data Acquisition, Processing and Handling System - 05 marks per Year	10		Copy of work order/ Contract along with Certificate of continuous operation (mentioning period) from client.
iii.	Experience in Data collection from FRTU/aggregators and integrating them with the application software hosted in Central Server (Cloud Server)-per system's documentary evidence is work orders/contracts along with completion certificate 05 marks per system.	10		Copy of work order/ Contract along with completion certificate
3	Software Supplier and system Integrator		10	
	Is the bidder an OEM or an authorised dealer/distributor of Software System for capturing data and its handling			
i.	OEM	10		Affidavit regarding the manufacturing of the field RTU
ii.	Authorized dealer/distributor	05		Copy of authorization letter in original from the OEM

4	Manpower Strength		25	
i.	Availability of Technical Staff on the pay roll of the Firm (please upload the organization details duly certified by the Authorized Signatory of the firm)	05		Between 10-20 Persons
		07		Between 20-40 Persons
		10		More than 40 Persons
ii.	Quality of Manpower to be deployed in this project as per SOW	10		Manpower skill and experience documentations
		Qualified System Engineer		
		03		3 years experience
		04		3-5 years experience
		05		5+ years experience
	Qualified Support Engineer	02		2 years experience
		03		2-3 years experience
		05		3+ years experience
5	Presentation on understanding of scope of work and domain expertise.		25	

Table: QCBS 1.0

- i. Each responsive Bid will be attributed a technical score denoted by symbol "T". The technical score shall be out of a maximum of 100 marks.
- ii. If in DGH's opinion, the Technical Bid does not meet the minimum technical specifications & service requirements or is otherwise materially deficient / inconsistent in any other aspect; the Bid shall be declared Technically Evaluated & Non-Responsive and shall not be considered for further evaluation.
- iii. After technical evaluation, DGH will rank the bidders in descending order of their technical scores with the top ranked bidder having the highest technical score. If any bidder is found to be technically inadequate to the requirements of DGH, i.e. if the technical marks are lower than 70, then that bidder's bid would be deemed non-responsive for further evaluation and would not be considered further in the bidding process.
- iv. If in case, after technical evaluation, only one bidder is found to be responsive & eligible, i.e. if the technical marks of only one bidder are more than or equal to 70, the Board will decide an acceptable price band and open Price Bid of the only eligible bidder. If the price bid of the bidder falls within the price band specified by the Board, the bidder will be declared as the SUCCESSFUL BIDDER.

- v. PRESENTATION BY BIDDERS: DGH shall invite the Bidders to make a presentation, at their own cost and expenses, for their product features and execution methodology. The schedule for the presentation along with date and time slot will be communicated to the bidder(s), by DGH at a later date.

C. Commercial Evaluation criteria and Process

NOTE: Documentary proof is to be provided for above (Sl. No. 1 to 3 of Table: QCBS 1.0) in technical bid. Non submission of documentary evidences for above in technical bid will result into “zero” marks.

(a) Evaluation of Financial proposal and award of work

(i) The bidders will be evaluated against relative ranking obtained against the assessment as made in the table above. Agencies securing top three positions will make them technically qualified for opening of price bid. However the decision of the Evaluation committee will be final and binding.

(ii) After Technical evaluation, financial bid will be opened for the top three scorers of technical evaluation. The financial proposal would be evaluated as under:

(iii) An Evaluated Bid Score (B) will be calculated for each responsive bid using the following formula, which permits a comprehensive assessment of the bid price and the technical merits of each bid:

$$B = X * \frac{C \text{ low}}{C} + (1 - X) * \frac{T}{T \text{ high}}$$

Where

C = Quoted Bid Price (Total contract cost including taxes & duties as per Sl No 8 of the Price Format placed as **Annexure-V**)

C low = Lowest of all quoted Bid Prices among the top three ranked bids

T = the total Technical Score awarded to the bid

Thigh = the highest Technical Score achieved by the bid among all responsive bids

X = Weightage for the Price as specified below:

The technical to financial weightage ratio would be 70:30 hence X = 0.30.

(iv) The bid with the highest Evaluated Bid Score (B) among the top three ranked bids shall be termed the Lowest Evaluated Bid and is eligible for Contract award, provided the Bidder was pre-qualified and/or it was found to be qualified to perform the Contract.

(v) In case of a tie in Evaluated Bid Scores (B), bidder with higher technical score will be awarded the Contract.

(vi) DGH reserves the right to negotiate the rates with Lowest Evaluated Bid as specified above and also reserves the right to reject any or all the offers without assigning any reason.

D. General:

1. The BEC overrides all other similar clauses operating anywhere in the Bid Documents.
 2. The bidder/contractor is prohibited to offer any service / benefit of any manner to any employee of DGH and that the contractor may suffer summary termination of contract / disqualification in case of violation.
 3. Onsite inspection will be carried out by DGH's officers / representative /Third Parties at the discretion of the DGH.
-
1. List of all the likely post contract issues and the provisions in the tender document to deal with the same.
 - a) Support of DSF-operators to RTMS Vendor
DGH gets involved in facilitating RTMS Vendor to enter into arrangements with DSF-operators for successful capture of field data and their transmission to RTMS of DGH-Cloud Server.
 - b) Single point responsibility for data capture & transmission from field instruments to FRTU and from FRTU to Cloud Server RTMS Software. It is required to be dealt during MC meetings or during approval of measurement systems in respective FDP.

Appendix-1 to Annexure-II

CHECK LIST

(must be submitted duly ticked, along with the Techno-commercial Bid)

Please Tick (✓) compliance (Yes/No) for the following:

Sl	Particulars	Yes	No
1	Whether "Bid Security" is submitted along with Techno-Commercial Bid		
2	Whether Appendix-1 to Annexure-I (Bid Submission Proforma) duly filled in & signed enclosed with techno-commercial bid.		
3	Whether documentary evidence of work experience by way of (a) copies of relevant contracts and (b) evidence of satisfactory execution of respective contracts indicating the contract number / reference, gross value of the job / service, description of job / service and duration of the contract enclosed with the techno-commercial Bid, as per Annexure-II.		
4	Whether Appendix-7 to Annexure-I (Bidders Past Services (Similar) Proforma) duly filled in & signed enclosed with techno-commercial bid.		
5	Whether audited balance sheets of the bidder's company for last 3 financial years i.e. 2016-17, 2015-16 and 2014-15 are submitted with techno-commercial bid.		
6	Whether Copy of valid registration certificate under GST Law or an undertaking for submission of copy of requisite GST registration certificate along with the first invoice under the contract is enclosed with techno-commercial bid.		
7	Whether Appendix-5 to Annexure-I (Undertakings / Declaration) duly filled in & signed enclosed with techno-commercial bid.		
8	Whether it is ensured that prices are not disclosed in the Techno-Commercial Bid Envelope.		
9	Whether you have taken any exception/deviations to the bid document.?		
10	If "YES" to Sl. 12 above, whether the same is indicated in separate Sheet and submitted with techno-commercial bid.		

Signature of the Bidder
Name _____
Seal of the Company

MODEL CONTRACT AND GENERAL CONTRACT CONDITIONS

(To be signed with the successful bidder)

This CONTRACT is made and entered into on thisday of ...Two thousand and by and between Directorate General of Hydrocarbons having its office at OIDB Bhawan, Tower A, Plot No. 2, Sector – 73, Noida -201 301, India (hereinafter referred to as DGH which expression unless repugnant to the context or meaning hereof shall include its successors, administrators, executors and assignees) on the one part and M/s, a company registered under the companies Act with its Registered office at referred to as the "CONTRACTOR" (which expression unless repugnant to the context or meaning hereof shall include its successors, administrators, executors and permitted assignees) on the other part.

Whereas DGH is desirous of (description of services) for carrying out DGH's operations conforming to specifications as set forth in the Scope of Work at **Annexure-IV** of this Contract.

And Whereas the CONTRACTOR represents that it has the necessary experience for carrying out DGH's operations as referred to herein and has submitted a bid for providing the required services against DGH's Tender No..... all in accordance with the terms and conditions set forth herein and any other reasonable requirements of the DGH from time to time.

And Whereas DGH's has accepted the bid of the CONTRACTOR and has placed Letter of Award vide its letter dated.... On the CONTRACTOR.

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

1.0 DEFINITIONS:

Unless inconsistent with or otherwise indicated by the context, the following terms stipulated in this CONTRACT shall have the meaning as defined hereunder.

1.1 CONTRACT

Shall mean a written CONTRACT signed between DGH and the CONTRACTOR (the successful bidder) including subsequent amendments to the CONTRACT in writing thereto.

1.2 DGH:

Shall mean Directorate General of Hydrocarbons, India, an organization under the Ministry of Petroleum & Natural Gas, Government of India, including its successors, administrators, executors and assignees.

1.3 SITE

Shall mean the place in which the services are to be carried out or places approved by the DGH for the purposes of the CONTRACT together with any other places designated in the CONTRACT as forming part of the site.

1.4 DGH'S SITE REPRESENTATIVE

Shall mean the person or the persons appointed by DGH from time to time to act on its behalf at the site for overall co-ordination, supervision and project management at site.

1.5 CONTRACTOR:

Shall mean any person/ persons/ firm/ company etc. whose bid has been accepted by DGH and to whom work has been awarded under this contract and shall include its authorized representatives, successors and permitted assignees.

1.6 SUB-CONTRACT:

Shall mean order/ contract placed by the CONTRACTOR for any portion of the CONTRACT or work sublet with necessary written consent of DGH on third party. Such sub-letting shall not relieve the CONTRACTOR from any of its obligation, duty or responsibility under the CONTRACT.

1.7 SUB-CONTRACTOR:

Shall mean any person or persons or firm or their legal representatives, successors, assignees to whom part of CONTRACT has been sublet by the CONTRACTOR after necessary written consent of DGH.

1.8 CONTRACTOR'S REPRESENTATIVE

Shall mean such person/or persons duly appointed representative at the site and base as the CONTRACTOR may designate in writing to the DGH as having authority to act for the CONTRACTOR in matters affecting the work and to provide the requisite services.

1.9 CONTRACT PRICE

Shall mean the sum accepted or the sum calculated in accordance with the rates accepted by DGH and amendments thereof, and shall include all fees, registration and other charges paid to statutory authorities without any liability on DGH for any of these charges. The prices will remain firm during currency of the CONTRACT unless specifically agreed to in writing by DGH.

1.10 (a) **GST** - means any tax imposed on the supply of goods and/or services under GST Law.

1.10 (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.

1.10 (c) **GST Law** - means IGST Act 2017, CGST Act 2017, UTGST Act, 2017 and SGST Act, 2017 and all related ancillary Rules and Notifications issued in this regard from time to time.

1.11 DAY

Shall mean a calendar day of twenty-four (24) consecutive hours beginning at 0000 hours with reference to local time at the site.

1.12 EQUIPMENT/MATERIALS/GOODS:

Shall mean and include any equipment, machinery, instruments, stores, goods which CONTRACTOR is required to provide to the DGH for/under the CONTRACT and amendments thereto.

1.13 WORKS / OPERATIONS:

Shall mean all work to be performed by the CONTRACTOR as specified in the Scope of Work under this CONTRACT.

1.14 GUARANTEE:

Shall mean the period and other conditions governing the warranty/guarantee of the works as provided in the CONTRACT.

1.15 MOBILISATION:

Mobilization shall mean placing of equipments fully manned, material, machine, goods and all manpower as provided in Scope of Work at the Site in readiness to commence work as envisaged under the Contract and duly certified by the DGH's authorized representative. Mobilization shall be deemed to be completed on the date and time when Contractor's equipment, material, machine goods and all manpower as provided in Scope of Work are placed at the Site in readiness to commence work as envisaged under the Contract and duly certified by the DGH's authorized representative

1.16 DEMOBILISATION:

Shall mean the removal of all things forming part of the mobilization from the site designated by DGH. The date and time of DGH's acceptance shall be treated as the date and time of demobilization.

1.17 DRAWINGS:

Shall mean and include all Engineering sketches, general arrangements/ layout drawings, sectional plans, all elevations, etc. related to the CONTRACT together with modification and revision thereto.

1.18 SPECIFICATIONS:

Shall mean and include detailed description, statements to technical data, performance characteristics, and standards (Indian as well as International) as applicable and as specified in the CONTRACT.

1.19 INSPECTORS:

Shall mean any person or outside Agency nominated by DGH to inspect equipment, materials and services, if any, in the CONTRACT stage wise as well as final as per the terms of the CONTRACT.

1.20 TESTS:

Shall mean such process or processes to be carried out by the CONTRACTOR as are prescribed in the CONTRACT considered necessary by DGH or their representative in CONTRACT to ascertain quality, workmanship, performance and efficiency of equipment or services thereof.

1.21 FACILITY:

Shall mean all property of the DGH owned or hired by DGH.

1.22 THIRD PARTY

Shall mean any group, person or persons who may be engaged in activity associated with the work specified but who shall remain at an arm's length from the work and who shall not have a direct responsibility or authority under the terms of this CONTRACT.

1.23 APPROVAL:

Shall mean and include the written consent duly signed by DGH or their representative in respect of all documents, drawings or other particulars in relation to the CONTRACT

1.24 SINGULAR/ PLURAL WORDS:

Save where the context otherwise requires, words imparting singular number shall include the plural and vice versa and words imparting neutral gender shall include masculine or feminine gender and vice versa.

1.25 GROSS NEGLIGENCE

Shall mean any act or failure to act (whether sole, joint or concurrent) by a person or entity which was intended to cause, or which was in reckless disregard of or wanton indifference to, avoidable and harmful consequences such person or entity knew, or should have known, would result from such act or failure to act. Notwithstanding the foregoing, Gross negligence shall not include any action taken in good faith for the safeguard of life or property,

1.26 WILLFUL MISCONDUCT

Shall mean intentional disregard of good and prudent standards of performance or proper conduct under the CONTRACT with knowledge that it is likely to result in any injury to any person or persons or loss or damage of property.

2.0 SCOPE OF WORK / CONTRACT:

Scope of the CONTRACT shall be as defined in the CONTRACT, specifications and Annexures thereto at **Annexure-IV**.

3.0 EFFECTIVE DATE, MOBILISATION TIME, DATE OF COMMENCEMENT OF THE CONTRACT AND DURATION OF CONTRACT:

3.1 EFFECTIVE DATE OF CONTRACT : The contract shall become effective as of the date, DGH notifies the successful bidder, in writing through Letter of Awards (LoA) that it has been awarded the contract. This date of issue of LoA shall be treated as the Effective Date of Contract.

3.2 MOBILISATION PERIOD: The mobilization of equipment, personnel, should be completed by Contractor within the stipulated period under the contract. Mobilization shall be deemed to be completed when Contractor's equipment and manpower are placed at the designated location in readiness to commence work as envisaged under the Contract duly certified by the DGH's authorized representative.

3.3 DATE OF COMMENCEMENT OF CONTRACT: The date on which the mobilization is completed in all respects is treated as **date of commencement of Contract**.

3.4 DURATION OF CONTRACT: The contract shall be for the period as indicated in the **Scope of Work**.

4.0 GENERAL OBLIGATIONS OF CONTRACTOR: Contractor shall, in accordance with and subject to the terms and conditions of this Contract:

4.1 Perform the work described in the Scope of Work / Terms of Reference (**Annexure-IV**) in most competent manner both technically & systematically and also in economic and cost effective manner.

4.2 Except as otherwise provided in the Terms of Reference and the special Conditions of the contract provide all manpower as required to perform the work.

4.3 Perform all other obligations, work and services which are required by the terms of this contract or which reasonably can be implied from such terms as being necessary for the successful and timely completion of the work.

4.4 Contractor shall be deemed to have satisfied himself before submitting his bid as to the correctness and sufficiency of its bid for the services required and of the rates and prices quoted,

which rates and prices shall, except insofar as otherwise provided, cover all its obligations under the contract.

4.5 Contractor shall give or provide all necessary supervision during the performance of the services and as long thereafter within the warranty period as DGH may consider necessary for the proper fulfilling of Contractor's obligations under the contract.

5.0 GENERAL OBLIGATIONS OF DGH: DGH shall, in accordance with and subject to the terms and conditions of this contract:

5.1 Pay Contractor in accordance with terms and conditions of the contract.

5.2 Allow Contractor and his personnel access, subject to normal security and safety procedures, to all areas as required for orderly performance of the work.

5.3 Perform all other obligations required of DGH by the terms of the contract.

6.0 PERSONNEL TO BE DEPLOYED BY CONTRACTOR

6.1 Contractor warrants that they will provide competent, qualified and sufficiently experienced personnel to perform the work correctly and efficiently and shall ensure that such personnel observe applicable DGH and statutory safety requirement. Upon DGH's written request, Contractor, entirely at their own expense, shall remove immediately, from assignment to the work, any personnel of the Contractor determined by the DGH to be unsuitable and shall promptly replace such personnel with personnel acceptable to the DGH without affecting DGH's work. The replacement key personnel must have the requisite qualification and experience as per Scope of Work / Terms of Reference (**Annexure-IV**) and shall submit their credentials along with their recent photographs to DGH for approval of DGH.

6.0 The Contractor shall be solely responsible throughout the period of this contract for providing all requirements of their personnel including but not limited to their transportation to & fro Noida / field site, en-route/local boarding, lodging, medical attention etc. DGH shall have no liability or responsibility in this regard.

6.1 Contractor's key personnel shall be fluent in English language (both writing and speaking).

7.0 WARRANTY AND REMEDY OF DEFECTS

7.1 Contractor warrants that they shall perform the work in a first class, workmanlike, and professional manner and in accordance with the highest degree of quality, efficiency and current state of the art technology/oil field practices and in conformity with all specifications, standards and drawings set forth or referred to in the Scope of Work / Terms of Reference and with instructions and guidance which DGH may, from time to time, furnish to the Contractor.

7.2 Should DGH discover at any time during the tenure of the Contract or within 3(three) months after completion of the operations that the Work does not conform to the foregoing warranty, Contractor shall after receipt of notice from DGH, promptly perform any and

7.3 All corrective work required to make the services conform to the Warranty. Such corrective Work shall be performed entirely at Contractor's own expenses. If such corrective Work is not performed within a reasonable time, DGH, at its option may have such remedial Work performed by others and charge the cost thereof to Contractor which the Contractor must pay promptly. In case Contractor fails to perform remedial work, or pay promptly in respect thereof, the performance security shall be forfeited.

8.0 NOTICES AND ADDRESSES:

For the purposes of this CONTRACT, the addresses of the parties will be as follows and all correspondence and notices in relations to the present CONTRACT sent to the parties at the addresses mentioned below shall be deemed to be sufficient service of notice on the parties. All such notices as will as reports, invoices and other relevant material shall be addressed to the parties as per the address given below:

8.1 Directorate general of Hydrocarbons

(a) For CONTRACT related communication:

H O D (MM)
Directorate General of Hydrocarbons,
OIDB Bhawan, Tower A, Plot No. 2, Sector – 73, Noida -201 301, India.
Fax : +91 120 2472049

For reports and payments:

(b) HoD (Production)
Directorate General of Hydrocarbons,
OIDB Bhawan, Tower A, Plot No. 2, Sector – 73, Noida -201 301, India.
Fax : +91 120 2472049

8.2 CONTRACTOR'S REGISTERED OFFICE AND ADDRESS

.....
.....
.....
Fax:.....

9.0 DUTIES AND POWER /AUTHORITY :

9.1 The duties and authorities of the DGH's site representative are to act on behalf of the DGH for:

- i. Overall supervision, co-ordination and Project Management at site
- ii. Proper utilization of equipment and services.
- iii. Monitoring of performance and progress
- iv. Commenting/ countersigning on reports made by the CONTRACTOR's representative at site in respect of works, receipts, consumption etc. after satisfying himself with the facts of the respective cases.
- v. He shall have the authority, but not obligation at all times and any time to inspect/test/examine/ verify any equipment machinery, instruments, tools, materials, personnel, procedures and reports etc. directly or indirectly pertaining to the execution of the work. However this shall not construe to imply an acceptance by the inspector. Hence, the overall responsibility of quality of work shall rest solely with the CONTRACTOR.
- vi. Each and every document emerging from site in support of any claim by the contractor has to have the countersignature/ comments of the DGH's representative/engineer without which no claim will be entertained by the DGH.

9.2 CONTRACTOR's representative:

- i. The CONTRACTOR's representative shall have all the powers requisite for the performance of the works.
- ii. He shall liaise with DGH's representative for the proper co-ordination and timely completion of the works and on any matter pertaining to the works.

- iii. He will extend full co-operation to DGH's representative/inspector in the manner required by them for supervision/inspection/observation of equipment, material, procedures, performance, reports and records pertaining to works.
- iv. To have complete charge of CONTRACTOR's personnel engaged in the performance of the work and to ensure compliance of rules and regulations and safety practice.

10.0 CONTRACT DOCUMENT :

10.1 Governing language:

The governing language for the CONTRACT shall be English. All CONTRACT documents and all correspondence and communication to be given and all other documentation to be prepared and supplied under the CONTRACT shall be written in English and the CONTRACT shall be construed and interpreted in accordance with English language.

10.2 Entire Agreement :

The CONTRACT constitutes the entire agreement between the DGH and the CONTRACTOR with respect to the subject matter of the CONTRACT and supersedes all communication, negotiations and agreement (whether written or oral) of the parties with respect thereto made prior to the date of this agreement. The right of either party to require strict performances will not be affected by any previous waiver or course of dealing. Neither this Agreement nor any modification will be binding on a party unless signed by an authorised representative of CONTRACTOR and DGH.

10.3 Modification in CONTRACT:

All modifications leading to changes in the CONTRACT with respect to technical and/or commercial aspects, including terms of delivery, shall be considered valid only when accepted in writing by DGH by issuing amendment to the CONTRACT. DGH shall not be bound by any printed conditions, provisions in the CONTRACTOR's BID, forms of acknowledgement of CONTRACT, invoice, packing list and other documents which purport to impose any condition at variance with or supplement to CONTRACT.

10.4 Assignment:

The CONTRACTOR shall not, save with the previous consent in writing of the DGH, sublet/SUB-CONTRACT, transfer or assign the CONTRACT or any part thereof in any manner whatsoever. However, such consent shall not relieve the CONTRACTOR from any obligation, duty or responsibility under the CONTRACT and CONTRACTOR shall be fully responsible for the services hereunder and for the execution and performance of the CONTRACT.

10.5 Waivers and amendments :

Waivers: - It is fully understood and agreed that none of the terms and conditions of this CONTRACT shall be deemed waived by either party unless such waiver is executed in writing only by the duly authorised agents or representative 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.

Amendments: - It is agreed that CONTRACTOR shall carry out work in accordance with the completion program to be furnished by the DGH which may be amended from time to time by reasonable modifications as DGH deems fit.

11.0 REMUNERATION AND TERMS OF PAYMENT

The payment shall be released as per terms mentioned in Special conditions of Contract

11.1 DGH shall pay to CONTRACTOR for the services, to be provided by the CONTRACTOR as per the Scope of Work (**Annexure-III**), as per the price Schedule at Annexure-V. The rates payable, shall be firm during the entire CONTRACT period, including extension period, if any.

11.2 All Bills along with relevant supporting documents shall be submitted in triplicate addressed to the **HoD (Production)**

11.3 Invoices with original supporting documents duly countersigned by the DGH's representative/ engineer wherever applicable will be submitted as per the payment schedule (Refer Special Conditions of Contract) by the CONTRACTOR to DGH and payment shall be made within 21 (twenty one) calendar days from the date of receipt of invoice at the above office.

The original invoice should also accompany the following documents/details:

1) Alongwith first invoice:

Following documents / details should be invariably furnished alongwith the first invoice:

- a) Copy of valid registration certificate under the GST Law.
- b) Particulars required for making payments through 'Electronic Payment Mechanism', in accordance with the clause on 'MODE OF PAYMENT' appearing in Annexure-I (i.e. 'Instructions to bidders') of bid document.
- c) Mobile No. (Optional).
- d) e-mail ID.

11.1 DGH's right to question the amounts claimed

Payment of any invoice shall not prejudice the right of the DGH to question the allowability under this Contract of any amounts claimed therein, provided DGH, within one year beyond the expiry of each CONTRACT year, delivers to CONTRACTOR, written notice identifying any item or items which it questions and specifying the reasons therefore. Should DGH so notify CONTRACTOR, such adjustment shall be made as the parties shall agree. These provisions shall be reciprocal for similar rights to the CONTRACTOR.

The CONTRACTOR shall provide on demand a complete and correct set of records pertaining to all costs for which it claims reimbursement from DGH and as to any payment provided for hereunder, which is to be made on the basis of CONTRACTOR's costs.

12.0 CLAIMS, TAXES & DUTIES, FEES AND ACCOUNTING

12.1 Claims

CONTRACTOR agrees to pay all claims, taxes and fees for equipment, labour, materials, services and supplies to be furnished by it hereunder and agrees to allow no lien or charge resulting from such claims to be fixed upon any property of DGH. DGH may, at its option, pay and discharge any liens or overdue charges for CONTRACTOR's equipment, labour, materials, services and supplies under this CONTRACT and may thereupon deduct the amount or amounts so paid from any sum due, or thereafter become due, to CONTRACTOR hereunder.

12.2 Notice of claims

CONTRACTOR or DGH, as the case may be, shall promptly give the other, notice in writing of any claim made or proceeding commenced for which that party is entitled to indemnification under the CONTRACT. Each party shall confer with the other concerning the defense of any such claims or proceeding, shall permit the other to be represented by counsel in defense thereof, and shall

not effect settlement of or compromise any such claim or proceeding without the other's written consent.

12.3 Taxes

CONTRACTOR, unless specified otherwise in the CONTRACT, shall bear all tax liabilities, duties, Govt. levies etc. including GST, Customs Duty, Corporate and Personnel Taxes levied or imposed on the CONTRACTOR on account of payments received by it from the DGH for the work done under this CONTRACT. It shall be the responsibility of the CONTRACTOR to submit to the concerned Indian authorities, the returns and all other concerned documents required for this purpose and to comply in all respects with the requirements of the laws in this regard, in time.

12.3.1 The rates quoted by the CONTRACTOR is inclusive of all taxes, duties and levies. However, CONTRACTOR is 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, DGH will have no liability to reimburse the difference in the duty/ tax, if the finally assessed amount is on the higher side and DGH will have to right to recover the difference in case the rate of duty/ taxes finally assessed is on the lower side. Further, it is the responsibility of the CONTRACTOR to make all possible efforts to make their accounting / IT system GST compliant in order to ensure availability of Input Tax Credit (ITC) to DGH.

12.3.2 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 CONTRACTOR 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 CONTRACTOR emerges as lowest CONTRACTOR after such loading, in the event of order on that CONTRACTOR, taxes mentioned by DGH on the Purchase Order/ Contracts will be binding on the CONTRACTOR.

12.3.3 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-Profitteering Measure vide Section 171 of the CGST Act, 2017. Accordingly, for supplies made under GST, the CONTRACTOR should confirm that benefit of lower costs has been passed on to DGH by way of lower prices/taxes and also provide details of the same as applicable. DGH reserves the right to examine such details about costs of inputs/input services of the CONTRACTOR to ensure that the intended benefits of GST have been passed on to DGH.

12.3.4 DGH shall declare the value of free issue of materials and services, if any, involved in the execution of the contract. The Contractor has considered the same while working out the GST liability, if any. Further in cases where GST is leviable on any facilities provided by DGH and used by CONTRACTOR and the consideration for which is recovered by DGH in the form of reduction in the invoice raised by CONTRACTOR then DGH will raise GST invoices on such transactions and the same will be reimbursed by bidders.

12.3.5 CONTRACTOR agrees 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 DGH in the customized format shared by DGH in order to enable DGH to update its database etc. that may be necessary to match the invoices on GSTN common portal and enable DGH to claim input tax credit in relation to any GST payable under this Contract or in respect of any supply under this Contract.

12.3.6 In case Input Tax Credit of GST is denied or demand is recovered from DGH by the Central / State Authorities on account of any non-compliance by CONTRACTOR, including non-payment of GST charged and recovered, the CONTRACTOR shall indemnify DGH 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. DGH, at its discretion, may also withhold/recover such disputed amount from the pending payments of the CONTRACTOR.

12.3.7 GST liability, if any, on account of supply of free samples against any tender shall be to bidder's account

12.4 Customs duty: - The CONTRACTOR shall bear all Customs Duty for import of equipments/spares/consumables and any other material required as per CONTRACT. DGH will not have any liability in this regard.

12.5 Personnel taxes

The CONTRACTOR shall bear all personnel taxes levied or imposed on its personnel, SUB-CONTRACTOR's personnel, vendors, consultants etc. on account of payment received under this CONTRACT. Tax shall be deducted at source as per Indian Tax Laws.

12.6 Corporate taxes

The CONTRACTOR shall bear all Corporate taxes, levied or imposed on the CONTRACTOR on account of payments received by it from the DGH for the work done under this CONTRACT.

12.7 If it is so required by the applicable laws in force at the time of payment, DGH shall withhold from the amount due to the CONTRACTOR and pay to the Indian Tax authorities any tax levied or assessed on account of the CONTRACTOR's operations pursuant to this CONTRACT.

12.8 For the lapse, if any on the part of the CONTRACTOR and consequential penal action taken by the Tax department, the DGH shall not take any responsibility whether financial or otherwise.

13.0 PERFORMANCE

The CONTRACTOR shall undertake to perform all services under this CONTRACT with all-reasonable skill, diligence and care in accordance with sound industry practice to the satisfaction of the DGH and accept full responsibility for the satisfactory quality of such services as performed by them. Any defect, deficiencies noticed in the CONTRACTOR's service will be promptly remedied by the CONTRACTOR within 7 days upon the receipt of written notice from the DGH to improve their performance failing which the DGH may terminate the CONTRACT by giving the CONTRACTOR **14 (fourteen)** days written notice.

14.0 PERFORMANCE BOND

14.1 The Contractor has furnished to DGH a Bank Guarantee No. _____ dated _____ issued by _____ for _____ (being 10 % of estimated Contract Price for 1st year) valid till _____ towards performance under this CONTRACT. In the event of any extension of the Contract period, Bank Guarantee should be extended by the period equivalent to the extended period of the contract. The bank guarantee will be discharged by DGH not later than 30 days following its expiry.

14.2 In the event CONTRACTOR fails to honour any of the commitments entered into under this agreement and /or in respect of any amount due from the CONTRACTOR to the DGH, the DGH shall have unconditional option under the guarantee to invoke the above bank guarantee and claim the amount from the bank. The bank shall be obliged to pay the amount to the DGH on demand.

15.0 DISCIPLINE

CONTRACTOR shall carry out operations hereunder with due diligence and in a safe and workman like manner according to good international oilfield practice. CONTRACTOR shall maintain strict discipline and good CONTRACT among its employees and its SUB-CONTRACTOR's employees and shall abide by and conform to all rules and regulations promulgated by the DGH governing the operations. Should DGH feel that the conduct of any of CONTRACTOR/SUB-CONTRACTOR's employees is detrimental to DGH's interest, the DGH shall have the unqualified right to request for the removal of such employee either for incompetence, unreliability, misbehavior, security reasons etc. while on or off the job. The CONTRACTOR shall comply with any such request to remove such personnel at CONTRACTOR's expense unconditionally. The CONTRACTOR will be allowed a maximum of 7 (seven) working days to replace the person by competent qualified person at CONTRACTOR's cost.

16.0 SAFETY AND LABOUR LAWS

CONTRACTOR shall comply with the provision of all laws including Labour Laws, rules, regulations and notifications issued thereunder from time to time. All safety and labour laws enforced by statutory agencies and by DGH shall be applicable in the performance of this CONTRACT and CONTRACTOR shall abide by these laws.

CONTRACTOR shall take all measures necessary or proper to protect the personnel, work and facilities and shall observe all reasonable safety rules and instructions. DGH's employee also shall comply with safety procedures/policy.

The CONTRACTOR shall report as soon as possible any evidence which may indicate or is likely to lead to an abnormal or dangerous situation and shall take all necessary emergency control steps to avoid such abnormal situations.

16.1 Verification of character and antecedents of Contractual Manpower

In all contracts involving deployment of Contractor's manpower within DGH's premises like plants, offices, installations, rigs, stock yards etc., the Contractor shall submit the following documents to DGH prior to start of work:

- (i) Undertaking from the Contractor that the character and antecedents of the person(s) proposed to be deployed by them is/are impeccable.
- (ii) Undertaking from the Contractor that they have scrutinized the previous working of the person(s) proposed to be deployed by them and there is nothing adverse as regards his/her character and antecedent.

(iii) Along with the above mentioned undertakings, the Contractor will provide certified photocopies of Police verification certificates in respect of persons proposed to be deployed by them, for inspection by the authorized representative of DGH. The Contractor has to obtain Police verification report (signed by an officer equivalent to DSP rank of higher) from the area where the person(s) to be deployed has/have been residing since the last five years. In case the person concerned has not resided at a place for five years at a stretch, Police verification reports should be obtained from that area where the person(s) has/ have stayed earlier during the last five years.

17.0 SECRECY

CONTRACTOR shall during the tenure of the CONTRACT and at anytime thereafter maintain in the strictest confidence all information relating to the work and shall not, unless so authorised in writing by DGH, divulge or grant access to any information about the work or its results and shall

prevent anyone becoming acquainted with either through CONTRACTOR or its personnel or authorised SUB-Contractors or agents. CONTRACTOR shall not avail of the information obtained in the course of work hereunder in any manner, whatsoever, nor shall CONTRACTOR divulge any information about the location of the work area of part thereof. CONTRACTOR shall not also destroy any report, note and technical data relating to the work and not required by the DGH. The obligation is continuing one and shall survive after the completion/ termination of this agreement.

18.0 STATUTORY REQUIREMENTS

During the tenure of this CONTRACT nothing shall be done by the CONTRACTOR in contravention of any law, act and/or rules/regulations, thereunder or any amendment thereof.

19.0 INSURANCE

A) CONTRACTOR shall, at his own expense, arrange appropriate insurance to cover all risks assumed by the CONTRACTOR under this CONTRACT in respect of its personnel deputed under this CONTRACT as well as CONTRACTOR's equipment, tools and any other belongings of the CONTRACTOR or their personnel during the entire period of their engagement in connection with this CONTRACT. DGH will have no liability on this account.

B) Waiver of subrogation: All insurance policies of the CONTRACTOR with respect to the operations conducted hereunder as set forth in **clause 16** hereof, shall be endorsed by the underwriter in accordance with the following policy wording:-

“ The insurers hereby waive their rights of subrogation against any individual, DGH, affiliates or assignees for whom or with whom the assured may be operating to the extent of the Contractual indemnities undertaken by the CONTRACTOR”.

C) Certificate of Insurance: Before commencing performance of the CONTRACT, CONTRACTOR shall upon request furnish DGH with certificates of insurance indicating (1) kinds and amounts of insurance as required herein (2) insurance corporation or companies carrying the aforesaid coverage (3) effective and expiry dates of policies (4) that DGH shall be given thirty (30) days written advance notice of any material change in the policy (5) waiver of subrogation endorsement has been attached to all policies and (6) the territorial limits of all policies. If any of the above policy expire or/ are cancelled during the term of this CONTRACT and CONTRACTOR fails for any reason to renew such policies, then DGH may replace same and charge the cost thereof to CONTRACTOR. Should there be lapse in any insurance required to be carried out by CONTRACTOR hereunder for any reason, losses resulting therefrom shall be to the sole account of the CONTRACTOR. Such insurance shall be effected within Insurance Company incorporated and registered in India or jointly with a Company of International repute and an Insurance Company incorporated and registered in India.

D) Deductible:- That portion of any loss not covered by insurance provided for in this article solely by reason of deductible provision in such insurance policies shall be to the account of the CONTRACTOR.

E) CONTRACTOR shall require all of its SUB-Contractors to provide such of the foregoing insurance cover as the CONTRACTOR is obligated to provide under this CONTRACT.

20.0 INDEMNITY AGREEMENT

20.1 INDEMNITY BY CONTRACTOR

Unless otherwise specified elsewhere in this CONTRACT, CONTRACTOR shall indemnify and keep indemnified DGH, its CONTRACTORS (other than the CONTRACTOR) and/or sub-

CONTRACTORS and its/their employees from all actions, proceedings, suits, claims, demands, liabilities, damages, losses, costs, charges, expenses (including without limitation, wreck or debris, removal costs, where wreck or debris removal is ordered by a competent authority) judgments and fines arising out of or in the course of or caused by the execution of work under the CONTRACT or other obligations hereunder directly or indirectly associated herewith and or arising from :

a) personal injury, illness or death of :

(i) any of CONTRACTOR's or sub CONTRACTOR's personnel (even if caused by or contributed to by the negligence or fault of DGH); and

(ii) subject to clause **20.2 (a) (i)** any other person to the extent the injury, illness or death is caused by the negligence or fault of the CONTRACTOR or CONTRACTOR's personnel or sub CONTRACTORS or sub CONTRACTOR's personnel and

b) loss or damage to :

(i) any property owned, hired or supplied by CONTRACTOR or CONTRACTOR's personnel or sub CONTRACTORS or sub CONTRACTOR's personnel including Constructional Plant (even if caused by, or contributed to by, the negligence or fault of DGH); or

(ii) subject to clause **20.2 (b) (i)** any other property to the extent the loss or damage is caused by the negligence or fault of the CONTRACTOR or CONTRACTOR's personnel or sub CONTRACTORS or sub CONTRACTOR's personnel.

20.2 Indemnity by DGH

Unless otherwise specified elsewhere in this CONTRACT, DGH shall indemnify and keep indemnified CONTRACTOR (which expression in this clause includes, unless the context otherwise requires, SubCONTRACTORS of any tier and their employees) from all actions, proceedings, suits, claims, demands, liabilities, damages, losses, costs, charges, expenses and fines arising from :

a) personal injury, illness or death of

(i) any employee of the DGH (even if caused by or contributed to by the negligence or fault of CONTRACTOR);

(ii) subject to clause **20.1 (a) (i)** any other person to the extent that the injury, illness or death is caused by the negligence or fault of DGH ; and

b) any loss or damage to :

(i) any property owned, hired or supplied by DGH (even if caused by or contributed to by the negligence or fault of CONTRACTOR); except to the extent that such property is in the care or custody of CONTRACTOR in connection with the work under the CONTRACT.

(ii) Subject to clause **20.1 (b) (i)** any loss or damage to any other property to the extent the loss or damage is caused by the negligence or fault of DGH.

21.0 TERMINATION

21.1 Termination on expiry of the CONTRACT

This Agreement shall be deemed to have been automatically terminated on the expiry of the CONTRACT period unless the DGH has exercised its option to extend this CONTRACT in accordance with the provisions, if any, of this CONTRACT.

21.2 Termination on account of force majeure

Either party shall have the right to terminate this CONTRACT on account of Force Majeure, as set forth in **clause 26**.

21.3 Termination on account of insolvency

In the event the CONTRACTOR or its collaborator at any time during the term of this Agreement becomes insolvent or makes a voluntary assignment of its assets for the benefit of creditors or is adjudged bankrupt, then the DGH shall, by a notice in Writing have the right to terminate this CONTRACT and all the CONTRACTOR's rights and privileges hereunder, shall stand terminated forthwith.

21.4 Termination for unsatisfactory performance

If the DGH considers that the performance of the CONTRACTOR is unsatisfactory or, not up to the expected standard, the DGH shall notify the CONTRACTOR in writing and specify in detail the cause of such dissatisfaction. The DGH shall have the option to terminate this Agreement by giving **14 days** notice in writing to the CONTRACTOR, if, CONTRACTOR fails to comply with the requisitions contained in the said written notice issued by the DGH.

21.5 Termination for delay in mobilisation

Successful bidder shall be required to mobilise complete equipment along with crew and collection of data for commencement of services at the specified site within the time period stipulated in the Forwarding Letter of this Bid Document. If the CONTRACTOR (successful bidder) fails to mobilise as above, DGH shall have, without prejudice to any other clause of the CONTRACT, the right to terminate the contract.

21.6 If at any time during the term of the Contract, breakdown of Contractor's equipment results in Contractor being unable to perform their obligations hereunder for a period of 15 successive days, DGH at its option may terminate this Contract in its entirety without any further right or obligation on the part of the DGH except for the payment of money then due. No notice shall be served by the DGH under the condition stated above.

21.7 Notwithstanding any provisions herein to the contrary, the Contract may be terminated at any time by the DGH on giving 30 (thirty) days written notice to the Contractor due to any other reason not covered under the above **clause from 21.1 to 21.6** and in the event of such termination the DGH shall not be liable to pay any cost or damage to the Contractor except for payment for services as per the Contract upto the date of termination.

21.8 In the event of termination of contract, DGH will issue Notice of termination of the contract with date or event after which the contract will be terminated. The contract shall then stand terminated and the Contractor shall demobilise their personnel & materials.

21.9 Consequences of termination

21.9.1 Upon termination of the Contract, Contractor shall return to DGH all of DGH's items, which are at the time in Contractor's possession.

21.9.2 In all cases of termination herein set forth, the obligation of the DGH to pay shall be limited to the period up to the date of termination. Notwithstanding the termination of this

Agreement, the parties shall continue to be bound by the provisions of this Agreement that reasonably require some action or forbearance after such termination.

21.9.3 In case of termination of Contract herein set forth, except under **21.1, 21.2 and 21.7**, following actions shall be taken against the Contractor ;

(i) DGH shall conduct an inquiry against the Contractor and consequent to the conclusion of the inquiry, if it is found that the fault is on the part of the contractor, then they shall be put on holiday [i.e. neither any tender enquiry will be issued to such a Contractor by DGH against any type of tender nor their offer will be considered by DGH against any ongoing tender(s) where contract between DGH and that particular Contractor (as a bidder) has not been concluded] for a period of two years from the date the order for putting the contractor on holiday is issued. However, the action taken by DGH for putting that contractor on holiday shall not have any effect on other contract(s), if any with that contractor which shall continue till expiry of their term(s).

(ii) Pending completion of the enquiry process for putting the Contractor on holiday, DGH shall neither issue any tender enquiry to the defaulting Contractor nor shall consider their offer in any ongoing tender.

22.0 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.

23.0 WITHHOLDING

23.1 DGH may at its absolute discretion withhold or nullify its obligations to pay the whole or any part of the amount due to the Contractor on account of subsequently discovered evidence of loss/ damages caused to the DGH by the contractor on account of:

23.1.1 Non-completion of contracted work to the absolute satisfaction of the DGH or its duly appointed representative/agent.

23.1.2 Contractor's un-cleared debt arising out of execution of the Contract.

23.1.3 Defective work not remedied by the Contractor.

23.1.4 Unsettled claims by any of the sub-contractor/s appointed by the Contractor or by any other third party claiming through the contractor or on the basis of any reasonable evidence indicating probable filing of such claims against the Contractor.

23.1.5 Any failure by the Contractor to fully reimburse the DGH in terms of the indemnification provisions of the Contract. Where, during the process of the work, the Contractor allows any indebtedness to accrue for which DGH may be held to be primarily or contingently liable or ultimately responsible for its discharge and where the Contractor fails to pay and discharge such indebtedness, within five days of being called upon to do so, then DGH may during the period for which indebtedness shall remain unpaid, be entitled to withhold a sum equal to the amount of such unpaid indebtedness. When all the above grounds for withholding payments are removed, the payments shall thereafter be made for amounts so withheld.

23.1.6 Withholding will also be effected on account of the following :-

- (i) Garnishee order issued by a Court of Law in India.
- (ii) Income tax deductible at source according to Law prevalent from time to time in the country.

- (iii) Any obligation of Contractor which by any Law prevalent from time to time to be discharged by DGH in the event of Contractor's failure to adhere to such Laws.
- (iv) Any payment due from Contractor in respect of any unauthorized imports.

24.0 CHANGE IN LAW

24.1 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 date of submission of Price Bid or revised price bid, if any, for this CONTRACT and which results in increased cost of the works under the CONTRACT through increased liability of taxes, (other than personnel and Corporate taxes), duties, the CONTRACTOR shall be indemnified for any such increased cost by the DGH subject to the production of documentary proof to the satisfaction of the DGH 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 DGH.

24.2 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 date of submission of Price Bid or revised price bid, if any, for this CONTRACT and which results in any decrease in the cost of the works through reduced liability of taxes, (other than personnel and Corporate taxes) duties, the CONTRACTOR shall pass on the benefits of such reduced cost, taxes or duties to the DGH, to the extent which is directly attributable to such introduction of new legislation or change or amendment as mentioned above.

24.3 All duties, taxes (except where otherwise expressly provided in the Contract) as may be levied / imposed in consequences of execution of the Works/Services or in relation thereto or in connection therewith as per the Acts, Laws, Rules, Regulations in force on the date of submission of Price Bid or revised price bid, if any, for this CONTRACT shall be to CONTRACTOR's account. Any increase / decrease in such duties, taxes after the date of submission of price bid or revised price bid, if any, but within the contractual completion / mobilization date as stipulated in the CONTRACT will be to the account of DGH.

24.4 Any increase in the duties and taxes after the contractual completion / mobilization date during the extended period will be to the contractor's account, where delay in completion / mobilization period is attributable to the CONTRACTOR. However, any decrease of duties and taxes after the contractual completion / mobilization date will be to DGH's account.

24.5 The Contract Price and other prices given in the Price Format are based on the applicable tariff as indicated by the CONTRACTOR in the Price Format. In case this information subsequently proves to be wrong, incorrect or misleading, DGH will have no liability to reimburse/pay to the CONTRACTOR the excess duties, taxes, fees, if any finally levied / imposed by the concerned authorities. However, in such an event, DGH will have the right to recover the difference in case the rate of duty/tax finally assessed is on the lower side.

24.6 Notwithstanding the provision contained in clause **24.1 to 24.4** above, the DGH shall not bear any liability in respect of :

- (i) Personal taxes on the personnel deployed by CONTRACTOR, his sub-contractor / sub-sub contractors and Agents etc.
- (ii) Corporate taxes and Fringe benefit tax in respect of contractor 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 CONTRACTOR.

25.0 FORCE MAJEURE

In the event of either party being rendered unable by Force Majeure to perform any obligation required to be performed by them under the CONTRACT, the relative obligation of the party affected by such Force Majeure shall be suspended for the period during which such cause lasts.

For the purpose of this contract, the term Force Majeure means any cause or event, other than the unavailability of funds, whether similar to or different from those enumerated herein, lying beyond the reasonable control of, and unanticipated or unforeseeable by, and not brought about at the instance of, the Party claiming to be affected by such event, or which, if anticipated or foreseeable, could not be avoided or provided for, and which has caused the non performance or delay in performance. Without limitation to the generality of the foregoing, the term Force Majeure shall include natural phenomenon or calamities, earth quakes, typhoons, fires, wars declared or undeclared, hostilities, invasions, blockades, riots, strikes, insurrection and civil disturbances but shall not include unavailability of funds.

Upon the occurrence of such cause and upon its termination, the party alleging that it has been rendered unable as aforesaid thereby, shall notify the other party in writing, the beginning of the cause amounting to Force Majeure as also the ending of the said cause by giving notice to the other party within 72 hours of the beginning and the ending of the cause respectively. If deliveries are suspended by Force Majeure conditions lasting for more than 2 (two) months, DGH shall have the option of canceling this CONTRACT in whole or part at its discretion without any liability at its part.

The Party asserting the claim of Force Majeure shall have the burden of proving that the circumstances constitute valid grounds of Force Majeure and that such party has exercised reasonable diligence and efforts to remedy the cause of any alleged Force Majeure. Time for performance of the relative obligation suspended by Force Majeure shall then stand extended by the period for which such cause lasts.

26.0 EMPLOYMENT BY FIRMS TO OFFICIALS OF DGH

Firms/companies who have or had business relations with DGH are advised not to employ serving DGH employees without prior permission. It is also advised not to employ ex-personnel of DGH within the initial two years period after their retirement/resignation/severance from the service without specific permission of DGH. The DGH may decide not to deal with such firm(s) who fail to comply with the above advice.

27.0 PREFERENCE TO LOCAL COMPANIES

CONTRACTOR agrees to give priority and preference to locally owned companies, when hiring Sub CONTRACTOR, SUBJECT TO price, quality and delivery being equivalent.

28.0 JURISDICTION AND APPLICABLE LAW

This Agreement including all matters connected with this Agreement, 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 the Courts at Delhi. (the place where the CONTRACT is signed in India).

29.0 SETTLEMENT OF DISPUTES AND ARBITRATION

29.1 Except as otherwise provided elsewhere in the contract, if any dispute or difference arises between the parties hereto or the respective representatives or assignees at any time in connection with operation, interpretation or out of CONTRACT or breach thereof shall be

decided in accordance with Indian Arbitration and Conciliation Act, 1996 by an Arbitral Tribunal consisting of three arbitrators. Each party shall appoint one arbitrator and the Arbitrators so appointed shall appoint third arbitrator, who shall act as the presiding arbitrator.

29.2 In case a party fails to appoint an arbitrator within 30 days from the receipt of request to do so by the other party or the two arbitrators so appointed fail to agree on the appointment of the third arbitrator within 30 days of the appointment of second Arbitrator, the Chief Justice of Supreme Court/High Court as the case may be or any other person or institution designated by him within whose jurisdiction the subject CONTRACT has been made, shall appoint the arbitrator/presiding arbitrator upon request of any of the parties.

29.3 If any of the arbitrators so appointed dies, resigns, incapacitated or withdraws for any reasons 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 the parties agree for the same and otherwise he shall proceed de-novo.

29.4 It is agreed between the parties that the party invoking arbitration shall specify all disputes to be referred to arbitration at the time of invocation of arbitration and not thereafter.

29.5 It is also agreed between the parties that neither party to the arbitration shall be entitled to the interest on the amount of award.

29.6 The Arbitral tribunal shall give a reasoned award and the same shall be final, conclusive and binding on the parties.

29.7 The venue of the arbitration shall be New Delhi, India and shall be conducted in English language. The Courts in Delhi will have the jurisdiction to deal with such arbitration award if required.

29.8 The fees of the arbitrators shall be borne by the respective parties nominating them and the fee of the presiding arbitrator, cost and other expenses incidental to the arbitration proceedings shall be borne equally by the parties. Subject to aforesaid, the provisions of Indian Arbitration and Conciliation Act, 1996 and any statutory modification or re-enactment in lieu thereof shall apply to the arbitration proceedings under this clause.

30.0 CONTINUANCE OF THE CONTRACT

Notwithstanding the fact that settlement of dispute(s) (if any) under arbitration may be pending, the parties hereto shall continue to be governed by and perform the work in accordance with the provisions under this CONTRACT.

31.0 INTERPRETATION

The titles and headings of the sections in this CONTRACT are inserted for convenient reference only and shall not be construed as limiting or extending the meaning of any provisions of this CONTRACT.

32.0 PATENT INDEMNITY

32.1 The CONTRACTOR shall, subject to the DGH's compliance with Sub-Clause below, indemnify and hold harmless the DGH and its employees and officers from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of any nature, including attorney's fees and expenses, which the DGH may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright, or other intellectual property right registered or otherwise existing at the date of the Contract by reason of:

a) the installation of the Items by the CONTRACTOR or the use of the Items in the country where the Site is located; and

b) the sale in any country of the products produced by the Items.

Such indemnity shall not cover any use of the Items or any part thereof other than for the purpose indicated by or to be reasonably inferred from the Contract, neither any infringement resulting from the use of the Items or any part thereof, or any products produced thereby in association or combination with any other equipment, plant, or materials not supplied by the CONTRACTOR, pursuant to the Contract.

32.2 If any proceedings are brought or any claim is made against the DGH arising out of the matters referred to in GCC above Sub-Clause, the DGH shall promptly give the CONTRACTOR a notice thereof, and the CONTRACTOR may at its own expense and in the DGH's name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim.

32.3 If the CONTRACTOR fails to notify the DGH within twenty-eight (28) days after receipt of such notice that it intends to conduct any such proceedings or claim, then the DGH shall be free to conduct the same on its own behalf.

32.4 The DGH shall, at the CONTRACTOR's request, afford all available assistance to the CONTRACTOR in conducting such proceedings or claim, and shall be reimbursed by the CONTRACTOR for all reasonable expenses incurred in so doing.

32.5 The DGH shall indemnify and hold harmless the CONTRACTOR and its employees, officers, and Subcontractors from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of any nature, including attorney's fees and expenses, which the CONTRACTOR may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright, or other intellectual property right registered or otherwise existing at the date of the Contract arising out of or in connection with any design, data, drawing, specification, or other documents or materials provided or designed by or on behalf of the DGH.

33.0 INDEPENDENT CONTRACTOR STATUS:

The CONTRACTOR shall act as an independent contractor performing the CONTRACT. The Contract does not create any agency, partnership, joint ventures or joint relationship between the parties.

Subject to all compliance with the CONTRACT, the CONTRACTOR shall be solely responsible for the manner in which works are performed. All employees, representatives or sub-CONTRACTORS engaged by the CONTRACTOR in performing the CONTRACT shall be under the complete control of the CONTRACTOR and shall not be deemed to be employees of the DGH and nothing contained in the CONTRACT or in any sub-CONTRACT awarded by the CONTRACTOR shall be construed to create any contractual relationship between any such employees or representative or Sub-CONTRACTOR and the DGH. CONTRACTOR shall be responsible for the acts, defaults or negligence of the CONTRACTOR, his agencies, servant or workmen.

34.0 LIMITATION OF LIABILITY

Notwithstanding any other provisions, except only in cases of willful misconduct and / or criminal acts,

a) Neither the Contractor nor DGH 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 Contractor to pay Liquidated Damages to the DGH and

b) Notwithstanding any other provisions incorporated elsewhere in the contract, the aggregate liability of the Contractor in respect of this contract, whether under the Contract, in tort or otherwise, shall not exceed Contract Price, provided however that this limitation shall not apply to the cost of repairing or replacing defective equipment by the Contractor, or to any obligation of the Contractor to indemnify the DGH with respect to Intellectual Property Rights.

c) DGH shall indemnify and keep indemnified Contractor 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.

In witness whereof, the parties hereto have executed this Agreement as of the day and year first above written.

Signed, Sealed and Delivered,

For and on behalf of

For and on behalf of Contractor

Directorate General of Hydrocarbons(DGH) M/s. _____

Name:

Name:

Status:

Status:

In presence of

In presence of

1.

1.

2.

2.

SPECIAL CONDITIONS OF THE CONTRACT

- i. Bidder will be responsible for integration of the complete project.
- ii. Bidder to provide responsibility of data flow from field instruments to FRTU to RTMS Software on DGH Cloud Server, jointly and severally with the DSF-Operator(s).
- iii. Field Remote Terminal Units (FRTU(s)) are to be purchased by the respective field operators. This being the link from the fields to DGH Cloud Server and thus require compatibility. Bidders are to provide the list of compatible FRTU(s) along with their Make, Model and Indicative price, for 24 x 7 seamless communications from Field instruments to RTMS Software in DGH Cloud Server.
- iv. The list of measurement instruments along with their make and specifications are provided in this tender. Bidder to customize their FRTU(s) for data reception and compatibility with the field instruments.
- v. Bidder must propose solution involving products that have not reached near end of life and may sustain for more than 5 years, from the date of "Notice of Award" of the contract.
- vi. To ensure smooth and trouble free operation of RTMS from field FRTU onwards, RTMS provider may be required to enter into some sort of arrangement with the respective field operators and DGH will extend cooperation to resolve the issues, if any, wherever required/sought.
- vii. The bidder must quote for all the items mentioned in the tender.
- viii. All manuals and documentation of hardware and software systems are to be provided in softcopy.
- ix. Bidder to provide surety (performance Bank Guarantee) against overall performance of the Real Time Measurement System (RTMS) including assurance of data flow from the FRTU to DGH cloud Server. The surety value shall be 10% of contract cost valid for contract duration plus 06 months.
- x. A. Liquidated Damages will be levied @0.5% per week, not more than 5% of the proportionate contract cost for item Sl nos. 1 & 2, for the delay beyond duration(s)/ schedule(s) as mentioned in the contract
B. Liquidated Damages will be levied @0.5% per week, not more than 5% of the respective work order value for item Sl nos. 3, 5, 6 & 7 for the delay beyond duration(s)/ schedule(s) as mentioned in the contract
- xi. **Change-order:** The quantity of FRTU-Months (Sl.No.2 of SOW) and Parameter Nos. (Sl.No.4) are fixed on the following basis:

Tender Item	Well site /Contract Area		Sale's Point/Contract Area		Quantity		Total Quantity for 30 CA		Tender Quantity
	Min	Max	Min	Max	Min	Max	Min	Max	
FRTU	1	3	1	2	2	5	60	150	3600 FRTU - Months
Parameter	3	9	1	2	4	11	120	330	120 Nos.

Tender quantity is determined based on the minimum as of now. However, based on actual field requirement (well site/ Sale Point) there is likelihood of increase in above quantities and may go up to the maximum values also.

Bidder should be prepared to execute change –orders/ work-orders/ instructions to link up additional quantity of FRTUs and parameters, if required during the contract period at the same rate, terms and conditions.

- xii. After the Contract period of 5 years is over, the RTMS software shall be handed over to DGH. Subsequent patches, upgradations and the “Right of Use” of the software to DGH shall be extended to perpetuity.

1.0 Duration of the Contract

The contract shall be valid for a period of 5 Years from the date of issue of the “Notice of Award” of the contract.

Item	Delivery Period
RTMS Software	Within 60 days from the date of issue of Letter of Award (LoA)
Services	Delivery of other Services as per the SOW shall be made with 72 Hrs or as per the schedule mentioned in the Work-order/ instructions, issued by DGH, time to time.

- 2.0 **Work Order:** Subsequent to Letter of Award to successful bidder and completion of job against item sl no 1, separate work order for job against item sl no 3, 5, 6 & 7 shall be issued by authorised DGH official on as and when required basis during the contract period.

3.0 PAYMENT Terms

S/N	Item	Qty	UOM	Payment T&C
1	Design, Development, Customization, Configuration, Cloud Hosting, Installation and Commissioning of the “Real Time Measurement System (RTMS)” software on the DGH Cloud Servers (1Active & 1 Standby), for receiving and processing the data of real time measurement of petroleum from fields and wells, as per details given in Detailed Scope along with maintenance Support Services (Warranty, Patches, upgradations etc.) for 01 year.	01	Nos.	<ul style="list-style-type: none"> 90% shall be released on successful installation and commissioning. Balance 10% shall be released after successful running of the software for 1Year.
2	AMC charges for item-1 from 2 nd Year onwards.	04	years	At the end of each Year
3	Services for capturing data and transmission of the same on 24 hour basis from the FRTUs of 30 contract areas to DGH Cloud Server, for contract period of 5 years. Each contract area may have two FRTUs approximately.			
	a) Offshore Contract Areas-7 Nos.	840	FRTU-Months	Monthly per FRTU, after completion of each calendar month

	b) Onshore (except NE) Contract Areas-14 Nos.	1680	FRTU-Months	-do-
	c) North-East-09 Nos.	1080	FRTU-Months	-do-
4	Onsite (DGH) Operation & Maintenance support services for the RTMS and related communications considering Software as a Service (SAAS) for a period of Five (05) years. At least two persons to be deployed for providing above service on 24x7 basis.	60	Months	After completion of each quarter, on certification of performance
5	Services at DGH end to add parameters in the RTMS software, when new wells or fields come into production. (30 contract areas x 4 parameters)	120	Nos.	Per number of parameter (of the well or facility), at the end of the job and Quarter.
6	Bidder has to provide system training (3 days on half-yearly basis).	30	Days	After 30 days of completion of each training of 3 days.
7	Estimated User Authorisations	100	Nos.	<ul style="list-style-type: none"> • Onetime payment for 10 Users. • Payment per user on addition of each user subsequently.
	a) Administration User (for adding or deleting Users)			
	b) Super Users for making engineering changes in the RTMS software			
	c) Users with read only rights (30 X 3 +10)			

SCOPE OF WORK

S/N	Item	Quantity	UOM
1	Design, Development, Customization, Configuration, Cloud Hosting, Installation and Commissioning of the "Real Time Measurement System (RTMS)" software on the DGH Cloud Servers (1Active & 1 Standby), for receiving and processing the data of real time measurement of petroleum from fields and wells, as per details given in detailed scope along with maintenance Support Services (Warranty, Patches, upgradations etc.) for 05 years	01	Set
2	Services for capturing data and transmission of the same on 24 hour basis from the FRTUs of 30 contract areas to DGH Cloud Server for contract period of 5 years. Each contract area may have two FRTUs approximately.		
	a) Offshore Contract Areas-7 Nos.	840	FRTU-Months
	b) Onshore (except NE) Contract Areas-14 Nos.	1680	FRTU-Months
	c) North-East-09 Nos.	1080	FRTU-Months
3	Onsite (DGH) Operation & Maintenance support services for the RTMS and related communications considering Software as a Service (SAAS) for a period of Five (05) years. At least two persons to be deployed for providing above service on 24x7 basis.	60	Months
4	Services at DGH end to add parameters in the RTMS software, when new wells or fields come into production. (30 contract areas x 4 parameters)	120	Nos.
5	Bidder has to provide system training (3 days on half-yearly basis) .	30	Days
6	Estimated User Authorisations (20 Concurrent users)	100	Nos.
	a) Administration User (for adding or deleting Users)		
	b) Super Users for making engineering changes in the RTMS software		
	c) Users with read only rights (30 X 3 +10)		

Detailed Scope

Introduction:

- 1.1** Directorate General of Hydrocarbons (DGH) is an upstream advisory & technical arm under Administrative control of the Ministry of Petroleum & Natural Gas to promote sound management of the Indian petroleum and natural gas resources. Its Office is located at Tower A, OIDB Bhawan, Sector - 73, Noida (UP).

The Real time Measurement System is being implemented in the newly concluded “**Discovered Small Field Contracts (DSF)**” to achieve the following objectives:

1. Enhance Transparency of petroleum measurement activities
 2. To detect and prevent pilferage from oil and gas wells due to theft, fraud and meter tampering
 3. To facilitate instant audit on petroleum inventories of the field.
 4. Compilation of field/ block wise production data.
 5. Monitoring and performance analysis of production data of all the producing fields/blocks.
 6. Regulatory oversight and inspections with the help of automated exception reports.
- 1.2** In line with the above objective, DGH aims to deploy a solution that will enable it to do real time monitoring of oil and gas productions under the DSF contracts.

- 1.3** Typical Architecture

***Overall typical Architecture** which DGH envisages is shown in Fig 1.4 below. The Parameters DGH wants to be communicated to the DGH Cloud Server are*

- A. Well Head Pressure, Well Temperature, Fluid Flow rate for non-associated gas well and fluid-flow indication for oil+gas well, from each producing well
- B. Custody Transfer meters/ Sales Meters and/ or measurement of petroleum produced and saved (in tanks etc.).

1.4 Architecture Description (Just for Comprehension of the bidders)

1. This Architecture is based on Internet of Things (IoT) protocols and push technology with local polling and logging to prevent data loss in absence of network connectivity.
2. The solution should use internet as backbone network for connectivity between the FRTU/equivalent and DGH cloud servers. It should support internet via GPRS and ETHERNET connectivity. The solution design should also have the capability to support SATCOM based communication where GPRS or ETHERNET based internet connectivity is not available.
3. Sensors and devices installed at the oil field are to provide data in digital Modbus RTU/equivalent format on RS485/equivalent. The Field RTU/equivalent will directly poll the connected sensors and devices at regular intervals of 30 min.
4. The data acquired from these devices will be wrapped in ISO standard (ISO/IEC PRF 20922), that is secure MQTTS protocol, for better utilisation of bandwidth and lower data latency.
5. Available wrapped data in secure MQTTS protocol will be pushed to the DGH cloud server via using GSM/GPRS/equivalent data connectivity. Data should be highly secured using TLS1.2 transport layer encryption/equivalent.
6. The DGH cloud software platform will receive the data from the Field Instruments/RTU/equivalent directly for insight into oil well production data. Powered by real time IoT technology for communication and Big Data for data storage and analytics.

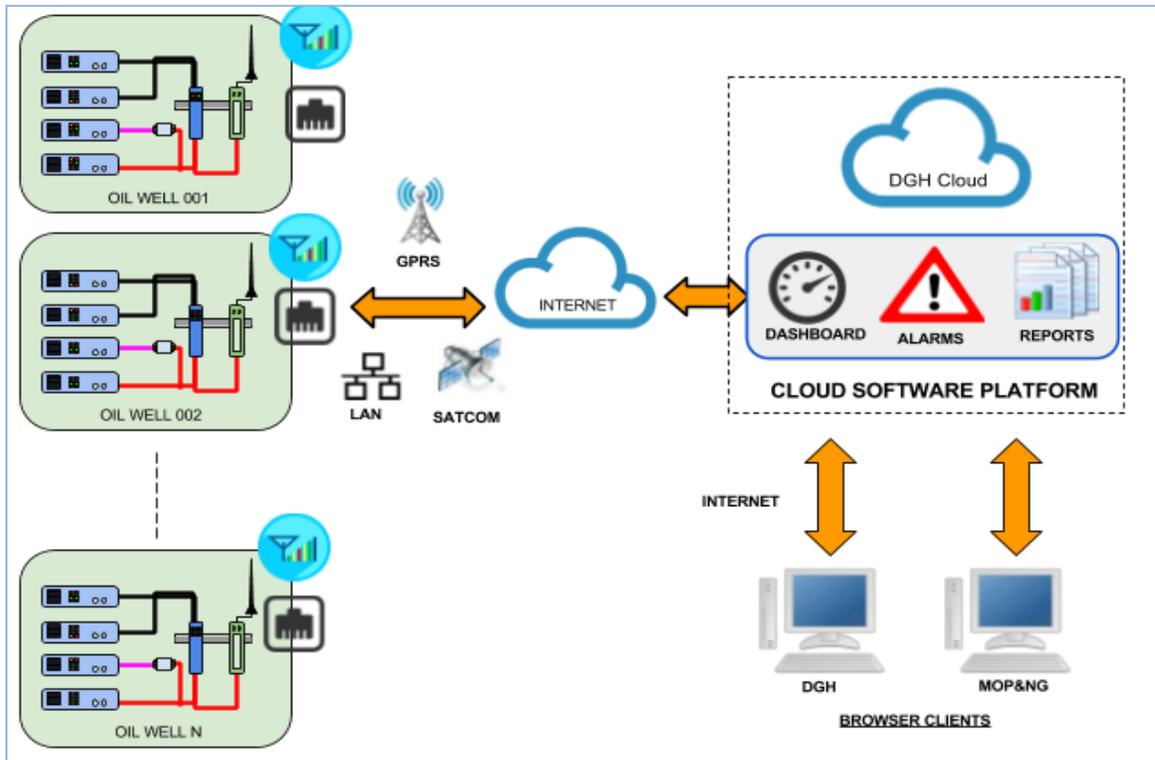
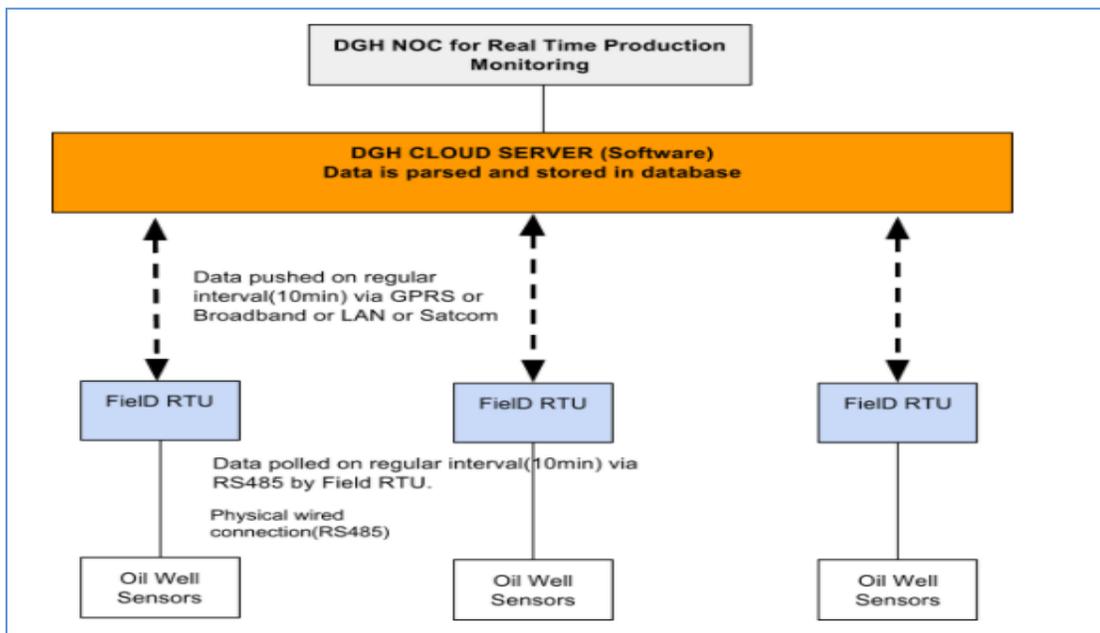


Fig.1.4

1.5 Process Flow (Just for Comprehension of the bidders)



2.0 Scope of Work of the contractor

2.1 The Scope of Work of the Contractor includes Design, Development, Customization, Configuration, Cloud Hosting, Installation and Commissioning of the “**Real Time Measurement System (RTMS)**” software on the DGH Cloud Servers (1Active & 1 Standby), for receiving and processing the data of real time measurement of petroleum from fields and wells. The Cloud servers will be presently located in DGH Data Centre and

may be in Disaster Recovery Centre (in future) .

2.2 Software Provisioning in the DGH Cloud Server

Includes the following:

- 2.2.1 Design, Development, Customization, Configuration, Cloud Hosting, Installation and Commissioning of the RTMS software along with relevant and requisite patches.
- 2.2.2 Provide support and assistance to DGH (as per the requirement of DGH) round the Clock, 24 x 7 and round the year to integrate the data from the field instruments/RTU/equivalent provided by the respective DSF operators.
- 2.2.3 Installation and commissioning RTMS Software System related Backups
- 2.2.4 Delivery of User Accesses and **Software Licenses** (if any).

2.3 Technical Requirements of the RTMS Software

2.3.1. **Scalable** - The system should be based on highly scalable Service Oriented Architecture to support thousands of sensors and devices on the cloud.

2.3.2. **Big Data Support** - software should have highly scalable backend database capable of storing time-series data acquired from the oil fields at least for a period of 20 years with minimum of 30 minute interval.

2.3.3. **Real Time Two Way Persistence Connectivity** - The software should provide persistent two way connectivity between the hardware client and the DGH Cloud Server. It is based on IoT based push connectivity so that fixed IP are not required at all. It should take care to provide high data uptime and any network or server downtime to ensure high data availability.

2.3.4. **Device Management** - The software should shows online or offline status of device. It should allow rebooting and troubleshooting of the remote client via the web interface to resolve client issues remotely. Online configuration of remote devices should be available.

2.3.5. **Site Diagnostics** - The software should be capable of showing site diagnostics. It shows sites in green, amber and red colour depending on if they are operating fine or have issues with connectivity or instrumentation depending on diagnostic information available.

2.3.6. **Network Management** - The software should be able to show Network status and quality of signal. Most remote monitoring applications suffer due to poor network quality, this feature can help identify these sites and such sites can be rectified.

2.3.7. **Reporting & Dashboard** - The software should provide the ability to generate reports and view data on dashboards via a Web Application. It will also be possible to email reports from the system.

2.3.8. **Alerts & Alarms** - The software should generate automated alerts on exceeding parameter threshold exceedance, data connectivity failure, flow meter failure etc. These alarms are sent over email and SMS using pre-configured message templates.

2.3.9. **Client provisioning and Authentication Keys** - The IoT cloud connectors should be securely provisioned and use X.509 client certificates for transport layer security and authentication.

2.3.10. **User Management, Authorization and Access Control** - The software should have a strong username password based access control for different roles.

2.3.11. **Operator Management** - The software allows creation of the following entities:

- a. Operator - All the connected flow meters and sensors for a given operator should be available in single operator account.
- b. Oil Field - An oil field would be a collection of wells
- c. Oil Well - This would be the asset being monitored

2.3.12. **Audit Logs**

- a. System solution must provide auditing and reporting facilities to be utilized in system performance and security access controls monitoring.
- b. It should maintain audit logs for various actions carried out like creating users, approval of any required workflow.
- c. Data Flags - The system should generate data flags for delayed data, maintenance phase data.

2.4 SOFTWARE REQUIREMENTS

2.4.1 General

The software should come with a web application to view, generate default reports, analyse the collected data and corroborate with oil field/ tenants/ consumers. The web application should be supported on major browsers like FireFox, Chrome, Safari, and Internet Explorer 11. The user interface should be responsive and support rendering on tablets, smartphones and desktops.

1. Operator Model
 - a. The Web Application should allow modelling of Operators. It should be possible to create any hierarchy and grouping for these entities.
 - b. The Web Application should supports grouping of Operators across geographic dimensions like State, District, City etc and other custom attributes (like oil field type) selected by DGH.
2. Maps, Geo tagging and Search
 - a. It should be possible, if required to geo-tag sensors of an oil field and its associated domain. The RTMS software should be able to display location of well coordinates on Geographical Map. Both Coordinates and Map will be provided by DGH.
 - b. DGH should be able to view oil fields on a Map. It will be possible to identify oil fields that have exceeded production threshold through proper colour coding. It should be possible to view data by clicking on the oil field icon on the map. The map view will provide filters and search for plotting filtered oil fields on the map.
3. Alerts and Alarms
 - a. The Web Application should provide an interface to view or list all alerts. There should be a filter to view alerts based on type and time.
 - b. The Web Application should provide an interface to acknowledge the alerts.
4. Calibrations
 - a. The Web Application should support configuration of manual calibration of the sensors. These calibrations should be stored in the database and applied to each raw reading once it arrives on the server. An audit log is required to be maintained for each of the calibrations change.

5. User Management and Access Control
 - a. It should be possible to create or deactivate users using the Web Application. Once the user is created an email will be sent to him to activate the account.
 - b. The System solution must have the ability to perform password management functions including: controlled password expirations, minimum password lengths, and enforcement of alphanumeric password standards, password history logging, and user lockout from failed login attempts.
 - c. All passwords should be kept in an encrypted state in the database. The username would be the email id of the user and would be activated via an activation link sent on the user email.
 - d. 2-Step Verification - The access control would be protected by 2 step verification. Whenever a user tries logins a code will be sent to his phone via text. To complete access to his account he will have to enter the code as part of the login process. The code once entered should not be required to be entered during subsequent logins from same device till 30 days. For any login from a new device or after 30 days would require a fresh code.
 - e. The system should allow following roles based authorization:
 - i. Regulator Admin - Can view and administer all operator accounts
 - ii. Regulator User - Can view operator accounts assigned to him
6. IoT Device Management
 - a. It should be possible to provision a device or client and generate its authentication tokens and id on the software platform using the Web Application.
 - b. The Web Application should display network parameters of the IoT Client. These are parameters like online status, network status, IP address etc.
 - c. The Web Application should display the sensor configurations and settings.
- 7. Dashboard and Reporting**
 - a. The web application shall provide an interface to obtain periodical transaction history, summary and detailed reports. For this purpose, the bidder shall provide a system for generating and viewing online MIS reports. Apart from the reports specified; bidder should gather the requirements for online MIS reporting from the individual participating divisions and design the solution accordingly.
 - b. The Web Application should have an oil field Dashboard for flow rate, totalized flow (water usage) on real time, daily and monthly basis.
 - c. Application should have provision to put multiplying factor for budget calculation on totalized flow values on each client.
 - d. Web application should support and provide reports for monthly and daily production. These reports may be auto generated and available on the specified email id.
 - e. The Web Application should support ability to export the reports data to csv and pdf format.
 - f. The Web Application should support ability to email reports.
 - g. The Web Application should support ability to generate custom reports as required by DGH.
8. Data Validation
 - a. The Cloud Server Interface module provide user interface for data validation and approval. DGH is able to select a particular time range and approve/reject the data with proper comments.
 - b. Supports manual and automated data validation and approval workflow to review the various oil field site data and approve by providing appropriate comments based on the data quality.
 - c. The Web Server Interface module provides ability to annotate the data with the specific events / comments.
9. Scalable & Portable:
 - a. System solution must be scalable in terms of addition of new entities, intervention points including scalability to the number of users & resources. Scalability of the System solution has to be made considering the number of

transactions per second and to the expected volume of the users. Portability of System solution to be made considering the additional services will be added in due course of time that will not impact portability of services.

2.4.2 Detailed Functional Requirements

The following detailed functional requirements should be complied with:

S No.	Functional Requirement
Requirement: Administrator Interface and User Management	
1	Ability to provide a login interface to the administrator to interact with user management module. Administrator should be able to a. Add Users b. Delete Users c. Define roles of User d. Edit User information/role
2	Ability to support the role based access of the information. It should have feature to define the privileges of user to access the limited information based on his/her role.
3	Ability to maintain history of changes made in User profile and role updates.
4	Ability to provide the feature to search Users based on their name, roles etc.
5	Ability to provide a User Hierarchy view of Users for better management.
6	Should support that user account creation , group membership management , password reset capabilities for a given group or groups of users can be delegated to any nominated user
7	Should support Read Only Domain controllers for enhanced security.
Requirement: Device installation and remote provisioning	
8	Should have capability to cater installations of devices at different premises / equipment of DGH.
9	Should have device provisioning capability - by which various parameters of devices could be configured at installation time and thereafter remotely.
10	Ability to maintain history of installation and provisioning. Software should record and display the installation status.
11	Capability to cater installations of devices at different premises / equipments of DGH.
12	Should be capable to handle data from pre-installed measuring devices.
13	Should be able to publish data at pre-defined time interval, system should be able to collect this data regularly from all the devices.

14	Should have capability to configure the data collection frequency. DDAS functionality shall be independent of data collection frequency of measuring devices.
15	Should be able to provide details of critical events (e.g. no communication with Meter, Power failure etc.) and necessary provision should exist to report the event to the user.
Requirement: Group Management	
16	Ability to create groups of meters, similar equipment or pair of equipment for particular control action and data analysis. For Example, all devices from a specific zone (say Rajasthan) shall form a single group
17	Should provide an interface to the user to interact with group management module. User shall be able to: <ul style="list-style-type: none"> · Create Groups · Delete Groups · Edit Groups
18	Ability to support the group based access to respective users. It should have feature to define the access levels of the group.
19	Ability to maintain history of changes made to a group. User shall be able to view the changes history based on date, time and group name.
20	Ability to provide the feature to search Groups based on several user defined filtering criteria like group name, type of group etc.
21	Ability to provide nested grouping. There can be sub groups within a group. Module shall also provide the view for nested groups in tabular and graphical format.
22	Capability to create groups of meters, similar equipment or pair of equipment for particular control action and data analysis. For Example, all pumps of a specific area can come under one group.
Requirement: Dashboards	
23	Predefined dashboards for various user roles.
24	User should be able to create custom dashboard for himself.
25	Admin user should be able to create custom dashboard for other users/all users.
Requirement: Reporting	
26	Provide predefined reports.
27	Provide the ability to save reports
28	There should be centralized reporting functionality that gives users a single place for locating the latest reports, spreadsheets, or key performance indicators.
35	Should Provide for Reporting wherein reports can be published through a variety of mediums like web application, client application, mail, ftp folder, mobile handhelds etc. Should support multiple formats like html, PDF, XML and other custom formats as out of the box

36	Reporting services should provide for adhoc reporting in web version. Should provide an intuitive zero-client, browser-based user interface.
37	Should provide customization features for reporting where user can filter on various parameters to be reported on the screen.
38	Should allow Conditional highlighting to provide visual highlight information inside tables and graphs depending on conditions defined
39	Should allow Creation of filters to control data displayed on a report. And allow Parameters passing to the reports at run- time.
40	The system should provide capability to create live, interactive BI portals that assemble and display business-critical information from disparate sources, using integrated BI capabilities such as dashboards, scorecards, key performance indicators, and business data connectivity technologies.
Requirement: Alarm and Event Management	
41	Shall have the capability to monitor alarms/events in real time. Software should cater the alarms and events sent by measuring device as well as calculated within the software.
42	The common alarm format should contain but not limited to the following information: Alarm Status, Clear Status, Acknowledge Status, Friendly Name, Event Type, Specific Problem, Probable Cause, Event Date/Time, Clearing Time, Acknowledged time, Infrastructure object identifier, Infrastructure object class, Perceived severity, Acknowledge user, Trouble Ticket Creation, Flag/User/Time/ ID, Threshold info
43	Facility to find the previous occurrences (with respective time of occurrence) of a particular alarm.
44	Facility to redefine the severity of alarms.
45	Alarm should have a graphical user interface (GUI) that is intuitive to use and should require minimal operator training time.
46	Alarms should also be displayed in the tabular form, with list being able to be re sequenced as required.
47	Should enable a user to select one or multiple alarms and apply a state change operation to each alarm in the selected group. (For example, if 10 alarms are selected and the user invokes an acknowledgment operation, then states of all selected alarms shall be set to acknowledge.)
48	Shall raise e-mail / SMS alerts automatically to specified list of users for selected alarms as defined in the Rule Engine.
49	All alarms from field device shall be mapped to the relevant infrastructure equipment object.
50	Alarms that have been mapped to the relevant managed object shall immediately be logged prior to any other processing being applied to them.
51	Shall provide the facility to query alarm history in to the common alarm format and users shall have the facility to clean alarm history.
52	Access to alarm views shall be role based controllable

53	Ability to support multiple users to accesses & to update alarm data simultaneously.
Requirement: Analytics and Machine Learning	
54	Capability to implement machine learning algorithms based on the data related to the oil fields.
55	Capability to predict well output and production forecasts based on the captured data.
56	Capability to correlate measured data and predict possible deviation in terms of loss/pilferage / leakage.
57	Capability to add more data algorithms as required from time to time.
Requirement: Asset Management	
58	Capability to transmit ASSET data to the existing Asset Management System of DGHS ERP through API, if required.
Requirement: Architectural Requirements	
59	Bidders should clearly describe how the solution will follow the architecture principles as specified in the RFP including Service- Oriented Architecture (SOA) , Open Standards, availability, scalability, security, Usability, Smart Clients and Disaster Recovery. The Solution shall be architected and designed using the principles of SOA and Enterprise Architecture, comprising of Process Architecture, Information & Data Architecture, Application Architecture, and Technology & Security Architecture.
Requirement: Warranty	
60	The products proposed in the solution must have clear roadmap for next 5 years. The updates and patches for the products must be provided for 5 years from the Go Live Date and Patches and Updates of proposed software must be provided free of cost for this duration.

2.4.3 Third party web services

The bidder shall be responsible for integration and cost associated with any third party services that may be required for the software:

1. Google Maps, Open Street Maps or any other mapping services provider required for Map Views.
2. SMS gateway for any SMS alerts and notifications.
3. Email Service for any email alerts and notifications.
4. IoT Brokers and Application Enablement Platform (AEP) Services e.g. AWS IoT Service
5. Integration with carrier/SIM Management Services

2.4.4 Security

TLS 1.2 Transport Layer Security ensures communication security from end to end. The Field RTU connects to the TLS 1.2 compliant port of the server, and thereafter all the communication between the device and the server should be encrypted.

There should be support for client certificates. Each corresponding device-certificate should be pushed AUTOMATICALLY by the Server, after the device is provisioned at the Cloud Server.

	Communication Points	Transport Protocol	Transport Security
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A	Field RTUs & Cloud Server	TCP/IP	TLS 1.2 with device side X.509 Certificates + MQTTS
B	Cloud Server to User	TCP/IP	TLS 1.2 + HTTPS

2.4.5 Mobile Application

The bidder shall provide native mobile application for the following three platforms:

1. Android
2. iOS

2.4.6 Software Hosting (Cloud Infrastructure)

2.4.6.1 Installation and commissioning of the software application

The following are the deliverables during installation and commissioning:

1. Installation and configuration of software platform on the cloud servers provided by DGH.
2. The bidder will have to coordinate with the application providers AND INSTALLATION OF APPLICATION SOFTWARE and database and creation of application server.
3. The bidder will have the prime and sole responsibility for the installation of the backup solution. Configuration of automatic backups (as per policies as directed by the purchaser), compression and de-duplication of the solution will also be the supplier's responsibility.
4. Devising a suitable backup policy and configuration/implementation of the backup policy involving backups.
5. At least one Restoration and Recovery exercise of the implemented backups.
6. The bidder would complete activities (1-4) and DGH would certify initial installation.
7. The bidder would place one resident engineer onsite for a minimum of 1 month for testing after completion of configuration of the supplied items.

2.4.6.2 Operation and Maintenance of Application software

a. Integration of Wells

Bidder shall be responsible for the integration of the wells on the system such that the system successfully receive the data from the Field RTU from each of the wells.

DGH, at its own discretion, may add more wells at a pro-rata rate and the bidder shall be liable to add more wells to the same system for monitoring.

b. Maintenance Activities

Maintenance includes, but is not limited to production monitoring, troubleshooting and addressing the functionality, availability & performance issues and implementing the system change requests, if any.

The bidder shall keep the application software in good working order; meeting the requirements defined by the DGH, perform changes and upgrades to applications as requested by the DGH, within the overall scope of the quality and quantity of functionalities to be delivered under this RFP.

The bidder shall rectify all the errors/bugs/gaps in the functionality offered by software solution.

For performing any functional changes to system, which are deviating from the initial system requirements, a separate Change Control Note (CCN) shall be prepared by bidder and shall be mutually agreed between bidder and the DGH.

2.4.6.3 Delivery Period, Installation & Commissioning Period and Penalties

The Vendor will be required to deliver the project at DGH, Noida, as per the details mentioned in the below table:

Item	Delivery Period
RTMS Software	Within 60days from the date of issue of Letter of Award (LoA)
Services	Delivery of other Services as per the SOW shall be made with 72 Hrs or as per the schedule mentioned in the Work-order/ instructions, issued by DGH, time to time.

The bidder shall be responsible for the following activities for cloud infrastructure management

1. Ongoing management of the cloud infrastructure.
2. Having a backup strategy for the software database and ongoing implementation of the same.
3. Managing the up gradation of the VMs as per the requirement and the load on the system.
4. Managing all third party services used as part of the project

2.4.7 Resources Deliverables

1. One System Engineer has to be deployed at DGH for five days a week in office hours at DGH for the entire project duration.
 - a. B. Tech. or engineering degree in any stream with at least five years of IT experience in the software development and system administration in the relevant discipline in which software package is provided.
 - b. Has experience of system administration and management
2. One Support Engineer for co-ordination between the DGH and operators for the integration of their data to the DGH cloud.
 - a. Support services will have to be provided, which will cater to the needs and coordinate between DGH/Stake holders and technical team to accomplish the given tasks in a given time frame.
 - b. B. Tech or related degree in Computer Science/ Electronics/ Instrumentation or any related field with at least two years of experience in the software support and having knowledge of instrumentation to solve any hardware integration related issues.
3. Resume for the proposed team must be submitted as a part of the technical bid submission.

2.4.8 Selection of Resources

1. If required at any stage, the bidder shall arrange to send a minimum of 3 candidates with the skill sets mentioned (Clause 2.4.7 above) and DGH shall conduct a personal Interview and select one among them. If the expertise levels of all the 3 persons are not satisfactory, the bidder shall send more candidates for the selection process.
2. The selection process shall not exceed 5 times. If the bidder is unable to provide suitable candidate thereafter the work order shall be reviewed and cancelled if necessary.

2.4.9 Replacement of Resources

In case of the non-availability of the initial approved resources, the resources are not available due to any of the following specified reasons, the above manpower shall be replaced within a period of three working days.

1. if the person leaves the work without completing
2. Work done is of inferior quality / quality related issues

3. Delayed delivery / performance related issues
4. Unavailable / absent for more than 3 days continuously without information

2.4.10 SLA and Penalties for breakdown of software system

The following penalties shall be levied in case of system breakdown

1. In case the system breaks down and software has stopped functioning (i.e. no output available on DGH portal web site marked for the system) the same should be made functional within maximum 12 (twelve) hours of time (for which no separate communication will be made from DGH side) else penalty of Rs. 1500/- every day (number of working days) will be levied on the firm and DGH shall have the right to deduct the same from the running bills of the firm.
2. In case the system generates error messages on website and data is not displayed or wrong data are displayed on web site marked for the system, the same should be corrected within twelve hours time (12 hrs.) (for which separate communication shall be made by DGH for each such incident with error message’s snapshots) else penalty of Rs. 1000/- (One hundred rupees only) per error message shall be imposed on per day basis
3. Development of New web pages and configuration of new wells
 - a. Work assigned for new web pages development or configuration of new wells into the software will also attract penalty of Rs. 1000/- per day separately, if not completed in time frame mutually agreed in writing in between DGH and the firm.
4. Maximum Penalty applicable:
 - a. The total penalties amount inclusive of all penalties shall not be more than 05% of the contract value.
If penalties amount happens to be more than 05% of contract value, then DGH shall have the right to terminate the contract and shall deduct the maximum of 05% amount of contract value and release the balance payment to the firm.

2.4.11 Exclusions / DGH Deliverables

The following items shall be the responsibility of DGH

1. Working space to the resources deployed as per section 2.4.7
2. Access to Operation Division during working hours.
3. Procurement of domain for hosting application
4. Remote access of database/application for any remote support during the AMC period.
5. IT Hardware for system installation and deployment as per the specifications given below in the Table 2.4.12.

Sl.	Item	Qty	Specifications
1.	Intel Xeon Based Rack Mountable servers	2	<ul style="list-style-type: none"> •Minimum 2 CPUs, Xeon 64bit •Minimum 16 Cores per CPU •Minimum Clock Speed 2.2 Ghz •5 TB Local SAS-10k RPM HDD Space after RAID-5 in (5,1) . Hot swappable HDD •SAS Storage controller with RAID support. •256 GB DDR4 RAM •4 port Ethernet NIC Card with minimum 1Gbps Bandwidth •Redundant and hot swappable (N+1) SMPS, FANS •Embedded capability to remotely manage servers like startup, shutdown etc. •All necessary power cables, Rack Rail Kits

2.	Network Switch	1	• 1GbpsL2 network switch with minimum 24EthernetPorts.
3.	KVM Switch:	1	• 8 port KVM switch. Rack mountable, Should have password protection feature. Onscreen display of connected servers, capability to connect minimum 8 servers. Necessary cables for 8 servers to be provided.
4.	KVM Keyboard & Monitor:	1	• Integrated keyboard, mouse and monitor unit. Rack mountable. LCD monitor should be minimum 17". LCD unit should be collapsible when not in use. Necessary connectivity cables with KVM switch.
5.	36 U Server Rack	1	• 36 U Server Rack • Power Strips vertical or Rackmount • Cooling Fan • Rear Gate
6.	Windows 2012 Standard Edition	2	Licensed to DGH.

Table - 2.4.12

6. VM at NDR Data Centre/ DGH data warehouse
7. Connectivity of servers and IT hardware as per suggested requirements.

DGH shall setup a central monitoring room at DGH, Noida - DGH-NOC for continuous monitoring of the system.

2.4.12 Training

Successful bidder has to provide system training for 03 days to DGH personnel (10 attendees per batch) at DGH office premise, each half-year of the contract period.

2.5 Instruments for RTMS

- (i) The field instruments (which will provide online Communication) shall have compatible communication protocol like inbuilt Modbus or equivalent.
- (ii) The instruments should provide the complete data of the field measurements, as well as information specific to the meters to FRTU in electronic form.
- (iii) The instruments should follow the safety norms of OISD / DGMS, as per the location/zone of installation.

General Common methods of measurement

SI No	Measurement Parameters	Preferred measurement methodologies
1	Gas Sales/Custody transfer	a) Multipath Ultrasonic Flow meters
		b) Turbine Flow meters
		c) Orifice Type(AGA#3)
		d) Coriolis Flow meter
2	Liquid Sales/Custody transfer	a) Multipath Ultrasonic Flow meters
		b) Turbine Flow meters
		c) Orifice Type
		d) Coriolis Flow meter
		e) Tank Level Gauging.
3	Production Oil or Gas	a) Multipath Ultrasonic Flow meters
		b) Turbine Flow meters
		c) Orifice Type
		d) Coriolis / Mass Flow meter
		e) Tank Level Gauging.
4	Internal Consumption	a) Vortex Flow meter
		b) Turbine Flow meters
		c) Orifice Type(AGA#3)
5	Well Head Pressure	a) Standard Capacitive/strain Gauge pressure transmitter
6	Well Head Temperature	a) Standard Temperature transmitters with RTD sensor
7	Gas Analysis/Calorific Value	a) On line Gas chromatograph
		b) Standard Lab analysis

SL.No	Measurement Methodology	Popular Manufacturers/Vendors
1	Multipath Ultrasonic Flow meters	<ol style="list-style-type: none"> 1. Daniel Systems 2. GE systems 3. ABB 4. Cameron 5. SICK 6. FMC Technologies 7. Emerson 8. Honeywell Elster 9. Krohne 10. Nagman. 12 Endress+Hauser
2	Turbine flow mete	<ol style="list-style-type: none"> 1. Daniel Systems 2. GE systems 3. ABB 4. Emerson 5. Cameron 6. SICK 7. FMC Technologies 8. Emerson 9. Honeywell Elster 10. Krohne
3	Coriolis Mass Flow meter	<ol style="list-style-type: none"> 1. Endress+Hauser 2. Micro Motion 3. KROHNE 4. Enerson. 5. GE Systems 6. Yokogawa
4	Orifice Type flow Metering, As per AGA#3	<ol style="list-style-type: none"> 1. Emerson, 2. Daniel Systems 3. Yokogawa 4. ABB, 5. Khrone, 6. Flowx 7. Nagman
5	Standard Pressure transmitter	<ol style="list-style-type: none"> 1. Emerson, 2. Yokogawa 3. ABB, 4. Endress+Hauser 5. Khrone, 6. Flowx

6	Standard Temperature transmitter	<ol style="list-style-type: none"> 1. Emerson, 2. Yokogawa 3. ABB, 4. Nagman 5. Endress+Hauser 6. Khrone, 7. Flowx
7	Tank Storage/Level measurement	<ol style="list-style-type: none"> 1. Emerson, 2. Yokogawa 3. SICK 4. Khrone, 5. ABB, 6. Endress+Hauser
8	Gas Chromatographs	<ol style="list-style-type: none"> 1. Daniel, 2. ABB, 3. Yokogawa
9	Vortex flow meter	<ol style="list-style-type: none"> 1. Foxboro, 2. Yokogawa, 3. Daniel. 4. Khrone 5. Schlumberger
10	Thermal Mass flow meter	<ol style="list-style-type: none"> 1. Emerson, 2. Yokogawa 3. ABB, 4. Khrone, 5. SICK

Guidance Document

There is a noticeable lack of international Standards in the area of wet gas flow measurement. However, the following publications contain extremely valuable practical information:

ISO/TR 11583: 2012 Measurement of wet gas flow by means of pressure differential devices inserted in circular cross-section conduits.

API MPMS Chapter 20.3 ‘Measurement of Multiphase Flow’ (1st. Ed., Jan 2013).

International standards for meters

- a. **Orifice meters:** ISO Standard 5167 and AGA Standard 3.
- b. **Turbine meters:** ISO Standard 9951, Measurement of Gas Flow in Closed Conduits: Turbine Meters and OIML R32, Rotary Piston Gas and Turbine Gas Meters.
- c. **Ultrasonic meters:** ISO Standard TC30/SC5/WG1 and AGA Report 9 &10, Measurement of Gas by Multipath Ultrasonic Meters.
- d. **Coriolis meters:** ISO Standard TC30/SC12 and AGA Report, Coriolis Flow Measurement for Natural Gas Applications.
 - The meter measurements should be within the specified operating range for the quoted accuracy of the meter.
- e. **Multiphase meters**
 - Typically used for replacement of a well test separator rather than for custody transfer. In some instances of commingled production, they may be used for production allocation.
 - Continually being developed and improved.
 - Accuracy is less than single phase meters.
- f. **V-cone meters** may be used for wet gas metering in non-custody transfer applications.
- g. **PT & TT** as per API/ISO or equivalent.

Location of the Contract Areas

KG/ONDSF/ACHANTA/2016

Contract Area Name: KG/ONDSF/ACHANTA/2016

Longitude and latitude measurements commence at points A to G are given below:

Points	Longitude (E)			Latitude (N)		
	D	M	S	D	M	S
A	81	48	00.4268	16	35	18.7784
B	81	49	06.0621	16	35	38.9487
C	81	50	39.5199	16	35	39.5572
D	81	50	39.2251	16	37	08.3797
E	81	49	39.0365	16	36	58.4216
F	81	48	38.0816	16	36	28.3377
G	81	47	58.7447	16	35	35.3024

MB/OSDSF/B9/2016

Contract Area Name: MB/OSDSF/B9/2016

Longitude and latitude measurements commence are given below

<u>B-9 (approximate area- 138.5 Sq. km.)</u>		
Points	LATITUDE (N)	LONGITUDE (E)
A	20° 10' 53.88"	71° 22' 44.13"
B	20° 04' 20.03"	71° 29' 43.40"
C	20° 00' 29.86"	71° 28' 49.56"
D	20° 00' 23.72"	71° 26' 04.36"
E	20° 06' 44.21"	71° 25' 01.02"
F	20° 06' 32.26"	71° 20' 13.92"
G	20° 08' 56.76"	71° 18' 52.32"

<u>B-7 (approximate area- 22.7 Sq. km.)</u>		
Points	LATITUDE (N)	LONGITUDE (E)
A	19° 59' 29.6"	71° 07' 29.00"
B	19° 59' 36.37"	71° 09' 13.69"
C	19° 59' 27.67"	71° 11' 48.86"
D	19° 58' 18.92"	71° 12' 00.32"
E	19° 57' 31.03"	71° 07' 47.36"

<u>BRC (approximate area- 22.03 Sq. km.)</u>		
Points	LATITUDE (N)	LONGITUDE (E)
A	19° 53' 59.72"	71° 09' 58.11"
B	19° 54' 0.32"	71° 12' 59.65"
C	19° 51' 32.77"	71° 12' 59.10"
D	19° 52' 11.67"	71° 09' 38.40"

MB/OSDSF/B15/2016

Contract Area Name: MB/OSDSF/B15/2016

B-15

Point	Latitude	Longitude	Approximate area
A	19°42' 51.38"	71°26' 06.67"	20.4sq km
B	19°45' 00.65"	71°27' 36.02"	
C	19°41' 42.55"	71°29' 25.44"	
D	19°41' 02.31"	71°28' 02.75"	

B-15A

Points	Latitude	Longitude	Approximate area
A	19° 47' 57.4"	71° 24' 3.99"	20.8 sq. km
B	19° 47' 54.93"	71° 26' 49.1"	
C	19° 45' 29.31"	71° 26' 45.09"	
D	19° 45' 29.66"	71° 24' 14.28"	

MB/OSDSF/B-37/2016

Contract Area Name: MB/OSDSF/B-37/2016

Coordinates of Contract Area: As given below:

Longitude and latitude measurements commence at points A,B,C, D and E are given below
B-37 (Approximate area- 31 Skm)

Point	Latitude	Longitude
A	18° 49' 30.00" N	72° 14' 00.00" E
B	18° 49' 30.00" N	72° 17' 00.00" E
C	18° 46' 15.00" N	72° 17' 00.00" E
D	18° 46' 15.00" N	72° 15' 30.00" E
E	18° 46' 30.00" N	72° 14' 00.00" E

B-51 (Approximate area- 22.3 Skm)

Point	Latitude	Longitude
A	18° 59' 17.17" N	72° 20' 00.00" E
B	18° 59' 17.17" N	72° 22' 40.59" E
C	18° 55' 30.00" N	72° 20' 57.00" E
D	18° 55' 30.00" N	72° 20' 00.00" E

B-174 (Approximate area- 46.6 Skm)

Point	Latitude	Longitude
A	18° 55' 00.00" N	72° 20' 55.00" E

B	18° 56' 34.02" N	72° 23' 02.55" E
C	18° 50' 00.00" N	72° 24' 29.62" E
D	18° 50' 00.00" N	72° 22' 00.00" E

B-183 ((Approximate area- 24.3 Skm)

Point	Latitude	Longitude
A	19°04'30.00" N	72°15'00.00" E
B	19°04'30.00" N	72°18'00.00" E
C	19°02'00.00" N	72°18'00.00" E
D	19°02'00.00" N	72°15'00.00" E

MB/OSDSF/B80/2016

Contract Area Name: MB/OSDSF/B80/2016

Coordinates of Contract Area: As given below:

Longitude and latitude measurements commence at points A,B,C and D are given below:

POINT	LATITUDE	LONGITUDE
A	19 ⁰ 03' 00.00" N	71 ⁰ 43' 00.00" E
B	19 ⁰ 03' 00.00" N	71 ⁰ 47' 19.00" E
C	18 ⁰ 59' 00.00" N	71 ⁰ 47' 19.00" E
D	18 ⁰ 59' 00.00" N	71 ⁰ 43' 00.00" E

MB/OSDSF/B127E/2016

Contract Area Name: MB/OSDSF/B127E/2016

Coordinates of Contract Area: As given below:

Longitude and latitude measurements commence at points A,B,C, D and E are given below:

B-127E

Points	Latitude(N)	Longitude(E)	Approximate Area
A	19 ⁰ 28' 36.7"	71 ⁰ 48' 58.66"	16.3 sq. km
B	19 ⁰ 29' 34.29"	71 ⁰ 50' 51.84"	
C	19 ⁰ 27' 24.08"	71 ⁰ 52' 8.67"	
D	19 ⁰ 27' 0.76"	71 ⁰ 51' 32.23"	
E	19 ⁰ 27' 0.33"	71 ⁰ 49' 48.74"	

B-153

Points	LATITUDE (N)	LONGITUDE (E)	Approximate Area
A	19°27' 49.72"	71°34' 57.68"	23.0 sq. km
B	19°29' 55.62"	71°36' 51.36"	

C	19°28' 33.48"	71°38' 58.40"	
D	19°26' 19.25"	71°36' 32.98"	

RJ/ONDSF/BAKHRI TIBBA/2016

Contract Area Name: RJ/ONDSF/BAKHRI TIBBA/2016

Coordinates of Contract Area:

The area comprising approximately **13.44Sq.Km. Onshore** India identified as **RJ/ONDSF/BAKHRI TIBBA/2016**

Points	Longitude (E)	Latitude (N)
A	70° 09' 13.05"	27° 17' 24.43"
B	70° 10' 03.53"	27° 18' 12.38"
C	70° 12' 19.93"	27° 15' 07.65"
D	70° 11' 29.30"	27° 14' 18.31"

AA/ONDSF/BARSILLA/2016

Contract Area Name: AA/ONDSF/BARSILLA/2016

Coordinates of Contract Area:

Points	Latitude	Longitude
A	26°46'12.466" N	94°35'55.146" E
B	26°45'9.372" N	94°35'52.074" E
C	26°45'5.579" N	94°37'35.346" E
D	26°46'21.156" N	94°37'38.854" E
E	26°46'19.098" N	94°36'39.714" E

KG/ONDSF/BHIMANAPALLI/2016

Contract Area Name: KG/ONDSF/BHIMANAPALLI/2016

Coordinates of Contract Area: The area comprising approximately **15.12Sq.Km onshore** India identified as **KG/ONDSF/BHIMANAPALLI/2016**

Points	Longitude (E)			Latitude (N)		
	D	M	S	D	M	S
A	82	8	15.6476	16	35	48.5091
B	82	9	0.9064	16	34	58.8347
C	82	8	10.8083	16	34	14.1745
D	82	7	42.5327	16	34	42.7993
E	82	5	27.708	16	33	49.6338
F	82	4	31.0343	16	35	34.248
G	82	5	17.0539	16	35	57.0136
H	82	5	53.0368	16	34	59.4914

AA/ONDSF/CHARAIDEO/2016

Contract Area Name: AA/ONDSF/CHARAIDEO/2016

Coordinates of Contract

Area: The area comprising approximately **11.48 Sq. Km. onshore** India identified as **AA/ONDSF/CHARAIDEO/2016**

Longitude and latitude measurements commence at points A to H are given below:

Points	Latitude	Longitude
A	26°56'41.737" N	94°50'31.863" E
B	26°57'0.959" N	94°50'49.167" E
C	26°57'38.375" N	94°51'41.001" E
D	26°58'09.614" N	94°53'0.779" E
E	26°58'09.592" N	94°54'02.493" E
F	26°57'19.791" N	94°54'42.055" E
G	26°56'26.232" N	94°53'02.814" E
H	26°56'59.249" N	94°52'41.843" E

AA/ONDSF/DIPLING/2016

Contract Area Name: AA/ONDSF/DIPLING/2016

Coordinates of Contract Area: The area comprising approximately **28.15 Sqkm Onshore** area identified as **AA/ONDSF/DIPLING/2016**. comprises of 03 independent discovered small fields.

DIPLING(approximate area- 10.08 Sq. km.)

Point	Longitude	Latitude
A	94° 58' 57.881" E	27° 05' 49.146" N
B	94° 58' 03.703" E	27° 06' 50.215" N
C	94° 59' 41.034" E	27° 08' 15.889" N
D	95° 00' 46.215" E	27° 06' 50.376" N

SAPEKHATI(approximate area- 09.28Sq. km.)

Point	Latitude	Longitude
A	27° 08' 41.277" N	95° 11' 22.285" E
B	27° 07' 44.516" N	95° 11' 57.865" E
C	27° 06' 39.961" N	95° 09' 15.706" E
D	27° 07' 31.814" N	95° 08' 43.745" E

SAROJINI(approximate area- 08.79 Sq. km.)

Point	Longitude	Latitude
A	95° 6' 39.419" E	27° 13' 46.411" N
B	95° 5' 32.075" E	27° 13' 14.464" N
C	95° 6' 17.274" E	27° 12' 1.254" N
D	95° 7' 58.813" E	27° 12' 50.608" N
E	95° 7' 31.357" E	27° 14' 11.069" N

AA/ONDSF/DUARMARA/2016

Contract Area Name: AA/ONDSF/DUARMARA/2016

Coordinates of Contract Area: The area comprising approximately **8.91Sq.Km.onshore** India identified as **AA/ONDSF/DUARMARA/2016**

Point	Latitude	Longitude
A	27° 28' 48.459"N	95° 43' 34.263" E
B	27° 27' 50.569"N	95° 41' 28.533" E
C	27° 27' 11.746"N	95° 41' 16.982" E
D	27° 26' 7.510" N	95° 42' 40.725" E

CB/ONDSF/ELAO/2016

Contract Area Name: CB/ONDSF/ELAO/2016

Coordinates of Contract

Area: The area comprising approximately **9.98Sq.Km.onshore** India identified as **CB/ONDSF/ELAO/2016**.

Points	Longitude (E)			Latitude (N)		
	D	M	S	D	M	S
C	72	46	00.01	21	25	52.00
E	72	46	00.01	21	27	29.99
F	72	47	55.00	21	27	29.99
G	72	47	55.00	21	25	52.00

KG/OSDSF/GSKV1/2016

Contract Area Name: KG/OSDSF/GSKV1/2016

Coordinates of Contract Area: As given below:

Longitude and latitude measurements commence at points A to J are given below:

GS-59-1 & GS-KV-1				
	X	Y	Lat	Long
A	587422.19	1808263.88	16 ⁰ 21' 14.24"	81 ⁰ 49' 6.7"
B	589259.56	1809344.25	16 ⁰ 21' 49.15"	81 ⁰ 50' 8.78"
C	589840.19	1809800.00	16 ⁰ 22' 3.9"	81 ⁰ 50' 28.41"
D	592385.50	1810730.88	16 ⁰ 22' 33.85"	81 ⁰ 51' 54.34"
E	597241.25	1812115.00	16 ⁰ 23' 18.2"	81 ⁰ 54' 38.22"
F	597571.94	1811240.50	16 ⁰ 22' 49.69"	81 ⁰ 54' 49.23"
G	590486.94	1807903.75	16 ⁰ 21' 2.11"	81 ⁰ 50' 49.94"
H	593022.56	1805000.75	16 ⁰ 19' 27.3"	81 ⁰ 52' 14.98"
I	592019.38	1804294.25	16 ⁰ 19' 4.44"	81 ⁰ 51' 41.08"
J	588965.62	1806073.75	16 ⁰ 20' 2.76"	81 ⁰ 49' 58.42"

AA/ONDSF/HILARA/2016

Contract Area Name: AA/ONDSF/HILARA/2016
Coordinates of Contract

Area: The area comprising approximately **9.6Sq.Km onshore** India identified as **AA/ONDSF/HILARA/2016**.

Points	Latitude			Longitude		
	deg	min	sec	deg	min	sec
A	24	54	47.687	92	34	54.309
B	24	54	46.323	92	36	09.681
C	24	52	46.424	92	35	54.996
D	24	52	48.698	92	34	4.953

AA/ONDSF/JERAIPATHAR/2016

Contract Area Name: AA/ONDSF/JERAIPATHAR/2016
Coordinates of Contract

Area: The area comprising approximately **10.05Sq.Km.onshore** India identified as **AA/ONDSF/JERAIPATHAR/2016**

Point	Latitude	Longitude
A	27° 28' 51.040" N	95° 11' 21.903" E
B	27° 30' 02.610" N	95° 12' 12.405" E
C	27° 31' 04.702" N	95° 12' 28.160" E
D	27° 31' 02.580" N	95° 13' 32.787" E
E	27° 29' 59.558" N	95° 13' 32.100" E
F	27° 29' 10.687" N	95° 13' 39.825" E
G	27° 28' 47.833" N	95° 12' 42.135" E

CB/ONDSF/KAMBOI/2016

Contract Area Name: CB/ONDSF/KAMBOI/2016
Coordinates of Contract Area: The area comprising approximately **2.35Sq.Km.onshore** India identified as **CB/ONDSF/KAMBOI/2016**.

Points	Longitude (E)	Latitude (N)
A	72° 02' 00''	23° 43' 00''

B	72° 03' 30''	23° 43' 00''
C	72° 03' 30''	23° 42' 30''
D	72° 02' 00''	23° 42' 30''

CY/ONDSF/KARAIKAL/2016

Contract Area Name: CY/ONDSF/KARAIKAL/2016

Coordinates of Contract Area: The area comprising approximately 10.38Sq.Km. onshore India identified as **CY/ONDSF/KARAIKAL/2016**

Points	Longitude (E)			Latitude (N)		
	D	M	S	D	M	S
A	79	45	13.54	10	52	53.48
B	79	45	13.55	10	52	04.78
C	79	47	47.43	10	52	05.79
D	79	47	47.55	10	51	36.20
E	79	48	57.49	10	51	31.59
F	79	48	30.45	10	52	01.62
G	79	48	22.72	10	52	54.23

GK/OSDSF/KD/2016

Contract Area Name: GK/OSDSF/KD/2016

Coordinates of Contract Area: As given below:

Longitude and latitude measurements commence at points A to J are given below:

Points	Latitude	Longitude
A	23° 24' 0 "N	68° 05' 00 "E
B	23° 24' 0 "N	68° 06' 30 "E
C	23° 23' 0 "N	68° 08' 00 "E
D	23° 20' 0.3 "N	68° 09' 00 "E
E	23° 19' 0 "N	68° 09' 00 "E
F	23° 19' 0 "N	68° 06' 00 "E
G	23° 21' 0 "N	68° 06' 00 "E
H	23° 21' 0 "N	68° 05' 15 "E

I	23 ⁰ 22'15 "N	68 ⁰ 05'15"E
J	23 ⁰ 22'15 "N	68 ⁰ 05'00 "E

CB/ONDSF/KHAMBEL/2016

Contract Area Name:CB/ONDSF/KHAMBEL/2016

Coordinates of Contract Area:

The area comprising approximately **9.78Sq.Km.onshore** India identified as **CB/ONDSF/KHAMBEL/2016**

Points	Longitude (E)			Latitude (N)		
	D	M	S	D	M	S
A	71	59	48.41	23	37	55.87
B	72	01	34.25	23	38	53.59
C	72	02	46.59	23	36	59.10
D	72	02	03.99	23	36	38.99
E	72	01	41.95	23	37	08.39
F	72	00	54.44	23	37	07.22

AA/ONDSF/KHEREM/2016

Contract Area Name: AA/ONDSF/KHEREM/2016

Coordinates of Contract Area:The area comprising approximately **16.45Sq.Km.onshore** India identified as **AA/ONDSF/KHEREM/2016**.

Point	Latitude	Longitude
A	95° 52' 29.660" E	27° 28' 17.234" N
B	95° 50' 57.361" E	27° 25' 12.913" N
C	95° 54' 14.112" E	27° 26' 55.349" N
D	95° 53' 7.282" E	27° 28' 36.464" N

Points A to B follow State Boundary (SB) within Assam and Arunachal Pradesh.

Point	Latitude	Longitude
A	95° 52' 29.660" E	27° 28' 17.234" N
B	95° 50' 57.361" E	27° 25' 12.913" N
C	95° 54' 14.112" E	27° 26' 55.349" N
D	95° 53' 7.282" E	27° 28' 36.464" N
SB	95° 50' 50.923" E	27° 25' 19.832" N
SB	95° 50' 45.687" E	27° 25' 27.413" N

SB	95° 50' 45.613" E	27° 25' 36.880" N
SB	95° 50' 46.088" E	27° 25' 46.202" N
SB	95° 50' 48.077" E	27° 25' 48.977" N
SB	95° 50' 50.632" E	27° 25' 50.575" N
SB	95° 50' 54.146" E	27° 25' 52.087" N
SB	95° 50' 56.154" E	27° 25' 54.417" N
SB	95° 50' 54.811" E	27° 25' 59.025" N
SB	95° 50' 55.938" E	27° 26' 0.682" N
SB	95° 50' 57.615" E	27° 26' 2.037" N
SB	95° 50' 58.317" E	27° 26' 4.884" N
SB	95° 51' 2.442" E	27° 26' 7.159" N
SB	95° 51' 1.376" E	27° 26' 12.276" N
SB	95° 51' 0.000" E	27° 26' 16.365" N
SB	95° 51' 2.280" E	27° 26' 18.719" N
SB	95° 51' 7.765" E	27° 26' 21.827" N
SB	95° 51' 8.038" E	27° 26' 26.214" N
SB	95° 51' 10.894" E	27° 26' 29.182" N
SB	95° 51' 14.708" E	27° 26' 29.987" N
SB	95° 51' 18.156" E	27° 26' 30.346" N
SB	95° 51' 20.627" E	27° 26' 31.200" N
SB	95° 51' 23.258" E	27° 26' 33.981" N
SB	95° 51' 25.460" E	27° 26' 34.840" N
SB	95° 51' 30.833" E	27° 26' 34.671" N
SB	95° 51' 36.330" E	27° 26' 38.016" N
SB	95° 51' 36.275" E	27° 26' 41.612" N
SB	95° 51' 35.415" E	27° 26' 46.039" N
SB	95° 51' 35.316" E	27° 26' 49.317" N
SB	95° 51' 34.899" E	27° 26' 52.275" N
SB	95° 51' 28.792" E	27° 26' 59.044" N
SB	95° 51' 28.451" E	27° 27' 2.813" N
SB	95° 51' 25.270" E	27° 27' 9.729" N
SB	95° 51' 22.540" E	27° 27' 13.462" N
SB	95° 51' 24.839" E	27° 27' 17.143" N
SB	95° 51' 25.085" E	27° 27' 21.965" N
SB	95° 51' 24.068" E	27° 27' 23.004" N
SB	95° 51' 23.916" E	27° 27' 24.899" N
SB	95° 51' 25.335" E	27° 27' 26.091" N
SB	95° 51' 29.222" E	27° 27' 28.310" N
SB	95° 51' 33.872" E	27° 27' 30.330" N
SB	95° 51' 34.027" E	27° 27' 33.449" N
SB	95° 51' 33.929" E	27° 27' 36.730" N
SB	95° 51' 35.966" E	27° 27' 39.086" N
SB	95° 51' 38.058" E	27° 27' 39.261" N
SB	95° 51' 43.706" E	27° 27' 39.039" N
SB	95° 51' 48.189" E	27° 27' 41.262" N
SB	95° 51' 51.868" E	27° 27' 44.993" N
SB	95° 51' 53.076" E	27° 27' 48.007" N

SB	95° 51' 55.110" E	27° 27' 50.566" N
SB	95° 51' 59.214" E	27° 27' 51.393" N
SB	95° 52' 2.289" E	27° 27' 53.415" N
SB	95° 52' 6.066" E	27° 27' 53.502" N
SB	95° 52' 11.176" E	27° 27' 53.293" N
SB	95° 52' 16.528" E	27° 27' 52.644" N
SB	95° 52' 20.663" E	27° 27' 54.623" N
SB	95° 52' 22.933" E	27° 27' 56.713" N
SB	95° 52' 27.031" E	27° 27' 58.488" N
SB	95° 52' 27.140" E	27° 28' 3.144" N
SB	95° 52' 27.251" E	27° 28' 7.826" N
SB	95° 52' 29.852" E	27° 28' 12.012" N

KG/ONDSF/KORAVAKA/2016

Contract Area Name:KG/ONDSF/KORAVAKA/2016

Coordinates of Contract

Area: The area comprising approximately **9.9Sq.Km.** **onshore** India identified as **KG/ONDSF/KORAVAKA/2016**.

Longitude and latitude measurements commence at points A,B,C, D, E and F are given below:

Points	Longitude (E)			Latitude (N)		
	D	M	S	D	M	S
A	81	53	05.95	16	24	39.57
B	81	53	31.44	16	24	08.24
C	81	55	08.68	16	24	47.48
D	81	55	22.36	16	24	27.23
E	81	56	35.08	16	25	13.39
F	81	55	30.39	16	26	05.46

AA/ONDSF/LAXMIJAN/2016

Contract Area Name: AA/ONDSF/LAXMIJAN/2016

Coordinates of Contract

Area: The area comprising approximately **8.9Sq.Km.** **onshore** India identified as **AA/ONDSF/LAXMIJAN/2016**

Points	Latitude	Longitude
A	26°49'37.288" N	94°46'07.645" E
B	26°47'17.703" N	94°44'26.853" E
C	26°48'02.519" N	94°46'40.166" E
D	26°47'40.62" N	94°46'40.859" E
E	26°47'54.527" N	94°47'34.136" E
F	26°48'25.548" N	94°47'37.672" E

G	26°48'20.500" N	94°46'45.234" E
H	26°49'18.399" N	94°46'43.169" E

CY/ONDSF/NEDUVASAL/2016

Contract Area Name: CY/ONDSF/NEDUVASAL/2016

Coordinates of Contract

Area: The area comprising approximately **10.01Sq.Km.** onshore India identified as **CY/ONDSF/NEDUVASAL/2016**.

Points	Longitude (E)			Latitude (N)		
	D	M	S	D	M	S
A	79	7	31.58	10	22	9.95
B	79	8	32.8	10	22	9.98
C	79	8	32.5	10	25	4.64
D	79	7	30.52	10	25	4.54

VN/ONDSF/NOHTA/2016

Contract Area Name: VN/ONDSF/NOHTA/2016

Coordinates of Contract Area: The area comprising approximately **15.00Sq.Km.** onshore India identified as **VN/ONDSF/NOHTA/2016**

Points	Longitude (E)	Latitude (N)
A	79° 35' 54.25''	23° 44' 7.00''
B	79° 38' 24.00''	23° 42' 40.00''
C	79°36' 30.50''	23° 41' 26.15''
D	79°34' 49.30''	23° 42' 33.00''

AA/ONDSF/PATHARIA/2016

Contract Area Name:AA/ONDSF/PATHARIA/2016

Coordinates of Contract

Area: The area comprising approximately **19.15Sq.Km.** onshore India identified as **AA/ONDSF/PATHARIA/2016**

Points	Latitude			Longitude		
	deg	min	sec	deg	min	sec
A	24	49	39.909	92	18	55.195
B	24	46	32.762	92	18	00.648

C	24	46	15.902	92	19	54.018
D	24	49	25.141	92	20	48.654

RJ/ONDSF/SADEWALA/2016

Contract Area Name:MB/ONDSF/SADEWALA/2016

Coordinates of Contract Area: As given below:

Longitude and latitude measurements commence at points A,B,C, D and E are given below:

Points	Longitude (E)			Latitude (N)		
	D	M	S	D	M	S
A	70	07	15.02	27	40	17.39
B	70	06	35.02	27	39	05.39
C	70	06	53.62	27	39	05.38
D	70	05	50.56	27	37	49.40
E	70	04	47.81	27	38	33.02
F	70	06	04.2	27	40	33.97

KG/ONDSF/SANARUDRAVARAM/2016

Contract Area Name:MB/ONDSF/SANARUDRAVARAM/2016

Coordinates of Contract Area:As given below:

Longitude and latitude measurements commence at points A,B,C, D and E are given below:

Points	Longitude (E)			Latitude (N)		
	D	M	S	D	M	S
A	81	15	05.62	16	27	53.80
B	81	15	59.02	16	30	50.25
C	81	17	04.91	16	29	49.72
D	81	16	18.79	16	28	34.98
E	81	15	31.18	16	27	39.44

MB/ONDSF/SOUTH PATAN/2016

Contract Area Name:MB/ONDSF/SOUTH PATAN/2016

Coordinates of Contract Area:As given below:

Longitude and latitude measurements commence a tpoints A,B,C, D and E are given below:

Points	Longitude (E)			Latitude (N)		
	D	M	S	D	M	S
A	72	01	51.779	23	47	59.492
B	72	03	04.553	23	48	26.124
C	72	03	52.421	23	46	00.744
D	72	02	35.862	23	45	46.524

CB/ONDSF/WEST BECHRAJI/2016

Contract Area Name:MB/ONDSF/WEST BECHRAJI/2016

Coordinates of Contract Area: As given below

Longitude and latitude measurements commence a tpoints A,B,C, D and E are given below:

Points	Longitude (E)			Latitude (N)		
	D	M	S	D	M	S
A	72	04	36.19	23	25	22.80
B	72	05	50.39	23	25	58.80
C	72	05	06.26	23	27	46.75
D	72	03	57.59	23	27	47.78
E	72	03	57.59	23	27	11.27

Annexure-V**PRICE FORMAT**

S/N	Item	Qty	UOM	Rate	Taxes (GST)	Amount
1	Design, Development, Customization, Configuration, Cloud Hosting, Installation and Commissioning of the "Real Time Measurement System (RTMS)" software on the DGH Cloud Servers (1Active & 1 Standby), for receiving and processing the data of real time measurement of petroleum from fields and wells, as per details given in Annexure-A along with maintenance Support Services (Warranty, Patches, upgradations etc.) for 01 year.	01	Nos.			
2	AMC charges for item-1 from 2 nd Year onwards.	04	years			
3	Services for capturing data and transmission of the same on 24 hour basis from the FRTUs of 30 contract areas to DGH Cloud Server, for contract period of 5 years. Each contract area may have two FRTUs approximately.					
	a) Offshore Contract Areas-7 Nos.	840	FRTU-Months			
	b) Onshore (except NE) Contract Areas-14 Nos.	1680	FRTU-Months			
	c) North-East-09 Nos.	1080	FRTU-Months			
4	Onsite (DGH) Operation & Maintenance support services for the RTMS and related communications considering Software as a Service (SAAS) for a period of Five (05) years.	60	Months			
5	Services at DGH end to add parameters in the RTMS software, when new wells or fields come into production. (30 contract areas x 4 parameters)	120	Nos.			
6	Training (3 days on half-yearly basis).	30	Days			
7	Estimated User Authorisations (20 Concurrent users)					
	a) Administration User (for adding or deleting Users)	100	Nos.			
	b) Super Users for making engineering changes in the RTMS software					
	c) Users with read only rights (30 X 3 +10)					
8	Total Amount					

Note: Quantity against Sl no 3 & 5 is indicative for evaluation