

# DIRECTORATE GENERAL OF HYDROCARBONS (Ministry of Petroleum & Natural Gas) Plot No.2, OIDB Bhawan, Sector 73, Noida-201301 Ph: 0120 – 247 2000. E-mail: mm@dghindia.gov.in

#### (E-Tender Notice)

#### INVITATION TO BID-National Competitive Bid (Limited E-Tender under Two Bid System)

Directorate General of Hydrocarbons, Noida invites Sealed Competitive Bids for "Design and Printing of DGH Annual "India's Hydrocarbon Outlook" and Annual Hindi Publication "Hridayanham" 2020-21", under two bid system (Techno-commercial bid and price bid) from the following prospective bidders:

- i) M/s. Continental Advertising Services, Delhi
- ii) M/s. Inter Publicity Pvt. Ltd., New Delhi
- iii) M/s. Concept Communications, Delhi
- iv) M/s. New Fields Advertising Private Ltd., New Delhi
- v) M/s. National Advertising Agency, New Delhi
- vi) M/s. Interads Advertising Pvt. Ltd., Delhi
- vii) M/s. RK Swamy BBDO Pvt. Ltd., New Delhi
- viii) M/s. Siddhartha Advertising, New Delhi
- ix) M/s. Adman Advertising, New Delhi
- x) M/s. Adfactors Advertising, Delhi
- xi) M/s. Airads Limited, Delhi
- xii) M/s. Basic 4 Advertising, New Delhi
- xiii) M/s. Sharad Advertising Pvt. Ltd., Delhi
- xiv) M/s. Ventures Advertising Pvt. Ltd., New Delhi
- xv) M/s. Sanket Communications Private Limited , New Delhi
- xvi) M/s. Yukti Prints, New Delhi

The detailed e-tender document for the above is also available at DGH's website <a href="www.dghindia.gov.in">www.dghindia.gov.in</a> and Government of India's Public Procurement Portal <a href="http://eprocure.gov.in/cppp/">http://eprocure.gov.in/cppp/</a>. The prospective bidders can participate in the tender by downloading the tender document from the aforementioned website, and submit their bid online only at GOI e-bidding portal <a href="https://eprocure.gov.in/eprocure/app">https://eprocure.gov.in/eprocure/app</a> with required documents confirming the eligibility criteria and other documents as stated in the e-tender document, before tender closing date and time. No physical bids will be accepted.

However, Bid Document may also be issued to those firms who meet the under mentioned technical rejection criteria (TRC) or bidder(s) empanelled in Print media creative agencies category of Bureau of Outreach & Communication (Erstwhile DAVP). The written request/ or any other desired clarifications from such firm should, however, be received (preferably by fax or in person) within 8 days from date of issue of tender to HoD (MM), DGH, OIDB Bhawan, Plot No.2, Sector 73, Noida- 201 301, (Ph No: 0120-2472000, Fax No: 0120-2472160) to issue the bid document.

E-Bids shall be submitted by 1400 hrs on 15.02.2021

E-Tender No.	Description of Item
MM-12019/1/2021-DGH/C-5443/ENQ/200	Designing and Printing of DGH Annual "India's  Hydrocarbon Outlook" and Annual Hindi  Publication "Hridayanham" 2020-21

Bidders are requested to go through the complete bid documents and the eligibility criteria under the Bid Rejection Criteria, Scope of work/ Technical Specifications etc. in particular before bidding.

#### **Pre-Qualification Criteria:**

1. Bidder should be empanelled under "Print media creative agencies with Bureau of Outreach & Communication (Erstwhile DAVP), Ministry of Information and Broadcasting". Copy of valid empanelment certificate to be attached.

Or

Bidder should have work experience in designing/printing of Reports, Magazines etc. with reputed MNCs, PSUs, Govt. agencies, etc. Bidder shall submit copy of Purchase order /Contract/Work Order and successful work completion certificate along with some proof of published reports of similar work done during last three years with minimum value of Rs. 5 Lakhs and above to DGH in the bid as documentary evidence.

- ii) The average annual turnover of bidder in the last three (3) financial years (2017-18, 18-19, 19-20) should be atleast INR 1 Crore. In respect of above, the bidder should submit audited annual financial statement of the relevant financial years.
- iii) The bidder should have an office /service center in the NCR. Self-Certificate stating the address, contact person, designation, phone number/fax number, e-mail id.

**NOTE:** Bids without documentary evidence as above towards eligibility criteria will be liable for rejection.

# DIRECTORATE GENERAL OF HYDROCARBONS MINISTRY OF PETROLEUM & NATURAL GAS GOVERNMENT OF INDIA

#### **NOIDA**

E-TENDER NO.: MM-12019/1/2021-DGH/C-5443/ENQ/200

#### **TENDER DOCUMENT**

#### **FOR**

Designing and Printing of DGH Annual "India's Hydrocarbon Outlook" and Annual Hindi Publication "Hridayanham" 2020-21

#### Directorate General of Hydrocarbons Ministry of Petroleum & Natural Gas Govt. of India, India

Phone No	:	(+91)-120-2472000	Office of : Director General (DGH)
Tele Fax	:	(+91)-120-2472049	OIDB Bhawan, Tower A, Plot No. 2,Sector
			– 73, NOIDA-201301, INDIA

#### **FORWARDING LETTER**

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# <u>Sub: E-Tender for "Designing and Printing of DGH Annual "India's Hydrocarbon Outlook" and Annual Hindi Publication "Hridayanham" 2020-21".</u>

Dear Sir,

**1.0** Limited tender under two bid system are invited in e-form from prospective Bidders through CPP e-bidding portal at <a href="https://eprocure.gov.in/eprocure/app">https://eprocure.gov.in/eprocure/app</a> for the above said service/work/supply/job, as per **Annexure-IV** at DGH, Noida at OIDB Bhawan. The salient features of the tender are:

1	E-Tender No.	MM-12019/1/2021-DGH/C-5443/ENQ/200
2	Brief Description of the Services / Scope	Designing and Printing of DGH Annual "India's
	of Supply	Hydrocarbon Outlook" and Annual Hindi Publication
		"Hridayanham" 2020-21
3	Type of Bid	Open E-Tender under two Bid System (Techno-
		commercial Bid & Price Bid)
4	E-Bid and Original documents submission	15/02/2021 at 14-00 hrs.(IST)
	closing Date & Time	
5	Place of Submission of original	Tender Box at Gr. Floor, Directorate General of
	documents	Hydrocarbons (DGH), OIDB Bhawan, Tower A, Plot
		No. 2, Sector – 73, Noida -201 301, India.
6	Bid Opening Time, Date & Place	Techno-commercial bid: 1400 Hrs. (IST) on the <b>next</b>
		working day of Bid Closing date and at the same
		address as above.
		Price bid: Opening time and date shall be intimated
		to technically qualified bidders.
7	Bid validity	90 days from bid closing date.
8	Bid Bond/ Earnest money Deposit	NIL, However, bidder need to submit "Bid Security
	Amount	Declaration"
	(original Bid Bond to be enclosed with	
	Techno-commercial Bid only)	
9	Performance Guarantee to be submitted	3% of Total contract value valid for a period of 05
	only by the Successful Bidder	months from date of issue of LOA.
10	Eligibility Criteria	As per Annexure-III of Tender document.

- 2.0 Complete bid document can be downloaded from DGH's web site <a href="www.dghindia.gov.in">www.dghindia.gov.in</a> and Government of India's Public Procurement Portal <a href="http://eprocure.gov.in/cppp/">http://eprocure.gov.in/cppp/</a>. The prospective bidders can participate in the tender by downloading the tender document from the aforementioned website, and submit their bid online only at GOI e-bidding portal <a href="https://eprocure.gov.in/eprocure/app">https://eprocure.gov.in/eprocure/app</a> with required documents confirming the eligibility criteria along with the other documents as stated in the e-tender document, before tender closing date and time. No physical bids will be accepted.
- **3.0** Addendum/ Corrigendum, if any, to the tender documents shall be uploaded on aforementioned websites only. Hence, bidders may view the same regularly till the bid submission date.
- 4.0 <u>Bidders must submit their bid online at Government of India's Public Procurement Portal https://eprocure.gov.in/eprocure/app. No physical bids will be accepted.</u>
- **5.0** Bidders are requested to go through the complete bid documents and the eligibility criteria under the Bid Rejection Criteria, Scope of work/supply etc. in particular before bid submission.
- **6.0** Two Bid systems are being followed in this tender. Bidders should take due care to submit their bids in accordance with the requirement and as per the instructions given in the tender document(s).
  - List of documents to be uploaded/submitted along with techno-commercial bid are also mentioned at Appendix-8 of Annexure-I of Bid document.
- **7.0** Bid Evaluation Criteria (BEC) shall be the basis for evaluation of bids. Prices should be quoted strictly as per Price Bid Format given.
- **8.0** DGH reserves the right to cancel the tender or reject / accept any / all bids without assigning any reason.
- **9.0** DGH expects the bidders to comply with the tender specifications, terms & conditions of the tender and submit their bid accordingly without any exceptions / deviations. Conditional bids indicating exceptions/ deviations to the tender clauses shall be rejected summarily.
- **10.0** Other details and terms/conditions are as per the following **Annexure I-VI**.

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

Thanking you,

MM- Dept For Directorate General of Hydrocarbons

**Encl: As above** 

#### **INSTRUCTIONS TO BIDDERS**

#### A. INTRODUCTION

**1.0 ELIGIBILITY AND EXPERIENCE OF THE BIDDER:-** (Please refer to "Technical & Commercial Rejection Criteria at **B1** of Bid Evaluation Criteria under **Annexure-III**).

#### 2.0 TRANSFER OF BIDDING DOCUMENT

The Bidding document is not transferable.

#### 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.

#### B. THE BIDDING DOCUMENT

#### 4.0 CONTENT OF BIDDING DOCUMENTS

**4.1** The services/scope of supply 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 : Proforma of Authorization Letter for Attending Tender Opening.

Appendix 3 : Proforma Certificate on relatives of DG/Directors of DGH

Appendix 4 : Proforma for Changes/Modifications Sought by Bidders.

Appendix 5 : Bid Security Declaration

Appendix 6 : Bank Guarantee for Performance Security

Appendix 7 : Undertaking / Declaration

Appendix 8 : List of documents to be uploaded/submitted along with techno-commercial bid

ANNEXURE-II : General Terms & Conditions of Contract

ANNEXURE-III : Pre-Qualification Criteria

ANNEXURE-IV : Scope of Work and Technical Terms & Conditions ANNEXURE-V : Technical Evaluation Criteria & Evaluation of bids

ANNEXURE-VI: Price Format/Price Schedule/BOM

**ANNEXURE-VII: Sample Data** 

**ANNEXURE-VIII: E-Bidding Instructions to Bidders** 

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 CLARIFICATION ON BID DOCUMENT**

A bidder requiring any clarification of Bid Document should notify DGH in writing at the address provided in the forwarding letter. Clarifications, if any, shall in no case be sought later than **5 days prior** to the deadline prescribed herein for the submission of Bids. However, DGH may at its discretion provide clarifications on any relevant or crucial issue regarding the bid document and such clarifications shall not automatically cause any extensions of prescribed dates unless otherwise notified by DGH in writing within the original prescribed dates. In case no such extension of time is notified by DGH in writing then the original prescribed dates shall deem to apply.

#### 6.0 AMENDMENT OF BID DOCUMENT

- **6.1** 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.
- **6.2** The Addendum will be hoisted on DGH's website and Gol's Public Procurement Portal only and all bidders are advised to visit aforesaid websites till the bid submission date to update themselves about modifications to the Bid documents, if any, in order to submit their offer accordingly.
- 6.3 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.

#### C. PREPARATION OF BIDS

#### 7.0 SUBMSSION OF BID

- **7.1** The bidders shall submit the bids electronically and sign digitally.
- **7.2** Tenders are invited online through Single stage and two envelope or bid systems. The first electronic envelope/bid is techno-commercial bid envelope and second electronic envelope is financial bid envelope.
- **7.3** The bidder shall submit Techno-Commercial & Financial bids simultaneously.

Note: Techno-Commercial bid will be evaluated first and thereafter financial bids of qualified bidders only shall be opened.

- **7.3.1** The techno-commercial bid electronic envelope will contain the follows:
  - a. Scanned copy of the following original documents:
    - i. Power of attorney or authorisation, or any other document consisting of adequate proof of the ability of the signatory to bind the bidder.
  - b. Bid document (without indicating price in Price format/Price schedule/ BOM/ BOQ) and corrigendum/addendum, if any.
  - c. Duly signed and scanned copies of required documents as mentioned at Appendix-8.

All the uploaded documents shall be digitally signed by the authorized signatory of the bidder.

**7.3.2** The Financial bid electronic envelope will contain: Scheduled of Rate/Price Schedule.

Note: Detailed instructions regarding online bid submission are available in Annexure-VI of Tender Document as "E-Tendering instructions to the bidders".

- **7.4** Bidder shall submit the following original documents offline to HOD (MM) at Directorate General of Hydrocarbons office in Noida, on or before the date and time of closing of bids specified in NIT, in a properly sealed envelope:
  - i) Power of Attorney for authorized signatory of the bid, or any other document consisting of adequate proof of the ability of the signatory to bind the bidder.
  - ii) Any other document, if specified, in the tender.

The envelope shall bear the name of the firm, Physical documents against e- Tender No. \_\_\_\_\_\_, name of work and the phrase "Do Not Open Before (Due date & time of opening of tender)"

**Note:** The responsibility for ensuring that envelope is delivered in time would be vested with the bidder. DGH shall not be responsible if the envelope is lost/ delivered elsewhere or late.

- **7.5** 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.
- **7.6** Bids shall be submitted in the prescribed bid proforma as per **appendices-1 to 8** of **Annexure-I** & **Price schedule at Annexure-V**. The prescribed proforma at Appendices of **Annexure-I**, duly filled in and signed should be uploaded intact.
- 7.7 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.
- **7.8** 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.
- **7.9** The Bidders are advised in their own interest to ensure that all the documents mentioned at Appendix-8 should be uploaded with their techno-commercial bid failing which the offer is liable to be rejected.
- **7.10** 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.
- **7.11** The bidder should indicate at the time of quoting against this tender their full postal and telegraphic/telex /fax addresses and also similar information in respect of their authorized agents in India, if any.
- **7.12** 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.
- **7.13** 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.
- **7.14** 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.

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

#### 8.1 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.

**8.2** Prevailing Government guidelines regarding Tender Fee /Bid Security / Performance Security / Purchase or Price Preference shall be applicable, provided the bidder submits necessary evidence for eligibility, along with the bid.

#### 9.0 BID PRICES

- **9.1** The bidders shall indicate on the appropriate price schedule the net unit prices (wherever applicable).
- **9.2** Unit prices must be quoted by the bidder, both in words and in figures. Price quoted must remain firm during its performance of the Contract and is not subject to variation on any account. All duties and taxes payable by the bidder under the Contract for which this Bidding Document is being issued, shall be included in the rates, prices and total Bid Price submitted by the bidder, and the evaluation of bid shall be made accordingly.
- **9.3** Prices quoted by the bidder shall be firm during the bidder's performance of the contract and not subject to variation on any account.
- **9.4** 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.
- **9.5** Concessions permissible under statutes:

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

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

#### 9.6 Income Tax Liability

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

#### 9.7 GST Liability:

- **9.7.1** 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)
- **9.7.2** 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.

- **9.7.3** 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.
- **9.7.4** 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.
- **9.7.5** 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 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.
- **9.7.6** 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.
- **9.7.7** 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 service, the Bidder shall not include GST in the quoted prices.
- **9.7.8** 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 PAYMENT TERMS**: Within 30 days of receipt of Invoices after complete supply.

#### 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 along with 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. GST Registration Number.
- 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 **90 days** after the date of bid opening 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.

#### 14.0 BID SECURITY

- **14.1** Bid Security not applicable for this tender.
- **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.
- 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.

#### d. SUBMISSION AND OPENING OF BIDS

#### 16.0 SEALING AND MARKING OF BIDS.

16.1 Offers are to be submitted in electronically. The first electronic cover/envelope 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 Price bid. The second sealed electronic cover/envelope will contain only the price schedule duly filled in and digitally signed.

Physical documents as mentioned in the bid document must be reached at DGH office before bid closing date and time.

- **16.2** DGH reserves the right to ignore any offer which fails to comply with the above instructions.
- **16.3** DGH will not be held responsible for any loss or late received of e-bid due to server problem and others.
- **16.4** DGH will not be held responsible for the loss of or for the delay in postal transit.

#### 17.0 DEADLINE FOR SUBMISSION OF BIDS

**17.1** The e-bid must be received by the DGH electronically not later than **1400** Hrs (IST) on the notified date of closing of the tender. Required original documents, as mentioned at 7.4 of Annexure-I, must be reached before the tender closing date and hours at the following address:

HOD (MM)
Directorate General of Hydrocarbons
OIDB Bhawan,
Tower A, Plot No.2, Sector-73,
NOIDA-201301

Original documents 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. Original documents received by post without proper superscription of Physical Documents against Tender number\_\_\_\_\_\_, Bid Closing Date and other details on the outer envelope will be opened in DGH office as ordinary mail and may not be considered.

#### 18.0 LATE BIDS

- **18.1** Bidders are advised in their own interest to ensure that e-bid and required physical documents against tender must reach the specified office well before the closing date and time of the bid.
- **18.2** Physical documents received after closing date and time of the bid, will be rejected and returned unopened.

#### 19.0 MODIFICATION AND WITHDRAWAL OF BIDS

**19.1** No e-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 **1400 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-2** 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** Price Bids of the technically qualified Bidders will be opened on a specific date in presence of interested qualified bidders. Bidders will be intimated about the bid opening date in advance.
- **20.3** 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.

#### e. **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-III**.

#### 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 <u>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.</u>

#### 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 PREFERNCE

- **25.1** Purchase preference to Micro and Small Enterprises registered with District Industry Centers or Khadi and Village Industries Commission or Khadi and Village Industries Board or Coir Board or National Small Industries Corporation or Directorate of Handicrafts and Handloom or any other body specified by Ministry of MSME.
- **25.2** Purchase preference policy-linked with Local Content (PP-LC) notified vide letter No O-27011/44/2015-ONG/II/FP dated 25.04.2017 of MoPNG and subsequent relevant order/s shall be applicable in this tender. Bidders seeking benefits under Purchase Preference Policy shall have to submit all undertakings/documents applicable to this policy.
- 25.3 In case a bidder is eligible to seek benefits under PP-LC policy as well as Public Procurement Policy for MSEs Order 2012, then the bidders should categorically seek benefits against only one of the two policies i.e. either PP-LC or MSE policy. If a bidder seeks free of cost tender document under the MSE policy, then it shall be considered that the bidder has sought benefit against the MSE policy and this option once exercised cannot be modified subsequently.
- **25.4** Bidders seeking Purchase preference (linked with local content) (PP LC) shall be required to meet / exceed the target of Local Content (LC).

#### f. AWARD OF CONTRACT

#### 26.0 AWARD CRITERIA

DGH will award the Contract to the successful Bidder whose bid has been determined to be substantially responsive and has been determined as the lowest evaluated bid, provided further that the Bidder is determined to be qualified to perform the Contract satisfactorily.

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

27.1 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.

#### 28.0 NOTIFICATION OF AWARD (NOA)

- **28.1** Prior to the expiration of the period of bid validity, DGH will notify the successful bidder in writing that its bid has been accepted.
- **28.2** The notification of award will constitute the formation of the contract.
- **28.3** Upon the successful bidder's furnishing performance security, pursuant to clause 30, the Purchaser will promptly notify each unsuccessful bidder and discharge their bid securities.

#### 29.0 PERFORMANCE SECURITY:

- 29.1 Successful bidder shall submit the performance security, 3% of Total contract value with validity 05 months, within 10 days of placement of Letter of Award (LoA)/ Notification of Award (NoA). The successful bidder shall furnish to DGH the Performance Security for an amount specified above or the amount mentioned in Letter of Award, issued by DGH to Contractor awarding the contract, as per Appendix 6 in the form of Bank Guarantee (BG) from any Nationalised / Scheduled Bank in India. Bank Guarantees issued by Banks should be on non-judicial stamp paper of requisite value, as per Indian Stamp Act, purchased in the name of the Banker.
- 29.2 The performance security specified above must be valid as per time period mentioned above at 29.1, to cover the warranty obligations indicated in **clause 7.0** of General Terms & Conditions hereof. The same 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.
- **29.3** 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.
- **29.4** The Performance Security will not accrue any interest during its period of validity or extended validity.

#### **30.0** SIGNING OF CONTRACT (Not Applicable):

At the same time as Purchaser notifies the successful Bidder that its bid has been accepted, the Purchaser will send the Bidder the contract/supply order in duplicate. The contract against this tender will be governed in accordance with the General Terms & Conditions of Contract at **Annexure-II**. The successful Bidder will return one copy of the supply order/contract duly signed on each page as token of confirmation/acceptance.

\*\*\*\*\*\*\*

#### **BID SUBMISSION PERFORMA**

Tender No	Bidder's Telegraphic Address: Telephone No : FAX NO :
Directorate General of Hydrocarbons OIDB Bhawan, Tower A, Plot No. 2, Sect	tor – 73, Noida -201 301.
Dear Sirs,	
you specify in the Acceptance of Te	e services detailed in schedule hereto or such portion thereof as ender at the price given in the said schedule and agree to od as per the Forwarding letter or till <b>90 days from the date of</b>
2. I/We hereby confirm that the quot	ted prices will remain firm for the entire contract duration.
Evaluation Criteria" at <b>Annexure-II</b> , and for providing services/work/job, and Supply/Schedule of Rates etc at <b>Anne</b>	mplied with the "Instructions to Bidders" at <b>Annexure-I</b> , "Bid d accepted the "General Terms and Conditions" at <b>Annexure-III</b> have thoroughly examined and complied with the Scope of <b>exure-IV</b> , hereto and am/are fully aware of the nature of the ur offer is to provide services strictly in accordance with the
	Yours faithfully,
	Signature of the Bidder
	Name
	Seal of the Company
	Dated
Signature of witness	
Address	

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

#### **AUTHORISATION LETTER FOR ATTENDING TENDER OPENING**

No.	Date
То,	The Directorate General of Hydrocarbons.  OIDB Bhawan, Tower A, Plot No. 2, Sector – 73, Noida -201 301,India.
Subjec	t : <b>Tender No</b>
Sir,	
	Yours faithfully
	Signature of Bidder
	: <b>o:</b> Mrfor information and for production before the HoD (MM) time of opening of bids.

#### Appendix 3

#### PROFORMA CERTIFICATE ON RELATIVES **OF DIRECTOR OF DGH**

into with Directorate General of Hydrocarbons (DGH).
We certify that to the best of my/our knowledge:
(i) I am not a relative of any DG / Director of DGH;
(ii) We are not a firm in which a DG / Director of DGH or his relative is a partner;
(iii) I am not a partner in a firm in which a DG / Director of DGH or his relative is a partner;
(iv) We are not a private company in which a DG / Director of DGH is a Member or Director;
(v) We are not a company in which DG / Directors of DGH hold more than 2 % of the paid-up share capital of our company or vice-versa.
Authorised Signatory of The Contracting Party
Place
Date

#### 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

Note: If left blank, it will be construed that bidder has **not taken** any exceptions/ deviations to the terms and conditions of the bid document.

Signature of the Bidder	
Name	
Seal of the Company	

Note: - Bids maintaining or taking exceptions/deviations beyond the bid closing date shall be rejected straightaway.

#### **Bid Security Declaration**

Ref: Tende	<u>r No. MM-12019</u>	/1/2021-DGH <sub>/</sub>	<u>/C-5443/ENQ/</u>	200 for Design	ning and Printin	g of DGH
Annual "In	dia's Hydrocarbo	n Outlook" an	d Annual Hind	di Publication	"Hridayanham"	2020-21

We hereby accept that if we withdraw or modify our bid during period of validity etc., our firm/company will be suspended for 02 years from the date of suspension.

Bidder Signature & Company Stamp

#### **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 – 7	<sup>7</sup> 3, Noida -201 301.
Dear Sirs,	
Tower A, Plot No. 2, Sector – 73, Noida expression shall, unless repugnant to the administrators, executors and assignees) had dated (hereinafter called amendments thereto) with M/s (hereinafter referunless repugnant to the context or meaning and assignees) and DGH having agreed to	neral of Hydrocarbons, having its Office at OIDB Bhawan, 201 301, India, (hereinafter referred to as `DGH', which context or meaning thereof, include all its successors, aving entered into a CONTRACT No.  d 'the CONTRACT' which expression shall include all the having its registered/head office at erred to as the 'CONTRACTOR') which expression shall, thereof include all its successors, administrators, executors hat the CONTRACTOR shall furnish to DGH a performance of faithful performance of the entire CONTRACT.
having head/registered office at "the Bank", which expression shall, unless its successors, administrators, executors and to pay immediately on first demand in wr figures) (Indian Rupees (in demur, reservation, contest or protest and demand made by DGH on the Bank by servi any proof, on the bank as regards the amou before any Court, Tribunal, Arbitrator or whatsoever, as liability under these presenguarantee herein contained shall be irrevoca by DGH in writing. This guarantee shall no	registered under the laws of (hereinafter referred to as repugnant to the context or meaning thereof, include all d permitted assignees) do hereby guarantee and undertake riting any /all moneys to the extent of Indian Rs (in words)) without any /or without any reference to the CONTRACTOR. Any such ng a written notice shall be conclusive and binding, without nt due and payable, notwithstanding any dispute(s) pending any other authority and/or any other matter or thing onts being absolute and unequivocal. We agree that the ble and shall continue to be enforceable until it is discharged to determined, discharged or affected by the liquidation, CONTRACTOR and shall remain valid, binding and operative
the Bank as a principal debtor, in the first i	es option shall be entitled to enforce this Guarantee against instance, without proceeding against the CONTRACTOR and antee that DGH may have in relation to the CONTRACTOR's
affecting in any manner our obligations her CONTRACT or to extend time of performa postpone for any time or from time to time	hall have the fullest liberty without our consent and without eunder to vary any of the terms and conditions of the said nce by the said CONTRACTOR(s) from time to time or to exercise of any of the powers vested in DGH against the said my 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 co	ontained herein above, our liability under this Guarantee is limited to				
	(Indian Rupees (in words)) and out til(indicate the date of expiry of bank				
Any claim under this Guarantee must be received by us before the expiry of this Bank Guarantee. such claim has been received by us by the said date, the rights of DGH under this Guarantee will however, if such a claim has been received by us within the said date, all the rights of DGH under Guarantee shall be valid and shall not cease until we have satisfied that claim.					
In witness whereof, the Bank throug of20_ at	gh its authorised officer has set its hand and stamp on this day				
(Signature)	 (Signature)				
Full name and official	Full name, designation and				
address (in legible letters) with Bank stamp	address (in legible letters)				
	Attorney as per power of				
	Attorney No				
	Dated				
WITNESS NO. 2					
(Signature)					
Full name and official					

address (in legible letters)

#### <u>Undertakings / Declaration (To be submitted at Company's letter head)</u>

<u>Tender No. MM-12019/1/2021-DGH/C-5443/ENQ/200for "Designing and Printing of DGH Annual Hindi Publication 2018-19".</u>

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

We have submitted a copy of valid GST registration certificate under Goods and Service tax rules.

OR

We undertake to submit copy of requisite Goods and Service tax 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.
- **3.** We hereby undertake that all the documents/ certificates / information submitted by them against the tender are genuine.

	Signature of the Bidder
Name	
	Seal of the Company

#### LIST OF THE DOCUMENTS TO BE UPLOADED/SUBMITTED ALONG WITH TECHNICAL-COMMERCIAL BID

#### A. <u>List of Documents to be uploaded in Techno-commercial electronic envelope:</u>

The tenderer shall upload the following digitally signed documents along with techno-commercial bid. Any bid not accompanying the below mentioned documents shall be liable for rejection:

- 1. Duly signed and scanned copy of Experience Certificate in accordance with clause no. B.1 (Technical Rejection Criteria) at Annexure-III of tender document.
- 2. Duly signed and scanned copy of PAN Card/TAN.
- 3. Duly signed and scanned copy of registration of firm in case of registered firm / company/proprietorship, partnership deed in cases of partnership firm.
- 4. Duly filled, signed and scanned copy of required Appendices (Appendix-1, 2, 3, 4 & 7) at Annexure-I.
- 5. The power of attorney or authorisation, or any other document consisting of adequate proof of the ability of the signatory to bind the bidder, in original, when the power of attorney is a special "Power of Attorney" relating to the specific tender of DGH only.

A notarized true copy of the "Power of Attorney" shall also be accepted in lieu of the original, if the power of attorney is a general "Power of Attorney". However, photocopy of such notarized true copy shall not be accepted.

- 6. Self-attested copy of GST registration certificate or undertaking as per Appendix-7 of Annexure-I.
- 7. Undertaking on the company's letter head and duly signed by the signatory of the bid that all the documents/ certificates / information submitted by them against the tender are genuine.
- 8. Declaration on the company's letter head and duly signed by the signatory of the bid 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.
- 9. Proposed new designs for DGH Annual Hindi Publication 2018-19.
- **B.** List of Documents to be submitted offline in original:

Power of attorney (Sr. No. 5 above) are also to be submitted offline in original before tender closing date and time.

#### MODEL CONTRACT AND GENERAL CONDITIONS OF CONTRACT

(To be signed with the successful bidder)

#### 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**:

DGH or Directorate General of Hydrocarbons., India means an organization including its successors, under the Ministry of Petroleum & Natural Gas, Government of India.

#### 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 **DAY**

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

#### 1.11 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.

#### 1.12 WORKS / OPERATIONS:

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

#### 1.13 GUARANTEE:

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

#### 1.14 MOBILISATION:

Shall mean rendering the necessary equipment fully manned and equipped as per requirements of the CONTRACT and ready to begin work at designated site. The date and time of DGH's acceptance will be treated as the date and time of mobilisation.

#### 1.15 **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

#### **1.16 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.

#### 1.17 **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.

#### 1.18 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.

#### 1.19 **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.

#### **1.20 FACILITY:**

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

#### 1.21 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.

#### 1.22 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

#### 1.23 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.

#### 1.24 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,

#### 1.25 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 SUPPLY / WORK / CONTRACT:

Scope of the SUPPLY/WORK/CONTRACT shall be as defined in the CONTRACT, specifications 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 after placement of LOA. DGH notifies the successful bidder, in writing through Letter of Awards (LOA) that it has been awarded the contract.
- 3.2 **MOBILISATION TIME:** The mobilization should be completed by Contractor within the stipulated period under the contract. Mobilization shall be deemed to be completed when contractor's equipment & manpower are placed at the nominated 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 LOA is placed, will be treated as date of commencement of Contract.
- 3.4 **DURATION OF CONTRACT**: The contract shall be for the period of 03 months from the date of placement of LOA or till completion of work/supply as per scope of work mentioned at Annexure-IV of the tender document.

- **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 / Technical Specifications (**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 / Technical Specifications (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, enroute/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 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: HOD (MM), Directorate General of Hydrocarbons, OIDB Bhawan, Tower A, Plot No. 2, Sector 73, Noida -201 301, India. Fax: +91 120 2472049.
- (b) For reports and payments: HOD(IT), Directorate General of Hydrocarbons, OIDB Bhawan, Tower A, Plot No. 2, Sector 73, Noida -201 301, India. Fax: +91 120 2472049

Fax:	
8.2 CONTRACTOR'S REGISTERED OFFICE AND ADDRESS	

#### 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

- 11.1 DGH shall pay to CONTRACTOR for the services/supply, to be provided by the CONTRACTOR as per the Scope of supply (Annexure-IV). 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 to the addressee at **8.1** (b) above.

11.3 Clear (undisputed) invoices with original supporting documents duly countersigned by DGH's representative/ engineer wherever applicable will be submitted at the end of satisfactory completion of Works / Services / Project by the CONTRACTOR to DGH and payment shall be made within 30 (thirty) calendar days from the date of receipt of invoice at the above office (Unless otherwise specified in the Special Conditions of the Contract)

The original invoice should also accompany the following documents/ details: 1) Along with invoice: Following documents / details should be invariably furnished along with the invoice:

- a) Copy of valid registration certificate under the GST Tax rules.
- 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) Invoice (i.e. Tax invoice as per relevant GST rules, in original and duplicate, clearly indicating GST Tax registration number, Rate and amount of GST shown separately).
- d) Insurance policies and proof of payment of premium (As applicable).
- e) Details of statutory payments like PF, ESI, EPF etc. (As applicable).
- f) Undertaking by the contractor regarding compliance of all statutes.
- g) Documentary evidence of payment of Customs duty, where applicable.
- h) Any other document specifically mentioned in the Contract, or supporting documents in respect of other claims (if any), permissible under the Contract.

In addition to the said particulars submitted alongwith the bid, the CONTRACTOR should also provide any other information as may be required for determining the taxability of the amount to be remitted to the non-resident. Further, the CONTRACTOR shall be liable to intimate the subsequent changes (if any) to the information submitted against any of the said particulars, alongwith full details.

11.4 In the event of any dispute in a portion or whole of any invoice, DGH shall make payment of undisputed portion and shall promptly notify the CONTRACTOR's representative in writing for the remaining portion in CONTRACT to mutually resolve the dispute and if resolved in part or full, payment shall be made to the CONTRACTOR within 30 days of such settlement.

#### 11.5 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 therefor. 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 ACCOUNTIING

#### 12.1 A 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 B. 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 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.

#### 12.4 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.

#### 12.5 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.

- 12.6 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.
- 12.7 It is noted that CONTRACT u/s 195 (2) of the Income Tax Act, 1961 for the purpose of deduction of tax at source will be obtained by DGH from the concerned Income Tax authorities in India.
- 12.8For 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	shall	furnish	to	DGH	a	Bank	Guarantee	No
dated		iss	ued by					for		_ (3 % of the Total contract
value) to be submitted within 10 days of the placement of Letter of Award (LoA)/ Notification of Award										
(NoA) valid till 05 months 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	d of th	e contract. T	he ban	k guarant	ee w	ıill be d	isch	arged b	y DGH not la	ater than 30 days following
its exp	iry.									

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 governing interalia customs stowaways, foreign exchange etc.

#### **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 subCONTRACTOR'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 subCONTRACTORs or subCONTRACTOR's personnel and
- b) loss or damage to:
- (i) any property owned, hired or supplied by CONTRACTOR or CONTRACTOR's personnel or subCONTRACTORs or subCONTRACTOR'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 ordamage is caused by the negligence or fault of the CONTRACTOR or CONTRACTOR's personnel or subCONTRACTORs or subCONTRACTOR'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 25.

#### 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 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 entirely 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 with-hold 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.
  - (i) 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.

#### 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 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 new 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 denovo.
- 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 and 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.

#### 35.0 FAILURE AND TERMINATION CLAUSE/LIQUIDATED DAMAGES CLAUSE:

- (a) Date of completion of the work/job/supply shall be the essence of the contract. If the contractor/supplier fails to complete/deliver the work/material as per time schedule mentioned at Annexure-IV or any time repudiates the contract before the expiry of such period, the purchaser may, without prejudice to any other right or remedy, available to him to recover damages for breach of the contract:
- (b) Recover from the Contractor/Supplier as agreed liquidated damages and not by way of penalty, a sum equivalent to 1/2% (half percent) of the total contract value per week for such delay or part thereof (this is an agreed, genuine pre-estimate of damages duly agreed by the parties) which the contractor has failed to deliver within the period fixed for delivery in the schedule, where delivery thereof is accepted after expiry of the aforesaid period. It may be noted that such recovery of liquidated damages may be up to a ceiling of 10% of Total contract value which the contractor/supplier has failed to deliver within the period fixed for delivery. Liquidated damages for delay in supplies thus accrued will be recovered by the paying authorities of the purchaser specified in the supply order, from the bill for payment of the cost of the materials submitted by the contractor/supplier in accordance with the terms of supply order/contract or otherwise. Liquidated damages will be calculated on the basis of contract/ supply order price of services/materials excluding duties and taxes, where such duties/taxes have been shown separately in contract/supply order.

OR

(c) Cancel the contract/supply order or a portion thereof by serving prior notice to the contractor/supplier.

#### **Pre-Qualification CRITERIA**

#### A. VITAL CRITERIA FOR ACCEPTANCE OF BIDS

Bidders are advised not to take any exception/deviations to the bid document. Still, if exceptions /deviations are maintained in the bid, such conditional/ non-conforming bids shall not be considered and shall be rejected.

#### B. REJECTION CRITERIA

#### **B.1** Pre-Qualification CRITERIA:

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

1. Bidder should be empanelled under "Print media creative agencies with Bureau of Outreach & Communication (Erstwhile DAVP), Ministry of Information and Broadcasting". Copy of valid empanelment certificate to be attached.

#### Or

Bidder should have work experience in designing/printing of Reports, Magazines etc. with reputed MNCs, PSUs, Govt. agencies, etc. Bidder shall submit copy of Purchase order /Contract/Work Order and successful work completion certificate along with some proof of published reports of similar work done during last three years with minimum value of Rs. 5 Lakhs and above to DGH in the bid as documentary evidence.

- 2) The average annual turnover of bidder in the last three (3) financial years (2017-18, 18-19, 19-20) should be atleast INR 1 Crore. In respect of above, the bidder should submit audited annual financial statement of the relevant financial years.
- 3) The bidder should have an office /service center in the NCR. Self-Certificate stating the address, contact person, designation, phone number/fax number, e-mail id.

**NOTE:** Bids without documentary evidence as above towards eligibility criteria will be liable for rejection.

#### **B.2** COMMERCIAL REJECTION CRITERIA

The following vital commercial conditions should be strictly complied with, failing which the bid will be liable for rejection:

**1.0** Bid should be submitted in Two Bid system in two separate electronic 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 techno-commercial bid. The Priced bid shall contain only the prices duly filled in as per the price bid format. 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.

#### 2.0 Acceptance of terms & conditions:

The bidder must confirm unconditional acceptance of General Terms & Conditions of Contract at **Annexure-II** and Instruction to Bidders at **Annexure-I** by attaching digitally signed tender document.

#### 3.0 Offers of following kinds will be rejected:

- a) Offers which do not confirm unconditional validity of **90 Days** of the bid as indicated in the "Invitation to Bid".
- **b)** Offers where prices are not firm during the entire duration of the contract and/or with any qualifications.
- c) Offers which do not conform to DGH's price bid format.
- d) Offers which do not confirm to the contract period indicated in the bid.
- e) The offers indicating/disclosing prices in techno-commercial (un-priced bid) or at any stage before opening of price-bid shall be straightaway rejected.
- f) Offers not accompanied by copy of PAN Card will be rejected.
- g) 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.
- h) Offers not accompanied with the undertaking on the company's letter head and duly signed by the signatory of the bid that all the documents/ certificates / information submitted by them against the tender are genuine.
- **4.0** 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.

#### C. EVALUATION OF BIDS

- C.1 Bidders who confirms the eligibility criteria (stated as B.1 and B.2 above) will be considered for evaluation of their respective price bids.
- C.2 The Evaluation of offers will be made on the basis of total amount / total price of items inclusive of all charges, taxes & duties as indicated in the price format (**Refer 'Total Figure in words''** in **Price Format'**).
- C.3 The decision of DGH will be final and binding to all the bidders.
- C.4 Rate for all the items is to be quoted by the bidders. In case of any item has not been quoted by any bidder that bid for such items will be loaded with the highest rate received for that item as evaluation is to be done on the total amount of all the items for the indicated quantity. However while awarding the contract, successful bidder has to supply all the items and for those items for which bidder has not quoted the rates will get the lowest rate received in the tender. Every bidder has to agree to this condition failing which its offer will not be considered for award of work.
- C.5 If there is any discrepancy between the unit price and the total price, the unit price will prevail and the total price shall be corrected. Similarly, if there is any discrepancy between words and figure, the amounts in words shall prevail and will be adopted for evaluation.

#### D.General:

- **1.** The BEC over-rides 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.** On site inspection will be carried out by DGH's officers / representative /Third Parties at the discretion of the DGH.

### SCOPE OF WORK/TECHNICAL SPECIFICATION

No.	Specifications	Proposed
1	Size of paper	210MM X 297MM A4 International (finished size)
2	No. of pages	1) <b>India Hydrocarbon Outlook</b> - 200 pages including text/ figures/ images, etc.
		(approximate)
		2) Hindi Publication <i>Hridayanham</i> – 80 to 100 pages
3	Cover	Matt velvet finish on both sides of outer cover or Jacket with Spot UV Coating and
		crystal abrasive finishing (front & back)
4	No. of Copies	India Hydrocarbon Outlook: 500 (400 Copies Paperback + 100 Copies Hard
	(Print)	Bound)
		Hindi Publication <i>Hridayanham</i> : 100 copies Paperback
5	Color	All Text pages and cover is 4 colour printing with online aqueous coating
6	Binding	Perfect Binding, Matt Lamination (500 Copies Paper Back Section Swing cover
		drawn) & 100 Copies Hard Bound (Full Pastel binding with jacket)
7	Paper	Text: 130 GSM IRIS SG or equivalent/Cover: 300 GSM Imported Art card
8	Design	a. Text, tables, content, and maps in hard copies/digital format, wherever
	(Mandatory	available along with photographs etc. will be provided by DGH
	inputs)	b. Composing, designing of the cover & back pages, designing of pages will be
		carried out by the agency in Adobe In-Design/Corel software.
		c. Digitization/scanning of the text/figures/tables/ photographs etc. including
		processing, proofing, binding etc. to be done by agency
		d. Pictures have to be scanned or digitized and improved through software for
		higher resolution.
		e. Editing and proofreading of the text of publication to be done.
		f. All pages of the book need to be coated, finished, and designed for optimum
		clarity and visual appeal.
		g. Purchase of 50 high quality images/design elements and re-touched/ finished
	District Drivets Or	as per requirement of the annual publication.
9	Digital Prints &	Submission of 6 digital colour printing copies prior to submission of ferro copy.
	Ferrocopy Submission	Once digital colour print copies are approved, ferro copy to be submitted to DGH
10		within 2 days.  The entire quantity of printed Appual Report should be submitted to DCH office.
10	Completion and Delivery	The entire quantity of printed Annual Report should be submitted to DGH office within 10 days from the date of approval of ferro copy.
11	Packing	Packed in Kraft Paper in lots of 10 copies each
12	Soft copy	a. Soft copy (.cdr file format and pdf format) of the publication to be submitted
14	зон сору	in 1 TB HDD to DGH.
		b. PDF version of Annual publication is to be hyperlinked with the Table of
		Contents.
		c. All finished artwork of photos, infographics and vectors and design elements
		(high-resolution) to be provided to DGH in jpeg/jpg/png.
		d. On completion of delivery, all chapters and tables will have to be submitted in
		Word and Excel format to DGH.
	I	<u> </u>

#### **Terms and Conditions:**

- 1. Raw data and write up that will be part of Annual report; will be provided by DGH in soft form (MS-WORD, PDF, PPT, etc.)
- 2. DGH Representative shall be associated at all stages during the entire designing and printing process. Approval of final design will be given by DGH.
- 3. Contractor has to submit the final publication within 30 days from the date of final data submission by DGH.
- 4. Contractor has to submit the 6 digital color printing copies prior to submission of Ferro copy. Once digital color print copies are approved by DGH, contractor has to submit Ferro copy to DGH within 3 days.
- 5. Contractor has to deliver the hard & soft deliverable as per scope of work within 10 days after submission of Ferro copy. Delivery at DGH Noida office (Reception).

\*\*\*\*\*\*\*\*\*

#### **Technical Evaluation Criteria & Evaluation of Bids**

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
- 2.0 Eligibility and experience of the bidder:-
- a. The bidder need to submit 3 soft/hard copies of the proposed new designs **each** for the **India Hydrocarbon Outlook** & Annual Hindi Publication **Hridayanham** along with their bid. Sample data for such designs is been provided at Page x to x of this tender document.
- b. At the time of technical bid evaluation, new designs (based on DGH sample data) along with previously done work shall be evaluated by a separate appraisal committee appointed by DGH and shall be given marks under evaluated as below:

Type of Bid	Type of Bid Marks for New designs and completed jobs				
Technical Bid	70	70			

The bidder has to score minimum cut-off qualifying marks of 50 out of 70 marks in the technical bid to qualify for commercial bid. Commercial bid shall be opened for only those technically qualified bidders who score above the minimum cut-off qualifying marks in Technical Bid.

Commercial bid shall be carrying **total 30 marks**. **Maximum 30 marks will be given for quoting the lowest rate for the bid.** Marks will be proportionately adjusted for other bidders.

The techno-commercially successful bidder who shall secure the **highest total evaluated marks (H1) (i.e. summation of marks scored on Technical bid and Commercial Bid) will be awarded the tender.** In case of a tie, while deciding the H1, the bidder with lowest quote in commercial bid shall be awarded the tender. Next tie breaker would be higher average audited turnover of last three financial years.

**Note:** Bids without documentary evidence as above towards eligibility criteria will be liable for rejection.

#### **Evaluation Methodology of Bids on QCBS method**

The individual bidder technical scores will be normalized as per the formula below:

Tn = Tb / Tmax \* 100

Where,

Tn = normalized technical score for the bidder

Tb = absolute technical score for the bidder

Tmax = maximum absolute technical score obtained by any bidder

Commercial bids of those bidders who qualify the technical evaluation will only be opened. All other Commercial bids will be returned un-opened. The commercial scores will be calculated as:

Fn = Fmin / Fb \* 100

Where,

Fn = Normalized financial score of the bidder

Fb = Evaluated cost for the bidder

Fmin = Minimum evaluated cost for any bidder

Final Evaluation: The overall score will be calculated as follows:

Bn = Wt \* Tn + Wc\* Fn

Where.

Bn = Overall score of the bidder

Wt = 0.70

Wc = 0.30

Bidder with highest overall Score (Bn) will be selected for award of the Job.

#### Note:

- i) Minimum Technical score for Qualification of Bid: 50 marks, i.e. Commercial bids will be opened for bidders who receive minimum 50 marks in the technical evaluation.
- ii) DGH shall constitute a Technical Evaluation Committee who will evaluate the presentation by the bidder
- iii) No further discussion/interface will be held with the bidder whose bid has been technically disqualified / rejected.

#### **Price Format/Price Schedule**

SI. No.	Item Description	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder in Rs. P	GST in %		TOTAL AMOUNT With GST
1.01	India Hydrocarbon Outlook Paper back	400.000	Nos			0.00	0.00
1.02	India Hydrocarbon Outlook Hard Bound	100.000	Nos			0.00	0.00
1.03	Annual Hindi Publication Hridayanham	100.000	Nos			0.00	0.00
Total in Figu	res					0.00	0.00

#### Notes:

- (i) The quantities mentioned in the price format/price schedule above are indicative/ estimated and for evaluation purpose only. However, payment will be made on actual basis only.
- (ii) Bidder must quote GST rate in the price format.
- (iii) Total cost should be inclusive of applicable taxes/GST and packing & freight and delivery charges to door delivery at DGH.
- (iv) Bidder should strictly follow the price format. Bid containing price quoted in any other format will be rejected outrightly.
- (v) Evaluation of bids will be done as per Cl. C at Annexure-III of the bid document.
- (vi) Price format will cover the complete scope of work/technical specification and bind all the terms & conditions stipulated in the bid document.

**Signature of Bidder** 

## **Sample Data (India Hydrocarbon Outlook)**

# COVER DESIGN (FRONT) To be designed

# COVER DESIGN (BACK) To be designed

# Contents

1	Upstream Oil and Gas Industry in India	12	
	1.1 History and Background		
	1.2 Formation of Directorate General of Hydrocarbons (DGH)	16	
	1.3 Acreages under various Regimes	19	
2	Investors' Pick	28	
	2.1 Recent Policies	28	
	2.2 Digitisation Initiatives	39	
3	E&P Activities	42	
	3.1 Exploration Activities	42	
	3.2 Development Activities		
	3.3 Oil and Gas Production.	62	
4	Geo-scientific Studies and Data Management	70	
	4.1 Hydrocarbon Resource Assessment of Indian		
	Sedimentary Basins		
	4.2 National Seismic Programme	83	
	4.3 National Data Repository	89	
5	Petroleum Resources and Reserves for Conventional	94	
	Hydrocarbons		
	5.1 Sedimentary Basins in India		
	5.2 Hydrocarbon Reserves of India		
	5.3 Inplace volume and Reserves under Contractual Regime	97	
	5.4 Reserve Replacement Ratio (RRR)	103	
6	Revenue Sharing Contracts Regime	106	
	6.1 Discovered Small Field (DSF) Policy	106	
	6.2 Hydrocarbon Exploration and Licensing Policy (HELP)	110	
7	Unconventional Hydrocarbons	116	
	7.1 Coal Bed Methane (CBM)	116	
	7.2 Shale Gas/Oil	125	
	7.3 Gas Hydrates	127	
8	Appendices	128	
	8.1 Contribution to Government Exchequer		
	8.2 MoU on Sectoral Cooperation		
	8.3 RTI Information		
	8.4 Active Companies in E&P Sector.		100
	8.5 Blocks and Fields under various Regimes	134	e e
	8.6 Maps of Awarded Acreages		
	8.7 Abbreviation	192	- L
			de
	eş.		

#### Minister's message for Annual Publication 2019-20

India, the 5<sup>th</sup> largest economy with a GDP of USD ~2.9 trillion has emerged as one of the major players in this evolving global scenario. With the world's second largest population, India is the 3<sup>rd</sup> largest energy consumer of the world and its share in global energy demand is set to almost double to 11% by 2040. The government's approach to energy policy covers four pillars of energy access, energy efficiency, energy sustainability and energy security.

In the wake of the COVID-19 global pandemic, India advocates for a stable oil market and shoulders the responsibility for a stable, affordable, reliable and accessible supplies to the people of India. The current times are unprecedented as the plummeting oil demand has stalled the world economy creating supply glut in oil markets. Time is opportune to think beyond normal, front-end operations and operational technology will have to be integrated with information technology to ensure efficiency in operations and maintain unhindered supply-chain network. I assure all stakeholders that the oil and gas sector is well equipped to withstand and deliver in such scenario.

Enhancing domestic production of oil and gas and bolstering business environment to uphold investor's confidence has been the epicenter of Government's policies. India's historic upsurge in Ease of Doing Business rankings is a testament to the success of the pro-investment reforms. Attractive corporate taxes, impressive business reforms and technology uptake are making India an overriding destination, globally, to invest as FDI in India rose by 18% - the sharpest pace in the last four fiscals - to a record \$73.46 billion in FY 2019-201. Global oil and gas giants such as Total S.A., Saudi Aramco, Rosneft, Exxon Mobil are now a partner in India's growth story.

India is aspiring to become a gas-based economy and increasing the share of natural gas in our energy mix from existing 6.2% to 15% by 2030. This is consistent with our commitment to cleaner fuels and reduction of carbon footprint. Thrust has been given to expand the gas infrastructure coverage and a gas trading exchange is in the offing to ensure consumer is agnostic to the source of gas supply.

Directorate General of Hydrocarbons has taken up a larger role as a facilitator and implementer of Government policies and is working cohesively with the industry to ensure seamless E&P operations in the country. The constructive and facilitative role undertaken by DGH in recent years is acknowledged by the industry. I congratulate DGH on its Annual Publication "India's Hydrocarbon Outlook: 2019-20" that encapsulates the progress in E&P activities in our country.

#### CHAPTER-6: Unconventional Hydrocarbons

Unconventional resources exist in petroleum accumulations that are pervasive throughout a large area and are not significantly affected by hydrodynamic influences (also called "continuous-type deposit"). Usually there is not an obvious structural or stratigraphic trap.

These include deposits like the coal bed methane (CBM), Shale gas/oil, Gas Hydrates etc. that lack the porosity and permeability of conventional reservoirs required to flow without stimulation at economic rates. Such accumulations require specialized extraction technology (e.g., dewatering of CBM, hydraulic fracturing, horizontal drilling etc.). The target volumes are larger. Huge number of wells are required to exploit the resources, leading to expensive development per unit of energy, making it a highly capital intensive project.

The Government of India has mooted an array of policies since 1997 for effective extraction and utilization of these resources. A background of the activities carried out in CBM, Shale Gas/Oil and Gas Hydrates in India along with the government-formulated reforms shall be discussed in the subsequent sections.

#### **Coal Bed Methane**

Coal Bed Methane (CBM) is a form of natural gas generated during the process of coalification and adsorbed into the solid matrix of the coal. It is classified as unconventional source of natural gas owing to its nature of occurrence.

The presence of CBM has been well known over ages due to its occurrence in underground coal mining, where it presents a serious safety risk.

India, having the fifth largest proven coal reserve in the world, presents a significant opportunity for considering CBM as an alternative source for augmenting India's energy resource, keeping in line with the vision of reducing hydrocarbon import and making India gas economic.

#### **CBM Policy Reforms**

In order to harness CBM potential in the country, the Government of India formulated CBM Policy in 1997, wherein CBM being Natural Gas is explored and exploited under the provisions of Oil Fields (Regulation and Development) Act 1948 (ORD Act 1948) and Petroleum & Natural Gas Rules 1959 (P&NG Rules 1959) administered by Ministry of Petroleum & Natural Gas (MoP&NG).

- In 2007, CBM Phases & Extensions Policy was framed to provide a transparent and consistent framework for granting extension in exploration phases, under CBM Contracts.
- In 2015 (re-notified in 2018), the Government of India, granted permission to Coal India Limited (CIL) and its subsidiaries to explore and produce CBM from its areas under Coal Mining Lease allotted to them, thereby, dispensing the requirement of having additional License from Ministry of Petroleum and Natural Gas. This was formulated to increase the area under CBM exploration and to enhance and accelerate the CBM production in the country from Coal mining areas.
- In 2016, Unified Licensing Policy under Hydrocarbon Exploration and Licensing Policy (HELP) was introduced wherein all types of hydrocarbon resources, both conventional and unconventional were allowed to be explored and exploited. The Open Acreage Licensing Policy (OALP) to carry out exploration and production from areas which are either, free or relinquished and Discovered Small

Field (DSF) Policy to exploit resources from already discovered fields are two such policies within the HELP regime.

- In 2017, a policy framework for Early Monetization of CBM was introduced to develop alternate sources of natural gas including CBM and promote gas economy. This policy was formulated to provide marketing and pricing freedom for Coal Bed Methane (CBM) and streamline the operational issues in the existing blocks.
- In 2018, the Government of India notified a Policy framework for Exploration and Exploitation of Unconventional hydrocarbons in existing acreages under existing Production Sharing Contracts (PSC), Coal Bed Methane (CBM) Contracts and Nomination fields.

#### **Summary of CBM Bid Rounds**

The Government of India formulated a CBM policy in 1997 and a Memorandum of Understanding (MoU) was signed between the Ministry of Coal and the Ministry of Petroleum and Natural Gas, to act in a cooperative manner for development of CBM. As per the policy, Ministry of Petroleum & Natural Gas (MoP&NG) became the administrative Ministry and Directorate General of Hydrocarbons (DGH) was made the nodal agency for development of CBM in the country.

About 26,000 sq. km. was identified for CBM exploration in the country. The first bidding round commenced in 2001. Subsequently, there were 3 other bidding rounds in the years 2003, 2005 and 2008, respectively. 30 CBM blocks were awarded under these rounds, 2 blocks were awarded on nomination basis and 1 under Foreign Investment Promotion Board Route. Around 16,613 sq. km. of the total prospective area has been awarded till date. These CBM blocks are in the states of Andhra Pradesh, Assam, Chhattisgarh, Gujarat, Jharkhand, Madhya Pradesh, Maharashtra, Odisha, Rajasthan, Tamil Nadu and West Bengal.

The total prognosticated CBM resource for the awarded 33 CBM blocks, is about 62.4 TCF (1767 BCM), of which, 10.48 TCF (296.9 BCM) has been established as Gas-in-Place (GIP).

#### Status of the awarded CBM blocks

At present, out of the 33 CBM blocks, 10 are active, 4 of which are in production phase, 4 in development phase and 2 in exploration phase.

The first commercial production from the CBM blocks commenced in the year 2007 from Raniganj (South) block operated by M/s. Great Eastern Energy Corp. Ltd. (GEECL). Raniganj (East) Block Operated by M/s. Essar Oil & Gas Exploration & Production Ltd (EOGEPL) started its commercial production from July 2016, Sohagpur (West) operated by M/s. Reliance Industries ltd. (RIL) started producing from March 2017 and Bokaro operated by M/s. Oil and Natural Gas Ltd. (ONGC) from August 2019. In addition to this incidental CBM gas is being produced during testing of CBM wells in Jharia block operated by ONGC and Sohagpur (East), operated by RIL.

The cumulative CBM production from these blocks as of FY 2019-20 is 3.7 BCM. The average gas production rate in the FY 2019-20 was 1.79 MMSCMD. It is envisaged that a cumulative of approximately 13 BCM of gas shall be produced from 8 CBM Blocks in the next 5 years.

To date, most of the CBM exploration and production activities in India are pursued by domestic Indian companies.

#### **CBM Resources and Block Performances**

The Gondwana sediments of eastern India host the bulk of India's coal reserves and all the current CBM producing blocks. Majority of the best prospective areas for CBM development are found to be in eastern India, situated in the belt of Damodar-Koel valley and Son valley.

A drastic increase in the production of Sohagpur west block can be attributed to the commissioning of Shahdol – Phulpur Gas Pipeline (SHPPL), operating from Shahdol in Madhya Pradesh to Phulpur in Uttar Pradesh where it hooks up with Gas Authority of India (GAIL)'s existing Hazira-Vijaipur-Jagdishpur (HVJ) pipeline network, laid by Reliance Gas Pipelines (RGPL), a subsidiary of RIL.

CBM's initial reserve & ultimate reserve has increased drastically since last 10 years. Taking 2008 as base year the initial reserve has increased approximately by 108% and ultimate reserve has increased approximately by 90%.

Table XX: Snapshot of CBM resources in India

Total CBM rounds conducted	4
No. of CBM Blocks awarded in 4 rounds	33
Coal bearing Area identified for CBM	26,000 Sq. Km.
Area covered under 33 blocks	16,613 Sq. Km. (64%)
CBM Resources in the 26,000 sq. km area	2600 BCM (91.8 TCF)
CBM Resources (from 33 Blocks)	1767.06 BCM (62.4 TCF)
Established CBM Reserves (GIP)	296.9 BCM (10.48 TCF)
Commercial Production commenced	Jul-07
Total No. of Wells drilled	980
*Investment made (till FY-2019-20)	Around US\$ 2.1 Billion
Avg. Gas Production (FY 2019-20)	1.79 MMSCMD from 4 CBM blocks
No. of CBM Blocks in Development/Production Phase	8
No. of CBM Blocks in Exploration Phase	3 (1 block is under Arbitration)
No. of CBM Blocks Under Relinquishment	11
No. of CBM Blocks Relinquished	11
Annual CBM Production in FY 2019-20	655.41MMSCM
Cumulative Production till Mar-2020	3,735 MMSCM
Expected cumulative production in next 5 years (FY 20-21 till FY 25-26)	12.89 MMSCM
*Investments made in 2019-20 are yet to be audited	

Table XX: State-wise distribution of CBM Resources in India

No.	STATE	Estimated CBM	Estimated CBM	GIIP
		resources	resources	(in TCF)
		(IN BCM)	(IN TCF)	( 15.7)
1	Jharkhand	722.08	25.5	1.99
2	Rajasthan	359.62	12.7	0
3	Gujarat	351.13	12.4	0
4	Odisha	243.52	8.6	0
5	Chhattisgarh	240.69	8.5	0
6	Madhya Pradesh	218.04	7.7	3.64
7	West Bengal	218.04	7.7	4.85
8	Tamil Nadu	104.77	3.7	0
9	Telangana & Andhra Pradesh	99.11	3.5	0
10	Maharashtra	33.98	1.2	0
11	North east	8.50	0.3	0
	Total CBM Resource	2599.48	91.8	10.48

<sup>\*</sup>Conversion factor: 1 cubic metre = 35.3147 cubic feet

#### **Table XX: Status of CBM Blocks**

			Present		Contract signed on								
No.	Block	State	Area (SKM)	Contractor (PI%)		Present Status							
	CBM BLOCKS OFFERED ON NOMINATION/FIPB ROUTE												
1	Raniganj (South)	West Bengal	210	GEECL (100)	31.05.2001	Production							
2	Raniganj (North)	West Bengal	311.8	ONGC (74)-CIL (26)	06.02.2003	Development							
3	Jharia	Jharkhand	67.1	ONGC (74)-CIL (26)	06.02.2003	Development/ incidental production							
			C	BM ROUND-I									
4	RG(East)-CBM- 2001/I	West Bengal	500	EOGEPL (100)	26.07.2002	Production							
5	SP(East)-CBM- 2001/I	Madhya Pradesh	495	RIL (100)	26.07.2002	Development							
6	SP(West)-CBM- 2001/I	Madhya Pradesh	500	RIL (100)	26.07.2002	Production							
7	BK-CBM-2001/I	Jharkhand	75	ONGC (80)-IOC (20)	26.07.2002	Production							
8	NK-CBM-2001/I	Jharkhand	271.5	ONGC (55)-IOC (20)-PEPL (25)	26.07.2002	Development							
			С	BM ROUND-II									

			Present		Contract signed on	
No.	Block	State	Area (SKM)	Contractor (PI%)		Present Status
9	SH(N)-CBM- 2003/II	Chhattisgarh	825	RIL (100)	06.02.2004	Relinquished due to non-grant of Environment Clearance
10	BS (1)-CBM- 2003/II	Rajasthan	1045	RIL (100)	06.02.2004	Under relinquishment
11	BS (2)-CBM- 2003/II	Rajasthan	1020	RIL (100)	06.02.2004	Under relinquishment
12	SK-CBM-2003/II	Jharkhand	70	ONGC (100)	06.02.2004	Under Relinquishement
13	NK(W)-CBM- 2003/II	Jharkhand	267	ONGC (100)	06.02.2004	Relinquished due to poor prospectivity
14	ST-CBM-2003/II	Madhya Pradesh	714	ONGC (100)	06.02.2004	Relinquished due to poor prospectivity
15	WD-CBM-2003/II	Maharashtra	503	ONGC (100)	06.02.2004	Relinquished due to poor prospectivity
16	BS (3)-CBM- 2003/II	Rajasthan	790	ONGC (70)-GSPC (30)	06.02.2004	Relinquished due to poor prospectivity
				CBM ROUN	ID-III	
17	SP(N)-CBM- 2005/III	Madhya Pradesh	609	R-Infra (55)-RNRL (45)	07.11.2006	Exploration
18	SR-CBM-2005/III	Madhya Pradesh	330	DIL (90)-Coal Gas (10)	07.11.2006	Under Relinquishment
19	RM-CBM-2005/III	Jharkhand	469	Dart Energy (35)- GAIL (35)-EIG (15)- TATA Power (15)	07.11.2006	Under Relinquishment
20	GV(N)-CBM- 2005/III	Telangana	386	Coal Gas (10)-DIL (40)-Adinath (50)	07.11.2006	Relinquished due to non-grant of PEL
21	BB-CBM-2005/III	West Bengal	248	British Petroleum (100)	16.11.2006	Relinquished due to poor prospectivity
22	MR-CBM-2005/III	Chhattisgarh	634	Dart Energy (35)- GAIL (35)-EIG (15)- TATA Power (15)	07.11.2006	Under relinquishment
23	TR-CBM-2005/III	Chhattisgarh	458	Dart Energy (35)- GAIL (35)-EIG (15)- TATA Power (15)	07.11.2006	Under relinquishment
24	BS (4)-CBM- 2005/III	Rajasthan	1168	REL (45)-RNRL (45)-Geopetrol (10)	07.11.2006	Under Relinquishment
25	BS (5)-CBM- 2005/III	Rajasthan	739	REL (45)-RNRL (45)-Geopetrol (10)	07.11.2006	Under Relinquishment
26	KG (E)-CBM- 2005/III	Andhra Pradesh	750	REL (45) – RNRL(45) – Geopetrol (10)	07.11.2006	Relinquished due to non-grant of PEL
			С	BM ROUND-IV		
27	AS-CBM-2008/IV	Assam	113	Dart Energy (10)- OIL (90)	29.07.2010	Under Relinquishment
28	MG-CBM-2008/IV	Tamil Nadu	667	GEECL (100)	29.07.2010	Under Arbitration
29	RM(E)-CBM- 2008/IV	Jharkhand	1128	EOGEPL (100)	29.07.2010	Relinquished due to non-transfer of PEL

No.	Block	State	Present Area (SKM)	Contractor (PI%)	Contract signed on	Present Status
30	TL-CBM-2008/IV	Odisha	557	EOGEPL (100)	29.07.2010	Relinquished due to non-grant of PEL
31	IB-CBM-2008/IV	Odisha	209	EOGEPL (100)	29.07.2010	Under Relinquishment
32	SP(NE)-CBM- 2008/IV	Madhya Pradesh & Chhattisgarh	339	EOGEPL (100)	29.07.2010	Exploration
33	ST-CBM-2008/IV	Madhya Pradesh	714	Dart Energy (80)- TATA Power (20)	29.07.2010	Relinquished due to poor prospectivity

#### Table XX: Active Blocks performance in the FY 2019-20

SI.	Block	Total	Wells	Total Prod.	Prod.	Gas Price	PLP	Royalty
No.	Name	wells	Added FY 2019- 20	(MMSCM)	FY 2019-20 (MMSCM)	(USD/ MMBTU)	FY 2019-20 (INR)	FY 2019-20 (INR)
1	Raniganj (South)	156	-	1327.8	138.9	6.79	3,90,34,827	15,61,39,310*
2	BK-CBM- 2001/I	66	26	0.27	0.27	5.77	Nil	26,076
3	RG(E)- CBM- 2001/I	348	-	1471.83	166.9	5.57	Nil	16,52,72,686*
4	SP(W)- CBM- 2001/I	305	-	914	345	7.06	Nil	55,73,11,140

<sup>\*</sup> Provisional as communicated by the Operator

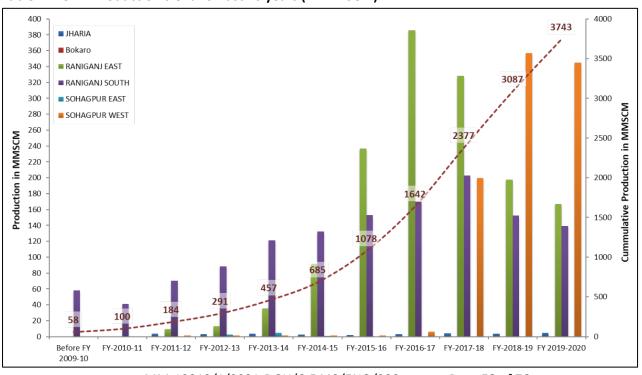
#### Table XX: Gas Initially In Place (GIIP) and CBM Reserves of the Active Blocks

SI. No.	Block Name	Put on Producti on	GIIP (BCM)	GIIP (TCF)	Rec. Reserves (BCM)	Rec. Reserves (TCF)	Cum. Production (MMSCM)	Cum. Production (BCF)	Total wells drilled
1	RG(E)- CBM- 2001/I	Jul-2016	60.77	2.15	28.12	0.99	1463.6	51.69	348

2	SP(W)- CBM- 2001/I	Mar- 2017	55.5	1.96	15.44	0.55	914.0	32.28	305
3	BK-CBM- 2001/I	Aug- 2019	30.18	1.07	3.68	0.13	0.2	0.01	66
4	RANIGANJ (SOUTH)	Jul-2007	69.09	2.44	5.29	0.19	1327.8	46.89	156
5	SP(E)-CBM- 2001/I	-	47.70	1.68	16.70	0.59	-	-	37
6	JHARIA*	Jan-2012	16.7	0.59	2.73	0.10	29.5	1.04	16
7	RANIGANJ (NORTH)	-	7.43	0.26	1.86	0.07	-	-	3
8	NK-CBM- 2001/I	-	9.53	0.34	1.46	0.05	•	-	49
		Total	296.9	10.48	75.28	2.66	3,735	131.90	980

<sup>\*</sup>On incidental production; In-place and recoverable based on the RFDP (approved on 09.09.2019)

Table XX: CBM Production trend for last 10 years (in MMSCM)



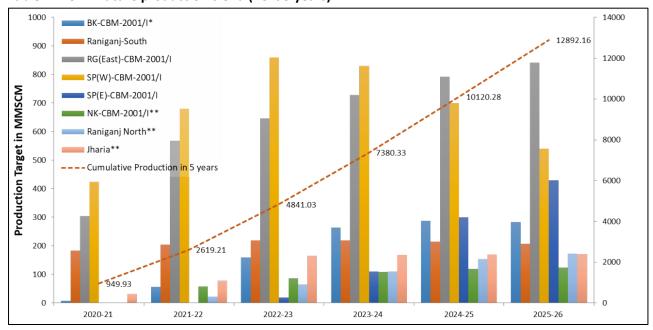
MM-12019/1/2021-DGH/C-5443/ENQ/200

Page **58** of **76** 

#### Table for the plot is as under:

Block Name	Before FY 2009- 10			FY- 2012-13					FY- 2017-18	FY- 2018-19	FY 2019-20
JHARIA		0	3.559	2.949	3.387	2.479	2.04	3.083	3.964	3.579	4.43
Bokaro									0	0	0.217
RANIGANJ EAST		0	9.066	12.827	35.359	91.331	236.499	385.471	328.448	197.662	166.937
RANIGANJ SOUTH	58.198	41.362	70.04	88.021	121.13	132.351	152.924	169.596	202.62	152.56	138.944
SOHAGPUR EAST		0	0.381	2.24	4.502	0.572	0.023	0.087	0.002	0.008	0.022
SOHAGPUR WEST		0	1.144	1.2	1.149	1.506	1.382	6.352	199.769	356.653	344.86
Grand Total		41.36	84.19	107.24	165.53	228.24	392.87	564.59	734.80	710.46	655.41
Cumulative Production											
	Before FY 2009- 10			FY- 2012-13		FY- 2014-15		H Y -	FY- 2017-18	FY- 2018-19	FY 2019- 2020
Cumulative Production	58	100	184	291	457	685	1078	1642	2377	3087	3743

#### Table XX: CBM future production trend (next 5 years)



<sup>\*</sup> Figures for BK-CBM-2001/I are based on FDP except for FY20-21

<sup>\*\*</sup> Figures are based on FDP/RFDP

#### Table for the above plot is as under:

(Production figures in MMSCM)

Block Name	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
BK-CBM-2001/I*	7.35	57.04	160.26	263.94	287.86	283.92
Raniganj-South	184.03	204.4	219	219	215.35	208.05
RG(East)-CBM-2001/I	304	569	646	728	793	841
SP(W)-CBM-2001/I	423.2	680	860	830	700	540
SP(E)-CBM-2001/I	0	0	20	110	300	430
NK-CBM-2001/I**	0	58.34	85.93	109.02	119.03	123.97
Raniganj North**	0	22.93	64.47	110.82	154.27	173.62
Jharia**	31.35	77.57	166.17	168.53	170.44	171.33
Total	949.93	1669.28	2221.82	2539.3	2739.95	2771.88
* Figures for BK-CBM-2001/I are based on FDP except for FY20-21						

<sup>\*\*</sup> Figures are based on FDP/RFDP

#### However, the projected data is updated and the updated data is as under:

#	CBM Block	Production Projection (in MMSCM)						
	CBIVI BIOCK	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	
1	BK-CBM-2001/I	7.35	64.36	126.38	177.15	178.07	293.27	
2	Raniganj-South	167.90	160.60	222.65	339.45	485.45	660.65	
3	RG(East)-CBM-2001/I	304.00	569.00	646.00	728.00	793.00	841.00	
4	SP(W)-CBM-2001/I	423.20	680.00	860.00	830.00	700.00	540.00	
5	SP(E)-CBM-2001/I	0.00	0.00	20.00	110.00	300.00	430.00	
6	NK-CBM-2001/I**	0.00	0.00	18.31	76.65	162.58	271.6	
7	Raniganj North**	0.00	0.00	16.96	50.18	94.26	139.22	
8	Jharia**	31.35	77.57	166.17	168.53	170.44	171.33	
	Total	933.80	1551.52	2076.47	2479.96	2883.81	3347.06	

<sup>\*\*</sup> Figures are based on FDP/RFDP

#### Shale Gas/Oil

Shale gas/oil is a form of natural gas/oil that remain unexpelled, unmigrated and entrapped within the pore space and fractures of a source rock (commonly, shale). They are categorized as unconventional

resource due to their nature of occurrence and method of extraction. In general, shales have insufficient permeability (usually in Nano Darcy i.e. 10<sup>-9</sup> D) for fluid flow to a well bore.

The shale gas/oil is produced commercially when sufficient fracture conductivity is induced by hydraulic fracturing.

In contrast to the conventional play exploration where the risk profile is governed by the presence and effectiveness of source, reservoir, trap, timing and migration of hydrocarbon, shale gas/oil exploration has a much different and usually more predictable risk profile. The gas shale itself contains all of the elements of petroleum risk as mentioned.

The producibility of shale gas is not just limited to a single prospect but to a larger geographic region. Thus, in a proven shale play, the challenge is to develop the proper drilling and completion techniques to optimize the gas production rate versus capital employed and operating costs.

In India, a preliminary resource assessment of Shale gas/oil was carried out by three different organisations.

In 2011, the United States Geological Survey (USGS) estimated the technically recoverable Shale gas/oil as 6.1 TCF for 3 basins: Cambay, Krishna-Godavari (KG) and Cauvery. Again in 2014, it estimated a technical recoverable volume of 62 million barrels of shale oil in Cambay Basin alone.

In 2013, the National Oil Company, ONGC estimated Shale Gas resources of 187.5 TCF from 5 sedimentary basins; Cambay, KG, Cauvery, Ganga and Assam.

CMPDI in July 2013 had estimated around 45.8 TCF in the Gondwana basin.

In order to understand the prospectivity and untap the Shale Gas and Oil resource potential in India, GoI announced a Shale gas and Oil exploration policy on 14th October, 2013 for the National Oil Companies (NOCs), ONGC and OIL. The companies were required to carry out exploration in their PML and ML areas in three phases.

#### Shale Gas/Oil Policy Reforms

In addition to the policies notified in 2016 (HELP) and 2018 (Unconventional), in Oct 2018, a policy framework to promote and incentivize Enhanced Recovery Methods for Oil and Gas was notified by the Ministry of Petroleum and Natural Gas, Government of India.

Under this policy, fiscal incentives are provided from the first day of the entire production from future discoveries of unconventional hydrocarbons (Shale Gas/Oil and Gas Hydrate). Many CBM operators have shown interests for exploiting the Shale Gas Resources in their region.

#### Summary of Shale Gas/Oil Activities in India

Under the Shale Gas Policy - 2013, 50 blocks in 4 basins; Assam, Krishna Godavari, Cauvery & Cambay were identified by ONGC and 6 blocks in 2 basins; Jaisalmer and Assam were identified by OIL in the Phase-I of exploration which ended in April-2017.

Till FY 2019-20, ONGC had drilled a total of 29 wells in 4 basins and OIL has drilled 4 shale wells in 2 basins.

#### Activities carried in the FY 2019-20

Activities carried out during the year 2019-20 are as follows:

#### ONGC

During the FY 2019-20, two exclusive shale wells (NJSGA in Cambay Basin and MDSGA in KG Basin) and one dual objective well PGAE were drilled. At present, a dual objective well, LKEAA in KG Basin is under drilling.

Out of the 29 wells completed so far, across four basins viz. Cambay, KG, Cauvery and A&AA Basins, 10 are exclusive wells and 19 are dual objective wells. Indications of presence of shale oil have been recorded in some wells namely JMSGA, NSGB and NJSGA in Cambay Basin and WGSGA in KG Basin during activation after hydro-fracturing. In the shale well, NGSGA (Cambay Basin), a zone encountered within the Nawagam Middle Pay (Tight Reservoir) was hydro-fractured and on activation, produced oil.

The shale well WGSGA in KG Basin requires further activation whereas another well GNSGC in Cambay Basin is awaiting hydro-fracturing.

#### OIL

Conventional core analyses of wells of 5 wells namely Dandewala-26, Sologuri-2, Matimekhena-5 and South Tinali-5 have been completed.

Final evaluation reports of Jaisalmer PML in Rajasthan and Dibrugarh Extn. PML, Chabua PML, Dumduma PML in Assam incorporating the above conventional core results have been submitted to DGH.

Around 17 m of conventional core from well Balimara-6 of Dumduma PML was acquired for prospectivity evaluation of Barail shales. Basic Geochemical analysis have been carried out at OIL's own Laboratories.

Detail laboratory analysis is currently in progress at M/s Weatherford Laboratories. Two review meetings were held, one at Centre of Excellence for Energy Studies, OIL, Guwahati with DGH officials on 21.11.2019 and another was at DGH, Noida with OIL officials on 14.02.2020 to review shale gas activities carried out by OIL.

Two locations are identified in Jairampur Extn. PEL and Deomali PEL for acquiring conventional core against the target shale of Upper Tikak Parbat and Disang shales for evaluation. Environmental Clearance (EC) is awaited.

#### **Gas Hydrates**

#### National Gas Hydrate Programme (NGHP):

National Gas Hydrate Programme in the country is steered by the Ministry of Petroleum and Natural Gas and technically coordinated by Directorate General of Hydrocarbons (DGH). Two expeditions 01 & 02 have been completed under NGHP. Under Expedition-01 carried out on 2006, 39 holes at 21 sites were drilled and established physical presence of Gas Hydrates in Krishna Godavari, Mahanadi and Andaman but were non exploitable with available technologies. Expedition-02 was conducted in 2015 drilled 42 holes in 25 sites. Two distinct Gas hydrate bearing sand reservoir areas B & C were identified in KG basin and Area A sand-rich reservoir systems having limited formation of concentrated gas hydrate accumulations. Area-E drilled wells indicated the presence of gas hydrate, with a combination of fracture/displacement and pore-filling type gas hydrate.

NGHP Expedition-02 results are encouraging and further extensive studies are planned to assess the gas hydrate resource potential, reservoir characterization, reservoir delineation and geo-mechanical modelling for seafloor and wellbore stability and identification of sites for pilot production for testing. KG deep offshore Area B' & C' contain gas hydrate accumulations may be suitable sites for gas hydrate production testing under NGHP Expedition-03.

Technology for production of gas from gas hydrate is not yet matured and is at R & D stage world over. The planning and execution of NGHP Expedition-03 to test the technology and assess the commerciality of Gas Hydrates exploitation in Indian offshore. At present, Collation and interpretation of all data is being done to identify sites for pilot production testing. The objective of NGHP Expedition-03 is to carry out pilot production testing at a suitable site identified during the NGHP Expedition-02.

#### Way Forward

Efforts are in place to narrow down the area/sites of interest for pilot production tests for pilot production test, comprehensive assessment of the Nation's Unconventional Resource potential and reservoir characterisation studies. The production technology is to be proved before venturing into the pilot production testing. NGHP member organizations are working on projects for the development of feasible Production technology. The various jobs being carried out by member organisation will envisage the potential resource and firm up strategy for the execution of Gas Hydrate pilot production testing in Indian offshore.

### Sample Data for Hindi Magazine

# COVER DESIGN (FRONT) To be designed

# COVER DESIGN (BACK) To be designed

## हिंदी पत्रिका 'हृदयंगम' के चतुर्थ संस्करण विषय वस्तु

क्रमांक	विषय वस्तु	द्वारा	पृष्ठ
1.	जीवाश्म ईंधन (फॉसिल फ्यूल) का विकल्प समय की मांग है।	श्री योगछेम शर्मा	
2.	जलवायु परिवर्तन (ग्लोबल वार्मिंग) : कारण और निवारण	श्री वासुदेव बंसल	
3.	जलवायु परिवर्तन	श्री आनंद प्रकाश, भू-भौतिकीविद्	
4.	नारी – कविता	श्री वासुदेव बंसल	
5.	बचपन— कविता	श्री अतुल गुप्ता	
6.	मेरी उमंग – कविता	श्री आर. बी सिंह	
7.	कुछ बाकी है	कुमारी रतिशा, सहायक (वित्त विभाग)	
8.	जल	श्रीमती विशाखा गुप्ता	
9.	वैश्विक महामारी नियंत्रण में योजना का अभाव – भारत की स्वास्थ्य प्रणाली के परिपेक्ष्य में	श्रीमती विशाखा गुप्ता	
10.	हिंदी उद्धरण		
11.	आज रिक्त हुए गम क्या करना	श्रीमती अनीता वशिष्ठ	
12.	हिंदी पखवाड़ा रिपोर्ट-2019		
13.	डिजिटल प्रौद्योगिकी और भू-स्थानिक डेटा और भविष्य की संभावनाएं	श्री अजय कुमार सिंह	
14.	कोल बेड मीथेन के लिए आगार अभियांत्रिकी	श्री अनु कुमार पवन	
15.	हाइड्रोकार्बन अन्वेषण, उत्पादन एवं विकास में 'रिजोर्वायर सिम्युलेशन' का प्रयोग - एक अवलोकन	श्री किस्मोतुल हुसैन	
16.	जिंदगी – कविता	श्री राकेश जैन	
17.	प्रेम की परिभाषा	श्री अजय कम्बोज, सहायक (प्रशा. विभाग)	
18.	तेल और गैस की खोज: भूकंपीय सर्वेक्षण	श्रीमती आरती गुप्ता	
19.	बिगड़ रहा है क्यों इंसान	श्री राजीव मोहन	
20.	बेफिक्री का बचपन	श्रीमती उदिशा वत्स	

21.	शायद मैं आजाद हूँ	श्रीमती उदिशा वत्स
22.	पापा आपके जाने के बाद	श्रीमती तथहीर फातिमा, सहायक रक्षा/ गृह मंत्रालय
23	माता पिता	श्रीमती तथहीर फातिमा, सहायक रक्षा/ गृह मंत्रालय
24	छठ पूजा से जुड़े पौराणिक एवं वैज्ञानिक तथ्य	श्री अनु कुमार पवन, मुख्य प्रबन्धक (आगार)
25	कामकाजी महिला	छाया राना, एसोसिएट प्रोग्रामिंग- 2524
26	पेट्रोलियम अन्वेषण और उत्पादन के क्षेत्र में डिजिटल टेक्नोलॉज, क्लाउड कंप्यूटिंग तथा आर्टिफिशियल इंटेलिजेंस (ए आई) का भविष्य	कल्पना कुमारी, कार्यपालक अभियंता (वि.)
27	हिंदी के विकास में फोर्ट विलिअम कॉलेज का योगदान-	डॉ मदन राय
28	रोशनी होने दो !	डॉ. वी. पी. जोय
29	पेट्रोलियम अन्वेषण और उत्पादन के क्षेत्र में हाइड्रोकार्बन महानिदेशालय की उपलब्धियां	श्री राजीव कुमार, वरिष्ठ भू-भौतिकविद्
30	एनडीआर विभाग की मुख्य गतिविधियाँ	कल्पना कुमारी, कार्यपालक अभियंता (वि.) – 2581
31	हास्यप्रद- जबाब	श्रीमती अनिता वशिष्ट, परामर्शदाता (रा.भा)
32	जल संरक्षण एवं प्रमुख जल सम्बन्धी मुद्दे	श्रीमती सितांशु
33	भारत में पेट्रोलियम अन्वेषण का इतिहास	डॉ मदन राय
35	हाथी के दांत	डॉ मदन राय

### संदेश

राष्ट्र के नव निर्माण, उसकी एकता अखंडता बनाए रखने तथा उसे एक सूत्र में पिरोए रखने में हिंदी का विशेष योगदान है। यह बात हमारे स्वतंत्रता सेनानियों, तात्कालिक चिंतकों और लोक नायकों ने अच्छी तरह से समझ ली थी, इसीलिए राष्ट्रीय चेतना जगाने का अभियान गुजराती भाषी स्वामी दयानंद सरस्वती, बांग्ला भाषी केशव चंद्र सेन और मराठी भाषी लोकमान्य तिलक आदि ने राष्ट्र के व्यक्तित्व को उजागर करने के लिए हिंदी में ही वह क्षमता देखी। हमारे राष्ट्रीय संग्राम के महानायक राष्ट्रपिता महात्मा गांधी ने हिंदी प्रचार के कार्य को राष्ट्र की नई आत्मा के रूप में परिकल्पित किया था और कहा था कि "यदि स्वराज्य में हिंदी नहीं रही तो मैं उसे स्वराज्य नहीं मानूंगा"। इसी को ध्यान में रखते हुए आजादी मिलने के बाद 14 सितम्बर, 1949 को संविधान सभा ने अधिकांश देशवासियों द्वारा बोली और समझी जाने वाली 'हिंदी भाषा' को संघ की राजभाषा के रूप में चुना।

आज जब हिंदी राजभाषा, संपर्क भाषा और विश्वभाषा के रूप में अपने कार्य क्षेत्र का विस्तार कर रही है, हमें हाइड्रोकार्बन महानिदेशालय में भी ऊर्जा उत्पादकता को बढ़ावा देने के साथ-साथ राजभाषा हिंदी के प्रचार-प्रसार तथा इसके कार्यान्वयन के दायित्वों का भी पूरी निष्ठा से अनुपालन करना चाहिए और दैनिक कार्य-कलाप में सहज एवं सरल हिंदी के प्रयोग पर विशेष बल देना चाहिए तािक भारत सरकार की राजभाषा नीित के अपेक्षित लक्ष्यों को प्राप्त किया जा सके।

वर्तमान में अधिकांश सरकारी कार्य कंप्यूटर आधारित हैं, इस लिए सूचना प्रौद्योगिकी के इस दौर में हमें हिंदी के विभिन्न ई-टूल्स जैसे यूनिकोड, हिंदी की-बोर्ड, अनुवाद, ई लर्निंग प्लेटफार्म, ई-महाशब्दकोश आदि का अधिकाधिक प्रयोग सुनिश्चित कर हिंदी को आगे बढ़ाना चाहिए।

राजभाषा विभाग, गृह मंत्रालय का स्पष्ट निर्देश है कि विभागों द्वारा प्रकाशित पत्रिकाओं में विभागों से संबंधित तकनीकी लेख हिंदी में भी प्रकाशित किए जाने चाहिएं। इसी दिशा-निर्देश को ध्यान में रखते हुए हाइड्रोकार्बन महानिदेशालय की हिंदी पत्रिका 'हृदयंगम' के चतुर्थ संस्करण में साहित्यक रचनाओं के अतिरिक्त हाइड्रोकार्बन महानिदेशालय की अन्वेषण तथा उत्पादन गतिविधियों से संबंधित लगभग आधा दर्जन लेख हिंदी में प्रकाशित किए गए हैं।

मुझे आशा है कि यह पत्रिका हिंदी के महत्व को रेखांकित करने तथा हाइड्रोकार्बन महानिदेशालय के कार्य प्रणाली से पाठकों को परिचित कराने के अपने इस उद्देश्य में सफलता प्राप्त करेगी।

शुभकामनाओं सहित,

(एस. सी. एल. दास) महानिदेशक, हाइड्रोकार्बन महानिदेशालय

### <u>पेट्रोलियम अन्वेषण और उत्पादन के क्षेत्र में डिजिटल टेक्नोलॉजी, क्लाउड कंप्यूटिंग तथा</u> आर्टिफिशियल इंटेलिजेंस (ए आई) का भविष्य

कल्पना कुमारी, कार्यपालक अभियंता (विद्युत्), एनडीआर

आजादी के बाद से ऊर्जा क्षेत्र के लिए अत्यधिक उपलब्धता के बावजूद, ऊर्जा की आपूर्ति और मांग के बीच की खाई लगातार बढ़ रही है। तेल और गैस उद्योग तेजी से बदलते डिजिटल परिदृश्य का सामना कर रहा है, जिसमें विकास और सफलता हासिल करने के लिए अत्याधुनिक तकनीकों की आवश्यकता है। हाल ही के वर्षों में तेल और गैस उद्योग ने आर्थिक परिदृश्य की चुनौतियों का सामना करने के लिए नई तकनीकों और डिजिटल टेक्नोलॉजी को अपनाना शुक्त कर दिया है। प्रगति की इस त्वरित गित का श्रेय सफल प्रौद्योगिकियों को जाता है, जो उत्पादकता को अभूतपूर्व दर से बढ़ा रही हैं और एक ऐसे युग की शुरुआत कर रही हैं जिसे चौथी औद्योगिक क्रांति (Industry 4.0) के रूप में जाना जा रहा है। आर्टिफिशियल इंटेलिजेंस (एआई), डाटा एनालिटिक्स और क्लाउड कंप्यूटिंग, एक रोमांचक और नया तकनीकी क्षेत्र है,लेकिन तेल और गैस उद्योग के परिदृश्य में बड़े पैमाने में इसके उपयोगिता की तलाश अभी जारी है।

तेल और गैस कंपनियां मूलतः इन महत्वपूर्ण मुद्दों का सामना करती हैं:

- डाटा प्रबंधन
- पुराने रिफाइनिंग प्लांट्स और उनके रखरखाव के साथ परिचालन चुनौतियां
- आकस्मिक विफलताओं के कारण हानि, जिसके परिणामस्वरूप ज्यादा डाउनटाइम
- पुराने और नए इंफ्रास्ट्रक्चर को एकीकृत करना
- कार्यबल के प्रबंधन में चुनौतियां

आधुनिक तकनीक जैसे एआई, क्लाउड कंप्यूटिंग और डिजिटल टेक्नोलॉजी के संयोजन से तेल और गैस उद्योग में नई संभावनाओं का पता लगाने और इन संभावनाओं को उन्नत अनुप्रयोगों में विकसित करने में मदद मिलेगी। इन सफल प्रौद्योगिकी को आत्मसात कर तेल और गैस कंपनियाँ बेहतर प्रदर्शन कर सकती है।

आर्टिफिशियल इंटेलिजेंस (एआई) एक विविध वैज्ञानिक क्षेत्र है, जिसका तेल और गैस उद्योग के अंतर्गत दो प्राथमिक अनुप्रयोग है : मशीन लर्निंग और डाटा विज्ञान । मशीन लर्निंग में कंप्यूटर सिस्टम को मानव इनपुट के बिना डाटा से सीखने और डाटा विश्लेषण कर व्याख्या करने में सक्षम बनाता है । इस सिस्टम में पुनरावृतियों के माध्यम से प्रक्रिया को संशोधित कर विशिष्ट उद्देश्यों के अनुरूप कंप्यूटर प्रोग्राम बनाया जाता है । मशीन लर्निंग में सिमुलेशन और डाटा के बीच के सहसंबंधों का पता लगाकर पैटर्न की पहचान कर कई मैन्युअल प्रक्रियाओं को स्वचालित किया जा सकता है । इस प्रौद्योगिकी द्वारा तेल और गैस कंपनियों को जटिल प्रक्रियाओं के संचालन, निगरानी, रखरखाव और उनसे संबंधित समस्याओं के तुरंत निपटान में सहायता मिलती है । मानव ऑपरेटरों द्वारा आसानी से न हो पाने वाले आंतरिक गातिविधियों और उससे समन्धित समस्याओं की सूक्ष्म जांच भी डिजिटल टेक्नोलॉजी द्वारा संभव हुआ है ।

तेल और गैस की बढ़ती मांग ने नए तेल / गैस क्षेत्रों की खोज पर दबाब डाला है। ऐसे में एआई के अनुप्रयोग से तेल और गैस के क्षेत्रों के अन्वेषण, ई एंड पी प्रक्रियाओं को अधिक कार्यसम और इसके संचालन के तरीके में सुधार लाने में मदद मिल सकता है। वर्तमान में तेल और गैस उद्योग में इन डिजिटल टेक्नोलॉजी के अनुप्रयोगों में ड्रिलिंग/ ईएंडपी डाटा का विश्लेषण, नए तेल क्षेत्रों की सटीक पहचान, ऑयल कोरोजन रिस्क एनालिसिस आदि शामिल हैं। यह प्लांट और इंफ्रास्ट्रक्चर के जीवनकाल, अपटाइम और विश्वसनीयता को बढ़ाने में मदद करता है, जो अंततः लाभदायक है।

विश्वसनीय और समय पर डाटा का संचार; तेल और गैस उद्योग के सुरक्षित और लाभदायक संचालन के लिए महत्वपूर्ण है। यह माप उपकरणों, भूमि-अनुबंधों या भिन्न कार्यालयों से सूचना का प्रवाह या नियामक दस्तावेजीकरण द्वारा। क्लाउड कंप्यूटिंग, एक ऐसा साधन है, जो पेट्रोलियम अन्वेषण प्रणाली के बढ़ते डाटा भंडारण की मांग को पूरा कर सकता है और बड़े पैमाने पर डाटा भंडारण और डाटा संचारित करने की समस्या को हल कर सकता है। क्लाउड टेक्नोलॉजी के माध्यम से तेल और गैस कंपनियों कम लागत पर अपार डाटा संग्रह को व्यवस्थित और प्रोसेसिंग कर सकता है। क्लाउड कंप्यूटिंग ने कंपनियों को तेज प्रोसेसिंग क्षमताओं के साथ स्थानीय सर्वरों के बजाय वर्चुअल हब द्वारा दुनिया भर में कई कार्यालयों के बीच लिंक स्थापित करने में मदद की है। दुनिया भर में तेल और गैस कंपनियां अब क्लाउड को एक शक्तिशाली सहायक के रूप में देख रही है। क्लाउड-आधारित टेक्नोलॉजी न केवल तेज कंप्यूटिंग क्षमता और उच्च सिस्टम प्रदर्शन के लिए उत्प्रेरक के रूप में कार्य करता है, बल्कि अनुप्रयोग के जल्द परिनियोजन, सेवा की कम लागत और डिजिटल परिवर्तन के लिए ईंघन के रूप में भी काम करता है। साथ ही साथ क्लाउड के प्रचुर कम्प्यूटेशनल क्षमता का उपयोग कर डाटा के माध्यम से उपयोगी अंतर्दृष्टि (insights) और ज्ञान एकत्रित करना संभव हो गया है। क्लाउड की मदद से हम दूरस्थ तकनीकी विशेषज्ञ/कंपनी के साथ मिलकर काम कर सकते हैं और डाटा का विश्लेषण (Data Visualization) कर सकते हैं।

एआई, क्लाउड कंप्यूटिंग और डिजिटल टेक्नोलॉजी जैसे सफल प्रौद्योगिकी के प्रमुख लाभों में शामिल है: संचालन के तरीके को बेहतर बनाना, तेल और गैस के अन्वेषण से उत्पादन तक के समय को कम करना, बेहतर और सुचिंतित निर्णय लेने में सहयोग करना, ईएंडपी प्रक्रियाओं/विभिन्न गातिविधियों की कार्यक्षमता में सुधार लाना आदि।

- गैस स्टेशन/ प्लेटफॉर्म मोनिटिरंग: गैस स्टेशनों/ प्लेटफॉर्म्स पर दुर्घटना, आग और विस्फोटों का भारी खतरा रहता है जो जानलेवा साबित हो सकता है और गैस स्टेशनों और इसके आसपास के क्षेत्र को नष्ट कर सकता है। एआई संचालित कैमरे की मदद से तेल और गैस क्षेत्रों में जोखिम वाले धुआं आदि खतरनाक गितविधियों का पता लगा सकते हैं। इन कैमरों को खतरनाक गितविधियों की वीडियो का उपयोग कर प्रिशिक्षित किया जा सकता है। ऐसी गितविधियों की पहचान करने के बाद एआई-संचालित कैमरे, गैस स्टेशन/ प्लेटफॉर्म के कर्मचारियों को आपातकालीन सुरक्षा कार्रवाई करने और आस-पास के पंपों को सूचित करने के लिए सचेत कर सकते हैं। ये कैमरे आग या विस्फोट के मामले में आपातकालीन सेवाओं को भी सूचित कर सकते हैं। तेल और गैस उद्योग में एआई का उपयोग कर, कंपनियां अपने गैस पंपों/ प्लेटफॉर्म्स की सुरक्षा पुख्ता हो सकती हैं।
- स्वचालित निरीक्षण: तेल और गैस कंपनियों में जोखिम के मूल्यांकन और उपकरणों की स्थिति की निगरानी के लिए लगातार निरीक्षण करना पड़ता है। असामान्य उपकरण व्यवहार की पहचान करने में विफलता के परिणामस्वरूप कार्य स्थलों पर उपकरण विफल हो सकते हैं या दुर्घटना हो सकती है। इन समस्याओं से बचने के लिए लगातार-मैनुअल निरीक्षण के विकल्प तलाश किये जा रहे हैं। तेल और गैस कंपनियों में एआई को लागू कर निरीक्षण प्रक्रियाओं को आसान बनाया जा सकता है। एआई-संचालित रोबोट को सामान्य उपकरण व्यवहार की मदद से प्रशिक्षित किया जा सकता है। एआई सिस्टम पैटर्न की पहचान कर उपकरण में विसंगतियों का पता लगाएगा। एआई-सक्षम रोबोट, उपकरणों और प्लांट में असामान्य व्यवहार का पता लगाने के लिए लगातार निरीक्षण कर सकते हैं। इसके अलावा, तेल और गैस कंपनियां

पाइपलाइनों का निरीक्षण करने के लिए एआई-सक्षम ड्रोन का उपयोग कर सकती हैं। ये ड्रोन वास्तविक समय में फुटेज रिकॉर्ड कर सकते हैं और पाइपलाइनों में दरारें या लीक का पता लगा सकते हैं। एआई - संचालित रोबोट आपातकालीन स्थितियों में हस्तक्षेप कर सकते हैं और शमन नीतियों के बारे में सूचित निर्णय ले सकते हैं। इस दृष्टिकोण से तेल और गैस कंपनियां अपने कार्य-स्थलों की सुरक्षा सुनिश्चित कर सकती हैं।

• तेल और गैस- रिजर्वायर का प्रबंधन: उत्पादन चक्र की आयु में सुधार के लिए तेल भंडार का प्रबंधन और रखरखाव किया जाना आवश्यक है। भूकंपीय व्याख्या, भूविज्ञान, रिजर्वायर इंजीनियरिंग और उत्पादन तकनीक आदि तेल और गैस-रिजर्वायर के प्रबंधन में शामिल हैं। इन सभी तकनीकी की देखभाल के लिए कई समर्पित टीमों की आवश्यकता होती है। हालांकि, व्यवसाय के मालिक अपनी लागत में कटौती करना चाहते हैं और एक स्टैंडअलोन समाधान तैनात करना चहाते हैं।

तेल और गैस कंपनियां एआई सिस्टम को भूकंपीय सर्वेक्षण, भूवैज्ञानिक सूचना और उत्पादन तकनीकों के बारे में ऐतिहासिक डाटा के साथ प्रशिक्षित कर सकती हैं। इस तरह के डाटा और एआई का लाभ उठाकर, तेल और गैस कंपनियां तेल और गैस-ब्लॉक की निगरानी और रिजर्वायर के स्वरूप/विशेषता के विवरण और मॉडलिंग कर सकती हैं। इस तरह एआई का उपयोग कर कच्चे तेल के नए स्रोत और संभावित ड्रिलिंग साइट खोजने में मदद मिल सकती है।

- उत्पादन वृद्धिः तेल और गैस कंपनियां अपने उत्पादन को बढ़ाने और मुनाफे को अधिकतम करने के लिए हमेशा नवीन तकनीकों की तलाश में रहती हैं। राजस्व में सुधार करने में पारंपरिक तकनीक अप्रभावी साबित हो रही हैं। उत्पादन डाटा का उपयोग कर एआई सिस्टम को प्रशिक्षित किया जा सकता हैं, जिससे स्वचालित पैटर्न की पहचान, डाटा को सुधारने के लिए वर्गीकरण और डाटा से जरुरी ज्ञान (एनालिटिक्स) प्राप्त किया जा सकेगा। एनालिटिक्स की मदद से एआई सिस्टम अनुमानित-मॉडल विकसित कर सकते हैं। इसकी मदद से पेट्रोलियम अन्वेषण और उत्पादन के क्षेत्र में कार्यरत कंपनियां, असफलता/अक्षमता के क्षेत्रों की पहचान कर सकती हैं और एआई की मदद से उत्पादन को अधिकतम करने के लिए नीतियां विकसित कर सकती हैं।
- सटीक/सुनिश्चित ड्रिलिंग: कच्चे तेल की प्राप्ति करने के लिए पृथ्वी के सतह पर सटीक स्थानों में ड्रिल करना पड़ता है और ऐसे स्थानों को खोजना जिटल हो सकता है। इसके अतिरिक्त, ड्रिलिंग परिचालन में दुर्घटनाओं, तेल फैलने और आग लगने के उच्च जोखिम शामिल होते हैं। अपतटीय ड्रिलिंग में, हजारों फीट गहराई तक ड्रिल कर सकते हैं। इस तरह की गहराई पर, पानी का तापमान फ्रिजिंग के स्तर तक पहुंच सकता है जो ड्रिलिंग उपकरण को नुकसान पहुंचा सकता है। तेल और गैस परिचालनों में एआई का लाभ उठाकर, कंपनियां भूमि और समुद्र तल पर ड्रिलिंग (वेधन) उपकरण का सटीक/ सुनिश्चित मार्गदर्शन करने के लिए एल्गोरिथम (कंप्यूटर प्रोग्राम) डिजाइन कर सकती है। ड्रिलिंग प्रणालियों के ऐतिहासिक डाटा का उपयोग कर एआई सिस्टम को प्रशिक्षित किया जा सकता है, जिससे एआई-संचालित सटीक ड्रिलिंग और पूर्व जोखिमों की पहचान की जा सकती है। इस दृष्टि से, तेल और गैस कंपनियां ड्रिलिंग कार्यों में प्रभावी रूप से ड्रिलिंग लागत और जोखिमों को कम कर सकती हैं।

कुछ प्रमुख अन्वेषण और उत्पादन के क्षेत्र की कंपनियाँ, पहले से ही गहरे समुद्र में ईएंडपी गतिविधियों के संचालन के लिए एआई वाले रोबोटों को तैनात कर रही हैं। एआई वाले रोबोटों की मदद से दुर्गम स्थान और गहरे समुद्र में चट्टानों के प्राकृतिक बहाव से हाइड्रोकार्बन श्रंखलाओं का पता लगाया जा रहा है। इसके अलावा एआई का उपयोग तेल और गैस प्लेटफोर्मों को सुरक्षित बनाने और सेंसर डाटा का इस्तेमाल कर प्रक्रियों के संचालन, मशीन विफलताओं की पहचान तथा ऑफशोर संरचनाओं / इंस्टालेशनों की निगरानी में की जा रही है।

इसके अलावा उत्पादन चरण में, तेल और गैस कंपनियों द्वारा बड़े टैंको में कच्चे और परिष्कृत तेल को संग्रह किया जाता है जिसे पाइपलाइनों के माध्यम से परिवहन करने की आवश्यकता होती है। तेल और गैस उद्योग में कच्चे तेल द्वारा जंग के कारण उपकरण विफलता एक आम जोखिम है। विभिन्न क्षेत्रों से निकला तेल आमतौर पर रासायनिक गुणों में भिन्न होता है। कच्चे तेल द्वारा जंग लगने की समस्या, तेल के रासायनिक गुणों और संग्रहित किए जाने वाले वातावरण पर निर्भर करता है। इंजीनियरों द्वारा परंपरागत तरीके से तेल से लगने वाले जंग को रोकने का समाधान मौजूद है। तेल और गैस कंपनियों के पास दिग्गज इंजीनियरों के इस ज्ञान को आने वाले कार्यबल को प्रदान करने के लिए सबसे अच्छी प्रक्रिया मौजूद नहीं थी। इस ज्ञान का डिजिटलीकरण और नए इंजीनियरों को रखरखाव की अंतर्दृष्टि प्रदान करना, अब एआई के माध्यम से संभव हो गया है।

कैलिफोर्निया स्थित एक कंपनी ने हाल में ही एक सॉफ्टवेयर बनाया है, जिससे अनियोजित रखरखाव को कम किया जा सकता है। मशीन लर्निंग का उपयोग कर तथा पुराने मौजूद जानकारी / डाटा का विश्लेषण कर अनियोजित डाउनटाइम को कम किया जाता है जिससे रखरखाव की लागत कम हो गई है। M/s Baker Hughes ने भी एक डीप-लर्निंग आधारित एनालिटिक्स सॉफ्टवेयर विकसित किया है जो तेल और गैस उद्योगों के कर्मचारियों को एकत्रित डाटा के आधार पर बेहतर तकनीक / व्यवसायिक निर्णय लेने में मदद करता है।

तेल और गैस कंपनियों को परिचालन उत्कृष्टता में वृद्धि लाने के लिए तथा लागत को कम करने के लिए ऑपरेटिंग मॉडल में बदलाव लाने की जरुरत है। ऐसी स्थित में एआई और डिजिटल टेक्नोलॉजी के कार्यान्वयन से इस क्षेत्र की कंपनियों को लाभ मिल सकता है। यह तेल और गैस के अन्वेषण और उत्पादन से जुड़े जोखिमों को कम करने में महत्वपूर्ण भूमिका निभा सकता है। भारत में भी एआई, क्लाउड कंप्यूटिंग और डिजिटल टेक्नोलॉजी के अपार अवसर मौजूद हैं। भारत में भी कई कंपनियों ने इस दिशा में नई पहल की है।

हाइड्रोकार्बन महानिदेशालय (डीजीएच) द्वारा संचालित एनडीआर में संपूर्ण भारत के अन्वेषण और उत्पादन (ईएंडपी) डाटा को उपयोगकर्ताओं (ईएंडपी कम्पनियाँ, शिक्षण सँस्थाए, सरकारी सँस्थाए इत्यादि) के वाणिज्यिक दोहन, अनुसंधान एवं विकास के लिए उपलब्ध कराया जाता है। एनडीआर इस मौजूद डाटा की व्याख्या करने के लिए एआई और डिजिटल टेक्नोलॉजी का उपयोग कर सकता है, जो नए तेल और गैस की संभावनाओं को उजागर करेगा और मौजूदा बुनियादी ढांचे से तेल और गैस उद्योग को अधिक उत्पादन में सहायता करेगा।

वर्तमान ऊर्जा मांगों को पूरा करने के लिए तेल और गैस उद्योग के संचालन के हर हिस्से में नवाचार को शामिल करने की आवश्यकता है। इन नवाचार प्रयासों से तेल और गैस के अन्वेषण और उत्पादन में काफी सकारात्मक परिणाम देखने को मिलेगा। इन प्रौद्योगिकी में तेल और गैस उद्योग के भविष्य को प्रभावित करने की अपार क्षमता है। एआई, क्लाउड कंप्यूटिंग और डिजिटल टेक्नोलॉजी जैसे प्रौद्योगिकी के उपयोग में कई अदृश्य संभावनाएं छिपी है, जिससे अन्वेषण और उत्पादन सेक्टर को एक नई दिशा मिलेगी।

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धरती माँ की आँखों का, पानी अब है सूख रहा |
ज्वर में धधक रही ये धरती , कैसा मंजर दीख रहा ||
जल ही जीवन, जल सा जीवन, जो अब तक था अनमोल |
इस अमृत में हमने मिलकर, प्रदूषण का जहर दिया है घोल ।।
सूखे अब सब ताल तलैये, उगे कंक्रीट के जंगल |
रक्त चूसने लगा प्रकृति का, ये जनसँख्या का दलदल ।।
बदल रहा तेजी से मौसम, का मिजाज़ बेमेल |
मुंह चिढ़ा रहे हमें ये, सूखे और बाढ़ के खेल ||
कैसे मुंह मोड़ेंगे हम, जब सब अपनी करनी होगी |
आगे आने वाले सालों में, सज़ा हमें भरनी होगी ||
बिन सोचे समझे जब, खत्म किये संसाधन |
ऐसी परिस्थिति से पार, नहीं लगा पायेगा धन ।।
युद्ध होंगे फिर जल के ऊपर, होगी काला बाज़ारी |
प्यासे मरेंगे पश् पक्षी, निर्धन जनता सारी ||
हनन करेंगे शक्तिशाली, नदियों के अधिकारों का |
सारे जल पर कब्ज़ा होगा, बाहुबली मक्कारों का ||
अब भी यदि इस संकट का, उपाय न कोई विचारा |
भीषण होगा परिणाम, मिलेगा तब न कोई भी चारा ।।
हमसे हमारी सभ्यता सबसे, है बहुत पुरानी धरती|
सदा रही है, सदा रहेगी, कभी नहीं है मरती ॥
धरती माँ अपने बच्चों में भेद नहीं करती है।
न ही करती पक्षपात, सदा न्याय करती है ||
हुआ असह्य उत्पात मनुजा का, यदि, किंचित क्षमा न करेगी |
मिटा देगी वह हमें धरा से, पर्यावरण में संतुलन भरेगी ||
जिन जीवों ने परिवर्तन का, मूल्य नहीं था जाना |
कालांतर में उन्हें पड़ा, इस धरती से मिट जाना ||
मत सोचो ये धरती हमने, पाई पुरखों से अधिकार में |
जानो ये है गिरवी, पाई है अनुजों से उधार में ||
एक एक बूँद का मूल्य समझ, न करें इसका अपमान |
बचें रहें हवा पानी वन, करें इसका संधान | |
संरक्षित कर दे वापस, अगली पीढ़ी को पानी ।
सुलभ सुरक्षित रहें संसाधन, जीवन धरा रहे धानी ||
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(जून, 2018 में प्रकाशित नीति आयोग की जल सूचकांक रिपोर्ट में यह बताया गया है कि 2020 तक भारत के 21 नगरों में, जिनमें दिल्ली नॉएडा गाज़ियाबाद एवं गुरुग्राम भी शामिल हैं, भूजल तक़रीबन समाप्त हो जायेगा | देश के जलस्त्रोतों का 40% जल भूजल से आता है और देश के दो तिहाई जलस्त्रोत सामान्य जल स्तर से नीचे हैं | ऐसे में हमारा देश भयावह पेय जल संकट के कब्जे में है| संयुक्त राष्ट्र संघ की जून 2019 की रिपोर्ट के अनुसार जिस तरह मौसम में बदलाव और प्राकृतिक आपदाओं की आवक जारी है, पूरा विश्व एक ऐसे भविष्य की तरफ बढ़ रहा है जहाँ साफ़ हवा पानी जैसी आधारभूत आवश्यकताएं भी केवल धनवान लोगों के सीमित दायरे में कैद होंगी और इस आधार पर भेदभाव होंगे | इसलिए जल संरक्षण आज के समय में बहुत महत्वपूर्ण है और हम सबको मिलके इसके लिए प्रयत्न करने होंगे)

विशाखा गुप्ता

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'नारी' होने को तो हैं दो अक्षर
पर महत्व अति भारी
        हर युग में नारी बनी
        प्रताड़ना की अधिकारी!
चाहे वो सीता हो या द्रोपदी
या आज की कन्या बेचारी!
        मानवता के कंटक बने
        कुछ कलुषित अत्याचारी!
यह निरीह नहीं, न बेचारी
समझो न तुच्छ तुम इसको
यह वह शक्ति, प्रकृति है जो
देती है एक जीवन नर को!
        जल कर जो खत्म हुए
        पूर्वज भगीरथ के भारी
        इनको तारने के लिए भी
        देव जो सारे विफल हुए तो नारी ही तो पुकारी
        हमारी – गंगा पतित पावनी नारी!
नारी में नर निहित है, और है
माँ, बहन एवं पुत्री प्यारी
त्याग, तपस्या की मूरत ये
अर्थव्यवस्था की आधारी!
        परिवार का गौरव बनती
        और जीते सब संसार है!
जब बढ़ती ये दृढ़ निश्चय लो
हर क्षेत्र में कीर्तिमान बने
यही राष्ट्र का गौरव है
जब इनसे देश का सम्मान बढ़े!
        भरो जोश और उडान फिर
        लक्ष्मी, अहिल्या, इंदिरा बनने की
        शिक्षित कर दो इनको इतना
        यही आगाज होगा फिर, भारत के स्वर्णयुग की!
इन नन्हें पंखों को न काटो
इसमें तो एक दुनिया समाई है
होगी शिक्षित और बल में तेज
यही हम सब की बढ़ाई है!
        नमन करूँ हर नारी को मैं
        नारी हमारा अभिमान है
        देश बढे प्रगति पथ पर
        हर कोई समझे इनको समान है!
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#### **E-tendering Instructions to Bidders**

#### General:

These are the special Instructions (for e-Tendering) as supplement to "Instruction to Bidders" as available in Annexure-I of the tender document. Submission of Bids only through online process is mandatory for this Tender.

For conducting electronic tendering, Directorate General of Hydrocarbons, Noida is using the **Central Public Procurement Portal (CPPP)(http://www.eprocure.gov.in)** of NIC, a Government of India Undertaking.

#### 1. Tender Bidding Methodology:

Sealed Bid System –Two Envelopes.

Financial & Techno-commercial bids shall be submitted by the bidder at the same time.

#### 2. Broad outline of activities from Bidders prospective:

- i) Procure a Digital Signing Certificate (DSC).
- ii) Register on Central Public Procurement Portal (CPPP).
- iii) Create Users and assign roles on CPPP.
- iv) View Notice Inviting Tender (NIT) on CPPP.
- v) Download Official Copy of Tender Documents from CPPP.
- vi) Prepare & arrange all document/paper for submission of bid online/offline.
- vii) Bid-Submission on CPPP.
- viii) Attend Public Online Tender Opening Event (TOE) on CPPP (Opening of Techno-Commercial Part).
- ix) Attend Public Online Tender Opening Event (TOE) on CPPP (Opening of Financial-Part) (only for Technically Responsive Bidders)

#### 3. Digital Certificates:

For participation in e-tendering, it is mandatory for all bidders to have a Digital Certificate (DC) also referred to as Digital Signature Certificate (DSC), of Class 2 or above (in the name of person who will sign the Bid), issued by a Certifying Authority (CA) licensed by Controller of Certifying Authorities (CCA) [refer <a href="http://www.cca.gov.in">http://www.cca.gov.in</a>].

#### 4. Registration:

To use the Central Public Procurement Portal (http://www.eprocure.gov.in), bidder needs to register on the portal. The bidder should visit the home-page of the portal (www.eprocure.gov.in) and go to the eprocure link then go to "Online Bidder Enrollment".

#### 5. Bid related information for this Tender (Sealed Bid):

The entire bid-submission would be online on CPPP (http://www.eprocure.gov.in) Broad outline of submission are as follows:

- (I) Submission of digitally signed copy of Tender Documents/ Addendum/ Corrigendum.
- (II) Two Envelopes.
  - Techno- Commercial Bid
  - Financial Bid

#### 6. Offline submissions of some documents:

It is mandatory for all bidders to submit following documents offline (physically) to HOD (MM), Grd Floor, DGH office, OIDB Bhawan, Sector-73, Noida-201301 on or before the date & time of bids closing as specified in NIT of this tender document, in a properly sealed envelope:

- (I) Power of Attorney (in Original) for authorized signatory of bid.
- (II) Any other document, if specified, in the tender.

The envelope shall bear the name of the firm, tender number, name of work and the phrase — Do Not Open Before (Due date & time of opening of tender) —

#### Note:

- A. The responsibility for ensuring that envelope is delivered in time would be vested with the bidder. The DGH shall not be responsible if the envelope is delivered elsewhere or late.
- B. Document submitted physically to DGH and the scanned copies furnished at the time of online bid submission should be the same otherwise the bid will be summarily rejected.

#### 7. Other Instructions:

For participating in this tender online, the following instructions are to be read carefully. These instructions are supplemented with more detailed guidelines on the relevant screens of the CPPP.

The bidder should visit the home-page of the CPP portal (www.eprocure.gov.in), and go to the link "eprocure", then "Bidders Manual Kit" and "Help for Contractors" link.

- (I) Please take care to scan documents that total size of documents to be uploaded remains minimum. If required, documents may be scanned at lower resolutions say at 150 dpi. However it shall be sole responsibility of bidder that the uploaded documents remain legible.
- (II) Utmost care may be taken to name the files/documents to be uploaded on CPPP. These should be no special character or space in the name of file.
- (III) It is advised that all the documents to be submitted (See Appendix-8 at Annexure-I of tender document) are kept scanned or converted to PDF format in a separate folder on your computer before starting online submission.
- (IV) Utmost care may kindly be taken to upload **Price schedule/ Price Format / BOQ/ BOM**. Any change in the format of price schedule / BOQ file shall render it unfit for bidding. Following steps may be followed:
  - a. Download Price schedule /Price format/ BOM/ BOQ in XLS format.
  - b. Fill rates in downloaded price schedule / BOQ as specified in XLS format only in sky blue back ground cells. Don't fill in white back ground cells.
  - c. BOQ/BOM file is password protected XLS file. Don't unprotect the file. Price has to be filled in the same file and the same has to be uploaded.
  - d. Save filled copy of downloaded BOM/BOQ file in your computer and remember its name & location for uploading correct file (duly filled in) when required.
- (V) The compatible support software (PDF Converter, Java, etc.) for online bid submission may be downloaded from CPP Portal.
- (VI) If some document is not applicable for the bidder then he has to upload scanned copy of paper mentioning, The document <name> called vide clause \_\_\_\_\_\_ is not applicable on us.
- (VII) If document asked for contains more than one page then all those pages may be uploaded in one PDF file.

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