OIL INDIA LIMITED
(A Govt. of India Enterprise)
CONTRACTS DEPARTMENT, DULIAJAN
DISTRICT: DIBRUGARH (ASSAM), PIN-786602
TEL: (91) 374-2800548, FAX: (91) 374-2803549
E-mail ID: contracts@oilindia.in
Website: www.oil-india.com

PART-1
FORWARDING LETTER

WORKS CONTRACT

M/s_____
_____
_____
_____

Sub: Tender No. CDH2516P27 for 'Design, implementation and support for Command-and-Control Centre & OT Data Lake project for OIL India Ltd.'.

Dear Sir/Madam,

1.0 OIL INDIA LIMITED (OIL), a "Maharatna" Category, Government of India Enterprise, is a premier oil Company engaged in exploration, production and transportation of crude oil & natural gas with its Headquarters at Duliajan, Assam. Duliajan is well connected by Air with nearest Airport being at Dibrugarh, 45 km away.

2.0 In connection with its operations, OIL invites International Competitive Bids (ICB) from competent and experienced Contractors/Firms through **OIL's e-Procurement Portal** for **'Design, implementation and support for Command-and-Control Centre & OT Data Lake project for OIL India Ltd.'.** One complete set of Bid Document covering OIL's IFB for above project is uploaded in OIL's e-Procurement portal. You are invited to submit your most competitive bid on or before the scheduled bid closing date and time through OIL's e-Procurement portal. For your ready reference, few salient points of the IFB (covered in detail in the Bid Document) are highlighted below:

a)	Type of Bid	:	**Open Global e-Tender: Single Stage-Two Bid System**
b)	Original Bid Closing Date & Time	:	**4th September 2026 [11:00Hrs (IST)]**
c)	Original Technical Bid Opening Date & Time	:	**4th September 2026 [14:00Hrs (IST)]**

d)	Price Bid Opening Date & Time	:	Will be intimated only to the eligible/qualified Bidders nearer the time.
e)	Bid Submission Mode	:	Bids must be uploaded online in OIL's e-Procurement portal.
f)	Bid Opening Place	:	Office of **Chief General Manager-Contracts** Contracts Department, Oil India Limited, Duliajan -786602, Assam, India.
g)	Bid Validity	:	Minimum **120 (one hundred twenty) days** from Bid Closing date
h)	Mobilization Time	:	30 days from the date of issuance of LOA.
i)	Bid Security Amount	:	**Rs. 2,34,78,000.00** **Refer Clause No. 9.0** of Instruction to Bidder (ITB)
j)	Bid Security Validity	:	**165 days from Original Bid Closing Date.**
k)	Original Bid Security to be submitted	:	Office of **CGM-CONTRACTS**, CONTRACTS DEPARTMENT, OIL INDIA LIMITED, DULIAJAN, ASSAM-786602, INDIA
l)	Amount of Performance Security & validity	:	Separate Performance Security need to be submitted for the two distinct phases of the contract, as follows: Implementation Phase: Performance Security equivalent to 10% of the Implementation contract value, to be furnished at the time of award and remain valid up to three months beyond completion of the implementation phase. AMC Phase: Performance Security equivalent to 3% of the post Implementation value (Total Contract value minus Implementation cost component), to be submitted prior to commencement of AMC services and remain valid up to three months beyond expiry of the AMC period.
m)	Location of job	:	Corporate Office-Delhi, FHQ-Duliajan, PHQ-Guwahati & RF-Jodhpur
n)	Duration of the Contract	:	70 months from the date of issuance of LOA comprising of the followings:

			a) 10 months for Implementation Phase followed by Go-Live b) 60 months of AMC (including 04 months of Hypercare Period after Go-Live). OIL may extend the Contract by up to One (01) additional year on the same terms & conditions, subject to satisfactory performance.
o)	Quantum of Liquidated Damage for Default in Timely execution	:	Refer **Clause No. 4.0** of Part-4, Section-III (Special Conditions of Contract).
p)	Bids to be addressed to	:	Chief General Manager-Contracts, Contracts Department, Oil India Limited, Duliajan-786602, Assam, India
q)	Pre-Bid Conference Date & Venue	:	**24th August 2026**. Venue: OIL's Corporate Office Noida.
r)	Last date for receipt of Pre-bid queries	:	**20th August 2026**
s)	Whether tendered item is divisible	:	**No**

3.0 PRE-BID CONFERENCE:

3.1 A Pre-Bid Conference is scheduled to be held on **24th August 2026** at **OIL's Corporate Office Noida** to explain the requirements of Company in details to the interested prospective Bidders and to understand bidders' perspective including exchange of views/clarifications, if any, on the **Scope of Work**, **Bid Evaluation Criteria and other terms & conditions of the Tender**. The parties who want to participate in the pre-bid conference must confirm their participation and forward the **e-mail IDs and contact details of maximum 2 (two) representatives** along with their pre-bid queries (if any) to email ID: parag_barman@oilindia.in or debashish.gogoi@oilindia.in or contracts_drive_2.0@oilindia.in latest by **21st August 2026.** The exact venue for pre-bid conference shall be communicated to the nominated representatives nearer the scheduled date of pre-bid conference.

3.2 It is recommended to the prospective Bidders to attend the pre-bid conference and to make site visits to familiarize themselves with all the salient features of terrain and available infrastructure in OIL's operational areas. This will help the bidder to understand the total requirement for proper bidding.

3.3 Maximum two (2) representatives from each prospective Bidder shall be allowed to participate in the pre-bid conference. All costs associated to attend the pre-bid conference by their representatives shall be borne by the interested Bidders.

3.4 The prospective bidders shall submit their queries/clarifications against the tender through E-mail / Courier addressed to CGM-Contracts, Oil India Ltd., Duliajan-786602, Assam and such queries must reach OIL's office at Duliajan latest by **20th**

August 2026. OIL shall provide clarifications to only those queries received within this date. Queries/ Clarifications against the tender received beyond the aforementioned date will not be entertained and replied. OIL will not be responsible for non-receipt or late receipt of any bidder's query in OIL's office.

3.5 Clarifications/exceptions/deviations, if required any, should be brought out by the bidder prior to or during the Pre-Bid Conference only. After processing these suggestions, as a sequel to the pre-bid conference, Company may communicate the changes in this regard, if agreed any, through an addendum to tender document. Company will not accept any exception/deviation to tender conditions/specifications once the same are frozen after the pre-bid conference and the non-compliant bid(s) shall be liable for outright rejection against this tender.

3.6 The exact date and venue of pre-bid conference will be intimated later on.

4.0 GUIDELINES FOR PARTICIPATING IN OIL'S E-PROCUREMENT:

4.1 To participate in OIL's E-procurement tender, bidders should have a legally valid digital certificate **of Class 3 with Organization's Name and Encryption certificate** as per Indian IT Act from the licensed Certifying Authorities operating under the Root Certifying Authority of India (RCAI), Controller of Certifying Authorities (CCA) of India (http://www.cca.gov.in). **Digital Signature Certificates having "Organization Name" field as "Personal" are not acceptable**. However, aforesaid Digital Signature Certificates having Bidder's Name in the "Organization Name" field are acceptable. **Only in case of sole proprietorship firms, Digital Signature Certificates issued in the name of the proprietor is also acceptable provided the bid is submitted in the capacity of a proprietorship firm.**

4.2 Digital Signature Certificate comes in a pair of Signing/verification and Encryption/decryption certificate. Bidder should have both the Signing/verification and Encryption/Decryption certificate for Signing and encryption, decryption purpose respectively. The driver needs to be installed once, without which the DSC will not be recognized. While participating on e-Tendering the DSC token should be connected to your system.

4.3 Encryption certificate is mandatorily required for submission of bid. In case bidder created response with one certificate (using encryption key) and bidder change his Digital Signature Certificate then old certificate [Used for encryption] is required in order to decrypt his encrypted response for getting the EDIT mode of the response. Once decryption is done, bidder may use new DSC certificate for uploading and submission of their offer. It is the sole responsibility of the bidder to keep their DSC certificate properly. In case of loss of the certificate, OIL INDIA LTD. will not be responsible.

4.4 For participation, applicants already having User ID & Password for OIL's E-Procurement Portal need to register against the IFB. New vendors/existing vendors not having User ID & Password for OIL's E-Procurement Portal shall obtain User ID & password through online vendor registration system in E-Portal.

4.4.1 Bidders without having E-Tender Login ID and password should complete their online registration at least 07 (Seven) days prior to the scheduled Bid Closing Date and time of the tender. For online registration, bidder may visit OIL's E-Tender site - https://etender.srm.oilindia.in/irj/portal.

4.4.2 Necessary Login ID & Password will be issued by OIL only after submitting the complete online registration by the Bidder. In the event of late registration/incomplete registration by Bidder, OIL INDIA LIMITED shall not be responsible for late allotment of User ID & Password and request for bid closing date extension on that plea shall not be entertained by Company.

4.5 Parties, who do not have a User ID, can click on Guest login button in the e-Tender portal to view and download the tender. The detailed guidelines are given in User Manual available in OIL's E-Procurement site. For any clarification in this regard, bidders may contact E-Tender Support Cell at Duliajan at erp_mm@oilindia.in, Ph.: 0374- 2807171/7192.

4.6 The link for OIL's E-Procurement Portal is available on OIL's web site (www.oil-india.com).

5.0 IMPORTANT NOTES:

Bidders shall take note of the following important points while participating in OIL's e-procurement tender:

i) **BACKING OUT BY BIDDER:** In case any bidder withdraws their bid within the bid validity period, Bid Security will be forfeited and the party will be put on Holiday as per the Banning Policy (available in OIL's website) of Company.

ii) **BACKING OUT BY L-1 BIDDER AFTER ISSUE OF LOA:** In case LOA issued is not accepted by the L1 bidder or the Performance Security is not submitted as per the terms of the contract within the time specified in the Bid Document, the Bid Security shall be forfeited and the bidder shall be dealt as per the Banning Policy (available in OIL's website) of Company.

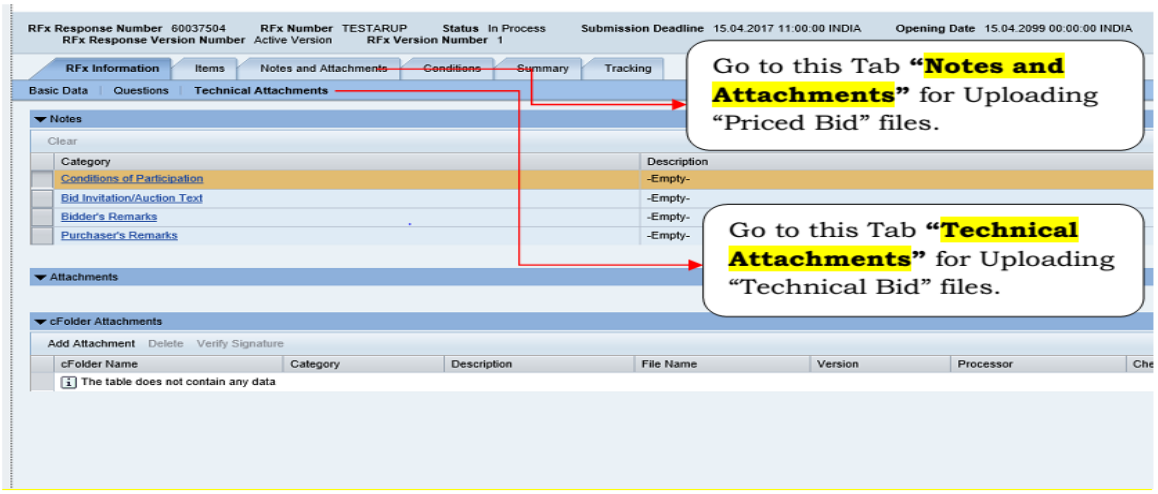
iii) **FURNISHING FRAUDULENT INFORMATION/DOCUMENT**: The information and documents furnished by the bidder/ contractor in respect of the subject tender/contract are accepted to be true and genuine. However, if it is detected during technical scrutiny or after award of the contract or after expiry of the contract, that the bidder had submitted any fake/fraudulent document or furnished false statement, the offer/contract shall be rejected/ cancelled, as the case may be and the bidder (if fake document/false statement pertains to such bidder) shall be dealt as per the Banning Policy (available in OIL's website) of Company. Undertaking of authenticity of information/documents submitted as per **Proforma-J** should be submitted along with the technical bids.

iv) **ERRING / DEFAULTING AGENCIES:** Erring and defaulting agencies like bidder, contractor, supplier, vendor, service provider will be dealt as per OIL's Banning Policy available in OIL's website: www.oil-india.com.

v) Bid should be submitted online in OIL's E-procurement site up to 11.00 AM (IST)(Server Time) on the date as mentioned and will be opened on the same day at 2.00 PM(IST) at the office of the CGM-Contracts in presence of the authorized representatives of the bidders.

vi) If the digital signature used for signing is not of "Class-3" with Organizations name, the bid will be rejected.

vii) The tender is invited under **SINGLE STAGE-TWO BID SYSTEM**. The bidders shall submit both the "**TECHNICAL**" and "**PRICED**" bids through electronic form in the OIL's e-Procurement portal within the Bid Closing Date and Time stipulated in the e-Tender. The Technical Bid should be submitted as per Scope of Work & Technical Specifications along with all technical documents related to the tender and uploaded in **"Technical Attachments" Tab only**. **Bidders to note that no price details should be uploaded in "Technical Attachments" Tab Page. Details of prices as per Price Bid format/Priced bid can be uploaded under "Notes & Attachments" tab.** A screen shot in this regard is shown below. Offer not complying with above submission procedure will be rejected as per Bid Evaluation Criteria.



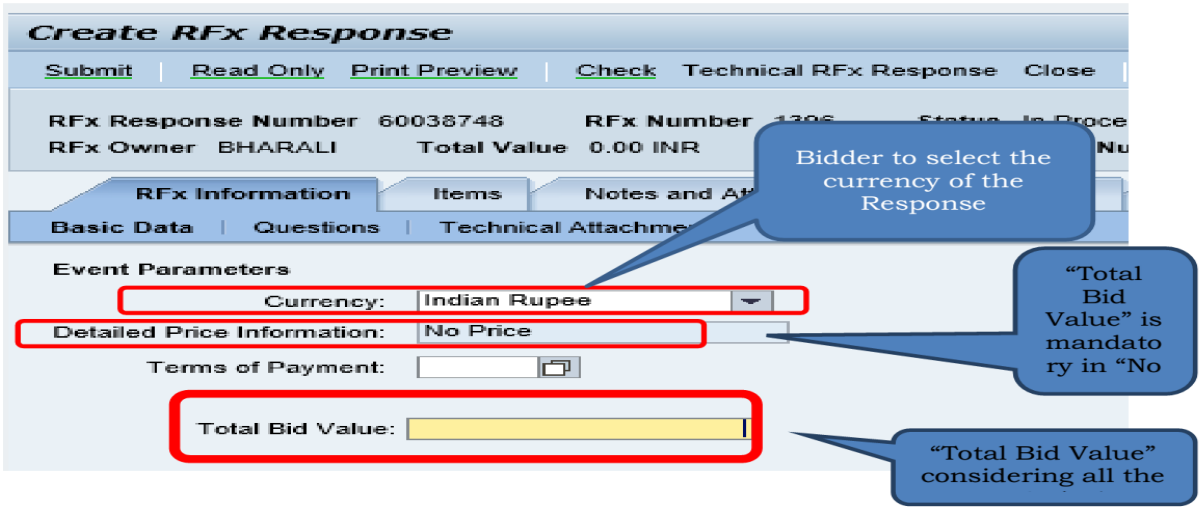
On "EDIT" Mode, Bidders are advised to upload "Technical Bid" and "Priced Bid" in the places as indicated above.

Notes:

* The "Technical Bid" shall contain all techno-commercial details **except the prices**.

** The "Priced bid" must contain the price schedule and the bidder's commercial terms and conditions, if any.For uploading Priced Bid, click on Add Atachment, a browser window will open, select the file from the PC and name the file under Description, Assigned to General Data and click on OK to digitally sign and upload the File. Please click on Save Button of the Response to Save the uploaded files.

viii) Maintenance of Total bid value in the Response: For convenience of the Bidders and to improve transparency, the rates/costs quoted by bidders against the E-tender shall be available for online viewing to all the Techno-commercially qualified Bidders against the tender after price bids are opened in the system. For tenders where **Detailed Price Information under RFx Information Tab is "No price"**, the Price Bid is invited against the tender through attachment form under "Notes & Attachment". In such tenders, Bidders must upload their pricing as per the **"Price Bid Format – Proforma-B"** under **"Notes & Attachment"** and additionally fill up the **on-line field "Total Bid Value"** under **"RFx Information"** Tab Page with the Total Cost (Including the GST component) as per the amount of the Price Bid in attachment form.



The "Total Bid Value" as entered by the Bidder in the on-line response shall be displayed in the E-tender portal amongst the techno-commercially qualified bidders and Company will not take any responsibility whatsoever towards incorrect information furnished by the bidders on the "Total Bid Value" field.

It is to be noted that Amount mentioned in the "Total Bid Value" field will not be considered for bid evaluation and evaluation will be purely based on the Price bid submitted as per the "Price Bid Format: Proforma-B" under "Notes & Attachments" tab page.

6.0 RESTRICTIONS ON PROCUREMENT FROM A BIDDER OF A COUNTRY WHICH SHARES LAND BORDER WITH INDIA:

Subject to **Order No. F. 7/10/2021-PPD (1) dated 23.02.2023** (as amended from time to time) issued by Department of Expenditure, Ministry of Finance, Govt. of India, Bidders should take note of the following:

6.1 Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority [Registration Committee constituted by the Department for Promotion of Industry and Internal Trade (DPIIT)]. Further, any bidder (including bidder from bidder) having specified Transfer of Technology (ToT) arrangement with an entity from a country which shares a land border with India, shall also require to be registered with the same competent authority to be eligible to bid in this tender.

6.2 "Bidder" (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.

6.3 "Bidder (or entity) from a country which shares a land border with India" for the purpose of this Order means:

a. An entity incorporated, established or registered in such a country; or
b. A subsidiary of an entity incorporated, established or registered in such a country; or
c. An entity substantially controlled through entities incorporated, established or registered in such a country; or
d. An entity whose beneficial owner is situated in such a country; or
e. An Indian (or other) agent of such an entity; or
f. A natural person who is a citizen of such a country; or
g. A consortium or joint venture where any member of the consortium or joint venture falls under any of the above

6.4 The beneficial owner for the purpose of para 6.3 above will be as under:
6.4.1 In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercises control through other means.

Explanation:

a. "Controlling ownership interest" means ownership of or entitlement to more than twenty-five per cent. of shares or capital or profits of the company;
b. "Control" shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholders' agreements or voting agreements;

6.4.2 In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership.

6.4.3 In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals.

6.4.4 Where no natural person is identified under 6.4.1 or 6.4.2 or 6.4.3 above, the beneficial owner is the relevant natural person who holds the position of senior managing official.

6.4.5 In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.

6.5 An Agent is a person employed to do any act for another, or to represent another in dealings with third person.

6.6 The successful bidder shall not be allowed to sub-contract works to any contractor from a country which shares a land border with India unless such contractor is registered with the Competent Authority. A declaration as per **Exhibit-I** in this respect to be submitted by the bidder for participation in this tender.

6.7 **Validity of registration**: In respect of tenders, registration should be valid at the time of submission of bids and at the time of acceptance of bids. In respect of supply otherwise than by tender, registration should be valid at the time of placement of order. If the bidder was validly registered at the time of acceptance/placement of order, registration shall not be a relevant consideration during contract execution.

6.8 The bidders should provide an undertakings as per **Exhibit-I, II & III** along with their bid towards compliance of the above guidelines for participation in this tender. If the undertakings given by a bidder whose bid is accepted is found to be false, this would be a ground for debarment/action as per OIL's Banning Policy and further legal action in accordance with law.

7.0 OIL now looks forward to your active participation in the IFB.

Thanking you,

Yours faithfully,
OIL INDIA LIMITED

Sd/-
(Parag Barman)
Chief Manager – Contracts (Global)
For Chief General Manager - Contracts
FOR RESIDENT CHIEF EXECUTIVE

PART-2
INSTRUCTIONS TO BIDDERS (ITB)

1.0 **ELIGIBILITY OF THE BIDDER:**

1.1 The eligibility of the bidder is listed under BID EVALUATION CRITERIA (BEC), PART-3 of the Bid document.

1.2 Bidder shall bear all costs associated with the preparation and submission of bid. Oil India Limited, hereinafter referred to as Company, will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

2.0 **BID DOCUMENTS**:

2.1 The services required, bidding procedures and contract terms are prescribed in the Bid Document. This Bid Document includes the following:

i) Forwarding Letter
ii) Instruction to Bidders (ITB)
iii) Bid Evaluation Criteria (BEC)
iv) General Conditions of Contract (GCC)
v) Scope of Work (SOW)/Terms of Reference (TOR)
vi) Special Conditions of Contract (SCC)
vii) Schedule of Rates (SOR)
viii) Proformas, Annexures, Exhibits etc.

2.2 The bidder is expected to examine all instructions, forms, terms and specifications in the Bid Documents. Failure to furnish all information required in the Bid Documents or submission of a bid not substantially responsive to the Bid Documents in every respect will be at the Bidder's risk & responsibility and may result in the rejection of its bid.

2.3 Bidders shall be deemed, prior to submitting their bids, to have satisfied themselves about the weather conditions, working culture in the area, socio-political environment, safety & security aspects, law & order situation and law of the land, and obtain for themselves all necessary information as to the risks, contingencies and all other circumstances, which may influence or affect the various obligations under the Contract.

3.0 **AMENDMENT OF BID DOCUMENTS:**

3.1 At any time prior to the deadline for submission of bids, the Company may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the Bid Documents through issuance of an Addendum(s)/Corrigendum(s)/Amendment(s).

3.2 The Addendum will be uploaded in OIL's E-Tender Portal in the Tab "Technical Rfx" and under External Area - "Amendments" folder. The Company may, at its discretion, extend the deadline for bid submission. Bidders are expected to take the Addendum into account in preparation and submission of their bid. Bidders are to check from time to time the E-Tender portal ["Technical RFx" Tab and under the folder "Amendments"] for any amendments to the bid documents before submission of their bids. No separate intimation shall be sent to the Bidders.

4.0 **PREPARATION OF BIDS:**

4.1 **Language of Bids**: The bid prepared by the bidder and all correspondence and documents relating to the bid exchanged by the Bidder and the OIL 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, duly authenticated by local chamber of Commerce of bidder's country, in which case, for purposes of interpretation of the bid, the translation shall prevail.

4.2 **Bidder's/Agent's Name & address**: Bidders should indicate in their bids their detailed postal address including the Fax/Telephone / Cell Phone Nos. and E-mail address. Similar information should also be provided in respect of their authorized Agents in India, if any.

4.3 **Documents comprising the bid**: Bids are invited under Single Stage Two Bid System. The bid to be uploaded by the Bidder in OIL's e-Procurement Portal shall comprise of the following components:

(A) Technical Bid (to be uploaded in 'Technical Attachments' tab)

a) Complete technical details of the services offered.
b) Documentary evidence established in accordance with Clause 8.0.
c) Bid Security
d) Bid-Form
e) Statement of Non-compliance (if any) as per Proforma–D.
f) Proforma-A: List of items to be imported without the CIF values.
g) Copy of Priced Bid without indicating prices (Proforma-B).
h) Integrity Pact duly signed by the bidder's authorized representative.
i) All Other Relevant Undertakings, Proformas etc. as applicable as part of Bid.

Note: Please note that, no price should be mentioned in the Technical Bid uploaded in 'Technical Attachments' tab, otherwise the bid shall be rejected straightway.

(B) Priced Bid (to be uploaded in 'Notes and Attachments' tab)

Bidder shall quote their prices in the following Proforma:

a) Proforma-A showing the items to be imported with the CIF values
b) Price-Bid Format as per Proforma-B

Note to above: *To fill the Price Bid Format sheet, bidders shall enter prices in the corresponding item-wise break-up sheet(s) against each line item. The total value of each break-up sheet will be automatically reflected in the respective line item of the Price Bid Format sheet. Bidders are advised to fill all applicable entries in the relevant break-up sheets and verify that the totals are correctly reflected in the Price Bid Format.*

5.0 **BID FORM:**

The bidder shall complete the Bid Form and upload the same along with their bid.

6.0 **BID PRICE:**

6.1 Prices quoted by the successful bidder must remain firm during its performance of the Contract and is not subject to variation on any account, except as otherwise mentioned in the bid document.

6.2 All duties and taxes (excluding GST) including Corporate Income Tax, Personal Tax, Assam Entry Tax etc. and other Cess/levies payable by the successful bidder under the Contract for which this Bid Document is being issued, shall be included in the rates, prices and total Bid Price submitted by the bidder, and the evaluation and comparison of bids shall be made considering the quoted GST in the proforma. For example, personal taxes and/or any corporate taxes arising out of the profits on the contract as per rules of the country shall be borne by the bidder.

7.0 **CURRENCIES OF BID AND PAYMENT:** Bidders are to quote in **INR only.**

8.0 **DOCUMENTS ESTABLISHING BIDDER'S ELIGIBILITY AND QUALIFICATIONS:**

These are listed in BID EVALUATION CRITERIA (BEC), PART-3 of the Bid document.

9.0 **BID SECURITY:**

9.1 The Bid Security is required to protect the Company against the risk of Bidder's conduct, which would warrant forfeiture of the Bid Security, pursuant to sub-clause 9.8.

9.2 All the bids must be accompanied by Bid Security in Original as prescribed under, for the amount as mentioned in the "Forwarding Letter" of the tender documents:

a. The Bid Security should be submitted in the form of irrevocable Bank

Guarantee (as per Proforma-G) or an irrevocable Letter of Credit (L/C) from any of the following Banks:

i) Any schedule Indian Bank or Any Branch of an International bank situated in India and registered with Reserve Bank of India as scheduled foreign bank in case of domestic bidder, or

ii) Any foreign Bank which is not a Scheduled Bank in India provided the Bank Guarantee issued by such Bank is counter-guaranteed by any Branch situated in India of any Scheduled Bank incorporated in India.

iii) Bank Guarantee issued by a Scheduled Bank on India at the request of some other Non-Schedule Bank of India shall not be acceptable.

b. Alternately Bid Security can also be paid through Insurance Surety Bond or Bank Draft/Cashier's Cheque/Banker's Cheque/Fixed Deposit Receipt (Account OIL INDIA LIMITED)/irrevocable Letter of Credit/NEFT/RTGS /Electronic Fund Transfer (subject to credit in OIL's account within prescribed time) to designated account of OIL.

i. If the Bid Security is submitted in the form of Bank Draft, Banker's Cheque, Cashier's Cheque, Fixed Deposit Receipt or Letter of Credit, the same should be in favour of "Oil India Limited" payable at Duliajan.

ii. Bid Security amount through NEFT or RTGS mode may be deposited on or before bid closing date and time to the following designated OIL's bank account:

	Bank Details of Beneficiary: OIL INDIA LIMITED	
a	Bank Name	STATE BANK OF INDIA
b	Branch Name	Duliajan
c	Branch Address	Duliajan, Dist-Dibrugarh
d	Bank Account No.	**10494832599**
e	Type of Account	Current Account
f	IFSC Code	**SBIN0002053**
g	MICR Code	786002302
h	SWIFT Code	SBININBB479

iii. If the bid security is submitted through NEFT or RTGS mode, details such as **UTR No., Tender No., Bidder's name & Deposited Amount etc.** must be uploaded with the Unpriced Techno-Commercial Bid documents.

c. In case of Bidders submitting Bid Security in the form of Bank Guarantee/Bank Draft/Cashier's Cheque/Banker's Cheque/Fixed Deposit Receipt/Letter of Credit, the original hard copy of Bid Security should reach the office of CGM-CONTRACTS on or before **02.00 PM (IST)** on the bid closing/opening date otherwise bid will be rejected.

d. A scanned copy of Bid Security document should also be uploaded along with the Unpriced Techno-Commercial Bid documents.

e. This Bid Security Deposit shall be refunded to all unsuccessful bidders but is liable to be forfeited in full or part, at Company's discretion, as per **Clause No. 9.8** below. Bids without Bid Security Deposit in the manner specified above will be summarily rejected.

f. No other mode of payment will be accepted by the Company. The Bid Security shall not earn any interest to the bidder from the Company.

Note:

(i) Bidders claiming waiver of Bid Security shall upload supporting documents as mentioned in **Para No. 10.0** below along with technical bid.

(ii) Any offer not accompanied with the Bid Security shall be treated as invalid and summarily rejected. Any subsequent deposit of Bid Security after the bid closing date shall not be permitted. Also, adjustment of Bid Security due against the instant tender, against dues from the Company or on any account shall not be permitted.

9.3 Any bid not secured in accordance with sub-clause 9.2 above shall be rejected by the Company as non-responsive.

9.4 The bidders shall extend the validity of the Bid Security suitably, if and when specifically advised by OIL, at the bidder's cost.

9.5 Unsuccessful Bidder's Bid Security will be discharged and/or returned within 30 days after finalization of the Tender.

9.6 Successful Bidder's Bid Security will be discharged and/or returned upon Bidder's furnishing the Performance Security and signing of the contract. Successful bidder will however ensure validity of the Bid Security till such time the Performance Security in conformity with Clause No. 26.0 below is furnished.

9.7 Bid Security shall not accrue any interest during its period of validity or extended validity.

9.8 The Bid Security may be forfeited:

a. If the bidder withdraws the bid within its original/extended validity.

b. If the bidder modifies/revises their bid suo-moto within its original/extended validity.

c. If the bidder does not accept the contract.

d. If the bidder does not furnish Performance Security Deposit within the stipulated time as per tender/contract.

e. If it is established that the bidder has submitted fraudulent documents or has indulged into corrupt and fraudulent practice, the bid security shall be forfeited after due process in addition to other action against the bidder.

9.9 In case any bidder withdraws their bid during the period of bid validity, Bid Security will be forfeited and the party shall be debarred as per the prevailing Banning Policy of the Company (OIL).

9.10 A bid shall be rejected straightway if Original Bid Security is not received within the stipulated date & time mentioned in the Tender and/or if the Bid Security validity is shorter than the validity indicated in Tender and/or if the Bid Security amount is lesser than the amount indicated in the Tender.

9.11 The Bank Guarantee issuing bank branch must ensure the following:

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

(i) MT 760 / MT 760 COV for issuance of bank guarantee.

(ii) MT 760 / MT 767 COV for amendment of bank guarantee.

[Tender Number should reflect in the SFMS text under MT 760 / MT 760 COV]

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

	Bank Details of Beneficiary	
A	Bank Name	ICICI Bank Ltd.
B	Branch Name	DULIAJAN
C	Branch Address	Kunja Bhavan, Daily Bazaar, Duliajan, Dibrugarh, Assam – 786602
D	IFSC Code	ICIC0000213

E	Unique identifier code (Field 7037)	OIL503988890
F	Company Name	Oil India Limited
G	SWIFT Code	ICICINBBXXX

9.12 Submission of Bid Security in the form of Electronic Bank Guarantee (e-BG) is also acceptable:
Beneficiary details for issue of e-BG are:

Sl. No.	Particulars	Details
1	NAME	OIL INDIA LIMITED
2	PAN	AAACO2352C
3	Date of Incorporation	18-02-1959
4	Email ID	contracts@oilindia.in
5	Mobile No	+91-8638144647
6	Local Address	Duliajan, Dibrugarh, Assam- 786602
7	Registered Address	Duliajan, Dibrugarh, Assam- 786602

10.0 **EXEMPTION FROM SUBMISSION OF BID SECURITY:** In case any bidder is exempted from paying the Bid security, they should upload the supporting documents along with their technical bid. The detailed guidelines for exemption of the Bid security are given below.

a) Central as well as State Government Departments and Public Sector Undertakings (PSUs) are also exempted from submitting bid security.

Notes:

(i) Bids without EMD shall be rejected, if the technical offer does not include a valid copy of relevant Document/Certificate towards exemption of EMD, issued by appropriate authority.

(ii) The Purchase Preference Policy for MSE bidders shall not be applicable in this tender.

11.0 **PERIOD OF VALIDITY OF BIDS:**

11.1 Bids shall remain valid as per the requirement mentioned in forwarding letter from the date of closing of bid prescribed by the Company. Bids of shorter validity will be rejected as being non-responsive. If nothing is mentioned by the bidder in their bid about the bid validity, it will be presumed that the bid is valid for **120 days from Bid Closing Date**.

11.2 In exceptional circumstances, the Company may solicit the Bidder's consent to an extension of the period of validity. The request and the response thereto shall be made in writing through Fax or e-mail. A Bidder may refuse the request. A Bidder granting the request will neither be required nor permitted to modify their Bid.

12.0 **SIGNING & SUBMISSION OF BIDS**:

12.1 **Signing of bids**:

12.1.1 Bids are to be submitted online through OIL's E-procurement portal with digital signature. The bid and all attached documents should be digitally signed by the bidder using "Class 3" digital certificates with Organization's Name [e-commerce application (Certificate with personal verification and Organization Name)] as per Indian IT Act 2000 obtained from the licensed Certifying Authorities operating under the Root Certifying Authority of India (RCAI), Controller of Certifying Authorities (CCA) of India before bid is uploaded. Digital Signature Certificates having Bidder's Name in the "Organization Name" field are only acceptable. Digital Signature Certificate having "Organization Name" field other than Bidder's Name shall be rejected summarily.

The bid including all uploaded documents shall be digitally signed by duly authorized representative of the bidder holding a Power of Attorney to bind the Bidder to the contract.

If any modifications are made to a document after attaching digital signature, the digital signature shall again be attached to such documents before uploading the same. The Power of Attorney in original shall be submitted by bidder as mentioned in Para 12.2 below.

In case the digital signature is not of "Class-3" with organization name, the bid will be rejected. Bidder is responsible for ensuring the validity of digital signature and its proper usage by their employees.

12.1.2 The original and all copies of the bid shall be typed or written in indelible inks. Since bids are to be submitted ONLINE with digital signature, manual signature is NOT relevant. The letter of authorization (as per Proforma-F) shall be indicated by written Power of Attorney accompanying the Bid.

12.1.3 Any physical documents submitted by bidders shall contain no interlineations, white fluid erasures or overwriting except as necessary to correct errors made by the Bidder, in which case such correction shall be initialled by the person or persons who has/have digitally signed the Bid.

12.1.4 Any Bid, which is incomplete, ambiguous, or not in compliance with the Bidding process shall be rejected.

12.2 **Submission of bids**:

The tender is processed under single stage - Two bid system. Bidder shall submit the Technical bid and Priced bid along with all the Annexures and Proforma (wherever applicable) and copies of documents in electronic form through OIL's e-procurement portal within the Bid Closing Date & Time

stipulated in the e-tender. For submission of Bids online at OIL's E-Tender Portal, detailed instructions are available in "User Manual" available in OIL's E-Tender Portal. Guidelines for bid submission are also provided in the "Forwarding Letter". The Technical Bid is to be submitted as per Terms of Reference/Technical Specifications of the bid document and Priced Bid as per the Price Schedule. The Technical Bid should be uploaded in the "Technical Attachment" Tab Page only. Prices to be quoted as per Proforma-B should be uploaded as Attachment just in the attachment link under "Notes & Attachments" Tab under General Data in the e-portal. No price should be given in the "Technical Attachment", otherwise bid shall be rejected. The priced bid should not be submitted in physical form and which shall not be considered. However, the following documents in one set should necessarily be submitted in physical form in sealed envelope superscribing the "IFB No., Brief Description of services and Bid Closing/Opening date & Time along with the bidder's name and should be submitted to CGM-Contracts, Oil India Ltd., Duliajan-786602 (Assam) on or before 14.00 Hrs (IST) on the bid closing date indicated in the IFB:

a) Original copy of Bid Security
b) Printed catalogue and literature if called for in the bid document.
c) Power of Attorney for signing of the bid digitally.
d) Any other document required to be submitted in original as per bid document requirement.

Documents sent through E-mail/Fax/Telephonic method will not be considered.

12.2.1 All the conditions of the contract to be made with the successful bidder are given in various Sections of the Bid Document. Bidders are requested to state their non-compliance to each clause as per Proforma-D of the bid document and the same should be uploaded along with the Technical Bid.

12.2.2 Timely delivery of the documents in physical form as stated in Para 12.2 above is the responsibility of the bidder. Bidders should send the same through Registered Post or by Courier Services or by hand delivery to the Officer in Charge of the particular tender before the Bid Closing Date and Time. Company shall not be responsible for any postal delay/transit loss.

12.2.3 Bids received through the e-procurement portal shall only be accepted. Bids received in any other form shall not be accepted.

13.0 **DEADLINE FOR SUBMISSION OF BIDS**:

13.1 Bids should be submitted online as per the online tender submission deadline. Bidders will not be permitted by System to make any changes in their bid/quote after the bid submission deadline is reached. Bidders are requested to take note of this and arrange to submit their bids within the submission deadline to avoid last minute rush/network problems.

13.2 No bid can be submitted after the submission deadline is reached. The system time displayed on OIL's e-Procurement Portal shall decide the submission deadline.

14.0 **LATE BIDS**:

Bidders are advised in their own interest to ensure that their bids are uploaded in system much before the closing date and time of the bid. The documents in physical form if received by the Company after the deadline for submission prescribed by the Company shall be rejected and shall be returned to the Bidders in unopened condition immediately.

15.0 **MODIFICATION AND WITHDRAWAL OF BIDS**:

15.1 The Bidder after submission of Bid may modify or withdraw its Bid prior to Bid Closing Date & Time. Withdrawal or modification of bid through physical correspondence shall not be considered and accepted.

15.2 No Bid can be modified or withdrawn subsequent to the deadline for submission of Bids.

15.3 No Bid can be withdrawn in the interval between the deadline for submission of Bids and the expiry of the period of Bid Validity specified by the Bidder on the Bid Form. Withdrawal of a Bid during this interval shall result in debarment of bidder from participation in future tenders of OIL.

16.0 **EXTENSION OF BID SUBMISSION DATE**:

Normally no request for extension of Bid Closing Date & Time will be entertained. However, OIL at its discretion, may extend the Bid Closing Date and/or Time due to any reasons.

17.0 **BID OPENING AND EVALUATION**:

17.1 Company will open the Technical Bids in presence of Bidder's representatives who choose to attend at the date, time and place mentioned in the Forwarding Letter. However, an authorization letter (as per Proforma-E) from the Bidder must be produced by the Bidder's representative at the time of Bid Opening. Unless this Letter is presented, the representative will not be allowed to attend the Bid Opening. The Bidder's representatives who are allowed to attend the Bid Opening shall sign a register evidencing their attendance. Only one representative against each Bid will be allowed to attend. In technical bid opening, only "Technical Attachment" will be opened. Bidders therefore should ensure that technical bid is uploaded in the "Technical Attachment" Tab Page only in the E-portal.

17.2 In case of any unscheduled holiday or Bandh on the Bid Opening Date, the Bids will be opened on the next full working day. Accordingly, Bid Closing Date / time will get extended up to the next working day and time.

17.3 Normally no clarifications shall be sought from the Bidders. However, for assisting in the evaluation of the bids especially on the issues where the Bidder confirms compliance in the evaluation and contradiction exists on the same issues due to lack of required supporting documents in the Bid (i.e. document is deficient or missing), or due to some statement at other place of the Bid (i.e. reconfirmation of confirmation) or vice versa, clarifications may be sought by OIL. In all the above situations, the Bidder will not be allowed to change the basic structure of the Bid already submitted by them and no change in the price or substance of the Bid shall be sought, offered or permitted.

17.4 Prior to the detailed evaluation, Company will determine the substantial responsiveness of each bid to the requirement of the Bid Documents. For purpose of these paragraphs, a substantially responsive bid is one, which conforms to all the terms and conditions of the Bid Document without material deviations or reservation. A material deviation or reservation is one which affects in any substantial way the scope, quality, or performance of work, or which limits in any substantial way, in-consistent way with the Bid Documents, the Company's right or the bidder's obligations under the contract, and the rectification of which deviation or reservation would affect unfairly the competitive position of other bidders presenting substantial responsive bids. The Company's determination of Bid's responsiveness is to be based on the contents of the Bid itself without recourse to extrinsic evidence.

17.5 A Bid determined as not substantially responsive will be rejected by the Company and may not subsequently be made responsive by the Bidder by correction of the non-conformity.

17.6 The Company may waive minor informality or nonconformity or irregularity in a Bid, which does not constitute a material deviation, provided such waiver, does not prejudice or affect the relative ranking of any Bidder.

18.0 **OPENING OF PRICED BIDS**:

18.1 Company will open the Priced Bids of the techno-commercially qualified Bidders on a specific date in presence of representatives (if any) of the qualified bidders.

18.2 The techno-commercially qualified Bidders will be intimated about the Priced Bid Opening Date & Time in advance. In case of any unscheduled holiday or Bandh on the Priced Bid Opening Date, the Bids will be opened on the next working day.

18.3 The Company will examine the Price quoted by Bidders to determine whether they are complete, any computational errors have been made, the documents have been properly signed, and the bids are generally in order.

19.0 **EVALUATION AND COMPARISION OF BIDS**:

The Company will evaluate and compare the bids as per BID EVALUATION CRITERIA (BEC), PART-3 of the Bid Documents.

19.1 Unconditional discounts/rebates, if any, given in the bid will be considered for evaluation.

19.2 Post bid or conditional discounts/rebates offered by any bidder shall not be considered for evaluation of bids. However, if the lowest bidder happens to be the final acceptable bidder for award of contract, and if they have offered any discounts/rebates, the contract shall be awarded after taking into account such discounts/rebates.

20.0 **CONTACTING THE COMPANY**:

20.1 Except as otherwise provided in Clause 17.0 above, no Bidder shall contact Company on any matter relating to its bid, from the time of the bid opening to the time the Contract is awarded except as required by Company vide sub-clause 17.3.

20.2 An effort by a Bidder to influence the Company in the Company's bid evaluation, bid comparison or Contract award decisions may result in the rejection of their bid.

21.0 **AWARD OF CONTRACT**:

The Company 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.

22.0 **COMPANY'S RIGHT TO ACCEPT OR REJECT ANY BID**:

Company reserves the right to accept or reject any or all bids 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 of the grounds for Company's action.

23.0 **NOTIFICATION OF AWARD**:

23.1 Prior to the expiry of the period of bid validity or extended validity, Company will notify the successful Bidder in writing by registered letter or by fax or E-mail that its Bid has been accepted.

23.2 The notification of award will constitute the formation of the Contract.

24.0 **PERFORMANCE SECURITY**:

Successful bidder has to submit Performance Security amount as mentioned in Forwarding Letter, within 30 (thirty) days from the date of issue of Letter of Award (LOA).

26.1 a. The Performance Security should be submitted in the form of irrevocable Bank Guarantee (as per **Proforma-I**) issued by Nationalized or Scheduled Bank in favour of M/s Oil India Limited and payable at DULIAJAN. The Bank Guarantee must be on Non-Judicial Stamp Paper of requisite value as per Indian Stamp Act purchased in the name of Banker. Duly filled 'Undertaking' towards details of BG (Format attached as **Proforma-N**) must be submitted along with original copy of PBG.

b. Alternately, the Performance Security can also be paid through Insurance Surety Bond or Bank Draft/Cashier's Cheque/Banker's Cheque/Fixed Deposit Receipt (Account OIL INDIA LIMITED)/irrevocable Letter of Credit/NEFT/RTGS/Electronic Fund Transfer (subject to credit in OIL's account within prescribed time) to designated account of OIL.

i. If the Performance Security is submitted in the form of Bank Draft, Banker's Cheque, Cashier's Cheque, Fixed Deposit Receipt or Letter of Credit, the same should be in favour of "Oil India Limited" payable at Duliajan.

ii. Performance Security amount through NEFT or RTGS mode may be deposited on or before bid closing date and time to the following designated OIL's bank account:

	Bank Details of Beneficiary: OIL INDIA LIMITED		
a	Bank Name	STATE BANK OF INDIA	
b	Branch Name	Duliajan	
c	Branch Address	Duliajan, Dist-Dibrugarh	
d	Bank Account No.	**10494832599**	
e	Type of Account	Current Account	
f	IFSC Code	**SBIN0002053**	
g	MICR Code	786002302	
h	SWIFT Code	SBININBB479	

If the Performance security is submitted through NEFT or RTGS mode, the bidder shall submit details such as **UTR No., Contract No., Bidder's name & Deposited Amount etc.**

iii. Submission of Performance Security in the form of Electronic Bank

Guarantee (e-BG) is also acceptable:

Beneficiary details for issue of e-BG are:

Sl. No.	Particulars	Details
1	NAME	OIL INDIA LIMITED
2	PAN	AAACO2352C
3	Date of Incorporation	18-02-1959
4	Email ID	contracts@oilindia.in
5	Mobile No	+91-8638144647
6	Local Address	Duliajan, Dibrugarh, Assam- 786602
7	Registered Address	Duliajan, Dibrugarh, Assam- 786602

c. In case of Bidders submitting Performance Security in the form of Bank Guarantee/Bank Draft/Cashier's Cheque/Banker's Cheque/Fixed Deposit Receipt/Letter of Credit, the original hard copy of Performance Security shall be submitted within the time frame as stipulated in the LOA.

d. No other mode of payment other than the mode covered under point nos. a & b will be accepted by the Company.

26.2 Performance Security shall not accrue any interest during its period of validity or extended validity.

26.3 The Bank Guarantee issuing bank branch must ensure the following:

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

(i) MT 760/MT 760 COV for issuance of bank guarantee.

(ii) MT 760/MT 767 COV for amendment of bank guarantee.

[Contract Number should reflect in the SFMS text under MT 760/MT 760 COV]

The above message/intimation shall be sent through SFMS by the BG issuing Bank branch to ICICI Bank, Duliajan Branch, IFSC Code – ICIC0000213; SWIFT Code - ICICINBBXXX. Branch Address: ICICI Bank Limited, Duliajan Branch, Kunja Bhavan, Daily Bazaar, Duliajan, Dibrugarh, Assam-786602. The Bank details are as under:

	Bank Details of Beneficiary	
A	Bank Name	ICICI BANK LTD.
B	Branch Name	Duliajan

C	Branch Address	Kunja Bhavan, Daily Bazaar, Duliajan, Dibrugarh, Assam-786602
D	IFSC Code	**ICIC0000213**
E	Unique Identifier Code (Field 7037)	OIL503988890
F	Company name	Oil India Limited
G	SWIFT Code	ICICINBBXXX

26.4 In case performance security is submitted in the form of Fixed Deposit, the following details must be attached in the form of declaration by the vendor/party for confirmation of Fixed Deposit from the issuing bank.

Full address of the issuing bank
Branch Code
Authorised signatory with full name and designation
Phone (Mobile) Numbers of the branch
Email address of the branch
Such fixed/term deposit must be pledged in favour of OIL and it must in the printed form on the physical original FDR in words "Pledged in favour of Oil India Limited"

26.5 To avoid delay in confirmation of Fixed deposit from the issuing bank and consequent delay in processing of bills and payment, party shall arrange the confirmation mail regarding issue of fixed deposit with the following details directly from bank's official email id to Oil India's following e-mail id (FD_PS@OILINDIA.IN):

FD NO.	**Issue Date**	**Maturity Date**	**FD Amount**	**Beneficiary/ Contractor Name**	**Whether above FD is pledged in favour of 'Oil India Limited' (Yes/No)**	**FD amount pledged (in ₹) as per bank's books of accounts**	**Mode of FD Renewal (Auto Renewal/Auto closure)**	**Remarks (if any) of the issuing Bank**
A	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**

26.6 This Performance Security must be valid for 90 (Ninety) days after the date of expiry of the contract period/defect liability period (if any). In the event of contract being extended within the provisions of the contract agreement, the contractor will have to extend suitably the validity of the "Security Deposit" for the extended period.

26.7 The Performance Security Deposit will be refunded to the Contractor after 90 (Ninety) days of satisfactory completion of works/defect liability period (if any) under the contract (including extension, if any), but a part or whole of which shall be used by the Company in realization of liquidated damages or claims, if any or for adjustment of compensation or loss due to the Company for any reason.

25.0 **SIGNING OF CONTRACT**:

25.1 At the same time as the Company notifies the successful Bidder that its Bid has been accepted, the Company will either call the successful Bidder for signing of the agreement or send the Contract Form provided in the Bid Documents, along with the General & Special Conditions of Contract, Technical Specifications, Schedule of Rates incorporating all agreements agreed between the two parties.

25.2 The successful Bidder shall sign and date the contract and return it to the Company after receipt of LOA. Till the contract is signed, the LOA issued to the successful bidder shall remain binding amongst the two parties.

25.3 In the event of failure on the part of the successful Bidder to sign the contract, OIL reserves the right to terminate the LOA issued to the successful Bidder and invoke the Performance Security if submitted by the successful Bidder. The party shall also be debarred for a period of 2(two) years from the date of default.

26.0 **CREDIT FACILITY**:

Bidders should indicate clearly in the Bid about availability of any credit facility inclusive of Government-to-Government credits indicating the applicable terms and conditions of such credit.

27.0 **MOBILIZATION AND ADVANCE PAYMENT**:

27.1 Request for advance payment shall not be normally considered. However, depending on the merit and at the discretion of the Company, advance against mobilisation charge may be given at an interest rate of 1% above the prevailing Bank rate (CC rate) of SBI from the date of payment of the advance till recovery/refund.

27.2 Advance payment agreed to by the Company shall be paid only against submission of an acceptable bank guarantee whose value should be equivalent to the amount of advance plus the amount of interest covering the period of advance. Bank guarantee shall be valid for 2 months beyond completion of

mobilisation and the same may be invoked in the event of Contractor's failure to mobilise as per agreement.

27.3 In the event of any extension to the mobilisation period, Contractor shall have to enhance the value of the bank guarantee to cover the interest for the extended period and also to extend the validity of bank guarantee accordingly.

28.0 **INTEGRITY PACT**:

28.1 OIL shall be entering into an Integrity Pact with the Bidders as per format enclosed vide Appendix-II of the Bid Document. The Integrity Pact has been duly signed digitally by OIL's competent signatory. The Integrity Pact shall be returned by the bidder (along with the technical Bid) duly signed by the same signatory who signed the Bid i.e. who is duly authorized to sign the Bid. Uploading the Integrity Pact with digital signature will be construed that all pages of the Integrity Pact has been signed by the bidder's authorized signatory who has signed the bid. If any bidder refuses to sign Integrity Pact or declines to submit the Integrity Pact, their bid shall be rejected straightway.

28.2 In case of a joint venture, all the partners of the joint venture should sign the Integrity pact.

28.3 In the event of any dispute between the management and the contractor relating to those contracts where Integrity Pact is applicable, in case, both the parties are agreeable, they may try to settle dispute through mediation before the panel of Independent External Monitors (IEMs) in a time bound manner. If required, the organizations may adopt any mediation rules for this purpose. In case, the dispute remains unresolved even after mediation by the panel of IEMs, the organization may take further action as per the terms and conditions of the contract. The fees/expenses on dispute resolution shall be equally shared by both the parties.

28.4 Bidders may contact the Independent External Monitors appointed by OIL to oversee implementation of Integrity Pact in OIL for any matter relating to the IFB at the following addresses:

a. Shri Radhakrishna Kini A, IPS (Retd.), Ex-Secretary (Security), Cabinet Secretariat, New Delhi; E-mail: arvkini2004@gmail.com ; arvkini2004@yahoo.co.in
b. Dr. Ved Prakash, ITS (Retd.); Ex-Additional Director General Foreign Trade, Ministry of Commerce; E-mail: ved60prakash@gmail.com
c. Shri Ajit Mohan Sharan, IAS (Retd.), Former Secretary, Ministry of Ayush, Govt. of India, Email ID: ams057@gmail.com

29.0 **LOCAL CONDITIONS**:

It is imperative for each Bidder to be fully informed themselves of all Indian as well as local conditions, factors and legislation which may have any effect on

the execution of the work covered under the Bidding Document. The bidders shall be deemed, prior to submitting their bids to have satisfied themselves of all the aspects covering the nature of the work as stipulated in the Bidding Document and obtain for themselves all necessary information as to the risks, contingencies and all other circumstances, which may influence or affect the various obligations under the Contract.

No request will be considered for clarifications from the Company (OIL) regarding such conditions, factors and legislation. It is understood and agreed that such conditions, factors and legislation have been properly investigated and considered by the Bidders while submitting the Bids. Failure to do so shall not relieve the Bidders from responsibility to estimate properly the cost of performing the work within the provided timeframe. Company (OIL) will assume no responsibility for any understandings or representations concerning conditions made by any of their officers prior to award of the Contract. Company (OIL) shall not permit any Changes to the time schedule of the Contract or any financial adjustments arising from the Bidder's lack of knowledg**e** and its effect on the cost of execution of the Contract.

30.0 **SPECIFICATIONS**:

Before submission of Bids, Bidders are requested to make themselves fully conversant with all Conditions of the Bid Document and other relevant information related to the works/services to be executed under the contract.

31.0 **GOODS AND SERVICES TAX**:

31.1 In view of **GST** Implementation from 1st July 2017, all taxes and duties including Excise Duty, CST / VAT, Service tax, Entry Tax and other indirect taxes and duties have been submerged in **GST**. Accordingly, reference of Excise Duty, Service Tax, VAT, Sales Tax, Entry Tax or any other form of indirect tax except of **GST** mentioned in the bidding document shall be ignored.

31.2 Bidders are required to submit copy of the GST Registration Certificate while submitting the bids wherever **GST** (CGST & SGST / UTGST or IGST) is applicable.

31.3 Bidder should also mention the **Harmonised System of Nomenclature (HSN)** and **Service Accounting Codes (SAC)** at the designated place in the Price Bid Format.

31.4 **Where the OIL is entitled to avail the input tax credit of GST:**

OIL will reimburse the GST to the Supplier of Goods / Services (Service Provider) at actual against submission of Invoices as per format specified in rules/ regulation of GST to enable OIL to claim input tax credit of GST paid. In case of any variation in the executed quantities, the amount on which the GST is applicable shall be modified in same proportion. Returns and details required

to be filled under GST laws &rules should be timely filed by supplier with requisite details.

The input tax credit of **GST** quoted shall be considered for evaluation of bids, as per evaluation criteria of tender document.

31.5 **Where the OIL is not entitled to avail/take the full input tax credit of GST:**

OIL will reimburse GST to the Supplier of Goods / Services (Service Provider) at actual against submission of Invoices as per format specified in rules / regulation of GST subject to the ceiling amount of GST as quoted by the bidder. In case of any variation in the executed quantities (If directed and / or certified by the In-Charge) the ceiling amount on which GST is applicable will be modified on pro-rata basis.

The bids will be evaluated based on total price including **GST**.

31.6 It is the responsibility of the bidder to quote the correct GST rate. The classification of goods / services as per GST (Goods & Service Tax) Act should be correctly done by the contractor to ensure that input tax credit on GST (Goods & Service Tax) is not lost to the OIL on account of any error on the part of the contractor.

31.7 Further, it is the responsibility of the bidders to make all possible efforts to make their accounting / IT system GST compliant in order to ensure availability of Input Tax Credit (ITC) to Oil India Ltd.

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

31.9 In case the bidder is covered under Composition Scheme under GST laws, then bidder should quote the price inclusive of the GST (CGST & SGST / UTGST or IGST). Further, such bidder should mention "Cover under composition system" in column for GST (CGST & SGST/UTGST or IGST) of price schedule.

31.10 OIL will prefer to deal with registered supplier of goods / services under GST. Therefore, bidders are requested to get themselves registered under GST, if not registered yet. However, in case any unregistered bidder is submitting their bid, their prices will be loaded with applicable GST while evaluation of bid. Where OIL is entitled for input credit of GST, the same will be considered for evaluation of bid as per evaluation methodology of tender document.

31.11 Procurement of Specific Goods: Earlier, there is no tax incidence in case of import of specified goods (i.e. the goods covered under List-34 of Customs Notification no. 12/2012-Cus dated. 17.03.2012 as amended). Customs duty is not payable as per the policy. However, under GST regime, IGST Plus GST compensation cess (if applicable) would be leviable on such imports. Bidders

should quote GST as inclusive considering IGST component for the imported Materials portion while quoting their prices on destination basis. However, GST rate to be specified in the price bid format.

31.12 The Supplier of Goods / Services may note the Anti-profiteering Clause (Clause No. 12.5) of Part-I GCC and quote their prices accordingly.

31.13 In case the GST rating of bidder on the GST portal / Govt. official website is negative / blacklisted, then the bid may be rejected by OIL.

33.0 In all National Competitive tenders, only Class-I local suppliers and Class-II local suppliers shall be eligible to bid.

[Class-I local supplier' means a supplier or service provider, whose goods, services or works offered for procurement, has local content equal to or more than 50% as defined in PP-LC policy; Class-II local supplier': means a supplier or service provider, whose goods, services or works offered for procurement, has local content equal to or more than 20% but less than 50%, as defined under PP-LC policy].

32.0 **Sustainable Development and Environment, Social & Governance Policy**:

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

The ESG Questionnaire along with Explanatory Note for guidance, is provided as **Appendix-V** of the tender document.

END OF PART-2

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PART-3
BID EVALUATION CRITERIA (BEC)

1.0 GENERAL CONFORMITY:

The bid shall conform generally to the full scope of work, specifications and terms & conditions given in this tender document. Bids shall be rejected in case material and services offered do not conform to the required parameters stipulated in the technical specifications. Notwithstanding the general conformity of the bid to the stipulated specifications, the following requirements will have to be particularly met by the Bidders without which the bid will be considered as non-responsive and rejected. All the documents related to BEC must be submitted along with the techno-commercial Bid.

Note: Bidders are advised not to take any exception/deviation to the Bid Documents. Exceptions/Deviations, if any, should be brought out during the **Pre-Bid Conference** as scheduled against this Tender. After processing such suggestions, Company may communicate the changes, if any, through an addendum to the tender document. Still, if any exceptions/deviations are maintained in the bid, such conditional/nonconforming bids shall not be considered, but shall be rejected.

2.0 ELIGIBILITY CRITERIA:

The bidder must be incorporated/constituted in India and must maintain more than or equal to 20% local content (LC) for the offered services to be eligible to bid against this tender.

Regarding calculation of local content and submission of documents during bidding & execution of contracts, provision of **Public Procurement (PP) (Preference to Make in India) Order, 2017 of Department for Promotion of Industry and Internal Trade (DPIIT), Govt. of India as revised vide Order No. P45021/2/2017-PP (BE-II) dated 16th September 2020 (and as amended time to time) with modifications as notified vide MoP&NG Order No. FP-20013/2/2017-FP-PNG-Part (4) (E-41432) dated 26th April 2022** (including subsequent amendments thereof, if any), shall be applicable.

If such local content is not maintained during execution of contract, OIL reserves the right to invoke the Performance Securities submitted by the bidding and supporting companies (wherever applicable), in addition to resorting to other options as may be deemed appropriate.

Whether **or not** the bidders want to avail PP-LC benefit against this tender, it is mandatory for them to meet the following at the bidding stage:

(a) The bidder must provide the specific **percentage (%) of local content** in their bid, without which the bid shall be liable for rejection being non-compliant.

(b) The Bidder shall submit an undertaking from the authorised signatory of bidder having the Power of Attorney along with the bid specifying the LC Percentage and such undertaking shall become a part of the contract, if awarded. [as per Appendix-III]

(c) The aforesaid undertaking of the bidder shall also be supported by a certificate from the statutory auditor or cost auditor of the company (in case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of other than companies) giving the percentage of local content.

(d) Bidder to submit a copy of their Certificate of Incorporation/constitution in India.

3.0 TECHNICAL EVALUATION CRITERIA:

3.1 The bidder shall submit tender specific Manufacturers Authorization Form (MAF) as per **Annexure-A1** from Original Equipment Manufacturers (OEMs) of the products a) Video Wall Screen, b) Video Wall Controller, c) Servers, d) VC System, e) UPS, f) PAC & g) Fire Alarm & Suppression System.

3.2 **EXPERIENCE CRITERIA:** Bidders should meet all the following experience criteria (**A, B, C & D**):

A. The bidder must have successfully executed/completed "**Command & Control Centre Infrastructure Works**, which includes supply, installation, integration and commissioning of Command & Control / Integrated Command Centre / War Room facilities including control-room civil & interior fit-out, video-wall(s), operator consoles, AV/VC systems and associated utilities" over the last 7 (seven) years reckoned from the Original Bid Closing Date in Oil & Gas / Petrochemicals / Power / Utilities / Metals as under:

a. One (01) completed above work having executed value not less than **INR 42,39,72,000.00.**

OR

b. Two (02) completed above works each having executed value not less than **INR 26,49,82,000.00.**

OR

c. Three (03) completed above works each having executed value not less **INR 21,19,86,000.00.**

AND

B. The Bidder must have successfully executed/completed **at least 01 (One) no. of** the following solution **against one contract of minimum value of INR 2,97,99,000.00** over the last 7 (seven) years reckoned from

the Original Bid Closing Date in Oil & Gas / Petrochemicals / Power / Utilities / Metals:

OT Data Acquisition & Industrial Data Ingestion: Consumption of both real-time and historical OT/industrial data from OPC UA, OPC DA, OPC HDA, or equivalent industrial data gateways or servers provisioned by the respective OT systems, followed by ingestion of this data into a centralized OT data lake, historian, time-series database, or operational data platform, along with asset-wise data modelling encompassing tag mapping, contextualisation.

AND

C. The Bidder must have successfully executed/completed **at least 01 (One) no. of** the following solution **against one contract of minimum value of INR 2,49,88,000.00** over the last 7 (seven) years reckoned from the Original Bid Closing Date in Oil & Gas / Petrochemicals / Power / Utilities / Metals:

Enterprise IT & Middleware Integration: The scope covers the design and deployment of IT middleware, enterprise integration platforms, APIs, or ESB (Enterprise Service Hub) solutions to enable seamless integration of enterprise and departmental IT systems—such as ERP, EAM, HSE, GIS, monitoring, and other business applications—along with the establishment of real-time and batch data pipelines for ingestion into centralized IT or business data lakes and analytics platforms.

AND

D. The Bidder must have successfully executed/completed **at least 01 (One) no. of** the following solution **against one contract of minimum value of INR 37,50,000.00** over the last 7 (seven) years reckoned from the Original Bid Closing Date in Oil & Gas / Petrochemicals / Power / Utilities / Metals:

Command & Control Applications, Dashboards & Decision Support : Delivered an application / dashboard for a Command & Control Centre / Centralised Visualisation Dashboard covering interactive dashboards, real-time analytics, configurable alerts/alarms and automated workflows.

Notes to above:

(i) **Conversion Rate**: Where the value of the quoted experience is denominated in a currency other than INR, the same shall be converted into equivalent INR using the closing exchange rate (B.C. Selling Rate) published by the State Bank of India (SBI) on the original Bid Closing Date.

3.2.1 In support of the experience criteria under **Clause No. 3.2 above**, the bidder shall furnish the following documentary evidence:

(a) Contract document/Work Order/Service Order showing detailed scope of work

AND

(b) Job Completion Certificate (JCC) or Service Entry Sheet (SES) or Certificate of Payment (COP) on company letter head issued by the Client and supported by Client's certified Job Report showing the following:

(i) Gross value of job done
(ii) Work Order No./Contract No.,
(iii) Nature/Number/Description of jobs done, and
(iv) Contract period and date of completion.

Notes:

(i) In case requisite experience is against **OIL's Contract**, bidder shall only require to categorically specify **OIL's Contract Number** and **date**.

(ii) Only Letter of Intent (LOI)/Letter of Award (LOA) or Work Order(s)/Client's Feedback Form are not acceptable as evidence of experience.

(iii) Mere award of contract(s) will not be counted towards experience. Successful completion of the awarded contract(s) to the extent of the parameter(s), as stipulated under **Clause No. 3.2** will only be treated as acceptable experience.

(iv) Work executed by a bidder for its own organization/parent subsidiary/co-subsidiary/sister-subsidiary/Joint Venture cannot be considered as experience for the purpose of meeting BEC.

(v) Work executed through 'sub-contracting' shall not be considered for evaluation.

(vi) Bid will be rejected if not accompanied with adequate documentary proof in support of Work experience as mentioned in **Clause 3.2.1** above.

(vii) If the prospective bidder is executing a contract as per Clause No. 3.2 of BEC which is still running and quantity of the jobs executed prior to

original bid closing date is equal to or more than the minimum prescribed numbers of jobs as mentioned in **Clause 3.2 of BEC**, such experience shall qualify for evaluation.

(viii) Oil India Limited (OIL) reserves the right to contact the Client(s) referred by the Bidder for authentication of the documents submitted by the bidder. OIL may contact the clients/operators under intimation/copy to the respective bidder. OIL will not be responsible for Client(s) not conforming or not replying to OIL's request for information. If OIL does not get an affirmative response within the stipulated time, then such Bidder's technical bid will be considered as non-responsive. It will be the responsibility of the Bidder to take up the matter with his client(s) and arrange for the confirmation as desired by OIL.

(ix) The Contract(s) / Purchase Order(s) date need not be within the period specified in the tender, preceding the original bid closing date of the tender, however, the execution of work should be within the specified period preceding original bid closing date of the tender.

(x) Original Bid Closing Date shall be considered for evaluation of BEC Criteria in case of any extension of the bid closing date.

3.2.2 Bidders who themselves do not meet the experience criteria as stipulated in Clause No. 3.2 above, can also bid under the categories as listed below:

(I) **Eligibility criteria in case bids are submitted based on technical experience of Parent/Subsidiary Company:**

Offers of those bidders who themselves do not meet the experience criteria as stipulated in clause no. 3.2 above can also be considered provided the bidder is a subsidiary company of the parent company [supporting company, which holds more than fifty percent of the paid-up equity share capital of the bidder] who fulfils the experience criteria. Similarly, bid from parent company can also be considered on the strength of requisite experience of its subsidiary [supporting company, in which the bidder holds more than fifty percent of the paid-up equity share capital]. However, the parent/subsidiary company (as the case may be) of the bidder should on its own meet the experience as stipulated in the BEC and should not rely for meeting the experience criteria on its sister subsidiary/co-subsidiary company or through any other arrangement like Technical Collaboration agreement etc.

In case of bidder who is a subsidiary company dependent upon the experience of the parent company or vice-versa with a view to ensure commitment and involvement of the parent/subsidiary company (Supporting Company) for successful execution of the contract, the participating bidder should enclose a Parent/Subsidiary Agreement (as per format enclosed) and also a parent/subsidiary Guarantee (as per format enclosed) to OIL for fulfilling the obligation under the Agreement, along with the technical bid.

(II) **<u>Eligibility criteria in case bid is submitted based on technical experience of Sister-subsidiary/Co-subsidiary Company</u>:**

Offers of those bidders who themselves do not meet the experience criteria as stipulated in Clause No. 3.2 above can also be considered based on the experience of their sister-subsidiary/co-subsidiary company (Supporting Company) within the ultimate parent/holding company subject to meeting the following conditions:

(i) Provided that the sister-subsidiary/co-subsidiary company and the bidding company are both wholly owned subsidiaries of an ultimate parent/holding company either directly or through intermediate wholly owned subsidiaries of the ultimate parent/holding company or through any other wholly owned subsidiary company within the ultimate/holding parent company. Documentary evidence to this effect to be submitted by the ultimate parent/holding company along with the technical bid.

(ii) Provided that the sister subsidiary/co-subsidiary company on its own meets the experience criteria stipulated in the BEC and not through any other arrangement like Technical Collaboration agreement etc.

(iii) Provided that with a view to ensure commitment and involvement of the ultimate parent/holding company for successful execution of the contract, the participating bidder must submit an agreement, as per format furnished, between them and their ultimate parent/holding company, along with the technical bid.

<u>Notes to Para 3.2.2(I) & 3.2.2(II) above</u>: In the situations mentioned in Paras No. (I) and (II) above, the supporting company shall not be allowed to submit their separate/independent bid against this tender. In such case, all such bids shall be rejected. Also, bids having technical support from the same entity shall be rejected. Further, bidders shall submit/comply the following:

(a) Undertaking by the Supporting Company to provide an additional Performance Security (as per format enclosed), equivalent to 50% of the value of the Performance Security which is to be submitted by the bidding company in case the bidding company is the successful bidder.

(b) In cases where the Supporting Company do not have Permanent Establishment in India, the bidding company can furnish this additional Performance Security on behalf of the supporting company in addition to their own Performance Security as per tender. In such case, bidding company shall furnish an undertaking that their foreign based supporting company / ultimate parent company is not having any Permanent Establishment in India in terms of Income Tax Act of India.

(c) Undertaking from the supporting company to the effect that in addition to invoking the Performance Security submitted by the Contractor, the additional Performance Security provided by the supporting company shall be invoked by OIL due to non-performance of the Contractor.

(d) A certificate from the Statutory Auditor of the bidding company to establish the relationship and equity percentage holding between bidding company and the supporting company. The certificate should be duly

concurred/endorsed by the Company Secretary or one of the Directors of the company concerned.

The above certificate should not be more than 30 days old as on the original bid closing date.

(III) <u>Bid from Joint Venture Company</u>:

(i) In case the bidder is Joint Venture Company, they must be registered in India and incorporated under the Companies Act 1956/Companies Act 2013/ Limited Liability Partnership Act 2008 and any amendment thereunder. They should meet the technical qualification requirements as under:

A. The JV on its own shall meet the experience criteria as per Clause No. 3.2.

or

B. Any member of the JV having a stake of at least **26% in the JV**, on its own shall meet experience requirement as per Clause No. 3.2.

<u>Notes</u>:

a) In case of (B) above, the following should be complied with:

(i) an undertaking from the Joint Venture partner, based on whose experience the JV seek qualification, shall be submitted with the techno commercial bid stating that they shall maintain minimum **26%** shareholding in the JV till the execution of the contract.

(ii) Undertaking should be submitted by the supporting Company/JV Partner [on whose strength/support the bidder is bidding] to provide additional Performance Security (as per format enclosed) equivalent to 50% of the value of the Performance Security which is to be submitted by the bidding company in case the bidding company is the successful bidder. In cases where supporting company do not have Permanent Establishment in India, the bidding company can furnish Performance Security equivalent to 150% of the value of the Performance Security which is to be submitted by the bidding company. In such case the bidding company shall furnish an undertaking that their supporting company/JV partner is not having any Permanent Establishment in India in terms of Income Tax Act of India.

(iii) Undertaking from the supporting company/JV partner to the effect that in addition to invoking the performance security submitted by the contractor, the performance security provided by supporting company/JV partner shall be

invoked by OIL due to non-performance of the contractor.

b) Experience of the JV or its member (as the case may be) relying on the experience of its supporting company/subsidiary/co-subsidiary/ sister-subsidiary/ parent/ holding/ affiliating/ associate company or through any other arrangement like technical collaborator for meeting the technical criteria shall not be considered for evaluation.

c) Certificate from the Statutory Auditor or Company Secretary or one of the Directors of the bidding company to establish the relationship and equity percentage holding between bidder and the supporting company, should be submitted along with the bid.

The above certificate should not be more than 30 days old as on the original bid closing date.

(ii) **Constitution of Joint Venture**: The members of the JV should not be more than three. If after submission of bid, a JV leader effects any alterations/changes in the constitution or replacement or inclusion or expulsion of any partner(s)/member(s) of the Joint Venture which had originally submitted the bid, the bid of such a JV shall be liable for rejection.

(iii) Indian bidders whose proposal for Joint Venture involves foreign equity participation or payment of royalty and / or lump sum for technical know-how and wherever Govt. approval is necessary, **are required to submit their application submitted to SIA/RBI along with the bid** and copy of Govt. approval prior to the date of price bid opening. Confirmation to this effect and declaration on the same should be provided as part of their technical offer.

(iv) Members of the JV are not allowed to quote separately/independently/or through any other arrangement like part of any other 'JV/Subsidiary/ Parent company/Sister-subsidiary/Co-subsidiary' against this tender. All the bids received in such a case shall be summarily rejected. Further, all bids from parties with technical support from the same Principal shall be rejected.

Notes to Para 3.2.2(I), 3.2.2(II) & 3.2.2(III) above:

In case the contract is awarded based on the bid submitted as per Clause no. 3.2.2 (I)/(II)/(III) above, in order to meet the commitment from the supporting firm based on whose technical experience the bidder has been qualified, the identified key personnel as mentioned in "Annexure-A2 IDENTIFIED KEY PERSONNEL" shall be from the supporting company/JV Partner during the entire implementation period of the project for successful execution. Declarations in this regard from the bidder as well

as the Supporting Company are required to be submitted by the bidder along with the un-priced techno-commercial bid.

(IV) <u>Bid from Consortium of Companies</u>:

In case the Bidder is a Consortium of Companies, the following requirement should be complied by the consortium:

(i) In case of Consortium bidding, the collective experience of consortium members shall have to meet the experience criteria as per Clause 3.2 of BEC. The Consortium Member(s) contributing experience must execute the portion of work corresponding to their experience share, which shall be clearly defined in the Consortium MoU.

(ii) Consortium bids shall be submitted with a Memorandum of Understanding (MoU) among the consortium members duly executed by the Authorized Executives of the consortium members and notarized. This MoU must accompany the bid. The MoU must state that the Consortium Member on whose experience/strength the Consortium is bidding, is bound to execute the full part of the contract which falls under/related to the experience submitted by them against Clause No. 3.2 of BEC above. Moreover, the MoU must clearly define the role/scope of work of each partner/member and should clearly define the leader of consortium. Memorandum of Understanding (MOU) must also state that all the members of consortium shall be jointly and severally responsible for discharging all obligations under the contract. However, the leader of the consortium must submit an undertaking along with the technical bid towards unconditional acceptance of full responsibility for executing the 'scope of work' of this bid document. In case of award, such MOU shall be kept valid through the entire contract period, including extensions, if any.

(iii) Only the Leader of the consortium should register against the tender and submit bid on behalf of the Consortium. The other members of the Consortium shall ratify all the acts and decisions of the Leader of Consortium, which are taken in connection with and/or during the evaluation of the tender and execution of the contract.

(iv) The Bid Security shall be in the name of the Leader of the consortium on behalf of consortium with specific reference to consortium bid and with name(s) & address(es) of Consortium members. Similarly, the Performance Security shall be in the name of the Leader on behalf of the Consortium.

(v) The leader of the consortium on behalf of the consortium shall coordinate with OIL during the period the bid is under evaluation as well as during the execution of works in the event contract is awarded and he shall also be responsible for resolving dispute/ misunderstanding/ undefined activities, if any, amongst all the consortium members. If the leader of the consortium changes during execution of the contract (if awarded), the contract shall be liable for termination.

(vi) Any correspondence exchanged with the leader of consortium shall be binding on all the consortium members.

(vii) Payment shall be made by OIL only to the leader of the consortium towards fulfilment of contract obligations.

(viii) In case of consortium bids, the bid shall be signed/digitally signed in line with tender stipulation by the leader of consortium. The power of attorney from each member authorizing the leader for signing and submission of Bid on behalf of individual member must accompany the bid.

(ix) Documents/details submitted with the bid pertaining to qualification of the bidder must be furnished by each partner/ member of consortium and should be complete in all respects clearly bringing up their experience especially in the form of work in their scope.

(x) The leader of the consortium must confirm unconditional acceptance of full responsibility of executing the "Scope of Work" of this tender. This confirmation must be submitted along with the technical bid.

(xi) **Constitution of Consortium**: The members of the consortium should not be more than 03 (Three). If during evaluation of bid, a consortium leader proposes any alterations/changes in the constitution or replacement or inclusion or expulsion of any partner(s)/member(s) of the consortium which had originally submitted the bid, to drive some advantages/benefits based on any development(s) having come to his knowledge at any time, the bid of such a consortium shall be liable for rejection. Similarly, under such a situation the contract shall be liable for termination, if already awarded.

(xii) **Signing of Contract**: In the event of award of contract to the consortium, the contract to be signed by all the members of the consortium and the liability of each one of them shall be jointly and severely.

(xiii) Members of the consortium are not allowed to quote separately/ independently/or through any other arrangement like part of any other JV/Consortium against this tender. All the bids received in such case shall be summarily rejected. Further, all bids from parties with technical support from the same Principal shall be rejected.

(xiv) Certified copies (attested by Director/Company Secretary/Authorised Signatory) of Board resolutions/Partnership resolutions passed by respective Board of Directors of the companies/Partners of the LLP agreeing to enter into such consortium with each other for submission of bid for the NIT and also authorizing designated executives of each company/LLP to sign the MOU, to be provided along with the technical bid.

(xv) The MOU/Agreement should be legally valid i.e. it should be on a non-judicial stamp paper and notarized. In case of involvement of overseas bidder/consortium partner, the MOU/Agreement need not be on a non-judicial stamp paper, however it should be notarized.

3.2.3 In case the contract is awarded based on the bid submitted as per Clause No. 3.2.2 (IV) above, in order to meet the commitment from the supporting firm based on whose technical experience the bidder has been qualified, the identified key personnel required during Implementation Phase shall be deployed from the supporting company/JV partner during the entire implementation period of the project. Declarations in this regard from the bidder as well as the Supporting Company are required to be submitted along with the un-priced techno-commercial bid.

3.2.4 Any party who is extending support by way of entering into Joint Venture agreement or MOU with another party shall not be allowed to submit an independent bid against this tender. Under such situation both the bids shall be rejected.

3.2.5 Bidders to note that "If any bidder (individual/Parent/Subsidiary/Sister-Subsidiary/Co-Subsidiary/ Joint Venture/Consortium) provides documents of jobs/contracts executed outside India against **BEC clause no. 3.2 above**, then OIL reserves the right to ask the bidder to get the aforesaid documents endorsed by Indian Embassy of the country where the job/contract was executed and it will be binding on the bidder to provide the same to OIL within stipulated time period."

3.3 KEY PERSONNEL:

The bidder must deploy a **Team** comprising of minimum **Six (06) nos.** of experienced key personnel **as per the table below** for the completion of project till go-live within the Contract period. The Key Personnel should be stationed at the site to ensure on-time delivery of products. The bidder must provide the list of key personnel with the name, designation & minimum experience as described below in **Annexure-A2**. The distribution of the key personnel is mentioned below:

Annexure-A2

Sr No	Job Role	Qualification & Experience	Minimum Resource Qty
1	Project Manager	Engineering Graduate with 10 years of large project execution experience	1
2	Infrastructure Engineer (Civil/Electrical/AV etc.)	Engineering Graduate in Civil/Electrical/Electronics- with 5 years of infrastructure execution experience	1
3	OT Integration Specialist	Engineering Graduate in Instrumentation/ Electronics- with 5 years of OT integration experience	1

4	IT Integration Specialist	Engineering Graduate (IT/Computer Science)/ MCA - with 5 years of IT integration experience	1
5	Business Data Lake Specialist	Engineering Graduate (IT, Computer Science, Data Engineering) / MCA -with 5 years of data lake experience	1
6	CCC Application Developer	Engineering Graduate (IT, Computer Science) / MCA - with 5 years of application development experience	1

Note to Clause No. 3.3:

a) Documentary evidence such as Degree certificates & CV clearly supporting the above-mentioned educational qualification & experience(s) are to be submitted along with the technical bid.

b) Bidder can propose/offer more than requisite number of personnel for selection/consideration by the company under this tender for any category. However, if the same personnel are offered/proposed by more than one bidder, he/she shall not be considered for evaluation and bids of all such bidders shall be liable for rejection.

c) During the course of execution of the project, OIL shall have the right to seek change of any project team member, engaged in carrying out the work under the contract, if his/her performance is not up to OIL's satisfaction. The successful bidder must replace such members with equal or more qualified personnel.

d) Any additional technical expert of the bidder may support the Core Team for successful completion of the Project with required experience to perform different activities under the contract efficiently without any financial implication on OIL.

e) The list of key personnel to be proposed & their biodata needs to be submitted as per **Annexure-A2** along with the Technical Bid. The relevant certificate against the educational qualification of team members must be submitted along with the Techno-Commercial Bid. The Biodata and experience certificates must be certified & authenticated by the CEO/CFO of the bidder.

f) The personnel fulfilling above criteria and approved by OIL shall only be allowed during the execution of the job. Any change of personnel during the tenure of the contract is generally not allowed. Replacement of the personnel shall only be considered in special cases like resignation, dismiss from the Company or death etc. Acceptance and rejection in this regard will be solely on OIL's discretions.

3.4 MOBILIZATION PERIOD:

The bidders must confirm their compliance in their "technical" bid to complete the mobilization within **30 (Thirty) days** from the date of **Letter of Award (LOA).** Offers without confirmation of stipulated mobilization time or with mobilization time more than **30 (Thirty) days** will be summarily rejected. The bidder shall confirm compliance of this in their technical bid.

4.0 FINANCIAL EVALUATION CRITERIA:

4.1 **Annual Financial Turnover from Operations** of the Bidder during any of the last three (03) completed financial/accounting years preceding the **Original Bid Closing date** must be at least **INR 32,53,44,000.00.**

[**Annual Financial Turnover** of the bidder from operations shall mean- "Aggregate value of the realization of amount made from the sale, supply or distribution of goods or on account of services rendered, or both, by the company (bidder) during a financial year" as per the Companies Act, 2013 Section 2 (91).]

Consortium Case: In case of bid from Consortium of Companies, any one of the consortium members shall have an annual financial turnover from operation of minimum **INR 32,53,44,000.00** and other members of the consortium shall have an annual financial turnover from operation of minimum **INR 16,26,72,000.00**, during any of the preceding 03 (Three) financial/accounting years reckoned from the original bid closing date. Net worth of all the members must be Positive for the financial/accounting year preceding the original bid closing date.

4.2 The **Net Worth** of the bidder should be minimum **INR 9,76,04,000.00** as per immediate preceding audited financial year result.

[**Net worth** shall mean: "Share capital + Reserves created out of profits and securities Premium - Aggregate value of accumulated losses (excluding revaluation reserves) - deferred expenditure - Miscellaneous Expenditure to the extent not written off and carried forward Loss - Reserves created out of write back of depreciation and amalgamation".]

Consortium Case: The financial Net worth of the all the Members of the consortium should be positive. The members of the consortium collectively should meet the net worth equal to **INR 9,76,04,000.00** as per immediate preceding audited financial year result.

4.3 **Working Capital**:

a) The Bidder should have minimum working capital equal to minimum **INR 9,76,04,000.00** as per immediate preceding audited financial year result.

b) In case the working capital is short, the bidder can supplement the same through line of credit from a scheduled commercial bank having net worth more than 100 Crores as per enclosed Proforma-WC.

Note: Working Capital shall mean “Current Assets minus Current liabilities” as per latest year’s audited consolidated annual Financial Statements.

Consortium Case: The members of the consortium collectively should meet the working capital equal to minimum **INR 9,76,04,000.00** as per immediate preceding audited financial year result.

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

(i) The parent/ ultimate parent / holding company (supporting company) should meet the Financial Evaluation Criteria stipulated in Clause Nos. 4.1,4.2 & 4.3 above.

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

(iii) A certificate from the Statutory Auditor of the bidding company to establish the relationship and equity percentage holding between bidding company and the supporting company. The certificate should be duly concurred/endorsed by the Company Secretary or one of the Directors of the company concerned.

The above certificate should not be more than 30 days old as on the original bid closing date.

4.5 If the Bidder is an Incorporated Joint Venture (JV) Company and does not meet financial criteria (BEC Clause Nos. **4.1,4.2 & 4.3**) by itself, it can submit the bid based on the financial strength of its JV member having more than 50% stake in the JV Company and the following needs to be complied/submitted:

(i) The member having more than 50% stake in the JV should meet the Financial Evaluation Criteria stipulated in Clause Nos. **4.1,4.2 & 4.3** above.

(ii) Net worth of the member having more than 50% stake in the JV (supporting company) should be positive for the accounting year preceding the original bid closing date.

(iii) **Corporate Guarantee** on the letter head of the member having more than 50% stake in the JV signed by an authorized official undertaking that they would financially support their JV company for executing the project / job in case the same is awarded to them.

(iv) A Certificate from the Statutory Auditor or Company Secretary or one of the Directors of the bidding company to establish the relationship and equity percentage holding between bidder and the supporting company, should be submitted along with the bid.

The above certificate should not be more than 30 days old as on the original bid closing date.

(v) An undertaking from the Joint Venture partner, based on whose experience the JV seek financial qualification, shall be submitted with the techno commercial bid stating that they shall maintain more than 50% shareholding in the JV till execution of the contract is accomplished.

4.6 **Notes to Financial Evaluation Criteria:**

a. For proof of Annual Turnover from operation, Net worth & Working Capital, any one of the following documents/photocopies must be submitted along with the bid:

(i) A certificate issued by a practicing Chartered/ Cost Accountant (with Membership Number and Firm Registration Number), certifying the Annual Turnover & Net worth as per format prescribed (**PROFORMA-L**).

OR

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

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

b. Considering the time required for preparation of Financial Statements, if the last date of preceding financial/accounting year falls within the preceding six months reckoned from the original bid closing date/within the due date for furnishing of audit report as per Section 139(1) of IT Act,

1961 (read along with latest circulars/notifications issued by CBDT from time to time) and the Financial Statements of the preceding financial/accounting year are not available with the bidder, then the Net worth of the previous financial/ accounting year excluding the preceding financial/accounting year will be considered. However, the bidder has to submit an undertaking in support of the same along with their technical bid as per format enclosed (**Proforma-K**).

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

d. In case the Audited Balance sheet and Profit Loss Account submitted along with the bid are in currencies other than INR, the bidder shall have to convert the figures in equivalent INR considering the prevailing conversion rate on the date on which the Audited Balance Sheet and Profit & Loss Account is signed. A CA Certificate (with Valid UDIN) is to be submitted by the bidder regarding converted figures in equivalent INR. Else, the Audited Balance Sheet and Profit & Loss Account shall be evaluated by considering the BC selling rate declared by State Bank of India (on the date on which the Audited Balance Sheet and Profit & Loss Account is signed) for conversion to INR.

5.0 COMMERCIAL EVALUATION CRITERIA:

5.1 The bids are to be submitted under single stage Two Bid System i.e. Un-priced Techno-Commercial Bid and Price Bid separately in their respective fields in E-portal. The unpriced Techno-commercial Bid is to be uploaded in "Technical RFx Response" Tab and Priced Bid is to be uploaded in the "Notes & Attachments" Tab. Only the Priced Bid uploaded in the "Notes & Attachments" Tab should contain the quoted price. Bids shall be rejected outright if the price(s) is/are indicated in the technical bids. Bids not conforming to this two bid system shall be rejected outright.

5.2 The price quoted by the successful bidder must be firm during the performance of the contract and not subject to variation on any account except as mentioned in the bid document. Any bid submitted with adjustable price quotation other than the above will be treated as non-responsive and rejected.

5.3 Bid security shall be furnished as a part of the Techno Commercial Un-Priced Bid. The amount and validity of bid security should be as specified in the **Forwarding Letter** of the tender. Any bid not accompanied by a proper bid security will be rejected.

5.4 Bid Documents/User Id & Password for OIL's E-Tender portal are not transferable. Bid can only be submitted in the name of the bidder in whose name the User ID and Password have been issued. Unsolicited bids will not be considered and will be straightway rejected.

5.5 Bids received through the e-procurement portal shall only be accepted. Bids received in any other form shall not be accepted.

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

5.7 Bids shall contain no interlineations, erasures or overwriting except as necessary to correct errors made by bidder, in which case such corrections shall be initiated by the persons(s) signing (digitally) the bid.

5.8 Any bid containing false statement will be rejected and action will be taken by Company as per Bid Document.

5.9 Bidders must quote clearly and strictly in accordance with the price schedule outlined in **Price Bidding Format** attached under "Notes and Attachments" tab in the main bidding engine of OIL's E-Tender portal; otherwise, the bid will be rejected. All other techno-commercial documents other than price details to be submitted with Unpriced Techno-Commercial Bid as per tender requirement under "Technical Attachment" Tab Page only.

5.10 Bidder must accept and comply with the following provisions as given in the Tender Document in toto, failing which offer will be rejected:

(i) Firm price

(ii) Bid Security

(iii) Period of validity of Bid

(iv) Price Schedule

(v) Performance Bank Guarantee / Security deposit

(vi) Mobilization Schedule

(vii) Scope of work

(viii) Guarantee of material / work

(ix) Liquidated Damages clause

(x) Tax liabilities

(xi) Arbitration / Resolution of Dispute Clause

(xii) Force Majeure

(xiii) Applicable Laws

(xiv) Specifications

(xv) Integrity Pact

5.11 There should not be any indication of price in the Un-priced Techno-Commercial Bid. A bid will be straightway rejected if this is given in the Un-priced Techno-Commercial Bid.

5.12 Bid received with validity of offer less than **120 (One Hundred Twenty)** days from Bid Opening Date will be rejected.

5.13 The Integrity Pact is applicable against this tender. OIL shall be entering into an Integrity Pact with the bidders as per format enclosed of the tender document. This Integrity Pact proforma has been duly signed digitally by OIL's competent signatory. The proforma has to be returned by the bidder (along with the Un-priced Techno-Commercial Bid) duly signed (digitally) by the same signatory who signed the bid, i.e., who is duly authorized to sign the bid. Uploading the Integrity Pact with digital signature will be construed that all pages of the Integrity Pact has been signed by the bidder's authorized signatory who sign the Bid. If any bidder refuses to sign Integrity Pact or declines to submit the Integrity Pact, their bid will be rejected.

5.14 **Land Border Sharing**: Bidders should submit an Undertaking that, their bid is compliant to Order No. F.No. 6/18/2019-PPD dated 23.07.2020 issued by Ministry of Finance, Department of Expenditure, Public Procurement Division, Govt. of India (including subsequent amendments thereto, if any), regarding restrictions on procurement from a bidder of a country which shares land border with India.

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

5.16 Bidders should not be under liquidation/bankruptcy/undergoing any insolvency resolution process as on Bid Closing date. Bidders shall submit undertaking towards compliance of above as per format **Proforma-O** along with the bid. If any

bidder declines to submit the above undertaking, their bids shall be liable for rejection.

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

5.18 The rates/prices must be quoted in **Indian Rupees (INR)** only.

6.0 PRICE EVALUATION CRITERIA:

6.1 The bids conforming to the technical specifications, terms and conditions stipulated in the bidding document and considered to be responsive after subjecting to Evaluation Criteria mentioned above will be considered for Price Evaluation as per criteria given below.

6.2 Bidders are required to quote for all the items as per **Proforma-B: Price Bid Format**, otherwise the offer of the bidder will be straightway rejected.

6.3 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

6.4 The quantities shown against each item in the "Price Bid Format" shall be considered for the purpose of Bid Evaluation. It is, however, to be clearly understood that the assumptions made in respect of the quantities for various operations are only for the purpose of evaluation of the bid and the Contractor will be paid on the basis of the actual number of days/parameter, as the case may be.

6.5 The bidders are advised not to offer any discount/rebate separately and to offer their prices after considering discount/rebate, if any.

6.6 Conditional and unsolicited discount will not be considered in evaluation. However, if such bidder happens to be the lowest recommended bidder, unsolicited discount without any condition will be considered for computing the contract price.

6.7 In case of identical overall lowest offered rate by more than 01 (one) bidder, the selection will be made by draw of lot between the parties offering the same overall lowest price.

6.8 Price Bids shall be evaluated on overall lowest cost to OIL (L-1 offer) basis i.e. considering total quoted price for all services including quoted GST (CGST & SGST/UTGST or IGST).

6.9 The inter-se-ranking of the techno-commercially qualified bidders will be determined on overall lowest cost basis (L-1 offer) i.e. considering the **Total quoted price inclusive of all liabilities including quoted GST (CGST & SGST/UTGST or IGST)**.

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

6.11 Price Evaluation of the qualified bids will be done on the basis of rates quoted by the bidder as per PROFORMA-B.

6.14 The inter-se-ranking of the techno-commercially qualified bidders will be determined on overall lowest cost basis (L-1 offer) i.e. considering the Total quoted price inclusive of all liabilities and GST.

Total Estimated Contract Cost including all Taxes & Duties [including all applicable GST components]:

T = A + B + C + D + E + F

Where,
T = Total Contract Cost
A = Total Cost of Core Platform & Functional Modules
B = Total Cost for Integrations & Data Services
C = Total Implementation & Delivery Charges for Command & Control Centre
D = Total Cost of Licenses / Hardware / Cloud (Bidder-supplied)
E = Annual Maintenance Contract Charges
F = Manpower & Mobilization Charges

6.15 If a bidder quotes total Charges/Consideration NIL, their bid shall be treated as unresponsive and will not be considered.

6.16 OIL will prefer to deal with registered bidder under GST. Therefore, bidders are requested to get themselves registered under GST, if not registered yet.

However, in case any unregistered bidder is submitting their bid, their prices will be loaded with applicable GST while evaluation of bid.

6.17 Price Bid uploaded without giving any of the details of the taxes (Including rates and amounts) will be considered as inclusive of all taxes including GST. Further, when a bidder mentions taxes as extra without specifying the rates & amount, the offer will be loaded with maximum value towards taxes received against the tender for comparison purposes. If the bidder emerges as lowest bidder after such loading, in the event of order on that bidder, taxes mentioned by OIL on the Purchase Order/Contracts will be binding on the bidder.

6.18 Input Tax Credit on GST (Goods & Service Tax) for this service is NOT available to OIL & the bids will be evaluated based on total price including GST.

6.19 **CUSTOMS DUTY**: In terms of Sl. No. 229 of Table I of the Customs Notification No.45/2025-Cus dated 24.10.2025 (including amendments thereof), imports of the items specified in List 16 of the Notification are subject to levy of concessional rate of customs duty subject to conditions specified therein.

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

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

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

7.0 GENERAL NOTES:

7.1 In case bidder takes exception to any clause of bidding document not covered under BEC, then the Company has the discretion to load or reject the offer on account of such exception if the bidder does not withdraw/modify the deviation when/as advised by company. The loading so done by the company will be final and binding on the bidders. No deviation will however be accepted in the clauses covered under BEC.

7.2 To ascertain the substantial responsiveness of the bid the Company reserves the right to ask the bidder for clarification in respect of clauses covered under BEC also and such clarifications fulfilling the BEC clauses in toto must be received on or before the deadline given by the company, failing which the offer will be evaluated based on the submission. Since, a pre-bid conference is scheduled against the tender, Company is not obligated to seek clarifications, however, clarifications if decided to be sought at the option of Company, the same shall be limited to the original submissions only and no independent fresh submission shall be called for/permitted. However, mere submission of such clarification shall not make the offer responsive, unless company is satisfied with the substantial responsiveness of the offer.

7.3 If any of the clauses in the BEC contradict other clauses of bidding document elsewhere, the clauses in the BEC shall prevail.

7.4 Bidder(s) must note that requisite information(s)/financial values etc. as required in the BEC & Tender are clearly understandable from the supporting documents submitted by the Bidder(s); otherwise Bids shall be rejected.

7.5 OIL will not be responsible for delay, loss or non-receipt of applications for participating in the bid sent by mail and will not entertain any correspondence in this regard.

7.6 The originals of such documents [furnished by bidder(s)] shall have to be produced by bidder(s) to OIL as and when asked for.

7.7 Bidders shall submit duly filled checklists on BEC & other relevant technical criteria as prescribed in the tender along with their technical bid. If any bidder fails/declines to submit the same, their bid shall not be considered for further evaluation.

8.0 PURCHASE PREFERENCE CLAUSE:

8.1 PURCHASE PREFERENCE TO MSE BIDDERS: NOT APPLICABLE

Since this is a Works tender, therefore Public Procurement Policy for MSEs Order, 2012 is not applicable for this tender. Thus, Purchase Preferences allowed as per Government Guidelines in vogue and PPP (Public Procurement policy) for Micro and Small Enterprises is not applicable for this tender.

8.2 **PURCHASE PREFERENCE POLICY (MAKE IN INDIA) (PP-MII):** Purchase preference under Public Procurement (Preference to Make in India) Order, 2017 of Department for Promotion of Industry and Internal Trade (DPIIT), Govt. of India as revised vide Order No. P-45021/2/2017-PP (BE-II)dated 16th September 2020 (and as amended time to time) with modifications as notified vide MoPNG Order No. FP-20013/2/2017-FP-PNG-Part (4) (E-41432) dated 26th April 2022, shall be applicable in this tender. Bidders to check the provisions of the Order for their eligibility to bid and seek benefits for Purchase preference, accordingly.

8.3 **AWARD OF CONTRACT: AWARD OF CONTRACT:** The contract for hiring of the tendered services shall be awarded as below**:**

A. L-1 bidder is a Class I PPLC bidder: In case, the L1 bidder is a Class I PPLC bidder, the contract shall be awarded to the L1 Class I PPLC bidder.

B. L-1 Bidder is other than Class I PPLC: In case, the L1 bidder is not a Class-I PPLC bidder, then preference shall be given to the eligible Class-I PPLC bidder with the lowest quoted "Total Price" (exclusive of GST, as reflected in the Price Bid) among all the Class I PPLC whose total price fall within the price band of L1+20%. If such Class-I PPLC bidder agrees to match their price with that of the L1 bidder, then the contract shall be awarded to them, else preference shall be given to the next eligible Class-I PPLC bidder within price band of L1+20% and so on. In case none of the Class-I PPLC bidder falling within price band of L1+20% agrees to match with that of L1 price then the contract shall be awarded to the L1 bidder.

9.0 **COMPLIANCE OF THE COMPETITION ACT, 2002:** The bidder shall strictly comply with the provisions of the Competition Act, 2002, more particularly, Section-3 of the Act. Any violation the provisions of the Act shall attract penal action under the Act.

10.0 **CERTIFICATION OF DOCUMENTS BY INDEPENDENT THIRD-PARTY INSPECTION AGENCIES (TPIA):**

10.1 Oil India Limited (OIL) has engaged the following 17 (Seventeen) Independent Inspection Agencies for a period of 04 (Four) years up to 06.06.2028 to verify and certify various documents required against BEC of the tender:

Sl. No.	**Name of Independent Inspection Agency**	**Contact E-mail ID**
i.	M/s. Alfred H Knight India Private Limited	a. rkjain@ahkgroup.com b. Pradeep.mathur@ahkgroup.com c. info@ahkgroup.com
ii.	M/s. TUV India Private Limited	a. noida@tuv-nord.com b. mumbai@tuv-nord.com c. salim@tuv-nord.com

iii.	M/s Conformity India International Private Limited	a. mktg@ciindia.in
iv.	M/s Ravi Energic Private Limited	a. baroda@ravienergic.com b. tpia@ravienergic.com
v.	M/s SGS India Private Limited	a. dhaval.vora@sgs.com b. sgs.india@sgs.com
vi.	M/s Assure Quality Management Certification Services Private Limited	a. aqmcs@aqmcs.com
vii.	M/s. IRCLASS Systems and Solutions Private Limited	a. industrial_services@irclass.org b. Bhavesh.satam@irclass.org
viii.	M/s. TÜV Rheinland (India) Pvt. Ltd.	a. Shailesh.deotale@ind.tuv.com b. Kaushal.gohil@ind.tuv.com c. info@ind.tuv.com d. ravi.kumar@ind.tuv.com
ix.	M/s Gulf Lloyds (India) Limited	a. contact@gulflloyds.com b. inspection@gulflloyds.com
x.	M/s Baltic Testing India Pvt. Ltd.	a. office@balticcontrolindia.com
xi.	M/s Sanmarg Engineering Validation & Assessment	a. Amitra@sanmargeva.com
xii.	M/s Meenar Global Consultants LLP	a. sales@mgellp.in
xiii.	M/s Rites Limited	a. nrinspn@rites.com b. info@rites.com c. sbu.ninsp@rites.com
xiv.	M/s Bureau Veritas (India) Private Limited	a. bvindia.corporate@bureauveritas.com
xv.	M/s TUV SUD South Asia Private Limited	a. Hemant.chavan@tuvsud.com b. Jayashree.rane@tuvsud.com
xvi.	M/s Adornment Engineers India Private Limited	a. jks@adornmentengineers.com
xvii.	M/s TCRC Inspections Pvt. Ltd.	a. admin@tereinspections.com b. ashismallick@teregroup.com c. tenders@teregroup.com

10.2 Bidders are required to have their following documents verified and certified by any one of the empanelled Independent Third-party Inspection Agencies listed above:

(i) Technical Criteria: Relevant documents required against BEC Clause Nos. 3.1 & 3.2

(ii) Financial Criteria: Line of Credit, if incorporated in the Tender

(iii) General Requirement: Bidder's Certificate of Incorporation.

(iv) Additional Documents: As per tender requirement.

The Inspection Certificate, duly issued by the selected agency, must be submitted along with the Technical Bid. All costs related to verification and certification by the Third-Party Inspection Agencies shall be borne solely by the respective bidders. Payments in this regard shall be made directly by the bidders to the Inspection Agencies. OIL shall not be held responsible for any payment-related dispute between the bidders and the inspection agencies.

10.3 The verified and certified documents (as mentioned in Para 10.2 above) must be submitted along with the Technical Bid. Any bid submitted with un-verified supporting documents shall not be considered. However, in case a bidder submits its bid along with all relevant supporting documents as per BEC without getting all/some of them verified by the designated Independent Inspection agency, such bid can be provisionally considered, provided it is accompanied by an **Undertaking by the Bidder on their official letterhead towards submission of the duly verified and certified copies/ Inspection Certificate within 07 (Seven) days from the actual date of bid opening**. No reminders or clarifications will be issued by the Company in this regard, and failure to submit the verified/ certified documents within the stipulated time shall result in outright rejection of the bid, at the sole risk and responsibility of the bidder.

10.4 The methodology of verification/certification of documents followed by the agencies is broadly as under, but not limited to:

(a) It is the sole responsibility of the bidders intending to participate in the tender to thoroughly understand the requirements of the tender, particularly the documents required under BEC. The bidders must present all relevant documents to any of the empaneled third-party certifying agencies for verification/certification. Neither OIL nor the Inspection Agencies shall be responsible for the selection or appropriateness of the documents submitted for verification. It is entirely the bidder's responsibility to ensure that the appropriate documents are verified/certified in support of BEC compliance.

(b) The concerned Independent Third-Party Inspection Agencies shall depute their qualified/competent inspector to the Bidder's premises to check the original documents and certify the copies which the bidder shall submit along with their bids.

(c) On issuance of the Inspection Certificate to the bidder, TPI agency should share a copy of the same to the concerned Purchase officer through e-mail directly (Email ID: parag_barman@oilindia.in). OIL will reserve the right to ask

the inspection agencies to verify the documents with source, if required at no extra cost to OIL. Verification/Certification of documents by OIL's empanelled third-party inspection agencies shall not automatically make the bidder techno-commercially-acceptable or eligible for award of contract.

Notes:

(i) Bidder's self-declared undertakings, Audited Balance Sheet & Profit-loss statement and/or CA certificate having UDIN are not required to be verified by the TPI agency. If any documents, LOI/LOA/Contracts, etc., submitted towards BEC experience criteria are issued by Oil India Limited, such documents need not be verified by TPI agency.

(ii) Undertaking from TPI Agency as per format (**PROFORMA-R**) enclosed should be submitted along with the Bid.

(iii) In case of clarifications sought by OIL against BEC, supporting documents (historical in nature) to those submitted in the original bid will also have to be verified from the same TPI agency which has originally verified their bid documents. OIL shall categorically mention the documents that are to be submitted with TPI verification in the clarification sought. In case the bidder fails to submit the TPI verified documents, as sought by OIL, as part of their clarification, their offer will be liable for rejection.

END OF PART-3

&&&&&

PART-4
SECTION-I
GENERAL CONDITIONS OF CONTRACT (GCC)

1.0 APPLICABILITY, DEFINITION & INTERPRETATION:

1.1 Applicability

All clauses in the General Conditions of Contract [GCC] shall apply to all transactions except as otherwise stated in the Special Conditions of Contract [SCC] and/or BEC-BRC. Furthermore, in the event if there is any conflict between the Principal text of the Agreement and the Appendixes, the Principal text will prevail.

1.2 Definition & Interpretation

In the contract (as hereinafter defined) the following words and expressions shall have the meaning hereby assigned to them except where the context otherwise requires:

1.2.1 COMPANY/OIL/Operator:

Shall mean Oil India Limited [OIL] a public sector undertaking, incorporated under COMPANY's Act 1956 having its registered office at Duliajan-786602, Assam, India and includes its successor and permitted assigns.

1.2.2 CONTRACTOR:

Shall mean the person or persons, firm or COMPANY or corporation incorporated in India or abroad, who has been awarded with the contract and includes contractor's legal representatives, his successors and permitted assigns.

1.2.3 Contract:

Shall mean a written agreement between the COMPANY and the CONTRACTOR for execution of the services/works including all contract documents and subsequent amendments, if any.

1.2.4 Site:

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

1.2.5 COMPANY's Site Representative/Engineer:

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

1.2.6 Sub-Contract:

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

1.2.7 Sub-Contractor:

Shall mean any person or firm or COMPANY (other than CONTRACTOR) to whom any part of the work has been entrusted by CONTRACTOR, with written consent of OIL or the persons appointed by OIL, successors and permitted assigns of such persons, firm or COMPANY**.**

1.2.8 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 COMPANY as having authority to act for the CONTRACTOR in matters affecting the work and to provide the requisite services.

1.2.9 Contract Price/Value*:*

Shall mean the sum accepted or the sum calculated in accordance with the rates accepted in tender and/or the contract rates as payable to the CONTRACTOR for the entire execution and completion of the services/works, including amendments/modification/change order issued by the COMPANY.

1.2.10 Firm price:

The prices will remain unchanged, except for statutory changes, during currency of the CONTRACT unless specifically agreed to in writing by COMPANY.

1.2.11 Service/Works/Operations:

Shall mean and include all items and things to be supplied/done and all work /Service to be performed by the CONTRACTOR as specified in the Scope of Work under this CONTRACT and shall also include all extra, additional, altered or substituted works/services as required for the purpose of successful execution of the Contract.

1.2.12 Equipment/Materials/Goods:

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

1.2.13 Drawings:

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

1.2.14 Specifications:

Means and includes all technical specifications, provision attached and referred to in the tender/contract document regarding method and manner of performing the services and qualities of the service/materials to be provided under the contract and also as modified by the COMPANY/its site representative during the execution of contract in the best interest of service.

1.2.15 Engineer In-charge (EIC):

Shall mean the person designated from time to time by the COMPANY and shall include those who are expressly authorized by the COMPANY to act for and on its behalf for operation of the contract.

1.2.16 Inspectors:

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

1.2.17 Tests:

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

1.2.18 Approval:

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

1.2.19 Day:

Shall mean a calendar day of twenty –four (24) consecutive hours beginning at 00:00 hours with reference to local time at the site.

1.2.20 Month:

Shall mean a calendar month as per Gregorian calendar.

1.2.21 Year:

Shall mean calendar year as per Gregorian calendar.

1.2.22 Working day:

Means any day which is not declared to be holiday by the COMPANY.

1.2.23 Bid/offer:

Shall mean the proposal/Offer along with supporting documents submitted by the bidder in response to the tender or enquiry in accordance with the terms of Tender or Enquiry, for consideration by COMPANY, prior to award of contract.

1.2.24 Guarantee:

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

1.2.25 Mobilization:

Shall mean rendering the equipment fully manned and equipped as per CONTRACT and ready to begin work at site designated by the COMPANY and accepted by the COMPANY after inspection.

1.2.26 De-mobilization:

Shall mean the removal of all items forming part of the Mobilization from the site of the COMPANY and inspection and acceptance thereafter by the COMPANY including compliance of requirement in relation to re-export of imported equipment/materials under concessional duty scheme in accordance with relevant notification from Customs Authorities.

1.2.27 Wilful 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 of the Company or Third Party.

1.2.28 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 unjustifiable 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.

1.2.29 Criminal Negligence:

Shall mean that the crime happened negligently, there was duty of care upon the Person but inadvertently due to his negligence, the duty was breached, which causes harm to the people in the form of death or serious injury.

1.2.30 GST Legislations:

'GST legislations' means 'any or all of the following legislations as may be applicable to the CONTRACTOR and OIL:

(A) The Central Goods & Services Tax Act, 2017;
(B) The Integrated Goods & Services Act, 2017;
(C) The Union Territory Goods & Services Tax Act, 2017;
(D) The respective State Goods & Service Tax Acts'
(E) The Goods and Services (Compensation to States) Act, 2017
(F) The Customs Act and the Customs Tariff Act.
(G) Any other applicable Act related to GST

2.0 CONTRACT DOCUMENT:

2.1 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.

2.2 Entire Agreement: The CONTRACT constitutes the entire agreement between OIL 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, unless such communication(s) expressly forms part of the contract or included by reference.

2.3 Amendment in CONTRACT: No Amendment of the Contract shall be valid unless it is in writing, is dated, expressly refers to the Contract, and is signed by a duly authorized representative of each party thereto. OIL shall not be bound by any printed conditions, provisions in the CONTRACTOR's BID, forms of acknowledgement of CONTRACT, invoice and other documents which purport to impose any condition at variance with or supplement to CONTRACT.

3.0 WAIVERS AND AMENDMENTS:

3.1 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 authorized representatives of both the parties. The failure of either party to execute any right shall not act as a waiver of such right by such party.

3.2 Change Program: It is agreed that CONTRACTOR shall carry out work in accordance with the completion program (e.g. Drilling programme) to be furnished by the COMPANY, which may be changed from time to time by reasonable modifications in the program as COMPANY sees fit. COMPANY's instruction in this regard shall be final and binding.

4.0 CONTRACT TIMELINE:

4.1 Effective Date of Contract: The contract shall become effective as of the date COMPANY notifies the CONTRACTOR in writing that it has been awarded the contract. This date of issuance of Letter of Award (LOA) by the COMPANY will be the Effective Date of Contract. All terms and conditions of the contract shall come into force with the date of issuance of LOA.

4.2 Date of Commencement of Operation:

The date on which the mobilization is completed in all respects and CONTRACTOR is ready to commence operation as per the contract provision [Certified by the COMPANY's representative] will be treated as the date of Commencement of Operation.

4.3 Duration of the contract:

The contract shall be valid for a period as defined in the LOA and Special Conditions of Contract [SCC].

5.0 SCOPE OF WORK/CONTRACT:

Scope of the CONTRACT shall be as defined in the CONTRACT, specifications, drawings and Appendices.

6.0 GENERAL OBLIGATION OF CONTRACTOR:

CONTRACTOR shall, in accordance with and subject to the terms and conditions of this Contract:

6.1 Perform the work described in the Terms of Reference/Scope of Work. The CONTRACTOR shall execute the work with professional competence and in an efficient and workman like manner.

6.2 Except as otherwise provided in the Terms of Reference and the special Conditions of the contract, employ all labours/personnel as required to perform the work.

6.3 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.

6.4 Comply with all applicable statutory obligations specified in the contract.

6.5 CONTRACTOR shall be deemed to have satisfied himself before submitting their 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.

6.6 CONTRACTOR shall be deemed, prior to submitting their bids, to have satisfied themselves about the weather conditions, working culture in the area, socio-political environment, safety & security aspects, law & order situation and law of the land, and obtain for themselves all necessary information as to the risks,

contingencies and all other circumstances, which may influence or affect the various obligations under the Contract.

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

7.0 GENERAL OBLIGATION OF COMPANY:

COMPANY shall, in accordance with and subject to the terms and conditions of this contract:

7.1 Pay CONTRACTOR in accordance with terms and conditions of the contract.

7.2 Allow CONTRACTOR access, subject to normal security and safety procedures, to all areas as required for orderly performance of the work as specified in the Scope of Works of the contract or work connected therewith.

7.3 Perform all other obligations required of COMPANY by the terms of this contract.

8.0 DUTIES AND POWER /AUTHORITY:

8.1 OIL's site representative/engineer:

The duties and authorities of OIL's site representative/engineer are to act on behalf of OIL for:

i. Overall supervision, co-ordination and Project Management at site

ii. Proper and optimum 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 OIL's representative/engineer without which no claim shall be entertained by the OIL.

8.2 CONTRACTOR's representative:

(a) The CONTRACTOR's representative shall have all the powers requisite for the performance of the Service/Works, subject to holding due authorisation from the CONTRACTOR.

(b) Representative(s) shall liaise with OIL's representative/engineer for the proper co-ordination and timely completion of the works and on any matter pertaining to the works.

(c) Representative(s) shall extend full co-operation to OIL's representative/inspector/engineer in the manner required by them for supervision/inspection/observation of equipment, material, procedures, performance, reports and records pertaining to works.

(d) 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.

9.0 Personnel to be deployed by contractor:

CONTRACTOR warrants that it shall provide competent, qualified and sufficiently experienced personnel to perform the work correctly and efficiently.

9.1 The CONTRACTOR should ensure that their personnel observe all statutory safety requirement including those prescribed by the COMPANY. Upon COMPANY's written request, CONTRACTOR, entirely at its own expense, shall remove immediately any personnel of the CONTRACTOR determined by the COMPANY to be unsuitable and shall promptly replace such personnel with personnel acceptable to the COMPANY. Replacement personnel should be mobilized within 15 days from the date of issuance of notice without affecting the operation of the COMPANY.

9.2 The CONTRACTOR shall be solely responsible throughout the period of the contract for providing all requirements of their personnel including but not limited to, their transportation to & fro from Duliajan/field site, enroute/ local boarding, lodging, personal protective gear & medical attention etc. COMPANY shall have no responsibility or liability in this regard.

9.3 However, COMPANY shall provide available medical assistance/facilities to CONTRACTOR's Personnel in case of emergency at its own establishment on chargeable basis.

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

10.0 PERFORMANCE SECURITY:

10.1 On receipt of notification of award from the COMPANY, the CONTRACTOR shall furnish the Performance Security to COMPANY within **30 (Thirty)** days from the date of issue of LOA for an amount specified in the Forwarding Letter and Letter of Award (LOA) as per Proforma enclosed and must be in the form of Insurance

Surety Bond or Bank Draft/ Cashier's cheque/Banker's cheque*/NEFT/RTGS/Electronic fund transfer to designated account of OIL# or Fixed Deposit Receipt (account OIL INDIA LIMITED) or irrevocable Bank Guarantee or irrevocable Letter of Credit (LC) from:

a. Any schedule Indian Bank or Any Branch of an International bank situated in India and registered with Reserve Bank of India as scheduled foreign bank in case of domestic CONTRACTOR/service provider.

OR

b. Any scheduled bank in India or from International bank who has its branch in India registered with Reserve Bank of India, in case of foreign CONTRACTOR/service provider.

OR

c. Any foreign Bank which is not a Scheduled Bank in India, provided the Bank Guarantee issued by such Bank is counter-guaranteed by any Branch situated in India of any Scheduled Bank incorporated in India.

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

10.2 Bank Guarantee issued by a Bank, amongst others, must contain the following particulars of such bank:

Full address

Branch Code

Code Nos. of the authorized signatory with full name and designation.

Phone Nos.

Fax Nos.

E-mail address.

10.3 The domestic CONTRACTOR/service provider(s) will have to submit the Bank Guarantee from any of the scheduled banks and on non- judicial stamp paper of requisite value as per the Indian Stamp Act, purchased in the name of the issuing banker.

10.4 The foreign CONTRACTOR/service provider(s) will submit the Bank Guarantee from Banks of Indian origin situated in their country. In case no such bank of Indian origin is situated in their country, the Bank Guarantee may be submitted from the bankers as specified above.

10.5 The Performance Security shall be denominated in the currency of the contract.

10.6 The Performance Security specified above must be valid for the entire duration of the Contract and claim period should be valid for a minimum of 03 (three) months beyond the contract period. The Performance Security will be

discharged by COMPANY not later than 30 days following its expiry of claim period. 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.

10.7 The Performance Security shall be encashed by COMPANY on account of CONTRACTOR's failure to fulfil its obligations under the Contract and/or non-performance/un-satisfactory performance of the Contractor. Company shall not be required to proof any loss or damage on account of Contractor's non-performance/un-satisfactory performance.

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

10.9 Failure of the successful Bidder to comply with the requirements of clause 10.0 shall constitute sufficient grounds for annulment of the award. In such an eventuality, action will be initiated as per the Banning Policy of OIL in vogue.

Subject to credit in OIL's account within prescribed time

* The validity of Bank Draft/Cashier's/Banker's cheque (as applicable) should not be less than 3 months.

In the event CONTRACTOR fails to honour any of the commitments entered into under this agreement, and /or in the event of termination of the contract under provisions of Integrity Pact and /or in respect of any amount due from the CONTRACTOR to OIL, OIL 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 OIL on demand.

11.0 SIGNING OF CONTRACT:

11.1 The successful bidder is required to sign a formal detailed contract with OIL within a maximum period of 60 days of date of LOA. Until the contract is signed, the LOA **as well as GCC & SCC as prescribed in the Tender**, shall remain binding amongst the two parties. In the event of failure on the part of the successful Bidder to sign the contract, OIL reserves the right to terminate the LOA issued to the successful Bidder and invoke the Performance Security if submitted by the successful Bidder. Such CONTRACTOR shall be put on holiday as per the Banning Policy of OIL [available at www.oil-india.in].

12.0 CLAIMS, TAXES & DUTIES:

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

CONTRACTOR hereunder.

12.2 **Notice of claims:** CONTRACTOR or COMPANY, 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 affect settlement of or compromise any such claim or proceeding without the other's written consent.

12.3 **Taxes:**

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

12.3.2 Tax levied on CONTRACTOR as per the provisions of Indian Income Tax Act and any other enactment/rules on income derived/payments received under the contract will be on CONTRACTOR's account.

12.3.3 CONTRACTOR shall be responsible for payment of personal taxes, if any, for all the personnel deployed in India by CONTRACTOR.

12.3.4 The CONTRACTOR shall furnish to the COMPANY, if and when called upon to do so, relevant statement of accounts or any other information pertaining to work done under the contract for submitting the same to the Tax authorities, on specific request from them in accordance with provisions under the law. CONTRACTOR shall be responsible for preparing and filing the return of income etc. within the prescribed time limit to the appropriate authority.

12.3.5 Prior to start of operations under the contract, the CONTRACTOR shall furnish the COMPANY with the necessary documents, as asked for by the COMPANY and/ or any other information pertaining to the contract, which may be required to be submitted to the Income Tax authorities at the time of obtaining "No Objection Certificate" for releasing payments to the CONTRACTOR.

12.3.6 Corporate income tax will be deducted at source from the invoice at the specified rate of income tax as per the provisions of Indian Income Tax Act as may be in force from time to time and COMPANY will issue TDS Certificate to the CONTRACTOR as per the provisions of Income Tax Act.

12.3.7 Corporate and personnel taxes on CONTRACTOR shall be the liability of the CONTRACTOR and the COMPANY shall not assume any responsibility on this account.

12.3.8 All local taxes, levies and duties, sales tax, octroi, etc. on purchases and sales made by CONTRACTOR shall be borne by the CONTRACTOR.

12.3.9 CONTRACTOR shall provide all the necessary compliances/ invoice/documents for enabling OIL to avail Input tax credit benefits in respect of the payments of GST which are payable against the CONTRACT. The CONTRACTOR should provide tax invoice issued under GST legislations for the goods and Services (indicating GST). Payment towards the components of GST shall be released by OIL only against appropriate documents i.e.: Tax Invoice/Bill of entry for availing input tax credit (as applicable).

12.3.10 The tax invoices as per above provisions should contain all the particulars as required under the invoicing rules under the GST legislations, including, but not limited to the following:

i. Name, Address and the GST Registration Number (under the relevant Tax Rules) of the Service Provider (CONTRACTOR)
ii. Name and Address and GST Registration Number of the Service Receiver (Address of OIL)
iii. Description, Classification and Value of taxable service/goods and the amount of applicable tax (CGST, SGST, IGST, UTGST and cess).

12.3.11 In case of imported goods, CONTRACTOR/supplier is required to provide original Bill of Entry or copy of Bill of Entry duly attested by Custom authority.

12.3.12 The CONTRACTOR should mention the Place of supply in the invoice raised under GST Law.

12.3.13 OIL would not accept any invoice without its GSTIN mentioned on the invoice

Note: CONTRACTOR who is under composition levy of the GST legislation would raise Bill of supply instead of Tax invoice, which will have GSTIN of supplier as well as OIL.

12.4 Goods and Services Tax:

12.4.1 "GST" shall mean Goods and Services Tax charged on the supply of material(s) and services. The term "GST" shall be construed to include the Integrated Goods and Services Tax (hereinafter referred to as "IGST") or Central Goods and Services Tax (hereinafter referred to as "CGST") or State Goods and Services Tax (hereinafter referred to as "SGST") or Union Territory Goods and Services Tax (hereinafter referred to as "UTGST") depending upon the import/interstate or intrastate supplies, as the case may be. It shall also mean GST compensation Cess, if applicable.

12.4.2 Where the OIL is entitled to avail the input tax credit of GST:

OIL will reimburse the GST to the Supplier of Goods/Services (Service Provider) at actual against submission of Invoices as per format specified in rules/ regulation of GST to enable OIL to claim input tax credit of GST paid. In case of

any variation in the executed quantities, the amount on which the GST is applicable shall be modified in same proportion. Returns and details required to be filled under GST laws &rules should be timely filed by supplier with requisite details.

12.4.3 Where the OIL is not entitled to avail/take the full input tax credit of GST:

OIL will reimburse GST to the Supplier of Goods/Services (Service Provider) at actual against submission of Invoices as per format specified in rules/ regulation of GST subject to the ceiling amount of GST as quoted by the bidder. In case of any variation in the executed quantities (If directed and/or certified by the In-Charge) the ceiling amount on which GST is applicable will be modified on pro-rata basis.

12.4.4 The CONTRACTOR will be under obligation for charging correct rate of tax as prescribed under the respective tax laws. Further the CONTRACTOR shall avail and pass on benefits of all exemptions/concessions available under tax laws. Any error of interpretation of applicability of taxes/ duties by the CONTRACTOR shall be to CONTRACTOR's account.

12.4.5 In case of statutory variation in GST, other than due to change in turnover, payable on the contract value during contract period, the Supplier of Goods/ Services (Service Provider) shall submit a copy of the 'Government Notification' to evidence the rate as applicable on the Bid due date and on the date of revision.

12.4.6 Beyond the contract period, in case OIL is not entitled for input tax credit of GST, then any increase in the rate of GST beyond the contractual delivery period shall be to Service provider's account whereas any decrease in the rate GST shall be passed on to the OIL.

12.4.7 Beyond the contract period, in case OIL is entitled for input tax credit of GST, then statutory variation in applicable GST on supply and on incidental services, shall be to OIL's account.

12.4.8 Claim for payment of GST/ Statutory variation, should be raised within two [02] months from the date of issue of 'Government Notification' for payment of differential (in %) GST, otherwise claim in respect of above shall not be entertained for payment of arrears.

12.4.9 The base date for the purpose of applying statutory variation shall be the Bid Opening Date.

12.4.10 The CONTRACTOR will be liable to ensure to have registered with the respective tax authorities, wherever applicable and to submit self- attested copy of such registration certificate(s) and the CONTRACTOR will be responsible for procurement of material in its own registration (GSTIN) and also to issue its own Road Permit/ E-way Bill, if applicable etc.

12.5 Anti-profiteering clause

12.5.1 As per Clause 171 of GST Act it is mandatory to pass on the benefit due to reduction in rate of tax or from input tax credit to the consumer by way of commensurate reduction in prices.

12.5.2 In case rating of Contractor is negative/blacklisted after award of work for supply of goods/services, then OIL shall not be obligated or liable to pay or reimburse GST to such vendor/Contractor and shall also be entitled to deduct/recover such GST along with all penalties/interest, if any, incurred by OIL.

13.0 CUSTOMS DUTY, IF APPLICABLE:

13.1.1 CONTRACTOR shall be responsible to import the equipment/tools/spares/ consumables etc. required for execution of the contract. The CONTRACTOR shall undertake to complete all the formalities as required under the Customs Act/Foreign Trade Policy (FTP) and indemnify OIL from all the liabilities of Customs in this regard.

13.1.2 CONTRACTOR will be solely responsible for payment of all applicable Customs Duty and to comply all Rules and Regulations. Total Contract Price/Value is inclusive of all Customs Duty, if not mentioned otherwise elsewhere in the Contract.

13.1.3 Above clause is to be read with Customs Duty Clause in SCC, if any.

14.0 INSURANCE:

14.1 The Contractor shall at its own expense arrange secure and maintain insurance with reputed insurance companies to the satisfaction of the Company as follows:

a) The Contractor shall, at his own expense, arrange appropriate comprehensive insurance (All-risks insurance cover with suitable limit as per International Standard) to cover all risks assumed by the Contractor under this Contract in respect of its equipment, tools including but not limited to well equipment & tools, any other belongings and personnel during the entire period of this Contract including extensions thereof.

b) The Contractor shall also carry adequate insurance cover against damage/loss to third party/person/property.

c) The Contractor at his cost shall arrange, secure and maintain insurance as may be necessary and to its full value for all such amounts to protect the works-in-progress from time to time and the interest of Company against all risks as detailed herein subject to the satisfaction of the Company and irrespective of acceptance of the Work.

d) The responsibility to maintain adequate insurance coverage at all times during the period of the Contract shall be that of the Contractor alone and OIL will have no liability on this account. The Contractor's failure in this regard shall not relieve him of any of his responsibilities & obligations under the Contract.

e) All costs on account of insurance liabilities covered under the Contract will be to the Contractor's account.

14.2 Deductible:

The Contractor shall take policy with minimum deductible as per IRDA prescribed for the policy(ies) that portion of any loss not covered by the insurance provided for in this article solely by reason of a deductible provision in such insurance policies that shall be the account of the Contractor.

14.3 The Contractor shall require all of its sub-Contractor to provide such of the foregoing insurance coverage as Contractor is obliged to provide under this Contract and inform the Company about the coverage prior to the commencement of agreements with its sub-Contractors.

14.4 All insurance taken out by Contractor or their sub-contractor shall be endorsed to provide that the underwriters waive their rights of recourse on the Company and to the extent of the liabilities assumed by Contractor under this Contract.

14.5 Waiver of subrogation:

All insurance policies of the Contractor and its Sub-Contractor with respect to the operations conducted hereunder as set forth in clauses hereof, shall be endorsed by the underwriter in accordance with the following policy wording:
"The insurers hereby waive their rights of subrogation against Oil India Limited or any of their employees or their affiliates and assignees."

14.6 Loss Payee Clause:

The Insurance Policies should mention the following in Loss Payee Clause:

“In respect of Insurance claims in which OIL’s interest is involved, written consent of OIL will be required”.

14.7 Additional Assured:

“Oil India Limited” is to be included as Additional Assured in the Insurance Policies (except in case of Workmen’s Compensation/Employer’s Liability insurance).

14.8 Certificate of Insurance:

Before commencing performance of the CONTRACT, CONTRACTOR shall furnish OIL with certificates of insurance indicating:

a) Kinds and amounts of insurance as required herein.
b) Details of coverage
c) Insurance corporation or companies carrying the aforesaid coverage
d) Effective and expiry dates of policies
e) That OIL shall be given thirty (30) days written advance notice of any

material change in the policy

f) Waiver of subrogation endorsement has been attached to all policies.

Note: An undertaking by the service provider has to be mandatorily provided during the Mobilisation time that they have taken all the Insurance provisions as per the contract and as the Law and Insurance Regulation.

14.9 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, OIL in no case shall be liable for any loss/damage occurred during the term when the policy is not effective. Furthermore, a penal interest @ 1% of the Total contract value shall be charged towards not fulfilling of the contractual obligations. Notwithstanding above, should there be a lapse in any insurance required to be taken by the Contractor for any reason whatsoever, loss/damage claims resulting therefrom shall be to the sole account of Contractor.

14.10 The Contractor on demand from the Company shall furnish the Insurance Policy having detail terms and conditions, with respect to any Certificate of Insurance submitted to the Company.

14.11 On account payment to OIL in case of claim

In case any loss or damage happen and where Company's interest is involved, The Company reserves the right to recover the loss amount from the Contractor prior to final settlement of the claim.

14.12 The CONTRACTOR shall at all time during the currency of the contract provide, pay for and maintain the following insurance amongst others:

i) **Employees Compensation (EC) Policy or Employer's Liability Policy insurance** as required by the laws of the country of origin of the employee.

ii) **Commercial General Liability Insurance:** Commercial General Public Liability Insurance covering liabilities including contractual liability for bodily injury, including death of persons, and liabilities for damage of property. This insurance must cover all operations of CONTRACTOR required to fulfil the provisions under this Contract.

iii) **Comprehensive General Automotive Liability:** Automobile Public Liability Insurance covering owned, non-owned and hired automobiles used in the performance of the work hereunder, with bodily injury limits and property damage limits shall be governed by Indian Insurance Regulations.

iv) **Carrier's Legal Liability Insurance:** Carrier's Legal Liability Insurance in respect of **all CONTRACTOR's items** to be transported by the CONTRACTOR to the site of work, for physical loss or destruction of or damage to goods or merchandise, while in transit.

v) **Public Liability Act Policy:** Public Liability Act Policy, if applicable, covering

the statutory liability arising out of accidents occurring during the currency of the contract due to handling hazardous substances as provided in the Public Liability Insurance Act 1991 and the Rules framed there under. In case there is no usage of hazardous substance, the Contractor should provide an undertaking during mobilization as per format enclosed regarding non-inclusion of hazardous substances within the ambit of the contract.

vi) **Pradhan Mantri Suraksha Bima Yojana (PMSBY) and Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY):** CONTRACTOR shall, ensure that all his/its personnel deployed under this contract have obtained additional insurance coverage under the Pradhan Mantri Suraksha Bima Yojana (PMSBY) and Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY) through the participating banks and submit the proof of such insurance coverage to the satisfaction of OIL.

Note: This will be applicable for only Indian citizens and within the prescribed age group defined under the scheme for the insurance coverage.

vii) Any other insurance policy set forth in the SCC

15.0 LIABILITY:

15.1 Except as otherwise expressly provided herein, neither COMPANY nor its servants, agents, nominees, CONTRACTORs, or sub- CONTRACTORs shall have any liability or responsibility whatsoever to whomsoever for loss of or damage to the equipment and/or loss of or damage to the property of the CONTRACTOR and/or their CONTRACTORs or sub-CONTRACTORs, irrespective of how such loss or damage is caused and even if caused by the negligence of COMPANY and/or its servants, agent, nominees, assignees, CONTRACTORs and sub-CONTRACTORs.

15.2 The CONTRACTOR shall protect, defend, indemnify and hold harmless COMPANY from and against such loss or damage and any suit, claim or expense resulting there from. Neither COMPANY nor its servants, agents, nominees, assignees, CONTRACTORs, sub-CONTRACTORs shall have any liability or responsibility whatsoever for injury to, illness, or death of any employee of the CONTRACTOR and/or of its CONTRACTORs or sub-CONTRACTOR irrespective of how such injury, illness or death is caused and even if caused by the negligence of COMPANY and/or its servants, agents nominees, assignees, CONTRACTORs and sub-CONTRACTORs. CONTRACTOR shall protect, defend, indemnify and hold harmless COMPANY from and against such liabilities and any suit, claim or expense resulting there from.

15.3 The CONTRACTOR hereby agrees to waive its right of recourse and further agrees to cause its underwriters to waive their right of subrogation against COMPANY and/or its underwriters, servants, agents, nominees, assignees, CONTRACTORs and sub- CONTRACTORs for loss or damage to the equipment of the CONTRACTOR and/or its sub-CONTRACTORs and/or their employees when such loss or damage or liabilities arises out of or in connection with the

performance of the contract limited to the CONTRACTOR's liabilities agreed to under this Contract.

15.4 The CONTRACTOR hereby further agrees to waive its right of recourse and agrees to cause its underwriters to waive their right of subrogation against COMPANY and/or its underwriters, servants, agents, nominees, assignees, CONTRACTORs and sub-CONTRACTORs for injury to, illness or death of any employee of the CONTRACTOR and of its CONTRACTORs, sub-CONTRACTORs and/or their employees when such injury, illness or death arises out of or in connection with the performance of the contract limited to the CONTRACTOR's liabilities agreed to under this Contract.

15.5 Except as otherwise expressly provided herein, neither CONTRACTOR nor its servants, agents, nominees, CONTRACTORs or sub- CONTRACTORs shall have any liability or responsibility whatsoever to whomsoever for loss of or damage to the equipment and/or loss or damage to the property of the COMPANY and/or their CONTRACTORs or sub-CONTRACTORs, irrespective of how such loss or damage is caused and even if caused by the negligence of CONTRACTOR and/or its servants, agents, nominees, assignees, CONTRACTORs and sub-CONTRACTORs. The COMPANY shall protect, defend, indemnify and hold harmless CONTRACTOR from and against such loss or damage and any suit, claim or expense resulting there from.

15.6 Except as otherwise expressly provided herein, neither CONTRACTOR nor its servants, agents, nominees, assignees, CONTRACTORs, sub- CONTRACTORs shall have any liability or responsibility whatsoever to whomsoever for injury or illness, or death of any employee of the COMPANY and/or of its CONTRACTORs or sub-CONTRACTORs irrespective of how such injury, illness or death is caused and even if caused by the negligence of CONTRACTOR and/or its servants, agents, nominees, assignees, CONTRACTORs and sub-CONTRACTORs. COMPANY shall protect, defend indemnify and hold harmless CONTRACTOR from and against such liabilities and any suit, claim or expense resulting there from.

15.7 The COMPANY agrees to waive its right of recourse and further agrees to cause its underwriters to waive their right of subrogation against CONTRACTOR and/or its underwriters, servants, agents, nominees, assignees, CONTRACTORs and sub-CONTRACTORs for loss or damage to the equipment of COMPANY and/or its CONTRACTORs or sub-CONTRACTORs when such loss or damage or liabilities arises out of or in connection with the performance of the contract.

15.8 The COMPANY hereby further agrees to waive its right of recourse and agrees to cause it underwriters to waive their right of subrogation against CONTRACTOR and/or its underwriters, servants, agents, nominees, assignees, CONTRACTORs and sub- CONTRACTORs for injury to, illness or death of any employee of the COMPANY and of its CONTRACTORs, sub-CONTRACTORs and/or their employees when such injury, illness or death arises out of or in connection with the performance of the Contract.

16.0 LIMITATION OF LIABILITY:

a) Notwithstanding any other provisions herein to the contrary, except only in cases of Wilful misconduct and/or criminal acts and/or criminal negligence, neither the CONTRACTOR nor the COMPANY (OIL) 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 COMPANY and/or COMPANY's right to forfeit the Performance Bank Guarantee(s) in terms of the contract.

b) Notwithstanding any other provisions incorporated elsewhere in the contract, the aggregate liability of the CONTRACTOR in respect of this contract, whether under Contract, in tort or otherwise, shall not exceed 100% of the Contract Price (if not specified otherwise in SCC), 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 COMPANY with respect to Intellectual Property Rights.

c) COMPANY 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.

17.0 LIABILITY OF UNION GOVERNMENT OF INDIA:

It is expressly understood and agreed upon by and between CONTRACTOR and OIL INDIA LIMITED, and that OIL INDIA LIMITED is entering into this agreement solely on its own behalf and not on behalf of any other person or entity. In particular, it is expressly understood and agreed that Union of India is not a party to this agreement and has no liabilities, obligations or rights, whatsoever hereunder. It is expressly understood and agreed that OIL INDIA LIMITED is an independent legal entity with power and authority to enter into contracts solely on its own behalf under the applicable laws of India and general principles of the Contract law. The bidder/ CONTRACTOR expressly agrees, acknowledges and understands that OIL INDIA LIMITED is not an agent, representative or delegate of the Union of India. It is further understood and agreed that Union of India is not and shall not be liable for any acts, omissions, commissions, breaches or other wrongs arising out of the contract. Accordingly, bidder/ CONTRACTOR hereby expressly waives, releases and foregoes any and all actions or claims, including cross claims, impleader claims or counter claims against the Union of India arising out of this contract and covenants not to sue the Union of India as to any manner, claim, cause of action or thing whatsoever arising of or under this agreement.

18.0 CONSEQUENTIAL DAMAGE:

Except as otherwise expressly provided, neither party shall be liable to the other for special, indirect or consequential damages resulting from or arising out of the contract, including but without limitation, to loss or profit or business

interruptions, howsoever caused and regardless of whether such loss or damage was caused by the negligence (either sole or concurrent) of either party, its employees, agents or sub- CONTRACTORs.

19.0 RISK PURCHASE:

In the event, CONTRACTOR's failure to provide the services as per the Contractual scope, terms and conditions, COMPANY (OIL) reserves the right to hire the services from any other source at the CONTRACTOR's risk & cost and the difference in cost shall be borne by the CONTRACTOR. Further, OIL shall retain the right of forfeiture of Performance Bank Guarantee and any other action as deemed fit. In certain operational situations OIL reserves the right to take over the site including the service equipment at the risk and cost of the CONTRACTOR.

20.0 INDEMNITY AGREEMENT:

20.1 Except as provided hereof CONTRACTOR agrees to protect, defend, indemnify and hold COMPANY harmless from and against all claims, suits, demands and causes of action, liabilities, expenses, cost, liens and judgments of every kind and character, without limit, which may arise in favour of CONTRACTOR's employees, agents, CONTRACTORs and sub-CONTRACTORs or their employees or in favour of any third party(is) on account of bodily injury or death, or damage to personnel/property as a result of the operations contemplated hereby, regardless of whether or not said claims, demands or causes of action arise out of the negligence or otherwise, in whole or in part or other faults.

20.2 Except as provided hereof COMPANY agrees to protect, defend, indemnify and hold CONTRACTOR harmless from and against all claims, suits, demands and causes of action, liabilities, expenses, cost, liens and judgments of every kind and character, without limit, which may arise in favour of COMPANY's employees, agents, CONTRACTORs and sub-CONTRACTORs or their employees or in favour of any third party(is) on account of bodily injury or death, or damage to personnel/property as a result of the operations contemplated hereby, regardless of whether or not said claims, demands or causes of action arise out of the negligence or otherwise, in whole or in part or other faults.

21.0 INDEMNITY APPLICATION:

The indemnities given herein above, whether given by COMPANY or CONTRACTOR shall be without regard to fault or to the negligence of either party even though said loss, damage, liability, claim, demand, expense, cost or cause of action may be caused, occasioned by or contributed to by the negligence, either sole or concurrent of either party.

22.0 ROYALTY PATENTS:

Each party shall hold harmless and indemnify the other from and against all claim and proceedings for or on account of any patent rights, design, trade mark or other protected rights arising from any use of materials, equipment,

processes, inventions and methods, which have not been imposed on the attending party by the terms of the contract or the specifications forming part thereof.

23.0 WARRANTY AND REMEDY OF DEFECTS:

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

23.2 Should COMPANY discover at any time during the tenure of the Contract or till the Unit/equipment/tools are demobilised from site or base camp (if applicable) that the work does not conform to the foregoing warranty, CONTRACTOR shall after receipt of notice from COMPANY, 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, the COMPANY, at its option may have such remedial Work performed by others and charge the cost thereof to CONTRACTOR subject to a maximum of the contract value payable for the defective work which needs corrective action 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.

24.0 SUBCONTRACTING/ASSIGNMENT:

24.1 CONTRACTOR shall not subcontract, transfer or assign the contract, or any part under this contract, to any third party(ies). Except for the main services under this contract, CONTRACTOR may sub-contract the petty support services subject to COMPANY's prior written approval. However, CONTRACTOR shall be fully responsible for complete execution and performance of the services under the Contract.

24.2 Consequent upon of placement of contract, if successful bidder(s)(other than Micro/Small Enterprise) is procuring materials/services from their sub-vendor, who is a Micro or Small Enterprise 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 with prior consent in writing of the purchasing authority/Engineer in Charge the details like Name, Registration No., Address, Contact No., details of material and value of procurement made, etc. of such enterprises shall be furnished by the CONTRACTOR at the time of submission of invoice/bill.

25.0 RECORDS, REPORTS AND INSPECTION:

The CONTRACTOR shall, at all times during the currency of the contract, permit the COMPANY and its authorized employees and representatives to inspect all the Work performed and to witness and check all the measurements and tests made in connection with the said work. The CONTRACTOR shall keep an authentic, accurate history and logs including safety records of each service item with major items consumed, which shall be open at all reasonable times for inspection by the COMPANY's designated representatives and its authorized employees. The CONTRACTOR shall provide the COMPANY's designated representatives with a daily written report, on form prescribed by the COMPANY showing details of operations during the preceding 24 hours and any other information related to the said services requested by the COMPANY whenever so requested. The CONTRACTOR shall not, without COMPANY's written consent allow any third person(s) access to the said information or give out to any third person information in connection therewith.

26.0 CONFIDENTIALITY, USE OF CONTRACT DOCUMENTS AND INFORMATION:

26.1 CONTRACTOR shall not, without COMPANY's prior written consent, disclose the contract, or any provision thereof, or any specification, plan, drawing pattern, sample or information furnished by or on behalf of COMPANY in connection therewith, to any person other than a person employed by CONTRACTOR in the performance of the contract. Disclosure to any such employed person shall be made in confidence and shall extend only, as may be necessary for purposes of such performance with prior permission from COMPANY. However, nothing hereinabove contained shall deprive the CONTRACTOR of the right to use or disclose any information which is:

a) possessed by the CONTRACTOR, as evidenced by the CONTRACTOR's written records, before receipt thereof from the COMPANY which however the CONTRACTOR shall immediately inform to COMPANY; or

b) required to be disclosed by the CONTRACTOR pursuant to an order of a court of competent jurisdiction or other governmental agency having the power to order such disclosure, provided the CONTRACTOR uses its best efforts to provide timely notice to COMPANY of such order to permit COMPANY an opportunity to contest such order subject to prior permission from COMPANY.

26.2 CONTRACTOR shall not, without COMPANY's prior written consent, make use of any document or information except for purposes of performing the contract.

26.3 Any document supplied to the CONTRACTOR in relation to the contract other than the Contract itself remain the property of COMPANY and shall be returned (in all copies) to COMPANY on completion of CONTRACTOR's performance under the Contract if so required by COMPANY.

26.4 During the currency of the Contract, COMPANY and its employees, agents, other CONTRACTORs, sub-CONTRACTORs (of any tier) and their employees etc. may be exposed to certain confidential information and data of the CONTRACTOR. Such information and data held by the COMPANY, its employees, agents, other

CONTRACTORs, sub-CONTRACTORs (of any tier) and their employees in the strictest Confidence and shall not be disclosed to any other party except on a need to know basis.

However, the above obligation shall not extend to information which:

i) is, at the time of disclosure, known to the public which CONTRACTOR shall immediately inform COMPANY;

ii) is lawfully becomes at a later date known to the public through no fault of CONTRACTOR subject to CONTRACTOR's undertaking that no information has been divulged by them to the public;

iii) is lawfully possessed by CONTRACTOR before receipt thereof from COMPANY which should be immediately informed to COMPANY;

iv) is developed by CONTRACTOR independently of the information disclosed by COMPANY which should be shared with the COMPANY;

v) CONTRACTOR is required to produce before competent authorities or by court order subject to prior permission from COMPANY;

27.0 REMUNERATION AND TERMS OF PAYMENT:

27.1 COMPANY shall pay to the CONTRACTOR during the term of the Contract the amount due from time to time calculated according to the rates of payment set and in accordance with other provisions hereof. No other payments shall be due from COMPANY unless specifically provided for in the Contract. All payments will be made in accordance with the terms hereinafter described.

27.2 Request for payment/part payment to third party i.e. other than the party on whom the contract has been awarded will not be entertained by OIL under any circumstances.

27.3 MANNER OF PAYMENT: All payments due by COMPANY to CONTRACTOR hereunder shall be made at CONTRACTOR's designated bank. Bank charges, if any will be on account of the CONTRACTOR.

27.4 Payment of any invoices shall not prejudice the right of COMPANY to question the validity of any charges therein, provided COMPANY within one year after the date of payment shall make and deliver to CONTRACTOR written notice of objection to any item or items the validity of which COMPANY questions.

27.5 INVOICES: Mobilization charges will be invoiced only upon completion of mobilization as certified by COMPANY representative and CONTRACTOR is ready at site for starting the services/ operation. Payment of mobilization charges shall be made within 45 days following the date of receipt of undisputed invoices by COMPANY.

27.6 CONTRACTOR shall send invoice to COMPANY on the day following the end of each month for all daily or monthly charges due to the CONTRACTOR.

27.7 CONTRACTOR will submit 02 (Two) sets of all invoices duly super scribed `Original' and `copy' as applicable to the COMPANY for processing payment. Separate invoices for the charges payable under the contract shall be submitted by the CONTRACTOR for foreign currency and Indian currency.

27.8 Payment of monthly invoices, if undisputed, shall be made within 30 days following the date of receipt of invoice by COMPANY.

27.9 COMPANY shall within 30 days of receipt of the invoice notify the CONTRACTOR of any item under dispute, specifying the reasons thereof, in which event, payment of the disputed amount may be withheld until settlement of the dispute, but payment shall be made of any undisputed portion on or before the due date. This will not prejudice the COMPANY's right to question the validity of the payment at a later date as envisaged in clause no. **27.4** above.

27.10 The acceptance by CONTRACTOR of part payment on any billing not paid on or before the due date shall not be deemed a waiver of CONTRACTOR's rights in any other billing, the payment of which may then or thereafter be due.

27.11 Payment of Final demobilization charges shall be made if applicable within 45 days on receipt of invoice by COMPANY accompanied by the following documents from the CONTRACTOR:

a) Audited account up to completion of the Contract.

b) Tax audit report for the above period as required under the Indian Tax Laws.

c) Documentary evidence regarding the submission of returns and payment to taxes for the expatriate personnel engaged by the CONTRACTOR or by its sub-CONTRACTOR.

d) Proof of re-export of all items including the unutilized spares and consumables (excepting consumables consumed during the contract period) and also cancellation of re-export bond if any.

e) Any other documents as required by applicable Indian Laws.

In case, no demobilization charges are payable, the documents mentioned above will have to be submitted by the CONTRACTOR before release of the final payment by the COMPANY. A certificate from Chartered Accountant on (a), (b) & (c) above will suffice

27.12 CONTRACTOR shall maintain complete and correct records of all information on which CONTRACTOR's invoice are based upto 02 (two) years from the date of last invoice. Such records shall be required for making appropriate adjustments or payments by either party in case of subsequent audit query/objection.

28.0 PAYMENT OF COMMISSION/FEE/REMUNERATION OF INDIAN AGENT/CONSULTANT/REPRESENTATIVE/RETAINER/ASSOCIATE OF FOREIGN PRINCIPAL (APPLICABLE IN ICB TENDERS ONLY):

The Commission/Fee/remuneration of the Indian agent/consultant/associate/ representative/retainer, if any, will be paid within 30 days of the payment of invoice made to the CONTRACTOR, The amount of commission/fee/remuneration as a percentage of invoice value as per contract provisions will be deducted by COMPANY/OIL from the monthly invoices of the CONTRACTOR and paid to the Indian agent/consultant/representative/ retainer/associate.

29.0 DETAILS OF STATUTORY PAYMENTS LIKE EPF AND ESI, ETC:

Wherever applicable, the CONTRACTOR (including those engaging 'International Workers') shall have itself registered under Employees' Provident Fund and Miscellaneous Provisions Act, 1952 and Employees' State Insurance Act, 1948 and follow the relevant statutory provisions including Rules made there-under concerning contractual workers.

The CONTRACTOR shall be required to submit the following documents/details to the Corporation:

(i) Copy of PF-ECR duly stamped by the designated Bank, alongwith a print of the digitally signed PDF data sheet of the ECR, as proof of payment, each month, details of this PDF data sheet shall be verified by the appropriate authority (i.e. Payment Making Authority) in the COMPANY from the official website of EPFO (http://www.epfindia.gov.in).

(ii) (a) Copy of the online challan endorsed/stamped by the designated bank as proof of receipt of payment towards monthly contribution of ESI contribution.

(b) Copy of Return of contribution in respect of ESI for each contribution period of the six months i.e. for the contribution period ended 30th Sept and the contribution period ended 31st March.

(iii) As an Annexure to each EPF-ECR and ESI Challan(s), CONTRACTOR shall also furnish the following Certificates:

1) The furnished information is correct to the best of his knowledge.

2) In case any discrepancies or irregularities is /are noticed in this undertaking, then OIL is free to inform the PF/ESIC Authorities.

3) Before the completion of contract, CONTRACTOR shall serve one-month notice to all his contractual workers, informing that their services will be terminated.

4) Within one month on completion/expiry of the contract, CONTRACTOR shall pay all the dues/ terminal dues such as leave with wages, bonus (if

applicable), Gratuity (if applicable), to all his contractual workmen, failing which CONTRACTOR's Bank Guarantee/ Security Deposit may be withheld by OIL.

COMPANY may verify the deposit of statutory contribution made by the CONTRACTORs with the EPFO/ESI authorities, where deemed necessary. However, before making payment of the last bill/invoice of the CONTRACTOR, the COMPANY may verify the details/status of the payment towards EPF/ESI made by the CONTRACTOR from the authorities/official website of EPF/ESI (i.e. http://www.epfindia.gov.in and http://www.esic.in). In case the information furnished by the CONTRACTOR is found to be incorrect the COMPANY shall take appropriate action against the CONTRACTOR in accordance with law.

The CONTRACTOR agrees and undertakes to indemnify OIL for any liabilities arising out of declarations made by him in future on violation or provisions of the EPF Act 1952 and ESI Act 1948.

30.0 TIMELY MOBILIZATION AND LIQUIDATED DAMAGES:

a) Time is the essence of this Contract. If the CONTRACTOR fails to mobilize and deploy the required manpower/equipment and/or fails to commence the operation within the period specified as specified under mobilization clause under SCC, OIL shall have, without prejudice to any other right or remedy in law or contract including sub clause (b) below, the right to terminate the contract.

b) If the contractor is unable to mobilize/deploy and commence the operation within the period specified in sub clause (a) above, it may request OIL for extension of the time with unconditionally agreeing for levy and recovery of LD. Upon receipt of such a request, OIL may at its discretion, extend the period of mobilization and shall recover from the CONTRACTOR, as an ascertained and agreed Liquidated Damages, a sum equivalent to @ 0.5% of contract value including mobilization cost, per week or part thereof of delay subject to maximum of 7.5% of the Contract Price.

c) The parties agree that the sum specified above is not a penalty but a genuine pre-estimate of the loss/damage which will be suffered by OIL on account of delay on the part of the CONTRACTOR and the said amount will be payable without proof of actual loss or damage caused by such delay.

d) LD will be calculated on the basis of Total Contract value [(if not specified otherwise in SCC] excluding duties and taxes, where such duties/taxes have been shown separately in the contract. However, the applicable GST on the LD shall have to be borne by the CONTRACTOR. Accordingly, the liquidated damages shall be recovered from the CONTRACTOR along with applicable GST.

31.0 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' will stand suspended as provided herein. The term force majeure as employed herein shall mean Acts of God such as earthquake, hurricane, typhoon, flood, volcanic activity etc.; war (declared /undeclared); riot, revolts, rebellion, terrorism, sabotage by persons other than the CONTRACTOR's Personnel; fires, explosions, ionising radiation or contamination by radio-activity or noxious gas, if not caused by CONTRACTOR's fault; declared epidemic or disaster; acts and regulations of respective Govt. of the two parties, namely the COMPANY and the CONTRACTOR and civil commotions, lockout not attributable to the CONTRACTOR.

Upon occurrence of such cause, the party claiming that it has been rendered unable as aforesaid thereby, shall notify the other party in writing within 72 (Seventy Two) hours of the alleged beginning and ending thereof, giving full particulars and satisfactory evidence in support of its claim.

Should 'force majeure' condition as stated above occurs and should the same be notified within 72 (Seventy two) hours after its occurrence the `force majeure' rate (if specified in the SCC of the Contract) shall apply for the first 15 (fifteen) days for each such occasion.

Either party shall have the right to terminate the Contract if such `force majeure' conditions continue beyond successive 60 (Sixty) days [or exclusively mentioned in the SCC of the Contract] with prior written notice of 15 days, provided termination of the Contract does not result into safety hazard to the life and property on account of withdrawal of operations or the operation is at critical stage. COMPANY shall have the absolute right to decide whether any safety hazard exists or operation is at critical position and decision of the COMPANY shall binding upon the CONTRACTOR.

Should either party decide not to terminate the Contract even under such condition, no payment would apply after expiry of fifteen (15) days force majeure period**.** [or exclusively mentioned in the SCC of the Contract]

Time for performance of the relative obligation suspended by Force Majeure shall then stand extended by the period for which such cause lasts.

If however, relative obligation of the party affected by such 'Force Majeure' is limited to part of the obligation(s), the contract shall not be terminated and the parties shall continue to perform their respective obligations, which are not affected by the 'force majeure' condition, provided the obligations affected by the 'force majeure' do not preclude the parties in performing the obligations not affected by such conditions.

32.0 <u>SET-OFF</u>:

Any sum of money due and payable to the CONTRACTOR (including Performance Security refundable to them) under this or any other Contract, whether in progress or in future, may be appropriated by OIL and set-off against

any claim of OIL (or such other person or persons contracting through OIL) for payment of a sum of money arising out of this contract or under any other contract made by the CONTRACTOR with OIL (or such other person or persons contracting through OIL).

33.0 WITHHOLDING:

COMPANY may withhold or nullify the whole or any part of the amount due to CONTRACTOR, after informing the CONTRACTOR of the reasons in writing, on account of subsequently discovered evidence in order to protect COMPANY from loss on account of:

33.1 For non-completion of jobs assigned as per Scope of Work/Terms of Reference.

33.2 Defective work not remedied by CONTRACTOR.

33.3 Claims by COMPANY's recognized sub-CONTRACTOR of CONTRACTOR or others filed or on the basis of reasonable evidence indicating probable filing of such claims against CONTRACTOR.

33.4 Failure of CONTRACTOR to pay or provide for the payment of salaries/ wages, contributions, taxes or enforced savings with-held from wages etc with respect to personnel engaged by the CONTRACTOR.

33.5 Failure of CONTRACTOR to pay the cost of removal of unnecessary debris, materials, tools, or machinery.

33.6 Any failure by CONTRACTOR to fully reimburse COMPANY under any of the indemnification provisions of this Contract. If, during the progress of the work CONTRACTOR shall allow any indebtedness to accrue for which CONTRACTOR, under any circumstances in the opinion of COMPANY, may be primarily or contingently liable or ultimately responsible and CONTRACTOR shall, within five days after demand is made by COMPANY, fail to pay and discharge such indebtedness, then COMPANY may during the period for which such indebtedness shall remain unpaid, with-hold from the amounts due to CONTRACTOR, a sum equal to the amount of such unpaid indebtedness.

33.7 Withholding will also be effected on account of the following:

i) Order issued by a Court of Law or statutory authority in India.

ii) Income-tax deductible at source according to law prevalent from time to time in the country.

iii) Any obligation of CONTRACTOR which by any law prevalent from time to time to be discharged by COMPANY in the event of CONTRACTOR's failure to adhere to such laws.

iv) Any payment due from CONTRACTOR in respect of unauthorised imports.

When all the above grounds for withholding payments are removed, payment shall thereafter be made for amounts so with-held.

33.8 COMPANY reserves the right to disburse or deposit the amount so withheld to the concerned person(s) or agency or government authority, as the case may be, besides nullifying such amount on account of loss suffered by the COMPANY against **33.2, 33.3, 33.6** & **33.7** above.

34.0 APPLICABLE LAWS:

The Contract shall be deemed to be a Contract made under, governed by and construed in accordance with the laws of India for the time being in force and shall be subject to the sole and exclusive jurisdiction of Courts situated in Dibrugarh (or the Place where the contract is executed) and Principal Bench of Gauhati High Court (or the High Court under whose territorial jurisdiction, the place of execution of contract falls).

This Agreement including all matter 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 Courts, mentioned hereinabove. Foreign companies, operating in India or entering into Joint ventures in India, shall also be governed by the laws of India and shall be subject to sole and exclusive jurisdiction of above Courts.

The CONTRACTOR shall ensure full compliance of various Indian Laws and Statutory Regulations, as stated below, to the extent applicable, as stated below, but not limited to, in force from time to time and obtain necessary permits/ licenses etc. from appropriate authorities for conducting operations under the Contract:

a) The Mines Act 1952
b) The Oil Mines Regulations, 1984
c) The Employees' Compensation Act, 1923
d) The Code of Wages, 2019
e) The Contract Labour (Regulation & Abolition) Act, 1970 and the rules framed there under
f) The Employees Pension Scheme, 1995
g) The Interstate Migrant Workmen Act., 1979 (Regulation of employment and conditions of service).
h) The Employees Provident Fund and Miscellaneous Provisions Act, 1952
i) Goods and Service Tax Act
j) Customs & Excise Act & Rules
k) Factories Act, 1948
l) Industrial Disputes Act, 1947
m) Payment of Gratuity Act, 1972
n) Environmental Protection Act, 1986 & other pollution control Acts.

Note: The above Acts are only indicative and not exhaustive. The Acts shall include the rules and regulations framed thereunder.

35.0 LABOUR LAWS:

i) CONTRACTOR shall comply with the provisions of various labour related laws, including but not limited to the Code of Wages, 2019, Employee Provident Fund and Miscellaneous Provisions Act 1952, COMPANY's Liability Act 1938, Employees' Compensation Act 1923, Industrial Disputes Act 1947, the Maternity Benefit Act 1961 and Contract Labour (Regulation and Abolition) Act 1970, Employment of Children Act 1938, Employees' State Insurance Act, 1948 or any modifications/amendment thereof or any other law relating thereto and rules made there under from time to time.

ii) No Labour below the age of eighteen [18] years shall be employed on the work.

iii) CONTRACTOR shall not pay less than what is provided under law to labourers engaged by him on the work.

iv) CONTRACTOR shall at his expense comply with all labour laws and keep the COMPANY indemnified in respect thereof.

v) CONTRACTOR shall pay equal wages for men and women in accordance with applicable Labour laws.

vi) If the CONTRACTOR is covered under the Contract Labour (Regulation and Abolition) Act, he shall obtain a license from licensing authority [i.e. office of the Labour Commissioner] by payment of necessary prescribed fee and the deposit, if any, before starting the work under the Contract. Such fee/deposit shall be borne by the CONTRACTOR.

vii) CONTRACTOR must obtain the PF Code from the concerned PF Authority under Employees Provident Fund and Miscellaneous Provisions Act, 1952. Similarly, CONTRACTOR must obtain ESI Code under Employees State Insurance Act.

viii) CONTRACTOR being the employer of the labours/personnel to be engaged under the contract shall be liable to pay gratuity to the labours/personnel as per the provision of the Payment of Gratuity Act, 1972 and accordingly, shall keep the COMPANY indemnified in respect thereof. If however, COMPANY requires to pay gratuity to such labour(s) as per the direction of the competent authority under the Act, COMPANY shall recover such amount from the outstanding dues payable to the CONTRACTOR under the contract or any other contract(s).

ix) CONTRACTOR shall furnish to Engineer in Charge the distribution return of the number & description, by trades of the work people employed on the works. CONTRACTOR shall also submit on the 4th& 19th of every month to Engineer in Charge a true statement showing in respect of the 2nd half of the preceding month & the 1st half of the current month (1) the accidents that occurred during the said fortnight showing the circumstances under which they happened and the extent of damage and injury caused by them and (2) the number of female workers who have been allowed Maternity Benefit as provided in the Maternity Benefit Act 1961 on Rules made there under and the amount paid to them.

x) Engineer in Charge shall on a report having been made by an inspecting officer as defined in Contract Labour (Regulation and Abolition) Act 1970 have the power to deduct from the money due to the CONTRACTOR any sum required or estimated to be required for making good the loss suffered by a worker or workers by reason of non-fulfilment of the conditions of the Contract for the benefit of workers, non-payment of wages or of deductions made from his or their wages which are not justified by the terms of the Contract or non-observance of the said regulations.

xi) The CONTRACTOR shall indemnify the COMPANY against any payments to be made under and for the observance of the provisions of the aforesaid acts without prejudice to his right to obtain indemnity from his sub-CONTRACTOR.

36.0 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

37.0 GENERAL HEALTH, SAFETY & ENVIRONMENT (HSE) GUIDELINES:

37.1 It will be solely the CONTRACTOR's responsibility to fulfil all the legal formalities with respect to the Health, Safety and Environmental aspects of the entire job (namely; the person employed by him, the equipment, the environment, etc.) under the jurisdiction of the district of that state where it is operating. Ensure that all sub-CONTRACTORs hired by CONTRACTOR comply with the same requirement as the CONTRACTOR himself and shall be liable for ensuring compliance all HSE laws.

37.2 It will be entirely the responsibility of the Contractor/his Supervisor/representative to ensure strict adherence to all HSE measures and statutory rules during operation in OIL's installations and safety of workers engaged by him. The crew members will not refuse to follow any instruction given by company's Installation Manager/Safety Officer/Engineer/Official/ Supervisor/Junior Engineer for safe operation.

37.3 Any compensation arising out of the job carried out by the Contractor whether related to pollution, Safety or Health will be paid by the contractor only.

37.4 Any compensation arising due to accident of the Contractor's personnel while carrying out the job, will be payable by the contractor.

37.5 When there is a significant risk to health, environment or safety of a person or place arising because of a non-compliance of HSE Measures Company shall have the right to direct the contractor to cease work until the non-compliance is corrected.

38.0 POLLUTION AND CONTAMINATION:

The CONTRACTOR shall be liable for all surface and sub-surface pollution to the extent caused by CONTRACTOR and resulting from CONTRACTOR's operation/service or spillage or dumping of solvents/additive substances or pollutants, which the CONTRACTOR brings to the Site for use in connection with Work to be performed under this Contract.

Notwithstanding anything to the contrary contained herein, it is agreed that except on the ground of willful misconduct or criminal misconduct, COMPANY shall release, indemnify and hold CONTRACTOR and its sub-CONTRACTORs harmless from any and all claims, judgments, losses, expenses and any costs related thereto (including but not limited to Court costs and "Attorney's fees") for:

a) Damage to or loss of any reservoir or producing formation; and/ or

b) Damage to or loss of any well; and/ or

c) Any other subsurface damage or loss; and/ or

d) Any property damage or loss or personal injury or death arising out of or in connection with a blowout, fire explosion and loss of well control regardless of cause.

39.0 STATUTORY VARIATION/ NEWLY ENACTED LAW:

39.1 All duties, taxes except otherwise specified in the Contract as applicable on the closing date of bid submission as per relevant acts and rules shall be in CONTRACTOR's account. Variation in case of custom duty on CIF value declared by the bidder shall be to COMPANY account.

39.2 In the event of introduction of any new legislation or any 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/decreased cost of the works under the CONTRACT through increased/decreased liability of taxes and/or duties, required to be paid by the CONTRACTOR, (other than personnel and Corporate taxes), the Parties shall agree to a revision in pricing to reflect such change subject to the production of documentary proof to the satisfaction of the COMPANY/CONTRACTOR as applicable 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 (applicable when disputed by COMPANY) & the courts wherever levy of such taxes/duties are disputed by COMPANY/CONTRACTOR.

39.3 Any increase in net amount of the duties and taxes (i.e. the amount of taxes/duties payable minus eligible credit of taxes/duties paid on input services/inputs) 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 in net amount of the duties and taxes (i.e. the amount of taxes/duties payable minus eligible credit of taxes/duties paid on input services/inputs) after the contractual completion/mobilization date will be to COMPANY's account.

39.4 The Contract Price and other prices given in the Schedule of Prices are based on the applicable tariff as indicated by the CONTRACTOR in the Schedule of Prices. In case this information subsequently proves to be wrong, incorrect or misleading, COMPANY 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, COMPANY will have the right to recover the difference in case the rate of duty/tax finally assessed is on the lower side.

39.5 Notwithstanding the provision contained in Clause-39.1 to 39.4 above, the COMPANY shall not bear any liability in respect of:

i. Personal taxes on the personnel deployed by CONTRACTOR, his sub-CONTRACTOR/sub-sub-CONTRACTORs and Agents etc.

ii. Corporate taxes and Fringe benefit tax in respect of CONTRACTOR and all of their sub-CONTRACTORs, agents etc.

iii. Other taxes & duties including Customs Duty and GST in addition to new taxes etc. in respect of sub-CONTRACTORs, vendors, agents etc. of the CONTRACTOR.

iv. Any liability on the CONTRACTOR, which was accrued under the old law or contract, which the CONTRACTOR is obligated to pay either to the COMPANY or to the Government Authority.

39.6 In order to ascertain the net impact of the amendment/ revisions/enactment of various provisions of taxes/duties, the CONTRACTOR is liable to provide following disclosure to COMPANY:

i. Details of each of the input services used in relation to providing service to COMPANY including estimated monthly value of input service and GST tax amount.

ii. Details of Inputs (material/consumable) used/required for providing service to COMPANY including estimated monthly value of input and GST paid/payable on purchase of inputs.

39.7 The above provisions would be applicable only in case of variation in rate of taxes and duties on supply of services to OIL and not applicable on taxes and duties on input (goods and services) towards such services.

39.8 Any claim or reduction on account of change in law shall be accompanied with undertaking that the provisions of anti- profiteering clause under GST Act have been complied with.

40.0 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.

41.0 COMMISSION OF MISCONDUCT/SUBMISSION OF FRAUDULENT DOCUMENT BY THE BIDDER/CONTRACTOR AND BANNING THEREOF:

The information and documents furnished by the bidder/CONTRACTOR in respect of the tender/contract are accepted by COMPANY to be true and genuine. However, if it comes to the notice of the COMPANY anytime either during the pendency of the tender or after award of the contract or after completion the contract that a Bidder/CONTRACTOR furnished fraudulent document/false information in relation to the subject tender/contract or committed any misconduct, appropriate action shall be taken against the Bidder/CONTRACTOR for debarment/banning of the bidder/CONTRACTOR from participating in any future tender of the COMPANY in terms of the COMPANY's Banning Policy, 2017 besides making the CONTRACTOR liable for other penal action including termination of ongoing contract(s) at his/her risk and peril. In such event, the Performance Security in respect of ongoing contract(s) shall be forfeited by the COMPANY.

42.0 SETTLEMENT OF DISPUTES:

42.1 If dispute of any kind whatsoever shall arise between the company and the contractor in connection with or arising out of the contract, including without prejudice to the generality of the foregoing, any question regarding its existence, validity or termination, or the execution of the facilities, whether during the progress of the facilities or after their completion and whether before or after the termination, abandonment or breach of the contract, the parties shall seek to resolve any such dispute or difference by mutual consultation. If the parties fail to resolve any such dispute or difference by mutual consultation, then the dispute may be settled through Settlement Advisory Committee (SAC). In the event, a dispute remains unsettled then Arbitration/ other remedies available under the applicable laws may be availed by the Contractor.

42.2 Resolution of Dispute through SAC:

a) OIL has framed the Conciliation Rules 2020 in conformity with Part III of the Arbitration and Conciliation Act 1996 as amended from time to time for speedier, cost effective and amicable settlement of disputes through conciliation.

b) If the parties fail to resolve such a dispute or difference by mutual consultation as per clause no. 42.1, the dispute, if the parties agree, may be referred to conciliation in accordance with OIL Conciliation Rules 2020 as amended from time to time. A copy of the said Rules has been made available on OIL's Website i.e. www.oil-india.com

c) Where the invitation for conciliation has been accepted by the other party, the parties shall attempt to settle such dispute(s) amicably under OIL conciliation

Rules 2020.

d) Parties shall invoke arbitration clauses only after exhausting the option of conciliation as an Alternative Dispute Resolution Mechanism. For the purpose of this clause, the option of conciliation shall be deemed to have been exhausted, even in case of rejection of conciliation by any of the parties.

42.3 Arbitration (Applicable for Suppliers/Contractors other than PSU and MSME):

1. Except as otherwise provided elsewhere in the contract, if any dispute, difference, question or disagreement arises between the parties hereto or their respective representatives or assignees, in connection with construction, meaning, operation, effect, interpretation of the contract or breach thereof which parties are unable to settle mutually through Conciliation/Mediation, the same shall be referred to Arbitration.

2. A party wishing to commence arbitration proceeding shall invoke an Arbitration Clause by giving 30 days' notice to the other party. The notice invoking arbitration shall specify all the points of dispute with details of the amount claimed to be referred to arbitration at the time of invocation of arbitration and not thereafter. If the claim is in foreign currency, the claimant shall indicate its value in Indian Rupee for the purpose of constitution of the arbitral tribunal.

3. The number of arbitrators and the appointing authority will be as under: Claim amount (excluding claim for interest and counter claim, if any)

Claim amount. {excluding claim for interest and counter claim, if any)	**Number ofArbitrator**	**Appointing Authority**
Up to Rs. 25.00 Lakh	Not applicable	Not applicable
Above Rs. 25.00 Lakh Up to Rs. 5 Crore	Sole Arbitrator from the panel of Arbitrators' List maintained by OIL	Mutually to be decided by the Parties.

4. The Parties agree that dispute involving claims below Rs. 25 lakhs and above Rs. 5 crores shall not be subject matter of Arbitration but subject to the exclusive jurisdiction of the Court(s) situated at New Delhi.

5. The parties agree that they shall appoint only those persons as arbitrators who accept the conditions of the arbitration clause. No person shall be appointed as Arbitrator or Presiding Arbitrator who does not accept the conditions of the arbitration clause.

6. If any of the Arbitrators so appointed dies, resigns, becomes incapacitated or withdraws for any reason from the proceedings, it shall be lawful for the concerned party/arbitrators to appoint another person in his place in the same

manner as aforesaid. Such person shall proceed with the reference from the stage where his predecessor had left if both parties consent for the same; otherwise, he shall proceed de novo.

7. Parties agree and undertake that neither shall be entitled for any pre- reference or pendente-lite interest on its claims. Parties agree that any claim for such interest made by any party shall be void. Parties agree that a claim for any such interest shall not be considered and shall be void. The Arbitrator or Tribunal shall have no right to award pre-reference or pendent-lite interest in the matter.

8. The arbitral tribunal shall complete the proceedings, make and publish the award within time stipulated in the Arbitration and Conciliation Act, 1996(as amended from time to time)

9. If after commencement of the arbitration proceedings, the parties agree to settle the dispute mutually or refer the dispute to conciliation, the arbitrators shall put the proceedings in abeyance until such period as requested by the parties. Where the proceedings are put in abeyance or terminated on account of mutual settlement of dispute by the parties, the fees payable to the arbitrators shall be determined as under:

   a) 20% of the fees if the claimant has not submitted a statement of claim.
   b) 40% of the fees if the pleadings are complete.
   c) 60% of the fees if the hearing has commenced.
   d) 80% of the fees if the hearing is concluded but the award is yet to be passed.

10. Each party shall be responsible to make arrangements for the travel and stay etc. of the arbitrator appointed by it. Claimant shall also be responsible for making arrangements for travel and stay of the Presiding Arbitrator and the expenses incurred shall be shared equally by the parties. In the case of sole arbitrator, both parties shall equally share all expenditures that may be required to be incurred.

11. The fees and other administrative/secretarial expenses of the arbitrator(s) shall not exceed the model fee as stipulated in the Schedule of the Act and such expenses shall be equally borne by the parties.

12. The seat and venue of the arbitration proceeding shall be New Delhi.

42.4 Arbitration (applicable in case of Contract awarded on Public Sector Enterprise):

1. If the Parties fail to resolve such a dispute or differences by Mutual Consultation/Good Faith Discussions, such disputes or difference shall be taken up by either party for resolution through Administrative Mechanism for Resolution of CPSEs Disputes (AMRCD) as mentioned in DPE Office Memorandum No. 05/0003/2019-FTS-10937 dated 14.12.2022 issued by Department of Public Enterprises, Ministry of Heavy Industries and Public Enterprises, Government of India and its further clarifications, modifications and amendments, issued from time to time.

2. A party wishing to commence arbitration proceedings shall invoke Arbitration

Clause and refer the dispute(s) to AMRCD with a copy to the other party. The notice invoking arbitration shall specify all the points of dispute with details of the amount claimed to be referred to arbitration at the time of invocation of arbitration and not thereafter.

3. Upon such reference, the dispute shall be decided by the Competent Authority appointed under the AMRCD, whose decision shall bind the parties finally and conclusively. The parties in the dispute will share equally the cost of the arbitration as intimated by the Arbitrator.

42.5 Arbitration (Applicable to Micro, Small and Medium Enterprise)

In the event of any dispute or difference relating to, arising from, or connected with the Contract, efforts shall be made to resolve the dispute(s) amicably by mutual consultation and in case such dispute(s) cannot be resolved through mutual consultation, then same shall be resolved through the procedure as prescribed in Section-18 of the Micro, Small and Medium Enterprises Development Act, 2006.

42.6 Exclusions

Parties agree that following matters shall not be referred to conciliation or arbitration:

a) Any claim, difference or dispute relating to, connected with or arising out of OIL's decision to initiate any proceedings for suspension or debarment or banning, or decision to suspend or to ban or to debar business dealings with the bidder/CONTRACTOR and/or with any other person involved or connected or dealing with bid/contract/bidder/CONTRACTOR.

b) Any claim, difference or dispute relating to, connected with or arising out of OIL's decision under the provisions of Integrity Pact executed between OIL and the Bidder/CONTRACTOR.

c) Any claim, difference or dispute relating to, connected with or arising out of OIL's decision to comply with any order or directive of any statutory or government authority.

43.0 COMPLETION OF CONTRACT:

Unless otherwise terminated under the provisions of any other relevant Clause or extended through written communication, this Contract shall be deemed to have been completed at the expiry of the Period specified in the contract or period of defect liability, as provided for under the Contract, whichever is later.

44.0 TERMINATION:

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

44.2 Termination of contract for death: If the CONTRACTOR is an individual or a proprietary concern and the individual or the proprietor dies or if the

CONTRACTOR is a partnership concern and one of the partners dies then unless, the COMPANY is satisfied that the legal heir of the individual or the proprietary concern or the surviving partners are capable of carrying out and completing Contract, the COMPANY is entitled to cancel the Contract for the uncompleted part without being in any way liable for any compensation payment to the estate of the deceased CONTRACTOR and/or to the surviving partners of the CONTRACTOR's firm on account of the cancellation of Contract. The decision of the COMPANY in such assessment shall be final & binding on the parties. In the event of such cancellation, the COMPANY shall not hold the estate of the deceased CONTRACTOR and/or the surviving partners of CONTRACTOR's firm liable for any damages for non-completion of the Contract.

44.3 **Termination on account of Force Majeure:** Unless the contract provides otherwise, either party shall have the right to terminate this Contract on account of Force Majeure as set forth in Article-31.0 above.

44.4 **Termination on account of insolvency:** In the event that the CONTRACTOR or its collaborator or its guarantor at any time during the term of the Contract, becomes insolvent or makes a voluntary assignment of its assets for the benefit of creditors or is adjudged bankrupt or under the process of insolvency or liquidation, then the COMPANY shall, by a notice in writing have the right to terminate the Contract and all the CONTRACTOR's rights and privileges hereunder, shall stand terminated forthwith.

However, COMPANY shall be at liberty to give the Receiver or Liquidator or Insolvency Professional Manager, as appointed by the Competent Court/Tribunal, the option of carrying out the Contract subject to its technical & financial competence and his providing a guarantee for due and faithful performance of the Contract.

44.5 **Termination for Unsatisfactory Performance**: If the COMPANY considers that, the performance of the CONTRACTOR is unsatisfactory, or not as per the provision of the Contract, the COMPANY shall notify the CONTRACTOR in writing and specify in details the cause of dissatisfaction. The COMPANY shall have the option to terminate the Contract by giving 15 days notice in writing to the CONTRACTOR, if CONTRACTOR fails to comply with the requisitions contained in the said written notice issued by the COMPANY. In the event CONTRACTOR rectifies its non-performance to the satisfaction of the COMPANY, the option of termination may not be exercised by the COMPANY. If however CONTRACTOR repeats non-performance subsequently, COMPANY shall exercise the option to terminate contract by giving 07 days notice. Such CONTRACTOR shall be put on holiday as per the Banning Policy of OIL [available at www.oil-india.in].

44.6 **Termination due to change of ownership and Assignment:** In case the CONTRACTOR's rights and /or obligations under this Contract and/or the CONTRACTOR's rights, title and interest to the equipment/ material, are transferred or assigned without the COMPANY's written consent, the COMPANY may at its option, terminate this Contract. COMPANY shall not be however

under any obligation to accord consent to the CONTRACTOR for change of ownership & assignment of the contract.

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

44.8 **Termination for delay in mobilization:** CONTRACTOR is required to mobilize complete equipment alongwith crew for commencement of services at the specified site within the maximum allowed number of days from the date of LOA/Notice for Mobilization as specified in the special conditions of contract. If the CONTRACTOR (successful bidder) fails to complete the mobilization as above, OIL shall have, without prejudice to any other clause of the CONTRACT, the right to terminate the contract.

44.9 Notwithstanding any provisions herein to the contrary, the Contract may be terminated at any time by the COMPANY on giving 30 (thirty) days written notice to the CONTRACTOR due to any other reason not covered under the above Article from **44.1 to 44.8** and in the event of such termination the COMPANY shall not be liable to pay any cost or damage to the CONTRACTOR except for payment of services as per the Contract upto the date of termination.

44.10 **Consequence of Termination:** In all cases of termination herein set forth, the relative obligations of the parties to the Contract shall be limited to the period up to the date of termination. Notwithstanding the termination of this Contract, the parties shall continue to be bound by the provisions of this Contract that reasonably require some action or forbearance after such termination.

Upon termination of this Contract, CONTRACTOR shall return to COMPANY all of COMPANY's properties, which are at the time in CONTRACTOR's possession.

In the event of termination of contract, COMPANY 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 demobilize their personnel & materials.

Demobilization charges shall not be payable by COMPANY in case of Article from **44.4 to 44.7**

45.0 **TO DETERMINE THE CONTRACT:**

In such an event (i.e. termination under Article No. 44.4 to 44.9 above), the contract shall stand terminated and shall cease to be in force from the date of such notification by the COMPANY. Thereafter the CONTRACTOR shall stop forthwith any of the work then in progress, except those work which the COMPANY may, in writing, require to be done to safeguard any property or work,

or installations from damages, and the COMPANY may take over the remaining unfinished work of the CONTRACTOR and complete the same through a fresh CONTRACTOR or by other means, at the risk and cost of the CONTRACTOR, and any of its sureties if any, shall be liable to the COMPANY for any excess cost occasioned by such work having to be so taken over and completed by the COMPANY over and above the cost at the rate/cost specified in the schedule of quantities and rates/prices.

46.0 WITHOUT DETERMINING THE CONTRACT: In such an event (i.e. termination under Article No. 44.4 to 44.9 above), the COMPANY may take over the work of the CONTRACTOR or any part thereof and complete the same through a fresh CONTRACTOR or by other means, at the risk and cost of the CONTRACTOR. The CONTRACTOR and any of its sureties are liable to the COMPANY for any excess cost over and above the cost at the rates specified in the schedule of quantities and rates/prices, occasioned by such work having been taken over and completed by the COMPANY.

47.0 ERRING/DEFAULTING AGENCIES:

Erring and defaulting agencies like bidder, CONTRACTOR, supplier, vendor, service provider will be dealt as per OIL's Banning Policy dated 6th January, 2017 available in OIL's website: www.oil- india.com. Moreover, OIL reserves the right to take legal or any other action on the basis of merit of the case.

48.0 MISCELLANEOUS PROVISIONS:

CONTRACTOR shall give notices and pay all fees at their own cost required to be given or paid by any National or State Statute, Ordinance, or other Law or any regulation, or bye-law of any local or other duly constituted authority as may be in force from time to time in India, in relation to the performance of the services and by the rules & regulations of all public bodies and companies whose property or rights are affected or may be affected in any way by the services.

CONTRACTOR shall conform in all respects with the provisions of any Statute, Ordinance of Law as aforesaid and the regulations or bye-law of any local or other duly constituted authority which may be applicable to the services and with such rules and regulation, public bodies and Companies as aforesaid and shall keep COMPANY indemnified against all penalties and liability of every kind for breach of any such Statute, Ordinance or Law, regulation or bye-law.

During the tenure of the Contract, CONTRACTOR shall keep the site where the services are being performed reasonably free from all unnecessary obstruction and shall store or dispose of any equipment and surplus materials and clear away and remove from the site any wreckage, rubbish or temporary works no longer required. On the completion of the services, CONTRACTOR shall clear away and remove from the site any surplus materials; rubbish or temporary works of every kind and leave the whole of the site clean and in workmanlike condition to the satisfaction of the COMPANY.

Key personnel cannot be changed during the tenure of the Contract except due to sickness/death/resignation of the personnel or any other justified situation in which case the replaced person should have equal experience and qualification, which will be again subject to prior approval, by the COMPANY.

END OF SECTION-I

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PART-4
SECTION-II
SCOPE OF WORK (SOW)/TERMS OF REFERENCE (TOR)/TECHNICAL SPECIFICATIONS

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List of Abbreviations

Abbreviation	Description
CCC	Command & Control Centre
OIL	Oil India Limited
CPSE	Central Public Sector Enterprise
FHQ	Field Headquarters
RF	Rajasthan Fields
PHQ	Pipeline Headquarters
DCS	Distributed Control System
PLC	Programmable Logic Controller
SCADA	Supervisory Control and Data Acquisition
OT	Operational Technology
IT	Information Technology
IoT	Internet of Things
SOC	Security Operations Centre
HVAC	Heating, Ventilation, and Air Conditioning
VC	Video Conferencing
CMS	Content Management System
FAT	Factory Acceptance Test
SAT	Site Acceptance Test
OPC UA	Open Platform Communications Unified Architecture
API	Application Programming Interface
KPI	Key Performance Indicator
RBAC	Role-Based Access Control
SSO	Single Sign-On
MFA	Multi-Factor Authentication
AES	Advanced Encryption Standard
TLS	Transport Layer Security
DMZ	Demilitarized Zone
VAPT	Vulnerability Assessment and Penetration Testing
MDM	Mobile Device Management
GIS	Geographic Information System
CAD	Computer-Aided Design
BIM	Building Information Modelling
NLP	Natural Language Processing
RPA	Robotic Process Automation
SOP	Standard Operating Procedure
LOI	Letter of Intent
PO	Purchase Order
COB LED	Chip-on-Board Light Emitting Diode
HDR	High Dynamic Range
CRAC	Computer Room Air Conditioning
PAC	Precision Air Conditioning
RH	Relative Humidity
SNMP	Simple Network Management Protocol
BACnet	Building Automation and Control Network

VESDA	Very Early Smoke Detection Apparatus
OSDU	Open Subsurface Data Universe
MEITY	Ministry of Electronics and Information Technology
CERT-In	Indian Computer Emergency Response Team
AMIS	Asset Management Information System
CBM	Condition-Based Monitoring
BoLD	Bowser Logistics Dashboard
S&E	Safety & Environment
eRTMAC	Real time data monitoring and analysis centre
RTPMA	Real-Time Performance Monitoring
NBPL	Numaligarh-Bongaigaon Pipeline
NSPL	Numaligarh-Siliguri Pipeline
CGGS	Central Gas Gathering Station
FGGS	Field Gas Gathering Station
GCS	Gas Collection Station
STF	Secondary Tank Farm
CTF	Central Tank Farm
ITF	Intermediate Tank Farm
CBUS	Bowser Unloading Station

1. Introduction

Oil India Limited (OIL), a Maharatna CPSE of the Government of India, is a fully integrated Exploration & Production company in the upstream sector. OIL INDIA LIMITED (OIL) is a premier Oil Company engaged in exploration, production and transportation of crude oil & natural gas with its Headquarters at Duliajan, Assam. Duliajan is well connected by Air with nearest Airport being at Dibrugarh, 45 km away.

With its origin dating back to the glorious year of oil discovery in India in 1889, today, OIL is regarded as one of the leading CPSEs in the country creating value for all its stakeholders and contributing meaningfully towards India's indigenous basket of crude oil.

2. Objective

2.1. The primary objective is to design and implement an enterprise-grade, centralized Command & Control Centre (CCC) that provides real-time monitoring, visualization, and decision support across the entire operational value chain with AMC for 5 years

2.2. Implementation of CCC shall help the organization in achieving below strategic and business goals:

a) Centralized View of Value Chain: End-to-end visibility of the entire domestic upstream portfolio.
b) Data driven decisioning: Near real-time decision-making considering the data insights across entire value-chain.
c) Transparency & Collaboration: Proactive management of risks, performance, and compliance across Exploration, Drilling, Production, and associated business functions.
d) Enhanced Safety: Become a digitally empowered, operationally agile, and safety-first E&P enterprise.
e) Faster Incident Response: Convergence of digital technologies, data and skilled personnel allowing timely intervention.

2.3. Below locations are selected for implementation of CCC:

a) Corporate Office, WTC Delhi
b) Field Headquarters (FHQ), Duliajan
c) Rajasthan Fields (RF), Jodhpur
d) Pipeline Headquarter (PHQ), Guwahati

2.4. Broad Components/Deliverables:

I. Control Room Infrastructure Setup

a) Physical CCC set up at WTC Delhi including civil, electrical, fire & safety, AV, IT hardware & networking works
b) Physical CCC set up at Field Headquarters (FHQ) including civil, electrical, fire & safety, AV, IT hardware & networking works
c) Physical CCC set up at Rajasthan Fields (RF), Jodhpur including civil, electrical, fire & safety, AV, IT hardware & networking works
d) Pipeline Headquarter (PHQ), Guwahati with AV and basic furnishing.

II. CCC Compute Infrastructure and Services:

a. OT Data Lake setup in FHQ Duliajan Data Centre and, OT & IoT System Integration
b. IT Middleware & Data Lake setup, IT System Integration
c. Develop & Deploy CCC Application and mobile app

III. AMC for 5 years

3. Current state overview

The organization currently operates with separate IT, OT, IoT, and Domain & Operation specific systems that support daily operations and plant control. While these systems meet basic operational needs, they function in silos, limiting integration, data visibility, and real-time decision-making capabilities.

3.1. IT Systems

a) ERP and other business/departmental applications deployed across on-prem and cloud environments, primarily supporting finance, inventory, planning, projects management & EDP Operations.
b) Includes CCTV monitoring, Drone Surveillance and upcoming Video Analytics.
c) A detailed list of IT applications and departmental platforms (Exploration, Drilling) proposed for integration will be covered in the functional requirements section.

3.2. OT & IoT Systems

a) Multiple DCS, PLC, and SCADA-based control systems from various OEMs are deployed across assets and installations in multiple geographies.
b) These are broadly categorized into three major groups: FHQ (Field Head Quarter) – Duliajan, PHQ (Pipeline Head Quarter) – Guwahati, and RF (Rajasthan) – Jodhpur.
   - **FHQ – Duliajan:**
     - Gas Management System including OCS monitoring (MCS Scada)
     - DCS & TFMS systems at Tank farm (STF, CTF and ITF)
     - DCS systems at Gas gathering & processing stations (CGGS, FGGS and GCS)
     - DCS system at Bowser unloading station (CBUS)
     - Well head monitoring systems (RTPMA, Cloud-deployed well head monitoring systems)
   - **PHQ - Guwahati**
     - SCADA systems at Oil pipeline (NBPL and NSPL)
   - **RF - Jodhpur**
     - SCADA system at Field oil and gas processing
c) The above OT systems are currently isolated with no integration into a common data lake or centralized integration gateway.
d) IoT systems are implemented for well head monitoring which are deployed in cloud.
e) A detailed list of OT & IoT Systems and OEM details will be covered in the functional requirements section.

3.3. Infrastructure & Network Landscape

a) All locations, including Corporate Office, FHQ, PHQ, and RF, are connected through MPLS, enabling high-bandwidth data communication.
b) OT systems are largely isolated logically and physically in some cases from the IT network for security and reliability, while IT systems operate primarily within the IT network.
c) Several systems are deployed on cloud platforms; a multi-cloud strategy is adopted, though the majority are hosted on Microsoft Azure.
d) Cloud workloads are managed and accessed via a common landing zone with centralized access controls.
e) A Security Operations Centre (SOC) is implemented for real-time monitoring, incident detection, and response across IT and cloud environments.

4. Scope of work

4.1. Bidder shall deliver the following components as per the technical and functional requirements outlined across this RFP

I. Control Room Infrastructure Setup

a) Physical CCC set up at WTC Delhi including civil, electrical, fire & safety, AV, IT hardware & networking works

b) Physical CCC set up at Field Headquarters (FHQ) including civil, electrical, fire & safety, AV, IT hardware & networking works

c) Physical CCC set up at Rajasthan Fields (RF), Jodhpur including civil, electrical, AV, IT hardware & networking works.

d) Pipeline Headquarter (PHQ), Guwahati including civil, electrical, AV, IT hardware & networking works.

II. CCC Compute Infrastructure and Services:

a. OT Data Lake setup in FHQ Duliajan Data Centre and, OT & IoT System Integration

b. IT Middleware & Data Lake setup, IT System Integration

c. Develop & Deploy CCC Application and mobile app

III. AMC for 5 years

4.2. Bidder shall design, build, deliver, integrate, commission and hand over a turnkey Command & Control Centre (CCC) solution and room fit outs across the four locations.

4.3. Bidder shall execute all associated civil, interior, A/V, lighting, HVAC, and utility works on a turnkey basis.

4.4. Bidder shall provide all required hardware, software, and services necessary to deliver and complete the Command & Control Centre (CCC) solution.

4.5. The CCC application, along with IT middleware and data lake, shall be deployed on a cloud-based platform, while OT data shall remain on-premises. The system architecture for both implementations shall follow the schematics provided in **Section 6 - Technical & Functional Requirements for CCC Compute Infrastructure and Services.**

4.6. The CCC at the Corporate Office (CO) will serve as a strategic hub, offering a comprehensive real-time view of OIL's entire value chain as an integrated energy company. It will cover key functional domains including Exploration, Production, Transportation, Refining, Finance, HR, HSE, ESG, CSR, and more.

4.7. The CCC at (FHQ, RF & PHQ) will offer real-time operational monitoring helping decision-making and coordinated execution. It will cover key functional domains including Exploration, Drilling, Production, Transportation, HSE, ESG, CSR, and more.

4.8. The CCCs at all proposed locations (including CO) shall be designed to proactively detect, coordinate, and respond to real-time events affecting operational efficiency. The solution shall, at a minimum:

a) Integrate seamlessly with IT and OT systems to deliver a unified operational picture and enable rapid response via real-time visibility, automated alerts, configurable workflows and decision-support tools.
b) Deliver actionable, context-rich insights, Alerts & Workflows to support effective planning, execution, troubleshooting and continuous operational improvement.
c) Enable field users to receive and acknowledge prioritized alerts on mobile, view CCC-pushed content and real-time status, and communicate securely two-way with control-room operators.

4.9. The Platform shall integrate data and functionalities from OIL's existing digital platforms as well as future initiatives, ensuring a unified and scalable approach to operational monitoring, analytics, and decision support.

4.10. Comprehensive modelling of wells, networks, and surface facilities shall be undertaken to enable real-time visualization & performance analysis and overlay of alerts and insights.

4.11. The proposed platform shall be architected to support future AI/ML-driven analytics for advanced decision-making, including (but not limited to) predictive maintenance, production forecasting, anomaly detection, and pattern recognition, even if such use cases are beyond the current implementation scope.

4.12. The solution shall be capable of integrating with existing OT and IT systems and databases, such as SCADA, PLCs, DCS, wellhead monitoring platforms, SAP, HSE Portal, E&P Databank, CCTV systems, and video analytics, to enable both real-time and historical monitoring of field performance and events.

4.13. A comprehensive list of IT and OT systems targeted for integration is provided in Section 6; the Bidder shall design the solution to integrate with those systems and accommodate any additional or future systems not listed.

4.14. The platform shall provide a field mobile application to display selected real-time statuses and active alerts, deliver instant alerts and notifications, and include in-app chat/redirection for features for direct coordination with the CCC and field teams.

4.15. The platform shall support operator guidance during critical events, enabling control room staff to push actionable alerts to field personnel on Mobile App. This includes sending annotated images, predefined SOPs, and real-time voice or video communications to facilitate quick decision-making and on-ground coordination.

4.16. The platform shall provide 2D/3D visualizations of assets, processes & value-chain, including field layouts, surface facilities, pipeline routes, and drilling infrastructure. These visual layers shall support interactive navigation and shall be GIS-based map and multi-layer visualization where applicable.

4.17. Bidder shall provision the platform to be future-ready with conversational AI capabilities, enabling users to query system data in natural language and receive contextually accurate, actionable responses.

4.18. The platform shall support KPI tracking and deviation alerts. It shall allow users to configure performance metrics, define thresholds, and receive real-time alerts for deviations, along with escalation workflows for necessary approvals or actions.

4.19. The Bidder shall comply with OIL's IT & Cloud policies and digital architecture standards, including adherence to SSO, RBAC, data encryption (in transit and at rest), and OSDU where applicable.

4.20. Bidder shall strictly adhere to all applicable cybersecurity guidelines and implement robust security measures to protect the system and data. Compliance with industry standards and client-specific security policies is mandatory throughout the project lifecycle.

4.21. The Bidder shall be responsible for turnkey execution, including the design, development, deployment, integration, commissioning, training, documentation, manpower provisioning, and change management required for successful platform implementation.

4.22. The platform shall be scalable and modular, allowing future integration of new data sources, applications, and analytical models without major architectural changes.

4.23. All offered resources shall be formally endorsed by the respective OEM or supported by publicly available OEM documentation/literature validating their specifications and suitability.

4.24. The bidder shall maintain a valid back-to-back support agreement with the respective OEMs, ensuring end-to-end coverage, updates, and issue resolution for all supplied components.

4.25. All source code, models, workflows, dashboards, and platform customizations shall be the intellectual property of OIL, with full rights to extend, modify, or replicate the solution.

4.26. The platform shall support secure data export, report generation, and audit trails, ensuring compliance with regulatory and internal governance requirement

4.27. The Bidder shall provide and manage all hardware, software, licensing, tools, and any other resources necessary for the complete design, development, integration, deployment, testing, and commissioning of the Command & Control Centre solution.

4.28. **Refer Annexure-A3** for detailed design criteria and applicable standards; the Bidder shall comply fully — **Annexure-A3** is an integral part of this SoW.

5. Technical & Functional Requirements for Control Room Infrastructure

i. The scope covers the establishment of Command & Control Rooms at the following locations:

   a) Corporate Office, WTC Delhi
   b) Field Headquarters (FHQ), Duliajan
   c) Rajasthan Fields (RF), Jodhpur
   d) Pipeline Headquarter (PHQ), Guwahati

ii. Bidder shall conduct a pre-bid site visit to study and evaluate the physical conditions and spaces designated for the Command & Control setup.

iii. Bidder shall submit a detailed control-room blueprint package for each location including 3D layouts, sightlines, ergonomic operator-station layouts, video wall placement, Network and Cabling, AC zoning, lighting levels and acoustical treatment.

iv. Bidder shall submit a detailed control design blueprint, Bill of Materials (BOQ), technical specifications, product datasheets and implementation plan for OIL approval.

v. Bidder shall execute civil works, interior finishes, raised floors (if required), cable trays, conduits, false ceilings, secure access points, acoustic panels and secure enclosures in compliance with local building codes and OIL safety standards.

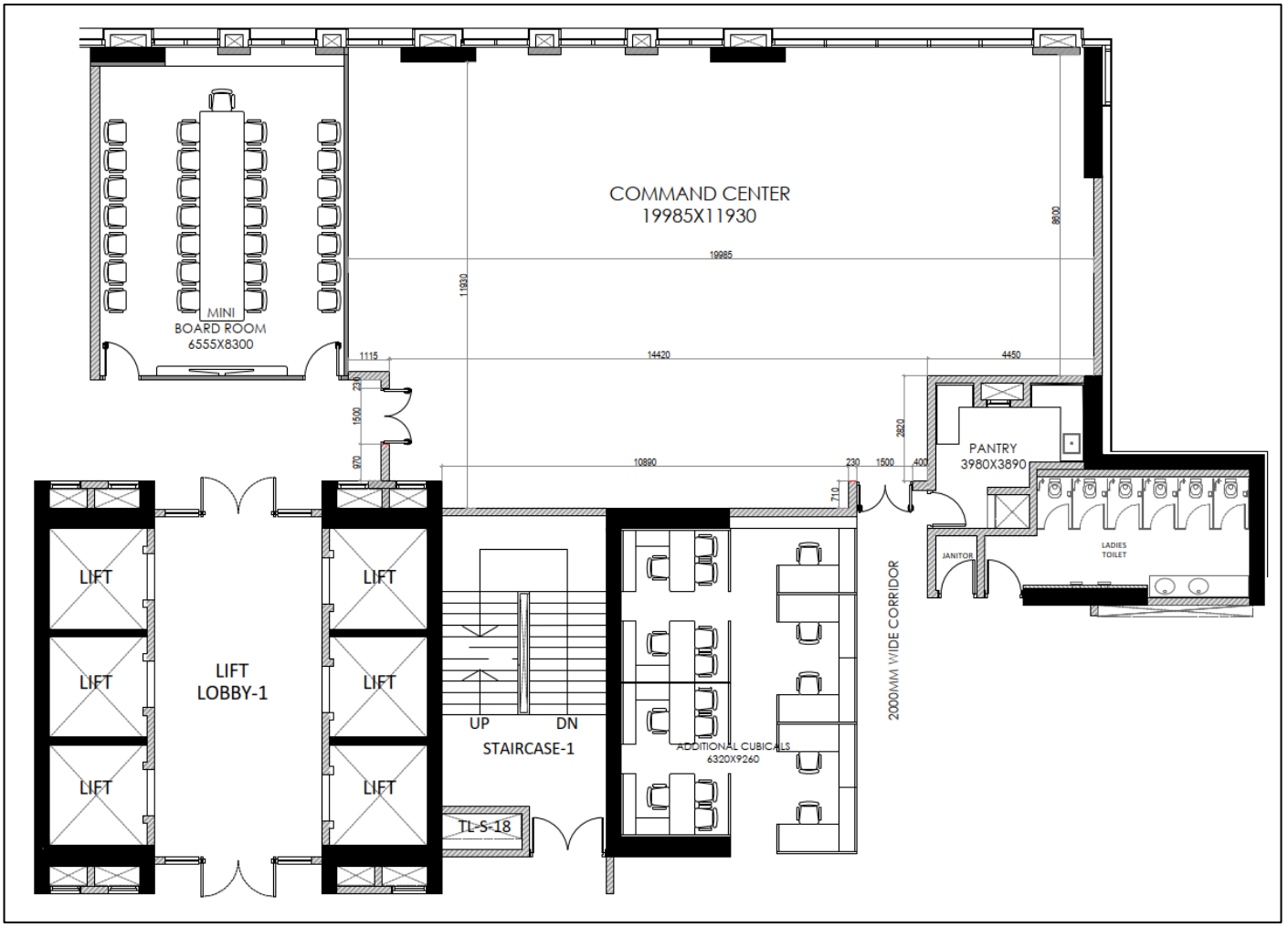
vi. Bidder shall supply and install IT and OT infrastructure required for the control rooms, OT and IT Data Lake, CCC Application including but not limited to: Servers, Cloud resources, video walls, controllers, content management system and mounts, operator consoles and ergonomic seating, collaboration workspace, VC systems, audio systems, lighting, control room servers/racks, network switches & cabling, storage, UPS, precision AC/HVAC, PDU, and environmental monitoring sensors.

vii. Bidder shall provide Factory Acceptance Tests (FAT) and Site Acceptance Tests (SAT) for critical subsystems (video wall, AV, servers, network, interiors) at Bidder facility or staging area and shall obtain OIL sign-off prior to site installation.

5.1. Corporate Office, WTC Delhi

a) The purpose of establishing the Command-and-Control Centre (CCC) at the Corporate Office is to provide strategic, operational, and financial oversight through an enterprise-wide view; facilitate executive meetings and performance reviews; showcase operations to visitors; and enable corporate-level monitoring and coordination of emergency incidents.

b) The existing layout configuration for the WTC Delhi site is presented in the following section.



c) Room dimensions are indicated in the layout. The bidder shall propose a control room plan addressing functional requirements and incorporating key components as outlined in the indicative BOQ below.

5.1.1. Indicative Control room BOQ

Sl no	Description	Unit	Qty
	Corporate Office, WTC Delhi		
I.	**Civil, Interior, Electrical & Utilities**		
A1	SITC of Civil & Interiors including Electrical, Fire Alarm and Suppression, Redundant UPS, PAC/HVAC, Lighting, Automation, Public Address System and Rodent Control system (Area of 65 X 29 X 8.85 feet)	AU	1
II.	**Video Wall, AV Infrastructure, VC, and other IT Hardware Components**		
A2	SITC of Active Curved LED Display with P0.93 HDR, COB Flip-Chip with Top Protection, anti-humidity, anti-scratch and anti-collision as per the design - 16.8mtrs x 2.7mtrs Tolerance +/- 0.2m	AU	1
A3	SITC of 32-point Multi-Touch Overlay Size 16.8mtrs x 2.7mtrs Tolerance +/- 0.2m	Set	1
A4	SITC of Command and Control Suite 4K60 Secured IPKVM, Encoders, Operator Console Codec, and Videowall Decoders with videowall processor with redundancy : Free form, PIP, POP, HDMI embedded audio switching, Sources can windowed, layered, and positioned anywhere on the video display for all Areas - 20 nos 4K60 Sources, 2nos 4K Workspace with wide monitors (32:9 aspect ratio) attached to Operator console codec and multifunctional keyboard, quantity of videowall decoders required to achieve Pixel-to-Pixel Resolution, 2nos decoders for VC codec.	Lot	1
A5	SITC of Computing Rack servers to access Dashboards and Applications	Nos	15
A6	SITC of Interactive Collaboration Suite with Videowall Controller supporting pixel to pixel resolution of Active LED Display with custom resolution and have 20 nos of 4K HDMI Inputs for interactive Collaboration Interactive table and with Wireless Tablet controller for extended experience	Nos	1
A7	SITC of a multi-user 3D stereoscopic immersive simulation system on an LED Wall, equipped with 3D tracked active stereoscopic glasses and hand-tracked controllers, designed for geological exploration and analysis, training and simulation and digital twins' presentation. The system shall support a wide range of industry-leading 3D CAD and visualization software without requiring file conversions, including Petrel for petroleum exploration, ArcGIS and more.	Lot	1

A8	SITC of Motorized 21.5" Pop-Up Capacitive Multi-touch Displays with Integrated Chairman & Delegate System, Mini PC supporting Executive collaboration platform Software and Licenses, including all necessary hardware, accessories, for seamless integration and operation (10 for Collaboration workspace table + 2 for interactive table)	Nos	12
A9	SITC of Executive Engagement Platform for PoP- Up Units and Custom Interactive application for CCC Dashboard Visualization, other applications, Media Visualization, and Non-linear Presentations to Support Full Resolution of LED Display with on-premises perpetual license.	Set	1
A10	SITC of interactive table with 88" 4K Capacitive display in 32:9 aspect ratio, embedded interactive player supporting object recognition, RFID, Gestures sensors and commanding officer console made with Premium finish	Set	1
A11	SITC of Holographic Box with real life 3D AI based Character creation and integration with Generative AI with LLM of company assets with interactive CMS	Nos	1
A12	SITC of 85" Interactive Display for War room / Collaboration Workspace with mount and interactive touch pen/stylus.	Set	1
A13	SITC of Video Conferencing, Audio systems, 5nos 30X 4K PTZ Conference Cameras and wireless presentation device	Lot	1
A14	SITC of CCTV surveillance with Entrance door integrated with Facial Recognition and RFID Access	Lot	1
A15	SITC of Cables, Connectors, Extenders, network components, racks, and Miscellaneous items	Lot	1

5.1.2. Detailed Technical & Functional Requirements

I. Civil, Interior, Electrical & Utilities

A1. SITC of Civil & Interiors including, Electrical, Fire Alarm and Suppression, Redundant UPS, PAC/HVAC, Lighting, Automation, Public Address System and Rodent Control system (Area of 65 X 29 X 8.85 feet)

a) Bidder to specify Make & Model of all quoted items in the table below:

Slno	Item Description	MAKE	MODEL
1	UPS		
2	PAC		
3	Fire Alarm & Suppression		

b) The Command-and-Control Centre shall be designed and executed in full compliance with ISO 11064 (ergonomic design of control centres), ISO/IEC 62368-1 (safety of AV, IT and communication equipment), and applicable Human Factor Engineering (HFE) principles.

c) The control room shall be planned according to international safety, ergonomic, environmental, operator health, sustainability, and functionality norms to ensure it meets world-class standards and is suitable for continuous 24x7 operation.

d) The design of the control room interiors and control desks shall strictly adhere to ISO 11064for ergonomics and HFE, optimising operator comfort, health, visibility, reach and efficiency.

e) In a typical control room, the environment is defined predominantly by the ceiling, flooring, control desks and wall panelling, which constitute nearly 90% of the visible area, and therefore major considerations shall be given to these components so that the entire functional design of the command centre remains fully ISO-compliant.

f) All integrated AV, IT and communication systems must carry valid certifications confirming compliance with ISO/IEC 62368-1.

g) The bidder shall provide a comprehensive design package that includes 3D renders and an interactive 3D walkthrough model, along with complete Good for Construction (GFC) working drawings. The package shall also cover electrical single-line diagrams and layouts, AV signal flow diagrams and rack elevations, automation and control system drawings, conduit and containment layouts, and a complete networking architecture with redundancy and cyber-security considerations.

h) These deliverables must be coordinated across all disciplines, including architecture, structure, HVAC, electrical, IT and AV, to eliminate clashes and ensure seamless execution. The interior design shall be contemporary, aesthetically appealing, ergonomically optimised, safe and suitable for a 24x7 working facility, avoiding conventional materials such as wooden cladding, aluminium composite panels, laminates, fabric, paint and Plaster of Paris in the control room areas, as these are prone to damage, ageing and fire hazards.

i) Flooring, false ceiling, doors, carpet, and all other interior works required for the Control Room shall be in the bidder's scope.

j) On-site cutting, gluing or screwing of factory-finished components shall not be permitted to maintain quality and finish standards.

k) Ergonomic norms for lighting, acoustics, airflow and spatial design shall be strictly followed. Illumination on work surfaces shall range between 200 and 750 lux, with ambient lighting maintained at a minimum of 200 lux, and lux-level reports must demonstrate compliance with ISO 11064 lighting norms.

l) Wall panelling and partitions shall achieve a Sound Transmission Class (STC) of 35 or higher, and modular perforated ceilings and wall panelling shall provide

a Noise Reduction Coefficient (NRC) of at least 0.60 while ensuring that micro-perforations are virtually invisible from normal viewing distances and that the overall finish remains smooth and visually appealing.

m) Decorative acoustic laminate flooring shall contribute to noise reduction, with a reduction in impact sound of at least 14 dB as per ISO 717-2. The design shall ensure proper airflow, maintaining an optimal temperature and sufficient air movement to create a comfortable and alert working environment, with airflow systems complying with ISO 11064-6 requirements.

n) Ergonomic spatial design shall be based on the anthropometric data of the user population, accommodating 5th to 95th percentile operators, and must allow seamless transitions between seated, standing and alternating positions to enhance comfort and productivity during long working hours.

o) Operator consoles and 24x7 seating shall adhere to ISO 11064 requirements, offering height adjustability, integrated cable management, anti-glare work surfaces and appropriate ergonomic support. Provision for a minimum of two operator workstations shall be ensured.

p) The control desk shall be designed as per Human Factor Engineering principles, ensuring that operator postures, sightlines to video walls and workstations, visibility of critical information and accessibility of controls are optimised for safety and productivity. Lighting levels shall be maintained at the work surfaces with controlled luminance ratios for video walls, and the acoustic design shall ensure that the noise criteria for control rooms are met without compromising aesthetics.

q) Meeting & Collaboration Space shall be provided with a fully equipped conference area featuring an AV-integrated conference table (power, data, and cable-management ports) and ergonomic conference chairs (fabric/leather finish) to accommodate at least 10 participants.

r) A sofa-based seating lounge shall be provisioned within the control room, comprising ergonomically designed sofas with a minimum seating capacity of eight (8) persons, suitable for standby personnel, quick reviews, and collaborative discussions.

s) Environmental controls, including HVAC and airflow, shall be integrated to maintain thermal comfort suitable for long-duration occupancy in a mission-critical environment.

t) The bidder shall provide 30 TR of PAC/VRF cooling for the CCC areas including the server/UPS room, configured N+1 with automatic lead–lag sequencing, and continuous 24×7 operation. The PAC/VRF system shall integrate with the room's automation for alarm, sequencing, humidity control, and environmental compliance as specified.

u) Indoor UPS, Server, and Precision AC Rooms shall be designed with proper soundproofing and thermal insulation to ensure noise levels do not exceed 50 dB(A) under operational load. Flooring shall be anti-static, load-bearing, and suitable for server racks, UPS systems, and precision AC units, with raised

flooring for cable and airflow management. The bidder shall provide complete grounding/earthing and lightning protection, along with cable trays, ducting, and all required penetration points for safe and organized power and network cabling.

v) The bidder shall provide a modular online UPS of not less than 48 kVA, with N+1 redundancy, dual AC input, dual output distribution, and integrated static + maintenance bypass. The UPS shall back all critical loads of the CCC including Technology and AV/IT hardware, Fire Alarm, Rodent Control, Public Address, network/compute, and emergency lighting circuits. Non-critical lighting and raw sockets shall remain on raw power.

w) The UPS shall be sized for 30 minutes of backup on full load. Battery technology may be VRLA or Li-ion, with appropriate BMS/monitoring, ventilation, and safety as per standards.

x) Fire safety norms shall be strictly observed to ensure operational continuity and personnel safety. The wall panelling and modular ceilings must be tested and certified in accordance with ASTM E84 Class A standards, or equivalent Indian standards, for flame spread and smoke generation.

y) The modular wall partitions shall meet a minimum fire resistance rating of 60 minutes for thermal insulation (I), integrity (E) and stability (R) as per BS 476 Part 20 and 22 or Indian equivalent standards. Such fire resistance tests must be carried out by UL, Intertek or an authorised Fire Research Laboratory under the Government of India. In addition to fire-rated materials, the design shall incorporate UPS-backed redundant power distribution, proper grounding and surge protection to safeguard all critical equipment and ensure continuity of operations during disturbances and emergencies.

z) An intelligent lighting and environmental automation system shall be integrated into the Command-and-Control Centre through KNX or equivalent building automation platform to ensure seamless control, energy efficiency and operational reliability. The system shall manage lighting levels, occupancy-based illumination adjustments, daylight compensation, environmental monitoring, and coordination with HVAC systems to maintain thermal comfort and meet the ergonomic and operational requirements of ISO 11064.

aa) All lighting circuits, control modules, sensors and dimming systems shall be fully compatible with the KNX or equivalent protocol, enabling centralised monitoring, scheduling and real-time adjustments from the control software.

bb) Bidder shall provide an ergonomically designed podium with integrated microphone, display/monitor for speaker notes, built-in AV connectivity (HDMI/USB/Power), branding panel provision (OIL logo), and lighting controls, fully integrated with the Control Room collaboration suite for a seamless user experience and content delivery.

cc) To ensure maximum safety and compliance, all electrical cabling used within the control room including lighting, power, data, and automation wiring shall be FRLSH (Flame Retardant Low Smoke and Halogen-free), ensuring minimal

smoke emission, reduced toxicity and superior fire-safe performance suitable for mission-critical 24x7 environments.

dd) Environmental norms and sustainability requirements shall be incorporated into the selection of materials and systems. The materials used in the control room interiors, including modular metal ceilings, metal wall panelling and control desks, shall comply with RoHS (Restriction of Hazardous Substances) guidelines, ensuring that they are free from hazardous substances such as lead, mercury and cadmium so that the final installation does not contaminate the environment and contributes to a healthier future for subsequent generations.

ee) The modular control desks (both metal and non-metal), designer metal ceilings and modular metal panelling shall be assessed for cradle-to-grave environmental impact and verified through Life Cycle Assessments (LCA) by approved consultants. Control desks and interior components, including ceilings and panelling, must also have Environmental Product Declarations (EPD) in accordance with ISO 14025 or equivalent, verifying their minimal environmental impact and contribution to sustainable design.

ff) Operator health-related norms shall be given high importance. The control desks and interior components, including acoustic laminate floors, ceilings and panelling, must emit volatile organic compounds (VOCs) within permissible limits to ensure healthy indoor air quality. These components shall therefore have Greenguard Gold or Indian equivalent VOC certification, as VOCs are known to be responsible for respiratory diseases and a significant proportion are carcinogenic in nature. Only materials that meet rigorous standards for low VOC emissions into indoor air shall be used, with special consideration for operators who spend 8–12 hours at a stretch within the control room, so that the environment remains safe even for sensitive individuals and confined spaces.

gg) The interior design shall be modular and scalable for future readiness. Modular designs must support quick replacement of damaged components, reducing downtime during maintenance, and the overall interior configuration shall be modular to facilitate easy installation, maintenance, retrofitting and scalability. It must be capable of accommodating future technological advancements that are not currently envisaged. All critical design components, including ceilings, wall panelling and control desks, shall be prefabricated in the factory and delivered ready to install without modification at site, and Factory Acceptance Tests (FAT) shall be conducted for ceilings and panelling prior to shipment to ensure quality and compliance. Any on-site changes shall be restricted to HVAC duct alignment, last-mile cabling and small adjustments. The control room solutions must support 24x7 operations with zero downtime during maintenance.

hh) At handover, the bidder shall submit as-built drawings, updated CAD files, O&M manuals and a detailed compliance matrix mapping all ISO, HFE, environmental, fire safety, seismic and health-related requirements against the final executed design. Training for operators and maintenance teams shall be provided to ensure effective use and upkeep of the facility. All relevant

warranties, service plans and certification documents shall be submitted as part of the handover documentation to establish that the Command-and-Control Centre fully conforms to the specified standards and performance criteria.

II. Video Wall, AV Infrastructure, VC, and other IT Hardware Components

A2. SITC of Active Curved LED Display		
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
Sl. No	**Parameter**	**Minimum Specifications**
A2.1	Pixel Pitch	0.93 mm or lesser
A2.2	Screen Size	16.8mtrs x 2.7mtrs Tolerance +/- 0.2m
A2.3	Configuration	COB Full Flip Chip
A2.4	Cabinet Material	Die-cast Aluminium or better
A2.5	Brightness	600 cd/m2 or higher
A2.6	HDR Support	HDR10+
A2.7	Contrast Ratio	20,000:1 or higher
A2.8	Refresh Rate	7680 Hz or higher
A2.9	Bit Depth	16-bit or higher
A2.10	Viewing Angle	H: 160° or higher, V: 155° or higher
A2.11	3D Function – Stereoscopic	Active 3D with Emitter to support full length of display and designated portion of the LED Display with supply 20 nos Active 3D Glasses
A2.12	Operation Time	Continuous 24/7 operation (24 hours, 7 days a week)
A2.13	Lifetime	100,000 hrs or higher
A2.14	Operating Temperature	0°C ~ +40°C
A2.15	Operating Humidity	10%~80%RH
A2.16	Power Redundancy	Each Cabinet should have dual Power - one for active and one for redundancy

A2.17	Signal Redundancy	Each Cabinet should have dual Signal / Data Port - one for active and one for redundancy
A2.18	Protection and Surface Treatment	Anti-Scratch, Anti-Dust, Anti-Moisture, Anti- Collision, Anti-Glare, Anti-Static, Anti-Moiré, Front Water-Proof
A2.19	Certifications	BIS and Low Blue light / Eye Comfort Certifications
A2.20	Curve	Supplier to provide special cabinets (Aluminium Diecast) which can accommodate an angle of 0~2.5 Degrees between each module to meet the curve requirement. The curve shall be as per the drawing provided.
A2.21	Mounting and Fabrication	Should include necessary mounting structure and all accessories to mount the LED walls to ensure precision installation
A2.22	**LED Controller Specifications**	
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
A2.23	Qty of LED Controllers	**Minimum 2 nos** (1 no for Active Connection and 1no for Redundant Connection)
A2.24	Each Controller should have below mentioned minimum Qty of Inputs, Outputs and features	
A2.25	Type of Inputs	HDMI 2.0/2.1 4K with Custom Resolution Input supported
A2.26	Number of Inputs	Required number of Inputs to achieve Pixel-to-Pixel Resolution in Stereoscopic 3D & HDR10+ and additional 20% spare input ports
A2.27	Number of Outputs (RJ45 / OFC)	Required Outputs to achieve Pixel-to-Pixel Resolution in HDR10+ and stereoscopic 3D Mode and additional 10% for Spare Output ports
A2.28	Power Redundancy	LED Controller should have dual power one for active and one for redundancy
A2.29	Features	- Hot-swappable input and output cards - Frame synchronization: image should be played smoothly, without any stuck, frame loss, tearing or piercing - Should supports HDR10+ and Stereoscopic 3D Function - Auto monitoring and fault alarms should be available

A3. SITC of 32 point Multi-Touch Overlay Size 16.8mtrs x 2.7mtrs Tolerance +/- 0.2m		
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
Sl. No	**Parameter**	**Minimum Specifications**
A3.1	Touch Points	32 Simultaneous touch points
A3.2	Touch Method	Finger and Stylus (with diameter >5mm) & Infrared
A3.3	Finger Touch Accuracy	± 1.5 mm
A3.4	Touch Response Time	6ms-16ms
A3.5	OS Compatibility	Windows, Mac OSX, Linux
A3.6	HID Support	Yes
A3.7	Operating Temperature	-20°C to 60°C
A3.8	Storage Temperature	-40°C to 85°C
A3.9	Operating Humidity	10% to 90% RH, non-condensing;
A3.10	Storage Humidity	10% to 90% RH, non-condensing
A3.11	Max Power Consumption	5W
A3.12	Interface	USB 2.0

A4. SITC of Command-and-Control Suite 4K60 IPKVM, Encoders, Operator Console, and Videowall Decoders with videowall processor with redundancy		
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder

Sl No	Parameter	Minimum Specifications
A4.1	**General**	
A4.1.1	Architecture	Distributed Architecture & Scalable (new operator desks or sources can be added)
A4.1.2	Real-Time Synchronization	Controllers should replicate configuration and status data in real time.
A4.1.3	Geo-Redundancy	Remote sites should mirror configuration & other critical data for disaster recovery.
A4.1.4	Brand or Hardware Agnostic	Should support multi-brand PCs with various operating systems, cameras, and display technologies
A4.1.5	Security	io and USB data flow over secured KVM channels using hardware-level encryption (AES-128 or better).
A4.1.6	True Redundancy and High Availability	The True Redundancy and High Availability (HA) framework should ensure that the system remains fully operational under any fault condition — whether network, hardware, power, or controller-related 1. Controller-Level Redundancy – dual synchronized controllers (active/standby). 2. Network-Level Redundancy – dual switches, VLAN separation, and redundant fiber paths. 3. Power-Level Redundancy – dual independent power supplies for each node. 4. Device-Level Redundancy – duplicate TX/RX units for critical feeds and displays.
A4.1.7	Curved Monitor	Should supply 49" Curved diagonal monitor with 32:9 aspect ratio (Quantity - 2nos)
A4.1.8	**KVM Transmitters**	
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
A4.1.9	Quantity Required	1 Lot
A4.1.10	Video inputs and resolutions	Resolutions: 3840 x 2160p 60Hz or Higher
A4.1.11	Colour depth	24 Bit (RGB888)

A4.1.12	Compression	Lossless compression: frame differentiation Lossy compression: Dynamic compression
A4.1.13	Network	Redundant (End-to-end network path redundancy is mandatory. Redundancy shall not be limited to endpoint devices)
A4.1.14	Supported network cabling	Cat 5e/6/7 (BASE-T) or single mode fiber, multimode fiber (BASE-X)
A4.1.15	MTBF	Minimum 250,000 hours
A4.1.16	**KVM Receivers**	
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
A4.1.17	Quantity Required	As per required to achieve pixel to pixel resolution of video wall with HDR and Stereoscopic 3D and pixel to pixel resolution of 32:9 wide aspect ratio Operators monitor + for VC Decoding + for Collaboration workspace
A4.1.18	Video Outputs and resolutions	Resolutions: 3840 x 2160p 60Hz or Higher
A4.1.19	Colour depth	24 Bit (RGB888)
A4.1.20	Compression	Lossless compression: frame differentiation Lossy compression: dynamic compression
A4.1.21	Audio	Should have Analog Audio out
A4.1.22	USB	USB for KVM ; 1x USB 2.0 Full-Speed)
A4.1.23	Supported network cabling	Cat 5e/6/7 (BASE-T) or single mode fiber, multimode fiber (BASE-X) with Network Redundancy
A4.1.24	MTBF	Minimum 250,000 hours
A4.1.25	**Multifunctional Keyboard for Operators / Operator Console with Touch Panel , KVM Receiver, Key board and mouse**	
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder

A4.1.26	Quantity Required	2
A4.1.27	Audio	Audio Out and microphone
A4.1.28	USB	Should support KVM switching and mixing with multiple sources simultaneously
A4.1.29	Speaker	2x 20W
A4.1.30	Display	Minimum 10.1" LCD touch display, resolution 1280x800 @60Hz Contrast: min. 500:1, typical 700:1 Brightness: min. 300 cd/m2, typical 400 cd/m2
A4.1.31	Source Control	The touch display should support, multi touch control of any connected source with zoom in zoom out gestures etc.
A4.1.32	Environment Control	The Operator Console should provide customizable layout for environment control for controlling lights, HVAC, doors, height adjustments of consoles etc.
A4.1.33	Smart Control	The Operator Console shall enable intuitive, context-aware control of multiple systems, sources, and video-wall layouts simultaneously, providing seamless operator interaction and workflow efficiency
A4.1.34	Programmable Hardware Keys	- Operator Console Should have Dedicated keys map to system functions or critical sources - Keys should be fully reconfigurable via controller interface.
A4.1.35	Programmable Touchscreen Display	- Operators should be able to create custom layouts with soft-keys and role-based menus. - Operators shall, via a role-based desktop interface, be able to preview, route authorized sources/layouts between their workstation, the video wall and other room displays; securely share windows - Operator Consol should dynamically adapt to user profiles, reflecting permissions and assigned sources. - Operator Consol should support real-time feedback for source selection, wall presets, and communication channels.

A4.1.36	User Personalization and Free Seating Integration	- Operator should be able to log in through password directly using keyboard. - Upon login, personal layouts, preferred sources, and permissions should load automatically.- Operator console should behave differently for each login based on the role defined for each user.
A4.1.37	MTBF	Minimum 50,000 hours
A4.1.38	**KVM Switch / Network Switch**	
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
A4.1.39	Number of ports	To be calculated as per the node requirements and should have minimum 20% of Ports vacant for redundancy and future scalability
A4.1.40	Protocols	- Support of at least 128 source addresses per multicast group - Protocol Independent Multicast (PIM)
A4.1.41	Power supply	Should have hot redundant power supplies

A5	**SITC of Computing Rack servers to access Dashboards and Applications in Control Room**	
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
Item Nos	**Parameter**	**Minimum Specifications**
A5.1	Processor	2.4Ghz, 16Core, 32 threads, 24MB Cache
A5.2	Motherboard	Dual Socket compatible with the specified processor
A5.3	Memory	2 X 32GB

A5.4	Storage	500GB SSD
A5.5	Graphics Card	4GB Server Grade Graphics card with Minimum 3 x HDMI ports. If mDP (Mini DisplayPort), DP (DisplayPort), or USB-C output is available instead of HDMI, include HDMI converters / connectors.
A5.6	Ethernet Ports	2 x Gigabit LAN
A5.7	Operating System	Windows 11 Enterprise LTSC / Pro
A5.8	Software	Microsoft Office LTSC and Antivirus with Internet Security
A5.9	Form Factor	2U Rack mount with Rails compatible with standard server racks
A5.10	Power Redundancy	Dual power configuration with one active power unit and one redundant power unit
A5.11	Certification	BIS

A6	**SITC of Interactive Collaboration Suite with Videowall Controller supporting pixel to pixel resolution of Active LED Display with custom resolution and 4K HDMI Inputs for interactive Collaboration with Wireless Tablet controller for extended experience**	
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
Sl No	**Parameter**	**Minimum Specifications**
A6.1	Video wall processing with Sync	Yes
A6.2	Custom Resolution Support	Yes
A6.3	Maximum Resolution Support and Required Outputs	Pixel to Pixel resolution of the LED Display without any scaling
A6.4	Processor	2X 16Core, 32 threads, 24MB Cache
A6.5	Memory	4 X 32GB
A6.6	Storage	2TB SSD

A6.7	Maximum Output support	HDMI 2.0 x 24nos supporting Videowall with bezel compensation
A6.8	Ethernet Ports	2 x 10G RJ45 / 40G Fiber
A6.9	Form Factor	4U Rack mount with Rails compatible with standard server racks
A6.10	Inputs	Should support 20numbers of 4K HDMI Inputs and touchback control of Video sources. System should be based on scalable architecture for future source additions
A6.11	Power Redundancy	Dual power configuration with one active power unit and one redundant power unit
A6.12	Certification	BIS
A6.13	Collaboration & Multi-Window Control	- Ability to open any number of windows on the Interactive Video Wall simultaneously without limitations. - Display multiple HDMI inputs anywhere on the screen (Quad View, Dual View, Single View, PIP, POP, and flexible combinations). - Control multiple sources simultaneously with HDMI inputs with Touchback feature. - Open multiple web applications directly on the screen (no remote PC required) with auto scale adjustment. - Option to present media files via FTP or pre-loaded content. - Session SAVE capabilities - Play 3D video file on Video Wall
A6.14	Multi-touch & Interactivity	- Multi-touch and multi-user interactivity (multiple users working simultaneously). - Support for gestures: pinch-in, pinch-out, zoom-in, zoom-out - Whiteboard functionality with annotation tools (multiple pen weights, colours). - On-screen annotation with screenshot/snapshot capture. - Hide and Unhide options & Drag/Drop Functionality for Multiple Contents (URL, Images, Videos, PDF, HDMI Inputs). - The collaboration device shall allow users to wirelessly send images, videos, and documents from laptops and mobile devices to the video wall.

		- Touch table should have flexibility to access different types of input sources simultaneously and able to annotate (Web Dashboard, HDMI Inputs, Network based PC Inputs) - Touch table should support independent session for brainstorming without interrupting the content which is shown on video wall - The collaboration system should support workspace sharing with real-time annotation, allowing simultaneous multi-user annotation from different locations on a shared canvas. For group discussions, the same content must be consistently displayed across the video wall, touch table, operator consoles and in meeting room 21.5"touch monitor.
A6.15	Wireless Sharing	- Wireless device sharing with support for Windows, MacOS, iOS, Android, and Linux. - Unlimited free licenses for users across all OS platforms.
A6.16	Enterprise Deployment & Licensing	- On-premises enterprise-grade deployment. - Supplied with perpetual licensing (no recurring subscription costs). - For perpetual/on-premise licenses specified under enterprise deployment, the bidder shall provide all patches, updates, maintenance, and technical support required during the contract/AMC period at no extra cost to OIL.
A6.17	CMS System & Resources	CMS system to manage & refresh content by OIL. Features: sorting, filtering, relations, flexible field types, Integrated media library with reusability and image processing Integrated media library with reusability and image processing Minimum storage support: 500GB, scalable as needed. Perpetual licensing and 5-year maintenance plan including hosting, bandwidth, CMS upkeep, and upgrades (to be included in AMC)
A6.18	Multi-touch Interactive Application with Multiparty and Network Push to Play Content on Main Screen from Interactive Table	The Custom Interactive application should enable the seamless pushing of media files, web dashboards, and presentations across the full length of the large-scale LED wall, creating an immersive and engaging experience. Presenter should have the ability to control and push the required content from the interactive table to the main LED wall using a

		multi-touch interactive application. The system should utilize a robust network infrastructure to ensure smooth and reliable content delivery from the interactive table to the main screen, incorporating advanced security measures and scalability for future expansion.
A6.19	Realtime 3D Rendered Imagery of Plant or Refinery or Exploration Area	The Custom Interactive application should showcase the entire value chain in 3D rendered imagery on the main LED display. The presenter should have the ability to control and navigate the view of the plant from their console using an interactive application. The navigation should be facilitated through an intuitive floorplan interface, allowing for seamless movement and detailed exploration of the plant or refinery. The system should deliver an immersive visual experience similar to advanced 3D visualization technologies.
A6.20	Integration of Live Camera Feed from the Field to Wide Curved Screen for Immersive Experience	The Interactive application should incorporate the capability to stream live camera feeds from the field directly to the entire wide curved screen, providing an immersive and realistic viewing experience. The curved screen, with its expansive wide width, should offer a truly immersive experience, envelop the viewers and making them feel as if they are present in the field. The system should employ advanced video processing techniques to stitch /positioning the window side by side together the multiple camera feeds seamlessly, creating a cohesive and continuous panoramic view. The system should support high-resolution playback of the live video, ensuring crisp and detailed imagery across the entire screen.
A6.21	Development of Interactive Content for LED Wall	The Interactive application should include the development of interactive content for the LED wall with UI and UX based on specific use cases and case studies. The system should showcase creative content writing, content design, motion graphics, photography, animations, actions, and triggers. The bidder shall deliver a minimum of three (3) animated films (2D/3D), each of 4–5 minutes duration, as per OIL's directions. The bidder shall also provide an estimated cost for optional additional films totalling up to 30 minutes during the AMC period, which shall be paid on actuals."

A6.22	Offline Feature Support	The application should support offline features, ensuring that previously downloaded files and assets are available even without internet connectivity.
A6.23	Responsive Multi-touch Content	The application should support easy, responsive multi-touch content with unlimited touchpoints, supporting actions and triggers, pinch zoom, pan, and rotate of any media files.
A6.24	Media File Support	The application should support various media files such as videos, PDFs, images, web browsers, Excel sheets, GIS applications / MAPS support
A6.25	Annotation and sharing	The application should allow annotation on the screen and the ability to save files. It should support sharing selected media files and annotated contents via one-click email, USB storage, network storage, etc.
A6.26	RFID/NFC Integration	The application should support RFID/NFC devices or sensors with plug-and-play integration.
A6.27	Timer Triggers	The application should have timer triggers for countdowns and inactivity timers to add conditional logic, such as "If no interaction after x minutes, play screensaver video." Or use a scheduler to change content and more at specified dates/times.
A6.28	Gesture-Based Actions	The application should support actions based on gestures, such as writing "W" as a gesture to trigger and populate relevant content.
A6.29	AI-Based Interaction Assistant	The system should include an advanced AI-powered interaction assistant, integrated with the interactive player of the LED wall. By leveraging Large Language Models (LLMs), the AI Assistant should generate accurate, context-aware responses, overlaying insights, operational data, or supporting media (such as videos, PDFs, or schematics) directly onto the LED display. The assistant should enable scenario-based visualizations, allowing users to explore operational simulations (e.g., pipeline analytics or refinery workflows) in an interactive and intuitive manner. Integrated with the Content Management System (CMS), the AI Assistant should ensure access to updated knowledge assets and support enhanced decision-making through voice commands. Additionally, the assistant should support

		multilingual interaction, allowing users to ask questions and receive responses in English, Hindi, etc., facilitating broader accessibility and usability.

A7. SITC of a multi-user 3D stereoscopic immersive simulation system on an LED Wall, equipped with 3D tracked active stereoscopic glasses and hand-tracked controllers, designed for geological exploration and analysis, training and simulation and digital twins presentation. The system shall support a wide range of industry-leading 3D CAD and visualization software without requiring file conversions, including Petrel for petroleum exploration, ArcGIS and more.		
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
Sl No	**Parameter**	**Minimum Specifications**
A7.3	Hand-Tracking Controllers	• Six-DOF controllers with optical tracking (≥ 200 fps), Each user should have their own tracked input device
A7.4	Software Compatibility Layer	Visualize 3D models and GIS datasets from applications such as Petrel, ArcGIS, etc
A7.5	Networking & Collaboration	• Multi-site VR via low-latency WAN links • Secure VPN with TLS 1.2 or later encryption • Real-time positional audio and spatial sound
A7.6	Simulation & Digital Twin Integration	• Support for real-time physics engines (PhysX, Havok or equivalent) with sub-millisecond update cycles
A7.7	Hardware Requirements	• Workstation: Intel Xeon (W-3400/3500 CPU on W790 Chipset) or AMD Ryzen Threadripper(RO 7000 WX CPU on WRX90 Chipset) • GPU: NVIDIA RTX A6000 (48 GB GDDR6) x 2nos or equivalent• RAM: 128 GB DDR4 ECC• Storage: NVMe SSD 2 TB (OS + cache), secondary HDD 8 TB for data
A7.8	Power & Cooling	• Redundant Power and Liquid cooling
A7.9	Operational Paradigm	Plug-and-play operational paradigm enabling VR model viewing within minutes of installation without programming requirements
A7.10	Stereoscopic Rendering Capability	Active stereoscopic rendering capability with infrared/RF synchronization for immersive 3D visualization and flicker-free operation

A7.11	Application Streaming Technology	Real-time streaming technology delivering host application graphics to multiple VR rendering clients with encrypted data transmission
A7.12	Data Conversion Requirement	Zero data conversion requirement; operates directly with existing 3D models without file modifications or application changes
A7.13	Installation Configuration	Software delivery via DVD-ROM or USB stick with complete installation packages and step-by-step configuration guidance
A7.14	Graphics Processing Requirements	Professional GPU support: NVIDIA Quadro RTX A6000 minimum, RTX series preferred for high-end applications and real-time rendering
A7.15	Network Architecture Support	Gigabit Ethernet connectivity for cluster operations with 10Gbit support for ultra-high-resolution systems and distributed rendering
A7.16	Resolution Support Matrix	Ultra-high-resolution support up to 8K (7680 x 4320) with seamless multi-projector / multi-display image fusion and pixel-perfect accuracy
A7.17	Performance Optimization Framework	Rendering acceleration technology optimizing host application performance for real-time VR operation with minimal latency overhead
A7.18	LED wall System Integration	Large-format LED Wall system integration with multi-display cluster support and seamless bezel compensation, edge blending capabilities
A7.19	Passthrough Technology Integration	XR passthrough functionality enabling real-world overlay and spatial design validation with millimetre-accurate registration
A7.20	Stereoscopic Output Modes	Multiple stereoscopic output modes: active shutter, passive polarized, INFITEC, autostereoscopic displays or equivalent with professional quality
A7.21	Display Resolution Support	Resolution scaling from standard HD to ultra-high definition 8K displays with pixel-perfect accuracy and professional colour management
A7.22	Refresh Rate Compatibility	Variable refresh rate support: 60Hz, 90Hz, 120Hz, 144Hz for flicker-free stereoscopic operation and optimal visual comfort
A7.23	Colour Depth Specification	Professional colour depth specification with HDR support for accurate visual representation and scientific visualization requirements

A7.24	Inside-out Tracking Support	Inside-out tracking support for standalone and tethered HMD systems with automatic calibration and drift correction
A7.25	Eye Tracking Integration	Advanced eye tracking integration for foveated rendering and user interaction analysis with 120Hz gaze detection capability
A7.26	Navigation Control System	Intuitive navigation control with speed adjustment, ground lock, and fly mode options for optimal user comfort and productivity
A7.27	Object Manipulation Interface	Direct object manipulation interface with magnetic snap-back and highlight functions for interactive design exploration
A7.28	Avatar Representation System	Avatar representation system with spatial positioning and voice communication integration for natural team interaction
A7.29	Voice Communication Integration	Integrated VoIP communication with mute/unmute controls for seamless team interaction and audio quality optimization
A7.30	GPU Clustering Capability	GPU clustering capability supporting distributed rendering for ultra-high-resolution displays with automatic load balancing

A8. SITC of Motorized 21.5" Pop-Up Capacitive Multitouch Displays with Integrated Chairman & Delegate System, Mini PC supporting Executive collaboration platform Software and Licenses, including all necessary hardware, accessories, for seamless integration and operation (10 for Collaboration workspace table + 2 for interactive table)		
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
Item Nos	**Parameter**	**Minimum Specifications**

A8.1	**Motorized Display**	
A8.1.1	Screen Size	21.5” TFT Active Matrix with LED backlight and minimum 50,000 hours backlight lifespan
A8.1.2	Screen Depth	Should be less than 16mm
A8.1.3	Resolution	1920px by 1080px
A8.1.4	Touch Technology	Capacitive multi touch with 10point touch support
A8.1.5	Aspect ratio	16:9
A8.1.6	Brightness	350nits
A8.1.7	Elevation angle	0-30°, fully ergonomic, without blocking sight and face
A8.1.8	Integrated Camera to the Display	5 MegaPixel camera suitable for facial recognition use case
A8.1.9	Panel buttons	Up / stop /down /signal switch / turn on or off
A8.1.10	Video Interface	2 nos HDMI
A8.1.11	Control Interface	RS232 /485, USB Data interface, USB Touch, USB Camera interface, Power supply interface
A8.1.12	Lift type	Motorized
A8.1.13	Lift time	30seconds or better
A8.1.14	Working Temperature	0-50°C
A8.1.15	Display & Microphone sync	To achieve a clean and aesthetically pleasing table design, the microphone and display screen should lift simultaneously
A8.1.16	Interconnecting Cables	Should consider all patch cables which loops from one device to another for control and Gigabit LAN patch cables
A8.2	**Chairman and Delegate Digital Conference System**	
A8.2.1	Microphone	Microphone with anti-wind and LED indicator
A8.2.2	Signal Interference	Anti RF interference from cell phone or similar devices
A8.2.3	Signal to noise ratio	52dB
A8.2.4	Pickup distance	up to 50cm

A8.2.5	Buttons	Integrated on top of Motorized display unit for Mic On/Off, Priority
A8.2.6	Discussion Modes	Free for all, First in First out, activate mic by detecting sound without press of button (in free mode), request mode to request and then to speak Chairman unit should have priority to close all other units or mute them temporarily
A8.2.7	Camera Control	The microphone lift system shall include dedicated manual controls for upward and downward movement, separate controls for mute and unmute functions, and at least one additional programmable button for future configuration or customization. When a microphone is activated, the camera should automatically focus on the corresponding delegate. In addition, automatic camera mixing should be present. The system should focus the first camera on the chairman, and when a delegate activates their microphone, both cameras should be visible side by side. The system should also provide the ability to manually override the automatic camera control.
A8.2.8	Controller	System should include controller with DSP built-in for in-room conference as well as video conference. The system should support voice activation, auto-mixing, and feedback suppression for improved audio quality Queue system allowing delegates to request to speak in an orderly manner.
A8.3	**Computing Units preloaded with Executive Engagement Platform license**	**Minimum Requirements**
A8.3.1	Processor	Intel i7 processor 12th Gen or above
A8.3.2	Memory	2 X 8GB or above
A8.3.3	Storage	500GB SSD or above
A8.3.4	Outputs	Minimum 2 x HDMI ports. If mDP (Mini DisplayPort), DP (DisplayPort), or USB-C output is available instead of HDMI, include HDMI converters / Connectors.
A8.3.5	Operating System	Windows 11 Enterprise LTSC
A8.3.6	LAN Ports	2nos Gigabit LAN Ports

A8.3.7	Certificate	BIS
A8.3.8	License	Executive collaboration platform Software License per Delegate unit, Microsoft Office LTSC and Antivirus with Internet Security

A9. SITC of Executive Engagement Platform for PoP- Up Units and Custom Interactive application for Dashboard Visualization, SCADA Data, Media Visualization, and Non-linear Presentations to Support Full Resolution of LED Display with on-premises perpetual license	
Parameter	**Minimum Specifications**
Brief Scope / Understanding	The Executive Engagement Platform is a transformative solution envisioned to enhance decision-making and operational efficiency in high-level organizational settings. It integrates advanced collaboration tools, interactive media handling, and real-time data visualization The platform's use of interactive touch interfaces, real-time annotations, and virtual whiteboarding fosters dynamic collaboration, while advanced technologies such as object recognition and RFID/NFC enhance usability and delegate authentication. It supports immersive experiences through large-scale LED displays, enabling real-time visualization of CCC Dashboard, 3D renderings, and live CCTV video feeds. Deployed on-premise with servers and secure local storage, the platform ensures data integrity and compliance with stringent security standards. By uniting robust hardware, intuitive software, and cutting-edge technologies, the solution establishes a user-centric environment that enhances collaboration, facilitates informed decision-making, and sets a new benchmark for executive operations.
Meeting Scheduling and Document and Agenda Distribution	- The collaboration System should support Callender Integration, when the meeting is scheduled it should show the list of meeting scheduled on the home screen. - The system should also support Multi-Video Conferencing platforms like (MS Teams, Cisco Webex, Zoom, Google Meet and other platforms). - During Video conferencing, user should have flexibility to share the workspace content to remote participant with live annotation.

Interactive Meeting Interface	Collaboration System UI should be user-friendly and engaging interface optimized for touchscreens.
	Media Interaction: Enable pinch-to-zoom, pan, and rotate functionality for media assets and documents.
	Real-Time Annotation: Allow real-time annotation and mark-up on PDFs, presentations, and other files.
	Virtual Whiteboard: Implement a virtual whiteboard for collaborative ideation and brainstorming. The collaboration system shall support intelligent content grouping and real-time, multi-user, sharing with synchronized annotation, and shall allow users to route either the entire workspace or selected (including annotated) items from any room device (touch monitor, operator console, or table) to the video wall.
Chairman Control and Collaboration Functionality	The system shall provide a centralized interface for the chairman to control which source is displayed on the main screen and each delegate's screen. The chairman can display a single source on all delegate screens or select different sources for individual delegates.
	Collaborative Annotation: The system shall enable real-time collaborative annotation on a single document, with all annotations visible to all participants.
	Integration with Command-and-Control Suite: The system shall have tight integration with the command and control suite to manage and control display sources, annotations, and screen sharing seamlessly.

A10. SITC of interactive table with 88" 4K Capacitive display in 32:9 aspect ratio, Embedded interactive player supporting RFID/NFC, Gestures sensors and commanding officer console made with Premium finish		
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
Sl No	**Parameter**	**Minimum Specifications**
A10.1	Display Type	LCD Backlit LED
A10.2	Diagonal Size of Screen	88"

A10.3	Resolution	4K with 32:9 aspect ratio
A10.4	Brightness	700cd/m2
A10.5	Response Time	16ms
A10.6	Touch Technology	Capacitive touch
A10.7	Multi-touch	> 40 point Multi-touch
A10.8	Object Recognition	Should have Object recognition technology to recognize pre configured objects on the display directly. Should supply 15 unique objects base
A10.9	Processor	Intel i9 processor 12th Gen or above
A10.10	Memory	2 X 32 GB
A10.11	Storage	500GB SSD
A10.12	Outputs	minimum 2 X HDMI / mDP / DP / USB-C output
A10.13	Operating System	Windows 11 Enterprise LTSC
A10.14	Certificate	BIS
A10.15	**Application Specification**	
A10.16	Multi-touch Interactive Application with Push to Play Content on Main Screen from Interactive Table	The Interactive application should enable the seamless pushing of media files, web dashboards, and presentations across the full length of the large-scale LED wall, creating an immersive and engaging experience. Presenter should have the ability to control and push the required content from the interactive table to the main LED wall using a multi-touch interactive application. The system should utilize a robust network infrastructure to ensure smooth and reliable content delivery from the interactive table to the main screen, incorporating advanced security measures and scalability for future expansion.
A10.17	Seamless Integration and Visualization of CCC and other applications on a Large-Scale Display System	The Custom Interactive application should integrate CCC and other applications and display it on a large, high-resolution screen from pixel to pixel in full screen mode. The user interface should be intuitive and user-friendly, allowing users to navigate through different plant areas, zoom in/out, and access detailed information on demand. The system should support the integration of live video feeds from CCTV cameras installed in field, enabling users to monitor

		critical areas in real-time. The solution should be scalable, allowing for the integration of additional data sources and the expansion of the display system as needed. The primary goal is to provide an immersive and comprehensive visual experience that enables users and delegates to view the entire plant or refinery data in a single, grand view, facilitating efficient monitoring, analysis, and informed decision-making processes.
A10.18	Integration of Live CCTV Camera Feed from the Field to Wide Curved Screen for Immersive Experience	The Custom Interactive application should incorporate the capability to stream live CCTV camera feeds from the field directly to the entire wide curved screen, providing an immersive and realistic viewing experience.
A10.19	Offline Feature Support	The application should support offline features, ensuring that previously downloaded files and assets are available even without internet connectivity.
A10.20	Integration with collaboration suit	The Interactive Table shall seamlessly integrate with the collaboration suite, supporting real-time 3D rendering, CCTV video content, synchronized display on the LED wall, multimedia file viewing with annotation and sharing, RFID/NFC-based interactions, gesture controls, and direct CMS access for unified operational collaboration.

A11. SITC of Holographic Box with real life 3D AI based Character creation and integration with Generative AI with LLM of company assets with interactive CMS		
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
Sl No	**Parameter**	**Minimum Specifications**
A11.1	Display Type	Holographic LCD with Edge Lit LED
A11.2	Dimensions of Box	2184 x 1200 x 550 mm
A11.3	Holographic Active Screen Size	1913 x 1084 mm
A11.4	Viewing Angle	89/89/89/89 (Typ.)(CR≥10)
A11.5	Colour Gamut	10-bit, 1.07 Billion colours

A11.6	Response Time	7ms
A11.7	Contrast ratio	1200:1
A11.8	Response Time	16ms
A11.9	Touch Type	Infrared Multi touch
A11.10	Touch Points	10 point touch
A11.11	Camera	48MP Camera
A11.12	Microphone	8 Array Directional Microphone
A11.13	Speaker	2× 20W
A11.14	**Application**	
A11.15	The Holographic Display System should provide an advanced 3D visualization platform designed for guest engagement. It should enable users to explore media and data through natural language interactions and multi-touch gestures.	
A11.16	The system should feature a 3D avatar acting as an AI assistant for welcoming guests, answering queries, and guiding interactions. The assistant should provide accurate and context-aware responses in English, Hindi, etc.,	
A11.17	Should support conversational interactions for querying organizational knowledge, procedural details, and historical insights, integrating with the CMS to fetch updated and accurate content.	
A11.18	Should support voice commands and multi-touch interactions for intuitive exploration of content and media. Gesture controls should allow zooming, rotating, and navigating content effortlessly.	
A11.19	Should provide a welcoming experience by offering personalized greetings and interactive tours of organizational milestones or key achievements.	
A11.20	Consider AI-enabled GPU servers integrated with the holographic system.	
A11.21	The system should integrate with a centralized CMS to access and dynamically update knowledge assets, including videos, documents, and interactive media. Any updates in the CMS should be reflected instantly in the system's knowledge base.	
A11.22	Should support interactions in English and Hindi to ensure accessibility for a diverse audience.	
A11.23	Should allow modular upgrades for additional features or content. Should support remote updates for software, rendering engines, and CMS integration, along with automated diagnostics for performance monitoring.	

A11.24	The system should support live, life-size video conversations using advanced holographic technology, enabling real-time interaction with remote participants. This feature should allow seamless integration of live video feeds into the holographic environment, creating an immersive experience for virtual meetings, guest interactions, or expert consultations. Remote participants should appear as holographic projections with synchronized audio for natural, face-to-face communication.
A11.25	The 3D Hologram should retrieve and present relevant media files, such as videos, PDFs, and images, from the CMS based on user queries. The content shall support interactive exploration through the holographic interface or associated interaction mechanisms such as gestures, voice commands, or auxiliary D interfaces, including functions like zoom, pan, rotate, or contextual navigation.

A12 SITC of 85" Interactive Display for War room / Collaboration Workspace with mount and interactive touch pen/stylus.		
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
Sl No	**Parameter**	**Minimum Specifications**
A12.1	**Interactive Display (85")**	
A12.2	Screen Size	85 inches
A12.3	Resolution	Ultra High Definition (UHD) 3840 x 2160
A12.5	Brightness	Minimum 300 cd/m²
A12.6	Viewing Angle	178°/178°
A12.7	Response Time	Maximum 8ms
A12.8	Connectivity	- HDMI Ports: Minimum 2 HDMI 2.0 ports - USB Ports: Minimum 2 USB 3.0 ports - DisplayPort: Minimum 1 DisplayPort 1.2 - LAN Port: 1 RJ45 Ethernet port Wireless Connectivity: Built-in Wifi and Bluetooth

A13. SITC of Video Conferencing, Audio systems, 5nos 30X 4K PTZ Conference Cameras and wireless presentation device		

Sl No	Parameter	Minimum Specifications
A13.1	**SITC of Video Conferencing Room Codec**	
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
A13.1.1	Processor	4 GHz, 16 Core CPU
A13.1.2	Memory	64GB
A13.1.3	Storage	1TB SSD
A13.1.4	Unified Graphics Memory	48GB
A13.1.5	Ethernet Ports	2 x Gigabit LAN
A13.1.6	VC software Compatibility	Zoom, Teams etc.,
A13.1.7	Rooms License	Should Include Zoom Room License and Conference Room Connector for SIP/H.323 Endpoint with 5 Year
A13.1.8	Camera and Display Support	Should support 5 Cameras and 4 Display output for Zoom Rooms
A13.1.9	Video Inputs	Should support Decoding of Video sources from IPKVM for Wired Content Sharing
A13.1.10	Room Controller	Compatible Wireless Controller with 8" touch screen
A13.1.11	Certification	BIS
A13.2	**SITC of 30X Optical Zoom 4K PoE Conference Camera**	
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
A13.2.1	Image Sensor	1/1.8' 4K Exmor CMOS
A13.2.2	Resolution	4K
A13.2.3	Optical Zoom	30X
A13.2.4	Digital Zoom	12X
A13.2.5	Focal Length	f = 6.9 mm (Wide) to 214 mm (Tele)
A13.2.6	Pan / Tilt Angles	Pan : ±170°, Tilt : +90° / -30°

A13.2.7	Power	PoE+
A13.2.8	Connectors	USB /LAN /HDMI
A13.3	**SITC of Audio Systems**	
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
A13.3.1	Ceiling speakers	180° horizontal coverage – designed for in-ceiling mounting along wall coverage zones .Frequency Range (-10 dB)-45 Hz - 20 kHz, Nominal Dispersion-75° Vertical,180° Horizontal\ Long-Term Power Handling-125 W (500 W peak), Sensitivity (SPL / 1 W @ 1 m)-93 dB SPL, Maximum SPL @ 1 m-114 dB SPL (120 dB SPL peak).
A13.3.2	Speakers Quantity	2
A13.3.4	Microphone	Ceiling Microphone with mute and unmute buttons and proper noise cancellation
A13.3.5	Microphone Quantity	2
A13.3.6	Integration	Should work seamless with Collaboration suit & Chairman delegate system for in-room discussion
A13.4	**SITC of Wireless Presentation Device**	
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
A13.4.1	Operating system	Should support Wireless sharing from following Operating System Windows, macOS, Android, iOS
A13.4.2	Wireless Dongles	Plug and play wireless buttons to cast screen to display without any Wi-Fi configuration by users. 2nos of Wireless dongle to be supplied
A13.4.3	Wireless Frequency Band	2.4 GHZ and 5 GHz Frequency band
A13.4.4	Temperature range Operating:	0°C to +40°C (+32°F to +104°F)
A13.4.5	Connectivity	LAN, Wi-Fi, USB Buttons

A13.4.6	Video Outputs	2 nos 4K Video outputs
A13.4.7	Minimum sources simultaneously on screen	2

A14. SITC of CCTV surveillance with Entrance door integrated with Facial Recognition and RFID Access		
Sl No	**Parameter**	**Minimum Specifications**
A14.1	**SITC of 4MP CCTV Camera with PoE – 12 Nos**	
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
A14.2	Camera Type	Fixed focal lens Camera PoE
A14.3	Image Sensor	1/3" Progressive Scan CMOS
A14.4	Day and Night	IR cut filter
A14.5	Quality of Image	4 MP
A14.6	Certification	BIS, STQC
A14.7	**SITC of NVR (Network Video Recorder) with VMS**	
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
A14.8	NVR with VMS	4K Recording of 12 CCTV cameras with storage computed for 30days continuous recording retention
A14.9	**Facial Recognition with Entrance door access control**	
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
A14.10	System Architecture	On Premise
A14.11	Integration	Access control integration to sync reference picture, card information to the facial recognition server
A14.12	Accuracy of Face detection	Up to 99.9%

A14.13	Speed	0.43ms
A14.14	Secondary Access	RFID Cards / Fingerprint

A15. SITC of Cables, Connectors, Cable cubbies Including USB extenders over IP, Accessories, Network Switches for Data Server Racks, and Miscellaneous Items required for the completion of the project		
Sl No	**Parameter**	**Minimum Specifications**
A15.1	SITC of High Speed HDMI 2.0 Patch Cables	Flexible high−speed HDMI cable with Ethernet High−performance cable with moulded Male HDMI connectors at both ends Supports signals up to 4K@60Hz and HDMI Ethernet Channel
A15.2	SITC of HDMI, USB and RJ45 Face Plate for Tables	Supply, installation and commissioning of 4K HDMI, USB 3.0 and Gigabit RJ45 ports as per the interior finish of the tables
A15.3	SITC of USB Extender	Supply and Installation of USB Extender for Point to point USB3.0 connectivity for single extension over CAT6A for distance
A15.4	SITC of USB to HDMI 4K Capture Card	Supply and Installation of the 4K HDMI Capture Card - Plug and play without installation of any software should be compatible with Zoom Rooms Software for Wired HDMI Content Sharing and as Camera feed
A15.5	SITC of Gigabit Managed L2 Network Switch	Supply and Installation of managed layer 2 network switches with stackable functionality. Should support Multicast & IGMP Snooping with 10GBPS Fiber or LAN uplink Ports
A15.6	SITC of Wireless Access Points	Supply, Installation and configuration of Advanced Dual-Band access points Switch Port Speed: Gigabit Radio Frequency: 2 4 and 5 Ghz Security features: WEP, WPA, WPA2 Security key bits: Up to 128-bit encryption Certification: BIS and WPC
A15.7	SITC of Server Rack	Supply and Installation of Server Rack with Adjustable trays, fan and necessary auxiliaries & mounting hardware

A15.8	SITC of Miscellaneous Items	Provision of any items not explicitly listed in the RFP but required to ensure the successful installation, professional handover, and full functionality of the project. This includes, but is not limited to, cable ties, cable managers, tapes, cable labelling, and other necessary accessories.

5.2. FHQ, Duliajan

a) The purpose of the Command-and-Control Centre (CCC) at FHQ, Duliajan and other field locations is to enable 24×7 centralized monitoring of field operations, ensuring real-time visibility of production, drilling activities, asset health, safety and security. It provides an integrated platform for incident detection, response and coordination, and supports operational decision-making through real-time data, analytics and remote assistance to field teams.

5.2.1. Indicative Control room BOQ

Sl no	Description	Unit	Qty
B	**FHQ, Duliajan**		
I	**Civil, Interior, Electrical & Utilities**		
B1	SITC of Civil & Interiors including Electrical, Fire Alarm and Suppression, Redundant UPS, HVAC, Lighting, Automation, Public Address System and Rodent Control system (Area of 70 X 35 X 7.5 feet)	Lot	1
II	**Video Wall, AV Infrastructure, CMS & Collaboration Platform, and other IT Hardware & Software Components**		
B2	SITC of Active Curved LED Display with P0.93 HDR, COB Flip-Chip with Top Protection, anti-humidity, anti-scratch and anti-collision as per the design - 9mtrs x 2mtrs Tolerance +/- 0.2m	Set	1
B3	SITC of 32-point Multi-Touch Overlay 9mtrs x 2mtrs Tolerance +/- 0.2m	Set	1
B4	SITC of Command and Control Suite 4K60 Secured IPKVM, Encoders, Operator Console, and Videowall Decoders with videowall processor with redundancy : Free form, PIP, POP, HDMI embedded audio switching, Sources can windowed, layered, and positioned anywhere on the video display for all Areas - 20 nos 4K60 Sources, **5nos** 4K Workspace with wide monitors (32:9 aspect ratio) attached to Operator console codec and multifunctional keyboard, Quantity of videowall decoders required to achieve Pixel-to-Pixel Resolution and for VC codec	Lot	1

B5	SITC of Computing Rack servers for running Dashboards and Applications	Nos	15
B6	SITC of Interactive Collaboration Suite with Videowall Controller supporting pixel to pixel resolution of Active LED Display with custom resolution and have 40 nos of 4K HDMI Inputs for interactive Collaboration with Wireless Tablet controller for extended experience and Physical whiteboard capture	Nos	1
B7	SITC of a multi-user 3D stereoscopic immersive simulation system on an LED Wall, equipped with 3D tracked active stereoscopic glasses and hand-tracked controllers, designed for geological exploration and analysis, training and simulation and digital twins presentation. The system shall support a wide range of industry-leading 3D CAD and visualization software without requiring file conversions, including Petrel for petroleum exploration, ArcGIS and more.	Lot	1
B8	SITC of 85" Interactive Display for Collaboration Workspace with mount	Set	1
B9	SITC of Video Conferencing, Audio systems, 5nos 30X 4K PTZ Conference Cameras and wireless presentation device	Lot	1
B10	SITC of CCTV surveillance with Entrance door integrated with Facial Recognition and RFID Access	Lot	1
B11	SITC of Cables, Connectors, Extenders, network components, racks, and Miscellaneous items	Lot	1

5.2.2. Detailed Technical & Functional Requirements

I. Civil, Interior, Electrical & Utilities

B1. SITC of Civil & Interiors including Electrical, Fire Alarm and Suppression, Redundant UPS, HVAC, Lighting, Automation, Public Address System and Rodent Control system (Area of 70 X 35 X 7.5 feet)

a) Bidder to specify Make & Model of all quoted items in the table below:

Slno	Item Description	MAKE	MODEL
1	UPS		
2	PAC		
3	Fire Alarm & Suppression		

b) The Command-and-Control Centre shall be designed and executed in full compliance with ISO 11064 (ergonomic design of control centres), ISO/IEC 62368-1 (safety of AV, IT and communication equipment), and applicable Human Factor Engineering (HFE) principles.

c) The control room shall be planned according to international safety, ergonomic, environmental, operator health, sustainability, and functionality norms to ensure it meets world-class standards and is suitable for continuous 24x7 operation.

d) The design of the control room interiors and control desks shall strictly adhere to ISO 11064 for ergonomics and HFE, optimising operator comfort, health, visibility, reach and efficiency.

e) In a typical control room, the environment is defined predominantly by the ceiling, flooring, control desks and wall panelling, which constitute nearly 90% of the visible area, and therefore major considerations shall be given to these components so that the entire functional design of the command centre remains fully ISO-compliant.

f) All integrated AV, IT and communication systems must carry valid certifications confirming compliance with ISO/IEC 62368-1.

g) The bidder shall provide a comprehensive design package that includes 3D renders and an interactive 3D walkthrough model, along with complete Good for Construction (GFC) working drawings. The package shall also cover electrical single-line diagrams and layouts, AV signal flow diagrams and rack elevations, automation and control system drawings, conduit and containment layouts, and a complete networking architecture with redundancy and cyber-security considerations.

h) These deliverables must be coordinated across all disciplines, including architecture, structure, HVAC, electrical, IT and AV, to eliminate clashes and ensure seamless execution. The interior design shall be contemporary, aesthetically appealing, ergonomically optimised, safe and suitable for a 24x7 working facility, avoiding conventional materials such as wooden cladding, aluminium composite panels, laminates, fabric, paint and Plaster of Paris in the control room areas, as these are prone to damage, ageing and fire hazards.

i) On-site cutting, gluing or screwing of factory-finished components shall not be permitted to maintain quality and finish standards.

j) Flooring, false ceiling, doors, carpet, and all other interior works required for the Control Room shall be in the bidder's scope.

k) Ergonomic norms for lighting, acoustics, airflow and spatial design shall be strictly followed. Illumination on work surfaces shall range between 200 and 750 lux, with ambient lighting maintained at a minimum of 200 lux, and lux-level reports must demonstrate compliance with ISO 11064 lighting norms.

l) Wall panelling and partitions shall achieve a Sound Transmission Class (STC) of 35 or higher, and modular perforated ceilings and wall panelling shall provide a Noise Reduction Coefficient (NRC) of at least 0.60 while ensuring that micro-perforations are virtually invisible from normal viewing distances and that the overall finish remains smooth and visually appealing.

m) Decorative acoustic laminate flooring shall contribute to noise reduction, with a reduction in impact sound of at least 14 dB as per ISO 717-2. The design shall ensure proper airflow, maintaining an optimal temperature and sufficient air movement to create a comfortable and alert working environment, with airflow systems complying with ISO 11064-6 requirements.

n) Operator consoles and 24x7 seating shall adhere to ISO 11064 requirements, offering height adjustability, integrated cable management, anti-glare work surfaces and appropriate ergonomic support. Provision for a minimum of **five operator** workstations shall be ensured.

o) The control desk shall be designed as per Human Factor Engineering principles, ensuring that operator postures, sightlines to video walls and workstations, visibility of critical information and accessibility of controls are optimised for safety and productivity. Lighting levels shall be maintained at the work surfaces with controlled luminance ratios for video walls, and the acoustic design shall ensure that the noise criteria for control rooms are met without compromising aesthetics.

p) Meeting & Collaboration Space shall be provided with a fully equipped conference area featuring an AV-integrated **conference table** (power, data, and cable-management ports) and ergonomic conference chairs (fabric/leather finish) to accommodate at least **10 participants.**

q) A sofa-based seating lounge shall be provisioned within the control room, comprising ergonomically designed sofas with a minimum seating capacity of eight (8) persons, suitable for standby personnel, quick reviews, and collaborative discussions.

r) Environmental controls, including HVAC and airflow, shall be integrated to maintain thermal comfort suitable for long-duration occupancy in a mission-critical environment.

s) The bidder shall provide 30 TR of PAC/VRF cooling for the CCC areas including the server/UPS room, configured N+1 with automatic lead–lag sequencing, and continuous 24×7 operation. The PAC/VRF system shall integrate with the room's automation for alarm, sequencing, humidity control, and environmental compliance as specified.

t) Indoor UPS, Server, and HVAC Rooms shall be designed with proper soundproofing and thermal insulation to ensure noise levels do not exceed 50 dB(A) under operational load. Flooring shall be anti-static, load-bearing, and suitable for server racks, UPS systems, and precision AC units, with raised flooring for cable and airflow management. The bidder shall provide complete grounding/earthing and lightning protection, along with cable trays, ducting, and all required penetration points for safe and organized power and network cabling.

u) The bidder shall provide a modular online UPS of not less than 40 kVA, with N+1 redundancy, dual AC input, dual output distribution, and integrated static + maintenance bypass. The UPS shall back Technology and AV/IT hardware, Fire Alarm, Rodent Control, Public Address, network/compute, and emergency lighting circuits; non-critical lighting and raw sockets shall remain on raw power.

v) The UPS shall be sized for 30 minutes backup on full load Battery technology may be VRLA or Li-ion, with appropriate BMS/monitoring, ventilation, and safety as per standards.

w) The modular wall partitions shall meet a minimum fire resistance rating of 60 minutes for thermal insulation (I), integrity (E) and stability (R) as per BS 476 Part 20 and 22 or Indian equivalent standards. Such fire resistance tests must be carried out by UL, Intertek or an authorised Fire Research Laboratory under the Government of India. In addition to fire-rated materials, the design shall incorporate UPS-backed redundant power distribution, proper grounding and surge protection to safeguard all critical equipment and ensure continuity of operations during disturbances and emergencies.

x) An intelligent lighting and environmental automation system shall be integrated into the Command-and-Control Centre through KNX or equivalent building automation platform to ensure seamless control, energy efficiency and operational reliability. The system shall manage lighting levels, occupancy-based illumination adjustments, daylight compensation, environmental monitoring, and coordination with HVAC systems to maintain thermal comfort and meet the ergonomic and operational requirements of ISO 11064.

y) To ensure maximum safety and compliance, all electrical cabling used within the control room including lighting, power, data, and automation wiring shall be FRLSH (Flame Retardant Low Smoke and Halogen-free), ensuring minimal smoke emission, reduced toxicity and superior fire-safe performance suitable for mission-critical 24x7 environments.

z) Environmental norms and sustainability requirements shall be incorporated into the selection of materials and systems. The materials used in the control room interiors, including modular metal ceilings, metal wall panelling and control desks, shall comply with RoHS (Restriction of Hazardous Substances) guidelines, ensuring that they are free from hazardous substances such as lead, mercury and cadmium so that the final installation does not contaminate the environment and contributes to a healthier future for subsequent generations.

aa) Operator health-related norms shall be given high importance. The control desks and interior components, including acoustic laminate floors, ceilings and panelling, must emit volatile organic compounds (VOCs) within permissible limits to ensure healthy indoor air quality. These components shall therefore have Greenguard Gold or Indian equivalent VOC certification, as VOCs are known to be responsible for respiratory diseases and a significant proportion are carcinogenic in nature. Only materials that meet rigorous standards for low VOC emissions into indoor air shall be used, with special consideration for operators who spend 8–12 hours at a stretch within the control room, so that the environment remains safe even for sensitive individuals and confined spaces.

bb) The interior design shall be modular and scalable for future readiness. Modular designs must support quick replacement of damaged components, reducing downtime during maintenance, and the overall interior configuration shall be

modular to facilitate easy installation, maintenance, retrofitting and scalability. It must be capable of accommodating future technological advancements that are not currently envisaged. All critical design components, including ceilings, wall panelling and control desks, shall be prefabricated in the factory and delivered ready to install without modification at site, and Factory Acceptance Tests (FAT) shall be conducted for ceilings and panelling prior to shipment to ensure quality and compliance. Any on-site changes shall be restricted to HVAC duct alignment, last-mile cabling and small adjustments. The control room solutions must support 24x7 operations with zero downtime during maintenance.

cc) At handover, the bidder shall submit as-built drawings, updated CAD files, O&M manuals and a detailed compliance matrix mapping all ISO, HFE, environmental, fire safety, seismic and health-related requirements against the final executed design. Training for operators and maintenance teams shall be provided to ensure effective use and upkeep of the facility. All relevant warranties, service plans and certification documents shall be submitted as part of the handover documentation to establish that the Command-and-Control Centre fully conforms to the specified standards and performance criteria.

II. Video Wall, AV Infrastructure, CMS & Collaboration platform and other IT Hardware & Software Components

B2	SITC of Active Curved LED Display	
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
Sl. No	**Parameter**	**Minimum Specifications**
B2.1	Pixel Pitch	0.93 mm or lesser
B2.2	Screen Size	9mtrs x 2mtrs Tolerance +/- 0.2m
B2.3	Configuration	COB Full Flip Chip
B2.4	Brightness	600 cd/m2 or higher
B2.5	HDR Support	HDR10+
B2.6	Contrast Ratio	20,000:1 or higher
B2.7	Refresh Rate	7680 Hz or higher
B2.8	Bit Depth	16-bit or higher
B2.9	Viewing Angle	H: 160° or higher, V: 155° or higher

B2.10	3D Function - Stereoscopic	Active 3D with Emitter to support full length of display and designated portion of the LED Display with supply 10 nos Active 3D Glasses
B2.11	Operation Time	Continuous 24/7 operation (24 hours, 7 days a week)
B2.12	Lifetime	100,000 hrs
B2.13	Operating Temperature	0°C ~ +40°C
B2.14	Operating Humidity	10%~80%RH
B2.15	Power Redundancy	Each Cabinet should have dual Power - one for active and one for redundancy
B2.16	Signal Redundancy	Each Cabinet should have dual Signal / Data Port - one for active and one for redundancy
B2.17	Protection and Surface Treatment	Anti-Scratch, Anti-Dust, Anti-Moisture, Anti- Collision, Anti-Glare, Anti-Static, Anti-Moiré, Front Waterproof
B2.18	Spare Modules	Minimum 5% Spare Modules to be provided along with the supply
B2.19	Certifications	BIS and Low Blue light / Eye Comfort Certifications
B2.20	Curve	Supplier to provide special cabinets (Aluminium Diecast) which can accommodate an angle of 0~2.5 Degrees between each module to meet the curve requirement.
B2.21	Mounting and Fabrication	Should include necessary mounting structure and all accessories to mount the LED walls to ensure precision installation
B2.22	**LED Controller Specifications**	
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
B2.23	Qty of LED Controllers	**2 nos** (1 no for Active Connection and 1no for Redundant Connection)
B2.24	Each Controller should have below mentioned Qty of Inputs, Outputs and features	
B2.25	Type of Inputs	HDMI 2.0/2.1 4K with Custom Resolution Input supported (Custom EDID capability)

B2.26	Number of Inputs	Required number of Inputs to achieve Pixel-to-Pixel Resolution in Stereoscopic 3D & HDR10+ and additional 20% spare input ports
B2.27	Number of Outputs (RJ45 / OFC)	Required Outputs to achieve Pixel-to-Pixel Resolution in HDR10+ and stereoscopic 3D Mode and additional 10% for Spare Output ports
B2.28	Power Redundancy	LED Controller should have dual power one for active and one for redundancy
B2.29	Preview and Control Ports	Minimum one preview output should be available and one ethernet controller should be available
B2.30	Features	- Hot-swappable input and output cards - Frame synchronization: image should be played smoothly, without any stuck, frame loss, tearing or piercing - Should supports HDR10+ and Stereoscopic 3D Function - Auto monitoring and fault alarms should be available

B3. SITC of 32-point Multi-Touch Overlay Size 9mtrs x 2mtrs Tolerance +/- 0.2m		
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
Sl. No	**Parameter**	**Minimum Specifications**
B3.1	Touch Points	32 Simultaneous touch points
B3.2	Touch Method	Finger and Stylus (with diameter >5mm)
B3.3	Finger Touch Accuracy	± 1.5 mm
B3.4	Touch Response Time	6ms-16ms
B3.5	OS Compatibility	Windows, Mac OSX, Linux
B3.6	HID Support	Yes

B3.7	Operating Temperature	-20°C to 60°C
B3.8	Storage Temperature	-40°C to 85°C
B3.9	Operating Humidity	10% to 90% RH, non-condensing;
B3.10	Storage Humidity	10% to 90% RH, non-condensing
B3.11	Max Power Consumption	5W
B3.12	Interface	USB 2.0

B4. SITC of Command-and-Control Suite 4K60 IPKVM, Encoders, Operator Console Codec, and Videowall Decoders with videowall processor with redundancy		
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
Sl No	**Parameter**	**Minimum Specifications**
B4.1	**General**	
B4.1.1	Architecture	Distributed Architecture & Scalable (new operator desks or sources can be added without stopping existing operations)
B4.1.2	Brand or Hardware Agnostic	Should support multi-brand PCs with various operating systems, cameras, and display technologies
B4.1.3	True Redundancy and High Availability	The True Redundancy and High Availability (HA) framework should ensure that the system remains fully operational under any fault condition — whether network, hardware, power, or controller-related 1. Controller-Level Redundancy – dual synchronized controllers (active/standby). 2. Network-Level Redundancy – dual switches, VLAN separation, and redundant fiber paths. 3. Power-Level Redundancy – dual independent power supplies for each node. 4. Device-Level Redundancy – duplicate TX/RX units for critical feeds and displays.

B4.1.4	Curved Monitor	Should supply 49" Curved diagonal monitor with 32:9 aspect ratio (Quantity – 4 nos)
B4.2	**KVM Transmitters**	
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
B4.2.1	Quantity Required	1 Lot
B4.2.2	Video inputs and resolutions	Resolutions: 3840 x 2160p 60Hz or Higher
B4.2.3	Colour depth	24 Bit (RGB888)
B4.2.4	Compression	Lossless compression: frame differentiation Lossy compression: Dynamic compression
B4.2.5	Network	Redundant
B4.2.6	Supported network cabling	Cat 5e/6/7 or single mode fiber, multimode fiber
B4.2.7	MTBF	Minimum 250,000 hours
B4.3	**KVM Receivers**	
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
B4.3.1	Quantity Required	As per required to achieve pixel to pixel resolution of video wall with HDR and Stereoscopic 3D and pixel to pixel resolution of 32:9 wide aspect ratio Operators monitor + for VC Decoding + for Collaboration workspace
B4.3.2	Video Outputs and resolutions	Resolutions: 3840 x 2160p 60Hz or Higher
B4.3.3	Colour depth	24 Bit (RGB888)
B4.3.4	Compression	Lossless compression: frame differentiation Lossy compression: dynamic compression
B4.3.5	Audio	Should have Analog Audio out
B4.3.6	USB	USB for KVM; 1x USB 2.0 Full-Speed)
B4.3.7	Supported network cabling	Cat 5e/6/7 or single mode fiber, multimode fiber
B4.3.8	MTBF	Minimum 250,000 hours

B4.4	**Multifunctional Keyboard for Operators / Operator Console with Touch Panel , KVM Receiver, Key board and mouse**	
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
B4.4.1	Quantity Required	5
B4.4.2	Audio	Audio Out and microphone
B4.4.3	USB	Should support KVM switching and mixing with multiple sources simultaneously
B4.4.4	Speaker	2x 20W maximum
B4.4.5	Display	Minimum 10.1" LCD touch display, resolution 1280x800 @60Hz Contrast: min. 500:1, typical 700:1 Brightness: min. 320 cd/m2, typical 400 cd/m2
B4.4.6	Source Control	The touch display should support, multi touch control of any connected source with zoom in zoom out gestures etc.
B4.4.7	Environment Control	The Operator Console should provide customizable layout for environment control for controlling lights, HVAC, doors, height adjustments of consoles etc.
B4.4.8	Smart Control	The Operator Console shall enable intuitive, context-aware control of multiple systems, sources, and video-wall layouts simultaneously, providing seamless operator interaction and workflow efficiency
B4.4.9	Programmable Hardware Keys	- Operator Console Should have Dedicated keys map to system functions or critical sources - Keys should be fully reconfigurable via controller interface.
B4.4.10	Programmable Touchscreen Display	- Operators should be able to create custom layouts with soft-keys and role-based menus. - Operators shall, via a role-based desktop interface, be able to preview, route authorized sources/layouts between their workstation, the video wall and other room displays; securely

		share windows - Operator Consol should dynamically adapt to user profiles, reflecting permissions and assigned sources. - Operator Consol should support real-time feedback for source selection, wall presets, and communication channels.
B4.4.11	User Personalization and Free Seating Integration	- Operator should be able to log in through password directly using keyboard. - Upon login, personal layouts, preferred sources, and permissions should load automatically. - Operator console should behave differently for each login based on the role defined for each user.
B4.4.12	MTBF	Minimum 50,000 hours
B4.4.13	**KVM Switch / Network Switch**	
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
B4.4.14	Number of ports	To be calculated as per the node requirements and should have minimum 20% of Ports vacant for redundancy and future scalability
B4.4.15	Power supply	Should have hot redundant power supplies

B5	**SITC of Computing Rack servers to access Dashboards and Applications in Control Room**	
	Make	**To be Specified by Bidder**
	Model	**To be Specified by Bidder**
Item Nos	**Parameter**	**Minimum Specifications**
B5.1	Processor	2.4Ghz, 16Core, 32 threads, 24MB Cache
B5.2	Motherboard	Dual Socket compatible with the specified processor

B5.3	Memory	2 X 32GB
B5.4	Storage	500GB SSD
B5.5	Graphics Card	4GB Server Grade Graphics card with Minimum 3 x HDMI ports. If mDP (Mini DisplayPort), DP (DisplayPort), or USB-C output is available instead of HDMI, include HDMI converters / connectors.
B5.6	Ethernet Ports	2 x Gigabit LAN
B5.7	Operating System	Windows 11 Enterprise LTSC / Pro
B5.8	Software	Microsoft Office LTSC and Antivirus with Internet Security
B5.9	Form Factor	2U Rack mount with Rails compatible with standard server racks
B5.10	Power Redundancy	Dual power configuration with one active power unit and one redundant power unit
B5.11	Certification	BIS

B6	**SITC of Interactive Collaboration Suite with Videowall Controller supporting pixel to pixel resolution of Active LED Display with custom resolution and 4K HDMI Inputs for interactive Collaboration with Wireless Tablet controller for extended experience**	
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
Sl No	**Parameter**	**Minimum Specifications**
B6.1	Video wall processing with Sync	Yes
B6.2	Custom Resolution Support	Yes

B6.3	Maximum Resolution Support and Required Outputs	Pixel to Pixel resolution of the LED Display without any scaling
B6.4	Processor	2X 16Core, 32 threads, 24MB Cache
B6.5	Memory	4 X 32GB
B6.6	Storage	2TB SSD
B6.7	Maximum Output support	HDMI 2.0 x 20nos supporting Videowall with bezel compensation
B6.8	Form Factor	4U Rack mount with Rails compatible with standard server racks
B6.9	Inputs	Should support at least 20 numbers of 4K HDMI Inputs. System should be based on scalable architecture for future source additions
B6.10	Power Redundancy	Dual power configuration with one active power unit and one redundant power unit
B6.11	Certification	BIS
B6.12	Collaboration & Multi-Window Control	- Ability to open any number of windows on the Interactive Video Wall simultaneously without limitations. - Display multiple HDMI inputs anywhere on the screen (Quad View, Dual View, Single View, PIP, POP, and flexible combinations). - Control multiple sources simultaneously with HDMI inputs with Touchback feature. - Open multiple web applications directly on the screen (no remote PC required) with auto scale adjustment. - Option to present media files via FTP or pre-loaded content. - Session SAVE capabilities - Play 3D video file on Video Wall
B6.13	Multi-touch & Interactivity	- Multi-touch and multi-user interactivity (multiple users working simultaneously). - Support for gestures: pinch-in, pinch-out, zoom-in, zoom-out - Whiteboard functionality with annotation tools (multiple pen weights, colours). - On-screen annotation with screenshot/snapshot capture.

		- Multiple Groups to with Hide and Unhide options & Drag/Drop Functionality for Multiple Contents (URL, Images, Videos, PDF, HDMI Inputs). - The collaboration device shall allow users to wirelessly send images, videos, and documents from laptops and mobile devices to the video wall. - The collaboration system should support workspace sharing with real-time annotation, allowing simultaneous multi-user annotation from different locations on a shared canvas. For group discussions, the same content must be consistently displayed across the video wall, touch table, operator consoles and in meeting room 21.5”touch monitor.
B6.14	Wireless Sharing	- Wireless device sharing with support for Windows, MacOS, iOS, Android, and Linux. - Unlimited free licenses for users across all OS platforms.
B6.15	Enterprise Deployment & Licensing	- On-premises enterprise-grade deployment. - Supplied with perpetual licensing (no recurring subscription costs). - For perpetual/on-premise licenses specified under enterprise deployment, the bidder shall provide all patches, updates, maintenance, and technical support required during the contract/AMC period at no extra cost to OIL.
B6.16	CMS System Resources & Maintenance	CMS system to manage & refresh content by OIL. Features: sorting, filtering, relations, flexible field types, Integrated media library with reusability and image processing Integrated media library with reusability and image processing Minimum storage support: 500GB, scalable as needed. Perpetual licensing and 5-year maintenance plan including hosting, bandwidth, CMS upkeep, and upgrades (to be included in AMC)
B6.17	Realtime 3DRendered Imagery of Plant or Refinery or Exploration Area	The Interactive application should showcase 3D rendered imagery on the main LED display. The presenter should have the ability to control and navigate the view.
B6.18	Integration of CCTV Camera Feed from the Field to Wide Curved	The Interactive application should incorporate the capability to stream live camera feeds from the field

	Screen for Immersive Experience	directly to the entire wide curved screen, providing an immersive and realistic viewing experience. The curved screen, with its expansive wide width, should offer a truly immersive experience, envelop the viewers and making them feel as if they are present in the field. The system should employ advanced video processing techniques to stitch /positioning the window side by side together the multiple camera feeds seamlessly, creating a cohesive and continuous panoramic view. The system should support high-resolution playback of the live video, ensuring crisp and detailed imagery across the entire screen.
B6.19	Offline Feature Support	The application should support offline features, ensuring that previously downloaded files and assets are available even without internet connectivity.
B6.20	Responsive Multi-touch Content	The application should support easy, responsive multi-touch content with unlimited touchpoints, supporting actions and triggers, pinch zoom, pan, and rotate of any media files.
B6.21	Media File Support	The application should support various media files such as videos, PDFs, images, web browsers, Excel sheets, GIS applications / MAPS support
B6.22	Annotation and sharing	The application should allow annotation on the screen and the ability to save files. It should support sharing selected media files and annotated contents via one-click email, USB storage, network storage, etc.
B6.23	RFID/NFC Integration	The application should support RFID/NFC devices or sensors with plug-and-play integration.
B6.24	Timer Triggers	The application should have timer triggers for countdowns and inactivity timers to add conditional logic, such as "If no interaction after x minutes, play screensaver video." Or use a scheduler to change content and more at specified dates/times.
B6.25	Gesture-Based Actions	The application should support actions based on gestures, such as writing "W" as a gesture to trigger and populate relevant content.

B7. SITC of a multi-user 3D stereoscopic immersive simulation system on an LED Wall, equipped with 3D tracked active stereoscopic glasses and hand-tracked controllers, designed for geological exploration and analysis, training and simulation and digital twins' presentation. The system shall support a wide range of industry-leading 3D CAD and visualization software without requiring file conversions, including Petrel for petroleum exploration, ArcGIS and more.		
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
Sl No	**Parameter**	**Minimum Specifications**
B7.1	System Designation	3D visualization software suite designated as immersive VR and 3D solutions platform enabling instant VR integration.
B7.2	Tracked 3D Glasses	Active stereoscopic glasses with integrated IR/RF tracking for Position and viewing angles, Each user's glasses must be tracked individually, and the tracking software must output the tracking data separately
B7.3	Hand-Tracking Controllers	• Three-DOF controllers with optical tracking (≥ 200 fps), Each user should have their own tracked input device
B7.4	Software Compatibility Layer	Visualize 3D models and GIS datasets from applications such as Petrel, ArcGIS, etc
B7.5	Networking & Collaboration	• Multi-site VR via low-latency WAN links • Secure VPN with TLS 1.2 or later encryption • Real-time positional audio and spatial sound
B7.6	Simulation & Digital Twin Integration	• Support for real-time physics engines (PhysX, Havok or equivalent) with sub-millisecond update cycles
B7.7	Hardware Requirements	• Workstation: Intel Xeon (W 3400/3500 CPU on W790 Chipset) or AMD Ryzen Threadripper (RO 7000 WX CPU on WRX90 Chipset) • GPU: NVIDIA RTX A6000 (48 GB GDDR6) x 2nos • RAM: 128 GB DDR4 ECC• Storage: NVMe SSD 2 TB (OS + cache), secondary HDD 8 TB for data
B7.8	Power & Cooling	• Redundant Power and Liquid cooling
B7.9	Operational Paradigm	Plug-and-play operational paradigm enabling VR model viewing within minutes of installation without programming requirements

B7.10	Stereoscopic Rendering Capability	Active stereoscopic rendering capability with infrared/RF synchronization for immersive 3D visualization and flicker-free operation
B7.11	Application Streaming Technology	Real-time streaming technology delivering host application graphics to multiple VR rendering clients with encrypted data transmission
B7.12	Data Conversion Requirement	Zero data conversion requirement; operates directly with existing 3D models without file modifications or application changes
B7.13	Installation Configuration	Software delivery via DVD-ROM or USB stick with complete installation packages and step-by-step configuration guidance
B7.14	Graphics Processing Requirements	Professional GPU support: NVIDIA Quadro RTX A6000 minimum, RTX series preferred for high-end applications and real-time rendering
B7.15	Network Architecture Support	Gigabit Ethernet connectivity for cluster operations with 10Gbit support for ultra-high-resolution systems and distributed rendering
B7.16	Resolution Support Matrix	Ultra-high-resolution support up to 8K (7680 x 4320) with seamless multi-projector / multi-display image fusion and pixel-perfect accuracy
B7.17	Performance Optimization Framework	Rendering acceleration technology optimizing host application performance for real-time VR operation with minimal latency overhead
B7.18	LED wall System Integration	Large-format LED Wall system integration with multi-display cluster support and seamless bezel compensation, edge blending capabilities
B7.19	Passthrough Technology Integration	XR passthrough functionality enabling real-world overlay and spatial design validation with millimetre-accurate registration
B7.20	Stereoscopic Output Modes	Multiple stereoscopic output modes: active shutter, passive polarized, INFITEC, autostereoscopic displays or equivalent with professional quality
B7.21	Display Resolution Support	Resolution scaling from standard HD to ultra-high definition 8K displays with pixel-perfect accuracy and professional colour management
B7.22	Refresh Rate Compatibility	Variable refresh rate support: 60Hz, 90Hz, 120Hz, 144Hz for flicker-free stereoscopic operation and optimal visual comfort

B7.23	Colour Depth Specification	Professional colour depth specification with HDR support for accurate visual representation and scientific visualization requirements
B7.24	Inside-out Tracking Support	Inside-out tracking support for standalone and tethered HMD systems with automatic calibration and drift correction
B7.25	Eye Tracking Integration	Advanced eye tracking integration for foveated rendering and user interaction analysis with 120Hz gaze detection capability
B7.26	Navigation Control System	Intuitive navigation control with speed adjustment, ground lock, and fly mode options for optimal user comfort and productivity
B7.27	Object Manipulation Interface	Direct object manipulation interface with magnetic snap-back and highlight functions for interactive design exploration
B7.28	Avatar Representation System	Avatar representation system with spatial positioning and voice communication integration for natural team interaction
B7.29	Voice Communication Integration	Integrated VoIP communication with mute/unmute controls for seamless team interaction and audio quality optimization
B7.30	GPU Clustering Capability	GPU clustering capability supporting distributed rendering for ultra-high-resolution displays with automatic load balancing

B8. SITC of 85" Interactive Display for Warroom / Collaboration Workspace with mount		
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
Sl No	**Parameter**	**Minimum Specifications**
B8.1	**Interactive Display (85")**	
B8.2	Screen Size	85 inches
B8.3	Resolution	Ultra High Definition (UHD) 3840 x 2160
B8.5	Brightness	Minimum 300 cd/m²

B8.6	Viewing Angle	178°/178°
B8.7	Response Time	Maximum 8ms
B8.8	Connectivity	- HDMI Ports: Minimum 2 HDMI 2.0 ports - USB Ports: Minimum 2 USB 3.0 ports - DisplayPort: Minimum 1 DisplayPort 1.2 - LAN Port: 1 RJ45 Ethernet port Wireless Connectivity: Built-in Wi-Fi and Bluetooth

B9	**SITC of Video Conferencing, Audio systems, 5nos 30X 4K PTZ Conference Cameras and wireless presentation device**	
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
Sl No	**Parameter**	**Minimum Specifications**
B9.1	**SITC of Video Conferencing Room Codec**	
B9.1.1	Processor	4 GHz, 16 Core CPU
B9.1.2	Memory	64GB
B9.1.3	Storage	1TB SSD
B9.1.4	Unified Graphics Memory	48GB
B9.1.5	Ethernet Ports	2 x Gigabit LAN
B9.1.6	VC software Compatibility	Zoom Rooms, Teams, Webex, etc.,
B9.1.7	Rooms License	Should Include Zoom Room License and Conference Room Connector for SIP/H.323 Endpoint with 5 Year
B9.1.8	Camera and Display Support	Should support 5 Cameras and 4 Display output for Zoom Rooms
B9.1.9	Video Inputs	Should support Decoding of Video sources from IPKVM for Wired Content Sharing
B9.1.10	Room Controller	Compatible Wireless Controller with 8" touch screen
B9.1.11	Certification	BIS

B9.2	**SITC of 30X Optical Zoom 4K PoE Conference Camera**	
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
B9.2.1	Image Sensor	1/1.8' 4K Exmor CMOS
B9.2.2	Resolution	4K
B9.2.3	Optical Zoom	30X
B9.2.4	Digital Zoom	12X
B9.2.5	Focal Length	f = 6.9 mm (Wide) to 214 mm (Tele)
B9.2.6	Pan / Tilt Angles	Pan : ±170°, Tilt : +90° / -30°
B9.2.7	Power	PoE+
B9.2.8	Connectors	USB /LAN /HDMI
B9.3	**SITC of Audio Systems**	
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
B9.3.1	Ceiling speakers	180° horizontal coverage – designed for in-ceiling mounting along wall coverage zones Frequency Range (-10 dB)-45 Hz - 20 kHz, Nominal Dispersion-75° Vertical,180° Horizontal\ Long-Term Power Handling-125 W (500 W peak), Sensitivity (SPL / 1 W @ 1 m)-93 dB SPL, Maximum SPL @ 1 m-114 dB SPL (120 dB SPL peak), Transducers-1 x 8-inch woofer,1 x compression driver
B9.3.2	Speakers Quantity	2
B9.3.3	Microphone	Ceiling Microphone with mute and unmute buttons and proper noise cancellation
B9.3.4	Microphone Quantity	2
B9.3.5	Amplifier	DANTE Power amplifier 600W @ 100/70V or 8/4 ohms across 4 channels
B9.3.6	DSP	Audio DSP 12 in 8 out with dante ,AEC ,USB,VOIP and amplink (8 channels)
B9.3.7	Integration	Should work seamless with Collaboration suit

B9.4	**SITC of Wireless Presentation Device**	
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
B9.4.1	Operating system	Should support Wireless sharing from following Operating System Windows, macOS, Android, ios
B9.4.2	Wireless Dongles	Plug and Play wireless buttons to cast screen to display without any wifi configuration by users. 2nos of Wireless dongle to be supplied
B9.4.3	Wireless Frequency Band	2.4 GHZ and 5 GHz Frequency band
B9.4.4	Temperature range Operating:	0°C to +40°C (+32°F to +104°F)
B9.4.5	Connectivity	LAN, WiFi, USB Buttons
B9.4.6	Video Outputs	2 nos 4K Video outputs
B9.4.7	Minimum sources simultaneously on screen	2

B10	**SITC of CCTV surveillance with Entrance door integrated with Facial Recognition and RFID Access**	
Sl No	**Parameter**	**Minimum Specifications**
B10.1	**SITC of 4MP CCTV Camera with PoE– 12 Nos**	
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
B10.2	Camera Type	Fixed focal lens Camera PoE
B10.3	Image Sensor	1/3" Progressive Scan CMOS
B10.4	Day and Night	IR cut filter
B10.5	Quality of Image	4 MP
B10.6	Certification	BIS, STQC
B10.7	**SITC of NVR with VMS**	

	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
B10.8	NVR with VMS	4K Recording of 12 CCTV cameras with storage computed for 30days continuous recording retention
B10.9	**Facial Recognition with Entrance door access control**	
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
B10.10	System Architecture	On Premise
B10.11	Integration	Access control integration to sync reference picture, card information to the facial recognition server
B10.12	Accuracy of Face detection	Up to 99.9%
B10.13	Speed	0.43ms
B10.14	Secondary Access	RFID Cards / Fingerprint

B11. SITC of Cables, Connectors, Cable cubbies Including USB extenders over IP, Accessories, Network Switches for Data Server Racks, and Miscellaneous Items required for the completion of the project		
Sl No	**Parameter**	**Minimum Specifications**
B11.1	SITC of High-Speed HDMI 2.0 Patch Cables	Flexible high−speed HDMI cable with Ethernet High−performance cable with moulded Male HDMI connectors at both ends Supports signals up to 4K@60Hz and HDMI Ethernet Channel

B11.2	SITC of HDMI, USB and RJ45 Face Plate for Tables	Supply, installation and commissioning of 4K HDMI, USB 3.0 and Gigabit RJ45 ports as per the interior finish of the tables
B11.3	SITC of USB Extender	Supply and Installation of USB Extender for Point to point USB3.0 connectivity for single extension over CAT6A for distance
B11.4	SITC of USB to HDMI 4K Capture Card	Supply and Installation of the 4K HDMI Capture Card - Plug and play without installation of any software should be compatible with Zoom Rooms Software for Wired HDMI Content Sharing and as Camera feed
B11.5	SITC of Gigabit Managed L2 Network Switch	Supply and Installation of managed layer 2 network switches with stackable functionality. Should support Multicast & IGMP Snooping with 10GBPS Fiber or LAN uplink Ports
B11.6	SITC of Wireless Access Points	Supply, Installation and configuration of Advanced Dual-Band access points Switch Port Speed: Gigabit Radio Frequency: 2 4 and 5 Ghz Security features: WEP, WPA, WPA2 Security key bits: Up to 128-bit encryption Certification: BIS and WPC
B11.7	SITC of Server Rack	Supply and Installation of Server Rack with Adjustable trays , fan and necessary auxiliaries & mounting hardware
B11.8	SITC of Miscellaneous Items	Provision of any items not explicitly listed in the RFP but required to ensure the successful installation, professional handover, and full functionality of the project. This includes, but is not limited to, cable ties, cable managers, tapes, cable labelling, and other necessary accessories.

5.3. Rajasthan Fields (RF), Jodhpur

a) The Command-and-Control Centre (CCC) at Rajasthan Fields (RF), Jodhpur shall enable 24×7 centralized monitoring of field operations, providing real-time visibility into production, drilling, asset health, and safety/security for the Rajasthan field.

5.3.1. Indicative Control room BOQ

Sl no	Description	Unit	Qty

C	**Rajasthan Fields (RF), Jodhpur**		
I	**Interior and Electrical**		
C1	SITC of Operator desk, collaboration table and electrical (Split AC, Lighting, UPS)	Lot	
II	**Video Wall, AV Infrastructure, VC, and other IT Hardware Components**		
C2	SITC of 120" Professional Display 24/7 operation with Heavy duty mount	Set	1
C3	SITC of Command and Control Suite 4K60 Secured IPKVM, Encoders, Operator Console Codec, and Videowall Decoders with videowall processor with redundancy : Free form, PIP, POP, HDMI embedded audio switching, Sources can windowed, layered, and positioned anywhere on the video display for all Areas - 8 nos 4K60 Sources, 1nos 4K Workspace with wide monitors (32:9 aspect ratio) attached to Operator console codec and multifunctional keyboard, Quantity of videowall decoders required to achieve Pixel-to-Pixel Resolution, 2nos decoders for VC codec.	Lot	1
C4	SITC of Computing Rack servers for running Dashboards and Applications	Nos	5
C5	SITC of Interactive Collaboration Suite supporting Single 4K Display and have 7 nos of 4K HDMI Inputs for interactive Collaboration with Wireless Tablet controller for extended experience	Nos	1
C6	SITC of Video Conferencing System	Lot	1
C7	SITC of Cables, Connectors, Extenders, network components, racks, and Miscellaneous items	Lot	1

5.3.2. Detailed Technical & Functional Requirements

I. Civil, Interior and Electrical

a) Bidder to specify Make & Model of all quoted items in the table below:

Slno	Item Description	MAKE	MODEL
1	UPS		
2	Split AC		

b) Provision of 2 operator workstations comprising 24×7 duty-grade ergonomic consoles with integrated cable management, modular layout, monitor arms, and storage space, along with high-back ergonomic chairs featuring adjustable lumbar support for continuous operations.

c) A fully equipped collaboration workspace shall be provisioned with an AV-integrated conference/meeting table featuring in-built power and data ports, accompanied by ergonomic fabric/leather conference chairs to comfortably accommodate a minimum of 10 participants.

d) Supply, installation, and commissioning of 10 kVA True Online Double-Conversion UPS with SMF battery bank providing a minimum of 60 minutes backup, including all required accessories.

II. Video Display, AV Infrastructure, VC, and other IT Hardware Components

C2. SITC of 120" Professional Display 24/7 operation with Heavy duty mount		
Sl. No	**Parameter**	**Minimum Specifications**
C2.1	Pixel Pitch	0.93 mm or lesser
C2.2	Screen Size	120 inches
C2.3	Configuration	COB Full Flip Chip
C2.4	Cabinet Material	Die-cast Aluminium or better
C2.5	Brightness	600 cd/m2 or higher
C2.6	HDR Support	HDR10+
C2.7	Contrast Ratio	20,000:1 or higher
C2.8	Refresh Rate	7680 Hz or higher
C2.9	Bit Depth	16-bit or higher
C2.10	Viewing Angle	H: 160° or higher, V: 155° or higher
C2.11	Operation Time	Continuous 24/7 operation (24 hours, 7 days a week)
C2.13	Lifetime	100,000 hrs or higher
C2.14	Operating Temperature	0°C ~ +40°C
C2.15	Operating Humidity	10%~80%RH
C2.16	Power Redundancy	Each Cabinet should have dual Power - one for active and one for redundancy
C2.17	Signal Redundancy	Each Cabinet should have dual Signal / Data Port - one for active and one for redundancy
C2.18	Protection and Surface Treatment	Anti-Scratch, Anti-Dust, Anti-Moisture, Anti- Collision, Anti-Glare, Anti-Static, Anti-Moiré, Front Water-Proof
C2.19	Spare Modules	Minimum 5% Spare Modules to be provided along with the supply
C2.20	Certifications	BIS and Low Blue light / Eye Comfort Certifications

C2.21	Curve	Supplier to provide special cabinets (Aluminium Diecast) which can accommodate an angle of 0~2.5 Degrees between each module.
C2.22	Mounting and Fabrication	Should include necessary mounting structure and all accessories to mount the LED walls to ensure precision installation
C2.23	**LED Controller Specifications**	
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
C2.24	Qty of LED Controllers	**Minimum 2 nos** (1 no for Active Connection and 1no for Redundant Connection)
C2.25	Each Controller should have below mentioned minimum Qty of Inputs, Outputs and features	
C2.26	Type of Inputs	HDMI 2.0/2.1 4K with Custom Resolution Input supported
C2.27	Number of Inputs	Required number of Inputs to achieve Pixel-to-Pixel Resolution in Stereoscopic 3D & HDR10+ and additional 20% spare input ports
C2.28	Number of Outputs (RJ45 / OFC)	Required Outputs to achieve Pixel-to-Pixel Resolution in HDR10+ and stereoscopic 3D Mode and additional 10% for Spare Output ports
C2.29	Power Redundancy	LED Controller should have dual power one for active and one for redundancy
C2.30	Features	- Hot-swappable input and output cards - Frame synchronization: image should be played smoothly, without any stuck, frame loss, tearing or piercing - Should supports HDR10+ and Stereoscopic 3D Function - Auto monitoring and fault alarms should be available

C3	SITC of Command and Control Suite 4K60 Secured IPKVM, Encoders, Operator Console Codec, and Videowall Decoders with videowall processor with redundancy : Free form, PIP, POP, HDMI embedded audio switching, Sources can windowed, layered, and positioned anywhere on the video display for all Areas - **8 nos 4K60 Sources, 1nos 4K Workspace with wide monitors (32:9 aspect ratio) attached to Operator console codec and multifunctional keyboard, Quality of videowall decoders required to achieve Pixel-to-Pixel Resolution, 2nos decoders for VC codec.**

Sl No	Parameter	Minimum Specifications
C3.1	**Solution**	
C3.1.1	Architecture	Distributed Architecture & Scalable (new operator desks or sources can be added)
C3.1.2	Brand or Hardware Agnostic	Should support multi-brand PCs with various operating systems, cameras, and display technologies
C3.1.3	Security and Data Segregation	- actual video and USB data flow over secured KVM channels using hardware-level encryption (AES-128 or better).
C3.1.4	True Redundancy and High Availability	The True Redundancy and High Availability (HA) framework should ensure that the system remains fully operational under any fault condition — whether network, hardware, power, or controller-related 1. Controller-Level Redundancy – dual synchronized controllers (active/standby). 2. Network-Level Redundancy – dual switches, VLAN separation, and redundant fiber paths. 3. Power-Level Redundancy – dual independent power supplies for each node. 4. Device-Level Redundancy – duplicate TX/RX units for critical feeds and displays.
C3.1.5	Curved Monitor	Should supply 49" Curved diagonal monitor with 32:9 aspect ratio (Quantity – 2 nos)
C3.2	**KVM Transmitters**	
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
C3.2.1	Video inputs and resolutions	Resolutions: 3840 x 2160p 60Hz or Higher
C3.2.2	Colour depth	24 Bit (RGB888)
C3.2.3	Compression	Lossless compression: frame differentiation Lossy compression: Dynamic compression
C3.2.4	Audio	Should have Analog Audio Input in addition to HDMI
C3.2.5	USB	2x USB one for KVM and one for USB 2.0

C3.2.6	Supported network cabling	Cat 5e/6/7 (BASE-T) or single mode fiber, multimode fiber (BASE-X)
C3.2.7	MTBF	250,000 hours
C3.3	**KVM Receivers**	
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
C3.3.1	Quantity Required	As per required to achieve pixel to pixel resolution of video wall with HDR and Stereoscopic 3D and pixel to pixel resolution of 32:9 wide aspect ratio Operators monitor + 2 nos for VC Decoding
C3.3.2	Video Outputs and resolutions	Resolutions: 3940 x 2160p 60Hz or Higher
C3.3.3	Colour depth	24 Bit (RGB888)
C3.3.4	Compression	Lossless compression: frame differentiation Lossy compression: dynamic compression
C3.3.5	Audio	Should have Analog Audio out
C3.3.6	USB	1x USB for KVM ; 1x USB 2.0 Full-Speed)
C3.3.7	Supported network cabling	Cat 5e/6/7 or single mode fiber, multimode fiber
C3.3.8	MTBF	250,000 hours
C3.4	**Multifunctional Keyboard for Operators / Operator Console with Touch Panel , KVM Receiver, Key board and mouse**	
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
C3.4.1	Quantity Required	2
C3.4.2	Audio	Audio Out and microphone
C3.4.3	USB	Should support KVM switching and mixing with multiple sources simultaneously
C3.4.4	Network	1x RJ45 1000 BASE-T PoE+

C3.4.5	Power supply	AC IN: 100 - 240V ~ 1.5A, DC OUT: + 12V = 5.0A
C3.4.6	Power consumption	20 Watts
C3.4.7	Speaker	2x 20W maximum
C3.4.8	Display	10.1'' LCD touch display, resolution 1280x800 @60Hz Contrast: min. 500:1, typical 700:1 Brightness: min. 320 cd/m2, typical 400 cd/m2
C3.4.9	Smart Control	The Operator Console shall enable intuitive, context-aware control of multiple systems, sources, and video-wall layouts simultaneously, providing seamless operator interaction and workflow efficiency
C3.4.10	Programmable Hardware Keys	- Operator Console Should have Dedicated keys map to system functions or critical sources - Keys should be fully reconfigurable via controller interface.
C3.4.11	Programmable Touchscreen Display	- Operators should be able to create custom layouts with soft-keys, macros, and role-based menus. - Operators shall, via a role-based desktop interface, be able to preview, route authorized sources/layouts between their workstation, the video wall and other room displays; securely share windows. - Operator Consol should dynamically adapt to user profiles, reflecting permissions and assigned sources. - Operator Consol should support real-time feedback for source selection, wall presets, and communication channels.
C3.4.12	User Personalization and Free Seating Integration	- Operator should be able to log in through password directly using keyboard. - Upon login, personal layouts, preferred sources, and permissions should load automatically.

		- Operator console should behave differently for each login based on the role defined for each user.
C3.4.13	MTBF	50,000 hours
C3.5	**KVM Switch / Network Switch**	
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
C3.5.1	Number of ports	To be calculated as per the node requirements and should have minimum 20% of Ports vacant for redundancy and future scalability
C3.5.2	Protocols	- Support of at least 128 source addresses per multicast group - Protocol Independent Multicast (PIM)
C3.5.3	Power supply	Should have hot redundant power supplies

C4	**SITC of Computing Rack servers to access Dashboards and Applications in Control Room**	
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
Item Nos	**Parameter**	**Minimum Specifications**
C4.1	Processor	2.4Ghz, 16Core, 32 threads, 24MB Cache
C4.2	Motherboard	Dual Socket compatible with the specified processor
C4.3	Memory	2 X 32GB
C4.4	Storage	500GB SSD
C4.5	Graphics Card	4GB Server Grade Graphics card with Minimum 3 x HDMI ports. If mDP (Mini DisplayPort), DP (DisplayPort), or USB-C output is available instead of HDMI, include HDMI converters / connectors.
C4.6	Ethernet Ports	2 x Gigabit LAN
C4.7	Operating System	Windows 11 Enterprise LTSC / Pro

C4.8	Software	Microsoft Office LTSC and Antivirus with Internet Security
C4.9	Form Factor	2U Rack mount with Rails compatible with standard server racks
C4.10	Power Redundancy	Dual power configuration with one active power unit and one redundant power unit
C4.11	Certification	BIS

C5	SITC of Interactive Collaboration Suite supporting Single 4K Display and have **7 nos of 4K HDMI Inputs** for interactive Collaboration with Wireless Tablet controller for extended experience	
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
Sl No	**Parameter**	**Minimum Specifications**
C5.1	Video wall processing with Sync	Yes
C5.2	Custom Resolution Support	Yes
C5.3	Maximum Resolution Support and Required Outputs	Pixel to Pixel resolution of the LED Display without any scaling
C5.4	Processor	2X 16Core, 32 threads, 24MB Cache
C5.5	Memory	4 X 32GB
C5.6	Storage	2TB SSD
C5.7	Maximum Output support	HDMI 2.0 x 24nos supporting Videowall with bezel compensation
C5.8	Ethernet Ports	2 x 10G RJ45 / 40G Fiber
C5.9	Power Redundancy	Dual power configuration with one active power unit and one redundant power unit
C5.10	Certification	BIS
C5.11	Collaboration & Multi-Window Control	- Ability to open any number of windows on the Interactive Video Wall simultaneously without limitations. - Display multiple HDMI inputs anywhere on the

		screen (Quad View, Dual View, Single View, PIP, POP, and flexible combinations). - Control multiple sources simultaneously with HDMI inputs with Touchback feature.
C5.12	Multi-touch & Interactivity	- Multi-touch and multi-user interactivity (multiple users working simultaneously). - Support for gestures: pinch-in, pinch-out, zoom-in, zoom-out, pan, and rotate. - Whiteboard functionality with annotation tools (multiple pen weights, colours). - On-screen annotation with screenshot/snapshot capture. - Multiple Groups to with Hide and Unhide options & Drag/Drop Functionality for Multiple Contents (URL, Images, Videos, PDF, HDMI Inputs). - The collaboration device shall allow users to wirelessly send images, videos, and documents from laptops and mobile devices to the video wall. - The collaboration system should support workspace sharing with real-time annotation, allowing simultaneous multi-user annotation from different locations on a shared canvas. For group discussions, the same content must be consistently displayed across the video wall, touch table, operator consoles and in meeting room 21.5”touch monitor.
C5.13	Enterprise Deployment & Licensing	- On-premises enterprise-grade deployment. - Supplied with perpetual licensing (no recurring subscription costs). - For perpetual/on-premise licenses specified under enterprise deployment, the bidder shall provide all patches, updates, maintenance, and technical support required during the contract/AMC period at no extra cost to OIL.
C5.14	CMS System & Resources	CMS system to manage & refresh content by OIL. Features: sorting, filtering, relations, flexible field types, Integrated media library with reusability and image processing Integrated media library with reusability and image processing Minimum storage support: 500GB, scalable as needed. Perpetual licensing and 5-year maintenance plan including hosting, bandwidth, CMS upkeep, and upgrades (to be included in AMC)

C5.15	Integration of Live Camera Feed from the Field to Wide Curved Screen for Immersive Experience	The Interactive application should incorporate the capability to stream live camera feeds from the field directly to the entire wide curved screen, providing an immersive and realistic viewing experience. The curved screen, with its expansive wide width, should offer a truly immersive experience, envelop the viewers and making them feel as if they are present in the field. The system should employ advanced video processing techniques to stitch /positioning the window side by side together the multiple camera feeds seamlessly, creating a cohesive and continuous panoramic view. The system should support high-resolution playback of the live video, ensuring crisp and detailed imagery across the entire screen.
C5.16	RFID/NFC Integration	The application should support RFID/NFC devices or sensors with plug-and-play integration.

C6	SITC of Video Conferencing System: USB VC system for Medium to Large room, Integrated mics additional mic at workstation and dual speakers
	Make : To be Specified by Bidder
	Model: To be Specified by Bidder

C7	SITC of Cables, Connectors, Extenders, network components, racks, and Miscellaneous items	
Sl No	**Parameter**	**Minimum Specifications**
C7.1	SITC of Cables, Connectors, Extenders, network components, racks, and Miscellaneous items	The Bidder shall ensure that all cables, connectors, extenders, network components, racks, and other miscellaneous items comply with the standard specifications and guidelines prescribed for the Corporate Office Control Room.

5.4. Pipeline Headquarter (PHQ), Guwahati

a) The Command-and-Control Centre (CCC) at Pipeline Headquarter (PHQ), Guwahati shall enable 24×7 centralized monitoring of field operations, providing real-time visibility into pipeline transfer, asset health, and safety/security for the PHQ

5.4.1. Indicative Control room BOQ

Sl no	Description	Unit	Qty
D	**Pipeline Headquarter (PHQ), Guwahati**		
I	**Interior and Electrical**		
D1	SITC of Operator desk, collaboration table and electrical (Lighting, UPS)	Lot	
II	**Video Wall, AV Infrastructure, VC, and other IT Hardware Components**		
D2	SITC of 120" Professional Display 24/7 operation with Heavy duty mount	Set	1
D3	SITC of Command and Control Suite 4K60 Secured IPKVM, Encoders, Operator Console Codec, and Videowall Decoders with videowall processor with redundancy : Free form, PIP, POP, HDMI embedded audio switching, Sources can windowed, layered, and positioned anywhere on the video display for all Areas - 8 nos 4K60 Sources, 1nos 4K Workspace with wide monitors (32:9 aspect ratio) attached to Operator console codec and multifunctional keyboard, Quantity of videowall decoders required to achieve Pixel-to-Pixel Resolution, 2nos decoders for VC codec.	Lot	1
D4	SITC of Computing Rack servers for running Dashboards and Applications	Nos	5
D5	SITC of Interactive Collaboration Suite supporting Single 4K Display and have 7 nos of 4K HDMI Inputs for interactive Collaboration with Wireless Tablet controller for extended experience	Nos	1
D6	SITC of Video Conferencing System	Lot	1
D7	SITC of Cables, Connectors, Extenders, network components, racks, and Miscellaneous items	Lot	1

5.4.2. Detailed Technical & Functional Requirements

I. Interior and Electrical

a) Bidder to specify Make & Model of all quoted items in the table below:

Slno	Item Description	MAKE	MODEL
1	UPS		

b) Provision of 2 operator workstations comprising 24×7 duty-grade ergonomic consoles with integrated cable management, modular layout,

monitor arms, and storage space, along with high-back ergonomic chairs featuring adjustable lumbar support for continuous operations.

c) A fully equipped collaboration workspace shall be provisioned with an AV-integrated conference/meeting table featuring in-built power and data ports, accompanied by ergonomic fabric/leather conference chairs to comfortably accommodate a minimum of 5 participants.
d) Supply, installation, and commissioning of 10 kVA True Online Double-Conversion UPS with SMF battery bank providing a minimum of 60 minutes backup, including all required accessories.
e) Provision and installation of energy-efficient LED lighting suitable for 24×7 Command and Control Centre operations.

II. Video Display, AV Infrastructure, VC, and other IT Hardware Components

D2. SITC of 120" Professional Display 24/7 operation with Heavy duty mount		
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
Sl. No	**Parameter**	**Minimum Specifications**
D2.1	Pixel Pitch	0.93 mm or lesser
D2.2	Screen Size	120 inches
D2.3	Configuration	COB Full Flip Chip
D2.4	Cabinet Material	Die-cast Aluminium or better
D2.5	Brightness	600 cd/m2 or higher
D2.6	HDR Support	HDR10+
D2.7	Contrast Ratio	20,000:1 or higher
D2.8	Refresh Rate	7680 Hz or higher
D2.9	Bit Depth	16-bit or higher
D2.10	Viewing Angle	H: 160° or higher, V: 155° or higher
	Operation Time	Continuous 24/7 operation (24 hours, 7 days a week)
D2.13	Lifetime	100,000 hrs or higher
D2.14	Operating Temperature	0°C ~ +40°C

D2.15	Operating Humidity	10%~80%RH
D2.16	Power Redundancy	Each Cabinet should have dual Power - one for active and one for redundancy
D2.17	Signal Redundancy	Each Cabinet should have dual Signal / Data Port - one for active and one for redundancy
D2.18	Protection and Surface Treatment	Anti-Scratch, Anti-Dust, Anti-Moisture, Anti- Collision, Anti-Glare, Anti-Static, Anti-Moiré, Front Water-Proof
D2.19	Spare Modules	Minimum 5% Spare Modules to be provided along with the supply
D2.20	Certifications	BIS and Low Blue light / Eye Comfort Certifications
D2.21	Curve	Supplier to provide special cabinets (Aluminium Diecast) which can accommodate an angle of 0~2.5 Degrees between each module.
D2.22	Mounting and Fabrication	Should include necessary mounting structure and all accessories to mount the LED walls to ensure precision installation
D2.23	**LED Controller Specifications**	
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
D2.24	Qty of LED Controllers	**Minimum 2 nos** (1 no for Active Connection and 1no for Redundant Connection)
D2.25	Each Controller should have below mentioned minimum Qty of Inputs, Outputs and features	
D2.26	Type of Inputs	HDMI 2.0/2.1 4K with Custom Resolution Input supported
D2.27	Number of Inputs	Required number of Inputs to achieve Pixel-to-Pixel Resolution in Stereoscopic 3D & HDR10+ and additional 20% spare input ports
D2.28	Number of Outputs (RJ45 / OFC)	Required Outputs to achieve Pixel-to-Pixel Resolution in HDR10+ and stereoscopic 3D Mode and additional 10% for Spare Output ports
D2.29	Power Redundancy	LED Controller should have dual power one for active and one for redundancy
D2.30	Features	- Hot-swappable input and output cards - Frame synchronization: image should be played smoothly,

		without any stuck, frame loss, tearing or piercing - Should supports HDR10+ and Stereoscopic 3D Function - Auto monitoring and fault alarms should be available

D3	SITC of Command and Control Suite 4K60 Secured IPKVM, Encoders, Operator Console Codec, and Videowall Decoders with videowall processor with redundancy : Free form, PIP, POP, HDMI embedded audio switching, Sources can windowed, layered, and positioned anywhere on the video display for all Areas - **8 nos 4K60 Sources, 1nos 4K Workspace with wide monitors (32:9 aspect ratio) attached to Operator console codec and multifunctional keyboard, Quality of videowall decoders required to achieve Pixel-to-Pixel Resolution, 2nos decoders for VC codec.**	
Sl No	**Parameter**	**Minimum Specifications**
D3.1	**Solution**	
D3.1.1	Architecture	Distributed Architecture & Scalable (new operator desks or sources can be added)
D3.1.2	Brand or Hardware Agnostic	Should support multi-brand PCs with various operating systems, cameras, and display technologies
D3.1.3	Security and Data Segregation	- actual video and USB data flow over secured KVM channels using hardware-level encryption (AES-128 or better).
D3.1.4	True Redundancy and High Availability	The True Redundancy and High Availability (HA) framework should ensure that the system remains fully operational under any fault condition — whether network, hardware, power, or controller-related 1. Controller-Level Redundancy – dual synchronized controllers (active/standby). 2. Network-Level Redundancy – dual switches, VLAN separation, and redundant fiber paths. 3. Power-Level Redundancy – dual independent power supplies for each node. 4. Device-Level Redundancy – duplicate TX/RX units for critical feeds and

		displays.
D3.1.5	Curved Monitor	Should supply 49" Curved diagonal monitor with 32:9 aspect ratio (Quantity – 2 nos)
D3.2	**KVM Transmitters**	
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
D3.2.1	Video inputs and resolutions	Resolutions: 3040 x 2160p 60Hz or Higher
D3.2.2	Colour depth	24 Bit (RGB888)
D3.2.3	Compression	Lossless compression: frame differentiation Lossy compression: Dynamic compression
D3.2.4	Audio	Should have Analog Audio Input in addition to HDMI
D3.2.5	USB	2x USB one for KVM and one for USB 2.0
D3.2.6	Supported network cabling	Cat 5e/6/7 (BASE-T) or single mode fiber, multimode fiber (BASE-X)
D3.2.7	MTBF	250,000 hours
D3.3	**KVM Receivers**	
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
D3.3.1	Quantity Required	As per required to achieve pixel to pixel resolution of video wall with HDR and Stereoscopic 3D and pixel to pixel resolution of 32:9 wide aspect ratio Operators monitor + 2 nos for VC Decoding
D3.3.2	Video Outputs and resolutions	Resolutions: 3840 x 2160p 60Hz or Higher
D3.3.3	Colour depth	24 Bit (RGB888)
D3.3.4	Compression	Lossless compression: frame differentiation

		Lossy compression: dynamic compression
D3.3.5	Audio	Should have Analog Audio out
D3.3.6	USB	1x USB for KVM; 1x USB 2.0 Full-Speed)
D3.3.7	Supported network cabling	Cat 5e/6/7 or single mode fiber, multimode fiber
D3.3.8	MTBF	250,000 hours
D3.4	**Multifunctional Keyboard for Operators / Operator Console with Touch Panel , KVM Receiver, Key board and mouse**	
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
D3.4.1	Quantity Required	2
D3.4.2	Audio	Audio Out and microphone
D3.4.3	USB	Should support KVM switching and mixing with multiple sources simultaneously
D3.4.4	Network	1x RJ45 1000 BASE-T PoE+
D3.4.5	Power supply	AC IN: 100 - 240V ~ 1.5A, DC OUT: + 12V = 5.0A
D3.4.6	Power consumption	20 Watts
D3.4.7	Speaker	2x 20W maximum
D3.4.8	Display	10.1'' LCD touch display, resolution 1280x800 @60Hz Contrast: min. 500:1, typical 700:1 Brightness: min. 320 cd/m2, typical 400 cd/m2
D3.4.9	Smart Control	The Operator Console shall enable intuitive, context-aware control of multiple systems, sources, and video-wall layouts simultaneously, providing seamless operator interaction and workflow efficiency

D3.4.10	Programmable Hardware Keys	- Operator Console Should have Dedicated keys map to system functions or critical sources - Keys should be fully reconfigurable via controller interface.
D3.4.11	Programmable Touchscreen Display	- Operators should be able to create custom layouts with soft-keys, macros, and role-based menus. - Operators shall, via a role-based desktop interface, be able to preview, route authorized sources/layouts between their workstation, the video wall and other room displays; securely share windows. - Operator Consol should dynamically adapt to user profiles, reflecting permissions and assigned sources. - Operator Consol should support real-time feedback for source selection, wall presets, and communication channels.
D3.4.12	User Personalization and Free Seating Integration	- Operator should be able to log in through password directly using keyboard. - Upon login, personal layouts, preferred sources, and permissions should load automatically. - Operator console should behave differently for each login based on the role defined for each user.
D3.4.13	MTBF	50,000 hours
D3.5	**KVM Switch / Network Switch**	
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
D3.5.1	Number of ports	To be calculated as per the node requirements and should have minimum 20% of Ports vacant for redundancy and future scalability
D3.5.2	Protocols	- Support of at least 128 source addresses per multicast group - Protocol Independent Multicast (PIM)

D3.5.3	Power supply	Should have hot redundant power supplies

D4	**SITC of Computing Rack servers to access Dashboards and Applications In Control Room**	
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
Item Nos	**Parameter**	**Minimum Specifications**
D4.1	Processor	2.4Ghz, 16Core, 32 threads, 24MB Cache
D4.2	Motherboard	Dual Socket compatible with the specified processor
D4.3	Memory	2 X 32GB
D4.4	Storage	500GB SSD
D4.5	Graphics Card	4GB Server Grade Graphics card with Minimum 3 x HDMI ports. If mDP (Mini DisplayPort), DP (DisplayPort), or USB-C output is available instead of HDMI, include HDMI converters / connectors.
D4.6	Ethernet Ports	2 x Gigabit LAN
D4.7	Operating System	Windows 11 Enterprise LTSC / Pro
D4.8	Software	Microsoft Office LTSC and Antivirus with Internet Security
D4.9	Form Factor	2U Rack mount with Rails compatible with standard server racks
D4.10	Power Redundancy	Dual power configuration with one active power unit and one redundant power unit
D4.11	Certification	BIS

D5	SITC of Interactive Collaboration Suite supporting Single 4K Display and have **7 nos of 4K HDMI Inputs** for interactive Collaboration with Wireless Tablet controller for extended experience	
	Make	To be Specified by Bidder

	Model	To be Specified by Bidder
Sl No	**Parameter**	**Minimum Specifications**
D5.1	Video wall processing with Sync	Yes
D5.2	Custom Resolution Support	Yes
D5.3	Maximum Resolution Support and Required Outputs	Pixel to Pixel resolution of the LED Display without any scaling
D5.4	Processor	2X 16Core, 32 threads, 24MB Cache
D5.5	Memory	4 X 32GB
D5.6	Storage	2TB SSD
D5.7	Maximum Output support	HDMI 2.0 x 24nos supporting Videowall with bezel compensation
D5.8	Ethernet Ports	2 x 10G RJ45 / 40G Fiber
D5.9	Power Redundancy	Dual power configuration with one active power unit and one redundant power unit
D5.10	Certification	BIS
D5.11	Collaboration & Multi-Window Control	- Ability to open any number of windows on the Interactive Video Wall simultaneously without limitations. - Display multiple HDMI inputs anywhere on the screen (Quad View, Dual View, Single View, PIP, POP, and flexible combinations). - Control multiple sources simultaneously with HDMI inputs with Touchback feature.
D5.12	Multi-touch & Interactivity	- Multi-touch and multi-user interactivity (multiple users working simultaneously). - Support for gestures: pinch-in, pinch-out, zoom-in, zoom-out, pan, and rotate. - Whiteboard functionality with annotation tools (multiple pen weights, colours). - On-screen annotation with screenshot/snapshot capture. - Multiple Groups to with Hide and Unhide options & Drag/Drop Functionality for Multiple Contents (URL, Images, Videos, PDF, HDMI Inputs).

		- The collaboration device shall allow users to wirelessly send images, videos, and documents from laptops and mobile devices to the video wall. - The collaboration system should support workspace sharing with real-time annotation, allowing simultaneous multi-user annotation from different locations on a shared canvas. For group discussions, the same content must be consistently displayed across the video wall, touch table, operator consoles and in meeting room 21.5”touch monitor.
D5.13	Enterprise Deployment & Licensing	- On-premises enterprise-grade deployment. - Supplied with perpetual licensing (no recurring subscription costs). - For perpetual/on-premise licenses specified under enterprise deployment, the bidder shall provide all patches, updates, maintenance, and technical support required during the contract/AMC period at no extra cost to OIL.
D5.14	CMS System & Resources	CMS system to manage & refresh content by OIL. Features: sorting, filtering, relations, flexible field types, Integrated media library with reusability and image processing Integrated media library with reusability and image processing Minimum storage support: 500GB, scalable as needed. Perpetual licensing and 5-year maintenance plan including hosting, bandwidth, CMS upkeep, and upgrades (to be included in AMC)
D5.15	Integration of Live Camera Feed from the Field to Wide Curved Screen for Immersive Experience	The Interactive application should incorporate the capability to stream live camera feeds from the field directly to the entire wide curved screen, providing an immersive and realistic viewing experience. The curved screen, with its expansive wide width, should offer a truly immersive experience, envelop the viewers and make them feel as if they are present in the field. The system should employ advanced video processing techniques to stitch /positioning the window side by side together the multiple camera feeds seamlessly, creating a cohesive and continuous panoramic view. The system should support high-resolution playback of the live video, ensuring crisp and detailed imagery across the entire screen.

D5.16	RFID/NFC Integration	The application should support RFID/NFC devices or sensors with plug-and-play integration.

D6	SITC of Video Conferencing System : USB VC system for Medium to Large room, Integrated mics , additional mic at workstation and dual speakers

D7	SITC of Cables, Connectors, Extenders, network components, racks, and Miscellaneous items	
Sl No	**Parameter**	**Minimum Specifications**
D7.1	SITC of Cables, Connectors, Extenders, network components, racks, and Miscellaneous items	The Bidder shall ensure that all cables, connectors, extenders, network components, racks, and other miscellaneous items comply with the standard specifications and guidelines prescribed for the Corporate Office Control Room.

6. Technical & Functional Requirements for CCC Compute Infrastructure and Services

6.1. OT Data Lake setup in FHQ Duliajan Data Centre and, OT & IoT System Integration

a) The objective is to establish a centralized OT Data Lake for unifying, storing, and managing real-time data from diverse OT and IoT systems, enabling seamless integration, advanced analytics, and enterprise-wide visibility.

b) Bidder shall design, deploy, and configure the Scalable OT Data Lake to ingest, process, and store high-frequency data from OT & IoT sources.

c) The proposed Data Lake shall be OT-grade, designed specifically for handling real-time, time-series, and operational data from industrial systems.

d) Bidder shall integrate all identified OT & IoT systems into the Data Lake using secure connectors, protocols (e.g., OPC-UA, Secured APIs).

e) All required software components—including interface services, data servers, analytics engines, visualization applications, and associated modules—must be installed and configured in line with OEM guidelines and industry best practices.

f) Secure communication between OT and IT systems shall be established by the bidder, strictly adhering to OEM recommendations and approved cyber-security standards.

g) Tag standardization and mapping activities, as per the project requirements, shall be undertaken by the bidder.

h) The bidder shall configure asset hierarchies, asset models, and asset templates in accordance with the defined functional specifications.

i) All analytics configurations, including formulas, KPIs, computation logic, and analytical models, are to be set up as per functional requirements.

j) Configuration of alert logic, thresholds, triggers, and user notification workflows shall be carried out by the bidder based on approved functional requirements.

k) The bidder shall develop and configure web-based real-time dashboards as per OIL's requirement, with a minimum of 30 dashboards to be delivered.

l) A minimum of 20 standard reports shall be configured in accordance with OIL's requirements. The final list of dashboards and reports will be confirmed during detailed engineering.

m) Integration of the solution with the OT, IoT & CCC Application shall be executed by the bidder.

n) Bidder shall provide necessary connectors, interfaces, and configuration to ensure reliable real-time and historical data acquisition.

o) Preparation of a comprehensive User Acceptance Test (UAT) plan and related documentation forms part of the bidder's scope.

p) The bidder shall conduct integrated system testing and facilitate the User Acceptance Test (UAT) in coordination with OIL.

q) Upon successful completion of UAT, the bidder shall obtain sign-off and hand over the fully functional solution.

r) All required cyber-security measures shall be implemented in alignment with OIL's cyber-security policy.

s) A detailed as-is assessment, to-be study, and gap analysis aimed at addressing future scalability and requirements shall be performed by the bidder.

t) Enablement of existing OT systems for OPC UA or equivalent standard communication protocols, along with site-level cybersecurity provisions, shall be provided by OIL.

u) Bidder shall design the OT–Data Lake integration architecture, submit it to OIL for review, and obtain approval prior to implementation.

v) Bidder shall implement secure data pipelines, ensuring compliance with OIL's cybersecurity, access control, and data governance policies.

w) The proposed solution shall include basic visualization features from the OT Data Lake to facilitate data quality monitoring, validation, and asset-level data visualization.

x) Bidder shall provide data contextualization and aggregation within the OT Data Lake as per requirements to enable standardized and meaningful representation of operational data.

y) OT Data Lake shall retain all historical operational data for a minimum period of 10 years, with secure archival, retrieval, and compliance-aligned storage mechanisms.

z) Bidder shall include the proposed data lifecycle management approach.

aa) Tag capacity shall be 50,000 tags initially. The bidder shall ensure proper design of the OT Data Lake solution to process the above tag volume efficiently, with scalability for future expansion up-to 1,00,000 tags.

bb) The OT data lake must be scalable to support future system integrations, addition of KPIs from currently integrated systems, and accommodating growing data volumes as required.

cc) Licenses shall be subscription based as per OIL's preference and include support and updates for the contract duration.

dd) The overall OT Data Lake solution shall adhere to an uptime KPI of 99.95%

ee) The bidder shall migrate a minimum of two (2) years of historical data (wherever available) from all integrated OT and IoT systems into the OT Data Lake. This includes time-series sensor data, events/alerts, SCADA logs, enterprise application data, and any relevant historical datasets required for baseline analytics, trend analysis and model training. The bidder is responsible for extraction, transformation, data quality checks, metadata mapping, contextualization, and ingestion into the target data lakes.

a) OT Data Lake Resources Provision

i. The proposed OT Data Lake solution shall be deployed at OIL's Data Centre located at Field Headquarters (FHQ), Duliajan, Assam. The bidder shall supply the rack servers and software licences as specified in this tender. OIL shall provide the required rack space for hosting the servers.

The bidder shall be solely responsible for the installation, configuration, commissioning, integration, testing, and successful deployment of the VMware Cloud Foundation (VCF) solution on the supplied servers utilizing the supplied VCF licences. The bidder shall utilize OIL's existing HPE Primera A670 500 TB SAN Storage for storage requirements and integrate the VCF solution with the existing SAN infrastructure. The bidder shall also utilize the following existing OIL infrastructure for deployment of the solution:

ToR L3 Switch – Dell EMC S5296F

SAN Switch – Cisco MDS-9148V-48PETK9

Management Switch – Dell EMC S3048

All compute resources required for the solution shall be provisioned from the infrastructure supplied under this tender. The bidder shall be solely responsible for ensuring that the proposed servers, including all associated hardware, firmware, drivers, software, and licences, are fully compatible and interoperable with the above-mentioned existing OIL infrastructure and the proposed VMware Cloud Foundation (VCF) solution. The bidder shall ensure successful end-to-end integration of the proposed solution with the existing infrastructure.

OIL shall provide necessary technical support for the existing infrastructure, as required for successful installation and commissioning of the solution.

The bidder shall be responsible for the operation, administration, monitoring, maintenance, and management of the supplied servers and VCF infrastructure throughout the contract period.

ii. Backup of the solution shall be carried out in OIL's infrastructure managed with Commvault backup software. Bidder must facilitate all necessary technical assistance to OIL team to implement backup policy, restoration policy, of the Data Lake along with all associated activities.

iii. The bidder shall be responsible for rebuilding of Data Lake from backed up data set in case of any eventuality. Bidder shall be responsible for carrying out regular restoration drill of data and application in coordination with OIL's IT team. The bidder shall also be responsible for preparing backup set for offline backup in cloud or in any other physical location.

iv. The bidder must supply all required systems and application components (Like OS, Databases, Middleware etc.) and necessary licenses that are compatible to above mentioned OIL's backup infrastructure for successful deployment of the Data Lake.

v. The bidder shall supply 4 rack mounted servers with appropriate licenses as per the specifications provided below.

Sl No	Parameter	Minimum Specifications
A1	**Technical Specifications for Rack Servers and Licenses**	
	Make	To be Specified by Bidder
	Model	To be Specified by Bidder
A1.1	Rack Servers	Quantity 4 (four)
A1.2	Make & model	Bidder must mention unique make and model of the quoted product
A1.3	Processor	Minimum 2 X Intel Xeon 6 Series processors with Granite Rapids-D architecture or later, 24 Cores per CPU, 3.0 GHz (Base Frequency) or higher, 128 MB Cache or higher
A1.4	Memory	Minimum 512 GB DDR5 (or higher) per server using minimum 64 GB R-DIMM memory modules.
A1.5	Network Adapter	Minimum 2 × dual-port 25 GbE SFP28 (or 4 × 25 GbE SFP28) network interfaces and 1 × 1 GbE management network interface. The 25 GbE network interfaces shall support operation at 10 GbE when connected to compatible 10 GbE SFP+ switch ports. Each server shall be connected to the ToR switches through two links to each ToR switch (participating as leaf switches in OIL's VXLAN overlay network). All links from each server shall be configured in an MC-LAG or equivalent multi-chassis link aggregation configuration. The network adapters shall be IPv4 and IPv6 compliant. All network ports shall be fully populated. The bidder shall supply all required SFP28 transceivers and optical fibre patch cords etc must be included for connection to the ToR switches. supporting operation at 25 GbE or 10 GbE, as applicable.
A1.6	Storage Boot	Minimum 2 X 128 GB SSD card (M.2 card or equivalent) with RAID-1 enabled.
A1.7	Disk Drive	Minimum 30 TB usable enterprise-grade NVMe SSD storage using SSDs of minimum 1.92 TB capacity each.
A1.8	Controller	Enterprise-grade NVMe passthrough controller.

A1.9	HBA	1 X Dual port 32 Gbps FC HBA card. Required standard fibre patch cords and two numbers of 32 Gbps transceivers etc. must be included for connection to the SAN switches.
A1.10	Form Factor	Maximum 2U Rack Mount Server.
A1.11	Power Supply	Redundant hot-swappable and cooling of adequate sizing to meet optimal peak performance requirement of the designed solution
A1.12	Compatibility	The proposed servers shall be VMware vSAN ReadyNode certified (or VMware vSAN certified, as applicable) and shall be certified/validated for compatibility with the latest version of VMware Cloud Foundation (VCF). The servers shall support mainstream operating systems, including Windows, SuSE Linux, Redhat Linux, and VMware virtualization platforms. The quoted server configuration may be customized to meet the solution requirements, provided it remains fully supported by the respective OEMs. The proposed server model shall be listed in the latest Broadcom Compatibility Guide for the proposed version of VMware Cloud Foundation (VCF), as published on the official Broadcom website.
A1.13	System Management	OEM system management software (Enterprise Version or Version with highest level of support) with full features. Support independent remote management through graphical user interfaces. Users can access the server remotely and take full control. The remote management should be independent of server OS. The System Management Software should be included with appropriate licences to integrate with the vCenter for Single Pane of Glass Management.
A1.14	Others	All system drivers should be provided on electronic media. All interconnecting cables required to connect the servers to the existing setup, along with power cables, auxiliary software, licenses, and any other accessories or services necessary for successful installation and commissioning, shall be supplied by the bidder.
A1.15	Support	Supply, installation and commissioning of rack servers with comprehensive 05 (five) year OEM comprehensive support from the date of commissioning with highest level of support available with the OEM.
A1.16	Supply & installation	1. The bidder shall be responsible for the installation and configuration of the complete solution, including the rack servers, VMware Cloud Foundation (VCF), and the installation and activation of all required operating system licences in accordance with the tender specifications. All

		hardware shall be deployed with the latest OEM-recommended firmware versions. 2. The bidder shall establish all required connectivity to existing hardware components such as TOR Switch, SAN switch, etc. as necessary for successful installation and commissioning. OIL is currently having OEM AMC support for SAN Infrastructure, TOR & Management Switches. Any configuration assistance if required for these components during installation and commissioning shall be provided by OIL. 3. The bidder shall integrate the VCF solution with OIL's existing HPE Primera A670 500 TB SAN Storage. The majority of the application workloads shall be hosted on the SAN storage. OIL shall create and export the required storage LUNs. The bidder shall be responsible for discovering, configuring, and utilizing the exported LUNs on the ESXi hosts, including datastore creation, and ensuring seamless support for VMware features such as vMotion, Storage vMotion, and other storage-related operations. 4. The bidder shall utilize OIL's existing infrastructure for deployment and integration of the solution, including the Dell EMC S5296F ToR L3 Switch, Cisco MDS-9148V-48PETK9 SAN Switch, and Dell EMC S3048 Management Switch. The bidder shall ensure successful integration and interoperability of the proposed solution with the existing infrastructure without affecting the operation of the existing environment. 5. The bidder shall be responsible for carrying out all configuration changes required in the proposed solution and coordinating with OIL for any necessary changes in the existing data centre network, SAN, IT security, or other infrastructure components to facilitate successful integration. OIL shall provide the necessary support and approvals wherever required. 6. The vendor must provide Installation and commissioning documentation after successful I&C of the solution. 7. The installation of the VCF solution shall be deemed complete only upon successful deployment and commissioning of the VCF solution, visibility of all software licenses in the respective OEM software portal under OIL's account, and activation of the hardware warranty in the respective OEM hardware portal under OIL's account, with support validity matching the warranty and support terms specified in the tender.
A1.17	Maintenance	1. The bidder shall be solely responsible for the operation, administration, maintenance, and management of the

		complete supplied solution throughout the contract period. The scope shall include: a) Administration and maintenance of all supplied hardware and software components. b) Provisioning and management of infrastructure resources, including creation, modification, and deletion of VMs, virtual networks/subnets, storage, and other resources as required by OIL. c) Reinstallation, reconfiguration, restoration, or migration of the solution whenever required during the contract period. 2. The bidder shall be responsible for raising support tickets with the respective OEMs for all hardware and software-related issues, coordinating with the OEMs until resolution, and restoring the services. Resolution of all issues related to the supplied solution shall be the sole responsibility of the bidder. 3. The bidder shall carry out periodic health checks of the supplied solution and perform all OEM-recommended firmware, software, and security updates, patches, and bug fixes during the contract period. 4. If the existing ToR switches, SAN switches, management switches, or SAN storage are replaced, upgraded, or reconfigured during the contract period, the bidder shall carry out all necessary reconfiguration and migration activities to ensure uninterrupted operation of the solution at no additional cost to OIL. 5. All cybersecurity-related advisories applicable to the hardware and software infrastructure issued by OIL during the Onsite Support Service period must be addressed and implemented by the bidder.
A1.18	Licenses	All Licenses required to enable all the features of the quoted server.
A2	**VMWare Cloud Foundation with Production Support (24 X 7) & Subscription for 5 years**	
A2.1	VCF License	VCF License for 192 Cores - To be attached to Site ID: 2243117 - VMWare Virtualization Software with Production Support (24 X 7) & Subscription covering the entire processor cores of the servers for entire duration of the CCC project
A2.2	Components of the VCF licenses	(a) VMware SDDC Manager 9.x or higher for Cloud Foundation - 192 core

		(b) VMware vCenter Server 9 or higher Standard Term License per Instance - 192 Instances (c) VMware vSphere 9 or higher Enterprise Plus for VCF - 192 core (d) VMware NSX Networking for Cloud Foundation - 192 core (e) VMware Aria Operations Network Enterprise for VMware Cloud Foundation (Per Core) - 192 core (f) VMware Aria Suite Enterprise 8.14 or higher for Cloud Foundation - 192 core
A3	**Windows Server License**	
A3.1	Windows Server License	Microsoft Windows Server 2025 Datacenter or later (License for 192 cores)
A3.2	License type	a) Licenses should be subscription. The licenses should not be tied to the hardware. It should be possible to deploy the licenses in a different hardware after the validity of the former hardware has expired. b) All licenses shall be mapped to OIL's Tenant ID. The Tenant IDs will be provided after issuance of the LoA. c)Any other OS licenses required by the solution has to be sourced and licensed by the bidder on OIL's name for entire duration of the CCC project

b) Key techno-functional requirements:

a. The system shall collect large volumes of high-speed data in real time, allowing it to service the full data collection needs of OIL. The scaling or expansion of the system shall not negatively impact speed or data volume collection capabilities.

b. Based on current requirement, the system shall be based on subscription licensing model for 50,000 tags with the capability of seamless expansion by 100% without the requirement of any additional changes to the architecture or hardware. 25 Named users shall be considered for the 5 years subscription period. (software AMC, ongoing support, updates and maintenance etc)

c. The system shall support a high availability architecture to ensure that there is no data loss.

d. The system shall enable real time and historical data monitoring, visualization and analysis.

e. The system shall collect data at sub-second speeds, organize data by assets and events, and deliver data to users and systems across the enterprise.

f. The system shall be designed to be highly scalable, reliable, flexible and secure to support a wide variety of uses cases and architecture.

g. The system shall not be a point solution or specialized application. The system shall be a configurable data infrastructure that will be the foundation for digital transformation and operational & business support throughout OIL.

h. Using the system capabilities, it shall be possible for OIL to develop a wide variety of operational and business use cases using drag & drop GUI based functionalities without the need for programming or custom development.

i. The list of some of the possible use cases that the system shall be capable of delivering are as follows in case require in future:

- KPI reporting across wells, pipelines, gathering stations, production facilities, and utilities.
- Real-time plant, field asset, and system performance & efficiency monitoring.
- Losses calculation and efficiency analysis.
- Environmental compliance monitoring and statutory reporting (air emissions, flaring, discharge, etc.).
- Energy consumption and auxiliary power monitoring with trend & variance analysis.
- Design vs. actual comparison for wells, compressors, pumps, heaters, and process units.
- IoT Sensor Integration & Remote asset monitoring for isolated installations, pipelines, and well pads.

The system shall function as an innovation platform where similar new use cases can be easily configured in the system by users. There shall be no limitation in the number of uses cases that are possible to be configured in the system.

Interfacing with operational data sources.

j. The system shall integrate and consolidate data from a variety of data sources including individual unit DCS, SCADA systems, automation systems, databases, controllers and devices including meters, IOT sensors with support to standard industry protocols:

- OPC-DA
- OPC-HDA
- OPC- A&E
- OPC-UA
- MODBUS TCP/IP
- IEC 61850
- IEC 60870-5-104
- DNP3

- RDBMS
- BACNet
- MQTT
- SNMP

k. All the above protocols shall be supported out of the box without requiring any external third-party converters or additional development for protocol conversion. It shall be ready to use plug and play type installations requiring only basic settings with protocol related configurations.

l. The data shall be acquired at the same frequency as the source data is updating.

m. It shall be possible to configure the update frequency for individual tags either on exception or periodic basis. Facility shall be available to set the exception parameter and time interval for update of data.

n. The Interface application shall support centralized as well as distributed architecture where all interfaces can be installed in the same machine or distributed across the plant on separate machines based on the location of the data source in the plant.

o. The interface application shall support redundancy and failover mechanism. It shall also be capable of handling redundant data sources.

p. There shall be no restrictions in the number of instances of the interface applications that can be deployed.

q. Data buffering shall be available to cater to conditions of connectivity loss/failure between the interface application and data archive server or unavailability of data archive server due to reasons like upgradation, maintenance, shutdown etc. There shall be no data loss under such scenario and buffering shall be available for a minimum period of 30 days. The buffer shall be automatically pushed into the database once the data archive server is available.

r. Data buffering shall be available to cater to conditions of interrupted connectivity between CCC and the OT data lake; the system shall maintain data synchronization using a fallback refresh frequency of 1 hour until normal connectivity and real-time ingestion resume.

Storage and retrieval of operations data

s. System shall have a built-in time series data archive for storage of process, operational and computed data.

t. The system shall support storage of different data types viz. Boolean, Byte, DateTime, Single (Float32), Double (Float64), Int16, Int32, Int64, String and Blob.

u. The data archive shall support storing of millisecond time stamp data.

v. The system shall support storage of data with future timestamp (predicted, forecasted data)

w. It shall be possible to set exception reporting/ dead band at individual tag level for the incoming data to filter and ensure only meaningful data is stored in the system.

x. The implementation of exception and compression mechanisms should no way affect the performance of the overall storage and retrieval process.

y. Similarly, the system shall also support the mechanism like swinging door compression method which enables storage of only the relevant data that will enable to accurately reproducing the original signal thereby optimizing the storage and other resources requirement.

z. The data archive should support future data such as predicted or forecasted data which has a future timestamp.

aa. The system shall be capable of handling collection and storage of data from up to two million OT data streams, tags, or points (to support future stream/tag expansion seamlessly).

bb. The system shall capture, and store data based on time, assets, and events.

cc. The system shall be able to manage out of order data i.e. if the incoming data is not coming in sequence, the data shall be automatically inserted and arranged in the right sequence based on time index.

Managing data

dd. The data shall be available online for retrieval for minimum 10 years.

ee. It shall be possible to further expand the online storage by expanding only the hardware resources.

ff. All data shall be backed up periodically during off-peak hours. There shall be incremental, verified backup done each day.

gg. The backup shall facilitate recovery after system failure, unintended configuration changes (such as an accidental point deletion) and database corruption.

hh. A graphical user interface tool shall be available to perform administration tasks including configuring security settings, managing archives, building and configuring points, and viewing message logs. A powerful command-line utility shall also be available for carrying out administration tasks.

ii. An excel add-in shall be available to create, delete, and edit objects, such as points, asset templates, and asset attributes in bulk.

Asset Data Contextualization

jj. A system shall allow users to model physical or logical objects along with the data associated with them. The tool shall identify the components/elements that make up a process, specify relationships between objects, and organize them based on the use case requirement.

kk. A meta data warehouse shall be used to define all assets, physical or logical.

ll. The tool shall provide a managed environment for

- Building contextual models
- Accessing and integrating data from different sources
- Performing analyses.
- Generation of logical events
- Generation of notifications

mm. The system shall make use of data abstraction model based on templates containing necessary attributes, data references and properties.

nn. The system shall a allow unification of data from disparate source systems. In addition to time series data coming from the data archival system, the system shall support bringing in the data from external relational database in the form of table lookup. In addition, it shall be possible to manually enter these data into the system.

oo. The system shall facilitate creation of relationships between these assets and create multiple representations of same assets based on hierarchy, role or function.

pp. It shall be possible to create multiple templates for different type of assets which allow users to create commonalities between different objects. It shall also be possible to create derived templates that make use of the parent template.

qq. Creation and managing of the templates shall be user configurable and should not involve any programming or coding.

rr. Whenever the templates are updated or modified, it shall immediately reflect in all instances created from that template.

ss. There shall be no limit on the number of hierarchies, templates, assets or analysis that can be created within the system.

tt. The system shall support a rich set of units of measure libraries using which it shall be possible to easily convert between units without the need to uses additional formulas/calculations for conversion. i.e. if the source data is defined and being recorded in a certain unit (e.g. psi) and the template or asset value field is defined using a different unit (e.g. bar), the system shall be capable of automatically handling such conversions.

uu. The system shall have a powerful real-time streaming calculation engine that shall enable users to configure, schedule and run calculations using a wide variety of functions and performance equations.

vv. Using the calculation engine, it shall be possible to generate Key Performance indicators and matrices using historical, real time and future data. It shall be possible to calculate equipment availability, equipment and process performance calculations, rate of change calculations, logical expressions, arithmetic, trigonometric and logarithm calculations, standard deviations and other first principle-based analysis and calculations.

ww. The system shall be capable of defining rules for automatically detecting and logging repeatable events that have a start and end time such as process events, downtime, shifts, startups, batch processes etc. The captured events shall automatically create references to process data along with its context so that users can analyse, compare and report similar events.

xx. The system shall have notification functionality where real time alerts of events can be sent to people or systems.

yy. It shall be possible to acknowledge the notifications. Facility shall be available to resend open notifications periodically or even escalate the notification to a different user in case the notification is not acknowledged, or appropriate action is taken by the user.

zz. Notification to users shall be in the form of emails and SMS.

aaa. Notification to other system shall be in the form of webservices (SOAP and REST). Using this it shall be possible to trigger automatic workorders or workflows in the external system.

Data Visualization and Reporting

bbb. The system shall support an easy-to-use self-service and scalable visualization tool that will enable all users to gain insights into critical operation and processes in real-time.

ccc. The tool shall be intuitive, web-based and shall enables users to retrieve, monitor, and analyse data to provide a deep level of operational intelligence.

ddd. It shall have ready to use symbol sets to visualize data in the form of trends, tables, values, gauges, and XY plots. It shall also support a rich set of graphical symbol library.

eee. The visualization and reporting tools shall tightly integrate with the rich contextualized, asset-based data models leveraging common asset lexicons, calculations and alerting. Navigation tree to visualize the data hierarchy shall be provided

fff. The displays or dashboards created shall support symbol collection and context switching eg. A group of symbols or display created for one asset shall be automatically applicable for assets of similar templates without having to recreate the displays.

ggg. The system shall enable choosing one or more data symbols and instantly view their related assets without having to search for each asset separately. In addition, it shall be possible to define selection criteria so that only the assets fulfilling the criteria shall be dynamically displayed eg. If the criteria are defined to display only pumps having efficiency below 75%, then the displays shall dynamically update and display the data symbol for only those pumps whose efficiency is below 75% at the selected point of time or time range.

hhh. It shall support configuration of multi-state symbols to create visual alarms for critical process states. Using multi-states, it shall be possible to dynamically hide symbol visibility and change text and symbol colour on display based on real time data update.

iii. Feature to categorize, visualize, analyse and compare events shall be available. It shall be possible to overlay similar events and their parameters for comparative analysis. Users shall also be able to acknowledge, annotate, add reason codes and attach files and images to events. It shall be possible to view parent child events in the form of Gantt chart.

jjj. Facility shall be available to create ad-hoc displays, analysis and calculations for deep dive analysis directly via the web browser. The ad-hoc displays shall enable creation of summary traces with customizable intervals. E.g. for a given data stream, the system shall be capable of displaying summary traces such as maximum, minimum, average etc. These summary traces shall be dynamically calculated based on the time duration and time interval selected by the user.

kkk. The tool shall support touch mode for touch enabled devices such as mobiles, tablets, 2in1 hybrid laptops etc. Touch-sensitive device gestures shall support functions such as drag & drop, pan, zoom, select etc using the touch functionalities of the device.

lll. The system shall have provision to write custom symbols and tool panes, including unique or industry-specific ways of visualizing data.

mmm. An excel add-in tool shall be made available to retrieve, monitoring, analysing, and reporting data directly into excel worksheet. It shall be possible to retrieve raw, calculated and contextual information directly into excel. This shall be used for creating user customizable, free form reports leveraging the combined power of the tool and excel.

Integration with enterprise system

nnn. The system shall provide integration capabilities with multiple enterprise systems and applications. It shall provide a wide variety of tools for to integrate and exchange data with third party systems.

ooo. The system shall support following technologies for sharing all data and related asset information:

- SQL-based data access (OLEDB, ODBC, JDBC Driver)
- OPC specifications (OPC DA/HDA Server)
- Service-oriented architecture (RESTful Services over HTTPS)
- Programmatic access (.NET Framework)

Scalability and Architecture

ppp. The system shall support horizontal scalability to accommodate additional field installations, wells, facilities, and users without performance degradation.

qqq. The system shall support vertical scalability to enable the addition of new analytical modules, tools, and functional capabilities over time.

rrr. The system shall be built on a resilient architecture incorporating high availability, failover mechanisms, redundancy, backup, and support disaster recovery provisions to ensure uninterrupted upstream operations.

System Administration

sss. The system should supply tools that system administrators can use to perform the following tasks:

- Manage the data archives, configure security settings, create new tags, access message logs, and monitor the performance of multiple installations of the bidder's data system from one central location
- Manage metadata, including asset data, which is used to properly describe a piece of logical or physical data
- Manage calculations and analyses that write results back to the data archive or similar data storage mechanism
- Monitor diagnostics and logs, including alarms, alerts, and notifications
- Easily manage user permissions
- Analyse system uses and configurations changes by maintaining an audit trail
- Monitor the health and performance of servers, workstations, firewalls and network equipment

OT Data Lake System Performance Metrics :

ttt. OT Data Lake shall be able to handle inbound events rate of at least 150000 events/sec for raw data.

uuu. Analysis evaluation rate of 30000 evaluations per second shall be handled by the system.

vvv. OT Data Lake visualization tool shall be able to handle up to 500 simultaneous connections.

c) OT System integration scope:

Source OT	System	Spheres	Key KPIs/Parameters (Illustrative, Not Exhaustive)
GMS SCADA	SCADA (ABB)	Duliajan	Equipment status & Alarms (Separator, Compressor, Pumps, Emulsion treater, Scrubber, Gas engines etc) Flow meters (Oil, Water, Gas) Pressure (Compressors, Gas lift) Storage tank level Flaring
SCADA - Field processing	SCADA (Yokogawa)	RF	
STF	DCS (Yokogawa) TFMS (Emerson)	Duliajan	Oil receipt volumes – source-wise Water cut % and other losses Tank inventory, Temperature Oil dispatch to Pipeline Sludge generation, water disposal Equipment status and Alarms (Separator, Pump etc)
CTF	DCS (Honeywell) TFMS (Honeywell)	Duliajan	
ITF	DCS (ABB) TFMS (Honeywell)	Duliajan	
CBUS	DCS (ABB)	Duliajan	Number of bowsers unloaded per shift/day Unloading flow rates, Time taken Buffer tank levels Transfer volumes to tank farms Any loss/gain accounting Pump and unloading equipment status & Alarms
NBPL	SCADA (Yokogawa)	PHQ, Guwahati	Pump station status (running, standby, fault) Pipeline flow rates, pressures, temperatures Inventory in pipeline and intermediate tanks Custody transfer readings (Tank inventory and Flow meters) Leak detection alarms
NSPL	SCADA (ABB)	PHQ, Guwahati	
CGGS	DCS (Emerson)	Duliajan	Gas gathering inlet flow, pressure, temperature – source-wise Custody meter readings Gas processing parameters – H_2S, CO_2 content etc Quality specs Flaring volumes Equipment status & Alarms (Compressor etc)
FGGS	DCS (Emerson)	Duliajan	
GCS, Hebeda	DCS (Emerson)	Duliajan	

RTPMA	SCADA (Yokogawa)	Duliajan	Casing head pressure Tubing head pressure Flow arm temperature Flow arm pressure Annulus pressure
Well head monitoring (IoT)	Yokogawa	FHQ & RF	Casing head pressure Tubing head pressure Flow arm temperature Flow arm pressure Annulus pressure

Please note that the above parameters are indicative and not exhaustive. The bidder shall identify and finalize the relevant parameters during the implementation phase based on system requirements and site conditions.

6.2. IT Middleware & Business Data Lake setup, IT System Integration

a. The objective is to establish an integrated IT middleware and business data lake platform that unifies enterprise systems, enables real-time data exchange, enhances cross-functional KPI visibility, and provides a secure, scalable foundation for future advanced analytics.

b. Bidder shall set up the IT middleware & Business Data Lake to integrate data from OIL's enterprise, IT, and departmental specific applications.

c. Existing application-side API enablement and related configurations will be handled by OIL India. The Bidder shall provide all required specifications, documentation, and support to facilitate this process.

d. Bidder shall design the integration architecture for IT systems, submit it to OIL for review, and obtain approval prior to implementation.

e. Bidder shall implement secure, reliable data pipelines and APIs, ensuring compliance with OIL's cybersecurity, access control, and data governance policies.

f. Any required connectors, adaptors, or integration modules for SAP-HANA shall be procured, licensed, and provisioned by the bidder as part of the solution.

g. Business Data Lake shall store structured and unstructured data, provide analytics-ready datasets, and enable secure data sharing with the CCC platform and authorized third-party applications.

h. Bidder shall implement data contextualization, aggregation, and standardization as per business & functional requirements.

i. Storage periods, retention policies, and data lifecycle management shall be defined during the detailed blueprint design, and the Bidder shall present the proposed approach in proposal.

j. The proposed platform is designed to be scalable, supporting future system integrations and accommodating growing data volumes.

k. Subscription license for the developed platform/application, infrastructure and services procured under a subscription-based model as per Microsoft's standard cloud licensing. The bidder shall adhere to the OIL's cloud service terms and conditions specified in the Design Criteria Document.

l. Data buffering shall be available to cater to conditions of interrupted connectivity between CCC and the IT data lake; the system shall maintain data synchronization using a fallback refresh frequency of 1 hour until normal connectivity and real-time ingestion resume

m. The bidder shall migrate a minimum of two (2) years of historical data (wherever available) from all integrated OT and IT systems into the respective IT Data Lake. This includes time-series data, enterprise application data, and any relevant historical datasets required for baseline analytics, trend analysis and model training. The bidder is responsible for extraction, transformation, data quality checks, metadata mapping, contextualization, and ingestion into the target data lakes

n. Backup of the solution shall be carried out in OIL's infrastructure managed with Commvault backup software. Bidder must facilitate all necessary technical assistance to OIL team to implement backup policy, restoration policy, of the Data Lake along with all associated activities.

o. The bidder shall be responsible for rebuilding of Data Lake from backed up data set in case of any eventuality. Bidder shall be responsible for carrying out regular restoration drill of data and application in coordination with OIL's IT team. The bidder shall also be responsible for preparing backup set for offline backup in cloud or in any other physical location.

a) IT Middleware & Business Data Lake resources provision

a. Bidder shall provide Cloud infrastructure for middleware setup, ensuring full compliance with OIL's Cloud Governance Framework, including standardized naming conventions, resource tagging, and policy enforcement controls.

b. Compute resources shall be provisioned such that CPU and RAM utilization do not exceed an average of 60%. Any sustained utilization beyond this threshold shall be deemed a resource shortfall, and the bidder shall provision additional capacity at no extra cost to OIL.

b) Key techno-functional requirements:

I. Integration

a) Integrate with enterprise systems, department-specific apps, and the CCC.
b) Support IoT protocols and file-based uploads (Excel, CSV, WITSML).
c) Enable near real-time and batch data ingestion.
d) Provide robust APIs for high query and load demands.

II. Data Handling

e) Handle structured, semi-structured, unstructured, and multimedia data (PDFs, images, videos).

f) OSDU-compliant for subsurface data in oil & gas.
g) Support basic data validation, data aggregation and calculations as per business requirements.

III. Scalability & Availability

h) Cloud-native or hybrid, scalable for future expansion.
i) High availability and disaster recovery ready.
j) Long-term storage with clear data retention policies (to be defined).

IV. Security & Compliance

k) Meet data privacy and cybersecurity regulations (incl. MEITY).
l) Ensure secure storage and governed access.
m) Support RBAC and MFA.

V. Analytics & AI Ready

n) Integrate with CCC & Future analytics, ML/AI, and reporting platforms.

b) IT System integration scope:

System	On Cloud/Prem	Key KPI/Parameters
SAP (S/4 HANA)	Azure	Production, Drilling & Exploration KPIs Project status & cost HR & Admin Inventory & procurement KPIs Financial KPIs Maintenance WO KPIs Budget, CAPEX, OPEX
CxO Dashboard	Azure	Departmental Data Imports (Flat files) Aggregated/Calculated KPIs
E&P Databank	On-prem	Exploration & Production data Well lifecycle data
eRTMAC	Azure	Drilling Progress Critical Alarms & Alerts Productivity (ROP, NPT, RPM)
CBM	Azure	Equipment Health status Anomaly detection & Prediction alerts
Connected Worker	Azure	Critical field observations Key parameters & Manual readings (Tank dip)
BoLD	Oracle	EPS/QPS production Bowser stats (VTAT, Utilisation, Loading/Unloading time, Route adherence etc.)
S&E Portal	AWS	Near-miss & Safety observations Total Incident Rate; Lost Time Injury Compliance actions Corrective actions status
Drone Surveillance	On-prem	Route survey coverage Safety & Intrusion detection Annotated images & videos

SOC	On-prem	Real-Time Threat alerts (Critical) Threat Detection Rate Incident Response Time
AMIS	On-prem	Key asset data

Above parameters are indicative and not exhaustive. The bidder shall identify and finalize the relevant parameters during the implementation phase based on system requirements and site conditions.

6.3. Develop & Deploy Cloud based CCC Application and mobile app

a. CCC Platform should follow System of Systems approach and integrate with existing sub-systems as well as future sub-systems.

b. Platform should have ability to integrate with subsystems natively driving unified user interface providing ease of operations and facilitating central control across multiple operations.

c. The data store function shall acquire data both automatically and manually. Automatic data acquisition shall be met through industry-standard data transports. Data Acquisition via OLE for Process Control (OPC) along with other proprietary transports shall also be supported.

d. CCC Platform should be able to connect to operational technologies with bi-directional control via native protocols like OPC UA/DA, BACnet IP, MODBUS TCP, Telemetry protocols etc. via tunnelling software wherever required.

e. CCC platform should connect to IT Application and network components via IT Data Lake or point-to-point integration with IT protocols via Web-services/APIs/ REST/SOAP and Network protocols via SNMP.

f. The device integration components must include powerful diagnostics, redundant communications, data level security, native open protocol communication connectivity and improved deployment capabilities.

g. The platform should be able to aggregate and normalize the data coming from different systems & databases of same and provide secure access to that data using data API(s) to application developers. The message exchange between various applications via CCC platform should be fully encrypted and authenticated.

h. The platform should support distributed deployment of functions (workflows & policies) across System's network and compute infrastructure with centralized management and control.

i. The platform for ease of management with adequate authentication and Role based access control mechanism.

j. The platform should support on-premises Active Directory or cloud-based Active Directory for user authentication.

k. The platform should have provisions for flow of normalized data in a predefined manner with adequate authentication.

l. Bidder shall design, develop and deploy the CCC applications, dashboards and mobile app with all required capabilities and features specified.

m. The solution shall provide a consolidated, enterprise-wide dashboard integrating data from exploration, drilling, production, transportation, and safety functions. It shall offer real-time operational status indicators (e.g., “Active Drilling”, “Shut-in Wells”) and seamlessly combine IT, OT, and IoT data to enable holistic monitoring, analytics, and data-driven decision-making.

n. Bidder shall conduct workshops with stakeholders to identify, document, and finalize KPIs, Alerts, Analytics & Insights, Workflow and Mobile app.

o. Bidder shall map KPIs to existing and new IT/OT data sources, designing any required integrations.

p. Bidder shall produce a detailed blueprint (including UI wireframes, interaction flows and display templates) and obtain written approval from OIL prior to development or deployment.

q. Platform shall be configurable for admin-driven onboarding and management of new wells, assets, sensors and locations without code changes.

r. Platform shall be AI/ML-ready to support future phases (predictive insights, anomaly detection, model deployment and integration of third-party/custom models).

s. Bidder shall ensure multi-layout, multi-location display support, adaptable to various screen configurations and aspect ratios across all CCC locations.

t. The Bidder shall provide a Field Mobile App that displays real-time status and alerts and enables direct coordination with the CCC and field teams via in-app chat/redirection for & ticketing functionality.

u. Bidder shall implement multi-source video-wall management with synchronized rendering, low-latency source switching, priority override/emergency broadcast and a secure visitor/branding mode.

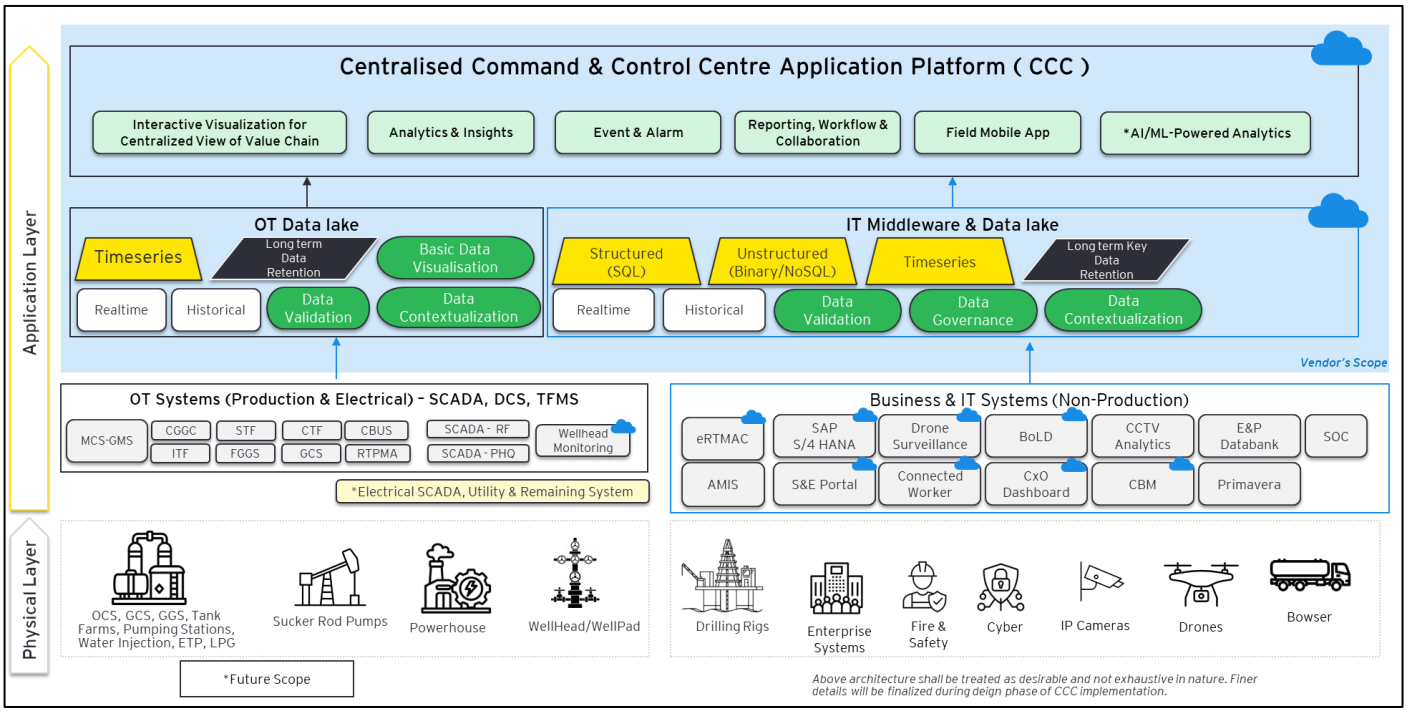
v. Bidder shall provide a Video/Content Management System (VCMS) to manage visualization modes and switch dashboards/content across entire video walls or defined zones, and support mixed multi-source layouts

w. Bidder shall provide Cloud infrastructure for the CCC Application including mobile app deployment, ensuring full compliance with OIL’s Cloud Governance Framework, including standardized naming conventions, resource tagging, and policy enforcement controls.

x. Backup of the solution shall be carried out by bidder through a backup policy which shall be created in consultation with OIL. Bidder must facilitate all necessary technical assistance to OIL team to implement backup policy, restoration policy, of the Data Lake along with all associated activities.

y. The bidder shall be responsible for rebuilding of Data Lake from backed up data set in case of any eventuality. Bidder shall be responsible for carrying out regular restoration drill of data and application in coordination with OIL's IT team. The bidder shall also be responsible for preparing backup set for offline backup in cloud or in any other physical location.

a) System Architecture and Core Functional Requirements



I. Real-Time & Periodic Data Ingestion

a) The system shall ingest data in real-time and on a scheduled/periodic basis from the OT Data Lake, IT middleware, and Data Lake sources.
b) The system shall support multiple input formats including unstructured data, flat files, and web forms, and shall be scalable to accommodate future data sources and integrations.

II. Data Aggregation & Storage

a) The system shall perform data cleansing, normalization, and validation to ensure consistency and accuracy.
b) The system shall calculate, aggregate, and store KPIs at asset, process, and enterprise levels to support reporting and analytics.

III. Interactive Visualization

a) Integrated dashboard and KPI tracking capabilities for various System functions.
b) Supports real-time updates as well as historical trend analysis.

c) Allows customization of dashboards with user-defined KPIs, visualizations, and layout preferences.
d) Supports aggregation and comparison of KPIs across multiple sites, units, or business functions.
e) Provides futuristic and immersive visualization capabilities for enhanced operational insight.
f) Supports multi-level drill-down from enterprise to asset and well levels.
g) Provide filterable reports and dashboards about critical information pertaining to incidents and KPIs collated in a single view which can be drilled down further for more detailed information.
h) Enables visualization of historical trends, charts, and video previews (Minimum 3 Level)
i) Offers customizable KPI tiles, heatmaps, thermographs, and touch-based interactions including drag-and-drop functionality.
j) Allow zoom, pan, and rotate with smooth 3D rendering and real-time equipment health indicators.
k) Displays visual alerts for anomalies, maintenance history, and supports simulation overlays for performance analysis.
l) Facilitates digital walkthroughs for remote monitoring, collaboration, and incident response.
m) Includes a comprehensive library of configurable visualization components, such as charts, gauges, maps, and analytical widgets.
n) Supports definition of location-specific KPIs and dashboards tailored for each site, enabling seamless transition between site-level operational insights and corporate-level strategic overviews.
o) Adapts to multiple screen sizes and aspect ratios, including panoramic displays in CCC, smaller screens in field headquarters, and mobile devices.
p) Provides support for light/dark themes and auto-restore of sessions.
q) Provides secure access control for different user roles, ensuring relevant KPI visibility based on function and authorization.

IV. Geospatial Asset Management

a) Provide an interactive GIS-based map for real-time visualization of all assets across geographically distributed locations (plants, pipelines, stations, fields, warehouses, utilities, etc.).
b) The map shall support multi-layer visualization, including asset categories, Heat map health status, alarms, live data, and operational KPIs.
c) Allows click-to-zoom functionality for focused views of individual assets or locations.
d) Facilitates spatial correlation of operational events, performance metrics, and maintenance activities.
e) Supports layering of multiple data sources for comprehensive geospatial analysis.
f) Enables integration with dashboards and KPI tracking for location-specific performance monitoring.

V. Diagnostic & Descriptive Analytics:

a) Descriptive Dashboard - Current vs. historical trends, KPI scorecards

b) Provides descriptive dashboards comparing current performance against historical trends and KPI scorecards.
c) Provide exception reporting and threshold-based alerts for timely identification of deviations.
d) Enables Top-N analysis to highlight best/worst performing assets, units, or processes.
e) Displays Red-Amber-Green (RAG) status indicators with real-time blinking for critical anomalies.
f) Facilitates root cause analysis by linking anomalies to underlying operational data.
g) Provides automated correlation of operational events across distributed upstream assets (wells, pipelines, compressors) to identify patterns and potential risk areas.
h) Allows drill-down from high-level summaries to detailed event or asset-level data.
i) Supports integration with dashboards and KPI tracking for a comprehensive operational overview.

VI. Event & Alarm Management:

a) Support multi-level alarm prioritization (critical, high, medium, low) with Dynamic colour coding (red, amber, yellow, green) based on severity.
b) Provides actionable workflows with defined escalation paths to ensure timely response.
c) Manage the life cycle of incidents and related entities via predefined workflows.
d) Offers GIS-based alarm mapping and clustering for spatial visualization of events across wells, pipelines, and facilities.
e) Delivers real-time notifications via multiple channels, including email, phone, and messaging platforms (e.g., WhatsApp).
f) Facilitates alarm history tracking, analytics, and reporting for operational review and compliance.
g) Integrates with dashboards and KPI tracking to provide contextual awareness of asset performance and risk.
h) Supports configuration of location-specific alarm thresholds and customizable escalation rules for upstream assets.

VII. AI/ML Predictive Analytics & Forecasting (Future Scope – Phase-2):

a) Forecast KPIs (production, decline curves, Opex/Capex)
b) What-if analysis with adjustable inputs
c) Integration with third-party platform for operational analytics input (CBM, EMS, ertMAC, Reservoir tools etc)
d) Conversational AI for querying

VIII. Reporting & Collaboration:

a) Supports auto-scheduled and on-demand report generation in multiple formats (PDF, Excel, etc.).
b) Provides automated task creation with configurable workflow automation and assignment.
c) Triggers workflows for operational alerts and escalations automatically, without requiring human intervention.
d) Allows initiation of cases or service requests (SRs) based on identified anomalies, performance deviations, or improvement opportunities.

e) Maintains audit trails of all actions, notifications, and task completions to support operational transparency and compliance.
f) Supports notifications and reminders to users for pending actions or escalated tasks to ensure timely response.
g) Provides mobile-enabled collaboration, allowing field operators and remote teams to receive alerts, acknowledge tasks, and update workflow actions in real time from mobile devices via Field Mobile App.

IX. Easy New Asset, System, KPIs Configuration:

a) Provides pre-built templates with ready-to-use configurations for new wells, pipelines, and other upstream asset types.
b) Offers a guided setup wizard with a step-by-step interface requiring only basic inputs for rapid configuration.
c) Includes an intuitive interface for users to register new assets, define parameters, and deploy associated data feeds within minutes.
d) Supports creation and configuration of new KPIs linked to assets, processes, or locations without requiring complex programming.
e) Enables mapping of newly added assets to existing asset hierarchies, dashboards, and KPI reporting structures automatically.
f) Facilitates future scalability by allowing seamless addition of new asset types, sensors, or operational units without impacting existing configurations.

X. Field Mobile App:

a) Provides real-time display of selected asset status, operational parameters, and active alerts.
b) Delivers real-time alerts and notifications for critical events to field personnel.
c) Supports in-app /redirection for chat and ticket/SR generation for direct coordination between field teams and the CCC.
d) Provides vibration alerts for critical events in noisy environments where audio notifications may be missed.
e) Optimized for low-bandwidth conditions typical of remote upstream oilfield locations.
f) Supports offline capability to securely store data such as logs, inspection forms, and incident reports, with automatic upload upon network reconnection.
g) Enables location-based task assignments and geo-tagging of field observations or incident reports for better situational awareness.
h) Provides audit trails of user actions, alerts acknowledged, and tasks completed via mobile app.
i) User Capacity: The mobile application shall support a minimum of 75 concurrent users. The mobile application shall be scalable to accommodate additional users as the field workforce grows.

XI. Functions in scope:

1. Geoscience/Exploration
2. Drilling, Production
3. Pipeline and Transportation
4. HSE
5. Finance

6. Projects
7. HR
8. BD
9. Planning
10. Engineering services
11. Admin and Shared Service

- KPIs: Approximately 350–400 across the above functions. (Note: A single KPI represents a specific metric, such as **Production**. Variations of this KPI across different assets—e.g., Wells, OCS, Tank farm—or different time periods—e.g., daily, shift-wise—are considered as instances of the same KPI, not separate KPIs.)

b) Detailed Technical Requirements:

Functionality	Technical Requirements
CCC Operations	The CCC platform shall be fully integrated commercial off the self (COTS) software platform that provides seamless integration and control mechanism with various Information Technology, Operational Technologies and IOT sensors/ applications/ platforms. • The solution shall provide the "day to day operation", "Common Operating Picture" and situational awareness to the center and participating agencies during these modes of operation. • It shall improve scalability for large and geographically distributed environments. • It shall provide complete view of sensors, facilities, ERP, video streams and alarms in an easy-to-use and intuitive GIS-enabled graphical interface with a powerful workflow and business logic engine. • It shall provide a uniform, coherent, user-friendly, and standardized interface. • The dashboard content and layout shall be configurable, and information displayed on these dashboards shall be filtered by the role of the person viewing dashboard.
Unified Value Chain View	The CCC platform should provide a responsive web interface with dynamic overlays, real-time data binding, and multi-monitor layout management; support tablet/mobile responsive breakpoints; integrate REST/GraphQL APIs with pagination, filtering, caching, and data validation pipelines; store data in secure time-series and relational databases.
Asset & KPI Data Overlay on Map	The CCC platform should provide real-time sensor visualization with charts, heatmaps, threshold-based colour coding, and animated flow indicators; integrate push-based streaming APIs (WebSocket/SSE) for live updates; store sensor and visualization data in time-series and document-oriented databases. CCC platform should have a user interface or dashboard and schematics that connects a person to a machine system or a device to achieve human machine interface. The interface should provide displays with modern UI/UX design. System

	should provide multi-touch and gesture controls such as panning & zooming, swipe, clutter & declutter of graphical layers and a larger view of the process.
3D Rendering (Should support future integration)	The CCC platform should deliver 3D asset visualization with operational overlays and health indicators; integrate metadata ingestion and 3D streaming APIs
Drag-Drop Dashboard & Report Builder	The CCC platform should provide a widget-based dashboard creation interface with responsive grid layouts and pre-built industry-specific templates
Data and Analytics Engine	Data archive and logging: stores data feeds from the device engine and external data sources Platform should be able to perform multi-dimensional analysis on incidents data. This should provide capability to do Trends Analysis and provide near real time Stream Analytics, time-shifted or offline analytics on the archived data. Reporting: delivers reports based on events triggered by device engine data and external notifications. CCC platform should have inbuilt Time-series historian (OT Data) with advance data retrieval. Platform should have following advance data retrieval modes like: • Time-in-state • Best fit • Counter • Minimum, maximum, average • Slope • Time weighted average • Cycle and delta • Value state • Interpolated • Integral • Full • Round trip System should be able to handle data coming in from system with mismatched system clocks, preserving the correct data sequence automatically
Display of Video with Metadata	The CCC Platform should provide an interface to view and control video playback (pause, zoom, playback speed) along with associated metadata such as timestamp, location, detected objects, and severity; integrate APIs for retrieving video streams and metadata from analytics platforms & CCTV video management systems; store metadata in structured databases and video content (Clips) in storage.
KPI Customization by Role	Provide role-aware KPI filtering and contextual visibility rules in the Dashboard; implement RBAC services for secure access control; store session and user-related data.

Time-Series Replay & Historical Data Access	The CCC Platform should provide interactive timeline navigation, charts, and video clip playback. enable export of time-slice data; support access to historical OT and IT datasets via data lakes; implement hot/warm/cold lifecycle management & retention policies; store time-series, video, and associated metadata in secure repositories.
Operation Management Interface	CCC platform should have a user interface or dashboard and schematics that connects a person to a machine system or a device to achieve human machine interface. The interface should provide displays with modern UI/UX design. System should provide multi-touch and gesture controls such as panning & zooming, swipe, clutter & declutter of graphical layers and a larger view of the process. Extensible library of pre-designed 'intelligent' and customizable visualization objects & templates CCC platform should have a client/server architecture to allow multiple client access to an Ethernet connected server. The workstation shall operate also as a stand-alone workstation/server. Should have built-in, real-time, and historical trending. Stunning graphic visual representation and interaction with operation bringing the right information to the right people at the right time UI/UX for CCC platform should supports multi-monitor. And shall works on both OS based native application as well as web-browser (RDP over HTML). CCC platform shall enable an operator to interact with various devices including network nodes, recorders, input/output (I/O) systems, intelligent transmitters, and other field devices.
Role-Based Views	Deliver adaptive UI layouts with personalized landing pages and location-specific dashboards; support cross-functional collaboration views and guest access with limited KPI visualization; integrate authorization middleware, RBAC, and Active Directory;
Secure Access & Audit Trail	Provide unified login with SSO and MFA support, session timeout, and device trust management; implement authentication, authorization, and audit logging services; monitor session activity; store audit logs in secure repositories.
User Personalization	Support theme/layout toggles, notification preferences; provide secure user preference management with scalable storage of personalization settings in document-oriented repositories.
Configurable Workflows	The platform should have process designer - Intuitive visual tool that offers an integrated workflow process design and deployment tool for use by departments, developers' community and technical architects. Workflow function should provide facility to trigger a corrective action workflow and define the stakeholders for the same. Workflow system should be able to create, assign, track, and report on the lifecycle of tasks during an incident.

	The workflow system should allow a specific task to be decomposed into sub-tasks. The workflow engine should be able to dynamic assignment of tasks based on roles, name, designation, or any other attribute present in the resource database
User Collaboration	Provide embedded messaging, workflow & task management within dashboards and mobile apps; support real-time messaging with presence indicators and typing status; enable file/attachment sharing and archival; integrate with notification services; store messages, documents, and attachments in secure object/document repositories.
Reporting and Data Export	Support no-code report building, template management, and export in multiple formats (PDF, CSV); enable scheduling, email distribution, and secure API-based data sharing; implement batch processing and job scheduling; store templates, export history, and report artifacts in structured repositories.
Configurable Alerts	Provide configurable alerts with badges, contextual tooltips, priority indicators, and snooze functionality with intelligent reactivation; support drill-down views and delivery via email, WhatsApp, or messaging channels
Alert Summary & Root Cause	Provide drill-down grid and chart views with multi-level filtering, severity classification, and statistical analysis widgets; implement an alert aggregation and diagnostics engine;
Basic Analytics	Deliver descriptive analytics dashboards with trends, heat maps, statistical summaries, Top-N/Bottom-N rankings, threshold breach analysis, comparative charts, and rule-based analytics with visual alerts; support historical data retrieval, quality checks, and cleansing; implement aggregation and correlation logic with high-performance algorithms;
No-Code New Well, Asset, and KPI Addition	Provide a no-code configuration interface with guided wizards, drag-drop entity design, and template libraries; support workflow orchestration, dynamic schema management, and scalable system design; store configurations and templates in a storage.
Business Rule Engine	Platform should automatically update the information based on alarms and incidents that are presented. The polling and platform database refresh cycle shall be configurable to match the status of the situation (whether there is an emergency or crisis or just monitoring only). Platform should have the Incident workflow management. The CCC platform should have a built-in alarm handling facility based on configurable cause and effect rules.
Field Responder Mobile Apps	CCC platform should enable operators and the crew members to access the workflow task assigned to them and act using the native mobile application (Android & IOS). They should be able to close loop of workflow by acknowledging the real-time status of Action assigned to them. Mobile app should provide field notifications, real-time alerts, SOS features, and emergency location services; support field

	data entry & ticket generation via forms with photo/voice input; integrate mobile-optimized APIs with real-time communication services and store-and-forward capabilities; store mobile data securely in database.

a. The bidder is free to offer any MeitY empanelled public cloud subscription if required for implementation of the solution. In this context the following points are to be considered by the bidder

   i. OIL has already setup a secure cloud landing zone in MS Azure to access OIL's ERP (SAP S4/HANA) and such other cloud-based applications for OIL's cloud security and compliance requirement.

   ii. The bidder shall have to route all traffic initiated towards the proposed public cloud hosting relevant application through OIL's above mentioned landing zone in Azure.

   iii. Any data transmission cost if applicable from the offered public cloud to OIL's landing zone/Azure must be factored by the bidder in his offer.

   iv. Additional security gateway, or connectivity components (NGFW-Next Generation Firewall or VPN gateway etc) must be factored in the bidder's subscription to enable secure IPsec connectivity to OIL's Azure Landing Zone subscription.

   v. The bidder must also factor federation/identity service in their subscription to establish SSO using OIL's Azure AD.

   vi. OIL shall have full access or audit right to the offered cloud subscription for cyber security and compliance mandate of OIL

Enablement for Design Digital Twin functional requirements:

b. The CCC platform shall be able to connect to Digital Twin models through secure integration interfaces.

c. The CCC platform shall provide an embedded Digital Twin viewer within the CCC UI to access and visualize the Digital Twin models (no separate/external application launch). The embedded Digital Twin experience in CCC shall provide a dashboard/UI for search, retrieval, and collaboration on Digital Twin information.

d. The CCC platform shall enable simple navigation between 3D Models, engineering data, and documents that are intelligently linked at the tag level.

e. The CCC platform shall allow users to hover on a Tag ID (in the hierarchy and/or model) and view a summary of the corresponding tag details and linked items.

f. The CCC platform shall enable access by hierarchy (including but not limited to): Tags by Type, Documents by Type, Documents by Source.

CCC & Web Application Users:

g. CCC Operators (24×7 shifts): 15 users

h. Supervisors / Engineers / Analysts: 10 users

i. Executives / Management (view & review): 25 users

j. Admin / Power users: 5 users

7. AMC for 5 years including Hyper Care

a. Bidder shall provide comprehensive AMC for a period of five (5) years, commencing from the date of successful Go-Live.

b. Post commissioning and end-to-end handover of the CCC platform, the bidder shall be responsible for Operations and Maintenance of the complete CCC solution under an Annual Maintenance Contract (AMC), providing:

i. Comprehensive maintenance for all supplied infrastructure and components including (but not limited to) servers, storage, networking equipment (switches/routers), application software, middleware, databases, operator consoles, video-wall controllers, AV systems, all associated licensed software, and any other licenses required to ensure seamless and continuous functioning of the CCC solution.

ii. Day to day operations of the CCC solutions at all the locations.

c. Hypercare & Post Go-Live Stabilization Support

Post successful installation and Go-Live of the CCC system, the Bidder shall provide an enhanced **Hypercare support period of four (4) months** to ensure system stabilization, operational continuity, and smooth transition to steady-state operations.

i. The Hypercare phase shall include dedicated support from the core project implementation team and shall cover, inter alia:
   - Identification, fixing and closure of bugs and defects
   - Performance tuning and optimization of applications, data pipelines, dashboards, and integrations
   - Model refinement, tuning and re-training, wherever applicable
   - Data validation and reconciliation across IT/OT systems
   - Configuration fine-tuning and parameter refinements
   - Usage monitoring and proactive issue identification
   - User handholding, on-job support and operational guidance
   - Resolution of operational issues and implementation of minor enhancements required for stabilization

ii. During the Hypercare period, the system shall be closely monitored to ensure compliance with agreed performance, availability and functional requirements.
iii. Weekly review and debrief meetings during the Hypercare period to assess system stability, user adoption, operational issues, and closure of identified gaps.
iv. The Hypercare support shall form an integral part of the Annual Maintenance Contract (AMC).

d. AMC cost per annum shall not be less than 5% of the Total Contract Value (TCV). In the event the quoted AMC charges per annum is less than 5% of the TCV, OIL shall withhold from the bidders' s payable amounts an amount equal to the shortfall (i.e., 5% of TCV minus the AMC cost per annum), and such withheld amount shall be released to the bidder in equal annual instalments during the AMC period, subject to satisfactory performance of AMC services for the respective year after deduction of penalty, if any.

e. The bidder will also be responsible for data integrity checks, cleansing, and synchronization across all connected systems. This includes any newly added data sources or changes in existing ones.

f. Bidder shall have end-to-end responsibility for Bidder-supplied systems, including single-point coordination with third-party OEMs, and ensure timely resolution of faults or defects arising from OEM-supplied items.

g. Bidder shall ensure maintenance personnel for AMC services report to OIL's Corporate Office (WTC, Delhi) and Field HQ (Duliajan) during OIL-defined working hours/shifts.

h. The bidder shall deploy the required manpower for the day-to-day operations of the CCC at CO-WTC Delhi and FHQ Duliajan, as specified in the Manpower deployment section in this document.

i. Bidder shall deploy additional manpower as required by workload, subject to prior intimation to and approval by OIL, and shall bear all associated costs (no additional charge to OIL).

j. The minimum resource deployment requirements along with the necessary skill sets are specified in the Manpower deployment section in this document.

k. The bidder shall provide support services beyond OIL's normal working hours whenever required, including weekends and holidays.

l. OIL will not provide accommodation, transportation or logistical support for the bidder's personnel or materials at any site; all such arrangements are the bidder's responsibility.

m. The services under the Annual Maintenance Contract (AMC) shall include, but are not limited to:

a. Preventive and breakdown maintenance, including repair or replacement of all hardware and software components.

i. Physical infrastructure associated with the CCC platform (such as video walls, presentation screens, precision AC units, UPS, racks, cabling, IT hardware, and network devices) must be inspected for wear, tear, or damage. Any defective material shall be replaced promptly. Components exhibiting rust, deterioration, or other defects (e.g., cables, connectors, or mounting structures) shall be replaced.

ii. During preventive maintenance, if any system integration issues, data discrepancies, inconsistencies, or inaccuracies are identified, the bidder shall promptly investigate and rectify these issues to ensure smooth and accurate system operation.

iii. OIL may carry out internal or external performance audits of the CCC platform at six-month intervals. The bidder shall address and implement audit recommendations—covering hardware, software, or configuration improvements—without any additional cost. Any proposals involving major changes or requiring extra hardware or services must first be submitted with cost details and receive CCC's approval before execution.

iv. The bidder shall be responsible for repairing or replacing any faulty hardware components (e.g., video walls, servers, storage systems, networking devices, AC units, UPS, and other IT hardware) and software modules within the CCC platform.

v. All such repair and replacement activities shall be included within the AMC charges, with no additional cost to OIL.

vi. The service provider shall attend to and resolve any number of breakdown maintenance calls related to the CCC throughout the contract period, without limitation.

vii. Repair or replacement of faulty hardware components (e.g., video wall, servers, storage systems, networking devices, AC units, UPS, and other IT hardware) or software modules within the CCC platform shall fall under the bidder's scope. All such repairs and replacements shall be covered under the AMC charges, with no additional cost to OIL.

viii. The bidder shall coordinate with OEMs, technology bidders, and relevant third parties for troubleshooting, repairs, or replacement of hardware and software components, ensuring timely resolution of issues without additional cost to OIL.

ix. If any component or module is beyond repair, it shall be replaced with a new component of the same make and model. If the original make and model is unavailable, the bidder shall provide a replacement with an equivalent or superior model that meets or exceeds the original technical specifications.

x. The bidder shall strictly comply with the defined response and resolution timelines for all breakdown calls, in accordance with the agreed SLA.

xi. The bidder shall maintain an adequate stock of critical spare parts and consumables to ensure minimal downtime during breakdown repairs.

xii. The bidder shall furnish all necessary tools, test equipment, and accessories required to carry out maintenance activities under the AMC, ensuring work is performed efficiently and without delay.

b. System Integration Health Monitoring & data quality management

i. The bidder shall continuously monitor the health and performance of all system integrations between IT and OT platforms, including data acquisition, processing, and visualization components.
ii. Preventive checks shall be conducted to identify and rectify issues such as data discrepancies, delays, inconsistencies, or integration failures.
iii. The bidder shall maintain logs of all monitoring activities, detected issues, and corrective actions taken, and submit periodic reports to OIL for review.
iv. Updates, patches, or configuration changes required to maintain integration health shall be applied within the AMC scope at no additional cost.
v. In case an integration issue arises due to problems at the system level (e.g., IT system APIs or OT system endpoints), the bidder shall inform OIL with detailed information, including the system name, affected modules, and nature of the issue. Troubleshooting and resolution shall be carried out jointly with OIL to identify the root cause and implement the necessary fixes.
vi. The bidder shall track the resolution of all reported issues, maintain status updates, and ensure timely closure in accordance with the agreed SLA.

c. System Upgrades and Patch Management

i. The bidder shall plan, coordinate, and implement all necessary software and firmware upgrades, patches, and security updates for the CCC platform, including IT and OT components.
ii. The bidder shall manage all upgrades, updates, and patches for the CCC platform in accordance with OEM guidelines. This includes applying security patches, bug fixes, and performance enhancements to ensure the system remains secure, stable, and performs optimally.
iii. Before applying any system upgrade or patch, the bidder shall test the changes in a staging environment to ensure compatibility with existing configurations and integrations. A report summarizing the test results shall be submitted to OIL for approval prior to implementation in the live environment.
iv. Any issues arising from system upgrades or patches, including data inconsistencies, performance degradation, or compatibility problems with integrated systems, shall be promptly addressed and resolved by the bidder. The bidder shall also provide support for rollback or restoration to previous versions, if required.
v. The bidder shall maintain a log of all patches and system upgrades, including installation date, version, and any issues, and make it accessible to OIL at all times.

8. Cyber security requirements

8.1. Overall Cyber Security and Governance Requirements:

a. Establish and implement Security Policy aligned with leading standards and frameworks such as ISA/IEC 62443, NCIIPC Guidelines, ISO/IEC 27001:2013, and NIST Cybersecurity Framework.

b. Ensure that policies, standards, and guidelines are formally documented, version-controlled, and reviewed by all key stakeholders for every updated version.

c. Include security awareness sessions for project teams, system integrators, and CCC operators to ensure secure practices during deployment and operations.

d. The CCC platform shall comply with Client's IT/ OT security standards including single sign-on (SSO), role-based access control, and data encryption.

e. The CCC platform should complies with all Government of India regulations (MEITY guidelines) regarding data sovereignty and security.

f. The bidder shall implement comprehensive data security measures including encryption of data-at-rest using AES-256 or stronger encryption, TLS 1.2 or higher for data-in-transit encryption, field-level encryption for sensitive data, and a key management system with regular key rotation.

g. The system shall retain comprehensive audit logs for at least 6 months, covering user sessions, access attempts, administrative actions, data changes, security events, and performance metrics. All logs must be stored securely in an immutable, tamper-evident format.

h. Any connection of isolated systems to the IT network shall be secured using approved infrastructure, including IPS/IDS-enabled firewall or VPN gateway solutions.

i. Data transfer between IT and OT networks shall only be done through approved secure gateways.

j. Security measures shall be implemented to protect data in transit and at rest during exchanges with third parties as per Data Protection Policy for OT assets.

8.2. Network Security:

a. Ensure all network infrastructure changes follow a documented end-to-end change management process with approvals and rollback plans.

b. Segregate internal networks into multiple trust zones (e.g., OT zone, DMZ, enterprise IT, CCC zone) with defined access rules.

c. During OT system integration, Align with industry frameworks like IEC 62443, NIST CSF, or ISO 27001 for industrial cybersecurity.

8.3. Asset & Application Security:

a. Applications shall implement secure authentication, role-based access control (RBAC), and data encryption (at rest and in transit) as per organizational security policies.

b. All CCC hardware, software, and connected field assets shall be uniquely tagged, inventoried, and monitored to prevent unauthorized access or configuration changes.

c. Follow asset management processes to govern the full lifecycle of physical and virtual assets.

d. Enforce regular patch management — ensure that all hardware, firmware, operating systems, and application software are updated with the latest security patches.

e. Conduct Vulnerability Assessment and Penetration Testing (VAPT) on assets (including hardware, software) once prior to Go-live and at least once in a year during the contractual period to identify security weaknesses and validate remediation effectiveness through a CERT-In empanelled agency and provide all necessary audit reports, certificates and clarifications required by OIL or its nominated auditor. Bidder shall be responsible for closure of the Vulnerabilities found in Audit, Vulnerability Assessment, Penetration Testing Activity.

f. The bidder needs to maintain, update and share with OIL the Software Bill of Material (SBOM) for all the software product (including both custom developed as well as Commercial of the shelf software) being supplied to OIL, or, any Software-as-a-Service (SaaS) Offering as a part of this Contract. SBOM shall be shared by the Contractor prior to commissioning and the same shall be maintained throughout the Contract Period. The SBOM shall include (but not limited to) the following:

   - License information
   - Name of the supplier
   - All primary (top level) components with all their transitive dependencies (including third-party dependencies whether in-house or open-source components) and relationships
   - Encryption used
   - Cryptographic hash of the components
   - Frequency of updates
   - Known unknown (where a SBOM does not include a full dependency graph)
   - Access control

g. Enforce highly restricted access control using multi-factor authentication (MFA), VPN, and session logging.

h. Enforce RBAC, SSO, and MFA to control who can push/pull data to/from the Data Lake.

i. Enable logging for all data transfers and access events for compliance and threat detection.

j. Ensure all data transfer, storage, and access controls align with MeitY security and data residency requirements.

k. Route logs, alerts, and anomalies to the existing SOC for continuous monitoring and incident response

9. Implementation & Delivery Schedule

9.1. Phase-wise implementation scope

a. **Phase-1 (Current Scope) – Command & Control Centre Infra setup, Application & Go-Live**
Phase 1 shall encompass all requirements specified in this RFP, except those explicitly designated as part of the future scope.

b. **Phase-2 (Future Scope) – Expansion of Data Integration and Introduction of AI/ML**
Phase-2 shall include advanced capabilities such as AI/ML-driven predictive and prescriptive analytics, what-if scenario modelling, Conversational AI Assistant with NLP, and integration of remaining and new OT/IT systems to expand Command & Control Centre visibility, along with any other enhancements explicitly identified as future scope in this document (post 6 months of stabilization period after Go-live depending on availability of requisite training data).

9.2. Phase-1 (Current Scope) implementation timeline

The total project duration is 10 months for implementation, followed by 5 years of Annual Maintenance Contract (AMC) support.

The implementation timelines are provided below in Table – 'Implementation & Delivery Schedule'

Table - Implementation & Delivery Schedule

#	Activity	Timeline
1	Award of LoA	T_0
2	Mobilization a) Kick Off Meeting b) Submission of detailed resume of all the members of **Project Implementation Team** as per **Qualification & Experience** mentioned under Para I **During implementation and Hyper Care phase** of Section **Manpower Deployment (Clause No. 12)**	T_0 + 1 Month

	c) Deployment of the approved **Project Implementation Team** d) Completion of site surveys at all locations e) Completion of at least One(1) stakeholder workshop for business, functional, technical understanding and data discovery f) Submission of detailed Project Plan	
3	Blueprint Design and Requirement Finalisation a) Approved Functional & Technical Design Documents (Control room 3D layouts, AV/Video, Civil & interior designs, IT hardware, BoQ & Spec,) b) Completion of stakeholder workshops for business, functional, technical understanding and data discovery c) System Architecture & Integration Blueprint d) Detailed KPI list e) Application design (High-Level Dashboard Concepts, Mock-ups of representative screens, Analytics, alerts and workflow concepts, Mobile app design)	T_0 + 2 Months
4	Infrastructure Setup (Control Room, IT, Civil, Utilities and Interiors Set-up) at all 4 locations a) Delivery of materials i. All equipment, materials as per BoQ items under A, B, C & D ii. Delivery & Inspection Certificates iii. FAT report of equipment Specifications, iv. Manufacturer Test Certificates b) Installation & Commissioning i. Completion of control room civil, electrical and interior works, PAC, UPS, Fire Detection System, CCTV System, Access Control System etc ii. Installation of control room IT infrastructure (CO, FHQ, RF, PHQ), video walls, operator consoles, IT hardware installation & configuration, network setup, system integration and testing	T_0 + 6 Months
5	OT & IT Data Lake Setup, OT & IT System Integration a) OT Data Lake material delivery i. Delivery & Inspection Certificates ii. Manufacturer Test Certificates b) Installation & Commissioning OT Data Lake infrastructure c) OT System Integration d) IT System Integration e) Migration of OT historical data f) Migration of IT historical data	T_0 + 7 Months
6	UAT, Go-live a) Completion of civil and interior works all four-location control room, Installation of control room infrastructure (CO, FHQ, RF, PHQ), video walls, operator consoles, b) OT hardware delivery, installation & configuration, c) IT System Infrastructure set-up d) IT & OT integration and migration e) Network setup, system integration and testing.	T1=T_0 + 10 Months

	f) Development and deployment of applications, dashboards, analytics, Alerts, KPI tracking, workflow, Mobile app; g) Conducting SAT, UAT h) Security & compliance validation including VAPT i) Creation of system admin, user manuals, SOPs and all other required documents. j) Successful handover of functional CCC at CO, FHQ, RF, and PHQ.	
7	Hyper Care Period	T1 + 4 Months
8	Training a) Operator & admin training sessions.	After Installation & Go-Live (as per mutually agreed schedule)
9	VAPT	Once before Go-Live and thereafter at least once every year during AMC
10	Operation & Maintenance - for a period of 5 years from Go-live	T1+60 Months

10. Training & Knowledge Transfer

Functional, technical, and end-user training must be delivered by the bidder as per the approved training plan at OIL's premises after installation & commissioning of the CCC setup

10.1. Using CCC - Operations Training

a. System Startup/Shutdown Procedures
b. Hands-on use of CCC application: dashboard navigation, report generation, content scheduling
c. Video Wall Management, Audio-Visual Controls, Environmental Controls, Emergency Procedures, Physical Security & Access Control
d. Role-based exercises: incident triage, alert escalation, two-way comms

10.2. CCC Maintenance & Administration

a. Verifying data quality, connectivity health, and system performance
b. Managing assets and KPIs: add/remove devices, configure widgets, update dashboards
c. Data backup & recovery
d. SOP walkthroughs: routine checks, scheduled maintenance, basic troubleshooting

10.3. The Bidder shall provide:

a. Role-based training sessions for operators, supervisors, and administrators.
b. Training material, presentations, and user manuals.
c. Training completion and attendance records.

11. Installation & Commissioning (I&C) Deliverables

Bidder to provide comprehensive, audit-ready documentation to ensure operational continuity and knowledge transfer post-handover. Key documentation requirements include:

11.1. Pre-Installation Deliverables

The Bidder shall submit the following prior to start of site activities:

a. Installation & Commissioning Plan, including schedule, milestones, and dependencies.
b. Site Readiness Assessment Report covering civil, power, HVAC, network, and safety readiness.
c. Design Documents covering IT, OT, AV, network, cloud, cybersecurity, and integration architecture.
d. Bill of Materials (BoM) with make model, quantity, and compliance to technical specifications.
e. Risk Assessment for all installation activities.
f. Implementation Rollout Plan for all locations.

11.2. Installation Deliverables

The Bidder shall perform installation and submit evidence of completion for the following:

a. Installation of CCC infrastructure including consoles, video walls, AV equipment, servers, storage, and network devices.
b. Installation and configuration of LAN/WAN, switches, and redundancy mechanisms.
c. Deployment of CCC application platform, dashboards, and visualization systems.
d. Installation of cloud infrastructure components.
e. Installation of cybersecurity controls including network segregation, access controls, and logging.
f. Proper labelling, grounding, cable management as per standards.
g. Submission of Installation Completion Certificates for each location.

11.3. Integration Deliverables

The Bidder shall ensure end-to-end system integration and provide the following:

a. Integration of CCC with SCADA, OT data lake, historians, analytics platforms, and third-party applications.
b. Configuration of APIs, middleware, and data exchange mechanisms.
c. Validation of data flows, timestamps, alarms, and dashboards.
d. Integration Test Reports demonstrating successful end-to-end connectivity.

11.4. Commissioning Deliverables

The Bidder shall conduct commissioning activities and submit:

a. System Commissioning Report confirming readiness for operations.
b. Component-level test results (AV, network, servers, applications, cybersecurity).
c. Performance & load test results for CCC systems (including video wall and dashboards).

d. Failover and redundancy test reports.
e. Cybersecurity validation report (hardening checks, access control validation).

11.5. Testing & Acceptance Deliverables

The Bidder shall support acceptance testing and provide:

a. Factory Acceptance Test (FAT) Report.
b. Site Acceptance Test (SAT) Report for each CCC location.
c. User Acceptance Test (UAT) support and closure report, including resolution of observations.
d. Formal Go-Live Readiness Certificate endorsed by OIL.

11.6. Go-Live Documentation

The Bidder shall provide:

a. Standard Operating Procedures (SOPs)
   i. End-to-end SOPs for daily operations, maintenance, escalation, and troubleshooting
   ii. Separate SOPs for Corporate CCC and Field HQ scenarios
b. As-Built Documentation
   i. Final architecture diagrams with logical and physical layouts
   ii. IP/networking schema, integrations, data flow maps
   iii. Final CCC configuration snapshot (dashboards, KPIs, rules, alerts)
c. User Manuals
   i. Role-based user guides for operators, admins, and executives
   ii. Event response playbooks and checklists (e.g., power outage, connectivity loss, Data Quality issues)
   iii. Runbooks for starting/stopping CCC components
d. Knowledge Repository & Access
   i. All documents stored in centralized digital repository (e.g., SharePoint, internal drive)
   ii. Clearly defined folder structure with metadata tagging
   iii. Access permissions mapped to CCC roles (read/edit/control)
e. Compliance & Review
   i. Follow OIL's-defined documentation standards & formats
   ii. Documentation reviewed and approved by OIL before Go-Live closure
   iii. Bidder responsible for documentation updates during hyper care

12. Manpower Deployment

Contractor shall ensure the following minimum manpower is deployed for the Project (unless otherwise agreed in writing with OIL):

I. During implementation and Hyper Care phase:

The Contractor shall deploy adequate and suitably qualified resources at the project location in additional to the specified resources in this document to ensure timely and satisfactory completion of all implementation activities in accordance with the Scope of Work and the agreed programme. All personnel shall be subject to OIL's site access, security and induction requirements prior to commencement of on-site activities.

The Contractor shall provide and maintain a Project Implementation Team for the duration of the implementation and for a stabilization/hyper-care period following successful Go-Live. Unless otherwise agreed in writing, the hyper-care period shall be a minimum of four months from the date of successful Go-Live. During this period the Contractor's implementation team shall comprise of –

Sr No	**Job Role**	**Qualification & Experience**	**Minimum Resource Qty**
1	Project Manager	Engineering Graduate with 10 years of large project execution experience	1
2	Infrastructure Engineer (Civil/Electrical/AV etc.)	Engineering Graduate in Civil/Electrical/Electronics - with 5 years of infrastructure execution experience	1
3	OT Integration Specialist	Engineering Graduate in Instrumentation/ Electronics- with 5 years of OT integration experience	1
4	IT Integration Specialist	Engineering Graduate (IT/Computer Science)/ MCA - with 5 years of IT integration experience	1
5	Business Data Lake Specialist	Engineering Graduate (IT, Computer Science, Data Engineering) / MCA -with 5 years of data lake experience	1
6	CCC Application Developer	Engineering Graduate (IT, Computer Science) / MCA - with 5 years of application development experience	1

II. During AMC Period:

Manpower needs to be deployed by the bidder for the day-to-day operations of CCC at CO Delhi and FHQ, Duliajan during general shift. The minimum requirements are as below.

Sr No	Role	Required Qualification	Roles & Responsibility	Min resources required	Location

1	Team Lead	B.E./B. Tech Degree More than 5 years of experience	• Ensure overall AMC service delivery and client coordination, including oversight of system health checks, updates, data feed monitoring, and resolution of connectivity issues performed by the operational team. • Oversee execution of backups, recovery drills, preventive maintenance, and troubleshooting activities as per SLA. • Coordinate and escalate issues with OEMs/vendors for infrastructure, hardware, or software. • Review and share weekly status reports and incident logs prepared by the team with OIL.	1	CO
2	Engineer / Operator	B.E./B. Tech/ Diploma Holder More than 3 years of experience in relevant field	• Perform daily system health checks, monitor data feeds and integration status, and execute troubleshooting for operational issues as directed by the Manager. • Execute backups, recovery drills, and preventive maintenance tasks. • Maintain incident logs, update issue trackers, and provide inputs for weekly status reports. • Manage Control Room infrastructure, including video wall, precision AC, projectors, controllers, AV systems, and display equipment.	1	CO
3	System / Application Administrator	B.E./B. Tech Degree More than 3 years of experience in relevant field	• Manage application performance and availability, monitor logs, validate data quality within applications, and resolve functional issues. • Address minor new requirements/ enhancements from the client	1	FHQ

			• Apply patches and updates and ensure application-level compliance with SLA.		
4	System Integration & Data Quality Engineer	B.E./B. Tech Degree More than 3 years of experience in relevant field	• Monitor and maintain end-to-end system integration health, ensuring stable data feeds between CCC and connected systems. • Monitor data quality across integrated systems and resolve anomalies. • Perform integration-related hardware checks and preventive maintenance; troubleshoot connectivity and data flow issues. • Execute backup and recovery tasks specifically related to integration components and support escalation of integration or data-flow-related issues.	1	FHQ
5	Engineer / Operator	B.E./B. Tech/ Diploma Holder More than 3 years of experience in relevant field	• Perform daily system health checks, monitor data feeds and integration status, and execute troubleshooting for operational issues as directed by the Manager. • Execute backups, recovery drills, and preventive maintenance tasks. • Maintain incident logs, update issue trackers, and provide inputs for weekly status reports. • Manage Control Room infrastructure, including video wall, precision AC, projectors, controllers, AV systems, and display equipment.	4	FHQ

12.1. To validate the proposed experience, the contractor shall submit the CVs of all personnel who will be engaged with OIL for the entire duration of the project, covering both the implementation and AMC phases. The CVs must be provided in the format specified.

12.2. The proposed team shall remain unchanged throughout the contract period except under unavoidable circumstances. Any replacement of personnel will require prior written approval from OIL. If any team member(s) leaves the organization for any reason, the successful contractor must provide an alternate resource with equivalent experience. The contractor shall ensure a minimum overlap of one month between the outgoing and incoming team member(s) to facilitate proper knowledge transfer. All replacement personnel must meet the experience and qualification requirements as specified in the Scope of Work.

12.3. The above team needs to be reasonably supported by other Senior Consultants, and other Domain Expert(s), as required, with suitable expertise for efficient and high-quality delivery of assignments.

12.4. If the replacement resource is found unable to perform the assigned responsibilities satisfactorily, the contractor shall replace the resource with another personnel meeting the required experience and qualifications, as per OIL's requirements.

END OF SECTION-II

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PART-4
SECTION-III
SPECIAL CONDITIONS OF CONTRACT (SCC)

The following Clauses of SCC shall supplement and/or amend the General Conditions of Contract (GCC). Whenever there is a conflict, the provisions herein shall prevail over those in the GCC.

Part A:

Mobilization	**Thirty (30) days** from the date of issuance of LOA. Mobilisation shall include: a) Kick Off Meeting b) Submission of detailed resume of all the members of **Project Implementation Team** as per **Qualification & Experience** mentioned under Para# I **During implementation and Hyper Care phase** of Section **Manpower Deployment** c) Deployment of the approved **Project Implementation Team** d) Completion of site surveys at all locations e) Completion of at least One (1) stakeholder workshop for business, functional, technical understanding and data discovery f) Submission of detailed Project Plan
Duration of contract	The Contract shall be valid for a period of 10 months for implementation & 5 years AMC after going live from the Effective Date, comprising: a) Implementation Phase b) Go-Live c) AMC (Including Hypercare Period after Go-Live) OIL may extend the Contract by up to One (1) additional year on the same terms & conditions, subject to satisfactory performance.
Inspection	OIL shall have the right to inspect, audit and review: a) Source code repositories, configuration files and deployment scripts. b) Data pipelines, analytics outputs and optimisation logic c) AI/ML models including training datasets, feature definitions, model parameters and hyperparameters, validation and back testing results, model drift and retraining records d) Dashboards, KPIs, alert thresholds and scenario logic. e) System logs, audit trails and security controls

	f) Model versions, calibration records and change history Such inspection may be carried out at OIL premises or Bidder premises with prior notice.
Performance Security	Separate Performance Security need to be submitted for the two distinct phases of the contract, as follows: Implementation Phase: Performance Security equivalent to 10% of the Implementation contract value, to be furnished at the time of award and remain valid up to three months beyond completion of the implementation phase. AMC Phase: Performance Security equivalent to 3% of the post Implementation value (Total Contract value minus Implementation cost component), to be submitted prior to commencement of AMC services and remain valid up to three months beyond expiry of the AMC period.
Terms of Payment	Refer to PAYMENT TERMS (**Table B of SOR, Section-IV**)
Submission of Invoice	a) Invoices shall reference Contract No., Work Order No. and milestone achieved. b) GST-compliant invoices are mandatory. c) Invoices not supported by acceptance certificates shall not be processed.
Product Lifecycle & Long Term Support Compliance	The bidder shall ensure that all hardware, software, systems, platforms, and licensed components proposed under this tender—including but not limited to servers, storage, networking equipment, operating systems, databases, virtualization platforms, analytics tools, middleware, and CCC application components—are not approaching End of Sale (EoS) or End of Support Life (EoSL) during the implementation period and for a minimum period of five (5) years thereafter, counting from the date of Go Live of the CCC Project. Any item for which the original equipment manufacturer (OEM) or original software developer has announced, or is expected to announce, EoS or EoSL within the aforesaid period shall not be quoted. The bidder shall submit an undertaking along with the technical bid confirming compliance with this requirement and shall provide OEM issued product lifecycle documentation / support matrices, wherever sought by OIL, to substantiate the same. In the event any quoted item is found, at any stage of evaluation or contract execution, to be nearing or entering

	EoS/EoSL prematurely, OIL reserves the right to reject such items and require the bidder to replace them with equivalent or superior products at no additional cost and without impacting project timelines.
De-Mobilization	Prior to de-mobilisation on the date of completion of contract, bidder has to complete the following activities: a) Complete technical and operational knowledge transfer covering: - Architecture - Data pipelines - AI/ML models and retraining procedures - Dashboards and operational workflows b) Handover of: - Source code and repositories - Configuration files and deployment scripts - Model artefacts, feature stores and training pipelines - All technical and operational documentation c) All data sets in Cloud Infra are to be migrated to OIL provided new infrastructure. d) Transition support for a period of one(1) month to ensure continuity of operations. No data, models or artefacts shall be retained by the Bidder post exit.
Provision of Personnel facilities	Boarding, Lodging and transportation for the service engineer(s) during implementation as well as AMC phase visits will be in the scope of the Bidder.
Miscellaneous Provisions: Key personnel	The Bidder shall deploy approved Key Personnel for Command & Control Centre Initiative. Replacement shall require prior written approval of OIL.
Address details for submission of invoice	All Invoices are to be sent to the following address: GM (IT) Oil India Limited, P.O. Duliajan-786602 Dist. Dibrugarh, Assam

Part B - GOODS AND SERVICES TAX:

1 In view of GST Implementation from 1st July 2017, all taxes and duties including Excise Duty, CST/VAT, Service tax, Entry Tax and other indirect taxes and duties have been submerged in GST. Accordingly reference of Excise Duty, Service Tax, VAT, Sales Tax, Entry Tax or any other form of indirect tax except of GST mentioned in the bidding document shall be ignored.

Bidders are required to submit copy of the GST Registration Certificate while submitting the bids wherever GST (CGST & SGST/UTGST or IGST) is applicable.

2. "GST" shall mean Goods and Services Tax charged on the supply of material(s) and services. The term "GST" shall be construed to include the Integrated Goods and Services Tax (hereinafter referred to as "IGST") or Central Goods and Services Tax (hereinafter referred to as "CGST") or State Goods and Services Tax (hereinafter referred to as "SGST") or Union Territory Goods and Services Tax (hereinafter referred to as "UTGST") depending upon the import / interstate or intrastate supplies, as the case may be. It shall also mean GST compensation Cess, if applicable.

3. Quoted price/rate(s) should be inclusive of all taxes and duties, except GST (i.e. IGST or CGST and SGST/UTGST applicable in case of interstate supply or intra state supply respectively and cess on GST if applicable) on the final service. However, GST rate (including cess) to be provided in the respective places in the Price Bid .Please note that the responsibility of payment of GST (CGST & SGST or IGST or UTGST) lies with the Supplier of Goods/Services (Service Provider) only .Supplier of Goods/Services (Service Provider) providing taxable service shall issue an Invoice/Bill, as the case may be as per rules/regulation of GST. Further, returns and details required to be filled under GST laws & rules should be timely filed by Supplier of Goods/Services (Service Provider) with requisite details.

4. Bidder should also mention the Harmonised System of Nomenclature (HSN) and Service Accounting Codes (SAC) at the designated place in SOR.

5. Where the OIL is entitled to avail the input tax credit of GST: OIL will reimburse the GST to the Supplier of Goods / Services (Service Provider) at actual against submission of Invoices as per format specified in rules/ regulation of GST to enable OIL to claim input tax credit of GST paid. In case of any variation in the executed quantities, the amount on which the GST is applicable shall be modified in same proportion. Returns and details required to be filled under GST laws &rules should be timely filed by supplier with requisite details.

The input tax credit of GST quoted shall be considered for evaluation of bids, as per evaluation criteria of tender document.

6. Where the OIL is not entitled to avail/take the full input tax credit of GST: OIL will reimburse GST to the Supplier of Goods / Services (Service Provider) at actual against submission of Invoices as per format specified in rules/ regulation of GST subject to the ceiling amount of GST as quoted by the bidder. In case of any variation in the executed quantities (If directed and/or certified by the In-Charge) the ceiling amount on which GST is applicable will be modified on pro-rata basis.

The bids will be evaluated based on total price including **GST**.

7. Payments to Service Provider for claiming GST amount will be made provided the above formalities are fulfilled. Further, OIL may seek copies of challan and certificate from Chartered Accountant for deposit of GST collected from OIL.

8. Bidder/Contractor shall be required to issue tax invoice in accordance with GST Act and/or Rules so that input credit can be availed by OIL. In the event that the Bidder/Contractor fails to provide the invoice in the form and manner prescribed under the GST Act read with GST Invoicing Rules there under, OIL shall not be liable to make any payment on account of GST against such invoice.

9. GST shall be paid against receipt of tax invoice and proof of payment of GST to government. In case of non-receipt of tax invoice or non-payment of GST by the Bidder/Contractor, OIL shall withhold the payment of GST.

10. GST payable under reverse charge mechanism for specified services or goods under GST act or rules, if any, shall not be paid to the Bidder/Contractor but will be directly deposited to the government by OIL.

11. Where OIL has the obligation to discharge GST liability under reverse charge mechanism and OIL has paid or is /liable to pay GST to the Government on which interest or penalties becomes payable as per GST laws for any reason which is not attributable to OIL or ITC with respect to such payments is not available to OIL for any reason which is not attributable to OIL, then OIL shall be entitled to deduct/ setoff / recover such amounts against any amounts paid or payable by OIL to Bidder / Contractor / Supplier.

12. Notwithstanding anything contained anywhere in the Agreement, in the event that the input tax credit of the GST charged by the Bidder / Contractor is denied by the tax authorities to OIL for reasons attributable to Bidder / Contractor, OIL shall be entitled to recover such amount from the Bidder / Contractor by way of adjustment from the next invoice. In addition to the amount of GST, OIL shall also be entitled to recover interest at the rate prescribed under GST Act and penalty, in case any penalty is imposed by the tax authorities on OIL.

13. TDS under GST, if applicable, shall be deducted from Bidder's/Contractor's bill at applicable rate and a certificate as per rules for tax so deducted shall be provided to the Bidder/Contractor.

14. The Bidder/Contractor will be under obligation for charging correct rate of tax as prescribed under the respective tax laws. Further the Contractor shall avail and pass on benefits of all exemptions/concessions available under tax laws. Any error of interpretation of applicability of taxes/ duties by the contractor shall be to contractor's account.

15. It is the responsibility of the bidder/contractor to quote the correct GST rate. The classification of goods/services as per GST (Goods & Service Tax) Act should be correctly done by the contractor to ensure that input tax credit on GST (Goods & Service Tax) is not lost to the OIL on account of any error on the part of the contractor.

16. In case, the quoted information related to various taxes, duties & levies subsequently proves wrong, incorrect or misleading, OIL will have no liability to reimburse the difference in the duty/tax, if the finally assessed amount is on the higher side and OIL will have to right to recover the difference and in case the rate of duty/taxes finally assessed is on the lower side.

17. Notwithstanding anything mentioned elsewhere in the Bidding Document the aggregate liability of OIL towards Payment of Taxes & Duties shall be limited to the volume of GST declared by the bidder in its bid & nothing shall be payable extra except for the statutory variation in taxes & duties.

18. Further, it is the responsibility of the bidders/contractor to make all possible efforts to make their accounting/IT system GST compliant in order to ensure availability of Input Tax Credit (ITC) to Oil India Ltd.

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

20. In case of statutory variation in GST, other than due to change in turnover, payable on the contract value during contract period, the Supplier of Goods/ Services (Service Provider) shall submit a copy of the 'Government Notification' to evidence the rate as applicable on the Bid due date and on the date of revision.

21. Beyond the contract period, in case OIL is not entitled for input tax credit of GST, then any increase in the rate of GST beyond the contractual delivery period shall be to Service provider's account whereas any decrease in the rate GST shall be passed on to the OIL.

22. Beyond the contract period, in case OIL is entitled for input tax credit of GST, then statutory variation in applicable GST on supply and on incidental services, shall be to OIL's account.

23. Claim for payment of GST/ Statutory variation, should be raised within two [02] months from the date of issue of 'Government Notification' for payment of differential (in %) GST, otherwise claim in respect of above shall not be entertained for payment of arrears.

24. The base date for the purpose of applying statutory variation shall be the Bid Opening Date.

25. The contractor will be liable to ensure to have registered with the respective tax authorities, wherever applicable and to submit self-attested copy of such registration certificate(s) and the Contractor will be responsible for procurement of material in its own registration (GSTIN) and also to issue its own Road Permit/ E-way Bill, if applicable etc.

26. In case the bidder/contractor is covered under Composition Scheme under GST laws, then bidder should quote the price inclusive of the GST (CGST & SGST/UTGST or IGST). Further, such bidder/contractor should mention "Cover under composition system" in column for GST (CGST & SGST/UTGST or IGST) of price schedule.

27. OIL will prefer to deal with registered supplier of goods/services under GST. Therefore, bidders/contractor are requested to get themselves registered under GST, if not registered yet. However, in case any unregistered bidder/contractor is submitting their bid, their prices will be loaded with applicable GST while evaluation of bid. Where OIL is entitled for input credit of GST, the same will be considered for evaluation of bid as per evaluation methodology of tender document.

28. Procurement of Specific Goods: Earlier, there is no tax incidence in case of import of specified goods (i.e. the goods covered under List-34 of Customs Notification no. 12/2012-Cus dated. 17.03.2012 as amended). Customs duty is not payable as per the policy. However, under GST regime, IGST Plus GST compensation cess (if applicable) would be leviable on such imports. Bidders/Contractor should quote GST as inclusive considering IGST component for the imported Materials portion while quoting their prices on destination basis. However, GST rate to be specified in the price bid format.

29. Documentation requirement for GST: The Bidder/Contractor will be under the obligation for invoicing correct tax rate of tax/duties as prescribed under the GST law to OIL, and pass on the benefits, if any, after availing input tax credit.

Any invoice issued shall contain the following particulars:

a) Name, address and GSTIN of the supplier;
b) Serial number of the invoice;
c) Date of issue;
d) Name, address and GSTIN or UIN, if registered of the recipient;

Note: OIL GSTIN numbers are as follows:

Assam :18AAACO2352C1ZW

Arunachal Pradesh :12AAACO2352C1Z8

e) Name and address of the recipient and the address of the delivery, along with the State and its code,

f) HSN code of goods or Accounting Code of services[SAC];

g) Description of goods or services;

h) Quantity in case of goods and unit or Unique Quantity Code thereof;

i) Total value of supply of goods or services or both;

j) Taxable value of supply of goods or services or both taking into discount or abatement if any;

k) Rate of tax (IGST,CGST, SGST/ UTGST, cess);

l) Amount of tax charged in respect of taxable goods or services (IGST,CGST, SGST/UTGST, cess);

m) Place of supply along with the name of State, in case of supply in the course of interstate trade or commerce;

n) Address of the delivery where the same is different from the place of supply and

o) Signature or digital signature of the supplier or his authorised representative.

GST invoice shall be prepared in triplicate, in case of supply of goods, in the following manner:

i) The original copy being marked as ORIGINAL FOR RECIPIENT;

ii) The duplicate copy being marked as DUPLICATE FOR TRANSPORTER and

iii) The triplicate copy being marked as TRIPLICATE FOR SUPPLIER.

In case of any advance given against any supplies contract, the supplier of the goods shall issue Receipt Voucher containing the details of details of advance taken along with particulars as mentioned in clause no. (a), (b), (c), (d), (g), (k), (l), (m) & (o) above.

30. Anti-profiteering clause

As per Clause 171 of GST Act it is mandatory to pass on the benefit due to reduction in rate of tax or from input tax credit to the consumer by way of commensurate reduction in prices. The Supplier of Goods / Services may note the above and quote their prices accordingly.

31. In case the GST rating of Contractor on the GST portal / Govt. official website is negative / black listed, then the bids may be rejected by OIL. Further, in case rating of bidder/contractor is negative / black listed after award of work for supply of goods / services, then OIL shall not be obligated or liable to pay or reimburse GST to such Contractor and shall also be entitled to deduct / recover such GST along with all penalties / interest, if any, incurred by OIL.

Part C – Other terms and conditions:

Details of the Service	Hiring the services to design and implement an enterprise-grade, centralized Command & Control Centre (CCC) that provides real-time monitoring, visualization, and decision support across the entire operational value chain. The services included:

	1. Control Room Infrastructure: Physical CCC set up at WTC Delhi, FHQ Duliajan, Rajasthan Fields, and PHQ Guwahati. 2. Set up of OT data lake, IT Middleware & data lake, IT-OT data lake Convergence, develop and deploy CCC Application and mobile app.
HSE Policy	The bidder shall ensure full compliance as per HSE clause defined in the tender.
Interim de-Mobilization and Re-mobilization	N/A
Documentation	1. Bidder must provide necessary documentation (Software Requirement Specs Document, Functional Document and Technical Document) of the project. 2. The entire solution developed should be the property of OIL and property rights need to reside with OIL. 3. As and when required by OIL, proper handover of the software application (in operational state) should be given to OIL. 4. The Project team deployed by the Bidder on the OIL Project must be designated to liaise with OIL for regular interactions, progress review and issue resolution.
Definitions	1. **"Hardware"** refers to all hardware including server, storage facilities, handheld devices, back-up solutions, back-up server, networking, UPS etc. as well as any other peripherals as mentioned under section terms of reference and technical specification. 2. **"Software"** refers to all necessary software required for the AP Automation tool to run in a secured manner. Software includes all operating software as well as application software as mentioned under section terms of reference and technical specification. 3. "**Certificate of Completion**" means certificate issued by the OIL to the bidder stating that the firm has successfully completed the jobs/works assigned to him and submitted all necessary reports as required by the OIL. 4. **"Hyper Care Period"** refers to a period of four (4) months following successful installation and go-live, during which enhanced post-implementation support is provided.
Obligations of Bidder	1. The bidder must supply software licenses, hardware, design, develop and commission the solution as per the scope of work. 2. The bidder must comply with the OIL's information exchange policies and procedures. 3. The bidder must report any security incidents involving exchanged information immediately.

	4. Any connection of isolated systems to the IT network shall be secured using approved infrastructure, including IPS/IDS enabled firewall or VPN gateway solutions. 5. Data transfer between IT and OT networks shall only be done through approved secure gateways. 6. The bidder shall be solely responsible for Adapters, connectors, tools, or add-ons required for integration. 7. 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. 8. The bidder shall comply with OIL's software development security requirements and ensure that all solution components, integrations, and deployment processes adhere to OIL's ICT Policies and associated security guidelines. 9. On OIL's request, bidder shall remove and replace at their expenses, any of their personnel whose presence is considered reasonably undesirable or performance is found to be poor in the opinion of OIL. The bidder shall provide the supporting staff and labour at their own expenses. 10. Bidder shall be deemed to have satisfied himself before submitting their 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. 11. Bidder shall give or provide all necessary supervision for performance of the services during and after design, development and thereafter within the AMC period as OIL may consider necessary for the proper fulfilling of bidder's obligations under the contract. 12. The bidder will be fully responsible for any unauthorized imports or wrong declaration of goods and will have to pay the penalty and other consequences as levied by the port/customs authorities for such unauthorized imports. 13. The bidder shall bear all expenses on account of repair/replacement of all their materials, equipment etc. consequent upon any damage/loss/non-performance during services implementation. 14. The bidder shall follow its own safety rules, in addition to rules prescribed under Indian Laws in this respect. Bidder must take complete responsibility of all safety aspects during the entire execution of the project. 15. The Bidder shall be solely responsible for providing, supplying, installing, integrating, configuring, testing

	and commissioning all hardware, software, licenses, accessories, tools, utilities, components and services, whether or not explicitly mentioned in the BOQ/Price Schedule, but which are necessary for the design, implementation, integration, operation, performance, safety, security, reliability and completeness of the Command & Control Centre (CCC) solution as per the Scope of Work, Technical Requirements, Specifications and applicable standards. The same shall be provided without any additional cost to OIL
Personnel to be Deployed by Successful Bidder	1. Bidder warrants that it shall provide competent, qualified and sufficiently experienced personnel to perform the work correctly and efficiently. 2. The bidder should ensure that their personnel observe applicable OIL and statutory safety requirement. Upon OIL's written request, bidder, entirely at its own expense, shall remove immediately any personnel of the bidder determined by OIL to be unsuitable and shall promptly replace such personnel with personnel acceptable to the OIL. 3. The bidder shall be solely responsible throughout the period of the contract including the installation and commissioning phase for providing all requirements of their personnel including but not limited to, their transportation to & fro from the location (CO, FHQ, PHQ, RF), enroute / local boarding, lodging & medical attention etc. OIL shall have no responsibility or liability in this regard. However, OIL shall provide available medical assistance/facilities to bidder's personnel in case of emergency at its own establishment on chargeable basis. 4. Bidder's key personnel shall be fluent in English language (both writing and speaking). 5. Bidder to ensure that the proposed personnel for the project are on bidder's payroll for the last one year at least from the original bid closing date. The bidder shall submit joining letter and payslips/salary proof for last year as a proof for the deployed resources. 6. Bidder must not change the key personnel deployed during solution implementation and Hyper Care period. Key personnel cannot be changed during the tenure of the Contract, especially during design, development and testing phase except due to sickness/death/resignation of the personnel in which case the replaced person should have equal experience and qualification, which will be again subject to approval by OIL.
Confidentiality	1. Bidder agrees to be bound by professional secrecy and undertake to keep confidential any information obtained during the execution of the project and to take

	all reasonable steps to ensure the bidder's personnel likewise keep such information confidential. 2. This obligation shall keep in force even after the expiry of the contract period and until such information will be disclosed by OIL.
Obligations of OIL	1. Active participation of OIL's Project Team (management and engineering) is envisaged throughout the project to avoid communication gaps and to ensure timely delivery. Participation will occur at the levels described below: 2. A single point of contact (SPOC) will be appointed by OIL at each location (CO Delhi, FHQ Duliajan, PHQ Guwahati, RF Jodhpur) to liaise with the bidder Project Manager and project team. 3. A Single Point of Contact (SPOC) from each key department, particularly Instrumentation and IT, will be assigned to coordinate with the bidder for requirements clarification, data access, system integration, and issue resolution during the CCC implementation. 4. Project team members will be responsible for providing relevant technical and operational inputs or facilitating discussions with the respective stakeholders from OIL. Where possible, the team may also include members with the necessary expertise to provide briefings, training, and guidance on internal IT systems and processes, thereby enabling the bidder team to access and utilize data more effectively in support of the CCC implementation. 5. Day-to-day technical coordination between bidder engineers and OIL engineers shall be encouraged; all formal decisions shall be recorded in writing. 6. The role of the change champions will be limited to: a) Providing the bidder with necessary information and insights for the bidder to comprehensively develop the change management plan and execute it. b) Assisting the successful bidder in cross-functional co-ordination and execution of the change management plan within structured process framework. c) Support communication efforts planned by bidder. d) Support UAT and training efforts planned by the bidder. e) Interface between regional account payable teams and bidder during change management phase. 7. OIL will be responsible to implement the process changes at the organization level as recommended and signed off between the successful bidder and OIL stakeholders during solution implementation phase.

	8. Bidder needs to provide the detailed process recommendation comprising of implementation approach and timelines etc. for sign-off to OIL stakeholders along with solution blueprint.
Public Cloud Subscription	The bidder is free to offer any **MeitY empanelled** public cloud subscription if required for implementation of the solution. In this context the following points are to be considered by the bidder 1. OIL has already setup a secure cloud landing zone in MS Azure to access OIL's ERP (SAP S4/HANA) and such other cloud-based applications for OIL's cloud security and compliance requirement. 2. The bidder shall have to route all traffic initiated towards the proposed public cloud hosting relevant application through OIL's above mentioned landing zone in Azure. 3. Any data transmission cost if applicable from the offered public cloud to OIL's landing zone/Azure must be factored by the bidder in his offer. 4. Additional security gateway, or connectivity components (NGFW-Next Generation Firewall or VPN gateway etc) must be factored in the Bidder's subscription to enable secure IPsec connectivity to OIL's Azure Landing Zone subscription. 5. The Bidder must also factor federation/identity service in their subscription to establish SSO using OIL's Azure AD. 6. OIL shall have full access or audit right to the offered cloud subscription for cyber security and compliance mandate of OIL
Other Conditions / Project Progress Tracking	1. OIL reserves the right of procuring additional software licenses/ upgraded version of the software from date of Go-Live of the solution. The newly procured licenses of the software will be covered under AMC in same terms and conditions as stated in the contract. 2. The Contract price shall remain firm and fixed during the execution of the Contract and not subject to variation on any account. 3. All payments will be made directly to the successful bidder against invoices raised by the bidder along with supporting documents and at timelines prescribed under section of payment milestones. 4. The bidder will assign a Project Manager with single point responsibility for the entire project cycle. Any issue regarding the project design or implementation related issues shall be addressed by this Project Manager. 5. The bidder shall deploy a project monitoring and tracking system (tool/software) to manage schedules, resource allocation, milestones, and deliverables. Primavera P6 is recommended as the preferred tool.

	6. Project Manager to adopt recognized project management methodology to oversee and manage the complete delivery and coordinate all sub-elements of the project and manage overall project GANTT chart, RACI chart, Communication plan, Risk plan and HSE plan. 7. Project Manager with his team will manage the solution implementation and delivery including: a. Install, test, integrate and document the technology used in the project. b. Provide walk-thru, acceptance and sign-off on technology. c. The Project Manager will also arrange for the fortnightly meeting with OIL representatives for the project execution status and future plan. 8. All project activities, including installation, testing, commissioning, and AMC operations, must be tracked through this system, with updates maintained accurately to support review meetings and post-project analysis. 9. The bidder shall describe the proposed project monitoring and reporting methodology in the technical bid of this RFP. 10. The bidder Project Management team shall be responsible for updating the Program Management Unit (PMU)/Steering Committee of OIL during progress review meetings held at periodic intervals throughout the project. The frequency and format of report submissions may be mutually revised between OIL and the bidder during critical phases of the project.
Notice	Any notice given by one party to other, pursuant to this Contract shall be sent in writing or by e-mail to the applicable address specified below: **Company** a) **For contractual matters** CGM (Contracts) OIL INDIA LIMITED PO DULIAJAN - 786602 ASSAM, INDIA Phone No. 91-374-2808650 Email: contracts@oilindia.in b) **For technical matters** GM (IT) HoD Oil India Limited, P.O. Duliajan-786602 Dist. Dibrugarh, Assam. Phone No. 91-374- 2804913 Email: keshab@oilindia.in

	Contractor _____ A notice shall be effective when delivered or on the notice's effective date, whichever is later.

Part D:

4. SERVICE LEVEL AGREEMENT

The purpose of this Service Level Agreement (hereinafter referred to as SLA) is to clearly define the levels of service which shall be provided by the bidder to OIL India Limited for the duration of this Agreement. Service Level Agreement (SLA) shall become part of the Agreement between OIL India Limited and the Successful bidder. SLA defines the terms of the Successful bidder's responsibility in ensuring the timely delivery of the deliverables and the correctness of the same based on the agreed Performance Indicators as detailed in this section. The Successful bidder to comply with Service Levels requirements to ensure adherence to project timelines, quality and availability of services.

Penalties shall not be levied in the following cases:

a) There is a Force Majeure event effecting the SLA which is beyond the control of the Successful bidder.
b) The non-compliance to the SLA is due to reasons beyond the control of the bidder. Reasons beyond contractor control may include force majeure events, OIL-side network/power/application/cloud downtime not attributable to bidder, delayed approvals or access from OIL, non-availability of shutdown/window/site access, natural calamities, etc.

Note: Bidder is also required to note that in case of SLAs not being made applicable for cases considered as "beyond the control of bidders", the bidder would still need to replace the component (if it is not functional as per SLA) within the SLA defined for resolution of Critical Level / High Level / Medium Level / Low Level issues. In case the bidder doesn't adhere to the Issue Resolution SLA timelines, the original SLA shall be made available.

4.1. DEFINITIONS

For the purposed of this service level agreement, the definition and terms specified in the contract along with the following terms shall have the meanings set forth below:

S. No.	Term	Definition
1	Uptime	Shall mean the time period for the solution and components with the specified technical service standards are available to the user department. Uptime shall be calculated on a quarterly basis and applicable to the following components: • Data ingestion pipelines • Analytics and AI/ML execution layer

		• Dashboards, reports and simulation interfaces • APIs exposed to upstream/downstream systems Uptime, is percentage, of any component (Non-IT and IT) can be calculated as: Uptime = {1 – ((Downtime)/ (Total Time – Scheduled Maintenance Time))} * 100
2	Downtime	Shall mean the time period for which the solution or its components are not available to the user department and excludes scheduled downtime, downtime owing to Force Majeure & Reasons beyond control of bidder.
3	Latency	Refers to the average time required for round-trip packet transfers between selected junctions/locations on the selected portions of the network backbone during a calendar month.
4	Packet Loss	Refers to the average percentage of IP packets transmitted between selected junctions/locations during a calendar month that are not successfully delivered
5	Incident	Refers to any event/abnormalities in the functioning of the services specified as part of SoW, that may lead to disruption in normal operation of the solution, including but not limited to: • Failure or delay of data ingestion pipelines • Incorrect, inconsistent or missing analytics outputs • AI/ML model execution failures or abnormal predictions • Dashboard unavailability or incorrect KPI rendering • Alerting, notification or simulation malfunction
6	Response Time	Shall mean the time elapsed from the moment an incident is reported in the Helpdesk, over phone or by any applicable mode of communication, to the time when a resource is assigned for the resolution of the same.
7	Resolution Time	Shall mean the time taken (after the incident has been reported at the helpdesk), in resolving (diagnosing, troubleshooting and fixing) or escalating (to the second level or to respective bidders, and conveying the same to the end user), the service-related troubles during the first level escalation.
8	Incidence Resolution	Resolution of incidence as per below priority levels: • P1 (Critical): A critical incident that results in complete loss of functionality or near-total unavailability of any core CCC component, including (but not limited to): a. CCC Application (web/mobile), CCC dashboards / command centre UI b. IT Data Lake / IT Middleware / IT-OT convergence services c. OT Data Lake / OT ingestion pipelines / OT historian / OT integration gateway d. Corporate Office (WTC Delhi) CCC control room/ FHQ control room being unusable e. Loss of enterprise-wide monitoring/alerting capability from CCC.

- P2 (High): A high severity incident where essential/core functionality is significantly degraded or intermittently unavailable, including partial loss of functionality of:

  a. CCC Application (major modules like alerts, dashboards, workflows, KPI rendering)
  b. IT Data Lake / IT middleware services impacting critical integrations
  c. OT Data Lake / OT data ingestion impacting critical real-time feeds
  d. PHQ/ RF control room being unusable

- P3 (Medium): A medium severity incident that causes limited loss of functionality or inconsistent behaviour that does not impede normal functioning of CCC overall. This typically affects:

  a. Non-critical features/modules of CCC Application
  b. Non-core pipelines/data sets in IT or OT Data Lake (where core monitoring remains available)
  c. Location-specific degradation at CO/FHQ/PHQ/RF where the CCC remains usable with reduced capability (e.g., some dashboards, reports, or non-critical feeds impacted).

- P4 (Low): A low severity incident that is a minor defect, cosmetic issue with no meaningful impact on:

  a. Core functionality of CCC Application
  b. Availability of IT Data Lake / OT Data Lake for operational monitoring
  c. CCC operations at CO/FHQ/PHQ/RF (site remains functionally operational)

- P5 (Very Low): A very low severity incident / failure with very low business impact, not affecting CCC availability or core monitoring, but required to be addressed so that it is resolved in near future. This may include minor enhancements, informational issues at CO/FHQ/PHQ/RF that do not disrupt CCC operations

Severity	Response Time	Target Resolution
Critical (P1)	1 Hour	4 Hours
High (P2)	4 Hours	24 Hours
Medium (P3)	8 Hours	2 Days
Low (P4)	24 Hours	3 Days
Very Low (P5)	2 Days	5 Days

4.2. MEASUREMENT OF SLA

4.2.1. The SLA metrics provided here specifies performance parameters as baseline performance, lower performance and breach.

4.2.2. SLA monitoring would be responsibility of the bidder. The bidder must provide monthly reports against all the SLAs and any ad-hoc report as may be required by OIL.

4.3. DURING IMPLEMENTATION STAGE

The SLA shall be used to evaluate the timely execution of deliverables for Go-Live.

S. No	Definition	Timely Delivery of deliverables would comprise entire bill of material and the application systems, and as per successful UAT of the same
1	**Service Level Agreement**	All the deliverables defined in the contract must be submitted on-time on the date as mentioned in the contract with no delay.
2	**Liquidated Damage**	For delay in final Go-live, Liquidated Damages, a sum equivalent to @ 0.5% of Implementation Cost* per week or part thereof of delay subject to maximum of 7.5% of the Implementation Cost* shall be applicable.

4.4. POST-IMPLEMENTATION PHASE

1. Payment will be released post-delivery of milestones and providing the certification as per timelines.
2. These SLAs shall be used to evaluate the performance of the services on monthly basis, but penalties would be levied for cumulative performance on quarterly basis.
3. Service levels will be calculated on the basis of the following formula:
   (Service Requests resolved within Target Resolution time / Total Service Requests raised) x 100%
4. Penalty levied for non-performance as per SLA requirements shall be deducted through subsequent payments due from OIL.
5. Uptime SLA of the solution is 99.95%.
6. The penalty shall be capped at a maximum of 7.5% of the quarterly contract value for the relevant AMC period.
7. In absence of resources during AMC period, a penalty of Rs. 10,000/- per day per person shall be recovered from the quarterly AMC invoice of the Bidder.
8. In addition to the AMC resources, absence of Hyper Care resources during Hyper care period, a penalty of Rs. 10,000/- per day per person shall be recovered from the Hypercare Payment as per Payment Terms # 6.
9. Performance Penalty shall be levied for not meeting each SLA.
10. Breach of SLAs target shall result in various severity level based on the business impact of the component causes to services.
11. The severity levels of SLAs and the associated penalty are defined as per the following table 'A':

TABLE – A

Severity	Response Time Target	Resolution Target	Penalty (% of Quarterly Payment)	Incremental Penalty Beyond Target Resolution
Critical (P1)	1 Hour	4 Hours	• No Penalty: 99.95% – 100.00% • 2% Penalty: < 99.95%	+0.50% per additional 4 hours beyond 4 hours until resolved

High (P2)	4 Hours	24 Hours	• No Penalty: 99.90% – 100.00% • 1% Penalty: < 99.90%	+0.25% per additional 24 hours beyond 24 hours until resolved
Medium (P3)	8 Hours	2 Days	• No Penalty: 99.90% – 100.00% • 0.5% Penalty: < 99.90%	+0.15% per additional 2 days beyond 2 days until resolved
Low (P4)	24 Hours	3 Days	• No Penalty: 99.90% – 100.00% • 0.1% Penalty: < 99.90%	+0.05% per additional 3 days beyond 3 days until resolved
Very Low (P5)	2 Days	5 Days	0.1%	+0.02% per additional 5 days beyond 5 days until resolved

5. ESCALATION PROCEDURE

Escalation levels (level 1, level 2, level 3) shall be defined as part of the solution design by the bidder and to be complied with by EIC (Engineer in charge) at OIL. Bidder shall meet the following with respect to issues reported by OIL.

Severity	Escalation Level	Escalation Time
Severity 1 (Whole system down/major feature impaired)	Level 1	15 Minutes
	Level 2	4Hours
	Level 3	48 Hours
Severity 2 (Partial loss/ functionality)	Level 1	1 Hour
	Level 2	24 Hours
	Level 3	5 Days
Severity 3 (Minor issues or requests)	No escalation	

6. Exit Management

The vendor will provide exit management services on contract expiry/termination, as per the following table.

Exit Management	
Data Ownership	All data generated, stored, and processed shall be solely owned by OIL.
Exit Management Kick-in	Exit management phase will commence 30 days prior to contract expiry or within 2 (two) weeks of notice of termination of this contract.
Data Sanitization (Vendor side)	In the event of expiry or termination of this contract, the vendor shall cease to use OIL's data and, at the request of OIL, shall destroy all such copies of the OIL's data then in its possession and shall ensure that the data cannot be forensically recovered and furnish a certificate towards the same to OIL.

On-Premises Infrastructure (Vendor Deployed)	All infrastructure will remain under OIL's ownership and control.
Exit Knowledge Transfer	Vendor shall provide comprehensive exit knowledge transfer to OIL's designated personnel. This knowledge transfer shall cover all aspects of the CCC solution as it was implemented and configured for OIL, including, but not limited to: • System architecture and infrastructure (including any cloud & on-premises components). • Configuration settings, policies, detection rules, exclusions, and customizations. • Integrations with IT & OT system including configuration details, API usage & Tag mapping. • Incident response procedures and playbooks implemented within the CCC. • Troubleshooting and maintenance procedures specific to OIL's deployment. The vendor shall submit the above in the format of a document to OIL.
Licences, Entitlements & Portability	All software licences procured by the Contractor for the Solution that are required for normal operation shall be transferred or assigned to OIL (or reissued in OIL's name) at no additional cost, unless otherwise stated in the licence terms agreed up-front. Where licences are non-transferable, the Contractor shall obtain, at its cost, replacement or perpetual licences acceptable to OIL. The Contractor shall provide a complete inventory of all software (commercial and open source), licences, entitlements, support contracts, and any limitations or vendor dependencies, together with license keys, vendor contacts and renewal schedules. For any custom-developed software, models, dashboards, workflows, automation scripts, and configuration, the Contractor shall deliver source code, build scripts, compiled artifacts, container images.
Cloud & Infrastructure Transition	For vendor-managed cloud services, the Contractor shall: • Provide full documentation of the cloud architecture, tenancy details, resource mapping, CSP billing data, network and security configurations, IaC/automation templates

	(Terraform/Ansible/ARM), container images, and CI/CD pipelines. • Ensure all data processing, backups, and disaster recovery artefacts are located within India, consistent with contract data residency requirements, and document exact data locations. • Provide migration support to OIL's enterprise cloud (or to a nominated CSP) including export of VM images, container registries, object storage buckets, database exports, and any necessary conversion tools. • Assist in setting up equivalent infrastructure in the target environment and execute cut-over with minimal disruption. The Contractor shall not terminate cloud services or remove or destroy Client data until OIL issues written acceptance of successful data migration and secure receipt.
Exit Documentation Transfer	Vendor shall provide OIL with the latest versions of all relevant documentation pertaining to the CCC solution as implemented for OIL. This shall include, but not be limited to: • Installation and deployment guides specific to OIL's environment. • Administration and user manuals, including any customizations made for OIL. • Configuration guides detailing all settings and parameters used in OIL's deployment. • Troubleshooting guides and known issue documentation. • System integration documentation.
Verification for Completeness	OIL reserves the right to verify the completeness and accuracy of the exit related deliverables.
Exit Sign-off	Exit management phase shall be considered complete when all the following requirements are met: 1. Agent uninstallation. 2. Decommissioning of vendor deployed on-premises infrastructure. 3. Exit knowledge transfer. 4. Exit configuration transfer. 5. Exit documentation transfer.

	6. Data sanitization on vendor's custody and submission of certificate to OIL. 7. OIL's approval for exit related deliverables.
Exception	If, upon contract expiry, OIL publishes a new tender for CCC solution and the incumbent vendor is awarded the contract again, exit management activities will not be required.

7. Pre Dispatch Inspection (PDI) at OEM / Factory Site

The Bidder shall facilitate Pre Dispatch Inspection (PDI) of all IT and AV hardware proposed under the CCC Project at the respective OEM / manufacturing / factory premises, prior to initiation of dispatch to OIL sites. The PDI shall be carried out by authorized representatives of OIL or its nominated agency to verify compliance with the approved technical specifications, Bill of Materials (BoM), configuration, make/model, and conformity to applicable standards.

The Bidder shall provide advance written intimation for PDI in consultation with OIL and shall ensure availability of all relevant documents, test reports, certifications, packing details, and access to the equipment for inspection. Dispatch of materials shall be undertaken only after successful completion of PDI and written clearance from OIL. Any observations/ non conformities identified during PDI shall be rectified by the Bidder at no additional cost and without impact on the project delivery schedule.

Costs associated with facilitating the PDI, including coordination with OEMs and readiness of equipment, shall be borne by the Bidder. However, cost towards travel, boarding/lodging of OIL personnel shall be borne by OIL.

PDI shall not absolve the Bidder from its contractual obligations related to quality, performance, comprehensive support, and acceptance at site.

8. Important Notes

1. Out of Pocket Expenses: The quoted /contract amount shall be inclusive of all out of–pocket expenses (OPE) relating to this assignment for domestic travel, boarding & lodging, transportation & dearness allowance (DA), etc.

2. No payment other than the quoted / contract rates will be paid to the Bidder / Service Provider.

9. <u>Training & Certification Obligations</u>

A. <u>Scope & Applicability</u>

1. These requirements apply to all contractors and subcontractor personnel

deployed at OIL sites for E&P works (exploration, drilling/workover, production operations, well services, construction, logistics, etc.).

2. The Contractor shall ensure compliance with OISD-STD-176 (HSE Training-E&P), related OISD standards (e.g., OISD-STD-174 Well Control, OISD-STD-190 Drilling Safety, OISD-GDN-207 Contractor Safety) and all statutory requirements under DGMS/OMR-2017 and Mines Rules, 1955.

B. Mandatory Training & Certifications (Minimum)

The Contractor shall, at its own cost, ensure that all personnel are trained and certified for their respective roles prior to mobilization, and that such certifications remain valid for the entire contract duration, viz. (but not limited to):

1. General HSE Induction & Site-Specific Orientation (location rules, PTW,ERP, alarms, muster, hazard communication).

2. Permit-to-Work (PTW) including isolation/LOTO and hot work; Fire safety & firefighting basics; Emergency Response drills.

3. Working at Height, Confined Space Entry, Lifting & Rigging/Scaffolding, Electrical Safety, PPE selection/use, Manual handling-as applicable to job role.

C. Records, Audit & Verification

1. The Contractor shall maintain individual training matrices, copies of valid certificates, attendance, and drill records; produce on demand.
2. Owner reserves the right to audit training records at any time; non-conformities shall be closed within defined timelines.

D. Subcontractor Flow-Down (If applicable)

Contractor shall impose these obligations on all subcontractors; Contractor remains fully responsible for compliance.

E. Enforcement & Commercial Levers

1. Right to stop work/ remove personnel for non-compliance.
2. Withholding payments for the period of non-compliance; repeated breaches may invite penalties and/or contract termination, without prejudice to other remedies.
3. Serious breaches affecting safety may trigger blacklisting as per OIL's policy and applicable law.

F. Costs

All costs of training, certification, refreshers, medical fitness and related logistics are to Contractor's account, deemed included in the contract price.

G. Owner Support (Non-Obligatory)

Wherever feasible, Owner may facilitate access to approved training centres (e.g., GVTC, DGMS-recognized First-Aid training centre, etc.) or share schedules for specialized courses. However, this does not dilute the Contractor's obligations.

10.0 Engagement/Deployment of Contract Labour:

10.1 The Contractor shall not employ, engage, or deploy any person below 18 (Eighteen) years of age or above 60 (Sixty) years of age for the performance of any work under this Contract.

10.2 The Contractor engaging contract labours for performance of any work under this contract shall strictly comply with the following:

(a) Issue of Appointment Letter to all its workers (as per **Annexure-WP**).
(b) Issue of Wage Slip on Monthly basis (as per **Annexure-WS**)
(c) Payment of Wages within 7th Day of the succeeding Month. (Proof of payment shall have to be included along with the respective Invoices submitted)

END OF SECTION-III

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PART-4
SECTION-IV
SCHEDULE OF RATES (SOR)

Table A – SOR/BOQ

Sr No	Item	Location	UOM	QTY
A	**Corporate Office CCC Infrastructure & Systems**			
A1	SITC of Civil & Interiors including Electrical, Fire Alarm and Suppression, Redundant UPS, HVAC, Lighting, Automation, Public Address System and Rodent Control system (Area of 65 X29 X 8.85 feet)	Corporate Office, Delhi	AU	1
A2	SITC of Active Curved LED Display with P0.93 HDR, COB Flip-Chip with Top Protection, antihumidity, anti-scratch and anti-collision as per the design - 16.8mtrs x 2.7mtrs Tolerance +/- 0.2m	Corporate Office, Delhi	AU	1
A3	SITC of 32 point Multi-Touch Overlay Size 16.8mtrs x 2.7mtrs Tolerance +/- 0.2m	Corporate Office, Delhi	Set	1
A4	SITC of Command and Control Suite 4K60 Secured IPKVM, Encoders, Operator Console Codec, and Videowall Decoders with videowall processor with redundancy : Free form, PIP, POP, HDMI embedded audio switching, Sources can windowed, layered, and positioned anywhere on the video display for all Areas - 20 nos 4K60 Sources, 2nos 4K Workspace with wide monitors (32:9 aspect ratio) attached to Operator console codec and multifuntional keyboard, quantity of videowall decoders required to achieve Pixel-to-Pixel Resolution, 2nos decoders for VC codec.	Corporate Office, Delhi	Lot	1
A5	SITC of Computing Rack servers to access Dashboards and Applications	Corporate Office, Delhi	Nos	15

A6	SITC of Interactive Collaboration Suite with Videowall Controller supporting pixel to pixel resolution of Active LED Display with custom resolution and have 20 nos of 4K HDMI Inputs for interactive Collaboration Interactive table and with Wireless Tablet controller for extended experience	Corporate Office, Delhi	Nos	1
A7	SITC of a multi-user 3D stereoscopic immersive simulation system on an LED Wall, equipped with 3D tracked active stereoscopic glasses and hand-tracked controllers, designed for geological exploration and analysis, training and simulation and digital twins presentation. The system shall support a wide range of industry-leading 3D CAD and visualization software without requiring file conversions, including Petrel for petroleum exploration, ArcGIS and more.	Corporate Office, Delhi	Lot	1
A8	SITC of Motorized 21.5" Pop-Up Capacitive Multitouch Displays with Integrated Chairman & Delegate System, Mini PC supporting Executive collaboration platform Software and Licenses, including all necessary hardware, accessories, for seamless integration and operation (10 for Collaboration workspace table + 2 for interactive table)	Corporate Office, Delhi	Nos	12
A9	SITC of Executive Engagement Platform for PoP- Up Units and Custom Interactive application for CCC Dashboard Visualization, other applications, Media Visualization, and Non-linear Presentations to Support Full Resolution of LED Display with on-premises perpetual license.	Corporate Office, Delhi	Set	1
A10	SITC of interactive table with 88" 4K Capactive display in 32:9 aspect ratio, embedded interactive player supporting object recognition, RFID, Gestures sensors and	Corporate Office, Delhi	Set	1

	commanding officer console made with Premium finish			
A11	SITC of Holographic Box with real life 3D AI based Character creation and integration with Generative AI with LLM of company assets with interactive CMS	Corporate Office, Delhi	Nos	1
A12	SITC of 85" Interactive Display for War room / Collaboration Workspace with mount and interactive touch pen/stylus.	Corporate Office, Delhi	Set	1
A13	SITC of Video Conferencing, Audio systems, 5nos 30X 4K PTZ Conference Cameras and wireless presentation device	Corporate Office, Delhi	Lot	1
A14	SITC of CCTV surveillance with Entrance door integrated with Facial Recognition and RFID Access	Corporate Office, Delhi	Lot	1
A15	SITC of Cables, Connectors, Extenders, network components, racks, and Miscellaneous items	Corporate Office, Delhi	Lot	1
A16	Any Other Item required towards physical infra at Corporate Office, Delhi	Corporate Office, Delhi	Lot	1
B	**FHQ CCC Infrastructure & Systems**			
B1	SITC of Civil & Interiors including Electrical, Fire Alarm and Supression, Redundant UPS, HVAC, Lighting, Automation, Public Address System and Rodent Control system (Area of 70 X 35 X 7.5 feet)	FHQ, Duliajan	Lot	1
B2	SITC of Active Curved LED Display with P0.93 HDR, COB Flip-Chip with Top Protection, anti-humidity, anti scratch and anti collision as per the design - 9mtrs x 2mtrs Tolerance +/- 0.2m	FHQ, Duliajan	Set	1
B3	SITC of 32 point Multi-Touch Overlay 9mtrs x 2mtrs Tolerance +/- 0.2m	FHQ, Duliajan	Set	1

B4	SITC of Command and Control Suite 4K60 Secured IPKVM, Encoders, Operator Console, and Videowall Decoders with videowall processor with redundancy : Free form, PIP, POP, HDMI embedded audio switching, Sources can windowed, layered, and positioned anywhere on the video display for all Areas - 20 nos 4K60 Sources, **5nos** 4K Workspace with wide monitors (32:9 aspect ratio) attached to Operator console codec and multifunctional keyboard, Quantity of videowall decoders required to achieve Pixel-to-Pixel Resolution and for VC codec	FHQ, Duliajan	Lot	1
B5	SITC of Computing Rack servers for running Dashboards and Applications	FHQ, Duliajan	Nos	15
B6	SITC of Interactive Collaboration Suite with Videowall Controller supporting pixel to pixel resolution of Active LED Display with custom resolution and have 40 nos of 4K HDMI Inputs for interactive Collaboration with Wireless Tablet controller for extended experience and Physical whiteboard capture	FHQ, Duliajan	Nos	1
B7	SITC of a multi-user 3D stereoscopic immersive simulation system on an LED Wall, equipped with 3D tracked active stereoscopic glasses and hand-tracked controllers, designed for geological exploration and analysis, training and simulation and digital twins presentation. The system shall support a wide range of industry-leading 3D CAD and visualization software without requiring file conversions, including Petrel for petroleum exploration, ArcGIS and more.	FHQ, Duliajan	Lot	1
B8	SITC of 85" Interactive Display for Collaboration Workspace with mount	FHQ, Duliajan	Set	1
B9	SITC of Video Conferencing, Audio systems, 5nos 30X 4K PTZ	FHQ, Duliajan	Lot	1

	Conference Cameras and wireless presentation device			
B10	SITC of CCTV surveillance with Entrance door integrated with Facial Recognition and RFID Access	FHQ, Duliajan	Lot	1
B11	SITC of of Cables, Connectors, Extenders, network components, racks, and Miscellaneous items	FHQ, Duliajan	Lot	1
B12	Any Other Item required towards physical infra at FHQ, Duliajan	FHQ, Duliajan	Lot	1
C	**RF CCC Setup & Equipment**			
C1	SITC of Operator desk, collaboration table and electrical (Split AC, Lighting, UPS)	RF, Jodhpur	Lot	1
C2	SITC of 120" Professional Display 24/7 operation with Heavy duty mount	RF, Jodhpur	Set	1
C3	SITC of Command and Control Suite 4K60 Secured IPKVM, Encoders, Operator Console Codec, and Videowall Decoders with videowall processor with redundancy : Free form, PIP, POP, HDMI embedded audio switching, Sources can windowed, layered, and positioned anywhere on the video display for all Areas - 8 nos 4K60 Sources, 1nos 4K Workspace with wide monitors (32:9 aspect ratio) attached to Operator console codec and multifuntional keyboard, Quantity of videowall decoders required to achieve Pixel-to-Pixel Resolution, 2nos decoders for VC codec.	RF, Jodhpur	Lot	1
C4	SITC of Computing Rack servers for running Dashboards and Applications	RF, Jodhpur	Nos	5
C5	SITC of Interactive Collaboration Suite supporting Single 4K Display and have 7 nos of 4K HDMI Inputs for interactive Collaboration with Wireless Tablet controller for extended experience	RF, Jodhpur	Nos	1
C6	SITC of Video Conferencing System	RF, Jodhpur	Lot	1

C7	SITC of of Cables, Connectors, Extenders, network components, racks, and Miscellaneous items	RF, Jodhpur	Lot	1
C8	Any Other Item required towards physical infra at RF, Jodhpur	RF, Jodhpur	Lot	1
D	**PHQ CCC Setup & Equipment**			
D1	SITC of Operator desk, collaboration table and electrical (Split AC, Lighting, UPS)	PHQ, Guwahati	Lot	1
D2	SITC of 120" Professional Display 24/7 operation with Heavy duty mount	PHQ, Guwahati	Set	1
D3	SITC of Command and Control Suite 4K60 Secured IPKVM, Encoders, Operator Console Codec, and Videowall Decoders with videowall processor with redundancy : Free form, PIP, POP, HDMI embedded audio switching, Sources can windowed, layered, and positioned anywhere on the video display for all Areas - 8 nos 4K60 Sources, 1nos 4K Workspace with wide monitors (32:9 aspect ratio) attached to Operator console codec and multifuntional keyboard, Quantity of videowall decoders required to achieve Pixel-to-Pixel Resolution, 2nos decoders for VC codec.	PHQ, Guwahati	Lot	1
D4	SITC of Computing Rack servers for running Dashboards and Applications	PHQ, Guwahati	Nos	5
D5	SITC of Interactive Collaboration Suite supporting Single 4K Display and have 7 nos of 4K HDMI Inputs for interactive Collaboration with Wireless Tablet controller for extended experience	PHQ, Guwahati	Nos	1
D6	SITC of Video Conferencing System	PHQ, Guwahati	Lot	1
D7	SITC of of Cables, Connectors, Extenders, network components, racks, and Miscellaneous items	PHQ, Guwahati	Lot	1
D8	Any Other Item required towards physical infra at FHQ, Guwahati	PHQ, Guwahati	Lot	1
E	**OT Data Lake Components**			

E1	OT Data Lake Software License Subscription including OPC Server Connector/ API Connector/ Middleware/ Data Bus/ Adapter license etc	-	Quarter	20
E2	OT Data Lake Installation, Configuration	-	Lot	1
E3	OT System Integration (Payment on actual nos of systems integrated)	-	Nos	15
E4	SITC of Server & accessories for OT Data Lake	-	Nos	4
E5	Migration of available historical data (2 completed Financial years and current year, Payment on actual nos of systems integrated)	-	Nos	15
E6	Any other item required for OT Data Lake set-up, Integration	-	Lot	1
F	**IT / Business Data Lake Components**			
F1	IT Data Lake Middleware Software License Subscription including API Connector/ Pre-built Connectors/ Streaming/ Event Ingestion/ Adapter etc	-	Quarter	20
F2	IT Data Lake Configuration & Middleware set-up	-	Lot	1
F3	IT System Integration including Data Pipeline Development (Payment on actual nos of systems integrated)	-	Nos	15
F4	Cloud Compute Resources for IT Data Lake	-	Quarter	20
F5	Cloud Storage Resources for IT Data Lake		Quarter	20
F6	Migration of available historical data (2 completed Financial years and current year, Payment on actual nos of systems integrated)		Nos	15
F7	Any other item required for IT Data Lake set-up, Integration.	-	Lot	1
G	**Visualization Platform & Field Mobility**			
G1	SaaS Cloud Visualization Software subscription with all requisite connectors	-	Quarter	20
G2	Field Mobile App on subscription basis	-	Quarter	20

G3	Customization and Implementation	-	Lot	1
H	**VAPT**			
H1	VAPT - IT Data Lake, OT Data Lake, CCC Application/Visualization Platform & Mobile App (On Actuals)	-	Year	6
I	**AMC**			
I1	AMC 1st Year	-	Quarter	4
I2	AMC 2nd Year	-	Quarter	4
I3	AMC 3rd Year	-	Quarter	4
I4	AMC 4th Year	-	Quarter	4
I5	AMC 5th Year	-	Quarter	4
J	**Training Services**			
J1	Training for 10 participants for 3 days duration	-	Lumpsum	2
K	**Additional On-Actual Items**			
K1	Additional Mandays for extra development/customization requirements (on actual)	-	Mandays	500
K2	Additional 3D/Multimedia content for visualization (on actual)	-	Minute	30
K3	Additional Mandays for Advanced AI/ML Analytics & Intelligent CCC Platform Enhancement	-	Mandays	200

Table B - PAYMENT TERMS

#	Activity	Timeline	%Payment
1	Completion of mobilization	T_0 + 1 Months	5% of Implementation Cost *
2	Blueprint Design and Requirement Finalisation	T_0 + 2 Months	5% of Implementation Cost *
3	Infrastructure Setup (Control Room, IT, Civil, Utilities and Interiors Set-up	T_0 + 6 Months	a. 50% of BoQ price (A,B,C,D) against completion of 3.a) of 'Implementation & Delivery Schedule' for each site

			b. 25% of BoQ price (A,B,C,D) against completion of 3.b) of 'Implementation & Delivery Schedule' for each site
4	OT & IT Data Lake Setup, OT & IT System Integration	T_0 + 7 Months	a. 50% of BoQ price (E4) against completion of 4.a) of 'Implementation & Delivery Schedule' b. 25% of BoQ price (E2,E4) against completion of 4.b) of 'Implementation & Delivery Schedule' c. 100% of BoQ price (E3) against completion of 4.c) of 'Implementation & Delivery Schedule' for each OT system integration d. 100% of BoQ price (F3) against completion of 4.d) of 'Implementation & Delivery Schedule' for each IT system integration e. 100% of BoQ price (E5) against completion of 4.e) of 'Implementation & Delivery Schedule' for each OT system integration f. 100% of BoQ price (F6) against completion of 4.f) of 'Implementation & Delivery Schedule' for each IT system integration
5	UAT, Go-live	T1=T_0 + 10 Months	a. 5% of Implementation Cost* will be withheld for Hyper Care period; Remaining part of Implementation Cost* to be paid after deduction of liquidated damage, if any
6	Hyper Care Period	T1+4 Months	a. Remaining 5% of Implementation Cost* after successful resolution of all issues identified during the Hypercare period, after deduction of penalty, if any
7	Training	After Installation & Commissioning	Payment against training charges (J1)
8	VAPT	Before Go-live & Annually	On actuals after submission of VAPT certificate(H1). One pre-Go-live VAPT during the implementation phase and one VAPT in each year of the 5-year AMC period
9	Post Go-live services	BoQ Items: E1, F1, F4, F5, G1 & G2	To be paid quarterly after deduction of penalty, if any after successful

			completion of service delivery for the quarter
10	AMC for a period of 5 years from Go-live	T1+60 Months	To be paid quarterly after deduction of penalty, if any after successful completion of service delivery for the quarter

**Implementation cost includes sections: A, B, C, D, E2, E4, E6, F2, F7, G3 from BOQ Price Schedule of CCC*

Note: *If the contractor fails to complete de-mobilisation activities, OIL shall withhold last quarter AMC payment and performance security.*

END OF SECTION-IV
END OF PART-4
&&&&&

PART-5
LIST OF PROFORMAS, APPENDICES, EXHIBITS, ANNEXURES ETC. FOR THE TENDER

(Bidders are advised to submit all the proformas applicable to them and fill the table below)

Sl. No.	Proforma-No.	Form Description	Submitted (Yes/No/Not applicable)
1.	**Proforma-A**	List of items to be imported (if any) for execution of contract. (To be uploaded in the Price/Financial Bid)	
2.	**Proforma-B**	Price Bidding Format (To be uploaded in the Price/Financial Bid; if the price bid format indicating the prices is uploaded in the technical bid, the bid will be straightaway rejected)	
3.	**Proforma-C**	Bid Form	
4.	**Proforma-D**	Statement of Non-Compliance (if any)	
5.	**Proforma-E**	Letter of Authorisation for attending Bid Opening format	
6.	**Proforma-F**	Letter of Authority format	
7.	**Proforma-G**	Form of Bid Security	
8.	**Proforma-H**	E-Remittance Form	
9.	**Proforma-I**	Performance Bank Guarantee Format	
10.	**Proforma-J**	Format of Undertaking by Bidders towards submission of authentic information/documents	
11.	**Proforma-K**	Certificate of compliance to financial criteria	

Sl. No.	Proforma-No.	Form Description	Submitted (Yes/No/Not applicable)
12.	**Proforma-L**	Certificate of Annual Turnover, Net Worth & Working Capital	
13.	**Proforma-M**	Format for Line of Credit	
14.	**Proforma-N**	Undertaking towards details of Bank Guarantee	
15.	**Proforma-O**	Declaration about bidder's financial standing	
16.	**Proforma-P**	Declaration that bidder is not under Holiday List/Delisted/Blacklist/ Debarred in OIL	
17.	**Proforma-Q**	Agreement Form	
18.	**Proforma-R**	Undertaking from TPI Agency	
19.	**Appendix-I**	Safety Measures	
20.	**Appendix-II**	Integrity Pact	
21.	**Appendix-III**	Undertaking for Local Content	
22.	**Appendix-IV**	Declaration Format for deployment of Services & Personnel	
23.	**Appendix-V**	ESG Questionnaire	
24.	**Exhibit-I**	Undertaking for works involving possibility of sub-contracting	
25.	**Exhibit-II**	Undertaking towards compliance of Land Border restrictions	
26.	**Exhibit-III**	Additional Undertaking in case of ToT	
27.	**Annexure-I**	Format of Agreement between Bidder and Parent/Subsidiary Company	
28.	**Annexure-II**	Parent Company/Subsidiary Company Guarantee format	

Sl. No.	Proforma-No.	Form Description	Submitted (Yes/No/Not applicable)
29.	**Annexure-III**	Format of agreement between bidder, their sister subsidiary/co-subsidiary company and the ultimate parent/ holding company	
30.	**Annexure-IV**	Parent/Ultimate Parent/Holding Company's Guarantee towards financial standing	
31.	**Annexure-V**	JV Company's Corporate Guarantee towards financial standing	
32.	**Annexure-VI**	Form of Performance Guarantee by Supporting Company	
33.	**Annexure-A1**	Manufacturers Authorization Form (MAF)	
34.	**Annexure-A2**	Details of Key Personnel	
35.	**Annexure-A3**	Detailed design criteria	
36.	**Checklist-I**	Commercial Checklist	
37.	**Checklist-II**	Checklist for BEC	
38.	**Annexure-WP**	Format for Appointment Letter	
39.	**Annexure-WS**	Format for Wage Slip	

PROFORMA-A

LIST OF ITEMS (Equipment, Tools, Accessories, Spares & consumable) TO BE IMPORTED INCONNECTION WITH EXECUTION OF THE CONTRACT SHOWING CIF VALUE

(SHOULD BE UPLOADED IN THE PRICE BID)

Sl. No.	Item Description	Qty /Unit	Rate	Total	Freight & Insurance	CIF Value	Port & other charge	Landed Cost	Is it re-exportable? YES or NO	Year of Mfg.	HSN Code
A	B	C	D	E = C x D	F	G = F + E	H	I = G+H	J	K	L

(1) The items which are not of consumable in nature and required to be re-exported outside India after completion of the Contract should be indicated as "YES" in column "J".

(2) The items, which are of consumable in nature should be indicated as "NO" in column "J".

(3) For estimation of applicable customs duty, the bidders are required to indicate customs tariff code (i.e. HSN Code) of each item in column "L".

Authorised Person's Signature: _____
Name: _____

Seal of the Bidder:

PROFORMA-B

PRICE BID FORMAT

THE PRICE BID FORMAT IN EXCEL SHEET IS UPLOADED UNDER 'NOTES AND ATTACHMENTS' TAB IN OIL'S E-PROCUREMENT PORTAL

(Refer Note in Clause No. 4.3-B of ITB)

PROFORMA-C

BID FORM

To
M/s Oil India Limited,
P.O. Duliajan, Assam, India

Sub: Design, implementation and support for Command-and-Control Centre & OT Data Lake project for OIL India Ltd.

Gentlemen,

Having examined the General and Special Conditions of Contract and the Terms of Reference including all attachments thereto, the receipt of which is hereby duly acknowledged, we the undersigned offer to perform the work/services in conformity with the said conditions of Contract and Terms of Reference for the sum quoted in the Price Bid Format or such other sums as may be ascertained in accordance with the Schedule of Prices attached herewith and made part of this Bid.

We undertake, if our Bid is accepted, to commence the work as per the terms & conditions set out in the subject tender.

If our Bid is accepted, we will submit the Performance Security Deposit as specified in the tender document for the due performance of the Contract.

We agree to abide by this Bid for a period of 120 days from the date of bid opening and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

Until a formal Contract is prepared and executed, this Bid, together with your written acceptance thereof in your notification of award shall constitute a binding Contract between us.

We understand that you are not bound to accept the lowest or any Bid you may receive.

Dated this _____ day of _____ 20___.

Authorised Person's Signature: _____

Name: _____

Designation: _____

Seal of the Bidder:

PROFORMA-D

STATEMENT OF NON-COMPLIANCE (IF ANY)

1.0 The Bidder shall furnish detailed statement of **exceptions/deviations**, if any, to the IFB stipulations, terms and conditions in respect of each Section of Bid Document in the following format:

Section No.	Clause No. (Page No.)	Non-Compliance	Remarks

Signature of Bidder: _____

Name: _____

NOTE: OIL INDIA LIMITED expects the bidders to fully accept the terms and conditions of the bid document. However, should the bidders still envisage some exceptions/deviations to the terms and conditions of the bid document, the same should be indicated as per above format and submit along with their bids. If the "**Statement of Non-Compliance**" in the above Proforma is left blank (or not submitted along with the Bid), then it would be constructed that the bidder has not taken any exception/deviation to the IFB requirements.

PROFORMA-E

PROFORMA LETTER OF AUTHORISATION FOR ATTENDING BID OPENING

TO,
CGM-CONTRACTS
OIL INDIA LIMITED
P.O. DULIAJAN-786602
Assam, India

Sir,

SUB: Design, implementation and support for Command-and-Control Centre & OT Data Lake project for OIL India Ltd.

I/We _____ confirm that Mr. _____ (Name and address) as authorised to represent us during bid opening on our behalf with you against IFB for **Design, implementation and support for Command-and-Control Centre & OT Data Lake project for OIL India Ltd.**

Yours Faithfully,

Authorised Person's Signature: _____

Name: _____

Signature of Bidder: _____

Name: _____

Date: _____

PROFORMA-F

PROFORMA LETTER OF AUTHORITY

TO
CGM-CONTRACTS
Contracts Department
P.O. DULIAJAN PIN-786602
Dist. Dibrugarh, Assam
India

Dear Sir,

SUB: Design, implementation and support for Command-and-Control Centre & OT Data Lake project for OIL India Ltd.

I/We _____ confirm that Mr. _____ (Name and address) is authorised to represent us to Bid, negotiate and conclude the agreement on our behalf with you against IFB for '**Design, implementation and support for Command-and-Control Centre & OT Data Lake project for OIL India Ltd..'** for any commercial/Legal purpose etc.

I/We confirm that we shall be bound by all and whatsoever our said representative shall commit.

Authorised Person's Signature: _____

Name: _____

Yours faithfully,

Signature: _____

Name & Designation _____

For & on behalf of _____

NOTE: This letter of authority shall be on printed letter head of the bidder and shall be signed by a person competent and having the power of attorney (Power of attorney shall be annexed) to bind such Bidder.

PROFORMA-G

FORM OF BID SECURITY (BANK GUARANTEE FORMAT)

To
M/s OIL INDIA LIMITED,
CONTRACTS DEPARTMENT,
DULIAJAN, ASSAM, INDIA, PIN-786602

WHEREAS, (Name of Bidder) _____ (hereinafter called "the Bidder") has submitted their offer Dated _____ for the provision of certain services (hereinafter called "the Bid") against OIL INDIA LIMITED, Duliajan, Assam, India (hereinafter called the Company's) Tender No. _____ KNOW ALL MEN BY these presents that we (Name of Bank) _____ of (Name of Country) _____ having our registered office at _____ (hereinafter called "Bank") are bound unto the Company in the sum of (*_____) for which payment well and truly to be made to Company, the Bank binds itself, its successors and assignees by these presents.

SEALED with the said Bank this ___ day of _____ 20_____

THE CONDITIONS of these obligations are:

1. If the Bidder withdraws their Bid within its original/extended validity; or
2. The Bidder modifies/revises their bid suomoto; or
3. The Bidder does not accept the contract; or
4. The Bidder does not furnish Performance Security Deposit within the stipulated time as per tender/contract; or
5. If it is established that the Bidder has submitted fraudulent documents or has indulged into corrupt and fraudulent practice.

We undertake to pay to Company up to the above amount upon receipt of its first written demand (by way of letter/fax/cable), without Company having to substantiate its demand provided that in its demand Company will note that the amount claimed by it is due to it owing to the occurrence of any of the conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to and including the date (**--/--/--) and any demand in respect thereof should reach the Bank not later than the above date.

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

A. Issuing Bank:

BANK FAX NO:

BANK EMAIL ID:

BANK TELEPHONE NO.:

IFSC CODE OF THE BANK:

B. Controlling Office:

Address of the Controlling Office of the BG issuing Bank:

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

Notwithstanding anything contained herein:

a) Our liability under this Bank Guarantee shall is restricted up to Rs._____

b) This guarantee shall be valid till ……

c) We are liable to pay the guarantee amount or any part thereof under this Bank Guarantee only and only if you serve upon us a written claim or demand on or before ……(Date of Expiry of BG PLUS one year claim period).

d) At the end of the claim period that is on or after ……. (Date of expiry of the Bank Guarantee Plus Minimum of 1 year claim period shall be stipulated) all your rights under this Guarantee shall stand extinguished and we shall be discharged from all our liabilities under this Guarantee irrespective of receipt of original Bank Guarantee duly discharged, by Bank.

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

SIGNATURE AND SEAL OF THE GUARANTORS _____

Name of Bank & Address _____

Witness _____

Address _____

_____

(Signature, Name and Address)

Date: _____

Place: _____

***** The Bidder should insert the amount of the guarantee in words and figures.
****** Date of expiry of Bank Guarantee should be as specified in the Tender.

Note:

The Bank Guarantee issuing bank branch shall ensure the following:

a. The Bank Guarantee issued by the Bank must be routed through SFMS platform as per following details:
   (i) MT 760 / MT 760 COV for issuance of Bank Guarantee
   (ii) MT 760 / MT 767 COV for amendment of Bank Guarantee

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

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

PROFORMA-H

[TO BE FILLED-UP/SUBMITTED BY THE VENDOR ON ITS LETTER HEAD FOR E-REMITTANCE]

Name:

FULL Address:

Phone Number:
Mobile Number:
E-mail address:
Fax Number:
Bank Account Number (in which the Bidder wants remittance against invoices):
Bank Name:
Branch:
Address of the Bank:
Bank Code:
IFSC/RTGS Code of the Bank:
NEFT Code of the Bank:
PAN Number:
GST Registration Number:

_____

Signature of Bidder with Official Seal

PROFORMA-I

FORM OF PERFORMANCE BANK GUARANTEE

To:

M/s. Oil India Limited
Contracts Department

Duliajan, Assam - 786602

WHEREAS _____ (Name and address of Contractor) (hereinafter called "Contractor") had undertaken, in pursuance of Contact No. _____ to execute (Name of Contract and Brief Description of the Work) _____ (hereinafter called "the Contract").

AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you with a Bank Guarantee as security for compliance with Contractor's obligations in accordance with the Contract.

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

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

This guarantee is valid until the _____day of _____

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

A. Issuing Bank:
BANK FAX NO:
BANK EMAIL ID:
BANK TELEPHNE NO:
IFSC CODE OF THE BANK:

B. Controlling Office:

Address of the Controlling Office of the BG issuing Bank:

Name of the Contract Person at the Controlling Office with Mobile No. and e-mail address:

Notwithstanding anything contained herein:

a) Our liability under this Bank Guarantee shall is restricted up to Rs._____
b) This guarantee shall be valid till …….
c) We are liable to pay the guarantee amount or any part thereof under this Bank Guarantee only and only if you serve upon us a written claim or demand on or before ……(Date of Expiry of BG PLUS one year claim period).
d) At the end of the claim period that is on or after ……. (Date of expiry of the Bank Guarantee Plus Minimum of 1 year claim period shall be stipulated) all your rights under this Guarantee shall stand extinguished and we shall be discharged from all our liabilities under this Guarantee irrespective of receipt of original Bank Guarantee duly discharged, by Bank.

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

SIGNATURE AND SEAL OF THE GUARANTORS_____
Designation_____
Name of the Bank_____
Address _____

Note:

The Bank Guarantee issuing bank branch shall ensure the following:

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

(i) MT 760 / MT 760 COV for issuance of Bank Guarantee
(ii) MT 760 / MT 767 COV for amendment of Bank Guarantee

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

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

PROFORMA-J

Format of undertaking by Bidders towards submission of authentic information/documents (To be typed on the letter head of the bidder)

Ref. No_____ Date _____

Sub: Undertaking of authenticity of information/documents submitted

To,
The CGM-Contracts
Contracts Department,
Oil India Limited, Duliajan

Sir,

With reference to our quotation against your above-referred tender, we hereby undertake that no fraudulent information/documents have been submitted by us.

We take full responsibility for the submission of authentic information/documents against the above cited bid.

We also agree that, during any stage of the tender/contract agreement, in case any of the information/documents submitted by us are found to be false/forged/ fraudulent, OIL has right to reject our bid at any stage including forfeiture of our PBG and/or cancel the award of contract and/or carry out any other penal action on us, as deemed fit.

Yours faithfully,

For (type name of the firm here)

Signature of Authorized Signatory
Name :
Designation :
Phone No.
Place :
Date :
(Affix Seal of the Organization here, if applicable)

PROFORMA-K

(TO BE EXECUTED BY THE AUTHORIZED SIGNATORY OF THE BIDDER ON THE OFFICIAL LETTER HEAD OF THE BIDDER)

CERTIFICATE OF COMPLIANCE TO FINANCIAL CRITERIA

[Ref: Clause 4.6 (b) BEC]

I _____ the authorized signatory(s) of _____ (Company or Firm name with address) do hereby solemnly affirm and declare/ undertake as under:

The Balance Sheet/Financial Statements for the financial year _____ have actually not been audited as on the Original Bid Closing Date.

Yours faithfully,

For (type name of the firm here)

Signature of Authorized Signatory
Name:
Designation:
Phone No.
Place:
Date:
(Affix Seal of the Organization here, if applicable)

Note: This certificate is to be issued only considering the time required for preparation of Financial Statements i.e. if the last date of preceding financial/accounting year falls within the preceding six months reckoned from the Original Bid Closing Date.

PROFORMA-L

CERTIFICATE OF ANNUAL TURNOVER & NET WORTH

TO BE ISSUED BY PRACTISING **CHARTERED ACCOUNTANTS' FIRM** ON THEIR LETTER HEAD

TO WHOM IT MAY CONCERN

This is to certify that the following financial positions extracted from the audited financial statements of M/s ..... (Name of the Bidder) for the last 03 (Three) completed accounting years upto.....**(as the case may be)** are correct.

YEAR	TURN OVER	NET WORTH

Place:
Date:

Seal:

Membership Number: Signature

Registration No.:

UDIN:

PROFORMA-M

Format for Line of Credit from Scheduled Commercial Bank

Confirmation from the bank for the availability of unutilized line of credit

(NOT APPLICABLE)

PROFORMA-N

UNDERTAKING TOWARDS SUBMISSION OF BANK GUARANTEE

To,

Oil India Limited

Contracts Department

Duliajan, Assam - 786602

We, M/s..... are submitting the Performance Security in favour of Oil India Limited, Duliajan in the form of bank guarantee bearing Reference No. .....for an amount of INR..... valid up to ..... as per terms and conditions of Tender/Contract No. .....

BG issuing bank details:

Bank Branch IFS Code	
Contact Details E-mail Addresses	Mobile Telephone Fax
Correspondence Address H No/Street/City	State Country Pin Code

Declaration:

We have arranged to send the confirmation of issuance of the bank guarantee via SFMS portal through our bank using the details mentioned in the tender and hereby confirming the correctness of the details mentioned.

Authorized Signature: _____

Name: _____

Vendor Code: _____

Email ID: _____

Mobile No: _____

Encl: Original bank guarantee

PROFORMA-O

DECLARATION ABOUT BIDDER'S FINANCIAL STANDING

To,
CGM-CONTRACTS
OIL INDIA LIMITED
DULIAJAN - 786602

Sub: Undertaking/Declaration regarding financial standing

Ref: Tender No. _____

We, _____ (name of bidder), hereby confirm that:

(1) We are neither bankrupt nor undergoing any insolvency resolution process or liquidation or bankruptcy proceeding under any law.

(OR)

(2) No insolvency resolution process or liquidation or bankruptcy proceeding is initiated under any law against us.

Place: _____

Date: _____

_____
(Name & Signature of the authorised signatory of the bidder)

PROFORMA-P

DECLARATION THAT BIDDER IS NOT UNDER HOLIDAY LIST/DELISTED/BLACKLISTED/DEBARRED IN OIL

To,
CGM-CONTRACTS
OIL INDIA LIMITED
DULIAJAN - 786602

Sub: Undertaking/Declaration regarding Holiday List, debarment etc.

Ref: Tender No. _____

We, _____ (Name of the bidder) hereby declare that neither our company nor any of its allied concerns, partners or associates or directors or proprietors involved in any capacity, are currently put on holiday list/banning list by OIL debarring us/them from carrying on business dealings with OIL.

Place: _____

Date: _____

_____

(Name & Signature of the authorised signatory of the bidder)

PROFORMA-Q

AGREEMENT FORM

This Agreement is made on ____ day of _____ between Oil India Limited, a Government of India Enterprise, incorporated under the Companies Act 1956, having its registered office at Duliajan in the State of Assam, hereinafter called the "Company" which expression unless repugnant to the context shall include executors, administrators and assignees on the one part, and M/s. _____ (Name and address of Contractor) hereinafter called the "Contractor" which expression unless repugnant to the context shall include executors, administrators and assignees on the other part,

WHEREAS the Company desires that Services _____ (brief description of services) should be provided by the Contractor as detailed hereinafter or as Company may requires;

WHEREAS, Contractor engaged themselves in the business of offering such services represents that they have adequate resources and equipment, material etc. in good working order and fully trained personnel capable of efficiently undertaking the operations and is ready, willing and able to carry out the said services for the Company as per Section-II attached herewith for this purpose and

WHEREAS, Company had issued a firm Letter of Award No. _____ dated _____ based on Offer No. _____ dated _____ submitted by the Contractor against Company's IFB No. _____ and the Contractor accepted the same vide Letter No. _____ dated _____.

WHEREAS, the Contractor has furnished to Company the performance security in the form of DD/BC/BG for Rs. _____ with validity of _____.

All these aforesaid documents shall be deemed to form and be read and construed as part of this agreement/contract. However, should there be any dispute arising out of interpretation of this contract in regard to the terms and conditions with those mentioned in Company's tender document and subsequent letters including the Letter of Intent and Contractor's offer and their subsequent letters, the terms and conditions attached hereto shall prevail. Changes, additions or deletions to the terms of the contract shall be authorized solely by an amendment to the contract executed in the same manner as this contract.

NOW WHEREAS, in consideration of the mutual covenants and agreements hereinafter contained, it is hereby agreed as follows –

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.

2. In addition to documents herein above, the following Sections and Annexures attached herewith shall be deemed to form and be read and construed as part of this agreement viz.:

(a) PART-I indicating the General Conditions of this Contract
(b) PART-II indicating the Scope of Work/Terms of Reference
(c) PART-III indicating the Special Conditions of Contract
(d) PART-V indicating the Schedule of Rates

3. In consideration of the payments to be made by the Company to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Company to provide the Services and to remedy defects therein in conformity in all respect with the provisions of this Contract.

4. The Company hereby covenants to pay the Contractor in consideration of the provision of the Services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of this Contract at the times and in the manner prescribed by this Contract.

IN WITNESS thereof, each party has executed this contract at Duliajan, Assam as of the date shown above.

Signed, Sealed and Delivered,

For and on behalf of Company (Oil India Limited)	for and on behalf of Contractor (M/s. _____)
Name:	Name:
Status:	Status:
In presence of	In presence of
1.	1.
2.	2.

PROFORMA-R

PROFORMA FOR UNDERTAKING FROM THIRD PARTY INSPECTION AGENCY
(to be submitted on official letter head)

TO
M/s OIL INDIA LIMITED
P.O. DULIAJAN-786602
Assam, India

Sir,

SUB: OIL's IFB No. CDH2516P27

M/s _____ having registered office at _____ intend to participate in the above referred tender of OIL INDIA LIMITED.

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

In this regard this is to certify that copies of documents pertaining to Bid Evaluation Criteria (BEC) submitted to us by the bidder have been verified and certified by us with originals and found to be genuine and authentic. We have signed and stamped on the copies of all the verified and certified documents having ____ nos. pages.

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

Thanking you,

Authorised Person's Signature: _____

Name: _____

APPENDIX-I

To,
CGM-CONTRACT
OIL INDIA LIMITED
DULIAJAN-786602

SUB: SAFETY MEASURES

Description of service: Design, implementation and support for Command-and-Control Centre & OT Data Lake project for OIL India Ltd.

Sir,

We hereby confirm that we have fully understood the safety measures to be adopted during execution of the above contract and that the same have been explained to us by the concerned authorities. We also give the following assurances.

a) Only experienced and competent persons shall be engaged by us for carrying out work under the said contract.

b) The names of the authorized persons who would be supervising the jobs on day to day basis from our end are the following:

i) _____

ii) _____

iii) _____

The above personnel are fully familiar with the nature of jobs assigned and safety precautions required.

c) Due notice would be given for any change of personnel under item (b) above.

d) We hereby accept the responsibility for the safety of all the personnel engaged by us and for the safety of the Company's personnel and property involved during the course of our working under this contract. We would ensure that all the provisions under the Oil Mines Regulations, 1984 and other safety rules related to execution of our work would be strictly followed by our personnel. Any violation pointed out by the Company's Engineers would be rectified forthwith or the work suspended till such time the rectification is completed by us and all expenditure towards this would be on our account.

e) We confirm that all persons engaged by us would be provided with the necessary Safety Gears at our cost.

f) All losses caused due to inadequate safety measures or lack of supervision on our part would be fully compensated by us and the Company will not be responsible for any lapses on our part in this regard.

g) We shall abide by the following HSE (Health, Safety & Environmental) POINTS:

GENERAL HEALTH, SAFETY & ENVIRONMENT (HSE) POINTS:

1 The Contractor shall be solely responsible to comply all the statutory norms as applicable while executing the job. It will be solely the Contractor's responsibility to fulfil all the legal formalities with respect to the Health, Safety and Environmental aspects of the entire job (namely: the person employed by him, the equipment, the environment, etc.) under the jurisdiction of the district of that state where it is operating. Ensure that all sub-contractors hired by him comply with the same requirement as the Contractor himself and shall be liable for ensuring compliance of all HSE laws by the sub-contractors. It will be the responsibility of the Contractor/his supervisor/representative to ensure strict adherence to all HSE measures and statutory Rules during operation in OIL's installations and safety of workers engaged by him. The crew members will not refuse to follow any instruction given by representative of OIL.

2 Contractor's arrangements for health and safety management shall be consistent with those for the company (OIL).

3 A Contractor employee must, while at work, take reasonable care for the health and safety of people who are at the employee's place of work and who may be affected by the employee's Actor omissions at work.

4 The Contractor shall ensure complete safety of the personnel engaged by him, and of all the equipment, they will handle and must take full responsibility for their safety.

5 Every person deployed by the Contractor must use appropriate PPEs (Personal Protective Equipment) to be provided by the Contractor. The Contractor shall provide Personnel Protective Equipment as per the hazard identified and risk assessed for the job and conforming to statutory requirement and company's PPE schedule. Safety appliances like protective footwear, Safety Helmet and Full Body harness, Fall Prevention Devises (FPD) shall conform to relevant IS codes. Necessary supportive document shall have to be available at site as proof. If the Contractor fails to provide the safety items as mentioned above to the working personnel, the Contractor may request to the Company (OIL) for providing the same. In case of exigency OIL will provide the safety items if available. However, in turn, OIL will recover the actual cost of the items by deducting from Contractor's Bill. However, it will be the Contractor's sole responsibility to ensure that the persons engaged by him in the mines use the proper PPE while at work. Contractor employees should be trained in the proper use and maintenance of PPE. In absence of appropriate PPEs, the representative of OIL has the right to stop the work which will be binding for the Contractor. Moreover, the accountability towards any delay in work/ penalty due non-adherence to PPE shall be binding to the Contractor.

6 The Contractor should frame a mutually agreed bridging document between OIL & the Contractor for all issues not envisaged under the terms and conditions of the contract with the roles and responsibilities clearly defined.

7 The Contractor has to keep a register of the persons employed by him/her. The Contractor's supervisor shall take and maintain attendance of his men every day for the work, punctually.

8 Soft copy of the Standard Operating Procedures (SOPs) related to scope of work shall be handed over to the representative of OIL by Contractor including an assessment of risk, wherever possible and safe methods to deal with it/them. Printout of copy (spiral binding) of the SOP mentioned above is to be kept with all working teams at all times. The SOP clearly stating the risk arising to men, machineries & material from the mining operation / other operations to be done by the Contractor and how it is to be managed. However, in case of any doubts, the Contractor shall reconfirm the same from the Engineer In-Charge (OIL).

9 Contractor has to ensure that all work is carried out in accordance with the Statute and the SOP for the job. For the purpose, he may deploy adequate qualified and competent personnel for carrying out the job in a safe manner. The work which is not covered under SOP, the Contractor shall develop it and submit to the representatives of OIL.

10 In case of deviation of SOP or non-availability of SOP, Job Safety Analysis OSA) shall be carried out before commencement of the work.

11 Necessary cold and hot work permits including excavation clearance and permission for working at height, Confined Space Entry as applicable are to be obtained by the competent person of the Contractor from the site representative of OIL before start of the job(s). Work Permit System should be inline as per guidelines issued by HSE Department.

12 The Contractor's personnel should be aware about the existing as well as probable hazards and ensure their training to tackle such untoward events by the Contractor. If the Company (OIL) arranges any safety awareness program / training for the working personnel at site (company employee, Contractor worker, etc.) the Contractor will not have any objection to any such training.

13 After receipt of the work order the Contractor shall have to submit authorized list of Contract Personnel, who will be engaged for the jobs including name of the Contractor's competent persons and every contact details. No person shall be engaged in any job in a mine unless his competency has been assessed and approved by the OIL Engineer In-Charge.

14 The Contractor shall not engage minor laborer below eighteen (18) years of age under any circumstances.

15 The Contractor should prevent the frequent change of his deployed employees as far as practicable. The Contractor shall not employ or terminate his worker without the knowledge of the OIL engineer in charge. However, if OIL Engineer In-Charge found any person not appropriate with respect to the job, the Contractor has to remove the person and replace a suitable person within the timeline as per the terms of the Contract.

16 OIL will communicate all information to the Contractor or his authorized representative only.

17 The Contractor shall have to report all incidents including near miss to the representative of OIL who shall be supervising the Contractor's work.

18 Any compensation arising out of the job carried out by the Contractor whether related to pollution, Safety or Health will be paid by the Contractor only.

19 Any compensation arising due to accident of the Contractor's personnel while carrying out the job, will be payable by the Contractor and their medical treatment/ facilities in case of accidents should be provided by the same Contractor. The Contractor's personnel should be aware about the existing as well as probable hazards and ensure their training to tackle such untoward events by the Contractor.

20 Contractor shall keep a reasonable degree of order by disposing of accumulated rubbish and excess material. Disposal of solid wastes generated by the Contractor shall be in accordance with the company's Procedure for Solid Waste Management. The Contractor Personnel have to take every possible care to keep the environment clean and free from pollution.

21 The Contractor have to ensure the quality and reliability of all the tools, equipment and instruments they use. The supporting documents relevant to prove the above should be submitted. Defective tools shall be immediately removed.

22 Contractor's Supervisor/ Contractor's personnel needs to be aware about the site specific emergency response plan (which includes display of emergency contact nos., establish telephone communication, layout of working area, use of fire extinguisher, emergency exit, assembly point).

23 All Lifting equipment of the Contractor like Crane etc. shall have to be duly calibrated. Calibration Certificate of this equipment shall have to be submitted to the representatives of OIL and a copy of the same to be made available at site.

24 Necessary sign-board / warning signals like caution, "hot work" in progress, emergency telephone numbers, no entry without permission etc. should be used while working on tanks. The said signals / sign-boards shall have to be arranged by the Contractor and shall be in line with the circular of signboards issued by HSE Department, Oil India Limited.

25 Barricading of area to be done with reflecting tapes as applicable during work.

26 The First-Aid box should be provided by the Contractor and the same has to be kept ready to use at the site throughout the working hours.

27 The availability of First-Aid Fire Fighting equipment should be ensured by the Contractor at all working hours.

28 Smoking is prohibited in all Company restricted areas except in authorized smoking areas/ shelters. Carrying of matches and lighters into the Hazardous Area is

prohibited. Cellular phones shall not be used in operating areas / hazardous areas unless they have been classified as 'intrinsically safe' for use in that atmosphere. Consumption of alcohol and possession of non- prescribed drug in Company work site is strictly prohibited.

29 The Contractor personnel should understand the implication of the known hazards related to the work undertaken by them and the necessity of having an emergency plan approved by OIL to counter them, if anything goes wrong.

30 In case Contractor is found non-compliant of HSE laws as required and all the above mentioned general HSE points, company will have the right for directing the Contractor to take action to comply with the requirements, and for further noncompliance, the Contractor will be penalized as per the terms of the Contract.

31 When there is a significant risk to health, environment or safety of a person or place arising because of a non-compliance of HSE Measures Company will have the right to direct the Contractor to cease work until the noncompliance is corrected.

32 Any requirement arise by the Statutory Authorities during the period of contract shall be applicable and binding for the Contractor.

(Seal) Yours Faithfully

Date_____ M/s_____

FOR & ON BEHALF OF CONTRACTOR

APPENDIX-II

INTEGRITY PACT

Between

Oil India Limited (OIL) hereinafter referred to as "The Principal"

And

(Name of the bidder).....hereinafter referred to as "The Bidder/Contractor"

Preamble:

The Principal intends to award, under laid down organizational procedures, contract/s for **Design, implementation and support for Command-and-Control Centre & OT Data Lake project for OIL India Ltd..** The Principal values full compliance with all relevant laws and regulations, and the principles of economic use of resources, and of fairness and transparency in its relations with its Bidder/s.

In order to achieve these goals, the Principal cooperates with the renowned international Non-Governmental Organization "Transparency International" (TI). Following TI's national and international experience, the Principal will appoint an external independent Monitor who will monitor the tender process for compliance with the principles mentioned above.

Section: 1 -Commitments of the Principal

(1) The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:

(i) No employee of the Principal, personally or through family members, will in connection with the tender for, or during execution of a contract, demand, take a promise for or accept, for him/herself or third person, any material or immaterial benefit which he/she is not legally entitled to.

(ii) The Principal will, during the tender process treat all Bidders with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidders the same information and will not provide to any Bidder confidential/additional information through which the Bidder could obtain an advantage in relation to the tender process.

(iii) The Principal will exclude from the process all known prejudiced persons.

(2) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the relevant Anti-Corruption Laws of India, or if there be a substantive suspicion in this regard, the Principal will inform the Chief Vigilance Officers and in addition can initiate disciplinary actions.

Section: 2 -Commitments of the Bidder

(1) The Bidder commits itself to take all measures necessary to prevent corruption. During his participation in the tender process, the Bidder commits himself to observe the following principles:

(i) The Bidder will not, directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or immaterial benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during subsequent contract execution, if awarded.

(ii) The Bidder will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, Subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.

(iii) The Bidder(s) will not commit any offence under the relevant Anticorruption Laws of India, further, the Bidder(s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.

(iv) The Bidder will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.

(v) Bidders to disclose any transgressions with any other public/government organization that may impinge on the anti-corruption principle. The date of such transgression, for the purpose of disclosure by the bidders in this regard, would be the date on which cognizance of the said transgression was taken by the competent authority. The period for which such transgressions (s) is/are to be reported by the bidders shall be the last **three years** to be reckoned from date of bid submission. The transgression (s), for which cognizance was taken even before the said period of three years, but are pending conclusion, shall also be reported by the bidders.

(vi) The Bidder(s) of foreign origin shall disclose the name and address of the Agents/ representatives in India, if any. Similarly, the Bidder(s) of Indian Nationality shall furnish the name and address of the foreign principals, if any. Further, all the payments made to the Indian agent/ representative have to be in India Rupees only.

(vii) Bidders not to pass any information provided by Principal as part of business relationship to others and not to commit any offence under PC/ IPC Act;

(2) The Bidder will not instigate third persons to commit offences outlined above or be an accessory to such offences.

(3) The Bidder signing Integrity Pact shall not approach the Courts while representing the matters to IEMs and he/she will await their decision in the matter.

Section 3 -Disqualification from tender process and exclusion from future Contracts

If the Bidder, before contract award has committed a transgression through a violation of Section 2 or in any other form such as to put his reliability or risibility as Bidder into question, the Principal is entitled to disqualify the Bidder from the tender process, for such reason.

1. If the Bidder has committed a transgression through a violation of Section 2 such as to put his reliability or credibility into question, the Principal is entitled also to exclude the Bidder from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of the transgression. The severity will be determined by the circumstances of the case, in particular the number of transgressions, the position of the transgressions within the company hierarchy of the Bidder and the amount of the damage. The exclusion will be imposed for a minimum of 6 months and maximum of 2 years.

2. The Bidder accepts and undertakes to respect and uphold the Principal's Absolute right to resort to and impose such exclusion and further accepts and undertakes not to challenge or question such exclusion on any ground, including the lack of any hearing before the decision to resort to such exclusion is taken. This undertaking is given freely and after obtaining independent legal advice.

3. If the Bidder can prove that he has restored/recouped the Damage caused by him and has installed a suitable corruption prevention system, the Principal may revoke the exclusion prematurely.

4. A transgression is considered to have occurred if in light of available evidence, no reasonable doubt is possible.

5. Integrity Pact, in respect of a particular contract, shall be operative from the date Integrity Pact is signed by both the parties or as mentioned in Section 9 - Pact Duration whichever is later. Any violation of the same would entail disqualification of the bidders and exclusion from future business dealings.

Section 4 -Compensation for Damages

(1) If the Principal has disqualified the Bidder from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover from the Bidder liquidated damages equivalent to Earnest Money Deposit / Bid Security.

(2) The bidder agrees and undertakes to pay the said amounts without protest or demur subject only to condition that if the Bidder can prove and establish that the exclusion of the Bidder from the tender process has caused no damage or less damage than the amount or the liquidated damages, the Bidder shall compensate the Principal only to the extent of the damage in the amount proved.

Section 5 -Previous transgression

(1) The Bidder declares that no previous transgression occurred in the last 3 years with any other company in any country conforming to the TI approach or with any other Public Sector Enterprise in India that could justify his exclusion from the tender process.

(2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process for such reason.

Section: 6 -Equal treatment of all Bidders/Contractor/Subcontractors

(1) The Principal will enter into Pacts on identical terms with all bidders.

(2) The Bidder undertake(s) to procure from all subcontractors a commitment in conformity with this Integrity Pact. The Bidder shall be responsible for any violation(s) of the provisions laid down in this agreement/Pact by any of its sub-contractors/sub-vendors.

(3) The Principal will disqualify from the tender process all bidders who do not sign this Pact or violate its provisions.

Section: 7 -Criminal charges against violating Bidders/Contractors/ Subcontractors

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor, which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the Vigilance Office.

Section: 8 -External Independent Monitor/Monitors

(1) The Principal appoints competent and credible Independent External Monitor (IEM) for this Pact.

(2) The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the Chairperson of the Board of the Principal.

(3) The Bidder accepts that the Monitor has the right to access without restriction to all Project documentation of the Principal including that provided by the Bidder. The Bidder will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors. The Monitor is under contractual obligation to treat the information and documents of the Bidder/Contractor/Subcontractor with confidentiality.

(4) The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the Principal and the Bidder. The parties offer the Monitor the option to participate in such meetings.

(5) As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of the Principal and request the Management to discontinue or heal the violation, or to take other relevant action. The monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action. However, the Independent External Monitor shall give an opportunity to the bidder to present its case before making its recommendations to the Principal.

(6) The Monitor will submit a written report to the Chairperson of the Board of the Principal within 8 to 10 weeks from the date of reference or intimation to him by the 'Principal' and, should the occasion arise, submit proposals for correcting problematic situations.

(7) If the Monitor has reported to the Chairperson of the Board a Substantiated suspicion of an offence under relevant Anti-Corruption Laws of India, and the Chairperson has not, within reasonable time, taken visible action to proceed against such offence or reported it to the Vigilance Office, the Monitor may also transmit this information directly to the Central Vigilance Commissioner, Government of India.

(8) The word 'Monitor' would include both singular and plural.

(9) In case of any complaints referred under IP Program, the role of IEMs is advisory and the advice of IEM is non-binding on the Organization. However, as IEMs are invariably persons with rich experience who have retired as senior functionaries of the government, their advice would help in proper implementation of the IP.

Section:9 -Pact Duration

This Pact begins when both parties have legally signed it. It expires for the Contractor 12 months after the last payment under the respective contract, and for all other Bidders 6 months after the contract has been awarded.

If any claim is made/ lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged/determined by Chairperson of the Principal.

Section:10 -Other provisions

(1) This agreement is subject to Indian Law. Place of performance and jurisdiction is the Registered Office of the Principal. The Arbitration clause provided in the main tender document / contract shall not be applicable for any issue / dispute arising under Integrity Pact.

(2) Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.

(3) In case of a joint venture, all the partners of the joint venture should sign the Integrity Pact. In case of sub-contracting, the principal contractor shall take the responsibility of the adoption of IP by the sub-contractor. It is to be ensured that all sub-contractors also sign the IP. In case of sub-contractors, the IP will be a tri-partite arrangement to be signed by the Organization, the contractor, and the sub-contractor.

(4) Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intensions.

P.Barman

.....	**.....**
For the Principal	**For the Bidder/Contractor**
Date:	Witness 1: .....
Place:	Witness 2: .....

APPENDIX-III

UNDERTAKING FOR LOCAL CONTENT

(To be submitted in the letter head of the bidder)

We, _____ (Name of the bidder) have submitted Bid No. _____ against Tender No. _____ dated _____ for '**Design, implementation and support for Command-and-Control Centre & OT Data Lake project for OIL India Ltd.'.**

We hereby undertake that we meet the mandatory minimum local content requirement as mandated by Ministry of Petroleum and Natural Gas, Government of India vide Notification No. FP-20013/2/2017-FP-PNG dated 17.11.2020 (or as amended from time to time). The percentage of Local Content is _____ % .

For and on behalf of _____

Authorized signatory _____

Name _____

Designation _____

Contact No. _____

APPENDIX-IV

DECLARATION FORMAT

(As per Notes to Para 3.2.2(I), 3.2.2(II) & 3.2.2(III) of BEC)

[On company's Letter Head]

To,

M/s OIL INDIA LIMITED,
CONTRACTS DEPARTMENT,
DULIAJAN, ASSAM, INDIA, PIN-786602

Dear Sir,

This has reference to your Tender No. ..... Dated ..... 20___ on the subject .....

We.....(Name of the Company) confirm that we will engage/deploy the services including the key personnel of the Parent/Subsidiary/Sister Subsidiary/ Co-Subsidiary/JV Partner/Consortium Partner experience (strike out whichever is not applicable) on whose strength we are meeting the tender's Technical requirement as per the tender qualifying criteria.

Signature

(Name & Designation of Authorized person)

APPENDIX-V

Questionnaire for vendors and suppliers

			Response
1. Emissions	What was the GHG emission for the last financial year ?	a) Scope 1 GHG emissions (kg CO_2e)	
		b) Scope 2 GHG emissions (kg CO_2e)	
	What was the GHG emission per unit of revenue for the last financial year?	a) Scope 1 GHG emissions (kg CO_2e)	
		b) Scope 2 GHG emissions (kg CO_2e)	
2. Decarbonization strategy & targets	Do you have a Net Zero target? If yes, please state the year		
	Do you have an emissions reduction target? If yes, are the targets absolute emissions based, or intensity based?		
	Please state the target for reduction in next financial year	a) Scope 1 GHG emissions/emissions intensity	
		b) Scope 2 GHG emissions/emissions intensity	
	Please provide information on a few decarbonization initiatives undertaken (describe the initiatives and their respective impact)		
3. Waste & Water Mgt.	Do you have any initiatives for waste management including solid wastes, liquid wastes and hazardous waste?		
	Do you have any initiatives for water management including monitoring of water consumption and withdrawals, and if applicable, treatment of wastewater?		
4. Disclosures	Are your current emissions verified? If yes, please name the assuring body		
	Are your emissions targets validated (eg: SbTi)? If yes, please name the methodology		
	Are you rated by any of the ESG rating agencies? If yes, please specify the agency and rating		

Suppliers and vendors may refer to the explanatory note for any questions or clarifications pertaining to any of the question s above.

Explantatory Note-ESG Questionnaire for Suppliers & Vendors

1 Emissions Reporting

What are Greenhouse Gas (GHG) Emissions?

Greenhouse gas (GHG) emissions refer to gases that trap heat in the Earth's atmosphere, contributing to global warming and climate change. These include carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O), among others. GHG emissions are generated from various sources, such as burning fossil fuels, industrial activities, and deforestation.

What are Scope 1 and Scope 2 Emissions?

- **Scope 1 Emissions:** Direct emissions from sources owned or controlled by your company (e.g., fuel combustion in company-owned vehicles, boilers, and generators).
- **Scope 2 Emissions:** Indirect emissions from purchased electricity, steam, heating, and cooling consumed by your company. These emissions occur at the power generation source but are attributed to your business due to electricity consumption.

How to Calculate GHG Emissions?

Emissions are typically calculated using the following formula:
GHG Emissions (kg CO2e) = Consumption data × Emission Factor

- **Consumption Data:** Fuel consumption (liters), electricity use (kWh), etc.
- **Emission Factor:** Standard values published by organizations like the IPCC

Examples:

1. **Fuel Consumption-Based Calculation (Scope 1):**
   - If you use 1,000 liters of diesel in company vehicles, and the emission factor for diesel is 2.68 kg CO_2e per liter, your emissions are: 1,000×2.68=2,680 kg CO2e
2. **Electricity Consumption-Based Calculation (Scope 2):**
   - If your facility consumes 5,000 kWh of electricity, and the emission factor for your electricity provider is 0.4 kg CO_2e per kWh, your emissions are: 5,000×0.4=2,000 kg CO2e

Sample Responses:

Question	Sample Response
What was the GHG emission for FY24?	a) Scope 1: 10,500 kg CO_2e
	b) Scope 2: 8,200 kg CO_2e
What was the GHG emission per unit revenue for FY24?	a) Scope 1: 2.5 kg CO_2e per INR 1,000 revenue
	b) Scope 2: 1.8 kg CO_2e per INR 1,000 revenue

2 Decarbonization Strategy & Targets

Net Zero and Emission Reduction Targets

- **Net Zero Target**: A Net Zero target refers to a commitment to reducing emissions to as close to zero as possible, with residual emissions offset by carbon capture or other means. OIL would like to know if your organization has set any targets of becoming net zero, and if so, what is the targeted year.

- **There are 2 types of defining the target:**

  Absolute Reduction: A fixed percentage decrease in emissions over a period (e.g., 10% reduction by 2030).
  Intensity-Based Reduction: Reduction in emissions per unit of production or revenue (e.g., 15% reduction per product by 2025).

Sample Responses:

Question	Sample Response
Do you have a Net Zero target? If yes, please state the year	Yes, by 2040
Do you have an emissions reduction target? If yes, are the targets absolute emissions based, or intensity based?	Yes, we aim for an absolute 40% reduction by 2030, and 100% by 2040
Please state the target for reduction in FY24.	a) Scope 1: 10% absolute reduction
	b) Scope 2: 10% absolute reduction
Please provide information on a few initiatives undertaken (describe the initiatives)	Afforestation EV inclusion Electrification of gas-based equipment Renewable energy setup
How much of the reduction targets have been achieved till date? (eg: more than 80% achieved, less than 20% etc)	~5 % reduction has been achieved

3. Waste & Water Management

Waste Management Initiatives

In order to answer the question regarding waste management initiatives, vendors and suppliers may mention few of the initiatives that their organizations have undertaken that may include (but are not limited to):

- Recycling and reusing materials
- Proper disposal of hazardous waste
- Reducing landfill waste through composting or waste-to-energy programs

Water Conservation Initiatives

Similar to the waste management initiatives, in order to answer the question regarding water conversation initiatives, vendors and suppliers may mention few of the initiatives that their organizations have undertaken that may include (but are not limited to):

- Monitoring water consumption with meters
- Installing water-efficient fixtures
- Treating wastewater before discharge

Sample Responses:

Question	Sample Response
Do you have any initiatives for waste management including solid wastes, liquid wastes and hazardous waste?	Yes, we recycle 60% of our production waste and have SOPs in place for proper dispose of hazardous materials.
Do you have any initiatives for water management including monitoring of water consumption and withdrawals, and if applicable, treatment of wastewater?	Yes, we have meters to monitor water withdrawals and have a wastewater treatment process.

4. Disclosures

Verification & Validation of Emissions Data

- **Current emissions verification:** There are certain third-party agencies that verify an organization's emissions. These organizations provide independent assessments to ensure transparency and accuracy in emissions reporting. Verification by such agencies enhances credibility and aligns businesses with best sustainability practices. In case your organization's current emissions are validated by such a third-party agency, please specify the name of such an agency.

- **Emissions target validation:** If you have a target of reducing your carbon footprint, certain organizations validate the roadmap of achieving a lower carbon footprint. In case you have prepared a roadmap and submitted it to SBTi or Transition Pathways Initiatives, and have received certificates that have validated the targets, please specify the agency that has validated your targets.

- **ESG Ratings:** Certain agencies assess organizations based on their disclosures, monitoring capabilities, and control measures, among other factors. Some of these agencies, such as CDP and S&P, are globally recognized for their ratings. If your organization has received a rating from any of these agencies, please specify the agency's name and your assigned rating.

Sample Responses:

Question	Sample Response
Are your current emissions verified? If yes, please name the assuring body	Yes, verified by XYZ agency
Are your emissions targets validated (eg: SbTi)? If yes, please name the methodology	Yes, validated by SBTi.
Are you rated by any of the ESGrating agencies? If yes, please specify the agency and rating	Yes, CDP rating: D.

EXHIBIT–I

UNDERTAKING FOR WORKS INVOLVING POSSIBILITY OF SUB-CONTRACTING

(REF. CLAUSE NO. 6.6 OF FORWARDING LETTER)

We, M/s _____ , have read the clause regarding restrictions on procurement from a country which shares a land border with India and on sub-contracting to contractors from such-countries, we certify that we are not from such a country/or if from such a country, has been registered with the Competent Authority and will not sub-contract any work to a contractor from such countries unless such contractor is registered with the Competent Authority. We hereby certify that we fulfil all requirements in this regard and is eligible to be considered.

Yours faithfully,

For (type name of the firm here)

Signature of Authorized Signatory

Name:

Designation:

Phone No.

Place:

Date:

(Affix Seal of the Organization here, if applicable)

EXHIBIT–II

UNDERTAKING TOWARDS COMPLIANCE OF LAND BORDER RESTRICTIONS DEFINED UNDER CLAUSE NO. 6.0 OF THE FORWARDING LETTER

We, M/s _____ , have read the clause regarding restrictions on procurement from a country which shares a land border with India, we certify that we are not from such a country/or if from such a country, has been registered with the Competent Authority. We hereby certify that we fulfil all requirements in this regard and is eligible to be considered.

Yours faithfully,

For (type name of the firm here)

Signature of Authorised Signatory

Name:

Designation:

Phone No.

Place:

Date:

(Affix Seal of the Organization here, if applicable)

EXHIBIT–III

ADDITIONAL UNDERTAKING BY BIDDER IN CASES OF SPECIFIED TRANSFER OF TECHNOLOGY (ToT)

(REF. CLAUSE NO. 6.1 OF THE FORWARDING LETTER)

We, M/s _____, have read the clause regarding restrictions on procurement from a bidder having Transfer of Technology (ToT) arrangement. We certify that we do not have any ToT arrangement requiring registration with competent authority.

OR

We, M/s _____, have read the clause regarding restrictions on procurement from a bidder having Transfer of Technology (ToT) arrangement. We certify that we have valid registration to participate in this procurement.

Yours faithfully,

For (type name of the firm here)

Signature of Authorised Signatory

Name:

Designation:

Phone No.

Place:

Date:

(Affix Seal of the Organization here, if applicable)

ANNEXURE-I

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

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

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

WHEREAS

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

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

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

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

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

4. It is further agreed that for the performance of work during contract period bidder and Parent Company/Subsidiary Company (Delete whichever not applicable)

shall be jointly and severely responsible to OIL for satisfactory execution of the contract.

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

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

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

ANNEXURE-II

PARENT COMPANY/SUBSIDIARY COMPANY GUARANTEE *(Delete whichever not applicable)*

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

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

WHEREAS

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

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

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

1. The Guarantor (**Parent Company/*Subsidiary Company (Delete whichever not applicable***) unconditionally agrees that in case of non-performance by the Company of any of its obligations in any respect, the Guarantor shall, immediately on receipt of notice

of demand by OIL, take up the job without any demur or objection, in continuation and without loss of time and without any cost to OIL and duly perform the obligations of the Company to the satisfaction of OIL.

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

3. The Guarantor shall be jointly with the Company as also severally responsible for satisfactory performance of the contract entered between the Company and OIL.

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

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

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

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

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

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

M/s _____

Witness:

1. Signature _____
   Full Name _____
   Address _____

Signature_____
Name
Designation_____
Common seal of the
Company_____

Witness:

2. Signature _____
   Full Name _____
   Address _____

ANNEXURE-III

FORMAT OF AGREEMENT BETWEEN BIDDER, THEIR SISTER SUBSIDIARY/CO-SUBSIDIARY COMPANY AND THE ULTIMATE PARENT/HOLDING COMPANY OF BOTH THE BIDDER AND THE SISTER SUBSIDIARY/CO-SUBSIDIARY

(Strike out whichever is not applicable between Ultimate Parent and Holding Company. Similarly strike out whichever is not applicable between Sister Subsidiary and Co-subsidiary Company)

(IN CASE OF INDIAN BIDDER TO BE EXECUTED ON STAMP PAPER OF REQUISITE VALUE AND NOTORISED)

This agreement made this ___ day of ____ month ____ year by and between M/s. _____ (Fill in Bidder's full name, constitution and registered office address) _____ hereinafter referred to as "Bidder" of the first part and M/s. _____ (Fill in full name, constitution and registered office address of Sister Subsidiary/Co-subsidiary Company of the Bidder) herein after referred to as "Sister Subsidiary/ Co-subsidiary" of the second part and M/s_____(Fill in the full name, constitution and registered office address of the Ultimate Parent/Holding Company's of both the subsidiaries) hereinafter referred to as "Ultimate Parent/ Holding Company" of the third part.

WHEREAS

M/s. Oil India Limited (hereinafter referred to as OIL) has invited offers vide their tender No. _____ for _____ and M/s. _____(Bidder) intends to bid against the said tender and desires to have a technical support of M/s. _____(Sister Subsidiary/Co-subsidiary Company) and Sister Subsidiary/Co-subsidiary Company represents that they have gone through and understood the requirements of subject tender and are capable and committed to provide the services as required by the bidder for successful execution of the contract, if awarded to the bidder.

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

1. M/s._____(Bidder) will submit an offer to OIL for the full scope of work as envisaged in the tender document.

2. M/s. _____(Sister Subsidiary/Co-subsidiary Company) undertakes to provide technical support and expertise and expert manpower, material, if any, to support the bidder to discharge its obligations as per the Scope of work of the tender / Contract for which offer has been made by the bidder.

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

4. Sister Subsidiary/ Co-subsidiary Company unconditionally agrees that in case of award of contract to the Bidder, if the Bidder is unable to execute the contract, they shall, immediately on receipt of notice by OIL, take up the job without any demur or objection, in continuation without loss of time and without any extra cost to OIL and duly perform the obligations of the Bidder/Contractor to the satisfaction of OIL.

5. The Ultimate Parent/Holding Company also confirms and undertakes that the commitment made by the Sister Subsidiary/ Co-subsidiary company in providing the technical support and technical expertise and expert manpower to support the bidder for execution of the contract are honoured.
6. The Ultimate Parent/Holding Company also takes full responsibility in getting the contract executed through the Sister subsidiary/ Co-subsidiary company in case the Bidder/Contractor is unable to execute the contract.

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

For and on behalf of (Bidder)	For and on behalf of (Sister Subsidiary/ Co-subsidiary)	For and on behalf of (Ultimate Parent / Holding Company)
M/s.	M/s.	M/s.
Witness	Witness	Witness
1)	1)	1)
2)	2)	2)

Note: In case of contracts involving - (a) manufacture/supply (b) installation and commissioning (c) servicing and maintenance of any equipment, as the bidding company can draw on the experience of their multiple subsidiary sister/Co-subsidiary company (ies) specializing in each sphere of activity, i.e. (a) manufacture/supply (b) installation and commissioning (c) servicing and maintenance, therefore, in that case, the above format shall be signed by all the sister/Co-subsidiary company(ies) and necessary modifications may be made in the above format to include all sister subsidiaries.

ANNEXURE-IV

PARENT/ULTIMATE PARENT/HOLDING COMPANY'S CORPORATE GUARANTEE TOWARDS FINANCIAL STANDING

(Delete whichever not applicable)

(TO BE EXECUTED ON COMPANY'S LETTER HEAD)

DEED OF GUARANTEE

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

WHEREAS

M/s. Oil India Limited (hereinafter referred to as OIL) has invited offers vide their Tender No. _____ for _____ and M/s _____(Bidder) intends to bid against the said tender and desires to have Financial support of M/s _____[Parent/Ultimate Parent/Holding Company(Delete whichever not applicable)] and whereas Parent/Ultimate Parent/Holding Company(Delete whichever not applicable) represents that they have gone through and understood the requirements of subject tender and are capable and committed to provide the Financial support as required by the bidder for qualifying and successful execution of the contract, if awarded to the bidder.

Now, it is hereby agreed by the Guarantor to give this Guarantee and undertakes as follows:

1. The Guarantor confirms that the Bidder is a 100% subsidiary of the Guarantor.
2. The Guarantor agrees and confirms to provide the Audited Annual Reports of any of the preceding 03(three) financial/accounting years reckoned from the original bid closing date.
3. The Guarantor have an **annual financial turnover** of minimum ……. during any of the preceding 03(three) financial/accounting years reckoned from the original bid closing date.
4. **Net worth** of the Guarantor is positive for preceding financial/ accounting year.
5. The Guarantor undertakes to provide financial support to the Bidder for executing the project/job, in case the same is awarded to the Bidder.
   The Guarantor represents that:

(a) This Guarantee herein contained shall remain valid and enforceable till the satisfactory execution and completion of the work (including discharge of the warranty obligations) awarded to the Bidder.

(b) The liability of the Guarantor, under the Guarantee, is limited to the 50% of the annualized contract price entered between the Bidder and OIL. This will, however, be in addition to the forfeiture of the Performance Guarantee furnished by the Bidder.

(c) This Guarantee has been issued after due observance of the appropriate laws in force in India.

(d) This Guarantee shall be governed and construed in accordance with the laws in force in India and subject to the exclusive jurisdiction of the courts of New Delhi, India.

(e) This Guarantee has been given without any undue influence or coercion, and that the Guarantor has fully understood the implications of the same.

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

For and on behalf of (Bidder)	For and on behalf of (Parent/Ultimate Parent / Holding Company (Delete whichever not applicable)
Witness:	Witness:
1.	1.
2.	2.

ANNEXURE-V

JOINT VENTURE COMPANY'S CORPORATE GUARANTEE TOWARDS FINANCIAL STANDING

(TO BE EXECUTED ON COMPANY'S LETTER HEAD)

DEED OF GUARANTEE

THIS DEED OF GUARANTEE executed at ……. this …….. day of …….. by M/s …… [Name of JV member with more than 50% stake] a company duly organized and existing under the laws of …….. (insert jurisdiction/country), having its Registered Office at …… hereinafter called "the Guarantor" which expression shall, unless excluded by or repugnant to the subject or context thereof, be deemed to include its successors and permitted assigns.

WHEREAS

M/s. Oil India Limited (hereinafter referred to as OIL) has invited offers vide their Tender No. _____ for _____ and M/s _____[Name of the incorporated Joint Venture Company] intends to bid against the said tender based on the financial strength of M/s _____ [Complete Name of JV member with more than 50% stake] and whereas M/s _____ [Complete Name of JV member with more than 50% stake] represents that they have gone through and understood the requirements of subject tender and are capable and committed to provide the Financial support as required by the bidder for qualifying and successful execution of the contract, if awarded to the bidder.

Now, it is hereby agreed by the Guarantor to give this Guarantee and undertakes as follows:

6. The Guarantor confirms it hold ……. (in percentage, should be more than 50%) stake in the M/s _____ [Name of the incorporated Joint Venture Company].
7. The Guarantor agrees and confirms to provide the Audited Annual Reports of any of the preceding 03(three) financial/accounting years reckoned from the original bid closing date.
8. The Guarantor have an annual financial turnover of minimum INR …….. during any of the preceding 03(three) financial/accounting years reckoned from the original bid closing date.
9. **Net worth** of the Guarantor is minimum INR …….. for the accounting year preceding the original bid closing date.
10. The Guarantor undertakes to provide financial support to ……. [Name (s) of other JV members] for executing the project/job, in case the same is awarded to the M/s _____ [Name of the incorporated Joint Venture Company].

The Guarantor represents that:

(g) This Guarantee herein contained shall remain valid and enforceable till the satisfactory execution and completion of the work (including discharge of the warranty obligations) awarded to …… [Name of the incorporated Joint Venture Company].

(h) The liability of the Guarantor, under the Guarantee, is limited to the 50% of the contract price entered between the M/s _____ [Name of the incorporated Joint Venture Company] and OIL. This will, however, be in addition to the forfeiture of the Performance Guarantee furnished by the Bidder.

(i) This Guarantee has been issued after due observance of the appropriate laws in force in India.

(j) This Guarantee shall be governed and construed in accordance with the laws in force in India and subject to the exclusive jurisdiction of the courts of New Delhi, India.

(k) This Guarantee has been given without any undue influence or coercion, and that the Guarantor has fully understood the implications of the same.

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

For and on behalf of the bidder M/s ……	For and on behalf of M/s …… (Name of JV member with more than 50% stake)
Witness: 1. 2.	Witness: 1. 2.

ANNEXURE-VI

FORM OF PERFORMANCE BANK GUARANTEE BY SUPPORTING COMPANY

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

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

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

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

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

This guarantee is valid until the _____day of _____.

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

A. Issuing Bank:

   BANK FAX NO:

   BANK EMAIL ID:

   BANK TELEPHONE NO:

   IFSC CODE OF THE BANK:

B. Controlling Office:

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

SIGNATURE AND SEAL OF THE GUARANTORS _____

Designation _____

Name of Bank _____

Address _____

Witness _____

Address _____

_____

Date: _____

Place: _____

Note:

The Bank Guarantee issuing bank branch shall ensure the following:

b. The Bank Guarantee issued by the Bank must be routed through SFMS platform as per following details:

   (i) MT 760 / MT 760 COV for issuance of Bank Guarantee
   (ii) MT 760 / MT 767 COV for amendment of Bank Guarantee

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

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

ANNEXURE-A1

(Manufacturer's Authorization Form (MAF) to be furnished on the official letterhead of the OEM)

(**as per clause No. 3.1 of BEC**)

To

CGM (Contracts)
OIL INDIA LIMITED
P.O. DULIAJAN – 786602
ASSAM, INDIA

Subject: Manufacturer's Authorization Form

Reference: Your Tender No. _____ dated _____

Dear Sir,

This is with reference to the above-mentioned tender; we hereby authorize M/s _____ (name of the Bidder) to submit the bid, negotiate and conclude on our behalf.

We, as OEM, undertake to provide all the support necessary for Supply of _____ to M/s _____ (name of the Bidder), in the event of award of Purchase Order to them. We also hereby confirm that the enquired equipment i.e. quoted in the bid are in regular production line and would be maintainable during the installation & commissioning and AMC period of 70 Months after award of Contract. We hereby confirm our support in terms of spares and service to M/s _____ (Name of the Bidder) during this period.

(Authorized signatory of OEM)
Name:
Designation:
Mobile No:
Email id:
Website address:

ANNEXURE-A2

KEY PERSONNEL
(As per clause No. 3.3 of BEC)

Sr No	Job Role	Qualification & Experience	Minimum Resource Qty
1	Project Manager	Engineering Graduate with 10 years of large project execution experience	1
2	Infrastructure Engineer (Civil/Electrical/AV etc.)	Engineering Graduate in Civil/Electrical/Electronics- with 5 years of infrastructure execution experience	1
3	OT Integration Specialist	Engineering Graduate in Instrumentation/ Electronics- with 5 years of OT integration experience	1
4	IT Integration Specialist	Engineering Graduate (IT/Computer Science)/ MCA - with 5 years of IT integration experience	1
5	Business Data Lake Specialist	Engineering Graduate (IT, Computer Science, Data Engineering) / MCA -with 5 years of data lake experience	1
6	CCC Application Developer	Engineering Graduate (IT, Computer Science) / MCA - with 5 years of application development experience	1

Authorised Person's Signature: _____

Name: _____

Seal of the bidder:

ANNEXURE-A3

(Detailed design criteria)
(Refer clause no. 4.28 of SOW, Part-4, Section-II)

1. Purpose

This document defines the design criteria and scope for the Command & Control Centre (CCC) solution, ensuring alignment with Oil India's operational, technical, and business requirements. It serves as a baseline reference for bidder execution. In case of any discrepancy or ambiguity, the bidder is recommended to raise queries for clarification.

2. Control Room & Infra Setup

2.1. The control rooms shall be designed as mission-critical, 24×7 operational environments and shall comply with all standards mentioned in Scope & Technical Requirements and relevant local building, fire and safety codes (CPWD/IS/IEC as applicable).

2.2. The bidder shall engage a qualified architect to prepare multiple design options and present them for OIL's review and approval before finalizing the control-room layout.

2.3. Bidder shall submit detailed control-room blueprints for each location (3D layouts, sight-lines, operator ergonomics, video-wall placement, cable routing, AC zoning, lighting plans, access control and security zones) for OIL approval prior to procurement or construction.

2.4. All civil, electrical and AC works shall be coordinated with OIL's facilities teams and other contractors; bidder shall obtain necessary local permits and approvals and adhere to site safety, waste-management and working-hour constraints.

2.5. Civil, Interiors & Furniture shall adhere to the following design criteria, which include, but are not limited to, the aspects outlined below, and may cover additional requirements as per OIL's standards, safety regulations, and functional needs:

2.5.1. All civil works shall comply with relevant IS codes/standards and ensure seismic/wind load resistance as applicable.

2.5.2. The project demands for a contemporary, aesthetically appealing, ergonomically designed, safe and 24X7 working facility.

2.5.3. Proper waterproofing, fireproofing, and acoustic treatments shall be provided as mentioned in the Scope & Technical Requirements.

2.5.4. Interior finishes shall reflect OIL's branding and theme while ensuring aesthetics, ergonomics, and functionality.

2.5.5. Materials, textures, and colour palettes shall maintain uniformity and premium quality across all spaces.

2.5.6. Floors, walls, and ceilings to be finished with client-approved materials ensuring uniform aesthetics.

2.5.7. Layout shall ensure unobstructed sight-lines from all operator workstations to primary visual display surfaces and permit flexible reconfiguration for multiple operational modes (normal, visitor, incident, presentation).

2.5.8. Operator workstations and consoles shall meet ANSI/HFES and ISO 11064 ergonomic requirements: height-adjustability, anti-fatigue flooring, wrist-friendly surfaces, task lighting, accessible power/data ports, secure storage, and cable management.

2.5.9. The LED trim lighting shall follow OIL's theme colours, and the table modesty panel shall feature the OIL logo as provided by the client.

2.5.10. Video wall installation shall have a structurally reinforced wall or frame capable of supporting the total weight, with proper alignment, mounting tolerances, and cable management provisions.

2.5.11. Adequate space shall be provided around the video wall for maintenance, ventilation, and operator access.

2.5.12. Flooring and wall finish around the video wall shall be non-reflective, durable, and compliant with fire safety norms.

2.5.13. A separate server room shall be provided, with controlled access, proper grounding, anti-static flooring, and adequate ventilation.

2.5.14. AC/HVAC room shall include noise and vibration proofing, with acoustic insulation to prevent disturbance to the control room environment.

2.5.15. All cable entry/exit points for server and AC rooms shall be clearly routed, concealed, and labelled, complying with standards for power and data segregation.

2.5.16. Bidder shall provide concealed, built-in trays for clear, organized, and invisible routing of data and power cables

2.5.17. Furniture and upholstery shall comply with BIFMA standards and fire-retardant regulations; materials must be low-emission, easy to maintain and suitable for continuous occupancy. Bidder shall provide material data sheets (EPD where available).

2.5.18. The bidder shall fabricate furniture at site/factory in accordance with the approved specifications and design drawings.

2.5.19. Pre-manufactured furniture shall be supplied only after approval by the OIL, following submission of complete catalogues, technical specifications, and drawings for standard furniture items such as tables, chairs, and sofas as required.

2.5.20. Sofas / Lounge Seating: Ergonomic, durable seating with fire-retardant upholstery, stain-resistant finish

2.5.21. The bidder shall submit sample shade cards for fabrics, leatherette, laminates, carpets, and polished hardwood/veneer finishes in multiple shades for client approval.

2.5.22. Seismic safety of user & Control room equipment is a prime concern area. The metal panelling and metal ceiling shall sustain the seismic vibrations as per design spectrum IS 1893 for zone 4 or better vibrations.

2.5.23. The wall partition shall be robust & strong enough to sustain the routine loads/minor impacts of typical Control room environment. The wall partition/partition structure shall

2.5.24. The original equipment manufacturer (OEM) shall offer furniture products that are compliant with BIFMA X5 standards.

2.5.25. The existing treatment on the walls / false ceiling / partitions to be dismantled and the malba/debris to be moved by mechanical means to the authorised municipal dumping sites.

2.5.26. All existing serviceable elements to be retained shall be properly covered and protected to prevent any damage. Materials that are removable and reinstallable shall be safely stored in the designated storage area provided by the client within the same building premises.

2.6. Utilities such as Precision AC System, Fire Suppressant, Lighting & Electrical shall adhere to the following design criteria:

2.6.1. Control room environment control:

2.6.1.1. Precision AC/HVAC units designed for continuous 24x7x365 operation with N+1 redundancy, ensuring uninterrupted cooling and reliability for control room environments.

2.6.1.2. Precision AC/HVAC shall maintain strict environmental conditions with temperature ±1°C and relative humidity ±5% RH, incorporating downflow airflow, multi-stage filtration, and integrated humidifier/dehumidifier for optimal equipment performance.

2.6.2. Fire protection and suppression systems:

2.6.2.1. Fire protection and suppression systems shall be provided as per relevant standards (e.g., gas-based FM-200 or NOVEC 1230 for server room).

2.6.2.2. Fire protection and suppression systems shall be designed as a total flooding system with discharge time ≤10 seconds and hold time ≥10 minutes, complying with NFPA 2001 / ISO 14520 standards.

2.6.2.3. Fire protection and suppression systems shall be equipped with dual-zone smoke detection (Photoelectric / VESDA) and certified by UL/FM for reliability and safety.

2.6.3. Lighting:

2.6.3.1. Provide a DALI-based control system (DALI gateways, controllers and DIN-rail relay modules) for addressable, reliable management.

2.6.3.2. Enable individual and group zone control with smooth 0–100% dimming and flicker-free operation. Specify high colour-fidelity luminaires (CRI > 90) for accurate colour rendering.

2.6.3.3. Include a touch-based central control panel for scene management and real-time overrides. Provide a redundant physical push-button controller as a local failover/override. Supply an IR remote for convenient local control, Supply an IR remote for convenient local control.

2.6.3.4. Deliver pre-programmed scenes for Normal, Presentation/Video Display, Emergency and Night/Standby modes.

2.6.3.5. Install continuous linear lighting across the room's length and width to ensure uniform illumination and eliminate dark spots.

2.6.3.6. Control room lighting complies with ISO 11064 standards, ensuring optimal brightness, uniformity, and visual comfort.

2.6.4. Electrical:

2.6.4.1. Use XLPE FR aluminium cables for main incoming feeders and FRLS-grade internal wiring for distribution; provide dedicated trays/containment and physical separation of power and data runs.

2.6.4.2. Ensure UPS input/output wiring, maintenance bypass, A/B PDUs, and automatic transfer logic are provided and coordinated with protection settings.

2.6.4.3. Earthing and lightning protection per IS 3043: equipotential bonding, separate protective/functional earthing, and SPD coordination at service entrance and downstream panels.

2.6.4.4. Provide test & commissioning reports (IR/continuity, cable certification), single-line diagrams, as-built drawings, and O&M manuals on completion.

2.7. IT hardware & AV infrastructure such as video wall, video conferencing systems, IT hardware, audio-visual equipment, servers, networking, and related supporting infrastructure shall adhere to the following design criteria:

2.7.1. Video wall:

2.7.1.1. Video-wall placement conforms to ergonomic sight-angle, pixel-density and viewing-distance criteria to ensure legibility for operators and visitors; structural supports and mounting frames shall be designed to relevant seismic and load codes.

2.7.1.2. Utilize modular LED panels with seamless tile design and ultra-fine cabinet tolerances to ensure minimal visible gaps between adjacent panels

2.7.1.3. Designed for optimal viewing angles, contrast, and brightness to enhance situational awareness and operator ergonomics in the control room environment.

2.7.1.4. Dual signal paths with automatic failover to maintain uninterrupted display during source or hardware failures. Redundant Power Supplies for continuous operation.

2.7.1.5. Integrated touch functionality on the display, enabling direct interaction for content navigation and drill-down into detailed operational data.

2.7.1.6. Integrated content management system for real-time control, scheduling and source switching. Touch-based control from operator desk for seamless content and mode switching on the video wall.

2.7.1.7. The LED display and its associated control system (controller/processor) shall be from the same OEM or shall be fully certified and supported by the LED OEM to ensure seamless integration, performance consistency and single-point accountability.

2.7.1.8. All input sources should to be housed within the server room or accessing remotely, ensuring no PCs are placed beneath the operator's desk. Only a KVM interface module with quad outputs, capable of supporting up to four monitors, is to be positioned at the operator's workstation.

2.7.1.9. The Video Wall solution should comply with relevant international standards, including:

- ISO 9001:2015 – Quality Management System

- ISO 45001 – Occupational Health & Safety Management System (or equivalent)
- ISO 14001:2015 – Environmental Management System (or equivalent)

2.7.2. Sound and Video Conferencing (VC) System:

2.7.2.1. Implement a unified touch interface for seamless management of audio zones, video conferencing, and media playback

2.7.2.2. Design the room's audio system to deliver clarity and immersive experience with higher Sound Pressure Levels (SPL) for presentations or recorded media, ensuring effective communication and engagement.

2.7.2.3. Deploy directional ceiling speakers with adjustable zoning to provide clear, immersive sound tailored to the room's layout and usage requirements.

2.7.2.4. Utilize smart cameras with high-definition (4K) resolution, automatic speaker tracking, facial recognition, and PTZ control, integrated with the VC system to focus on active speakers and ensure optimal video coverage.

2.7.2.5. Ensure compatibility and integration with existing systems, such as the CCC application and intercoms, enabling synchronized audio alerts and communication.

2.7.3. Control Room IT Infrastructure (Servers, Operator Stations, AV & Network) :

2.7.3.1. Provide ergonomic, high-performance workstation setups with wide viewing angles, flicker-free display, and high colour accuracy to ensure clear visualization of multiple sources.

2.7.3.2. IT Servers should support redundancy (failover, clustering, virtualization) to ensure uninterrupted availability. It should be scalable in compute and storage to handle future application load.

2.7.3.3. The networking system for the control room shall be designed on a highly available and resilient architecture, ensuring uninterrupted connectivity between servers, operator stations, Video wall and other IT components.

2.7.3.4. Redundancy shall be ensured at both core and distribution layers, with N+1 architecture for critical switches, routers.

2.7.3.5. Racks, server rooms, Network and AV enclosures shall be provisioned with adequate service clearances, hot-aisle/cold-aisle management, cable access, locking, and monitoring; racks shall include environmental sensors and remote power control.

2.7.3.6. Position AV and interactive whiteboard ergonomically near the collaboration table, ensuring all participants have clear visibility and reach for annotations.

2.7.3.7. Support wireless content sharing to enable easy, clutter-free participation from multiple sources without relying on cables

2.7.3.8. Optimize ambient light conditions and display positioning, so projected or displayed content remains clear even in well-lit environments.

2.7.3.9. Apply multi-layered defence, including access controls, secure authentication, and compliance with industrial security standards.

2.7.4. Redundancy and resilience: duplicate critical infrastructure (Server, power, network links, core compute/AV controllers) shall be designed to avoid single points of failure and enable rapid failover.

2.7.5. Health & safety: design shall provide ergonomic escape routes, emergency lighting, first-aid and firefighting access, and comply with statutory occupational health & safety norms.

2.7.6. Bidder shall produce a detailed BOQ, product datasheets, method statements, installation drawings and snagging procedures as part of the design submission; no procurement or site work shall commence without OIL's written approval.

2.7.7. FAT shall be executed for AV, video-wall, servers, networking and interiors (staging where applicable) with documented acceptance criteria; SAT and joint commissioning shall be carried out at each site with performance verification.

2.7.8. Environmental and performance acceptance tests shall include verification of display uniformity/brightness, audio intelligibility, AC temperature/humidity stability, UPS failover, power quality and structured-cabling test reports.

2.7.9. Bidder shall deliver as-built drawings, cabling records, test certificates, equipment warranties, spare-parts lists, preventive-maintenance schedules and O&M manuals at handover.

2.7.10. Any deviation from these design criteria must be documented, justified, and submitted to OIL for written approval prior to implementation.

3. System Integration and Data Lake

3.1. Bidder shall validate the existing integration touchpoints captured in the requirements, assess the compatibility of integration protocols, and identify any additional IT or OT systems that may need to be integrated to ensure complete KPI coverage.

3.2. Bidder shall Prepare and share a comprehensive system integration list with the OIL for review and approval.

3.3. Bidder shall ensure that all proposed integration approaches, APIs, connectors, and data exchange mechanisms are compatible with the OIL's existing applications and platforms.

3.4. Any custom adapters or middleware components must be documented, standardized, and shared with the client for validation.

3.5. Bidder shall define data acquisition frequency, data granularity, and batch/real-time mechanisms for each system, in consultation with the OIL.

3.6. Bidder shall standardize tag names, engineering units, contextual metadata, and maintain a clear asset hierarchy across sites.

3.7. Bidder shall define data storage, archival, and retention policies for all IT &OT system data to be ingested into the OT data lake and IT middleware & data lake.

3.8. The system must be equipped to have data compression features for efficient storage and retrieval of data.

3.9. Bidder shall Include provisions for long-term storage, purging, and compliance with OIL & regulatory requirements.

3.10. Bidder shall provide detailed integration design documentation, including architecture diagrams, data flow diagrams, API specifications, tag mapping, and data transformation rules.

3.11. The IT and OT data lakes shall be designed for scalable storage, standardized contextualization of data (tags, timestamps, units, metadata), and seamless integration to support future AI/ML and advanced analytics use cases.

3.12. Ensure all IT system integrations comply with MEITY guidelines, ISO/IEC 27001, and OIL-specific IT security policies for data privacy, access control, and secure API usage.

3.13. Ensure OT system integrations comply with ISA/IEC 62443 and OIL-specific OT security standards

3.14. Servers shall support enterprise-grade reliability features (ECC memory, hot-swappable drives/modules, enterprise RAID) and provide for non-disruptive maintenance.

3.15. Bidder shall design system & integration approach to accommodate addition of new IT & OT systems in the future.

3.16. All integration activities should follow a formal change management process, including approvals, rollback plans, and stakeholder communication.

3.17. Data buffering shall be available to cater to conditions of connectivity between CCC and the IT/OT data lake is interrupted, the system shall maintain data synchronization using a fallback refresh frequency of 1 hour until normal connectivity and real-time ingestion resume

3.18. The bidder shall migrate a minimum of two (2) years of historical data (wherever available) from all integrated OT and IT systems into the respective OT/IT Data Lake. This includes time-series data, enterprise application data, and any relevant historical datasets required for baseline analytics, trend analysis and model training. The bidder is responsible for extraction, transformation, data quality checks, metadata mapping, contextualization, and ingestion into the target data lakes

4. CCC Application, Dashboard and Mobile app

4.1. Workshops shall be conducted with OIL stakeholders to identify, document, and finalize KPIs, alerts, and workflows.

4.2. Bidder shall design the UI, wireframes and interactive dashboard flows and submit them to OIL for review and formal approval prior to any development.

4.3. Bidder shall prepare the KPI catalogue (calculation formulas, data sources, aggregation windows) and submit it to OIL for validation and approval before implementing KPI logic.

4.4. Bidder shall define and document use cases for alert taxonomy, notification channels, escalation rules and workflow definitions, and for analytics/insight rules (descriptive dashboards, Top-N, trend logic, basic anomaly detection). The bidder shall provide sample outputs, acceptance criteria and test cases, obtain OIL's written approval of the documented use cases and acceptance criteria prior to the start of development.

4.5. Ensure dashboards are customizable, Interactive, and responsive, with multi-monitor support for control rooms.

4.6. Design for personalized landing pages, and adaptive UI layouts to support multi-location visualisation.

4.7. The system shall support seamless scaling for the addition of new wells, assets, and data sources without re-architecture.

4.8. Include easy configuration of new assets, systems, KPIs, and workflows using guided setup and template-based wizards.

4.9. The solution shall provide schema flexibility to accommodate evolving operational requirements without major reconfiguration.

4.10. Ensure secure access through SSO, RBAC, MFA, and session/device management, with audit trails for all actions.

4.11. Ensure the architecture supports AI/ML readiness, enabling predictive analytics, forecasting, and advanced decision-making in future phases.

4.12. Bidder shall configure, deploy, and assist in installation of the mobile application on user devices, ensuring compatibility, security compliance, and user readiness.

4.13. Bidder shall prepare and conduct UAT (covering scope, test cases, execution, and defect resolution) with OIL end-users and obtain formal written approval/sign-off prior to go-live.

5. Performance and Scalability

5.1. The system shall provide seamless integration with existing IT & enterprise applications, OT systems, and data sources, enabling real-time data flow and minimizing latency.

5.2. The system shall support centralized monitoring and health checks of all integrated components, including applications, network devices, and data pipelines, with automated alerts for failures or performance degradation.

5.3. The data lake shall support scalable ingestion and retrieval, accommodating high-frequency sensor data from OT systems and large transactional data from IT systems, while maintaining query performance for analytics and reporting.

5.4. The CCC system shall provide elastic scalability, auto-adjusting resources to workload demands to ensure consistent performance during peak operations.

5.5. Dashboards shall be responsive and adaptive, capable of rendering accurately on multiple screen sizes and resolutions across different locations.

5.6. The system shall support location-specific landing pages at startup, allowing personalized KPI layouts and dashboards tailored to each site or location.

5.7. The system shall incorporate scalable architecture and optimized resource allocation, ensuring consistent availability, low latency, and reliability in line with defined Service Level Agreements (SLA) for uptime, response time, and fault recovery.

5.8. The architecture shall provide flexible scalability, enabling expansion through both horizontal (additional nodes) and vertical (resource upgrades)

5.9. The system should be built with high availability and redundancy at the infrastructure, data, and application levels, incorporating clustering and failover strategies.

5.10. The system shall support near real-time data updates, ensuring that KPIs, alerts, and operational metrics accurately reflect the current state. Update frequency and latency will be defined and finalized during execution in consultation with OIL.

5.11. Real-time monitoring shall be enabled for system performance, application health, integration status, data flow, and resource utilization, with automated alerts to proactively highlight potential issues or disruptions.

5.12. The CCC system should be architected to sustain peak data ingestion rates up to 10x the average operational load, with the flexibility to scale horizontally and vertically to seamlessly handle sudden surges in data streams, user interactions, or concurrent applications without compromising performance.

5.13. The dashboard application shall ensure high responsiveness, with page load and query execution latency within defined limits under normal operational load, providing smooth and uninterrupted user interaction.

5.14. The system should support parallel and batch processing to efficiently manage large volumes of operational and enterprise data, ensuring timely transformation, aggregation, and delivery for CCC applications.

5.15. The mobile app shall efficiently support concurrent users and real-time data updates, ensuring timely display of alerts, notifications, operational metrics, and seamless in-app communication with operators without perceptible lag.

5.16. The bidder shall provide clear and well-defined logical and physical architecture diagrams for the system design along with a complete list of open-source software/ platforms and technologies used.

5.17. Any other items (hardware, software, or license) including tools etc. required to make the system fully operational and to complete the project in all respect will be in the scope of the bidder.

6. Cloud Infrastructure & Services

The bidder is free to offer any MeitY empanelled public cloud subscription if required for implementation of the solution. In this context the following points are to be considered by the bidder

6.1. OIL has already setup a secure cloud landing zone in MS Azure to access OIL's ERP (SAP S4/HANA) and such other cloud-based applications for OIL's cloud security and compliance requirement.

6.2. The bidder shall have to route all traffic initiated towards the proposed public cloud hosting relevant application through OIL's above mentioned landing zone in Azure.

6.3. Any data transmission cost if applicable from the offered public cloud to OIL's landing zone/Azure must be factored by the bidder in his offer.

6.4. Additional security gateway, or connectivity components (NGFW-Next Generation Firewall or VPN gateway etc) must be factored in the bidder's subscription to enable secure IPsec connectivity to OIL's Azure Landing Zone subscription.

6.5. The bidder must also factor federation/identity service in their subscription to establish SSO using OIL's Azure AD.

6.6. OIL shall have full access or audit right to the offered cloud subscription for cyber security and compliance mandate of OIL

6.7. The bidder must grant Global Administrator access to OIL to this newly created subscription.

6.8. The solution must be deployed in data centres within India. As per the MEITY guidelines, proposed CSP (Cloud Service Provider) should be from the selected empanelled major cloud service providers by MEITY (Ministry of Electronics and Information Technology).

6.9. All data processing, storage, backups, and disaster recovery operations must be confined within India's geographical boundaries, with the bidder maintaining comprehensive records of all data handling locations and procedures.

6.10. The deployment shall comply with OIL's cloud governance framework, including standardized naming conventions, resource tagging, and policy enforcement controls.

6.11. All network traffic between the CCC and other systems or users shall be routed exclusively through OIL's secure connectivity framework; the use of public IP addresses is strictly prohibited unless explicitly approved in writing by OIL.

6.12. All cloud and application resources must comply with OIL's identity and access management framework, including authentication, authorization, and role-based access controls.

6.13. The bidder shall implement performance monitoring with real-time metrics collection, dashboards, and automated alerts to ensure optimal cloud operations.

6.14. The solution shall support elastic scalability, automatically adjusting compute, storage, and network resources based on workload demand.

6.15. The solution architecture must be designed to be cloud service provider agnostic, enabling portability between different cloud platforms. In case of necessary provider changes, the bidder shall be responsible for migration, installation, and recommissioning of the system.

6.16. The cloud infrastructure shall implement end-to-end data security, including encryption at rest and in transit, secure key management, role-based access control, and compliance with MEITY, CERT-In, and ISO/IEC 27001 standards.

6.17. All system and application logs should be consolidated (e.g. using a cloud logging service or SIEM) for audit and troubleshooting.

6.18. The bidder shall manage the full lifecycle of the cloud infrastructure, covering setup, configuration, ongoing maintenance, capacity planning, performance tuning, resource management, and administration of related tools.

6.19. The bidder should provide ongoing management: patching, updates, performance monitoring, and 24×7 support.

6.20. Cost optimization tools including resource usage monitoring, automated rightsizing recommendations, and budget alerts to control cloud spending.

7. Network and Security

7.1. Bidder shall design and implement the solution to comply with OIL's network policies and SOC requirements.

7.2. The bidder shall coordinate with OIL's network & security teams for IP address planning, VLAN design, routing, ACLs, gateway placement, and change windows; no permanent configuration shall be applied without written sign-off from OIL.

7.3. Security monitoring, SPAN/tap access and SIEM integration shall be provided into OIL's SOC: the bidder shall expose telemetry, flows and logs in formats and endpoints prescribed by OIL.

7.4. All public-facing and third-party integration endpoints shall be placed in the OIL-managed DMZ; the bidder shall not host public services in other zones without OIL approval.

7.5. Any changes that affect OIL's core network (routing, peering, public IPs, NAT, firewall policies) shall be executed only after OIL approval and during agreed maintenance windows with rollback procedures.

7.6. The bidder shall provide OIL, in advance of implementation, with detailed network and bandwidth requirements (including profiles, QoS needs and expected peak loads) and shall coordinate with OIL's network team to validate capacity and design assumptions.

7.7. Security policies, standards and guidelines shall be formally documented, version-controlled, and periodically reviewed and approved; they shall align with ISA/IEC-62443, NCIIPC guidance, ISO/IEC-27001 and NIST CSF.

7.8. The CCC platform shall comply with OIL's IT/OT security requirements (including SSO, RBAC and OSDU where applicable) and with MEITY/CERT-In regulations on data residency and security.

7.9. The bidder shall enforce end-to-end data security: AES-256 (or stronger) encryption at rest, TLS 1.2+ for data-in-transit, field-level encryption for sensitive data, and a secure key management system with periodic key rotation.

7.10. Multi-Factor Authentication (MFA) shall be mandatory for all user access points, supporting biometric, hardware token and software token methods, and required for all privileged access.

7.11. Network architecture shall implement layered segmentation into trust zones (OT, OT-DMZ/aggregation, IT, CCC, DMZ/public) and enforce controls; public-facing services must be hosted in a dedicated DMZ with WAF, DDoS mitigation, API gateway and load-balancing.

7.12. Database and sensitive data stores shall reside in isolated security zones/subnets with ACLs, database-level firewalls, encryption, and periodic security audits.

7.13. The solution shall provide a dedicated SPAN (cyber) port or equivalent non-intrusive tapping capability to enable continuous network monitoring and packet capture by security teams.

7.14. Comprehensive audit logging shall be retained in secure, immutable/tamper-evident storage for a minimum of six months and shall capture user sessions, access attempts, administrative actions, data changes, security events and key performance metrics.

7.15. Patch and firmware management processes shall be defined and executed for hardware, OS and applications, including emergency/critical patch procedures, testing, rollback plans, and documented schedules.

7.16. Conduct regular (At least Once in a year) Vulnerability Assessment and Penetration Testing (VAPT) on assets (including hardware, software) to identify security weaknesses and validate remediation effectiveness through a CERT-In empanelled agency and provide all necessary audit reports, certificates and clarifications required by OIL or its nominated auditor.

7.17. Security awareness and role-based training shall be provided for project teams, integrators and CCC operators throughout implementation and handover.

8.0 Licensing

8.1. The bidder shall deliver a complete solution including all software, hardware and licenses in quantities sufficient to meet the full scope of the bid, and shall be responsible for any additional items discovered as necessary during implementation at no extra cost to the OIL.

8.2. If, at any time during implementation, the bidder determines that additional hardware, software, or licences are necessary to meet the requirements of the contract — whether or not such items were specified in the bid documents — the bidder shall procure, deliver, install and commission those items at its own cost, with no additional charge to OIL.

8.3. The bidder shall secure all necessary approvals and licenses in the name of OIL before initiating the corresponding activities.

8.4. The bidder shall provide clear documentation of cloud service subscription models, covering all components, usage limits, and scaling considerations for the full solution stack.

8.5. The solution must offer complete license management for all cloud services, featuring automated tracking, compliance checks, and guidance for optimizing usage.

8.6. The bidder shall ensure full transparency of cloud resource usage and costs, providing detailed monthly reports, usage dashboards, and service- or department-wise cost breakdowns.

8.7. Licenses required for the normal operation of the OIL platform shall be subscription based, with the exact quantity to be mutually agreed upon by OIL and the bidder during the design phase.

8.8. All additional licenses necessary for the normal operation of the solution shall be procured by the bidder on an annual subscription basis, with timely renewals or new licenses provided as required and mandated under the contract.

8.9. The licensing model shall be designed for flexibility, supporting future growth and expansion of the OIL system, including scaling of system integrations, addition of new functionalities, and ensuring long-term support.

8.10. The solution shall enable easy licensing audits to ensure compliance and identify over- or under-utilized licenses.

8.11. The bidder shall provide visibility into the long-term roadmap and support commitments for all software components, enabling OIL to align its licensing strategy.

8.12. The bidder shall ensure that all software and service licenses are fully transferable in the event of future cloud migration or platform changes. This includes providing detailed procedures, clear requirements, and comprehensive documentation covering any associated limitations, dependencies.

CHECKLIST-I

COMMERCIAL CHECK LIST
(Tender No. CDH2516P27)

Bidder's Name:_____

This Questionnaire duly filled in should be returned along with each copy of Un-priced Bid. Clauses confirmed hereunder should not be repeated in the Bid.

Sl. No.	Description	Bidder's Confirmation
1.	Bidding structure	
2.	Bidder's name and address:	
3.	It is noted that deviations to Terms & Conditions shall lead to rejection of offer, as specified in the Tender.	
4.	Ensure and confirm that prices quoted in 'Schedule of Rates', are for complete scope of work as defined in the tender	
5.	Indicate SAC Code Indicate rate of GST applicable.	SAC Code: GST ……..%
6.	EMD Details: Whether Bid Security submitted	
7.	Confirm to Submit PBG as per Tender requirement	
8.	Confirm that the offer shall remain valid for acceptance up to 120 (One Hundred Twenty) days from Date of bid opening.	
9.	Whether Mobilization and Completion period of contract is complied?	
10.	Whether Integrity Pact Submitted (if applicable)?	
11.	Confirm that quoted prices shall remain firm and fixed until	

	completion of the contract, except as otherwise mentioned in the bid document.	
12.	Confirm that you have submitted all documents as mentioned in the Tender/Annexures	
13.	Confirm acceptance to all terms & conditions of the Tender.	
14.	Confirm that all correspondence must be in English Language only.	
16.	Indicate Name & Contact No. (Telephone/Fax/E-mail) of person signing the bid.	Name: Contact No.: Fax: Email:
17.	Confirm that all Bank charges associated with Bidder's Bank shall be borne by Bidder.	
18.	Please indicate the following: (i) PAN No. (ii) GST Regn. No.	

Bidder confirms that in case of conflicting version of various terms & conditions at different places, the confirmation furnished as above shall be considered over-riding and final and any other deviation indicated elsewhere shall be treated as redundant.

Signature _____

Name _____

Designation _____

Office Stamp _____

CHECKLIST-II

CHECKLIST FOR BEC
(Tender No. CDH2516P27)

Bidder's Name: _____

BEC CLAUSE NO.	Compliance		Bidder to indicate Relevant Page No. of their Bid to support the remarks/ compliance
	Yes	No	
1.0			
2.0			
3.0			
3.1			
3.2			
3.2.1			
3.2.2			
3.2.3			
3.2.4			
3.2.5			
3.3			
3.4			
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4.2			
4.3			
4.4			
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10.3			
10.4			

Annexure-WP

Letter of appointment to employee under clause (f) of sub-section (1) of Section 6 of Occupational Safety, Health and Working Conditions (OSH &WC) Code, 2020

(To be issued in English or Hindi and in local language)

Format for Appointment Letter

i. Name of employee:
ii. Date of birth:
iii. Father's / Mother's name:
iv. Aadhaar number (after obtaining consent):
v. Labour Identification Number (LIN) of the establishment:
vi. Universal Account Number (UAN) and / or Insurance Number (ESIC) (if available):
vii. Designation:
viii. Type of Employment (Regular/Fixed-term-employment/Contractual):
ix. Category of skill:
x. Date of joining:
xi. Wages/Basic/Pay and Dearness Allowance:
xii. Other allowance including accommodation whichever is/are applicable:
xiii. Applicability of social security [Employees' Provident Fund Organization (EPFO) and Employees' State Insurance Corporation (ESIC)] benefits:
xiv. Broad Nature of duties to be performed:
xv. Benefits available under chapter VI (Maternity Benefit) of Code on Social Security, 2020 (in case of women employee):
xvi. Any other information:

Signature / Digital Signature
Employer

Annexure-WS

FORM – VIII-C

(See rule 156)

Format for Wage slip

Date of issue:				
Name of the Establishment				
Address:.....			Period:.....	
1.	Name of the Employee:			
2.	Father's/Mother's/Spouse's Name:			
3.	Designation:			
4.	UAN:			
5.	Bank Account Number:			
6.	Wage period:			
7.	Rate of wages payable	a) Basic	b) D.A.	c) other allowances
8.	Total attendance/unit of work done:			
9.	Overtime wages			
10.	Gross wages payable			
11.	Total deductions	a) PF	b) ESI	c) Others
12.	Net wages paid			
*Employer/Pay-in-charge signature				

***Note: Required in case register is maintained physically.**

END OF PART-5

END OF TENDER DOCUMENT

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