#### **OIL INDIA LIMITED**

(A Government of India Enterprise) P.O. Duliajan-786602, Assam, India E-mail: material@oilindia.in

#### <u>INVITATION FOR BID</u> NATIONAL COMPETITIVE BID

OIL INDIA LIMITED invites National Competitive Bid (NCB) through its e-procurement portal <a href="https://etender.srm.oilindia.in/irj/portal">https://etender.srm.oilindia.in/irj/portal</a> for the following items:

E-TENDER NO.	BID CLOSING / OPENING DATE	ITEM & QTY.
SDI3184P17/P4	19.01.2017	SD WAN SOLUTION, QTY. – 1 NO. (Pre Bid Conference date & venue 04.01.2017, Kolkata)

Tender fee (Non-refundable): Rs 1,000.00; Bid Closing/Opening Time: (11 Hrs.) IST/(14 Hrs.) IST; Period of sale of documents: 05.12.2016 to 29.12.2016. The complete bid documents and details for purchasing bid documents, participation in E-tenders are available on OIL's e-procurement portal <a href="https://etender.srm.oilindia.in/irj/portal">https://etender.srm.oilindia.in/irj/portal</a> as well as OIL's website <a href="https://etender.srm.oilindia.com">www.oil-india.com</a>.

**NOTE:** All addenda, Corrigenda, time extension etc. to the tenders will be hosted on above website and e-portal only and no separate notification shall be issued in the press. Bidders should regularly visit above website and e-portal to keep themselves updated.

# 9

## OIL INDIA LIMITED

## (A Government of India Enterprises) PO: Duliajan – 786602

Assam (India)

**TELEPHONE NO. (91-374) 2808719** 

FAX NO: (91-374) 2800533

 $Email: ankurjyoti\_sarmah@oilindia.in \ ; \ erp\_mm@oilindia.in$ 

## **FORWARDING LETTER**

Tender No. : SDI3184P17 DT: 03.1.2016

**Tender Fee** : Rs 1,000.00

**Bid Security** : Applicable

Bidding Type : SINGLE STAGE TWO BID SYSTEM

Tender Type : Open Tender

Bid Closing / Opening on : As mentioned in the e-portal

**Performance Security** : Applicable

**Integrity Pact** : Applicable

Date of pre-bid conference : 04.01.2017

Time of pre-bid conference: 09.00 AM onwards.

**Venue of pre-bid conference: KOLKATA** 

OIL invites Bids for **Supply, Installation & Commissioning, Training and AMS of SD-WAN Solution** through its e-Procurement site under **SINGLE STAGE TWO BID SYSTEM**. The bidding documents and other terms and conditions are available at Booklet No. MM/LOCAL/E-01/2005 for E-Procurement of Indigenous Tenders. The prescribed Bid Forms for submission of bids are available in the Technical RFx -> External Area - > Tender Documents

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

#### **NOTES:**

- (1) A Pre-Bid Conference with the vendors will be held at <u>Kolkata</u> to discuss on the technical specifications and other terms and conditions of the tender. All the vendors who purchase the Tender Document within the <u>Last date of issue of user ID and password i.e. -29.12.2016</u> (or amended otherwise) will be eligible to attend the Pre-Bid Conference. The exact venue and time of the Pre-Bid conference will be intimated to the vendors at a later date.
- (2) Clarification on the technical specifications and other terms & conditions of the tender shall be provided to the vendors during the Pre-bid Conference. Vendors should come fully prepared to the Pre-bid Conference and submit their queries to OIL in the Pre-bid

Conference for clarification. The set of queries shall be sent to OIL at least 5 days before the Pre-bid Conference (ie Within 31.12.2016) for study by OIL.

- (3) Any changes in the technical specifications and other terms & conditions of the tender arising out of discussion in the Pre-bid Conference shall also form part of the tender document. In the Pre-bid Conference specifications, terms and conditions of the NIT will be frozen and no request for amendment to NIT shall be entertained after the pre bid conference.
- (4) Vendors shall depute representatives who are competent enough and authorized to take on the spot decision. At the most 2 (Two) representatives from each vendor shall be allowed to participate in the pre-bid conference. All costs for attending the pre-bid conference shall be to the vendors account.
- (5) Vendors, immediately after the purchase of the Tender documents, shall inform OIL at the following address about their participation in the Pre-Bid Conference with details of the persons to enable OIL to make arrangement for the Pre-Bid Conference.

DGM – MATERIALS, OIL INDIA LIMITED P.O DULIAJAN, PIN – 786 602, DIST. DIBRUGARH (ASSAM) INDIA FAX NO.: +91 - 374 – 2800533, E-Mail: ankurjyoti\_sarmah@oilindia.in

## The tender will be governed by:

a) For technical support on various matters viz. Online registration of vendors, Resetting of Passwords, submission of online bids etc, vendors should contact OIL's ERP MM Deptt at following: Tel Nos = 0374-2807178, 0374-2807171, 0374-2807192. Email id = <a href="mailto:erp\_mm@oilindia.in">erp\_mm@oilindia.in</a>.

b) OIL's office timings are as below:

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

Vendors should contact OIL officials at above timings only.

#### **OIL Bank Details:**

		Bank Details of Beneficiary
a	Bank Name	STAE BANK OF INDIA
b	Branch Name	Duliajan
с	Branch Address	Duliajan, Dist-Dibrugarh
d	Banker Account No.	10494832599
e	Type of Account	Current Account
f	IFSC Code	SBIN0002053
g	MICR Code	786002302

h	SWIFT Code	SBININBB479
i	Contact No.	9435554859
j	Contact Person Name	Mr. K.L.K.Banik, AGM
k	Fax No.	0374-2802729
1	Email Id	sbi.02053@sbi.co.in

- c) "General Terms & Conditions" for e-Procurement as per Booklet No. MM/LOCAL/E-01/2005 for E-Procurement of Indigenous Tenders.
- d) Technical specifications and Quantity as per Annexure 1A.
- e) The prescribed Bid Forms for submission of bids are available in the Technical RFx -> External Area > Tender Documents.
- f) Amendments to the NIT after its issue will be published on OIL's website only. Revision, clarification, addendum, corrigendum, time extension etc. to the tender will be hosted on OIL website only. No separate notification shall be issued in the press. Prospective bidders are requested to visit website regularly to keep themselves updated.
- g) Any sum of money due and payable to the contractor (including Security Deposit refundable to them) under this or any other contract may be appropriated by Oil India Limited and set-off against any claim of Oil India Limited (or such other person or persons contracting through Oil India Limited) for payment of sum of money arising out of this contract or under any other contract made by the contractor with Oil India Limited (or such other person or persons contracting through Oil India Limited).
- h) Bidder are advised to fill up the Technical bid check list (**Annexure EEE**) and Response sheet (**Annexure FFF**) given in MS excel format in Technical RFx -> External Area -> Tender Documents. The above filled up document to be uploaded in the Technical RFX Response.

### **Special Note:**

1.0 Vendors having OIL's User ID & password may pay Tender Fee on-line through OIL's electronic Payment Gateway upto one week prior to the Bid closing date (or as amended in e-portal).

Vendors who do not have OIL's User ID & password, may generate User ID & password online by the Vendor by using the link for supplier enlistment given in OIL's e-tender portal and then pay Tender Fee on-line through OIL's electronic Payment Gateway upto one week prior to the Bid closing date (or as amended in e-portal).

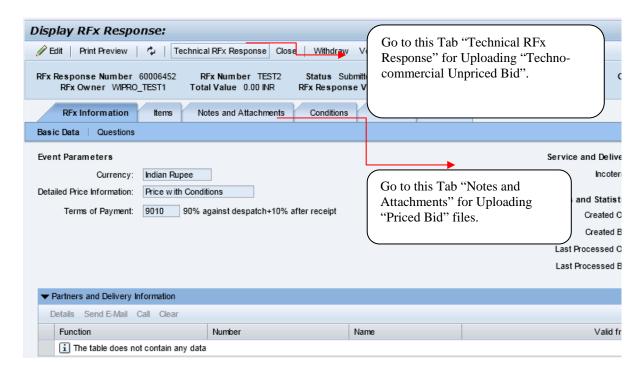
Alternatively application showing full address/email address with Tender Fee (Non-refundable) of Rs. 1,000.00 in the form of crossed "Payee Account only "Bank Draft/Bankers' Cheque drawn by Bank and valid for 90 days from the date of issue of the same or in the form of Indian Postal Orders payable to the OIL is to be sent to <u>DGM-Materials</u>, Oil India Limited, P.O. Duliajan, Assam-786602. Application shall be accepted only upto one week prior to the Bid closing date (or as amended in e-portal). The envelope containing the application for participation should clearly indicate "REQUEST FOR ISSUE OF USER ID AND PASSWORD FOR E TENDER NO ..." for easy identification and timely issue of user ID and password. On receipt of requisite tender fee, USER\_ID and initial PASSWORD will be communicated to the bidder (through e-mail) and will be

allowed to participate in the tender through OIL's e- Procurement portal. No physical tender documents will be provided. Details of NIT can be viewed using "Guest Login" provided in the e-Procurement portal. The link to e-Procurement portal has been also provided through OIL's web site www.oil-india.com.

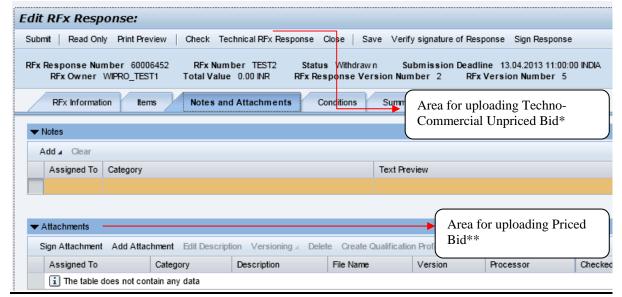
#### NOTE:

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

- 2.0 The tender is invited under SINGLE STAGE-TWO BID SYSTEM. The bidders are required to submit both the "TECHNO-COMMERCIAL UNPRICED BID" and "PRICED BID" through electronic format in the OIL's e-Tender portal within the Bid Closing Date and Time stipulated in the e-Tender.
- 2.1 Please ensure that Technical Bid / all technical related documents related to the tender are uploaded in the Technical RFx Response-> User > Technical Bid only. The "TECHNO-COMMERCIAL UNPRICED BID" shall contain all techno-commercial details except the prices. Please note that no price details should be uploaded in Technical RFx Response.
- 2.2 The "PRICE BID" must contain the price schedule and the bidder's commercial terms and conditions. The prices of the items should be quoted in "Conditions Tab". Details of prices as per Bid format / Commercial bid can be uploaded as Attachment under the attachment option under "Notes & Attachments".
- 2.3 A screen shot in this regard is given below. Offer not complying with above submission procedure will be rejected as per Bid Rejection Criteria mentioned in Annexure-CCC.



On "EDIT" Mode- The following screen will appear. Bidders are advised to Upload "Techno-Commercial Unpriced Bid" and "Priced Bid" in the places as indicated above:



## Note:

- \* The "Techno-Commercial Unpriced Bid" shall contain all techno-commercial details **except the prices**.
- \*\* The "Price bid" must contain the price schedule and the bidder's commercial terms and conditions. For uploading Price Bid, first click on Sign Attachment, a browser window will open, select the file from the PC and click on Sign to sign the Sign. On Signing a new file with extension .SSIG will be created. Close that window. Next click on Add Atachment, a browser window will open, select the .SSIG signed file from the PC and name the file under Description, Assigned to General Data and clock on OK to save the File.
- 3.0 Please note that all tender forms and supporting documents are to be submitted through OIL's e-Procurement site only except following documents which are to be submitted manually in sealed envelope super scribed with <u>Tender no.</u> and <u>Due date</u> to <u>DGM-Materials</u>, <u>Materials</u> <u>Department</u>, <u>Oil India Limited</u>, <u>Duliajan 786602</u>, <u>Assam</u> on or before the Bid Closing Date and Time mentioned in the Tender.
  - a) Original Bid Security
  - b) Detailed Catalogue (if any)
  - c) Any other document required to be submitted in original as per tender requirement

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

- 4.0 Benefits to Micro & Small Enterprises (MSEs) as per OIL's Public Procurement Policy for Micro and Small Enterprises (MSEs) shall be given. Bidders are requested to go though ANNEXURE I of MM/LOCAL/E-01/2005 for E-Procurement of Indigenous Tenders for more details. MSE bidders are exempted from submission of Tender Fees and Bid Security/Earnest Money provided they are registered for the items they intend to quote.
- 5.0 Bidders are requested to examine all instructions, forms, terms and specifications in the bid. Failure to furnish all information required as per the NIT or submission of offers not substantially responsive to the bid in every respect will be at the bidders risk and may result in rejection of its offer without seeking any clarifications.

- 6.0 Bidders must ensure that their bid is uploaded in the system before the tender closing date and time. Also, they must ensure that above documents which are to be submitted in a sealed envelope are also submitted at the above mentioned address before the bid closing date and time failing which the offer shall be rejected.
- 7.0 Bid must be submitted electronically only through OIL's e-procurement portal. Bid submitted in any other form will be rejected.
- 8.0 **SINGLE STAGE TWO BID SYSTEM** shall be followed for this tender and only the PRICED-BIDS of the bidders whose offers are commercially and technically acceptable shall be opened for further evaluation.
- 9.0 a) The Integrity Pact is applicable against this tender. Therefore, please submit the Integrity Pact document duly signed along with your quotation as per BRC. OIL shall be entering into an Integrity Pact with the bidders as per format enclosed vide Annexure DDD of the tender document. This Integrity Pact proforma has been duly signed digitally by OIL's competent signatory. The proforma has to be submitted by the bidder (along with the technical bid) duly signed (digitally) by the same signatory who signed the bid, i.e., who is duly authorized to sign the bid. Uploading the Integrity Pact with digital signature will be construed that all pages of the Integrity Pact 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 Integrity Pact with the offer, their bid shall be rejected straightway.
  - b) The name of the OIL's Independent External Monitors at present are as under: SHRI RAJIV MATHUR, IPS (Retd.)
    Former Director, IB, Govt. of India, e-Mail ID: rajivmathur23@gmail.com
- 10.0 The tender shall be governed by the Bid Rejection & Bid Evaluation Criteria given in enclosed **Annexure-CCC**. However, if any of the Clauses of the Bid Rejection Criteria / Bid Evaluation Criteria (as per **Annexure-CCC**) contradict the Clauses of the tender and / or "General Terms & Conditions" as per Booklet No. MM/LOCAL/E-01/2005 for E-Procurement of Indigenous Tenders elsewhere, those in the BEC / BRC shall prevail.
- 11.0 To ascertain the substantial responsiveness of the bid OIL reserves the right to ask the bidder for clarification in respect of clauses covered under BRC also and such clarifications fulfilling the BRC clauses in toto must be received on or before the deadline given by the company, failing which the offer will be summarily rejected.
- 12.0 Please do refer the User Manual provided on the portal on the procedure How to create Response for submitting offer.
- 13.0 If Bank Guarantee is submitted towards 'Bid Security', then bidders have to ensure that the Bank Guarantee issuing bank indicate the name and detailed address (including e-mail) of their higher office from where confirmation towards genuineness of the Bank Guarantee can be obtained.

## **NOTE:**

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

**Yours Faithfully** 

Sd-(A J SARMAH) MANAGER MATERIALS (IP) FOR: DGM-MATERIALS Tender No & Date: SDI3184P17 DT: 03.1.2016

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

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

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

	•	
Criteria	Complied	/
<del></del>	Not	
	Complied.	
	(Remarks	if
	any)	
1.0 BID REJECTION CRITERIA (BRC):		
The bid shall conform generally to the specifications, terms and conditions given		
in this document. Notwithstanding the general conformity of the bids to the		
stipulated specifications, the following requirements will have to be particularly		
met by the Bidders without which the same will be considered as non-responsive		
and rejected.		

### A) TECHNICAL

1. Bidder must have experience of successfully executing one similar order during last 5 years as on bid closing date for this tender.

<u>Definition of "similar order" in the context of this clause</u>: Design and implementation of a multi-site WAN environment for an organization involving minimum 5 sites (50% of the total sites of the proposed solution) using network equipment: Router or Firewall or SD-WAN devices.

- 2. Documentary evidence in respect of the above must be submitted in the form of:
- a. Copies of relevant Purchase Order, and
- b. Completion certificate or any other documentary evidence that can substantiate the satisfactory completion of the purchase order cited above clearly mentioning the quantum of work satisfying the requirement of the clause above.

#### **B) FINANCIAL:**

- a) Annual Financial Turnover of the bidder during any of preceding 03 (three) financial / accounting years from the original bid closing date should be at least **Rs. 112.31 Lakhs.**
- b) Net Worth of the firm should be Positive for preceding financial / Accounting year.

## Note -For (a) & (b):

Considering the time required for preparation of Financial Statements, if the last date of preceding financial / accounting year falls within the preceding six months reckoned from the original bid closing date and the Financial Statements of the preceding financial / accounting year are not available with the bidder, then the financial turnover of the previous three financial / accounting years excluding the preceding financial / accounting year will be considered. In such cases, the Net worth of the previous financial / accounting year excluding the preceding financial / accounting year will be considered. However, the bidder has to submit an affidavit/undertaking certifying that 'the balance sheet/Financial Statements for the financial year .................. (As the case may be) has actually not been audited so far'.

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

i) A certificate issued by a practicing Chartered Cost Accountant (with Membership Number and Firm Registration Number), certifying the Annual turnover & Net worth as per format prescribed in ANNEXURE-II.

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

## C) COMMERCIAL:

i) Validity of the bid shall be minimum 120 days from the Bid Closing Date.

#### ii) Bid security:

The bid must be accompanied by Bid Security of Rs 6,99,000.00 in OIL's prescribed format as Bank Guarantee or a Cashier's cheque or Demand Draft in favour of OIL. The Bid Security may be submitted manually in sealed envelope superscribed with Tender no. and Bid Closing date to Head Materials, Materials Department, Oil India Limited, Duliajan- 786602, Assam on or before the Bid Closing Date and Time mentioned in the Tender. The Bank Guarantee towards Bid Security shall be valid for 7 months from Bid closing date. (i.e. upto 19.08.2017). Cashier's cheque or Demand Draft shall be valid for minimum 90 days or as per RBI's guidelines, drawn on "Oil India Limited" and payable at Duliajan, Assam

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

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

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

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

iii) Bids are invited under "Single Stage Two Bid System". Bidders have to submit both the "Techno-commercial Unpriced Bids" and "Priced Bids" through electronic form in the OIL's e-Tender portal within the bid Closing date and time stipulated in the e-tender. The Techno-commercial Unpriced bid is to be submitted as per scope of works and Technical specification of the tender and the priced bid as per the online Commercial bid format. For details of submission procedure, please refer relevant para of General Terms and Conditions vide MM/LOCAL/E-01/2005 for E-Procurement of Indigenous Tenders. Any offer not complying with the above shall be rejected straightway.

## iv) Performance Security:

The successful bidder shall submit Performance Security as given below:

- a) 1<sup>st</sup> Performance Security @ 10% of PO value (for SD-WAN Solution + Installation & Commissioning & UAT Charge + Training Charges +Any other items) shall be submitted within 30 days of receipt of the formal purchase order failing which OIL reserves the right to cancel the order and forfeit the Bid Security. The Performance Security shall be valid for the entire period of Warranty of 1 year from the date of successful installation & commissioning plus 3(three) months.
- b) 2<sup>nd</sup> Performance Security @ 10% of 5 years AMS value shall be submitted before expiry of 1<sup>st</sup> Performance Security. The Performance Security shall be valid for the entire AMS period of 5 years plus 3(three) months.

Bidders should undertake in their bids to submit Performance Security as stated above.

The Performance Security shall be in any one of the following forms:

- (a) A Bank Guarantee in the prescribed OIL's format valid for 3(three) months beyond the Warranty period indicated in the Purchase Order /contract agreement.
- (b) A Cashier's cheque or Demand Draft with validity of minimum 90 days or as per RBI's guidelines, drawn on "Oil India Limited" and payable at Duliajan, Assam.

The Performance Security for capital nature items like plant and machinery etc. shall be valid for 12 months from the date of commissioning plus 3(three) months or 18 months from the date of shipment/despatch plus 3(three) months whichever concludes earlier. However, for consumables like chemicals, cement, tubular etc. the Performance Security shall be valid for 12 months from the date of shipment/despatch plus 3(three) months.

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

- v) The prices offered will have to be firm through delivery and not subject to variation on any account. A bid submitted with an adjustable price will be treated as non-responsive and rejected.
- vi) Bids received after the bid closing date and time will be rejected. Similarly, modifications to bids received after the bid closing date & time will not be considered.
- vii) All the Bids must be Digitally Signed using "Class 3" digital certificate with Organisation's name (*e-commerce application*) as per Indian IT Act obtained from the licensed Certifying Authorities operating under the Root Certifying Authority of India (RCAI), Controller of Certifying Authorities (CCA) of India. The bid signed using other than "Class 3 with Organisation's Name" digital certificate, will be rejected.
- viii) Technical RFx Response folder is meant for Technical bid only. Therefore, No price should be given in Technical RFx Response folder, otherwise the offer will be rejected.
- ix) Price should be maintained in the "online price schedule" only. The price submitted other than the "online price schedule" shall not be considered.
- ix). A bid shall be rejected straightway if it does not conform to any one of the following clauses:
- (a) Validity of bid shorter than the validity indicated in the Tender.
- (b) Original Bid Security not received within the stipulated date & time mentioned in the Tender.
- (c) Bid Security with (i) Validity shorter than the validity indicated in Tender and/or (ii) Bid Security amount lesser than the amount indicated in the Tender.
- (d) Annual Turnover of a bidder lower than the Annual turnover mentioned in the Tender.
- (e) In case the party refuses to sign the Integrity Pact.
- (f) Delivery:
- 1. Delivery of Software, Hardware and Relevant Licenses must be completed within 60 days of placing the purchase order in all the locations as specified against each item.
- 2. Installation and commissioning of the entire solution shall be completed within 60 days of delivery of equipment.

## 2.0 BID EVALUATION CRITERIA (BEC)

The bids conforming to the terms and conditions stipulated in the tender and considered to be responsive after subjecting to the Bid Rejection Criteria as well as verification of original of any or all documents/ documentary evidences

pertaining to BRC, will be considered for further evaluation as per the Bid Evaluation Criteria given below.

## A) TECHNICAL:

- i) The bids will be evaluated as per NIT specification.
- ii) All the items shall be procured from a single source. Hence, for evaluation of the bids, the cost of all the items shall be considered together.

#### **B) COMMERCIAL:**

- i). To evaluate the inter-se-ranking of the offers, Assam Entry Tax on purchase value will be loaded as per prevailing Govt. of Assam guidelines as applicable on bid closing date. Bidders may check this with the appropriate authority while submitting their offer.
- ii) Priced bids of only those bidders will be opened whose offers are found technically acceptable. The technically acceptable bidders will be informed before opening of the "priced bid".
- iii) A job executed by a bidder for its own organization / subsidiary cannot be considered as experience for the purpose of meeting BEC.
- iv) To ascertain the substantial responsiveness of the bid OIL reserves the right to ask the bidder for clarification in respect of clauses covered under BRC also and such clarifications fulfilling the BRC clauses in toto must be received on or before the deadline given by the company, failing which the offer will be summarily rejected.

## NOTE:

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

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## TECHNICAL SPECIFICATIONS WITH QUANTITY

Tender No & Date: SDI3184P17 DT: 03.1.2016

	Complied /
	Not
4	Complied.
	Complied. (Remarks if
	any)
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## **ITEM NO. 10**

## SUPPLY OF SD-WAN SOLUTION (QTY = 01 NO.)

## TECHNICAL REQUIREMENT

#### 1 ARCHITECTURE

The basic architectural model used in the proposed solution must consist of at least the following logical components:

- 1. **Controller Device** This device makes path optimization decisions and configuration of application-based forwarding policy and security rules are done on this device. This component is present in all the sites.
  - a. All policy and security rule configurations are done at the Controller device at HO
  - b. Controller devices at each site make path optimization decision for the respective sites and receives policy configurations from the Controller device at HO
- 2. **WAN Edge Device-** This is the device where WAN interfaces terminate. Edge device in each site make dynamic fully meshed encrypted overlay paths to every other edge device. This device forwards traffic to other branches over WAN including direct Internet access.
- 3. **Centralized Network Management Device** This device provides comprehensive solution to manage, visualize, provision, automate configuration and monitor the proposed SD-WAN infrastructure from a single graphical interface. This device is installed at HO.

For placement of components and architecture diagram refer to the attached document -sd-wan-proposal.docx

## **2** Functional Specifications of the Proposed Solution

## 2.1 Transport Independent Overlay Network

- 1. Each edge device must dynamically establish fully meshed encrypted overlay paths to every other edge device, across multiple different WAN services: L3VPN MPLS, Internet and Cellular Data connectivity (3G/4G).
- 2. The solution must support site-site remote routing via the primary WAN-aggregation site (huband-spoke model).
- 3. The solution must support dynamic optimal direct site-to-site remote routing (spoke-to-spoke

model).

- 4. Each edge device must be able to virtualize the WAN interfaces and treat them as pool of resources (interfaces).
- 5. The overlay paths established amongst the edge devices must support:
  - a. Transport of unicast, multicast, and broadcast traffic
  - b. The ability to run routing protocols: OSPF v2 and v3, BGP for IPv4 and IPv6
- 6. There shall be no peering requirement with the service provider of the WAN transport. The design shall be such that only the WAN IP addresses of the edge devices at each branch locations need to be known for establishing the overlay network.
- 7. The local users in each of the branch offices must be able to access Internet directly without going through the HO.
- 8. The solution must use Ethernet as standard media type for WAN transport.

## 2.2 Dynamic load sharing of traffic based on business and/or application policies

- 1. Edge devices must be able to load-balance traffic across multiple WAN paths based on load balancing algorithms efficiently using all available WAN bandwidth.
- 2. Edge devices must be able to identify and classify applications, including application-encrypted traffic. Identification and classification of at least the following classes of application types must be supported by the solution:
  - a. SAP ERP
  - b. Microsoft Exchange
  - c. Active Directory/LDAP
  - d. SMTP
  - e. Skype for Business
  - f. IP Voice Telephony
  - g. Web traffic
  - h. H.323
  - i. SIP
- 3. The solution must be able to dynamically control data packet forwarding decisions by looking at application type, performance, policies, and path status.
- 4. The solution must be able to monitor the network performance—jitter, packet loss, and delay—and make decisions to forward critical applications over the best-performing path based on the defined application policy.
- 5. The solution must respond to measured performance changes (degradation) in addition to link and node state changes (up/down) and adjust application forwarding accordingly.
- 6. The solution must be able to prioritize real time traffic over other traffic.

## 2.3 Application Optimization over WAN

- 1. The solution must provide application-specific acceleration capabilities that improve response times while reducing WAN bandwidth requirements.
- 2. The solution must have application awareness with capability of deep packet inspection of traffic in order to identify and monitor applications' performance to determine what traffic is running across the network in order to tune the network for business-critical services, resolve network problems and to help ensure that critical applications are properly prioritized across the network.

## 2.4 Security and Encryption

- 1. All remote-site traffic must be encrypted when transported over WAN transport links: MPLS, Internet and 3G/4G network protecting Data Confidentiality and Integrity.
- 2. The encryption must be done as per IPsec standards using AES with 128-bit keys or higher coupled with Internet Key Exchange Version 2 (IKEv2).
- 3. The use of encryption should not limit the performance or availability of a remote-site applications and should be transparent to end users.
- 4. The solution must use Hardware based encryption only and must give IMIX Encryption throughput equal to or greater than the sum total of WAN bandwidth capacity per site.
- 5. The solution must support zone based firewall and VRFs to allow for network isolation.
- 6. The solution must have DoS/DDoS protection.

## 2.5 Centralized management, monitoring and configuration of WAN

- The Centralized management appliance installed at Duliajan must provide a single, unified platform for network service provisioning, monitoring and assurance, change and compliance management.
- 2. The centralized management appliance must have web based GUI.
- 3. The solution must support zero-touch provisioning/plug-n-play for new branches, which entails on-site branch personnel having to make physical (i.e., cabling) changes only and administrators not having to make configuration changes to bring new branches online.
- 4. The solution must provide guided workflows for deployment and management of SD-WAN infrastructure.
- 5. The solution must support end-to-end real-time flow visualization for the application paths for identifying issues and taking corrective actions.
- 6. All network-wide configuration shall be from the centralized management appliance.
- 7. All application forwarding policies shall be configured from the centralized management appliance.
- 8. The centralized management appliance shall have NMS capabilities and must support network wide device and network visibility for all the devices in the scope of the solution
- 9. The solution must be able to collect and aggregate traffic statistics for all WAN paths. Traffic statistics include path utilization, application-specific utilization and path performance.

- 10. The solution must support device health monitoring for all the devices within the solution scope.
- 11. The solution must store historical traffic and performance information to assist with trouble analysis, traffic forecasting and SLA compliance.
- 12. The solution must support syslog and email based alarm to notify the administrators when any device/link fault or network performance degradation happens.

## 2.6 Minimum Capacity of the Proposed Solution

Refer to the attached document - sd-wan-proposal.docx

## 3 Minimum Hardware Specification of the Component Devices

#### 3.1 Common terms

- 1. All the hardware appliances shall be from the same OEM.
- 2. The bidder must specify Make and Model for all the quoted items in the solution.
- 3. The bidder must submit relevant product brochure/manual/documentation for all the quoted items. Compliance to each of the technical and functional requirements must be verifiable from the submitted product brochure/manual/documentation.
- 4. All the hardware appliances must be supplied with all related accessory, power cables, network cables, mounting kit etc.
- 5. All the hardware specifications and quantity to be supplied are minimum tender requirement only. If the bidder's proposed solution requires additional/higher specifications and/or higher quantity and/or any additional software/license/hardware, the bidder may include them in the proposed solution and specify under "ANY OTHER ITEMS"
- 6. All the software and licenses required to meet the tender specifications must be provided from day-1.

### 3.2 Dedicated Controller Appliance

Location	Primary WAN Aggregation site – HO
Address for delivery	Oil India Limited,
	Materials Department
	Duliajan, Assam - 786602
Minimum quantity	02
Hardware Specification	
1.	The bidder must specify the make and model of the quoted device.
1.	Make:
	Model:
2.	Form factor: Standard 19 inch rack mountable physical Hardware Appliance
3.	DRAM : Minimum 16 GB
4.	Compact Flash Memory: Minimum 32 GB
5.	Integrated Gigabit Ethernet ports:

	<u> </u>
	a) Minimum four (04) numbers of 10/100/1000 Ethernet ports for WAN or LAN.
	<ul> <li>b) Ethernet ports must support Small Form-Factor Pluggable (SFP)- based connectivity in addition to RJ-45 connections, enabling fiber or copper connectivity.</li> </ul>
	c) 2 numbers of compatible 1 G Copper SFP and 2 numbers of compatible 1 G MM Fiber SFP must be supplied with each device
6.	Architecture: Control and data plane functionalities must have clear separation in hardware
7.	Aggregate throughput: Minimum 2 Gbps
8.	USB Port for external storage : Minimum 1
9.	Console port : Minimum 1
10.	Power supply :
10.	a) AC input voltage : 240 VAC
	b) AC input frequency : 50 Hz
	c) Redundancy: Power supply redundancy shall be provided from day-1 in such a way that there shall be no impact on services with fully loaded configuration (Hardware + Software) in case of single power supply failure.
11.	Encapsulations supported:
	a) Generic routing encapsulation (GRE)
	b) Ethernet
	c) 802.1q VLAN
12.	Cryptography support:
	a) Encryption: DES, 3DES, AES-128 or AES-256 (in CBC and GCM modes)
	b) Authentication: RSA (748/1024/2048 bit), ECDSA (256/384 bit)
	c) Integrity: MD5, SHA, SHA-256, SHA-384, SHA-512
13.	Protocol and Feature Support:
	a) IPv4
	b) IPv6
	c) Static Routes
	d) OSPF v2 and v3
	e) BGP
	f) IKE
	g) VRRP
	h) ACL
	i) RADIUS
	j) AAA with TACAS+
	k) NAT
	l) IEEE802.1ag

	m) IEEE802.3ah
	n) BFD
	o) VRF
	p) Hardware based IPsec VPN
	q) LACP - 802.3ad
14.	Network Management support:
	a) SNMP V1/V2/V3
	b) CLI access over Telnet and SSH
	c) GUI based configuration support
	d) Remote Monitoring support
	e) SYSLOG
	f) NetFlow or equivalent
15.	High availability Support:  The device shall be configured in high availability mode to ensure that failure of one controller device does not affect the data forwarding as well as control path functionalities.
16.	SD-WAN Support:
10.	<ul> <li>a) This device shall function as Controller device in Primary WAN         Aggregation site – HO and in coordination with Edge, Centralized         Management Device and any additional device supplied (if required)         will achieve the functional requirements of the solution.</li> </ul>
17.	Regulatory requirement: The quoted device must be minimum EAL 3 or NDPP certified. The relevant certificate must be submitted along with the bid

## 3.3 Dedicated Edge Appliance

5.5 Dedicated Edge Apphance		
Location	Primary WAN Aggregation site – HO	
Address for delivery	Oil India Limited,	
	Materials Department	
	Duliajan, Assam - 786602	
Minimum quantity	02	
Hardware Specification		
1.	The bidder must specify the make and model of the quoted device.	
1.	Make:	
	Model:	
2.	Form factor: Standard 19 inch rack mountable physical Hardware Appliance	
3.	DRAM : Minimum 16 GB	
4.	Compact Flash Memory: Minimum 32 GB	
5.	Integrated Gigabit Ethernet ports:	
3.	a) Minimum four (04) 10/100/1000 Ethernet ports for WAN or LAN.	
	b) Ethernet ports must support Small Form-Factor Pluggable (SFP)-	
	based connectivity in addition to RJ-45 connections, enabling fiber	
	or copper connectivity.	

	c) 2 numbers of compatible 1 G Copper SFP and 2 numbers of compatible 1 G MM Fiber SFP must be supplied with each device
6.	Architecture: Control and data plane functionalities must have clear separation in hardware
7.	Aggregate throughput: Minimum 2 Gbps
8.	USB Port for external storage : Minimum 1
9.	Console port : Minimum 1
10.	Power supply :
	a) AC input voltage : 240 VAC
	b) AC input frequency : 50 Hz
	c) Redundancy: Power supply redundancy shall be provided from day-1 in such a way that there shall be no impact on services with fully loaded configuration (Hardware + Software) in case of single power supply failure.
11.	Encapsulations supported:
	a) Generic routing encapsulation (GRE)
	b) Ethernet
	c) 802.1q VLAN
12.	Cryptography support:
	a) Encryption: DES, 3DES, AES-128 or AES-256 (in CBC and GCM modes)
	b) Authentication: RSA (748/1024/2048 bit), ECDSA (256/384 bit)
	c) Integrity: MD5, SHA, SHA-256, SHA-384, SHA-512 Protocol and Feature Support:
13.	a) IPv4
	b) IPv6
	c) Static Routes
	d) OSPF v2 and v3
	e) BGP
	f) IKE
	g) VRRP
	h) ACL
	i) RADIUS
	j) AAA with TACAS+
	k) NAT
	I) IEEE802.1ag
	m) IEEE802.3ah
	n) BFD
	o) VRF
	p) Hardware based IPsec VPN with capacity for minimum 100 tunnels
	pj Hardware based irsec vriv with capacity for millimin 100 tunnels

	q) LACP - 802.3ad	
14.	Network Management support:	
	a) SNMP V1/V2/V3	
	b) CLI access over Telnet and SSH	
	c) GUI based configuration support	
	d) Remote Monitoring support	
	e) SYSLOG	
	f) NetFlow or equivalent	
15.	High availability Support:  The device shall be configured in a manner to ensure that failure of one edge device does not affect the data forwarding as well as control path functionalities.	
16.	Security: Inbuilt stateful and zone based firewall	
17.	SD-WAN Support: This device shall function as Edge device in Primary WAN Aggregation site – HO and in coordination with Controller, Centralized Management Device and any additional device supplied (if required) will achieve the functional requirements of the solution.	
18.	Regulatory requirement: The quoted device must be minimum EAL 3 or NDPP certified. The relevant certificate must be submitted along with the bid.	

## 3.4 Controller & Edge Co-located Appliance

Location	Branch sites	
Delivery Details	Address	Quantity
	DR and Corp HQ:	02
	Plot No. 19,	
	Film City,	
	Sector 16A,	
	Noida - 201301	
	PHQ, Guwahati	02
	Oil India Limited	
	P.O. Udayan Vihar	
	Narengi,	
	Guwahati – 781171	
	CoEES	02
	Oil India Limited	
	Centre for Excellence, Near	
	Pantaloon Show Room, G S Road,	
	Guwahati -781006	
	Kolkata Main office	02
	Oil India Limited	
	4, India Exchange Place, Kolkata -	
	700 001	
	Kolkata Shipping office	02
	Oil India Limited	
	Continental Chambers, 2 <sup>nd</sup> Floor	
	15-A, Hemanta Basu Sarani	

	Kallista 700001		
	Kolkata – 700001		
	BEP office	02	
	Oil India Limited		
	IDCO Tower, Janpath,		
	Bhubaneswar - 751 007		
	Jodhpur office	02	
	Oil India Limited		
	Rajasthan Project,		
	OIL HOUSE		
	2-A, District Shopping Centre		
	Saraswati Nagar, Basni, Jodhpur		
	Rajasthan - 342005		
	CEMG office	02	
	Oil India Limited		
	5 <sup>th</sup> Floor		
	IT Infra Building		
	FC-24 Sector 16-A,		
	Noida-201301		
	Kakinada office	02	
	Oil India Limited KG Basin Project		
	2-7A-7, Subhadra Residency		
	Venkatanagar, Sivalayam Street		
	Kakinada 533003, Andhra Pradesh		
Hardware Specification			
1.		d model of the quoted device for each	
	of the following locations:	NA-L- O NA-J-L	
	Location	Make & Model	
	DR and Corp HQ		
	PHQ, Guwahati		
	CoEES, Guwahati		
	Kolkata Main office		
	Kolkata Shipping office		
	BEP office		
	Jodhpur office		
	CEMG office		
	Kakinada office		
2.	Form factor: Standard 19 inch rack me	ountable physical Hardware Appliance	
3.	DRAM : Minimum 16 GB		
4.	Compact Flash Memory: Minimum 16	GB	
5.	Integrated Gigabit Ethernet ports:		
	a) Minimum 03 (three) 10/100/	1000 Ethernet ports for WAN or LAN.	
		t Small Form-Factor Pluggable (SFP)- in to RJ-45 connections, enabling fiber	
	compatible 1 G MM Fiber SFF	1 G Copper SFP and 2 numbers of must be supplied with each device	
6.	Architecture: Control and data pl separation in hardware	ane functionalities must have clear	
	- Separation in hardware		

	Minimum Aggregate through	put to be provided per device at each site:	
7.	Corp HQ	1 Gbps	
	PHQ, Guwahati	400 Mbps	
	CoEES, Guwahati	400 Mbps	
	Kolkata Main office	400 Mbps	
	Kolkata Shipping office	400 Mbps	
	BEP office	400 Mbps	
	Jodhpur office	1 Gbps	
	CEMG office Kakinada office	400 Mbps 400 Mbps	
-	USB Port for external storage	·	
8.	Console port : Minimum 1		
9.	·		
10.	Power supply :		
	a) AC input voltage : 240	) VAC	
	b) AC input frequency :	50 Hz	
11.	Encapsulations supported:		
	a) Generic routing enca	psulation (GRE)	
	b) Ethernet		
	c) 802.1q VLAN		
12.	Cryptography support:		
12.	a) Encryption: DES, 3DE	S, AES-128 or AES-256 (in CBC and GCM modes)	
	b) Authentication: RSA (	748/1024/2048 bit), ECDSA (256/384 bit)	
		SHA-256, SHA-384, SHA-512	
12	c) Integrity: MD5, SHA,  Protocol and Feature Support		
13.	a) Ipv4		
	b) Ipv6		
	c) Static Routes		
	d) OSPF v2 and v3		
	e) BGP		
	f) IKE		
	g) VRRP		
	h) ACL		
	i) RADIUS		
	j) AAA with TACAS+		
	k) NAT		
	l) IEEE802.1ag		
	m) IEEE802.3ah		
	n) BFD		
	o) VRF		
		a V/DNI with conscitut for maining and 100 towards	
	p) Hardware based IPse	c VPN with capacity for minimum 100 tunnels	

	q) LACP – 802.3ad	
14.	Network Management support:	
	a) SNMP V1/V2/V3	
	b) CLI access over Telnet and SSH	
	c) GUI based configuration support	
	d) Remote Monitoring support	
	e) SYSLOG	
	f) NetFlow or equivalent	
15.	High availability Support:	
	The device shall be configured in a manner to ensure that failure of one	
	edge device does not affect the data forwarding as well as control path functionalities.	
16.	Security: Inbuilt stateful and zone based firewall	
17.	SD-WAN Support:	
17.	This device shall function as Edge device in branch sites and in coordination	
	with Controller, Centralized Management Device and any additional device	
	supplied (if required) will achieve the functional requirements of the	
	solution.	
18.	Regulatory requirement: The quoted device must be minimum EAL 3 or	
	NDPP certified. The relevant certificate must be submitted along with the bid	
	biu	

## 3.5 Centralized Network Management Appliance

Location	Primary WAN Aggregation site – HO
Address for delivery	Oil India Limited,
	Materials Department
	Duliajan, Assam - 786602
Minimum quantity	01
Hardware Specification	
1.	The bidder must specify the make and model of the quoted device.
1.	Make:
	Model:
2.	Form factor: Standard 19 inch rack mountable physical Hardware Appliance
3.	DRAM : Minimum 16 GB
4.	Storage: Minimum 4*900 GB 6Gb SAS 10K RPM HDD configured in RAID 10
5.	Processor: Minimum 10 core 2.30 GHz or better Intel Xeon Processor with
	minimum 25 MB cache
6.	Power supply: Dual redundant 240VAC/50 Hz
7.	Integrated Gigabit Ethernet ports:
/.	Minimum 2 numbers of 10/100/1000 Ethernet ports
8.	Minimum number of manageable devices: The device must support
0.	management of at least 50 devices

## ITEM NO. 20

INSTALLATION & COMMISIONING AND UAT (QTY = 01 AU)

ITEM NO. 30	
TRAINING (QTY = 01 AU)	<del> </del>
ITEM NO.40	
AMS FOR 5 YEARS (QTY= 01 AU)	
ITEM NO. 50	
ANY OTHER ITEMS (OTY = 01 NO )	
ANY OTHER ITEMS (QTY = $01 \text{ NO.}$ )	
ANY OTHER ITEM	
1. All the hardware specifications and quantity to be supplied are minimum tender requirement	
only. If the bidder's proposed solution requires additional/higher specifications and/or higher	
quantity and/or any additional software/license/hardware, the bidder may include them in the	
proposed solution and specify under "ANY OTHER ITEMS".	
2. The bidder must give the following details of the items offered under "ANY OTHER ITEMS":	
a. Make and Model	
b. Location of delivery and quantity for each location	
b. Location of delivery and quantity for each location	
c. Functional/technical requirements fulfilled by the items	

## **SPECIAL TERMS AND CONDITIONS:**

3. Cost of "ANY OTHER ITEMS" must be quoted separately

## 1 General Terms

1.	The bidder must submit manufacturer's authorization letter (MAF) from their respective OEM to
	quote against this tender. MAF must include authorized personnel contact details: Email address and
	Phone number.
2.	The bidder shall quote for all the items as specified in tender. Partial offers will be considered as non-
۷.	responsive and will be rejected.
3.	The bidder must provide unpriced bill of materials and services (with details of make, model and
5.	quantity for each of the item) along with the bid. This must include additional software/feature
	licenses needed to meet the solution requirements.
4	All the hardware appliances shall be from the same OEM.
4.	
5.	The bidder must provide technical details of their offered solution by filing in the <b>Bidder's Response</b>
	Sheet – Annexure-1 (Part A and Part B). The bidder must ensure that information in Annexure-1 is
	complete and correct.
6.	The bidder must submit relevant product brochure/manual/documentation for all the quoted items.
0.	Technical scrutiny to determine compliance of the quoted items against the specification given in the
	tender shall be done on the basis of submitted product brochure/manual/documentation along with
	the information given by the bidder in Bidder's Response Sheet – Annexure-1 (Part A and Part B).
7.	All the technical requirements of the tender must be met in totality by the quoted items as on bid
	closing date.
	Bidders shall confirm that their OEMs will provide support during the entire duration of the purchase
8.	order, i.e. up to 5 years of warranty and AMS support.
	, , , , , , , , , , , , , , , , , , , ,

9.	The proposed solution (including all the Hardware and software) must have minimum of five years of end of support from the date of bid closing. Respective OEM documentation (Hardware as well as
	software) to this effect must be submitted along with the bid. OEM's declared end-of-support
	, , ,
	literature must mention the availability of Hardware spares for next five years.
10.	A pre-bid conference for this tender will be held in Kolkata to discuss queries/amendment requests
10.	with prospective bidders. The bidder must submit queries/amendment requests to OIL by E-mail at
	least five days prior to Pre-bid conference.
	Date and venue of the pre-bid conference shall be notified later.
	No queries/amendment requests/request for extension of BC date shall be entertained after the pre-
	bid conference.
11.	The bidder has to make his own arrangements for transportation and accommodation of its personnel
	when visiting various locations of OIL within the scope of the solution.

## 2 Scope of Work

The scope of the work involves the following:

- 1. Supply of hardware, software, necessary licenses and documentation
- 2. Installation, integration, commissioning and user acceptance testing
- 3. Training
- 4. Annual Maintenance Services for the entire solution for 5 years

## 3 Delivery of software, hardware and relevant licenses

1.	Delivery of items must be completed within 60 days of placing the purchase order in all the locations as specified against each item.
2.	The bidder must provide soft copy or hard copy of the OEM product documentation and configuration manual at the time of delivery.
3.	The bidder must provide list of supplied inventory along with OEM serial number/service tag at the time of delivery.
4.	All the required software licenses and content update licenses must be provided in soft or hard copy at the time of delivery.  All the supplied software licenses must be perpetual in nature without any requirement for renewal.  All the supplied content update licenses (for e.g. firewall signature updates etc.) must valid for a period of 5 years from the date of successful commissioning of the solution.

## 4 Installation and commissioning of the solution

1.	Installation and commissioning cost must be quoted separately.
2.	Installation and commissioning of the entire solution shall be completed within 60 days of delivery of equipment.
3.	The bidder will be responsible for design, installation, configuration and integration of the solution as per Oil India Ltd.'s requirements fulfilling all Tender specifications. The detailed design document to be prepared in consultation with Oil India Ltd fulfilling OIL's requirements must be submitted to OIL at least 7 days prior to commencing installation and commissioning activities. The actual implementation shall commence after review of the design document and go-ahead from OIL. The design must be as per best practices guidelines published by the OEM. OEM must certify the design prepared by the bidder for correctness and adherence to best practices.
4.	The bidder shall be responsible for any configuration changes required in the existing equipment like router, switches, firewall, load balancer etc. to integrate the solution with the existing infrastructure.
5.	Installation and commissioning of the solution has to be carried out by an OEM-certified installation

	engineer with remote support from OEM. The OEM must be involved with the bidder's installation engineer throughout the installation and commissioning activity.  The bidder must provide copy of the OEM certificates for the installation engineers assigned to carry out the installation activity at least seven days before start of the installation activity.  The submitted OEM certificate must meet the following requirements:
	a) The certificate must validate the ability of the Engineer to plan, implement, verify and troubleshoot the supplied solution
	b) The certificate must have been awarded by the OEM to the installation engineers after successful completion of an examination based OEM curriculum
	c) The certificate must be verifiable with the OEM
6.	After completion of installation and commissioning activity, OEM must carry out configuration audit of the supplied solution to validate that the installation and commissioning has been completed as per the design and issue a certificate.
	Installation and commissioning of the solution shall be deemed complete only after successful completion of acceptance testing and submission of configuration audit certificate from OEM.
7.	All interconnecting cables, transceiver optics and required accessories must be supplied by the bidder.
8.	Cable dressing and management with tagging – The bidder will be responsible for cable dressing and management with tagging for all the interconnecting cables within the solution scope. Necessary Cable ties, cable channels and cable lacing cord, tag marker etc. must be supplied by the bidder.
9.	The bidder must provide documentation for installation and configuration after successful installation and integration of the solution. The documentation must include step-by-step procedures to configure the devices, schematic diagram of the solution showing details of the interconnection and OEM serial number, service tags of the supplied equipment. This document must be submitted to OIL prior to commencement of Acceptance Test.
10.	The installation and commissioning of the solution shall be deemed complete when all of the following requirements are met:
	a) Completion of delivery of all the items
	b) Completion of installation, configuration and integration at all the locations
	c) Submission and OIL's approval for all documentation deliverables as per the tender requirements
	d) Successful completion of Configuration Audit
	e) Successful completion of User Acceptance Test
	f) Successful completion of training
	2. OIL will issue commissioning certificate to the bidder after completion of the installation and commissioning

## 5 User Acceptance Test (UAT)

1.	The bidder shall carry out Acceptance Tests for the supplied hardware and software in the presence of OIL's personnel and OEM certified Installation Engineers. The acceptance testing shall be done at IT
	Department, Duliajan, Assam.
2.	Acceptance tests will be done as per the UAT Plan and shall include the following:
	1. Physical Verification: All the received equipment will be powered on and physical specifications of the hardware supplied will be checked against the tender specifications

	2. Verification of physical connectivity, cable tagging and labelling
	3. Demonstration of all software licenses installed as per tender specifications
	4. Demonstration of all Transport independent overlay network functionalities as per the tender requirements
	5. Demonstration of all Dynamic load sharing functionalities as per the tender requirements
	6. Demonstration of all Application optimization functionalities as per the tender requirements
	7. Demonstration of all Security and Encryption functionalities as per the tender requirements
	8. Demonstration of Centralized Management, monitoring and configuration functionalities as per the tender requirements
3.	After completion of UAT, the bidder shall submit detailed UAT report to OIL.

## **6 Documentation Deliverables**

1.	The following are the documentation deliverables during various stages of the implementation of the solution:		
	STAGE	DOCUMENT NAME	
	7 days prior to commencement installation and commissioning activities	Design Document	
	At least seven days before start of the installation activity.	OEM certificates for the installation engineers	
	After completion of installation but before commencement of UAT	Configuration audit certificate from OEM	
	After completion of installation but before commencement of UAT	Installation and configuration document	
	After successful completion of UAT	UAT report	
	After completion of installation and commissioning	<ul> <li>Service Agreement details with OEM for providing AMS</li> </ul>	

## 7 Training

1.	The bidder must impart training on the supplied solution to at least 3 IT Personnel from OIL. The training must be conducted in a single batch. The minimum duration of training must be 5 days.				
2.	The training content must include at least the following:				
	a) Features and capabilities of all the supplied product				
	b) Administration and management of all the supplied product				
	c) Troubleshooting and maintenance of all the supplied product				
	d) Lab sessions				
3.	The bidder must arrange for necessary training infrastructure. The bidder is free to impart the training in any location of their choice in India. The training facility must be OEM authorized for imparting				
	training on the offered solution. The training must be conducted by OEM certified instructor only.				
4.	Complete OEM published training material as per OEM curriculum must be provided either in				
	hardcopy or softcopy to each participant. The training material provided must be standard course				
	material provided as part of the course. The training material shall not be tailor-made for OIL.				
5.	Cost of transportation and accommodation of the OIL Personnel for training will be borne by OIL.				

6.	The training must be completed before commencement of the installation and commissioning of the solution.		
7.	Training cost has to be quoted separately.		

## 8 Annual Maintenance Services (AMS)

1.	All the hardware and software items supplied to OIL for the solution shall be covered under Comprehensive onsite AMS provided directly by the OEM for a period of 5 (five) years from the date of issue of commissioning certificate for the solution.
2.	AMS cost has to quoted separately. The bidder must mention the OEM part code for AMS services along with quantity in the unpriced bill of materials.
3.	The bidder must submit the AMS service agreement certificate from OEM (at the time of commissioning) to substantiate that the supplied items (indicating their serial numbers) are covered under AMS for the desired period.
4.	During the AMS period, any failed device under AMS shall have to be repaired/ replaced with a new/ standby one within 120 hours of reporting the failure. Necessary configuration of the replacement device for proper operation of the device will be the responsibility of the bidder.
	During the AMS period, any reported problem other than hardware failure shall have to be resolved within 72 hours of reporting the problem.  Such replacement/repair activity shall not entail any additional cost to OIL apart from the fixed AMS fee payable quarterly.
5.	The bidder must supply and implement any firmware/Operating System Update/software update/Patch released by the OEM during the AMS period for the offered solution. Such updates must be provided free of cost.
6.	Remote assistance support must be provided within 2 hours of reporting any problem related to the supplied items. For problems which cannot be resolved over remote support, bidder's personnel must visit the site.
7.	The bidder shall be responsible for transportation and accommodation of the bidder's personnel visiting the sites for resolution of any problem.
8.	There will be a single point of contact for reporting any problem related to the offered solution. It must be possible to report problems over both phone and email or online. These details must be provided along with the escalation matrix along with the bid.
	OIL must be able to directly contact the OEM for reporting any problem related to the offered solution.
9.	AMS charges will be paid quarterly after completion of the quarter. The bidder must submit appropriate invoices to DGM-IT, IT Department, Oil India Limited, Duliajan, Assam - 786602, on a Quarterly basis, clearly mentioning the OIL Purchase Order no. and period of billing.

## 9 Penalty Terms

1.	During the AMS period, any failed device shall have to be repaired/ replaced with a new/ standby device within 120 hours of reporting the failure. Necessary configuration of the replacement device for proper operation of the device will be the responsibility of the successful bidder. In case of failure on the part of the bidder to rectify the problem within 120 hours of reporting, a penalty of INR 5000.00 per day per device will be levied. However, maximum penalty in a quarter will not exceed
	15% of the total cost of the equipment (hardware and software) in the solution.
2.	During the AMS period, any reported problem other than hardware failure shall have to be resolved within 72 hours of reporting the problem. In case of failure on the part of the bidder to rectify the problem within 72 hours of reporting, a penalty of INR 5000.00 per day per device will be levied. However, maximum penalty in a quarter will not exceed 15% of the total cost of the equipment
	(hardware and software) in the solution.

## 10 Payment Terms

1.	Payment against the Hardware and software cost of the solution will be as per the following schedule: 50% - After delivery of material (hardware, software and licenses) 50% - After issue of Commissioning Certificate for the solution by OIL AND successful completion of training modules.		
2.	Total training charges will be paid on submission of consolidated training invoice after successful completion of training modules.		
3.	Installation and commissioning charges will be paid on submission of invoices after successful commissioning of the solution.		
4.	AMS charges will be paid quarterly after completion of the quarter. The bidder must submit appropriate invoices to DGM-IT, IT Department, Oil India Limited, Duliajan, Assam - 786602, on a Quarterly basis, clearly mentioning the OIL Purchase Order no. and period of billing.		

## 11 Confidentiality Agreement Terms

1	OIL Confidentiality and Non-Disclosure Agreement (NDA) will be applicable and bidder has to submit
1.	Non-Disclosure Agreement as per given format duly signed & Sealed by the authorized signatory of
	the bidder, along with the bid.

## 12 Price Schedule

1	Bidders should fill up, sign and upload the price breakup of all the items as per "Annexure HHH (Part
1.	A)" under "Notes & Attachments" > "Attachments" only. The filled up price breakup should not be
	uploaded in Technical RFx Response folder.

## **NOTE:**

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

AUGUST 12, 2016

# **TENDER CONTENTS- TECHNICAL**

**SD-WAN IMPLEMENTATION AT OIL** 

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## SD-WAN IMPLEMENATION AT OIL

## 2 INTRODUCTION

Oil India Limited (OIL) is an Indian National Oil company under the administrative control of Ministry of Petroleum and Natural Gas, Govt. of India, engaged in the business of exploration, development and production of crude oil and natural gas, transportation of crude oil and production of LPG.

OIL intends to migrate its traditional WAN infrastructure to on-premises SD-WAN based infrastructure.

The definition of SD-WAN in the context of the proposed solution is "SD WAN is a solution that uses real time WAN link performance monitoring and data packet inspection to autonomously manage the distribution of network traffic across multiple, likely heterogeneous, WAN links with the aim of improving and optimizing WAN performance in alignment with the business requirements."

## 3 OVERVIEW OF CURRENT WAN INFRASTRUCTURE AT OIL

Location of Primary Data center and WAN aggregation site (HO)	Field Headquarters, Duliajan, Assam	
Location of Disaster recovery site	Corporate Headquarters	, Noida, UP
Branch offices and their location	Location	Number of offices
	Guwahati, Assam	02
	Kolkata, West Bengal	02
	Noida, UP	o2 (Including the DR site above)
	Jodhpur, Rajasthan	01
	Kakinada, Andhra Pradesh	01
	Bhubaneswar, Odisha	01
Type of MPLS Connectivity	Dual MPLS (L <sub>3</sub> VPN) connectivity at all offices	
Internet connectivity	Direct Internet connectivity in 8 locations	
	Internet connectivity via	HO in 2 locations

The following diagram gives schematic overview of the WAN links:

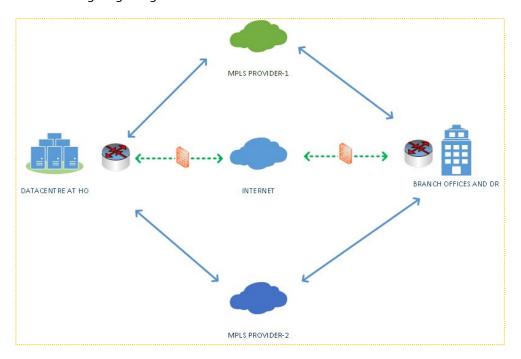


Figure 1: Overview of WAN Links at OIL

## 3.1 CURRENT WAN DESIGN AT OIL

### 3.1.1 HIGH AVAILABILITY

The dual redundant MPLS links are being used in ACTIVE-PASSIVE manner. One of the links is configured as primary. Whenever the primary link in any of the site goes down, respective routes are reconfigured manually to use the secondary WAN link.

## 3.1.2 ROUTING

Currently there is no BGP peering with the service provider. Site prefixes (e.g. 172.16.0.0/16 etc.) are statically configured by the service provider. Whenever there is change in the site prefixes, service provider is informed about the changes and service provider reconfigures the routing.

### 3.1.3 LIMITATIONS WITH THE CURRENT DESIGN

- 1. **No provision for automatic failover**: In case one link fails, re-routing the traffic to the other link is manual. This is a time-consuming activity and need human intervention.
- 2. **Underutilization of the secondary link**: Since the dual-redundant links are being used in ACTIVE-PASSIVE manner, the secondary WAN link is grossly underutilized.
- 3. **No provision for monitoring link quality**: Currently there is no provision for monitoring the link quality parameters like round-trip delay, jitter etc. Only link availability can be monitored.

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- 4. **No provision for application visibility**: Currently there is no provision for traffic prioritization, for e.g. SAP traffic must be prioritized over other traffic like email etc.
- 5. **Dependence on service providers**: Current design has operational dependency on the service providers for routing the Site prefixes. Whenever there is any change in the LAN prefixes of the sites, service provider must be informed for changing the LAN pool configuration.
- 6. **Security Consideration**: Currently we are dependent on service providers to ensure security of the traffic flowing through the provider network.

## 4 DETAILS ABOUT THE PROPOSED SOLUTION

#### 4.1 OBJECTIVE

The objectives of implementing SD-WAN solution in OIL are following:

- To eliminate the limitations in the current WAN design
- 2. To build a transport independent overlay network to connect all the offices of OIL using all available transport options including MPLS, Internet and Cellular (4G/3G).
- 3. To allow for load sharing of traffic across multiple WAN connections in an efficient and dynamic fashion that can be based on business and/or application policies
- 4. To allow for Application Optimization over WAN
- 5. To provide a secure and encrypted overlay independent of the transport layer and have the ability to offload Internet-destined traffic closer to the edge of the network.
- 6. To simplify the complexity associated with management, configuration and orchestration of WANs.

#### 4.2 EXECUTIVE SUMMARY OF THE PROPOSED SOLUTION

SD-WAN solutions employ centrally managed WAN edge devices placed in branch offices to establish logical connections with other branch edge devices across the physical WAN. These logical connections create secure paths across multiple WAN connections and carriers, such as hybrid Internet and multiprotocol label switching (MPLS) architectures. SD-WAN solutions allow for load sharing of traffic across multiple WAN connections in an efficient and dynamic fashion that can be based on business and/or application policies. SD-WAN solutions dramatically simplify the complexity associated with management, configuration and orchestration of WANs.

## 4.3 TECHNICAL REQUIREMENT

## 4.3.1 ARCHITECTURE

The basic architectural model used in the proposed solution must consist of at least the following logical components:

- Controller Device

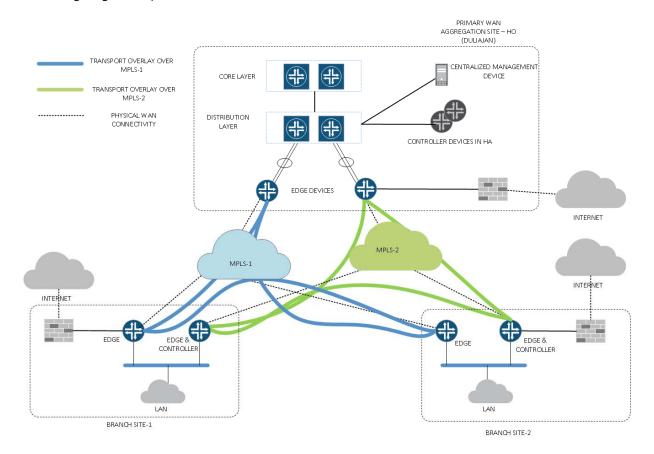
   This device makes path optimization decisions and configuration of
  application-based forwarding policy and security rules are done on this device. This
  component is present in all the sites.
  - a. All policy and security rule configurations are done at the Controller device at HO
  - b. Controller devices at each site make path optimization decision for the respective sites and receives policy configurations from the Controller device at HO
- WAN Edge Device- This is the device where WAN interfaces terminate. Edge device in each site make dynamic fully meshed encrypted overlay paths to every other edge device. This device forwards traffic to other branches over WAN including direct Internet access.
- 3. Centralized Network Management Device This device provides comprehensive solution to manage, visualize, provision, automate configuration and monitor the proposed SD-WAN infrastructure from a single graphical interface. This device is installed at HO.

## Placement of the Components

Device Type	Site	Minimum Quantity per site	Fault Tolerance
Controller Device	HO-Duliajan	02	Failure of one Controller device at HO must not affect the functionality of the solution.
	Branch Offices	01	Controller and Edge functionality <u>may be co-located</u> in the same physical appliance.  The design must ensure single device fault tolerance such that failure of the Controller device at the branch office does not affect the SD-WAN functionality for the site.
Edge Device	All sites	02	There shall be at least 2 number of Edge devices, each connected to one of the MPLS service providers.  When one of the Edge devices fail, the other Edge device must be able to take over roles of the both of the Edge devices

Centralized Network Management Device	HO-Duliajan	01	This device will be a standalone device without fault tolerance for device failure
Total minimum quantity of dedicated Controller appliance	02		
Total minimum quantity of dedicated Edge appliance	02		
Total minimum quantity of Edge/Controller functionality co-located appliance	18 (2 per site for og	remote sites)	
Total minimum quantity of Centralized Network Management Device	01		

Following diagram depicts the architecture model with HO and two branch sites:



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#### 4.3.2 FUNCTIONAL SPECIFICATIONS OF THE PROPOSED SOLUTION

#### 4.3.2.1 TRANSPORT INDEPENDENT OVERLAY NETWORK

- 1. Each edge device must dynamically establish fully meshed encrypted overlay paths to every other edge device, across multiple different WAN services: L<sub>3</sub>VPN MPLS, Internet and Cellular Data connectivity (3G/4G).
- 2. The solution must support site-site remote routing via the primary WAN-aggregation site (hub-and-spoke model).
- 3. The solution must support dynamic optimal direct site-to-site remote routing (spoke-to-spoke model).
- 4. Each edge device must be able to virtualize the WAN interfaces and treat them as pool of resources (interfaces).
- 5. The overlay paths established amongst the edge devices must support:
  - a. Transport of unicast, multicast, and broadcast traffic
  - b. The ability to run routing protocols: OSPF v2 and v3, BGP for IPv4 and IPv6
- 6. There shall be no peering requirement with the service provider of the WAN transport. The design shall be such that only the WAN IP addresses of the edge devices at each branch locations need to be known for establishing the overlay network.
- 7. The local users in each of the branch offices must be able to access Internet directly without going through the HO.
- 8. The solution must use Ethernet as standard media type for WAN transport.

# 4.3.2.2 DYNAMIC LOAD SHARING OF TRAFFIC BASED ON BUSINESS AND/OR APPLICATION POLICIES

- 1. Edge devices must be able to load-balance traffic across multiple WAN paths based on load balancing algorithms efficiently using all available WAN bandwidth.
- 2. Edge devices must be able to identify and classify applications, including applicationencrypted traffic. Identification and classification of at least the following classes of application types must be supported by the solution:
  - a. SAP ERP
  - b. Microsoft Exchange
  - c. Active Directory/LDAP
  - d. SMTP
  - e. Skype for Business
  - f. IP Voice Telephony
  - q. Web traffic
  - h. H.323
  - i. SIP
- 3. The solution must be able to dynamically control data packet forwarding decisions by looking at application type, performance, policies, and path status.

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- 4. The solution must be able to monitor the network performance—jitter, packet loss, and delay—and make decisions to forward critical applications over the best-performing path based on the defined application policy.
- 5. The solution must respond to measured performance changes (degradation) in addition to link and node state changes (up/down) and adjust application forwarding accordingly.
- 6. The solution must be able to prioritize real time traffic over other traffic.

#### 4.3.2.3 APPLICATION OPTIMIZATION OVER WAN

- 1. The solution must provide application-specific acceleration capabilities that improve response times while reducing WAN bandwidth requirements.
- The solution must have application awareness with capability of deep packet inspection of traffic in order to identify and monitor applications' performance to determine what traffic is running across the network in order to tune the network for business-critical services, resolve network problems and to help ensure that critical applications are properly prioritized across the network.

#### 4.3.2.4 SECURITY AND ENCRYPTION

- 1. All remote-site traffic must be encrypted when transported over WAN transport links: MPLS, Internet and 3G/4G network protecting Data Confidentiality and Integrity.
- 2. The encryption must be done as per IPsec standards using AES with 128-bit keys or higher coupled with Internet Key Exchange Version 2 (IKEv2).
- 3. The use of encryption should not limit the performance or availability of a remote-site applications and should be transparent to end users.
- 4. The solution must use Hardware based encryption only and must give IMIX Encryption throughput equal to or greater than the sum total of WAN bandwidth capacity per site.
- 5. The solution must support zone based firewall and VRFs to allow for network isolation.
- 6. The solution must have DoS/DDoS protection.

#### 4.3.2.5 CENTRALIZED MANAGEMENT, MONITORING AND CONFIGURATION OF WAN

- 1. The Centralized management appliance installed at Duliajan must provide a single, unified platform for network service provisioning, monitoring and assurance, change and compliance management.
- 2. The centralized management appliance must have web based GUI.
- 3. The solution must support zero-touch provisioning/plug-n-play for new branches, which entails on-site branch personnel having to make physical (i.e., cabling) changes only and administrators not having to make configuration changes to bring new branches online.
- 4. The solution must provide guided workflows for deployment and management of SD-WAN infrastructure.
- 5. The solution must support end-to-end real-time flow visualization for the application paths for identifying issues and taking corrective actions.
- 6. All network-wide configuration shall be from the centralized management appliance.

- 7. All application forwarding policies shall be configured from the centralized management appliance.
- 8. The centralized management appliance shall have NMS capabilities and must support network wide device and network visibility for all the devices in the scope of the solution
- 9. The solution must be able to collect and aggregate traffic statistics for all WAN paths. Traffic statistics include path utilization, application-specific utilization and path performance.
- 10. The solution must support device health monitoring for all the devices within the solution scope.
- 11. The solution must store historical traffic and performance information to assist with trouble analysis, traffic forecasting and SLA compliance.
- The solution must support syslog and email based alarm to notify the administrators when any device/link fault or network performance degradation happens.

#### 4.3.2.6 MINIMUM CAPACITY OF THE PROPOSED SOLUTION

The following table specifies the minimum required capacity to be provided by the solution from day-1. The bidder must appropriately do the sizing of the offered components in the solution accordingly.

LOCATION	NUMBER OF LAN	Bandwidth	1		IMIX Encryption throughput	Number of WAN Optimized	Aggregate Throughput
	USERS	MPLS-1	MPLS-2	Internet	tinoognpot	TCP Connections	per Edge device
Primary WAN Aggregation Site: DULIAJAN	2000	200 Mbps	200 Mbps	48 Mbps	448 Mbps	5000	2 Gbps
Corp HQ:	250	200 Mbps	200 Mbps	48 Mbps	448 Mbps	5000	1 Gbps
PHQ, Guwahati	250	8 Mbps	8 Mbps	16 Mbps	32 Mbps	2000	400 Mbps
CoEES, Guwahati	100	8 Mbps	8 Mbps	8 Mbps	24 Mbps	1000	400 Mbps
Kolkata Main office	250	8 Mbps	8 Mbps	16 Mbps	32 Mbps	2000	400 Mbps
Kolkata Shipping office	100	8 Mbps	8 Mbps	8 Mbps	24 Mbps	1000	400 Mbps
BEP office, Bhubaneswar	50	4 Mbps	4 Mbps	4 Mbps	12 Mbps	500	400 Mbps
Jodhpur office	250	100 Mbps	100 Mbps	24 Mbps	224 Mbps	2000	1 Gbps
CEMG office, Noida	250	8 Mbps	8 Mbps	16 Mbps	32 Mbps	2000	400 Mbps

Kakinada	100	8 Mbps	8 Mbps	8 Mbps	24 Mbps	1000	400 Mbps
office							

#### 4.3.3 MINIMUM HARDWARE SPECIFICATION OF THE COMPONENT DEVICES

#### 4.3.3.1 COMMON TERMS

- 1. All the hardware appliances shall be from the same OEM.
- 2. The bidder must specify Make and Model for all the quoted items in the solution.
- 3. The bidder must submit relevant product brochure/manual/documentation for all the quoted items. Compliance to each of the technical and functional requirements must be verifiable from the submitted product brochure/manual/documentation.
- 4. All the hardware appliances must be supplied with all related accessory, power cables, network cables, mounting kit etc.
- 5. All the hardware specifications and quantity to be supplied are minimum tender requirement only. If the bidder's proposed solution requires additional/higher specifications and/or higher quantity and/or any additional software/license/hardware, the bidder may include them in the proposed solution and specify under "ANY OTHER ITEMS"
- 6. All the software and licenses required to meet the tender specifications must be provided from day-1.

#### 4.3.3.2 DEDICATED CONTROLLER APPLIANCE

4.3.3.2 DEDICATE	CONTROLLER AFFLIANCE		
Location	Primary WAN Aggregation site – HO		
Address for delivery	Oil India Limited,		
	Materials Department		
	Duliajan, Assam - 786602		
Minimum quantity	02		
Hardware Specificatio	n		
1.	The bidder must specify the make and model of the quoted device.		
	Make:		
	Model:		
2.	Form factor: Standard 19 inch rack mountable physical Hardware Appliance		
3.	DRAM : Minimum 16 GB		
4.	Compact Flash Memory: Minimum 32 GB		
5.	Integrated Gigabit Ethernet ports:		
	<ul> <li>a) Minimum four (04) numbers of 10/100/1000 Ethernet ports for WAN or LAN.</li> <li>b) Ethernet ports must support Small Form-Factor Pluggable (SFP)-</li> </ul>		

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	based connectivity in addition to RJ-45 connections, enabling fiber or copper connectivity.  c) 2 numbers of compatible 1 G Copper SFP and 2 numbers of compatible 1 G MM Fiber SFP must be supplied with each device		
6.	Architecture: Control and data plane functionalities must have clear separation in hardware		
7.	Aggregate throughput: Minimum 2 Gbps		
8.	USB Port for external storage : Minimum 1		
9.	Console port : Minimum 1		
10.	Power supply :		
	<ul> <li>a) AC input voltage: 240 VAC</li> <li>b) AC input frequency: 50 Hz</li> <li>c) Redundancy: Power supply redundancy shall be provided from day- 1 in such a way that there shall be no impact on services with fully loaded configuration (Hardware + Software) in case of single power supply failure.</li> </ul>		
11.	Encapsulations supported:		
	<ul><li>a) Generic routing encapsulation (GRE)</li><li>b) Ethernet</li><li>c) 802.1q VLAN</li></ul>		
12.	Cryptography support:		
	<ul> <li>a) Encryption: DES, 3DES, AES-128 or AES-256 (in CBC and GCM modes)</li> <li>b) Authentication: RSA (748/1024/2048 bit), ECDSA (256/384 bit)</li> <li>c) Integrity: MD5, SHA, SHA-256, SHA-384, SHA-512</li> </ul>		
13.	Protocol and Feature Support:		
	a) IPv4 b) IPv6 c) Static Routes d) OSPF v2 and v3 e) BGP f) IKE g) VRRP h) ACL i) RADIUS j) AAA with TACAS+ k) NAT l) IEEE8o2.1ag m) IEEE8o2.3ah n) BFD		
	o) VRF p) Hardware based IPsec VPN		

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	q) LACP - 802.3ad	
14.	Network Management support:	
	a) SNMP V1/V2/V3	
	b) CLI access over Telnet and SSH	
	c) GUI based configuration support	
	d) Remote Monitoring support	
	e) SYSLOG	
	f) NetFlow or equivalent	
15.	High availability Support:	
	The device shall be configured in high availability mode to ensure that failure of one controller device does not affect the data forwarding as well as control path functionalities.	
16.	SD-WAN Support:	
	a) This device shall function as Controller device in Primary WAN Aggregation site – HO and in coordination with Edge, Centralized Management Device and any additional device supplied (if required) will achieve the functional requirements of the solution.	
17.	Regulatory requirement: The quoted device must be minimum EAL 3 or NDPP certified. The relevant certificate must be submitted along with the bid	

### 4-3-3-3 DEDICATED EDGE APPLIANCE

1333		
Location	Primary WAN Aggregation site – HO	
Address for delivery	Oil India Limited,	
	Materials Department	
	Duliajan, Assam - 786602	
Minimum quantity	02	
Hardware Specification		
1.	The bidder must specify the make and model of the quoted device.	
	Make:	
	Model:	
2.	Form factor: Standard 19 inch rack mountable physical Hardware Appliance	
3.	DRAM : Minimum 16 GB	
4.	Compact Flash Memory: Minimum 32 GB	
5.	Integrated Gigabit Ethernet ports:	
	a) Minimum four (04) 10/100/1000 Ethernet ports for WAN or LAN.	

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6.	<ul> <li>b) Ethernet ports must support Small Form-Factor Pluggable (SFP)-based connectivity in addition to RJ-45 connections, enabling fiber or copper connectivity.</li> <li>c) 2 numbers of compatible 1 G Copper SFP and 2 numbers of compatible 1 G MM Fiber SFP must be supplied with each device</li> <li>Architecture: Control and data plane functionalities must have clear separation in hardware</li> </ul>	
7.	Aggregate throughput: Minimum 2 Gbps	
8.	USB Port for external storage : Minimum 1	
9.	Console port : Minimum 1	
10.	Power supply :	
	<ul> <li>a) AC input voltage: 240 VAC</li> <li>b) AC input frequency: 50 Hz</li> <li>c) Redundancy: Power supply redundancy shall be provided from day- 1 in such a way that there shall be no impact on services with fully loaded configuration (Hardware + Software) in case of single power supply failure.</li> </ul>	
11.	Encapsulations supported:	
	<ul><li>a) Generic routing encapsulation (GRE)</li><li>b) Ethernet</li><li>c) 802.1q VLAN</li></ul>	
12.	Cryptography support:	
	<ul> <li>a) Encryption: DES, 3DES, AES-128 or AES-256 (in CBC and GCM modes)</li> <li>b) Authentication: RSA (748/1024/2048 bit), ECDSA (256/384 bit)</li> <li>c) Integrity: MD5, SHA, SHA-256, SHA-384, SHA-512</li> </ul>	
13.	Protocol and Feature Support:	
	a) IPv4 b) IPv6 c) Static Routes d) OSPF v2 and v3 e) BGP f) IKE g) VRRP h) ACL i) RADIUS j) AAA with TACAS+ k) NAT l) IEEE802.1ag m) IEEE802.3ah n) BFD o) VRF	

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	p) Hardware based IPsec VPN with capacity for minimum 100 tunnels q) LACP - 802.3ad	
14.	Network Management support:	
	<ul> <li>a) SNMP V1/V2/V3</li> <li>b) CLI access over Telnet and SSH</li> <li>c) GUI based configuration support</li> <li>d) Remote Monitoring support</li> <li>e) SYSLOG</li> <li>f) NetFlow or equivalent</li> </ul>	
15.	High availability Support:  The device shall be configured in a manner to ensure that failure of one edge device does not affect the data forwarding as well as control path functionalities.	
16.	Security: Inbuilt stateful and zone based firewall	
17.	SD-WAN Support:  This device shall function as Edge device in Primary WAN Aggregation site – HO and in coordination with Controller, Centralized Management Device and any additional device supplied (if required) will achieve the functional requirements of the solution.	
18.	Regulatory requirement: The quoted device must be minimum EAL 3 or NDPP certified. The relevant certificate must be submitted along with the bid.	

## 4.3.3.4 CONTROLLER & EDGE CO-LOCATED APPLIANCE

Location	Branch sites	
Delivery Details	Address	Quantity
	DR and Corp HQ:	02
	Plot No. 19,	
	Film City,	
	Sector 16A,	
	Noida - 201301	
	PHQ, Guwahati	02
	Oil India Limited	
	P.O. Udayan Vihar	
	Narengi,	
	Guwahati – 781171	

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Catto	
CoEES	02
Oil India Limited	
Centre for Excellence, Near Pantaloon Show Room, G S Road,	
Guwahati -781006	
Kolkata Main office	02
Oil India Limited	
4, India Exchange Place, Kolkata - 700 001	
Kolkata Shipping office	02
Oil India Limited	
Continental Chambers, 2 <sup>nd</sup> Floor	
15-A , Hemanta Basu Sarani	
Kolkata – 700001	
BEP office	02
Oil India Limited	
IDCO Tower, Janpath,	
Bhubaneswar - 751 007	
Jodhpur office	02
Oil India Limited	
Rajasthan Project,	
OIL HOUSE	
2-A, District Shopping Centre	
Saraswati Nagar, Basni, Jodhpur	
Rajasthan - 342005	
CEMG office	02
Oil India Limited	
5 <sup>th</sup> Floor	
IT Infra Building	
FC-24 Sector 16-A,	
Noida-201301	
Kakinada office	02
Oil India Limited KG Basin Project	

	T	I	
	2-7A-7, Subhadra Residency		
	Venkatanagar, Sivalayam Street		
	Kakinada 533003, Andhra Pradesh		
Hardware Specification	,		
1.	The bidder must specify the make and model of the quoted device for each of the following locations:		
	Location	Make & Model	
	DR and Corp HQ		
	PHQ, Guwahati		
	CoEES, Guwahati		
	Kolkata Main office		
	Kolkata Shipping office		
	BEP office		
	Jodhpur office		
	CEMG office		
	Kakinada office		
2.	Form factor: Standard 19 inch rack mountable physical Hardware Appliance		
3.	DRAM : Minimum 16 GB		
4.	Compact Flash Memory: Minimum 16 GB		
5.	Integrated Gigabit Ethernet ports:		
	<ul> <li>a) Minimum o3 (three) 10/100/1000 Ethernet ports for WAN or LAN.</li> <li>b) Ethernet ports must support Small Form-Factor Pluggable (SFP)-based connectivity in addition to RJ-45 connections, enabling fiber or copper connectivity.</li> <li>c) 2 numbers of compatible 1 G Copper SFP and 2 numbers of compatible 1 G MM Fiber SFP must be supplied with each device</li> </ul>		
6.	Architecture: Control and data plane functionalities must have clear separation in hardware		
7.	Minimum Aggregate throughput to be provided per device at each site:		
	Corp HQ	1 Gbps	
	PHQ, Guwahati	400 Mbps	
	CoEES, Guwahati	400 Mbps	
	Kolkata Main office	400 Mbps	
	Kolkata Shipping office	400 Mbps	

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	BEP office	400 Mbps		
	Jodhpur office	1 Gbps		
	CEMG office	400 Mbps		
	Kakinada office	400 Mbps		
8.	USB Port for external storage : Minim	num 1		
9.	Console port : Minimum 1			
10.	Power supply :			
	a) AC input voltage : 240 VAC b) AC input frequency : 50 Hz			
11.	Encapsulations supported:			
	<ul><li>a) Generic routing encapsulatio</li><li>b) Ethernet</li><li>c) 802.1q VLAN</li></ul>	n (GRE)		
12.	Cryptography support:			
	modes) b) Authentication: RSA (748/102	b) Authentication: RSA (748/1024/2048 bit), ECDSA (256/384 bit)		
13.	Protocol and Feature Support:			
	a) Ipv4 b) Ipv6 c) Static Routes d) OSPF v2 and v3 e) BGP f) IKE g) VRRP h) ACL i) RADIUS j) AAA with TACAS+ k) NAT l) IEEE802.1ag m) IEEE802.3ah n) BFD o) VRF p) Hardware based IPsec VPN w	rith capacity for minimum 100 tunnels		
14.	Network Management support:			
	<ul> <li>a) SNMP V<sub>1</sub>/V<sub>2</sub>/V<sub>3</sub></li> <li>b) CLI access over Telnet and SSH</li> <li>c) GUI based configuration support</li> </ul>			

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	d) Remote Monitoring support	
	e) SYSLOG	
	f) NetFlow or equivalent	
15.	High availability Support:	
	The device shall be configured in a manner to ensure that failure of one edge device does not affect the data forwarding as well as control path functionalities.	
16.	Security: Inbuilt stateful and zone based firewall	
17.	SD-WAN Support:	
	This device shall function as Edge device in branch sites and in coordination with Controller, Centralized Management Device and any additional device supplied (if required) will achieve the functional requirements of the solution.	
18.	Regulatory requirement: The quoted device must be minimum EAL 3 or NDPP certified. The relevant certificate must be submitted along with the bid	

## 4-3-3-5 CENTRALIZED NETWORK MANAGEMENT APPLIANCE

Location	Primary WAN Aggregation site – HO	
Address for delivery	Oil India Limited,	
	Materials Department	
	Duliajan, Assam - 786602	
Minimum quantity	01	
Hardware Specification	1	
1.	The bidder must specify the make and model of the quoted device.	
	Make:	
	Model:	
2.	Form factor: Standard 19 inch rack mountable physical Hardware Appliance	
3.	DRAM : Minimum 16 GB	
4.	Storage : Minimum 4*900 GB 6Gb SAS 10K RPM HDD configured in RAID 10	
5.	Processor: Minimum 10 core 2.30 GHz or better Intel Xeon Processor with minimum 25 MB cache	
6.	Power supply: Dual redundant 240VAC/50 Hz	
7.	Integrated Gigabit Ethernet ports:	
	Minimum 2 numbers of 10/100/1000 Ethernet ports	

8.	Minimum number of manageable devices	s: The device must support
	management of at least 50 devices	

#### 4.3.3.6 ANY OTHER ITEM

- 1. All the hardware specifications and quantity to be supplied are minimum tender requirement only. If the bidder's proposed solution requires additional/higher specifications and/or higher quantity and/or any additional software/license/hardware, the bidder may include them in the proposed solution and specify under "ANY OTHER ITEMS".
- 2. The bidder must give the following details of the items offered under "ANY OTHER ITEMS":
  - a. Make and Model
  - b. Location of delivery and quantity for each location
  - c. Functional/technical requirements fulfilled by the items
- 3. Cost of "ANY OTHER ITEMS" must be quoted separately

4.4 GENER	4.4 GENERAL TERMS		
1.	The bidder must submit manufacturer's authorization letter (MAF) from their respective OEM to quote against this tender. MAF must include authorized personnel contact details: Email address and Phone number.		
2.	The bidder shall quote for all the items as specified in tender. Partial offers will be considered as non-responsive and will be rejected.		
3.	The bidder must provide unpriced bill of materials and services (with details of make, model and quantity for each of the item) along with the bid. This must include additional software/feature licenses needed to meet the solution requirements.		
4.	All the hardware appliances shall be from the same OEM.		
5.	The bidder must provide technical details of their offered solution by filing in the Bidder's Response Sheet – Annexure-1. The bidder must ensure that information in Annexure-1 is complete and correct.		
6.	The bidder must submit relevant product brochure/manual/documentation for all the quoted items.		
	Technical scrutiny to determine compliance of the quoted items against the specification given in the tender shall be done on the basis of submitted product brochure/manual/documentation along with the information given by the bidder in Bidder's Response Sheet – Annexure-1.		
7.	All the technical requirements of the tender must be met in totality by the quoted items as on bid closing date.		
8.	Bidders shall confirm that their OEMs will provide support during the entire duration of the purchase order, i.e. up to 5 years of warranty and AMS support.		
9.	The proposed solution (including all the Hardware and software) must have minimum of five years of end of support from the date of bid closing. Respective OEM documentation (Hardware as well as software) to this effect must be submitted along		

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	with the bid. OEM's declared end-of-support literature must mention the availability of Hardware spares for next five years.
10.	A pre-bid conference for this tender will be held in Kolkata to discuss queries/amendment requests with prospective bidders. The bidder must submit queries/amendment requests to OIL by E-mail at least five days prior to Pre-bid conference.
	Date and venue of the pre-bid conference shall be notified later.
	No queries/amendment requests/request for extension of BC date shall be entertained after the pre-bid conference.
11.	The bidder has to make his own arrangements for transportation and accommodation of its personnel when visiting various locations of OIL within the scope of the solution.

#### 4.5 SCOPE OF WORK

The scope of the work involves the following:

- 1. Supply of hardware, software, necessary licenses and documentation
- 2. Installation, integration, commissioning and user acceptance testing
- 3. Training
- 4. Annual Maintenance Services for the entire solution for 5 years

#### 4.6 DELIVERY OF SOFTWARE, HARDWARE AND RELEVANT LICENSES

1.	Delivery of items must be completed within 60 days of placing the purchase order in all the locations as specified against each item.	
2.	The bidder must provide soft copy or hard copy of the OEM product documentation and configuration manual at the time of delivery.	
3.	The bidder must provide list of supplied inventory along with OEM serial number/service tag at the time of delivery.	
4.	All the required software licenses and content update licenses must be provided in soft or hard copy at the time of delivery.	
	All the supplied software licenses must be perpetual in nature without any requirement for renewal.	
	All the supplied content update licenses (for e.g. firewall signature updates etc.) must valid for a period of 5 years from the date of successful commissioning of the solution.	

### 4.7 INSTALLATION AND COMMISSIONING OF THE SOLUTION

1.	Installation and commissioning cost must be quoted separately.	
2.	Installation and commissioning of the entire solution shall be completed within 60 days of delivery of equipment.	
3.	The bidder will be responsible for design, installation, configuration and integration of the solution as per Oil India Ltd.'s requirements fulfilling all Tender specifications. The	

	detailed design document to be prepared in consultation with Oil India Ltd fulfilling OIL's requirements must be submitted to OIL at least 7 days prior to commencing installation and commissioning activities. The actual implementation shall commence after review of the design document and go-ahead from OIL.
	The design must be as per best practices guidelines published by the OEM. OEM must certify the design prepared by the bidder for correctness and adherence to best practices.
4.	The bidder shall be responsible for any configuration changes required in the existing equipment like router, switches, firewall, load balancer etc. to integrate the solution with the existing infrastructure.
5.	Installation and commissioning of the solution has to be carried out by an OEM-certified installation engineer with remote support from OEM. The OEM must be involved with the bidder's installation engineer throughout the installation and commissioning activity.
	The bidder must provide copy of the OEM certificates for the installation engineers assigned to carry out the installation activity at least seven days before start of the installation activity.
	The submitted OEM certificate must meet the following requirements:
	<ul> <li>a) The certificate must validate the ability of the Engineer to plan, implement, verify and troubleshoot the supplied solution</li> <li>b) The certificate must have been awarded by the OEM to the installation engineers after successful completion of an examination based OEM curriculum</li> </ul>
	c) The certificate must be verifiable with the OEM
6.	After completion of installation and commissioning activity, OEM must carry out configuration audit of the supplied solution to validate that the installation and commissioning has been completed as per the design and issue a certificate.
	Installation and commissioning of the solution shall be deemed complete only after successful completion of acceptance testing and submission of configuration audit certificate from OEM.
7.	All interconnecting cables, transceiver optics and required accessories must be supplied by the bidder.
8.	Cable dressing and management with tagging – The bidder will be responsible for cable dressing and management with tagging for all the interconnecting cables within the solution scope. Necessary Cable ties, cable channels and cable lacing cord, tag marker etc. must be supplied by the bidder.
9.	The bidder must provide documentation for installation and configuration after successful installation and integration of the solution. The documentation must include step-by-step procedures to configure the devices, schematic diagram of the solution showing details of the interconnection and OEM serial number, service tags of the supplied equipment. This document must be submitted to OIL prior to commencement of Acceptance Test.

10.	1. The installation and commissioning of the solution shall be deemed complete
10.	when all of the following requirements are met:
	a) Completion of delivery of all the items
	b) Completion of installation, configuration and integration at all the locations
	c) Submission and OIL's approval for all documentation deliverables as per
	the tender requirements
	d) Successful completion of Configuration Audit
	e) Successful completion of User Acceptance Test
	f) Successful completion of training
	2. OIL will issue commissioning certificate to the bidder after completion of the
	installation and commissioning

### 4.8 USER ACCEPTANCE TEST (UAT)

1.	The bidder shall carry out Acceptance Tests for the supplied hardware and software in the presence of OIL's personnel and OEM certified Installation Engineers. The acceptance testing shall be done at IT Department, Duliajan, Assam.
2.	<ol> <li>Acceptance tests will be done as per the UAT Plan and shall include the following:</li> <li>Physical Verification: All the received equipment will be powered on and physical specifications of the hardware supplied will be checked against the tender specifications</li> <li>Verification of physical connectivity, cable tagging and labelling</li> <li>Demonstration of all software licenses installed as per tender specifications</li> <li>Demonstration of all Transport independent overlay network functionalities as per the tender requirements</li> <li>Demonstration of all Dynamic load sharing functionalities as per the tender requirements</li> <li>Demonstration of all Application optimization functionalities as per the tender requirements</li> <li>Demonstration of all Security and Encryption functionalities as per the tender requirements</li> </ol>
	8. Demonstration of Centralized Management, monitoring and configuration functionalities as per the tender requirements
3.	After completion of UAT, the bidder shall submit detailed UAT report to OIL.

### 4.9 DOCUMENTATION DELIVERABLES

The following are the documentation deliverables during various stages implementation of the solution:		
	STAGE	DOCUMENT NAME
	7 days prior to commencement installation and commissioning activities	Design Document
	At least seven days before start of the installation activity.	OEM certificates for the installation engineers

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After completion of installation but before commencement of UAT	Configuration audit certificate from OEM
After completion of installation but before commencement of UAT	Installation and configuration document
After successful completion of UAT	UAT report
After completion of installation and commissioning	Service Agreement details with OEM for providing AMS

4.10 TRAINING			
1.	The bidder must impart training on the supplied solution to at least 3 IT Personnel from OIL. The training must be conducted in a single batch. The minimum duration of training must be 5 days.		
2.	The training content must include at least the following:		
	<ul> <li>a) Features and capabilities of all the supplied product</li> <li>b) Administration and management of all the supplied product</li> <li>c) Troubleshooting and maintenance of all the supplied product</li> <li>d) Lab sessions</li> </ul>		
3.	The bidder must arrange for necessary training infrastructure. The bidder is free to impart the training in any location of their choice in India. The training facility must be OEM authorized for imparting training on the offered solution. The training must be conducted by OEM certified instructor only.		
4.	Complete OEM published training material as per OEM curriculum must be provided either in hardcopy or softcopy to each participant. The training material provided must be standard course material provided as part of the course. The training material shall not be tailor-made for OIL.		
5.	Cost of transportation and accommodation of the OIL Personnel for training will be borne by OIL.		
6.	The training must be completed before commencement of the installation and commissioning of the solution.		
7.	Training cost has to be quoted separately.		

### 4.11 ANNUAL MAINTENANCE SERVICES (AMS)

1.	All the hardware and software items supplied to OIL for the solution shall be covered under Comprehensive onsite AMS provided directly by the OEM for a period of 5 (five) years from the date of issue of commissioning certificate for the solution.
2.	AMS cost has to quoted separately. The bidder must mention the OEM part code for AMS services along with quantity in the unpriced bill of materials.
3.	The bidder must submit the AMS service agreement certificate from OEM (at the time

	of commissioning) to substantiate that the supplied items (indicating their serial numbers) are covered under AMS for the desired period.	
4.	During the AMS period, any failed device under AMS shall have to be repaired/replaced with a new/ standby one within 120 hours of reporting the failure. Necessary configuration of the replacement device for proper operation of the device will be the responsibility of the bidder.	
	During the AMS period, any reported problem other than hardware failure shall have to be resolved within 72 hours of reporting the problem.	
	Such replacement/repair activity shall not entail any additional cost to OIL apart from the fixed AMS fee payable quarterly.	
5.	The bidder must supply and implement any firmware/Operating System Update/software update/Patch released by the OEM during the AMS period for the offered solution. Such updates must be provided free of cost.	
6.	Remote assistance support must be provided within 2 hours of reporting any problem related to the supplied items. For problems which cannot be resolved over remote support, bidder's personnel must visit the site.	
7.	The bidder shall be responsible for transportation and accommodation of the bidder's personnel visiting the sites for resolution of any problem.	
8.	There will be a single point of contact for reporting any problem related to the offered solution. It must be possible to report problems over both phone and email or online. These details must be provided along with the escalation matrix along with the bid.	
	OIL must be able to directly contact the OEM for reporting any problem related to the offered solution.	
9.	AMS charges will be paid quarterly after completion of the quarter. The bidder must submit appropriate invoices to DGM-IT, IT Department, Oil India Limited, Duliajan, Assam - 786602, on a Quarterly basis, clearly mentioning the OIL Purchase Order no. and period of billing.	

### 4.12 PENALTY TERMS

1.	During the AMS period, any failed device shall have to be repaired/ replaced with a new/ standby device within 120 hours of reporting the failure. Necessary configuration of the replacement device for proper operation of the device will be the responsibility of the successful bidder. In case of failure on the part of the bidder to rectify the problem within 120 hours of reporting, a penalty of INR 5000.00 per day per device will be levied. However, maximum penalty in a quarter will not exceed 15% of the total cost of the equipment (hardware and software) in the solution.
2.	During the AMS period, any reported problem other than hardware failure shall have to be resolved within 72 hours of reporting the problem. In case of failure on the part of the bidder to rectify the problem within 72 hours of reporting, a penalty of INR 5000.00 per day per device will be levied. However, maximum penalty in a quarter will not exceed 15% of the total cost of the equipment (hardware and software) in the solution

4.13 PAYMENT TERMS		
1.	Payment against the Hardware and software cost of the solution will be as per the following schedule:	
	50% - After delivery of material (hardware, software and licenses)	
	50% - After issue of Commissioning Certificate for the solution by OIL AND successful completion of training modules.	
2.	Total training charges will be paid on submission of consolidated training invoice after successful completion of training modules.	
3.	Installation and commissioning charges will be paid on submission of invoices after successful commissioning of the solution.	
4.	AMS charges will be paid quarterly after completion of the quarter. The bidder must submit appropriate invoices to DGM-IT, IT Department, Oil India Limited, Duliajan, Assam - 786602, on a Quarterly basis, clearly mentioning the OIL Purchase Order no. and period of billing.	

#### 4.14 CONFIDENTIALITY AGREEMENT TERMS

1. OIL Confidentiality and Non-Disclosure Agreement (NDA) will be applicable and bidder has to submit Non-Disclosure Agreement as per given format duly signed & Sealed by the authorized signatory of the bidder, along with the bid.

BIDDERS RESPONSE SHEET

ANNEXURE-I (Part-B)

#### Instruction to Bidders:

- 1. The bidders must fill in all the required details.
- 2. The cells where the bidder must fill in the details mandatorily are color coded as follows:

Meaning: Information required but not filled in. When the required information is filled in the relevant cell, fill color will automatically get cleared.

#### SPECIAL TERMS AND CONDITIONS

NIT CLAUSE	BID COMPLIANCE	
NUMBER		
	GENERAL TERMS	
1.1	The bidder must submit manufacturer's authorization letter (MAF) from their respective OEM	
	to quote against this tender. MAF must include authorized personnel contact details: Email	
	address and Phone number.	
1.2	The bidder shall quote for all the items as specified in tender. Partial offers will be considered	
	as non-responsive and will be rejected.	
1.3	The bidder must provide unpriced bill of materials and services (with details of make, model	
	and quantity for each of the item) along with the bid. This must include additional	
	software/feature licenses needed to meet the solution requirements.	
1.4	All the hardware appliances shall be from the same OEM.	
1.5	The bidder must provide technical details of their offered solution by filing in the bidder's	
	Response Sheet – Annexure-1. The bidder must ensure that information in Annexure-1 is	
	complete and correct.	
1.6	The bidder must submit relevant product brochure/manual/documentation for all the quoted	
	items.	
	Technical scrutiny to determine compliance of the quoted items against the specification given	
	in the tender shall be done on the basis of submitted product brochure/manual/documentation	
along with the information given by the bidder in bidder's Response Sheet – Annexure-1.		
1.7	All the technical requirements of the tender must be met in totality by the quoted items as on	
	bid closing date.	
1.8	bidders shall confirm that their OEMs will provide support during the entire duration of the	
	purchase order, i.e. up to 5 years of warranty and AMS support.	
1.9	The proposed solution (including all the Hardware and software) must have minimum of five	
	years of end of support from the date of bid closing. Respective OEM documentation	
	(Hardware as well as software) to this effect must be submitted along with the bid. OEM's	
	declared end-of-support literature must mention the availability of Hardware spares for next	
	five years.	

1.10	A pre-bid conference for this tender will be held in Kolkata to discuss queries/amendment requests with prospective bidders. The bidder must submit queries/amendment requests to OIL by E-mail at least five days prior to Pre-bid conference.  Date and venue of the pre-bid conference shall be notified later.  No queries/amendment requests/request for extension of BC date shall be entertained after the pre-bid conference.	
1.11	The bidder has to make his own arrangements for transportation and accommodation of its personnel when visiting various locations of OIL within the scope of the solution.	
	SCOPE OF WORK	
2	The scope of the work involves the following:  1. Supply of hardware, software, necessary licenses and documentation  2. Installation, integration, commissioning and user acceptance testing  3. Training  4. Annual Maintenance Services for the entire solution for 5 years	
	DELIVERY OF SOFTWARE, HARDWARE AND RELEVANT LICENSES	
3.1	Delivery of items must be completed within 60 days of placing the purchase order in all the locations as specified against each item.	
3.2	The bidder must provide soft copy or hard copy of the OEM product documentation and configuration manual at the time of delivery.	
3.3	The bidder must provide list of supplied inventory along with OEM serial number/service tag at the time of delivery.	
3.4	All the required software licenses and content update licenses must be provided in soft or hard copy at the time of delivery.  All the supplied software licenses must be perpetual in nature without any requirement for renewal.  All the supplied content update licenses (for e.g. firewall signature updates etc.) must valid for a period of 5 years from the date of successful commissioning of the solution.	
	INSTALLATION AND COMMISSIONING OF THE SOLUTION	
4.1	Installation and commissioning cost must be quoted separately.	
4.2	Installation and commissioning of the entire solution shall be completed within 60 days of delivery of equipment.	

4.3	The bidder will be responsible for design, installation, configuration and integration of the solution as per Oil India Ltd.'s requirements fulfilling all Tender specifications. The detailed design document to be prepared in consultation with Oil India Ltd fulfilling OIL's requirements must be submitted to OIL at least 7 days prior to commencing installation and commissioning activities. The actual implementation shall commence after review of the design document and go-ahead from OIL.  The design must be as per best practices guidelines published by the OEM. OEM must certify the design prepared by the bidder for correctness and adherence to best practices.	
4.4	The bidder shall be responsible for any configuration changes required in the existing equipment like router, switches, firewall, load balancer etc. to integrate the solution with the existing infrastructure.	
4.5	Installation and commissioning of the solution has to be carried out by an OEM-certified installation engineer with remote support from OEM. The OEM must be involved with the bidder's installation engineer throughout the installation and commissioning activity. The bidder must provide copy of the OEM certificates for the installation engineers assigned to carry out the installation activity at least seven days before start of the installation activity. The submitted OEM certificate must meet the following requirements:  a) The certificate must validate the ability of the Engineer to plan, implement, verify and troubleshoot the supplied solution  b) The certificate must have been awarded by the OEM to the installation engineers after successful completion of an examination based OEM curriculum  c) The certificate must be verifiable with the OEM	
4.6	After completion of installation and commissioning activity, OEM must carry out configuration audit of the supplied solution to validate that the installation and commissioning has been completed as per the design and issue a certificate.  Installation and commissioning of the solution shall be deemed complete only after successful completion of acceptance testing and submission of configuration audit certificate from OEM.	
4.7	All interconnecting cables, transceiver optics and required accessories must be supplied by the bidder.	
4.8	Cable dressing and management with tagging – The bidder will be responsible for cable dressing and management with tagging for all the interconnecting cables within the solution scope. Necessary Cable ties, cable channels and cable lacing cord, tag marker etc. must be supplied by the bidder.	

4.9	The bidder must provide documentation for installation and configuration after successful		
5	installation and integration of the solution. The documentation must include step-by-step		
	procedures to configure the devices, schematic diagram of the solution showing details of the		
	interconnection and OEM serial number, service tags of the supplied equipment. This		
	document must be submitted to OIL prior to commencement of Acceptance Test.		
	document must be submitted to OL prior to commencement of Acceptance rest.		
4.10	The installation and commissioning of the solution shall be deemed complete when all of the		
	following requirements are met:		
	a) Completion of delivery of all the items		
	b) Completion of installation, configuration and integration at all the locations		
	c) Submission and OIL's approval for all documentation deliverables as per the tender		
	requirements		
	d) Successful completion of Configuration Audit		
	e) Successful completion of User Acceptance Test		
	f) Successful completion of training		
	2. OIL will issue commissioning certificate to the bidder after completion of the installation and		
	commissioning		
	USER ACCEPTANCE TEST (UAT)		
5.1	The bidder shall carry out Acceptance Tests for the supplied hardware and software in the		
	presence of OIL's personnel and OEM certified Installation Engineers. The acceptance testing		
	shall be done at IT Department, Duliajan, Assam.		
5.2	Acceptance tests will be done as per the UAT Plan and shall include the following:		
	1. Physical Verification: All the received equipment will be powered on and physical		
	specifications of the hardware supplied will be checked against the tender specifications		
	2. Verification of physical connectivity, cable tagging and labelling		
	3. Demonstration of all software licenses installed as per tender specifications		
	4. Demonstration of all Transport independent overlay network functionalities as per the		
	tender requirements		
	5. Demonstration of all Dynamic load sharing functionalities as per the tender requirements		
	6. Demonstration of all Application optimization functionalities as per the tender requirements		
	7. Demonstration of all Security and Encryption functionalities as per the tender requirements		
	8. Demonstration of Centralized Management, monitoring and configuration functionalities as		
	per the tender requirements		
5.3	After completion of UAT, the bidder shall submit detailed UAT report to OIL.		
			BID COMPL
	DOCUMENTATION DELIVERABLES		

6.1	The following are the documentation deliverables during various stages of the implementation	of the solution:
	STAGE	DOCUMENT NAME
	7 days prior to commencement installation and commissioning activities	Design Document
	At least seven days before start of the installation activity.	OEM certificates for the installation engineers
	After completion of installation but before commencement of UAT	Configuration audit certificate from OEM
	After completion of installation but before commencement of UAT	Installation and configuration document
	After successful completion of UAT	UAT report
	After completion of installation and commissioning	Service Agreement details with OEM for providing AMS
	TRAINING	
7.1	The bidder must impart training on the supplied solution to at least 3 IT Personnel from OIL. The training must be conducted in a single batch. The minimum duration of training must be 5 days.	
7.2	The training content must include at least the following:  a) Features and capabilities of all the supplied product  b) Administration and management of all the supplied product  c) Troubleshooting and maintenance of all the supplied product  d) Lab sessions	
7.3	The bidder must arrange for necessary training infrastructure. The bidder is free to impart the training in any location of their choice in India. The training facility must be OEM authorized for imparting training on the offered solution. The training must be conducted by OEM certified instructor only.	
7.4	Complete OEM published training material as per OEM curriculum must be provided either in hardcopy or softcopy to each participant. The training material provided must be standard course material provided as part of the course. The training material shall not be tailor-made for OIL.	
7.5	Cost of transportation and accommodation of the OIL Personnel for training will be borne by OIL.	
7.6	The training must be completed before commencement of the installation and commissioning of the solution.	
7.7	Training cost has to be quoted separately.	
	ANNUAL MAINTENANCE SERVICES (AMS)	
8.1	All the hardware and software items supplied to OIL for the solution shall be covered under Comprehensive onsite AMS provided directly by the OEM for a period of 5 (five) years from the date of issue of commissioning certificate for the solution.	

8.2	AMS cost has to quoted separately. The bidder must mention the OEM part code for AMS	
	services along with quantity in the unpriced bill of materials.	
8.3	The bidder must submit the AMS service agreement certificate from OEM (at the time of commissioning) to substantiate that the supplied items (indicating their serial numbers) are covered under AMS for the desired period.	
8.4	During the AMS period, any failed device under AMS shall have to be repaired/ replaced with a new/ standby one within 120 hours of reporting the failure. Necessary configuration of the replacement device for proper operation of the device will be the responsibility of the bidder. During the AMS period, any reported problem other than hardware failure shall have to be resolved within 72 hours of reporting the problem.  Such replacement/repair activity shall not entail any additional cost to OIL apart from the fixed AMS fee payable quarterly.	
8.5	The bidder must supply and implement any firmware/Operating System Update/software update/Patch released by the OEM during the AMS period for the offered solution. Such updates must be provided free of cost.	
8.6	Remote assistance support must be provided within 2 hours of reporting any problem related to the supplied items. For problems which cannot be resolved over remote support, bidder's personnel must visit the site.	
8.7	The bidder shall be responsible for transportation and accommodation of the bidder's personnel visiting the sites for resolution of any problem.	
8.8	There will be a single point of contact for reporting any problem related to the offered solution. It must be possible to report problems over both phone and email or online. These details must be provided along with the escalation matrix along with the bid.  OIL must be able to directly contact the OEM for reporting any problem related to the offered solution.	
8.9	AMS charges will be paid quarterly after completion of the quarter. The bidder must submit appropriate invoices to DGM-IT, IT Department, Oil India Limited, Duliajan, Assam - 786602, on a Quarterly basis, clearly mentioning the OIL Purchase Order no. and period of billing.	
	PENALTY TERMS	
9.1	During the AMS period, any failed device shall have to be repaired/ replaced with a new/ standby device within 120 hours of reporting the failure. Necessary configuration of the replacement device for proper operation of the device will be the responsibility of the successful bidder. In case of failure on the part of the bidder to rectify the problem within 120 hours of reporting, a penalty of INR 5000.00 per day per device will be levied. However, maximum penalty in a quarter will not exceed 15% of the total cost of the equipment (hardware and software) in the solution.	

9.2	During the AMS period, any reported problem other than hardware failure shall have to be resolved within 72 hours of reporting the problem. In case of failure on the part of the bidder to rectify the problem within 72 hours of reporting, a penalty of INR 5000.00 per day per device will be levied. However, maximum penalty in a quarter will not exceed 15% of the total cost of the equipment (hardware and software) in the solution.		
	PAYMENT TERMS		
10.1	Payment against the Hardware and software cost of the solution will be as per the following schedule: 50% - After delivery of material (hardware, software and licenses) 50% - After issue of Commissioning Certificate for the solution by OIL AND successful completion of training modules.		
10.2	Total training charges will be paid on submission of consolidated training invoice after successful completion of training modules.		
10.3	Installation and commissioning charges will be paid on submission of invoices after successful commissioning of the solution.		
10.4	AMS charges will be paid quarterly after completion of the quarter. The bidder must submit appropriate invoices to Head-IT, IT Department, Oil India Limited, Duliajan, Assam - 786602, on a Quarterly basis, clearly mentioning the OIL Purchase Order no. and period of billing.		
	CONFIDENTIALITY AGREEMENT TERMS		
11.1	OIL Confidentiality and Non-Disclosure Agreement (NDA) will be applicable and bidder has to submit Non-Disclosure Agreement as per given format duly signed & Sealed by the authorized signatory of the bidder, along with the bid.		

#### **ANNEXURE-I (Part-A)**

#### Instruction to Bidders:

- 1. The bidders must fill in all the required details.
- 2. The cells where the bidder must fill in the details mandatorily are color coded as follows:

Meaning: Information required but not filled in. When the required information is filled in the relevant cell, fill color will automatically get cleared.

NIT CLAUSE NUMBER	NIT CLAUSE	BID COMPLIA NCE	Question to the Bidder	Bidder's Response (This column must be filled with appropriate answer to "Question to the Bidder" in column D)	Reference to Supporting OEM documentation (Brochure/datasheet/Product Manual) - Give exact page number
			ARCHITECTURE		
1	Architecture		Is the proposed solution as per the basic architectural model specified in this clause of the NIT?  What is the architecture of your proposed solution?  Give details of the proposed devices at each site: type, make and model and quantity		
	FL	JNCTIONAL	SPECIFICATIONS OF THE PROPOSED SO	LUTION	
		TRANS	PORT INDEPENDENT OVERLAY NETWOR	K	
	Each edge device must dynamically establish fully meshed encrypted overlay paths to every other edge		Describe your solution's edge device  Is your solution agnostic to the choice		
	device, across multiple different		of access technologies?		

2.1.2	WAN services: L3VPN MPLS, Internet and Cellular Data connectivity (3G/4G).  The solution must support site-site remote routing via the primary WANaggregation site (hub-and-spoke model).	Describe how edge devices will dynamically establish fully meshed encrypted overlay paths to every other edge device?  How does your solution achieve this?	
2.1.3	The solution must support dynamic optimal direct site-to-site remote routing (spoke-to-spoke model).	How does your solution achieve this?	
2.1.4	Each edge device must be able to virtualize the WAN interfaces and treat them as pool of resources (interfaces).	How does your solution achieve this?	
2.1.5	The overlay paths established amongst the edge devices must support:  a. Transport of unicast, multicast, and broadcast traffic  b. The ability to run routing protocols: OSPF v2 and v3, BGP for	How does your solution interact with existing routing protocols?  What assumptions, if any, does you solution make about the routing that is in place between a branch facility and a data center?	
2.1.6	There shall be no peering requirement with the service provider of the WAN transport. The design shall be such that only the WAN IP addresses of the edge devices at each branch locations need to be known for establishing the overlay network.		
2.1.7	The local users in each of the branch offices must be able to access Internet directly without going through the HO.		

2.1.8	The solution must use Ethernet as standard media type for WAN transport.									
	DYNAMIC LOAD SHARING OF TRAFFIC BASED ON BUSINESS AND/OR APPLICATION POLICIES									
2.2.1	Edge devices must be able to load- balance traffic across multiple WAN paths based on load balancing algorithms efficiently using all available WAN bandwidth.		Explain which load balancing algorithms are used and how is the decision made relative to what traffic transits which link?							
2.2.2	Edge devices must be able to identify and classify applications, including application-encrypted traffic. Identification and classification of at least the following classes of application types must be supported by the solution:  a. SAP ERP b. Microsoft Exchange c. Active Directory/LDAP d. SMTP e. Skype for Business f. IP Voice Telephony g. Web traffic h. H.323 i. SIP		Which applications can your solution identify? Where and how is this application recognition performed?							
2.2.3	The solution must be able to dynamically control data packet forwarding decisions by looking at application type, performance, policies, and path status.		What functionality does your solution provide to enable a company to implement and support SLAs for varying types of applications?							

2.2.4	The solution must be able to monitor the network performance—jitter, packet loss, and delay—and make decisions to forward critical applications over the best-performing path based on the defined application policy.		How your solution performs monitoring of network and application performance?	
2.2.5	The solution must respond to measured performance changes (degradation) in addition to link and node state changes (up/down) and adjust application forwarding accordingly.		How does your solution implement this functionality	
2.2.6	The solution must be able to prioritize real time traffic over other traffic.		How does your solution achieve this?	
2.3.1	The solution must provide application-specific acceleration capabilities that improve response times while reducing WAN bandwidth requirements.	AP	PLICATION OPTIMIZATION OVER WAN How does your solution achieve this?	

2.3.2	The solution must have application awareness with capability of deep packet inspection of traffic in order to identify and monitor applications' performance to determine what traffic is running across the network in order to tune the network for business-critical services, resolve network problems and to help ensure that critical applications are properly prioritized across the network.	How does your solution achieve this?	
		SECURITY AND ENCRYPTION	
2.4.1	All remote-site traffic must be encrypted when transported over WAN transport links: MPLS, Internet and 3G/4G network protecting Data Confidentiality and Integrity.	Explain how traffic will be encrypter in your solution giving details about encryption technology in use.	
2.4.2	The encryption must be done as per IPsec standards using AES with 128-bit keys or higher coupled with Internet Key Exchange Version 2 (IKEv2).		
2.4.3	The use of encryption should not limit the performance or availability of a remote-site applications and should be transparent to end users.		
2.4.4	The solution must use Hardware based encryption only and must give IMIX Encryption throughput equal to or greater than the sum total of WAN bandwidth capacity per site.	Explain how your solution will use Hardware based encryption?	

2.4.5	The solution must support zone				
	based firewall and VRFs to allow for				
	network isolation.				
2.4.6	The solution must have DoS/DDoS				
	protection.				
		ZED MANA	GEMENT, MONITORING AND CONFIGUR	RATION OF WAN	
2.5.1	The Centralized management		Explain the functionalities of the		
	appliance installed at Duliajan must		offered centralized management		
	provide a single, unified platform for		appliance.		
	network service provisioning,				
	monitoring and assurance, change				
	and compliance management.				
2.5.2	The centralized management				
	appliance must have web based GUI.				
2.5.3	The solution must support zero-		Describe how your solution supports		
	touch provisioning/plug-n-play for		zero-touch provisioning		
	new branches, which entails on-site				
	branch personnel having to make				
	physical (i.e., cabling) changes only				
	and administrators not having to				
	make configuration changes to bring				
	new branches online.				
2.5.4	The solution must provide guided		Describe the process of deploying		
	workflows for deployment and		functionality in a branch office.		
	management of SD-WAN				
	infrastructure.				
2.5.5	The solution must support end-to-		Describe how your solution achieve		
	end real-time flow visualization for		this requirement.		
	the application paths for identifying				
	issues and taking corrective actions.				
2.5.6	All network-wide configuration shall				
	be from the centralized management				
	appliance.				

2.5.7	All application forwarding policies shall be configured from the centralized management appliance.				
2.5.8	The centralized management appliance shall have NMS capabilities and must support network wide device and network visibility for all the devices in the scope of the solution		Describe how your solution achieve this requirement.		
2.5.9	The solution must be able to collect and aggregate traffic statistics for all WAN paths. Traffic statistics include path utilization, application-specific utilization and path performance.		Give details of various statistics available for the solution.		
2.5.10	The solution must support device health monitoring for all the devices within the solution scope.				
2.5.11	The solution must store historical traffic and performance information to assist with trouble analysis, traffic forecasting and SLA compliance.		Explain how the solution supports this requirement and limitation on availability of historical data.		
2.5.12	The solution must support syslog and email based alarm to notify the administrators when any device/link fault or network performance degradation happens.		Explain how the solution supports this requirement.		
		MINIMU	IM CAPACITY OF THE PROPOSED SOLUTI	ON	

2.6	MINIMUM CAPACITY OF THE PROPOSED SOLUTION: The table specifies the minimum required capacity to be provided by the solution from day-1. The bidder must appropriately do the sizing of the offered components in the solution accordingly.		Does your offered components meet the minimum required capacity?		
	MINIM	IUM HARD	WARE SPECIFICATION OF THE COMPONE	ENT DEVICES	
			COMMON TERMS		
3.1.1	All the hardware appliances shall be from the same OEM.				
3.1.2	The bidder must specify Make and Model for all the quoted items in the solution.				
3.1.3	The bidder must submit relevant product brochure/manual/documentation for all the quoted items. Compliance to each of the technical and functional requirements must be verifiable from the submitted product brochure/manual/documentation.				
3.1.4	All the hardware appliances must be supplied with all related accessory, power cables, network cables, mounting kit etc.				

3.1.5	All the hardware specifications and quantity to be supplied are minimum tender requirement only. If the bidder's proposed solution requires additional/higher specifications and/or higher quantity and/or any additional software/license/hardware, the bidder may include them in the proposed solution and specify under "ANY OTHER ITEMS"			
3.1.6	All the software and licenses required to meet the tender specifications must be provided from day-1.			
		[	DEDICATED CONTROLLER APPLIANCE	
3.2.1	The bidder must specify the make and model of the quoted device.		Give the following details:  Make:  Model:  Give details of the submitted documents - brochure/datasheet/product manual relevant to the offered product	
3.2.2	Form factor: Standard 19 inch rack mountable physical Hardware Appliance			
3.2.3	DRAM : Minimum 16 GB			
3.2.4	Compact Flash Memory: Minimum 32 GB			

3.2.5	Integrated Gigabit Ethernet ports: a) Minimum four (04) numbers of 10/100/1000 Ethernet ports for WAN or LAN. b) Ethernet ports must support Small Form-Factor Pluggable (SFP)-based connectivity in addition to RJ-45 connections, enabling fiber or copper connectivity. c) 2 numbers of compatible 1 G Copper SFP and 2 numbers of compatible 1 G MM Fiber SFP must be supplied with each device		
3.2.6	Architecture: Control and data plane functionalities must have clear separation in hardware	Explain in detail how this requirement is met in the offered device.	
3.2.7	Aggregate throughput: Minimum 2 Gbps		
3.2.8	USB Port for external storage : Minimum 1		
3.2.9	Console port : Minimum 1		
3.2.10	Power supply: a) AC input voltage: 240 VAC b) AC input frequency: 50 Hz c) Redundancy: Power supply redundancy shall be provided from day-1 in such a way that there shall be no impact on services with fully loaded configuration (Hardware + Software) in case of single power supply failure.		

2.2.44			
3.2.11	Encapsulations supported:		
	a) Generic routing encapsulation		
	(GRE)		
	b) Ethernet		
	c) 802.1q VLAN		
3.2.12	Cryptography support:		
	a) Encryption: DES, 3DES, AES-128 or		
	AES-256 (in CBC and GCM modes)		
	b) Authentication: RSA		
	(748/1024/2048 bit), ECDSA		
	(256/384 bit)		
	c) Integrity: MD5, SHA, SHA-256, SHA-		
	384, SHA-512		
	,		
3.2.13	Protocol and Feature Support:		
	a) IPv4		
	b) IPv6		
	c) Static Routes		
	d) OSPF v2 and v3		
	e) BGP		
	f) IKE		
	g) VRRP		
	h) ACL		
	i) RADIUS		
	j) AAA with TACAS+		
	k) NAT		
	I) IEEE802.1ag		
	1.		
	m) IEEE802.3ah		
	n) BFD		
	o) VRF		
	p) Hardware based IPsec VPN		
	q) LACP - 802.3ad		

3.2.14	Network Management support: a) SNMP V1/V2/V3 b) CLI access over Telnet and SSH c) GUI based configuration support d) Remote Monitoring support e) SYSLOG f) NetFlow or equivalent		
3.2.15	High availability Support: The device shall be configured in high availability mode to ensure that failure of one controller device does not affect the data forwarding as well as control path functionalities.	How high availibility is ensured with the offered device?	
3.2.16	SD-WAN Support: a) This device shall function as Controller device in Primary WAN Aggregation site – HO and in coordination with Edge, Centralized Management Device and any additional device supplied (if required) will achieve the functional requirements of the solution.	Explain the role of the offered device in the solution.	
3.2.17	Regulatory requirement: The quoted device must be minimum EAL 3 or NDPP certified. The relevant certificate must be submitted along with the bid.	Give details of the submitted documents in support of this clause.	
		DEDICATED EDGE APPLIANCE	
3.3.1	The bidder must specify the make and model of the quoted device.  Make:	Give the following details: Make: Model:	

Model:	Give details of the submitted documents - brochure/datasheet/product manual relevant to the offered product	
3.3.2 Form factor: Standard 19 inch rack mountable physical Hardware Appliance		
3.3.3 DRAM : Minimum 16 GB		
3.3.4 Compact Flash Memory: Minimum 32 GB		
3.3.5 Integrated Gigabit Ethernet ports: a) Minimum four (04) 10/100/1000 Ethernet ports for WAN or LAN. b) Ethernet ports must support Small Form-Factor Pluggable (SFP)-based connectivity in addition to RJ-45 connections, enabling fiber or copper connectivity. c) 2 numbers of compatible 1 G Copper SFP and 2 numbers of compatible 1 G MM Fiber SFP must be supplied with each device		
3.3.6 Architecture: Control and data plane functionalities must have clear separation in hardware	Explain in detail how this requirement is met in the offered device.	
3.3.7 Aggregate throughput: Minimum 2 Gbps		
3.3.8 USB Port for external storage : Minimum 1		
3.3.9 Console port : Minimum 1		

3.3.10	Power supply: a) AC input voltage: 240 VAC b) AC input frequency: 50 Hz c) Redundancy: Power supply redundancy shall be provided from day-1 in such a way that there shall be no impact on services with fully loaded configuration (Hardware + Software) in case of single power supply failure.		
3.3.11	Encapsulations supported: a) Generic routing encapsulation (GRE) b) Ethernet c) 802.1q VLAN		
3.3.12	Cryptography support: a) Encryption: DES, 3DES, AES-128 or AES-256 (in CBC and GCM modes) b) Authentication: RSA (748/1024/2048 bit), ECDSA (256/384 bit) c) Integrity: MD5, SHA, SHA-256, SHA-384, SHA-512		

3.3.13	Protocol and Feature Support:		
	a) IPv4		
	b) IPv6		
	c) Static Routes		
	d) OSPF v2 and v3		
	e) BGP		
	f) IKE		
	g) VRRP		
	h) ACL		
	i) RADIUS		
	j) AAA with TACAS+		
	k) NAT		
	I) IEEE802.1ag		
	m) IEEE802.3ah		
	n) BFD		
	o) VRF		
	p) Hardware based IPsec VPN with		
	capacity for minimum 100 tunnels		
	q) LACP - 802.3ad		
2 2 4 4	N		
3.3.14	Network Management support:		
	a) SNMP V1/V2/V3 b) CLI access over Telnet and SSH		
	c) GUI based configuration support		
	d) Remote Monitoring support		
	e) SYSLOG		
	f) NetFlow or equivalent		
	Try weet low of equivalent		
L			

3.3.15	High availability Support: The device shall be configured in a manner to ensure that failure of one edge device does not affect the data forwarding as well as control path functionalities.		How high availibility is ensured with the offered device?				
3.3.16	Security: Inbuilt stateful and zone based firewall						
3.3.17	SD-WAN Support: This device shall function as Edge device in Primary WAN Aggregation site – HO and in coordination with Controller, Centralized Management Device and any additional device supplied (if required) will achieve the functional requirements of the solution.		Explain the role of the offered device in the solution.				
3.3.18	Regulatory requirement: The quoted device must be minimum EAL 3 or NDPP certified. The relevant certificate must be submitted along with the bid.		Give details of the submitted documents in support of this clause.				
	CONTROLLER & EDGE CO-LOCATED APPLIANCE						

3.4.1	The bidder must specify the make	Specifiy Make and model for the		
3.4.1	and model of the quoted device for	devices proposed in each of the		
	=			
	each of the locations given in NIT.	following locations:		
		DR and Corp HQ		
		PHQ, Guwahati		
		CoEES, Guwahati		
		Kolkata Main office		
		Kolkata Shipping office		
		BEP office		
		Jodhpur office		
		CEMG office		
		Kakinada office		
3.4.2	Form factor: Standard 19 inch rack			
	mountable physical Hardware			
	Appliance			
3.4.3	DRAM : Minimum 16 GB			
3.4.4	Compact Flash Memory: Minimum			
	16 GB			
3.4.5	Integrated Gigabit Ethernet ports:			
	a) Minimum 03 (three) 10/100/1000			
	Ethernet ports for WAN or LAN.			
	b) Ethernet ports must support Small			
	Form-Factor Pluggable (SFP)-based			
	connectivity in addition to RJ-45			
	connections, enabling fiber or copper			
	connectivity.			
	c) 2 numbers of compatible 1 G			
	Copper SFP and 2 numbers of			
	compatible 1 G MM Fiber SFP must			
	be supplied with each device			
	1		1	

3.4.6	Architecture: Control and data plane functionalities must have clear separation in hardware	Explain in detail how this requirement is met in the offered device.	
3.4.7	Minimum Aggregate throughput to be provided per device at each site as per NIT.	Specifiy aggregate throughput for the devices proposed in each of the following locations:  DR and Corp HQ PHQ, Guwahati CoEES, Guwahati Kolkata Main office Kolkata Shipping office BEP office Jodhpur office CEMG office Kakinada office	
3.4.8	USB Port for external storage : Minimum 1		
3.4.9	Console port : Minimum 1		
3.4.10	Power supply : a) AC input voltage : 240 VAC b) AC input frequency : 50 Hz		
3.4.11	Encapsulations supported: a) Generic routing encapsulation (GRE) b) Ethernet c) 802.1q VLAN		
3.1.12	Cryptography support: a) Encryption: DES, 3DES, AES-128 or AES-256 (in CBC and GCM modes) b) Authentication: RSA (748/1024/2048 bit), ECDSA (256/384 bit) c) Integrity: MD5, SHA, SHA-256, SHA-384, SHA-512		

3.4.13	Protocol and Feature Support:		
3.4.13	a) lpv4		
	b) Ipv6		
	c) Static Routes		
	d) OSPF v2 and v3		
	e) BGP		
	f) IKE		
	g) VRRP		
	h) ACL		
	i) RADIUS		
	j) AAA with TACAS+		
	k) NAT		
	I) IEEE802.1ag		
	m) IEEE802.3ah		
	n) BFD		
	o) VRF		
	p) Hardware based IPsec VPN with		
	capacity for minimum 100 tunnels		
	q) LACP – 802.3ad		
	l "		
3.4.14	Network Management support:		
	a) SNMP V1/V2/V3		
	b) CLI access over Telnet and SSH		
	c) GUI based configuration support		
	d) Remote Monitoring support		
	e) SYSLOG		
	f) NetFlow or equivalent		
3.4.15	High availability Support:	How high availibility is ensured with	
	The device shall be configured in a	the offered device?	
	manner to ensure that failure of one		
	edge device does not affect the data		
	forwarding as well as control path		
	functionalities.		

3.4.16	Security: Inbuilt stateful and zone based firewall				
3.4.17	SD-WAN Support: This device shall function as Edge device in branch sites and in coordination with Controller, Centralized Management Device and any additional device supplied (if required) will achieve the functional requirements of the solution.		Explain the role of the offered device in the solution.		
3.4.18	Regulatory requirement: The quoted device must be minimum EAL 3 or NDPP certified. The relevant certificate must be submitted along with the bid		Give details of the submitted documents in support of this clause.		
		CENTRAI	LIZED NETWORK MANAGEMENT APPLIA	NCE	
3.5.1	The bidder must specify the make and model of the quoted device.		Give the following details: Make: Model: Give details of the submitted documents - brochure/datasheet/product manual relevant to the offered product		
3.5.2	Form factor: Standard 19 inch rack mountable physical Hardware Appliance				
3.5.3	DRAM : Minimum 16 GB				
3.5.4	Storage : Minimum 4*900 GB 6Gb SAS 10K RPM HDD configured in RAID 10				

3.5.5	Processor: Minimum 10 core 2.30 GHz or better Intel Xeon Processor with minimum 25 MB cache		
3.5.6	Power supply: Dual redundant 240VAC/50 Hz		
3.5.7	Integrated Gigabit Ethernet ports: Minimum 2 numbers of 10/100/1000 Ethernet ports		
3.5.8	Minimum number of manageable devices: The device must support management of at least 50 devices		
		ANY OTHER ITEM	
1	All the hardware specifications and quantity to be supplied are minimum tender requirement only. If the bidder's proposed solution requires additional/higher specifications and/or higher quantity and/or any additional software/license/hardware, the bidder may include them in the proposed solution and specify under "ANY OTHER ITEMS".	Does the offered solution require any additional items? If yes, give details.	

2	2. The bidder must give the following details of the items offered under "ANY OTHER ITEMS": a. Make and Model b. Location of delivery and quantity for each location c. Functional/technical requirements fulfilled by the items	Give details (if applicable)	
3	Cost of "ANY OTHER ITEMS" must be quoted separately		

# **NON-DISCLOSURE AGREEMENT**

#### **BETWEEN**

**Oil India Ltd (OIL),** a company incorporated under the Companies Act, 1956 and having its registered office at Duliajan, Assam – 786602, hereinafter referred to as **"OIL"** (which expression shall unless it be repugnant to the context or meaning thereof, mean and include its successors in office and assignees) of the **ONE PART** and

AND

# \_\_\_\_\_\_ a company incorporated under the Companies Act, 1956 having its registered office at \_\_\_\_\_\_\_. (hereinafter referred to as "\_\_\_\_\_\_" which expression unless repugnant to the context or meaning thereof be deemed to include its successors and assigns) of the SECOND PART; OIL and \_\_\_\_\_\_ are hereinafter collectively referred to as the "Parties".

WHEREAS, the Parties intend to engage in discussions and negotiations concerning the establishment of a business relationship between themselves. In the course of such discussions and negotiations, it is anticipated that each Party may disclose or deliver to the other certain or some of its trade secrets or confidential or proprietary information, for the purpose of enabling the other party to evaluate the feasibility of such business relationship (hereinafter referred to as "the Project").

The Parties wish to ensure that all such confidential information disclosed by either party will be held by the party who has received it in confidence and used solely in connection with their cooperation.

NOW, THEREFORE, in consideration of the foregoing premises, and the mutual covenants contained herein, the Parties hereby agree as follows:

#### **ARTICLE 1. DEFINITION**

For the purpose of this Agreement,

#### ARTICLE-1: CONFIDENTIAL INFORMATION

"Confidential Information" shall mean and include any information of any nature (commercial, technical, marketing, financial, etc.) in any form including but not limited to copy, abstract, sample, note or module, disclosed by either party (the "Disclosing Party") to the other party (the "Receiving Party") within the scope of the Project, whether such information are disclosed through written documents, electronic transmissions, orally or visually, and without it being necessary for the Disclosing Party to specify the confidential nature of such information.

#### **ARTICLE 2. CONFIDENTIALITY**

**2.1** The Receiving Party hereby agrees to consider and treat as strictly confidential, during the term of this Agreement, the Confidential Information of the Disclosing Party. This paragraph shall survive after any expiration or termination of this Agreement and shall bind Receiving Party, its employees, agents, representatives, successors, heirs and assigns.

The Receiving Party agrees in particular:

- not to publish in any manner or otherwise disclose to any third party any Confidential Information or part of it, and to treat all Confidential Information at least with the same degree of care as it applies to its own files of a confidential nature;
- ii) not to use Confidential Information, even partially, for the benefit of any third party or for its own account (except for the sole purpose of the business arrangement described in the recitals above);
- iii) not to decompile, disassemble, decode, reproduce, redesign, reverse engineer or manufacture any information, code, process, products or equipment of the Disclosing Party or any part thereof; and
- iv) to disclose Confidential Information only to those of its employees and Affiliates who have a reasonable need to know in connection with the business arrangement described in the recitals above, to inform such employees of the confidential nature of the Confidential Information, and to cause them to comply with any and all terms of this Agreement.

v)	to disclose confidential information to consultants engaged by receiving Party provided
	such consultant also executes a Non-Disclosure Agreement with the receiving party
	that contains terms and conditions that are no less restrictive than these and with the
	prior consent of the disclosing party.

2.2	Neither OIL nor	shall d	isclose	to th	ie publ	ic or to a	any
	third parties (i) the fact that the cooperation descr	ribed in th	e recit	als ab	ove is	taking pl	ace
	between them, or (ii) the fact that Confidential Info	ormation	have	been	made	available	to
	it or that it						

has inspected any portion of the Confidential Information, without the prior written consent of the other party, unless required to do so by applicable law or regulation.

In the latter case, prior to disclosure of any information concerning the existence of the cooperation, the party obliged to make a disclosure shall inform the other party of the reason and proposed content of such disclosure and shall written consent thereon.

#### **ARTICLE 3. EXCEPTIONS**

The obligations set forth in **Article 2** of this Agreement shall not apply to Confidential Information which:

- i) is in the public domain at the time of its disclosure by the Disclosing Party or thereafter falls into it without any breach of this Agreement (and, in that case, only from the date on which it fell into the public domain);
- ii) was known by the Receiving Party prior to its disclosure by the Disclosing Party, provided that the Receiving Party gives proper evidence of such prior knowledge; or
- iii) has been rightfully obtained by the Receiving Party from a third party without any breach of a confidentiality obligation towards the Disclosing Party; or
- iv) has been independently discovered or developed by the Receiving Party without using Confidential Information, so long as such independent discovery or development can be documented and verified.
- v) is required to be disclosed as per any law in force in India or under order of any competent court.

Confidential Information shall not be deemed to be or fall within exceptions i) to v) merely because it is embraced by more general information in the public domain or by more general

information thereafter acquired or developed by the Receiving Party. In addition, any combination of features/items/information/data shall not be deemed to be within the foregoing exceptions merely because individual features/items/information/data are in the public domain or in the possession of the Receiving Party.

#### **ARTICLE 4. RETURN OF DOCUMENTS**

Upon the expiration of this Agreement, or at the Disclosing Party's request, the Receiving Party shall promptly return to the Disclosing Party all documents including but not limited to copies, abstract, extracts, samples, notes or modules embodying Confidential Information of the Disclosing Party, or, at the option and direction of the Disclosing Party, destroy all copies of the Disclosing Party's Confidential Information and certify in writing that such copies have been duly destroyed. Until that date, the Receiving Party shall keep such documents in a place permitting both their secrecy and their rapid recovery.

# **ARTICLE 5. NO OTHER RIGHTS OR OBLIGATIONS**

- 5.1 Notwithstanding the disclosure of any Confidential Information by the Disclosing Party to the Receiving Party, the Disclosing Party shall retain title and all intellectual property and proprietary rights in the Confidential Information. No license under any trademark, patent or copyright, or application for same which are now or thereafter may be obtained by such Party is either granted or implied by the conveying of Confidential Information. The Receiving Party shall not conceal, alter, obliterate, mutilate, deface or otherwise interfere with any trademark, trademark notice, copyright notice, confidentiality notice or any notice of any
- **5.2** Nothing in this Agreement shall be construed as granting or conferring to either party any rights by license or otherwise in the Confidential Information, except as expressly provided herein.
- **5.3** Nothing in this Agreement shall be construed as (i) obligating either party to disclose any information which it does not wish to disclose, or (ii) obligating either party to accept any offer or enter into any agreement between the Parties.

5.4 Other proprietary right of the Disclosing Party on any copy of the Confidential Information, and shall reproduce any such mark or notice on all copies of such Confidential Information. Likewise, the Receiving Party shall not add or emboss its own or any other any mark, symbol or logo on such Confidential Information.

#### ARTICLE 6. NO WAIVER OF RIGHT ON DELAY

**6.1** No delay or omission by either party in exercising any rights under this Agreement will operate as a waiver of that or any other right. A waiver or consent given by either party on any one occasion is effective only in that instance and will not be construed as a bar to or waiver of any right on any other occasion.

#### ARTICLE 7. APPLICABLE LAW – JURISDICTION

- **7.1** All disputes arising in connection with this Agreement, if not settled amicably by the Parties, shall be finally settled under the provisions of the Indian Arbitration and Conciliation Act, 1996 by three arbitrators appointed in accordance with the said Act.
- **7.2** The arbitration shall be conducted in English. The arbitral tribunal shall have its seat in **Guwahati** or any other place as may be mutually agreed by both the parties. The arbitration award shall be final and binding on the Parties, and the Parties agree to be bound thereby and to act accordingly. The costs of arbitration shall be borne by the party as provided in the Act.
- 7.3 The Courts of Dibrugarh shall only have the jurisdiction for the purpose of this Agreement

#### **ARTICLE 8. DURATION**

This Agreement shall come into force on the date written hereunder, and shall remain in force for a period of **four (4)** years starting from such date. The obligations set forth in Article 2 hereof shall survive the expiration of this Agreement for the period specified in such Article.

#### **ARTICLE 9. COMPLETE AGREEMENT**

The Parties agree that this Agreement (i) is the complete and exclusive statement between the Parties with respect to the protection of the confidentiality of Confidential Information, (ii)

supersedes all related discussions and other communications between the Parties, and (iii) may only be modified in writing by authorized representatives of the Parties.

#### **ARTICLE 10. PUBLICATIONS**

Neither Party shall make news releases, public announcements, give interviews, issue or publish advertisements or publicize in any other manner whatsoever in connection with this Agreement, the contents/provisions thereof, other information relating to this Agreement, the Purpose, the Confidential Information or other matter of this Agreement, without the prior written approval of the other Party.

## ARTICLE 11. REMEDIES

The Receiving Party acknowledges that if the Receiving Party fails to comply with any of its obligations hereunder, the Disclosing Party may suffer immediate, irreparable harm for which monetary damages may not be adequate. The Receiving Party agrees that, in addition to all other remedies provided at law or in equity, the Disclosing Party shall be entitled to injunctive relief hereunder.

IN WITNESS WHEREOF the Parties have caused this Agreement to be executed by their duly

authorized representatives on the date written hereunder.

Made on \_\_\_\_\_\_\_, at \_\_\_\_\_\_\_\_(Place)

On behalf of OIL

On behalf of \_\_\_\_\_\_\_

Signature :\_\_\_\_\_\_ Signature :\_\_\_\_\_\_

Name:

Designation:

Designation:

# **Annexure- DDD**

#### **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 Tender No. **SDI3184P17** 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 and Contractor/s.

In order to achieve these goals, the Principal cooperates with the renowned international Non-Governmental Organisation "Transparency International" (TI). Following TI's national and international experience, the Principal will appoint an external independent Monitor who will monitor the tender process and the execution of the contract 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:-
  - 1. No employee of the Principal, personally or through family members, will in connection with the tender for, or the 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.
  - 2. 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 or the contract execution.
  - 3. 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 Page 2 of 6 substantive suspicion in this regard, the Principal will inform its Vigilance Office and in addition can initiate disciplinary actions.

#### Section 2 - Commitments of the Bidder/Contractor

- (1) The Bidder/Contractor commits itself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.
  - 1. The Bidder/Contractor 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 the execution of the
  - The Bidder/Contractor 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 cartelisation in the bidding process.
  - 3. The Bidder/Contractor will not commit any offence under the relevant Anticorruption Laws of India; further the Bidder/Contractor 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.
  - 4. The Bidder/Contractor 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.
- (2) The Bidder/Contractor will not instigate third persons to commit offences outlined above or be an accessory to such offences.

# 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 or to terminate the contract, if already signed, for such reason.

1. If the Bidder/Contractor 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/Contractor 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 3 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/Contractor 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.
- 1. A transgression is considered to have occurred if in light of available evidence no reasonable doubt is possible.

# **Section 4 - Compensation for Damages**

- 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 3 % of the value of the offer or the amount equivalent to Earnest Money Deposit/Bid Security, whichever is higher.
- 2. If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to section 3, the Principal shall be entitled to demand and recover from the Contractor liquidated damages equivalent to 5% of the contract value or the amount equivalent to Security Deposit/Performance Bank Guarantee, whichever is higher.
- 3. The bidder agrees and undertakes to pay the said amounts without protest or demur subject only to condition that if the Bidder/Contractor can prove and establish that the exclusion of the Bidder from the tender process or the termination of the contract after the contract award has caused no damage or less damage than the amount or the liquidated damages, the Bidder/Contractor shall compensate the Principal only to the extent of the damage in the amount proved.

# **Section 5 - Previous transgression**

- 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 or the contract, if already awarded, can be terminated for such reason.

# Section 6 - Equal treatment of all Bidders/Contractor/Subcontractors

1. The Bidder/Contractor undertakes to demand form all subcontractors a commitment in conformity with this Integrity Pact, and to submit it to the Principal before contract signing.

- 2. The Principal will enter into agreements with identical conditions as this one with all Bidders, Contractors and Subcontractors.
- 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 (three in number depending on the size of the contract) (to be decided by the Chairperson of the Principal)

- The Principal appoints competent and credible external independent Monitor for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.
- 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 Contractor accepts that the Monitor has the right to access without restriction to all Project documentation of the Principal including that provided by the Contractor. The Contractor 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 Contractor. The parties offer to 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.
- 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.

#### **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, i.e. New Delhi.
- 2. Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.
- 3. If the Contractor is a partnership or a consortium, this agreement must be, signed by all partners or consortium members.
- 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.

A J SHARMA MANAGER MATERIALS (IP)	
For the Principal	For the Bidder/Contractor
Place. Duliajan.	Witness 1:
Date 04.12.2016 .	Witness 2:

m	D	~ .	
Technical	Bid	Check	clist

**Annexure-EEE** 

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

NOTE: Please fill up the greyed cells only.

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

# Response Sheet Annexure-FFF

Tender No.	
Bidders Name	

**Bidders Response Sheet** 

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

NOTE: Please fill up the greyed cells only.

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

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

Tender No.	<b>:</b>	•••••
Name of Beneficiary	:M/s	
Vendor Code	:	•••••••••••
Address	<b>:</b>	
Phone No. (Land Line)	<b>:</b>	
Mobile No.	<b>:</b>	
E-mail address	<b>:</b>	
Bank Account No. (Minimum		
Eleven Digit No.)	:	
Bank Name	:	
Branch	<b>:</b>	
<b>Complete Address of your</b>	<b>:</b>	
Bank	<b>:</b>	
IFSC Code of your Bank		
a) RTGS	:	
b) NEFT	:	
PAN	:	
VAT Registration No.	:	
CST Registration No.	:	
Service Tax Registration No.	:	
<b>Provident Fund Registration</b>	<b>:</b>	
our above mentioned accoun	nt directly and we shall not hold	Oil India Limited can be remitted to Oil India Limited responsible if the ount due to incorrect details furnished
	Office Seal	Signature of Vendor

Counter Signed by Banker: Seal of Bank:

Enclosure: Self attested photocopies of the following documents-

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