

# RAILTEL CORPORATION OF INDIA LIMITED (A Govt. of India Undertaking, Ministry of Railways)

1-10-39 to 44, 6A, 6th Floor, Begumpet Airport Road, Opp. Shoppers Stop, BEGUMPET, HYDERABAD- 500 016, Telangana

#### TENDER DOCUMENT

Limited Tender No: RAILTEL/E-TENDER/LT/SR/SC/2022-23/164 DATED 16-01-2023.

## NAME OF THE STORES

SUPPLY, INSTALLATION, CONFIGURATION AND DEPLOYMENT OF SERVERS AND HARDWARE FOR ENTERPRISE CLASS EMAIL SOLUTION FOR RAILTEL CUSTOMER AT HYDERABAD, PAZHAYAKAYAL & KOTA

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# **RailTel Corporation of India Limited**

A Government of India (Ministry of Railways) Undertaking

1-10-39 to 44, 6A, 6th Floor, Begumpet Airport Road, Opp. Shoppers Stop, BEGUMPET, HYDERABAD- 500 016, Telangana

#### **TENDER NOTICE**

#### Limited Tender No: RAILTEL/E-TENDER/LT/SR/SC/2022-23/164 DATED 16-01-2023

RailTel Corporation of India Ltd., Secunderabad invites tenders on RailTel ENIVIDA portal for "SUPPLY, INSTALLATION, CONFIGURATION AND DEPLOYMENT OF SERVERS AND HARDWARE FOR ENTERPRISE CLASS EMAIL SOLUTION FOR RAILTEL CUSTOMER AT HYDERABAD, PAZHAYAKAYAL & KOTA" as per schedule of requirement (SOR) and specification enclosed to the tender document.

Sl No	Description of work	Earnest Money (EMD) in Rs.
1	SUPPLY, INSTALLATION, CONFIGURATION AND	
	DEPLOYMENT OF SERVERS AND HARDWARE FOR	4.02.6007
	ENTERPRISE CLASS EMAIL SOLUTION FOR RAILTEL	4,82,600/-
	CUSTOMER AT HYDERABAD, PAZHAYAKAYAL & KOTA	

a)	Start Date for downloading the Tenders निविदाओं को डाउनलोड करने की प्रारंभ दिनांक	16-01-2023
b)	Closing date for Submission of E-Bids ई-निविदाएं जमा करने की अंतिम तिथि	27-01-2023 at 15.00 hrs.
c)	Date of opening of E-Bids ई-बोलियां खुलने की तिथि	27-01-2023 at 15.30 hrs.
d)	Estimated Cost of the Work कार्य की अनुमानित लागत	Rs 2,41,26,699/-
e)	Validity of offer ऑफर की वैंधता	20 days from the date of opening of tender.
f)	Delivery Period डिलीवरी की अवधि	Within 150 days from the date of issue of LOA/PO
g)	Web address for availability of Tender document निविदा दस् तावेज की उपलब् धता के लिए वेब पता	Detailed tender notice and tender document are available at website <a href="https://railtel.enivida.com">https://railtel.enivida.com</a> .

#### Note:

Eligible MSEs are exempted from EMD only. No other exemption will be given., However bidder should submit valid UDYAM certificate.

Tender Notice and Tender Document are available on RailTel's website and can be downloaded from <a href="https://railtel.eNivida.com">www.railtelindia.com</a> or from the e-Tendering portal <a href="https://railtel.eNivida.com">https://railtel.eNivida.com</a>. For online bid submission the tenderer will have to necessarily download an official online copy of the tender document from portal <a href="https://railtel.eNivida.com">https://railtel.eNivida.com</a>. All future Information viz. corrigendum /addendum/ amendments etc. for this Tender shall be posted on the e-Tendering Portal only. Printed copy of Tender document will not be sold from RailTel office.

निविदा सूचना और निविदा दस्तावेज रेलटेल की वेबसाइट पर उपलब्ध हैं और इन्हें www.railtelindia.com या ई-निविदा पोर्टल से डाउनलोड किया जा सकता है https://railtel.eNivida.com | ऑनलाइन बोली जमा करने के लिए निविदाकर्ता को पोर्टल https://railtel.eNivida.com से निविदा दस्तावेज की एक आधिकारिक ऑनलाइन प्रति आवश्यक रूप से डाउनलोड करनी होगी। इस निविदा के लिए भविष्य की सभी सूचनाएं अर्थात शूद्धिपत्र/परिशिष्ट/संशोधन इत्यादि केवल ई-निविदा पोर्टल पर पोस्ट की जाएंगी। निविदा दस्तावेज की मुद्रित प्रति रेलटेल कार्यालय से नहीं बेची जाएगी। The bidder shall bear all costs associated with the preparation, submission/participation in the bid. RailTel in no way will be responsible or liable for these costs regardless of the conduct or outcome. बोलीदाता बोली तैयार करने, प्रस्तुत करने/बोली में भागीदारी से जुड़ी सभी लागतों को वहन करेगा। रेलटेल किसी भी तरह से आचरण या परिणाम की परवाह किए बिना इन लागतों के लिए जिम्मेदार या उत्तरदायी नहीं होगा Sd/-यशपाल सिंह तोमर (Yashpal Singh Tomar) GGM/POM/SR for RailTel Corporation of **India Limited** 

## <u>Chapter-I</u> Section Online

These Special Instructions (for e-Tendering) supplement 'Instruction to Bidders,' as enclosed in Chapter-2, Section-II of the Tender Document.

E - Procurement is the complete process of e-Tendering from publishing of tenders online, inviting online bids, evaluation and award of contract using the system. You may keep a watch of the tenders floated under <a href="https://railtel.eNivida.com">https://railtel.eNivida.com</a>. The link of e-procurement portal is also given on our official RailTel portal i.e., <a href="https://www.railtelindia.com">www.railtelindia.com</a> under TENDER TAB.

These will invite for online Bids. Bidder Enrolment can be done using "Online Bidder Enrolment."

The instructions given below are meant to assist the bidders in registering on the e-tender Portal and submitting their bid online on the e-tendering portal as per uploaded bid.

More information useful for submitting online bids on the enivida Portal may be obtained at: <a href="https://railtel.enivida.com">https://railtel.enivida.com</a>.

#### **GUIDELINES FOR REGISTRATION**

Bidders are required to enroll on the e-Procurement Portal (<a href="https://railtel.enivida.com/bidderRegistration/newRegistration">https://railtel.enivida.com/bidderRegistration/newRegistration</a>) or click on the link "Bidder Enrolment" available on the home page of e-tender Portal by paying the Registration fee of Rs.2000/-+Applicable GST.

As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.

Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication with the bidders.

Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Only Class III Certificates with signing + encryption key usage) issued by any Certifying Authority recognized by CCA India (e.g., Sify / TCS / nCode / eMudhra etc.), with their profile.

Only valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSCs to others which may lead to misuse.

Bidder then logs in to the site through the secured log-in by entering their user ID /password and the password of the DSC /e-Token.

The scanned copies of all original documents should be uploaded in pdf format on e-tender portal.

After completion of registration payment, bidders need to send their acknowledgement copy on our help desk mail id eprocurement@railtelindia.com for activation of account.

## SEARCHING FOR TENDER DOCUMENTS

There are various search options built in the e-tender Portal, to facilitate bidders to search active tenders by several parameters.

Once the bidders have selected the tenders they are interested in, you can pay the Tender fee and processing fee (NOT REFUNDABLE) by net-banking / Debit / Credit card then you may download the required documents / tender schedules, Bid documents etc. Once you pay both fee tenders will be moved to the respective 'requested' Tab. This would enable the e- tender Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.

#### PREPARATION OF BIDS

Bidder should consider any corrigendum published on the tender document before submitting their bids.

Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid.

Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF formats. Bid Original documents may be scanned with 100 dpi with Color option which helps in reducing size of the scanned document.

To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g., PAN card copy, GST, Annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Documents" available to them to upload such documents.

These documents may be directly submitted from the "My Documents" area while submitting a bid and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process. Already uploaded documents in this section will be displayed. Click "New" to upload new documents.

#### SUBMISSION OF BIDS

Bidder should log into the website well in advance for the submission of the bid so that it gets uploaded well in time i.e., on or before the bid submission time. Bidder will be responsible for any delay due to other issues.

The bidder must digitally sign and upload the required bid documents one by one as indicated in the tender document as a token of acceptance of the terms and conditions laid down by RailTel.

Bidder must select the payment option as "e-payment" to pay the tender fee / EMD as applicable and enter details of the instrument.

In case of BG bidder should prepare the BG as per the instructions specified in the tender document. The BG in original should be posted/couriered/given in person to the concerned official before the Online Opening of Financial Bid. In case of non-receipt of BG amount in original by the said time, the uploaded bid will be rejected.

Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BOQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BOQ file, open it and complete the white Colored(unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BOQ file is found to be modified by the bidder, the bid will be rejected.

The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.

The uploaded tender documents become readable only after the tender opening by the authorized bid openers.

Upon the successful and timely submission of bid click "Complete" (i.e., after Clicking "Submit" in the portal), the portal will give a successful Tender submission acknowledgement & a bid summary will be displayed with the unique id and date & time of submission of the bid with all other relevant details.

The tender summary must be printed and kept as an acknowledgement of the submission of the tender. This acknowledgement may be used as an entry pass for any bid opening meetings.

All document needs to be submitted online only. There is no need of submission of offline document. Original copy of following document is needed to be submitted by the successful bidder before issuance of LOA.

1. Offer letter complete

- 2. Schedule of Requirements shall contain the price of each item quoted exactly according to the proforma of schedule of requirements and price breakup.
- 3. Duly stamped and signed/digitally signed copy of Tender Documents/ Addenda
- 4. Earnest Money Deposit (EMD).
- 5. Constitution of Firm and Power of Attorney
- 6. System performance Guarantee
- 7. Manufacturer Authorization Form (MAF).
- 8. Clause wise compliance to tender conditions.
- 9. Any other document asked in the tender but not listed above.
- 10. Any Other information desired to be submitted by the tenderer.

#### For any clarification in using ENIVIDA Portal:

Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.

Any queries relating to the process of online bid submission or queries relating to e-tender Portal in general may be directed to the Helpdesk Support.

Please feel free to contact enivida Helpdesk (as given below) for any query relate to e-tendering.

Phone No.: - 011-49606060 / 9205898228 Mail id: - eprocurement@railtelindia.com

#### RailTel Contact:

RailTel Contact-I (for general Information)

Ravi Kumar: DGM/Project/SR

Telephone 9959933373,

E-mail ID: ravi.verma@railtelindia.com

RailTel Contact-II (for general Information)
Yashpal Singh Tomar: GGM/POM/SR

Telephone: 9701399700,

E-mail ID: yashpal.tomar@railtelindia.com

#### **TENDERER DATA SHEET**

SUPPLY, INSTALLATION, CONFIGURATION AND DEPLOYMENT OF SERVERS AND HARDWARE FOR ENTERPRISE CLASS EMAIL SOLUTION FOR RAILTEL CUSTOMER AT HYDERABAD, PAZHAYAKAYAL & KOTA (Tender No: RAILTEL/E-TENDER/LT/SR/SC/2022-23/164 DATED 16-01-2023)

S No	clause reference	Description	Remarks (Yes/No)
1	EMD as per NIT/ Exemption certificate as per Cl. No 2.0	Whether EMD/ Exemption certificate submitted online in ENIVIDA portal?	
2	Offer letter as per Form-1	Offer letter uploaded?	
3	Tender Document	Tender document digitally signed along with corrigendum if any uploaded?	
4		Whether Power of attorney in non-judicial stamp paper worth of Rs.100/-enclosed with the Tender is in proper format and notarized?	
5		Whether Power of attorney is mentioning "the position of person giving power of attorney and the position of person in the company in favor of whom the Power of Attorney is being given?"	
6	cl.no.6.12 instructions to tenderers section II chapter II	Whether Partnership deed, Memorandum of Joint Venture as the case may be if applicable is enclosed for partnership firm? If not applicable, then it should be mentioned as "NOT APPLICABLE" under remarks column.	
7		In case, clause no 6.12 regarding partnership firm, is not applicable, whether relevant <b>document</b> regarding <b>Proprietary firm</b> is enclosed?	
		Whether Constitution of Firm and article of association document enclosed with Offer?	
	Clause	wise compliance and deviation statement	

S No	clause reference	Description	Remarks (Yes/No)
8		Whether clause wise compliance to the tender condition and statement of s Form- No. 2 uploaded?	
9	Manufacture Authorization Form	Whether Manufacture Authorization Form uploaded?	

**Note**: All scan copies of documents listed above shall be submitted online. As per requirement of RailTel the bidder shall produce the Original Copies.

## <u>CHAPTER-II</u> SECTION<u>I</u> SCHEDULE OF REQUIREMENT (SOR)

Name of the Work/Stores: SUPPLY, INSTALLATION, CONFIGURATION AND DEPLOYMENT OF SERVERS AND HARDWARE FOR ENTERPRISE CLASS EMAIL SOLUTION FOR RAILTEL CUSTOMER AT HYDERABAD, PAZHAYAKAYAL & KOTA

## Tender No: RAILTEL/E-TENDER/LT/SR/SC/2022-23/164 DATED 16-01-2023

SN	Item Description	Qty	Units	Unit Price (All Inclusive)	Total Price (All Inclusive)
1	Type I Servers as per detailed spec				
1.1	Supply at Hyderabad	3	Nos		
1.2	Installation at Hyderabad	3	Nos		
2	Type I Servers with Tape as per de specifications	etailed			
2.1	Supply at Hyderabad	1	Nos		
2.2	Installation at Hyderabad	1	Nos		
3	Type II Servers as per detailed spe	cificatio	ns		
3.1	Supply at Hyderabad	1	Nos		
3.2	Installation at Hyderabad	1	Nos		
3.3	Supply at Pazhayakayal, TN	3	Nos		
3.4	Installation at Pazhayakayal, TN	3	Nos		
3.5	Supply at Kota, Rajasthan	3	Nos		
3.6	Installation at Kota, Rajasthan	3	Nos		
4	Type II Server with Tape as per de specifications	tailed			
4.1	Supply at Pazhayakayal, TN	1	Nos		
4.2	Installation at Pazhayakayal, TN	1	Nos	To be Quoted in	E-Nivida Portal
4.3	Supply at Kota, Rajasthan	1	Nos		
4.4	Installation at Kota, Rajasthan	1	Nos		
5	Type III Servers as per detailed sp	ecificatio	ons		
5.1	Supply at Hyderabad	5	Nos		
5.2	Installation at Hyderabad	5	Nos		
6	Active/Passive replicated NAS as specification	per detai	led		
6.1	Supply at Hyderabad	1	Set		
6.2	Installation at Hyderabad	1	Set		
7	Client hardware for E-Mail system	manage	ment		
7.1	Supply at Hyderabad	2	Nos		
8	LTO-8 Backup tapes Make: Power Vault LTO-8				
8.1	Supply at Hyderabad	10	Nos		
8.2	Supply at Pazhayakayal, TN	10	Nos		
8.3	Supply at Kota, Rajasthan	10	Nos		
	Total Amo	unt (All I	nclusive)		

#### General Terms and Conditions:

- 1. All Equipment should be quoted as per technical specifications.
- 2. Bidder shall submit the detailed BOM of the equipment's offered duly verified and certified by the respective OEM.
- 3. The BOM shall be as per tender condition and scope of work.
- 4. The material shall be supplied with all accessories, Power cords, fitting material required to install and commissioning of equipment's.
- 5. Any license fee required to be paid for hardware & software during the life cycle of the Cards/Modules shall be included in the rate quoted by the tenderer.
- 6. There shall be no post contractual liability of license fee on RailTel for hardware & software supplied by tenderer.
- 7. Completion period: **150 days** from the date of release of Work Order.
- 8. IT, GST as applicable to the works contracts will be deducted at source and hence the rates quoted for items shall have the provisions for the same.

#### Note:

- (i) If there is any discrepancy in the total amount and the Unit Rate, the value shown in the Unit Rate shall be considered final for the evaluation.
- (ii) The price is inclusive of ESI, EPF and inclusive of GST, Transportation, and Insurance.
- (iii) Evaluation of tender is based on total offered value inclusive of all taxes and duties.
- (iv) The Tenderer should enclose, Tender Specific MAF (MAF- Manufacture Authorization Form) along with the bid. Bid submitted without MAF shall not be considered.
- (v) The detailed Bill of Material with rates to be enclosed. Tenderer to give the detailed break up of common units/parts/sub-modules etc. for building up the SOR items.
- (vi) Make/Model and Data sheet of the offered product to be uploaded.

#### Section-II

#### **Instructions to Tenderers & Conditions of Tendering**

Information and Additional Terms & Conditions to Bidder for the "SUPPLY, INSTALLATION, CONFIGURATION AND DEPLOYMENT OF SERVERS AND HARDWARE FOR ENTERPRISE CLASS EMAIL SOLUTION FOR RAILTEL CUSTOMER AT HYDERABAD, PAZHAYAKAYAL & KOTA

#### General Requirement of the work.

Name of the work: "SUPPLY, INSTALLATION, CONFIGURATION AND DEPLOYMENT OF SERVERS AND HARDWARE FOR ENTERPRISE CLASS EMAIL SOLUTION FOR RAILTEL CUSTOMER AT HYDERABAD, PAZHAYAKAYAL & KOTA

RailTel have participated in the tender floated by RAILTEL CUSTOMER dated 29/07/2022 for the work of SUPPLY, INSTALLATION, CONFIGURATION AND DEPLOYMENT OF SERVERS AND HARDWARE FOR ENTERPRISE CLASS EMAIL SOLUTION FOR RAILTEL CUSTOMER AT HYDERABAD, PAZHAYAKAYAL & KOTA. The work is to be executed in line with RailTel End Customer.

The broad solution of the required work is given below; However SOR part and associated work are in the scope of Tenderer.

1. <u>Sub-Contracting:</u> The initial installation and commissioning works cannot be subcontracted. However, the onsite system support with resident engineer can be outsourced to another agency. In that case, the M/s Railtel shall be responsible for fulfilling service level agreement.

#### 2. Present Architecture:

**Email:** The present e-mail infrastructure comprises of E-Mail gateways on Internet & Extranet and E-Mail hosting server, as given below.

Sl. No	Description	LAN	Location
1	Active/Passive cluster for Mail service at Headquarters	One Mail Server, separately for each unit on the respective unit's Intranet. The systems	Hyderabad
2	Branch Mail server 1	provide both MUA and MTA functionalities.	Pazhayakayal
3	Branch Mail server 2		Kota
4	Email Gateway on Internet for Outgoing mails	MTA on only one ISP link on Internet.	Hyderabad
5	Email Gateway on Internet for Incoming mails	Kaspersky Secure Mail Gateway connected on only one ISP link on Internet as MTA.	Hyderabad
6	Email gateway on Extranet	Linux based e-mail server as MTA.	Hyderabad
7	Email Archive server at HQ	Intranet	Hyderabad

- a) All the RailTel's Customer Intranet mail servers are isolated from the Internet.
- **b)** Mail Server cluster on Intranet at Headquarters sends/receives mails to/from Mail Gateways on Internet & Extranet. The HQ mail server distributes incoming mails to mailboxes of users

- at HQ and forwards mails belonging to branch users to the respective branch mail servers for final distribution by the respective branch e-mail servers.
- c) Currently, multiple MUAs are in use with IMAP-Webmail and POP3-MS-Outlook. The mail servers accept e-mail from RailTel's Customer users via Webmail and from other clients (MS Outlook) and processes mail destined for internal users locally.
- **d)** Branch Mail servers delivers non-local destined mails to Mail server cluster. Mail server cluster takes care of further delivery of mails.
- e) Mails addressed to outside domains are delivered to Mail gateways based on policies.
- f) The responsibility of SPAM prevention is on Mail Gateways. Antivirus scanning is performed on Mail Server and Mail Gateways. Mail received from Internet is double filtered. Outgoing mail is filtered once.

#### 3. Requirements for the new E-Mail solution

The requirements comprise of Hardware, Software and System Configuration Services as described below.

- **1. Hardware:** Supply, Installation and Commissioning of new hardware as per the following specifications.
  - i) Type I Servers as per detailed specifications in Chapter III Point 1. Quantity is 3 numbers and delivery shall be at Hyderabad.
  - ii) Type I Servers with Tape as per detailed specifications in Chapter III Point 2. Quantity is 1 numbers and delivery shall be at Hyderabad.
  - iii) Type II Servers as per detailed specifications in Chapter III Point 3. Quantity is 7 numbers and delivery shall be 1 server at Hyderabad, 3 servers at Pazhayakayal, Tamil Nādu and 3 servers at Kota, Rajasthan.
  - iv) Type II Servers with Tape as per detailed specifications in Chapter III Point 4. Quantity is 2 numbers and delivery shall be one server at Pazhayakayal, Tamil Nādu and one server at Kota, Rajasthan.
  - **v)** Type III Servers as per detailed specifications in Chapter III Point 5. Quantity is 5 numbers and delivery shall be at Hyderabad.
  - vi) Network Attached Storage in a replicated configuration (Active/Passive) as per detailed specifications in Chapter III Point 7. Delivery shall be at Hyderabad. The network storage shall be a highly available system, configured in an Active/Passive configuration with replication. Two sets of network storage shall be established with each one in a different building connected on Campus LAN with Fiber Optic Cable backbone.
  - vii) Deleted
  - viii) Deleted
  - ix) LTO-8 Backup tapes 30 numbers, delivery shall be 10 tapes each at Hyderabad, Pazhayakayal, Tamil Nādu and Kota, Rajasthan
  - **x)** E-Mail system management stations as per Chapter III Point 6-2 numbers, delivery shall be at Hyderabad
- 2. **Email System Software:** Supply of RHEL/CentOS compatible email system and email Archive solution for Headquarters and two branches. All the users will use the same domain. The number of users at each location is given below. The features desired from the E-Mail software are given in Chapter III Point 9. **(Not in scope).**

S N	Location	LAN	No. of users	
1	Hyderabad	Intranet	2000	
2	Pazhayakayal	Intranet	500	
3	Kota	Intranet	500	
The following is optional at RailTel's Customer discre regarding inclusion shall be taken before placement of				
4	Hyderabad - With two factor authentication	Internet DMZ	800	

#### 4. System Configuration Services: (Not in the Scope)

The Contractor (System-Integrator) shall perform System configuration Services for the supplied Email systems. The Contractor (System-Integrator) shall be responsible to establish High Availability Clusters using the servers supplied for E-Mail services as mentioned in the scope of work. System configuration services associated with Email is further divided into two parts viz., Part-A, Part-B. Installation, and configuration procedure for each of the following activities in soft copy and hard copy (neatly bound paper media) shall be provided to RailTel's Customer.

#### 1. Part-A

- i) Configure Active/Active E-Mail server Cluster with a Load Balancer in front of the cluster at Headquarters, using the Type-I server and Type-I server with Tape. One each server for Cluster, One for Load Balancer. One server shall be configured with two VMs and can be used as spare for either cluster server or Load balancer.
- ii) Configure Active/Passive clusters with DRBD based replication at each of the two branches using the Type-II servers and Type-II with Tape servers. One each of Type-II and 'Type-II with Tape' servers shall constitute a Cluster, One Type-II server shall be fully configured for cluster service and kept as spare. The servers can be accessed from Hyderabad through leased line links during the installation period.
- iii) Configure separate Mail Gateways on Internet and on Extranet, at Headquarters using the Type-III servers. Configure one spare server with two VMs with one for Internet Mail Gateway and the other for Extranet Mail Gateway. The Mail Gateway on Internet shall be capable of sending mail on either of the ISP links.
- **iv)** The existing operational Kaspersky Secure Mail Gateway currently accepts incoming mail from only one ISP link. Configure the same for receiving mail from two ISP links.
- v) Configure Mail Archive systems to store a copy of all mails handled by the respective unit's mail system, for regulatory compliance at Headquarters and at each of the two branches using the Type-II servers. The servers can be accessed from Hyderabad through leased line links during the installation period.
- **vi)** Configure Data and System Backups at Headquarters and two branches.
- **vii)** Configure Intermediate Firewall between Mail Gateways on Internet to Mail Server cluster on Intranet at Headquarters
- **viii)** Configure E-Mail to SMS gateway at Headquarters using the server provided by RailTel's Customer. A Third-party SMS service provider based in India with 100000 number of

SMS per year shall be engaged by the contractor for this purpose, at no extra cost to RailTel's Customer for the first 1 year.

**ix)** Detailed scope of work in Part-A is covered below in subsequent sections.

#### 2. Part-B

- i) Configure Internet mail server to provide mail service over Internet, at Headquarters using one of the Type-III servers.
- **ii)** Configure one spare Type-III server with two VMs with one for mail server accessible over Internet and the other as Internet Mail Gateway. The server can be deployed into operation in case of failure of the corresponding server.
- iii) Detailed scope of work in Part-B is covered below in subsequent sections.

#### 5. Annual Technical Support Services (Not in scope)

- 1. Software support for the e-Mail systems During the support period, all updates/patches to the software shall be supplied together with associated installation support. In addition, unlimited e-mail/telephonic support calls with resolution by next business day shall be provided. Software deliverables shall be made on six monthly bases with associated payments. The Software support is split into two portions, as given below.
  - i) Onsite support for one year by stationing a resident engineer. During the onsite support, the resident engineer shall attend to all issues related to the implemented systems. It is possible RailTel's Customer may place separate contract for the Offsite support subsequently as per the prices quoted. It is possible RailTel's Customer may renew contract for one more year for Onsite support at the same price quoted.
  - ii) Offsite support for four years from the conclusion of the above period for the implemented systems. During this period, the scope shall cover (a) Supply of patches & updates together with detailed instructions and associated support for installation of the same, (b) Maximum of two site visits per location per year and (c) Unlimited telephonic/e-mail support calls covering headquarters and two branches. Offsite support is optional, and it is possible RailTel's Customer may place separate contract for the Offsite support subsequently as per the prices quoted.
- 2. Service Quality: All issues, where downtime is not involved, and which are not related to hardware problems shall be resolved within one day. Where downtime is involved, not related to hardware problems, the issues shall be resolved within 4 hours from time of complaint. Any cyber security issues related to Internet mail gateways servers must be resolved within 4 hours from time of complaint. The resident engineer shall fix all critical (as determined by RailTel's Customer) cyber security vulnerabilities identified during periodic vulnerability audit conducted by RailTel's Customer. An availability of 99%, excluding downtime related to hardware issues shall be ensured at Headquarters. An availability of 98%, excluding downtime related to hardware issues shall be ensured at the branches.
- 3. Resident Engineer: The staff engaged by Contractor (System-Integrator) should wear uniform which is distinct from RailTel's Customer uniform. Safety shoes and other PPE as required for the job are to be provided by Contractor (System-Integrator) for all the staff engaged by him and ensure its usage. The Contractor (System-Integrator) has to ensure safe working practices and follow all safety rules and regulations stipulated by Safety Engineering Division, RailTel's Customer from time to time. Contractor (System-Integrator) shall provide the resident engineer with suitable ergonomic chair, computer table and two Intel I7 based computer systems. The chair and computer table can be taken back at the end of one year support period. The resident

engineer shall be responsible for performing data backups and periodically test the backups, at headquarters.

**Working Hours:** The onsite support shall be carried out between 08.45 & 16.45 hours on all RailTel's Customer working days (six-day week) to ensure resolution of issues in a time bound manner. The support staff may have to work beyond normal working hours in the presence of RailTel's Customer IT staff during the handling of critical events.

RailTel's Customer will not provide any boarding, transport facility to Contractor (System-Integrator)'s staff.

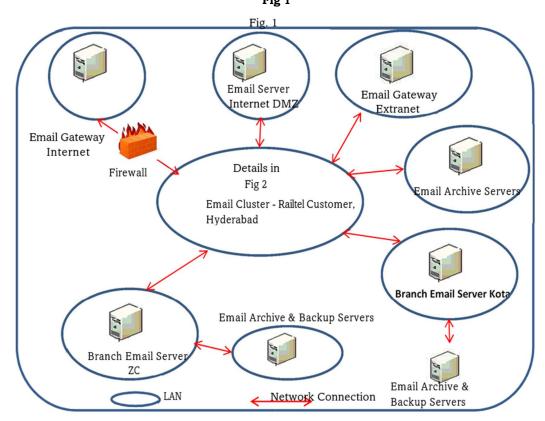
Contractor and Resident engineer shall sign non-disclosure agreements.

Contractor (System-Integrator), in case of resource replacement, should ensure that there should be a minimum of 7 days overlapping period for Knowledge Transfer (KT). Contractor (System-Integrator) has to ensure that his manpower attrition should not affect the system performance at RailTel's Customer. Contractor (System-Integrator) needs to obtain approval from RailTel's Customer before deploying staff at RailTel's Customer site.

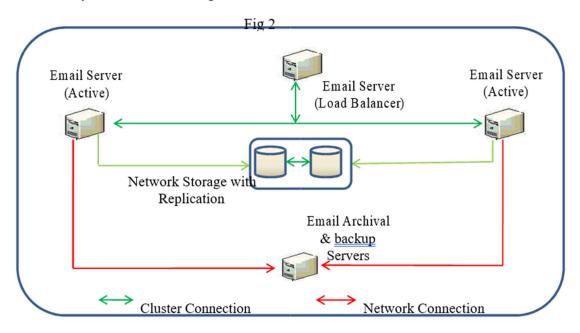
Contractor shall submit Police Verification Certificate (PVC) and medical certificate of staff to be engaged for the work to get entry pass for working personnel/staff. All stipulations and instructions given by CISF from time to time shall scrupulously be followed for entry, exit of men and materials and also during execution of work for security purpose.

## 6. <u>Detailed Solution Architecture:</u>

## Required E-Mail Architecture Fig 1



\*RailTel Hyderabad Site details in fig 2 below.



#### 1. Part-A (Not in scope)

The scope of the system Contractor (System-Integrator) is to install the e-mail system on the servers and establishment of high availability clusters.

- a. Supply, Installation and Commissioning of E-Mail system in a Highly Available Active/Active cluster configuration with a Load Balancer in front of the cluster at Headquarters and Active/Passive cluster at each of the two branches. The clusters shall be integrated with the existing local authentication system at each unit. The Mail Messaging solution should be based on an enterprise class messaging platform. All the users in the organization will use the same domain. The number of users on Intranet LAN at Headquarters is 2000 and at the two branches are 500 each. It shall be possible to migrate unused licenses among the three units. Supply, Installation and Commissioning of a Hierarchical Storage Management solution on top of the Network storage which comprises hard disks in SSD and SAS categories.
- **b.** One time migration of global address book, existing individual user's mailboxes including user's additional folders, personal address books, personal signatures, mail filters, calendars, tasks, and notes to the new e-mail setup. This includes both Headquarters and Two branch servers.
- **c.** One time migration of address books and filters from Microsoft Outlook used by some users to the new webmail facility. The number of users shall be around 30 maximums.
- **d.** Supply, Installation and Commissioning of an E-Mail archive solution at Headquarters and branch sites. A copy of all mails exchanged internally or with external parties, at HQ as well as branch sites is stored on the respective unit's E-Mail archive.
- **e.** Supply, Installation and Commissioning of E-Mail gateway solution for Internet and Extranet networks with Antispam, Anti-virus, Encryption.
- f. Supply, Installation and Commissioning of an e-mail to SMS gateway system.
- g. Initial Cyber Security hardening of all software components of the e-mail system.
- h. Training to users in the features of the new system, such as Mail Filters, Calendar, Tasks, Notes, Files, Global and Personal Address Books, Hindi use etc., The training shall be organized in four half day sessions at RailTel's Customer Hyderabad, each covering about 400 users. Softcopy user manual shall be provided on the usage of various features. The auditorium for this purpose, Tea and Snacks will be provided by RailTel's Customer. Contractor (System-Integrator) shall provide recorded training session to help new users not covered initially.
- **i.** Supply, Installation and Commissioning of a data backup solution. The backup solution shall be capable of taking backups of mailboxes and system backups from the mail system servers.
- **j.** The Contractor (System-Integrator) shall migrate existing Email infrastructure and establish following at RailTel's Customer:

Sl. No	Description	High Availability	Storage	LAN	Location
1	Mail service on Active/Active cluster with Load Balancer in front of the cluster and Replicated Hierarchical Storage using NAS at Headquarters for 2000 users.	Yes	Network storage	Intranet	Hyderabad
2	Mail service with Active/Passive cluster at Branch-1 for 500 users.	Yes	Local	Intranet	Pazhayakayal
3	Mail service with Active/Passive cluster at Branch-2 for 500 users.	Yes	Local	Intranet	Kota
4	Email Archive service	No	Local	Intranet	All

5	Email Gateway service on Internet	No	Local	Internet	Hyderabad
6	Email Gateway service on Extranet	No	Local	Extranet	Hyderabad
7	Email to SMS gateway	No	Local	Intranet	Hyderabad
8	Intermediate Firewall configuration between Mail Gateways and Mail Service cluster at HQ	No			Hyderabad
9	Mail service on Active/Active cluster with Load Balancer in front of the cluster and Replicated Hierarchical Storage using NAS at Headquarters for 2000 users.	Yes	Network storage	Intranet	Hyderabad
10	Mail service with Active/ Passive cluster at Branch-1 for 500 users.	Yes	Local	Intranet	Pazhayakayal

- **k.** The mail servers on RailTel's Customer intranet, covered at sl. no. 1 above shall be isolated from the Internet. The Branch Mail servers covered at sl. nos 2 & 3 above shall exchange non-local mail with the mail server on RailTel's Customer intranet.
- E-Mail gateways shall be established for Internet and Extranet networks with Antispam, Antivirus, Encryption. The updation of necessary Antispam and Anti-virus on E-Mail gateway connected to Extranet network shall be offline and manually initiated.

**Inward mail handling on Internet:** Currently, Internet connectivity is taken from two ISP links and a Kaspersky Secure Mail Gateway (KSMG) is used on Internet with connection to one ISP link. The KSMG system shall be configured for connection to the other ISP link also, with necessary modifications of DNS server. All incoming mail will be initially accepted by the KSMG system and after scanning will be passed to Internet Mail Gateway.

**Outward mail handling on Internet:** All outgoing mail destined for hosts on Internet shall be routed by the Internet Mail Gateway, through either of the ISP links.

**Mail handling on Extranet:** All incoming and outgoing mail from/to Extranet sites shall be routed by the Extranet Mail Gateway.

- **m.** Licenses for KSMG are available with RailTel's Customer and Contractor (System-Integrator)'s responsibility shall be configuring the KSMG for connection to second ISP link. Any additional server grade NIC for this purpose, if required, shall be supplied by the Contractor (System-Integrator).
- n. Mail Server cluster at HQ shall receive mails from Mail Gateway(s) on Internet/Extranet and distribute to mailboxes of individual users on different servers. The connection for the mail exchange between mail server cluster and Internet-Mail Gateway shall be asynchronous. There shall not be any permanent data connectivity between the Internet Mail Gateway and Intranet. All the mail received from Internet shall be spooled on the Internet-Mail Gateway. Similarly, all the mail from internal users shall be spooled on the Intranet mail servers.

Both members of the Active/Active cluster for Intranet Mail service shall be configured to initiate connection with the Internet Mail Gateway, however at different intervals to avoid simultaneous connection. At the pre-set intervals, the corresponding Network Interface Card shall be enabled, and a connection will be initiated by the Intranet mail server with Internet-Mail Gateway.

An intermediate firewall appliance (to be configured by Contractor (System-Integrator)) configured to permit outgoing connections only shall be positioned between the Mail Server and Mail Gateways. The mail servers shall initiate connection to Internet-Mail Gateway periodically to exchange mail and shall terminate the connection immediately.

The mail exchange shall be by Pull mechanism, with Intranet mail servers pulling the mail from the Internet Mail Gateway. There shall not be any Push mechanism from Internet Mail Gateway to Intranet mail servers. The Active/Active E-Mail cluster at HQ will receive mail destined for branches and sends it onward to the branch mail servers.

Pulling of mail by the Intranet mail servers from the Internet Mail Gateway can be established by either of the following two techniques.

-UUCP over TCP

-POP3

It may be noted that the communication shall be asynchronous in nature. There shall not be any permanent connection. The pulled mail will be distributed by the mail servers to the mailboxes of users at Headquarters and to the branch mail servers for final distribution to the users at branches.

- **o.** Branch Mail servers deliver non-local (both within and outside domain) destined mails to Mail server cluster. Mail server cluster routes the mails for further delivery of mails.
- p. The Intranet e-mail system should provide anti-spamming capabilities which allow end users to classify messages as spam and not spam, create rules that handle future spam and nonspam message, review messages which are marked as spam.
- **q.** Mail destined to outside domain is delivered to Mail gateways based on predefined routes.
- **r.** The responsibility of spam prevention for mails originated over Internet/Extranet is on Mail Gateways. Antivirus scanning is performed on Mail Server and Mail Gateways.
- S. Cyber Security hardening of all software modules. This includes hardening of Operating Systems, hardening of cluster setup, hardening of MTA, hardening of MUA (Webmail), hardening of DBMS, hardening of Webserver, establishing of Host Firewall & suitable HIDS, Time Synchronization from RailTel's Customer's time server, Transferring system logs to a syslog server already in place. This list is indicative only and all standard hardening steps shall be included.

RailTel's Customer shall use leading vulnerability scanners and all reported issues that are relevant as determined by RailTel's Customer shall be fixed. The initial Cyber Security hardening shall be carried out by the contractor with a team comprising experts with CISSP/CEH and Red hat certifications possessing at least 5 years' experience.

The systems accessible over Internet shall be submitted by the Contractor (System Integrator) for penetration testing by CERT-In authorized agency for external threats. All issues reported shall be fixed by the Contractor (System-Integrator).

In addition, on a quarterly basis RailTel's Customer shall conduct Cyber Security vulnerability scan using leading vulnerability scanners and all reported issues that are relevant, as determined by RailTel's Customer shall be fixed, by onsite resident engineer with support of OEM.

**t.** The above Email infrastructure shall incorporate following features:

## i. High Availability/Redundancy:

- The Active/Active cluster with Load Balancer in front of the cluster at Headquarters should provide high availability and redundancy feature on email servers with replicated Network storage at RailTel's Customer, Hyderabad.
- 2. The Active/Active cluster shall support following features:
  - Comprehensive Load balancing mechanisms: Round Robin, URL, IP hashing
  - Cookies and stick tables to provide sessions persistence

- Advanced routing decisions: Based on URL, domain name, file extensions, Load on backend
- Stickiness/Persistence: Maintain user sessions based on TCP (Port/IP), HTTP information
- Extensive ACL system
- Advanced Health Checks: Multiple methods for checking backend health including ping, TCP connections
- Traffic and DDoS protection: Allows maximum connections to front end / backend and reject connections in excess. Advanced Application-based DDoS Protection: Block clients using multiple criteria, over a configurable time window (rate limiting); Anomalous behavior detection; Configurable blacklists
- Support reloading of configuration without losing /closing existing connections
- High Performance TLS/SSL with support for SSL/TLS termination
- HTTP/2 Support; Small Object Caching; Multi-threading
- Connection Buffering / Compression Support / Geo-location support
- HTTP Validation
- Support for popular TCP/UDP protocols including IMAP/SMTP/POP3/HTTP
- High Performance: Single-process, event driven model considerably reducing the cost of context switch and the memory usage, event checker, Zero Copy forwarding, Tree based Storage, Optimized HTTP header analysis.
- Session rate: 100,000 /s;
- 3. The Active/Passive E-Mail cluster at branches shall provide IP address failover as well as data replication using DRBD at the two branch locations. In case of failure of active mail server, failover to passive server shall happen within few seconds ensuring availability of alternate Mail Server on the LAN.
- 4. For all other servers in the e-mail setup High availability is not required.
- ii. <u>Mailbox Storage</u>: The storage system for Headquarters setup shall have following feature in storage system:
  - 1. Network storage Mail storage for e-mail server at RailTel's Customer, Hyderabad shall be on Network storage.
  - 2. Hierarchical Mail Storage The solution shall use hard disks in SSD and SAS available on Network storage to provide the following features. This configuration is in the scope of Contractor (System-Integrator).
  - 3. Inboxes and Sent-Items of all users which are less than a week old will be stored on SSD drives
  - 4. Inboxes, Sent-Items and Other mail folders of all users which are more than one week old will be stored on SAS drives.
  - 5. Archive storage will exist, and this will be on SAS. All folders other than Inbox and Sent-Items will be located on this portion.
  - Mail movement for first two bullet points above will be automated and user can either manually move mail from other folders to the Archive storage or use a mail filter for automated movement.
  - 7. Users will also be facilitated to establish mail filters to move mail automatically to the Archive storage.

- iii. **Archival Systems:** All e-mails sent and received by users shall be captured by archival mail servers and stored/archived in indexed and encrypted form. The system shall have following features:
  - 1. Facility to read all archived mails in read only mode by administrator Facility to read respective archived mails by email users.
  - Search facility on various parameters like mail-to, mail-from, date range, whether contains attachment with attachment type and searching certain keywords in body of messages and subject.
  - 3. Provide email users facility to search and restore mail in bulk from archive server to their respective mailboxes.
  - 4. The archival system shall employ data de-duplication to conserve storage space.
  - 5. The archival system shall provide web-based GUI solution capable of running on IE11 and later versions, Recent versions of Mozilla Firefox, Mozilla Firefox ESR 45.2.0 and Chrome browser. The browser-based solution shall provide above features.
- iv. **Policy enforcement:** System administrator shall be able to create Groups as per the IT/Email Policy/Internet-Access-Policy of RailTel's Customer and apply at the time of user creation and also modify later when user privileges are changed. It shall also allow creation of new, and deletion of old Groups based on requirements.

## The IT/Email Policy covers:

- Different disk quota limits for different user groups.
- Allow sending of attachments by privileged users to external domain email addresses.
- Some groups can only send mail internally.
- Only predefined user/group can post mails in Circular folder.
- Blocking receipt of certain email-attachment types.
- Allow users to access mails via different network protocols (HTTP, IMAP, POP3 or their available secure versions) based on category of User. For E.g.: A User may be allowed to access Email service only over POP3. Another User may access Email service over IMAP only. Some other User may have access privilege to access Email service over both POP3 and IMAP.
- Block mails coming from Internet to specified addresses and aliases on the Intranet mail system.

#### v. Security:

#### Email Servers

- 1. Authentication shall be enabled on all Email servers (excluding gateway servers) for sending/receiving/viewing mails by users using either IMAP or POP3 clients.
- All the Email servers excluding gateway servers shall be integrated with existing Active
  Directory servers on the respective LANs at RailTel's Customer for authentication.
  Active Directory configuration is not in scope of Contractor (System-Integrator). Anti
  Spoofing features are required on Email Servers.
- 3. Antivirus scanning capability shall be available. Antivirus software shall not be an Opensource software.

#### Email Gateway

- 4. It should support StartTLS encryption at gateway level.
- Anti-Virus & Anti-Spam scanning capability shall be available on Internet Mail Gateway.
   Antivirus & Anti-Spam shall not be an Open-Source software. Antispam should have
   Signature of Tenderer with seal

following features: Defense Against Junk Email, Bulk Mail Filtering, Outbound & Inbound Spam Filtering, Spam Quarantine, Quarantine and Release mail notification to user, Content filtering, Customized content filtering based on attachment, Proactive blocking of specified file types, pattern, Custom locking based on domain & IP address, Reputation based blocking – RBL.

- The following minimum list of Anti-spamming techniques shall be supported by Internet mail gateway:
- 6. Directory Harvest prevention
- 7. Reverse DNS, MX / A record check
- 8. Challenge-Response for False positive handling
- 9. Whitelisted / Blacklisted IP, Sender
- 10. Greylisting
- 11. Apply controls based on content, sender identification, sender domain, or other selectable parameters.
- 12. Apply controls based on the Sender ID framework as industry standard for the anti-spam initiative
- 13. The Mail Gateways shall be configured with Sender Policy Framework and Domain based Message Authentication, Reporting and Conformance (DMARC).
- vi. **Email to SMS Integration:** User shall be able to create filter on mail received. The summary of Emails (Subject, Sender, Date & Time), matching the above filter condition shall be forwarded by SMS to user's mobile. Supply of GSM/GPRS MODEM is in the scope of Contractor (System-Integrator). User shall also be able to send SMS via email using mail clients (web mail & outlook).
- vii. **Email Administration:** The solution shall provide unified GUI administration console for day-to-day maintenance activity like checking logs, disk quota management etc. The Administrator shall be a non "root" user and may carry out all administrative activity except deletion of user mailbox. The deletion capability should be available only with "root" account.
- viii. **Branch Admin Facility:** Admin consoles separately for e-mail are required to be provided for branch admin server for the two branches. All internal branch mails shall be processed at branch server itself and only external mails shall be routed to head office mail server. The interconnectivity is by means of private links. The branch mail server shall be able to use user- templates created by head-office mail administrator.
- ix. Backup/Restore: The solution should provide feature of backup and restore on Network storage and Tape Drive. Different types of backups based on requirement shall be configurable. E.g.: Daily backup, Weekly backup, Incremental backup, Full back up etc. Restoration of single user mailboxes with facility to select only specific folder shall be feasible.
- x. **Specific Requirement: Deliverables** for Software shall cover the following:
  - Supply of software on CD media and its licenses.
  - Supply of Installation procedure document for all the modules supplied or configured by Contractor (System-Integrator).
  - Installation, Configuration and Deployment of the offered solution.
  - Supply of neatly bound paper copy procedure manuals for all the configurations carried out by the Contractor (System-Integrator).

- Warranty period of 5 years from the date of go-live at all units. During the period, all patches/updates shall be supplied.
- Onsite support for 1 years by stationing resident engineer at RailTel's Customer (6-day week in General Shift 8:45 AM to 4:45 PM).

#### 2. Part-B: (Not in scope)

**a.** The Contractor (System-Integrator) shall establish following at RailTel's Customer:

S N	Description	High Availability	Storage	LAN	Location
1	Email service on Internet for 800 users	No	Local	Internet, accessible from outside	Hyderabad

- **b.** Supply, Installation and Commissioning of an e-mail system accessible over Internet with two factor authentication system. The authentication system shall challenge the user to enter username and password combination followed by entry of a key generated with an authenticator app. The key shall be changed every 30 seconds. The authenticator app shall be freely available on Google Play store and Apple store and shall be initialized with a preshared key provided by the Internet webmail application. The initial key can only be generated from local network and cannot be generated from outside the local network. The failed logins shall be sent to System Administrator through SMS/WhatsApp message. Any necessary APIs with appropriate licenses shall be supplied by Contractor (System Integrator).
- **c.** User shall be able access the Internet Email Server through a browser over https protocol and after successful two factor authentication, view/send/forward/delete mail.
- **d.** The Email server on Internet shall retain mails for a specified time period defined by Administrator on global basis.
- **e.** The system shall be located in Internet DMZ and shall be used to provide access to recently received mails from Internet.
- **f.** The server shall host a copy of mail received by Internet E-Mail Gateway from Internet and holds the same available for viewing for a specified time period defined by Administrator on global basis. All mail older than the specified period shall be automatically purged by the system without any user intervention.
- **g.** Whenever a user accesses this server and responds to a mail, a copy of such response should be sent to the internal mail server. For example, when a user replies to a mail on this server, the reply shall be sent to the Mail Gateway, which will, in addition to routing the mail onwards will also create a copy and send to the internal mail server.
- **h.** The MUA bundled in the mail server shall be compatible with browsers available on recent versions of Android and recent browsers available for Microsoft Windows.

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

#### 1.1 TENDERING INSTRUCTIONS:

The tender document duly signed and stamped/ digitally signed, complete in all respects shall be uploaded on ENIVIDA Portal. The Tenderer shall also enclose an undertaking in his offer indicating that he will accept all Terms and conditions of the tender document and have not offered any counter clauses. The bidder shall also upload the offer letter as per form -1

1.2 Tender Offer should be uploaded on ENIVIDA Portal on or before **15:00 hrs. on 27-01-2023**. The Tender will be opened on the same day at **15:30 hrs**. If it is happening to be a holiday, tender will be opened on the next working day.

#### 2.0 EARNEST MONEY:

The tenderer shall deposit earnest money along with the tender **online** in ENIVDA Portal:

Sl No	Description of work	Earnest Money (EMD) in Rs.
1	SUPPLY, INSTALLATION, CONFIGURATION AND DEPLOYMENT OF SERVERS AND HARDWARE FOR ENTERPRISE CLASS EMAIL SOLUTION FOR RAILTEL CUSTOMER AT HYDERABAD, PAZHAYAKAYAL & KOTA	4,82,600 /-

No bank guarantee for EMD is accepted. Earnest Money of unsuccessful Tenderers shall be returned & that of successful tenderer after supply and acceptance of the material and upon submission of valid SD/PBG. **Tenders without earnest money will be rejected.** However, Firms registered with NSIC under single point registration scheme, or any other body recognized by MSME are exempted from submission of EMD provided they are valid and in current. Copy of UDYAM certificate to be submitted along with tender bid.

No interest is allowed on this Deposit and RailTel Corporation reserves the right to forfeit the Earnest Money Deposit in case of failure on part of the contractor to fulfill the conditions of contract.

#### **Forfeiture of Earnest Money:**

When the tenderers withdrawn or revised his offer within the validity period, RailTel has the right to forfeit the Earnest Money Deposit.

Any tender not accompanied by Earnest Money in the approved forms as mentioned in above para will be **rejected\***.

2.1 Note: \* Firms registered with NSIC, or any other body specified by Ministry of MSME for the tendered supply/work/service is exempted from submission of EMD. These exemptions shall be applicable provided firms are registered with NSIC/MSME and registration is current and valid as per extant govt rules.

#### 3.0 Evaluation Criteria:

The Total all Inclusive Rate on FOR destination given in Schedule of Requirement, will be criteria for deciding the inter-se-position and consideration of offers against the Schedule of Requirements given in the Schedule.

**3.1 RATES DURING NEGOTIATION:** The tenderer/s shall not increase his/their quoted rates in case the RailTel Administration negotiates for reduction of rates. Such negotiations shall not amount to cancellation or withdrawal of the original offer and the rates originally quoted will be binding on the tenderer/s

## 4.0 SECURITY DEPOSIT (SD):

The security deposit amount will be equal to 5% of contract value for due fulfillment of the contract.

The amount towards SD shall be recovered from the contractor's "on account" bills as under: The Security Deposit @ 5% of work order value will be recovered from the Running account bills as well as final bill of the contract till full SD is covered and will be released **after three months** from the date of completion of warranty period.

No interest will be payable upon the Security Deposit

#### 5.0 PERFORMANCE BANK GUARANTEE (PBG)

The tenderer is required to submit a Performance Bank Guarantee (PBG) within 30 days of the issue of LOA/Purchase order @ 3% of the value of the LOA/PO for the satisfactory performance of materials covered in SOR valid for a period of 8 months from the date of issue of LOA. The Performa for PBG is given in form 3. If the delivery period gets extended, the PBG should also be extended appropriately.

- 5.1 The value of PBG to be submitted by the Contractor will not change for variation up to 25% (either increase or decrease). In case during execution, value of the contract increases by more than 25% of the original contract value, an additional Performance Guarantee amounting to 5% (five percent) for the excess value over the original contract value shall be deposited by the Contractor. On the other hand, if the value of contract decreases by more than 25% of the original contract value, performance Guarantee amounting to 5% (five percent) of the decrease in the contract value shall be returned to the Contractor. The PBG amount in excess of required PBG for decreased contract value, available with RailTel, shall be returned to Contractor as per his request duly safeguarding the interest of railways.
- **5.2** The procedure for obtaining Performance Guarantee is outlined below: -

Extension of time for submission of PBG beyond 31 days and up to 60 days from the date of issue of LOA may be granted subject to the conditions that a penal interest of 15% per annum of the amount of BG shall be charged for the period of delay beyond 21 days i.e., 31st day after date of issue of LOA. In case the successful bidder is not able to submit PBG, the successful bidder will have options to submit this amount in the form of Demand Draft. In case the successful bidder fails to submit the requisite PBG even after 60 days from the date of issue of LOA, the contract shall be terminated duly en-cashing PBG submitted for empanelment and other dues, if any payable against that contract and further action shall be taken as per conditions of empanelment with RailTel.

Whenever the contract is rescinded, the Performance Bank Guarantee shall be en-cashed the balance work shall be got done independently without risk and cost of the failed contractor. The failed contractor shall be debarred from participating in the tender for executing the balance work. If the failed contractor is a JV or partnership firm, then every member or partner of such a firm shall be debarred from participating in the tender for the balance work either in his/her individual capacity or as a partner of any other JV/Partnership firm.

Note: if BG submitted, a separate advice of the BG will invariably be sent by the BG issuing bank to the RailTel's bank through SFMS and only after this the BG will become acceptable to RailTel. It is therefore in own interest of bidder to obtain RailTel's bank IFSC code, its branch and address and advise these particulars to the BG issuing bank and request them to send advice of BG through SFMS to the RailTel's Bank. The bank details of RailTel, Secunderabad is enclosed at Chapter IV Forms.

The Performance Bank Guarantee will bear no interest.

## 6.0 GENERAL

- **6.1** All corrections and over-writing must be attested.
- **6.2** The Tenderer should read the conditions carefully and see the schedule of requirement and technical specifications before submitting the offer.

No counter conditions for the clauses laid down will be permitted. Such offers are liable for rejections without intimation. In all matters of dispute, the decision of the Executive Director, Southern Region, Secunderabad shall be final and binding.

- **6.3** Tenderer while quoting may specifically note the following:
  - a) Price breakup has to be given as per SOR.
  - b) During the course of Supply, any statutory variation in taxes / duties shall be to RailTel account and shall be admissible on production of valid documentary evidence. Tenderer may submit the taxes / duties' structure considered by him while quoting the rates.
- **6.4** Firm representative may visit the site and may acquaint themselves with the site conditions before quoting.
- Services like water and power supply, being required minimal, will be provided free of cost. You have to make your own arrangements, without claiming any extra cost to department, to draw the water and power supply from the scheduled available point near work site at RAILTEL CUSTOMER Hyderabad.
- 6.6 Pre-award discussions will be held with the lowest bidder for finalizing other terms and conditions of the contract.
- 6.7 The quoted value shall be inclusive of onsite warranty support, ESI, EPF, GST and any other mandatory duties and levies of the Government. Documentary evidence for this shall be provided along with the bills. No advance money will be given.
  - a. Firm shall provide the compliance statement for each item specification indicating adherence to it. Firm shall indicate Make/Model offered and provide technical information and datasheet/brochure and/or any documentary proof for this.
  - b. The firm shall also produce a letter from OEMs (Switching OEMs) on their letter head that they will be responsible for proper installation and satisfactory support during warranty period in case order is placed on the firm
- **Safety Requirement of Contract:** Bidder shall agree to do works as per guidance of Safety Engineer Department of RAILTEL CUSTOMER. Tentative Guidelines are given below for reference.
  - a. Submission of Lab Reports & Medical Fitness Certificate from at least MBBS Doctor for each Onsite Staff before providing access to premises.
  - Submit all tools, ladders, and accessories for inspection by safety Engineer, RAILTEL CUSTOMER immediately after bringing at site.
  - c. Safety compliance:
    - All contract workers should always wear PPE's suitable for the hazard.
    - Attend Safety Training Provided by RAILTEL CUSTOMER.
    - Should restrict themselves to concerned area only.
    - Follow work specific do's and don'ts given by EIC.
- 6.9 Addenda / Corrigenda to the tender documents may be issued by RailTel prior to the date of opening of the tenders, to clarify or reflect modifications in the contract terms and conditions or in the design. Such addendum/corrigendum shall be available on RailTel web site www.railtelindia.com and ENIVIDA Portal only. Tenderers who are unable or unwilling to bring their tenders to conform to the requirements of the RailTel are liable to be rejected.
- **Ambiguity**: If there is any ambiguity or doubt as to the meaning of any of the tender clauses/ conditions or if any additional information required, the matter should immediately be referred to the RailTel in writing.
- 6.11 The contractor shall furnish Indemnity Bond for a sum equal to the cost of materials proposed to be taken by him. The quantity of materials that shall be given by the RailTel at any time shall not exceed the value of Indemnity Bond that is furnished by the Contractor.
- 6.12 CONSTITUTION OF FIRM AND POWER OF ATTORNEY

Any individual(s) signing the tender or other documents connected there with should specify whether he is signing: -

- **1.** As sole proprietor of the concern or as attorney of the sole proprietor;
- **2.** As a partner or partners of the firm;
- 3. As a Director, Manager or Secretary in the case of Limited Company duly authorized by a

resolution passed by the Board of Directors or in pursuance of the authority conferred by Memorandum of Association. In the case of a firm not registered under the Indian Partnership Act, all the partners or the attorney duly authorized by all of them should sign the tender and all other connected documents. The original Power of Attorney or other documents empowering the individual or individuals to sign should be furnished to the Purchaser for verification, if required.

RailTel will not be bound by Power of Attorney granted by the tenderer or by the changes in the composition of the firm made subsequent to the execution of the contract agreement.

In case where the Power of Attorney partnership deed has not been executed in English, the true and authenticated copies of the translation of the same by Advocate, authorized translators of Courts and Licensed Petition Writers should be supplied by the Contractor(s) while tendering for the work.

Power of Attorney, Partnership Deed, Memorandum of Joint Venture as the case may be in original or duly signed.

#### 7.0 Clause Wise Compliance:

Clause wise compliance statement of the technical specifications and commercial terms & conditions shall be enclosed with the offer along with technical literature of the material and other documents in support of relevant clauses. The tender document issued by RailTel should be signed on each page along with stamp of the company/firm and should be submitted along with bid.

**8.0 Delivery Period**: The material should be supplied within **150 days** from the date of issue of Purchase Order/LOA.

#### 9.0 Provenness of the material / equipment supplied:

In order to enable the Purchase to assess the Provenness of the materials offered, the bidder shall provide documentary evidence regarding the materials being offered by him.

#### 10.0 WARRANTY PERIOD:

The materials should be warranted as per Technical Specification in Chapter-III.

The bidder shall warrant that stores to be supplied shall be new and free from all defects and faults in material, workmanship and manufacture and shall be of the highest grade and consistent with the established and generally accepted standards of material of the type ordered and shall perform in full conformity with the specifications and drawings. The contractor shall be responsible for any defects that may develop under the conditions provided in tender and under proper use, arising from faulty materials design or workmanship such as corrosion, inadequate quantity of material to meet requirements, inadequate protection, deficiencies in circuit design and / or otherwise and shall remedy such defects at his own cost when called upon to do so by the Purchaser who shall state in writing in what respect the stores are faulty.

If it becomes necessary for the contractor to replace or renew any defective portion/portions of the material under this clause, the provisions of the clause shall apply to the portion/portions of the material so replaced or renewed or until the end of the above mentioned period of twenty four months, whichever may be later, if any defect is not remedied within a reasonable time, the Purchaser may proceed accordingly at the contractor's risk and expenses, but without prejudice to any other rights which the Purchaser may have against the contractor in respect of such defects.

Replacement under warranty clause shall be made by the contractor free of all charges at site including freight, insurance, and other incidental charges.

#### 11.0 TERMS OF PAYMENT

RailTel shall issue ERP Purchase Order as per Consignee of the Material.

The Payment Terms shall be back-to-back with RailTel customer. However, the payment shall be made to the bidder within 2-3 weeks after receipt of the payment from RAILTEL CUSTOMER. The payment clause of the RAILTEL CUSTOMER is given below.

## i) Supply of items:

**Hardware & Software:** 50% of the Supply value after supplying the materials to the site & acceptance. Balance after successful completion of work.

ii) Installation & Commissioning: After successful completion of work.

**Note:** System Integrator has to co-ordinate with the end customer and other SI to ensure smooth functioning of the entire solution as per tender document to the satisfaction of RailTel end customer.

Following documents shall be submitted while processing of payment.

- **I.** GST Compliant Tax Invoice in original.
- II. Delivery Challan
- III. Consignee Inspection Certificate.
- IV. Warranty Certificate of OEM
- V. Copy of PBG
- VI. Insurance Certificate
- **VII.** Acceptance Certificate by RAILTEL CUSTOMER
- **12.0 Paying Authority:** Bill Passing Officer is GM/TM Respective Territory of Region & bill paying officer are Associated Finance of region. s
- **GST No**: GST& Pan details to be mentioned on the bill for arranging payment.
- 14.0 Taxes & Duties

#### 15.0 Unit Rate, Taxes & Duties

- i. The price quoted in the offer should be firm, fixed indicating the breakup and inclusive of all taxes & duties like import, custom, Anti-Dumping, CGST, SGST, IGST, UTGST etc. The offer should be inclusive of packing, forwarding, freight up to destination, insurance charges.
- **ii.** Bidder shall issue a valid tax invoice to RailTel for availing proper credit of CGST, SGST, IGST, UTGST in case of award of contract. GST will not be reimbursed in the absence of valid tax invoice.
- **iii.** For all the taxable supplies made by the vendor, the vendor shall furnish all the details of such taxable supplies in the relevant returns to be filed under GST Act.
- **iv.** If the vendor fails to comply with any of the above, the vendor shall pay to purchaser any expense, interest, penalty as applicable under the GST Act.
- **v.** In case of incorrect reporting of the supply made by the vendor in the relevant return, leading to disallowance of input credit to purchaser, the vendor shall be liable to pay applicable interest under the GST Act to the credit of purchaser. The same provisions shall be applicable in case of debit/credit notes.
- **vi.** Tenderer shall quote all-inclusive rates, but there shall be break up of basic price and all type of applicable taxes such as SGST, CGST, IGST, UT GST along with respective HSN/SAC code under GST Law (including tax under reverse charges payable by the recipient)
- **vii.** Wherever the law makes it Statutory for the purchaser to deduct any amount towards GST at sources, the same will be deducted and remitted to the concerned authority.
- **viii.** In regard to works contract, the tenderer should have registration no for GST in respective State where work is to be executed and shall furnish GST registration certificate along with Tender.
- ix. The imposition of any new tax and /or increase in the aforesaid taxes, duties levies after the last stipulated date for the receipt of tender including extensions if any and the bidder thereupon necessarily and properly pays such taxes/ levies / Cess, the bidder shall be reimbursed the amount so paid, provided such payments, if any, is not, in the opinion of

RailTel attributable to delay in execution of work within the control of bidder. The bidder shall, within a period of 30 days of the imposition of any such tax or levy or Cess, give a written notice thereof to RailTel that the same is given pursuant to this condition, together with all necessary information including details of input credit relating thereto. In the event of non-payment/ default in payment of any of the above taxes, RailTel reserves the right to with-hold the dues / payments of bidder and make payment to State / Central Government authorities as may be applicable. However, if the rates are reduced after the last stipulated date of tender, bidder has to pass on the benefits to RailTel.

- **x.** In case of imported equipment: Anti-dumping duty if applicable on the equipment proposed to be supplied by OEM/Tenderer as per extant instructions of Ministry of Commerce/Finance Government of India has to be borne by the tenderer and shall be deducted from the amount payable to the bidder at the time of making payment to the firm if this duty amount is paid to Custom Authority by RailTel.
- **xi.** Evaluation Criteria: inter se position of the offers will be determined on total unit rate on CIP destination basis which will include basic rate, custom duty GSST, SGST, IGST, GST, freight, insurance and any other charge or cost quoted by the tenderer, including GST payable.
  - On reverse charge by RailTel, wherever applicable.
- **XII.** However, if the extension of contract period is on account of failure of contractor, no compensation shall be made towards upward revision or imposition of any new taxes. Any benefit on account of downward revision of duty either in original contract period or during the extended contract period shall be passed on by the contractor to RailTel.

Note: "In case the successful tenderer is not liable to be registered under CGST/IGST/UTGST/SGST Act, the RailTel shall deduct the applicable GST from his/their bills under reverse charge mechanism (RCM) and deposit the same to the concerned tax authority."

- **16.0 Others:** The details / proof of payment of GST on materials supplied to RailTel if paid shall be furnished along with the invoice. If not paid, a declaration may be furnished.
- **17.0 Transportation: The** rates quoted should be F.O.R. destination.
- **18.0 Statutory Deduction:** These will be made at source as per the rules prevalent in the area of work.

#### 19.0 Liquidated Damages

The timely delivery is the essence of this project. Liquidated damages will be applicable at the rate of (0.5%) half percent per week or part thereof for undelivered portion subject to a maximum of **10% of the cost of supply**. RailTel will have the right to cancel the order, place order on alternative source at risk & cost of the supplier besides levying the LD.

LD shall be imposed back-to-back as per with M/s RAILTEL CUSTOMER.

#### 20.0 Purchaser's Right to Vary Quantities

The Purchaser reserves the right to increase or decrease by up to 25% (i.e., 75% to 125% quantity) of the quantity of goods and services specified in the Schedule of Requirements without any change in unit price of the ordered quantity or other terms and conditions during currency of the contract. 12 / 18 The prices for variation quantity above 125% of the original quantity shall be as follows: Variation of quantity from 125% to 140% will be 2% rebate on unit price and above 140% to 150% shall be with 4% rebate on unit price.

### 21.0 Purchaser's Right to accept any Bid and to reject any or all Bids

The Purchaser reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids, at any time prior to award of contract without assigning any reason whatsoever and without thereby incurring any liability to the affected bidder or bidders on the grounds for the Purchaser's action.

#### 22.0 Annulment of Award - Deleted

## 23.0 UNITPRICES: covered at para 15 above

#### 24.0 Offer letter and Validity of Offer

The bidder shall complete the offer letter and the price schedule furnished in the bid documents, indicating the goods to be supplied, description of the goods, associated technical literature, quantity, and prices etc. For the items not manufactured by bidders, the authorization from original manufacturer should be enclosed.

The offer should remain valid for a period of 20 days from the date of opening.

#### 25.0 Inspection:

Pre-shipment/pre-dispatch inspection shall be carried out at manufacturer's / supplier's site by authorized representative of RailTel's/Inspecting Authority or as decided by RailTel executive or RailTel End Customer representative. Travelling, lodging & boarding expenses of RailTel's representative and charges for 3<sup>rd</sup> party inspection, if any, shall be borne by RailTel but necessary facilities if but necessary facilities to carry out tests/ witness inspection shall be provided by the manufacturer's / supplier's, free of cost

Along with inspection call, the manufacturers / suppliers shall submit details of test procedures, test program, test parameters together with permitted values, etc., and their Quality Assurance plan.

In case material fails during inspection, the same shall be replaced, free of cost, by manufacturer's / suppliers. In such case, total cost of re-inspection including travel, lodging & boarding of the inspecting officials shall be to manufacturer's / supplier's account.

RailTel may, if decided by competent authority, waive off the pre-dispatch inspection on submission of necessary QA documents.

Nominated RailTel Engineer will issue inspection certificate of successfully completion of the test/inspection.

#### 26.0 Consignee Details:

Consignee: The Consignee Locations is at RAILTEL CUSTOMER.

#### 27.0 FORCE MAJEURE CLAUSE:

If at any time during continuance of this Contract, the performance, in whole or part, by either party, of any obligation under this contract shall be prevented or delayed by reason of any war, hostility, act of the public enemy, Civil Commotion, Sabotage, Fires, Floods, Earth quakes, explosions, strikes, epidemics, quarantine, restrictions lockouts, any statute, statutory rules, regulations, order of requisitions issued by any Government Department or Competent Authority or acts of God (here-inafter referred to as event) then provided notice of the happening of any such, event is given by either party to the other within twenty one days from the date of occurrence thereof neither party shall by reason of such event be entitled to terminate this Contract nor shall either party have any claim for damage against the other in respect of such non-performance or delay in performance, and the obligations under the Contract shall be resumed as soon as practicable after such event has come to an end or ceased to exist, PROVIDED FURTHER that if the performance in whole or part of any obligation under this contract is prevented or delayed by reason of any such event beyond a period as mutually agreed to by the RailTel and the Contractor after any event or 60 days in the absence of such an agreement whichever is more, either party may, at its option, terminate the Contract provided also that if the contract is so terminated under this clause the RailTel may, at the time of such termination, take over from the Contractor at prices as provided for in the contract, all works executed or works under execution.

**28.0 ARBITRATION:** Any dispute or difference whatsoever arising between the parties out of or relating to the construction, meaning, scope, operation or effect of this contract or the validity or the breach thereof shall be settled by a sole arbitrator in accordance with provisions contained in Arbitration and Conciliation Act, 1996.

- a) The sole arbitrator shall be appointed by the Managing Director of RailTel Corporation of India Limited. It is expressly understood between the parties that no objection shall be raised at any time after execution hereof to the appointment of the arbitrator by the Managing Director of RailTel Corporation of India Limited including that the person appointing the arbitrator is connected to and /or employed with the RailTel Corporation of India Limited.
- b) The Venue of the arbitration shall be Secunderabad (India). The arbitration proceedings shall be conducted in English and cost of the arbitration shall be borne between the parties in equal proportion.
- c) The Arbitrator shall give a reasoned award, which shall be binding on the parties.

#### 29.0 TERMINATION OF CONTRACT:

RailTel reserves the right to interrupt and terminate the contract at any time, should in RailTel's opinion, the cessation of work become necessary, owing to paucity of funds of the Contractor, the Contractor's apparent inability to perform, non-procession of equipment and tools required for the work or defective and mal-functioning equipment, inability to provide men and material or for any other cause deemed reasonable. In such case, the value of approved materials utilized at site and of certified and accepted work done to date by the Contractor shall be paid for in full at the rates specified in the Contract subject to the clause of Liquidated damages contemplated herein. All such materials become the property of the RailTel. Notice in writing from the RailTel of such termination and reason thereof shall be conclusive evidence of taking over of works from the contractor. The security deposit will be forfeited in such case of termination.

#### 30.0 GOVERNING LAWS:

This contract shall be interpreted in accordance with the laws of India. The courts at New Delhi shall have exclusive jurisdiction to entertain and try all matters arising out of this contract

#### 31.0 TERMINATION FOR INSOLVENCY:

The purchaser may at any time terminate the order/contract by giving written notice to the supplier, without compensation to the supplier, if the supplier becomes bankrupt or otherwise insolvent as declared by the competent court provided that such termination will not prejudice or affect to the Purchaser.

#### 32.0 FALL BACK CLAUSE:

The order / contract, if and when placed, will be subject to following fallback clause:

- b. The price quoted by the supplier should not be higher than the maximum price, if any, for the materials and the same shall not be higher than the price usually charged by the supplier for materials of the same nature, class, or description to any other purchaser.
- c. The price charged for the materials supplied under the order/contract by the supplier shall in no event exceed the lowest price at which the supplier sells the materials of identical description to any other person during the period till performance of all supply orders placed during the currency of the contract is completed. If at any time during the period the supplier reduced the sale price of such materials or sells such materials to any other person including his dealers at a price lower than the price chargeable under the contract, he shall forthwith notify such reduction or sale to the purchase and the price payable under the contract for these materials supplied after the date of coming into forced of such reduction or sale shall stand correspondingly reduced.
- d. If it is discovered that the supplier has contravened the above conditions, then without prejudice to any other action which might be taken against him, it shall be lawful for the purchaser to terminate the order/contract and purchase the materials at the risk and cost of the supplier and in that event the provision of general conditions of tender shall, as far as possible, be applicable or recover the loss.
- e. The contractor shall furnish the following certificate to the concerned account officer along with each bill for payment of suppliers made against the order/contract.

"I/We certify that there has been no reduction in sale price of the stores of description identical to the stores supplied to the Government under the contract herein and such stores have not been offered/sold by me/us to any person/organization including the purchaser or any Department of

Central Government or any Railway Office or any Railway Undertaking as the case may be up to the date of bill/the date of completion of supplies against all supply orders placed during the currency of the order/contract at a price lower than the price charged to the RailTel, Southern Region, under the contract."

## 33.0 GST: covered in para 13 above.

#### 34.0 Make in India clause:

The provisions of Public Procurement (Preference to Make in India), Order-2017 dt. 15.06.2017 (or subsequent revisions, if any) is applicable or latest.

Office Memorandum dated 19.02.2020 (or latest) issued by Department of Telecommunications, Ministry of Communications shall be applicable for Clause 10 (d) of public procurement (Preference to Make in India) Order, 2017.

#### 35.0 Compliance of Restrictions under Rule 144 (xi) of GFR 2017 or latest:

Restrictions on procurement from a bidder of a country which shares a land border with India.

- I. Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority.
- II. "Bidder" (Seller / Service Provider) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.
- **III.** "Bidder from a country which shares a land border with India" for the purpose of this Order means:
  - a. An entity incorporated, established, or registered in such a country; or
  - **b.** A subsidiary of an entity incorporated, established, or registered in such a country; or
  - **c.** An entity substantially controlled through entities incorporated, established, or registered in such a country; or
  - **d.** An entity whose beneficial owner is situated in such a country; or
  - e. An Indian (or other) agent of such an entity; or
  - **f.** A natural person who is a citizen of such a country; or
  - **g.** A consortium or joint venture where any member of the consortium or joint venture falls under any of the above
- **IV.** The beneficial owner for the purpose of (iii) above will be as under:
  - 1. In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercises control through other means. Explanation
    - **a.** "Controlling ownership interest" means ownership of or entitlement to more than twenty-five per cent. of shares or capital or profits of the company;
    - **b.** "Control" shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholders agreements or voting agreements;
  - **2.** In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;
  - **3.** In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals;
  - **4.** Where no natural person is identified under (1) or (2) or (3) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;
  - **5.** In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.
- **V.** An Agent is a person employed to do any act for another, or to represent another in dealings with third person.

- **VI.** The successful bidder shall not be allowed to sub-contract works to any contractor from a country which shares a land border with India unless such contractor is registered with the Competent Authority.
- **VII.** Any false declaration and non-compliance of the above would be a ground for immediate termination of the contract and further legal action in accordance with the laws.

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# RAILTEL/E-TENDER/LT/SR/SC/2022-23/164 Chapter-III

## **Technical Specifications**

Name of the work: SUPPLY, INSTALLATION, CONFIGURATION AND DEPLOYMENT OF SERVERS AND HARDWARE FOR ENTERPRISE CLASS EMAIL SOLUTION FOR RAILTEL CUSTOMER AT HYDERABAD, PAZHAYAKAYAL & KOTA.

#### **Detailed Technical Specifications**

#### 1. Specifications of hardware - Type I Servers

#### Make: Dell, Model: Power Edge 750

Dual Socket Server in 2U Rack Form Factor as per following Specifications or better.

- a. Form Factor: 2U size with necessary rack mount accessories & Cable Management Arm.
- **b.** CPU Processor: 2 Nos of Intel Xeon Silver 12 Core CPU; 2.1GHz or better; Intel Compatible chipset motherboard;
- **c.** Memory: 128 GB (8 x 16GB) DDR4 ECC RAM with Memory protection.
- **d.** Hardware RAID controller, supporting RAID 0,1,5 with at least 2GB of NV Cache.
- **e.** 2 Nos of 1.6TB Enterprise NVMe Mixed Use Drive. Hard Drives configured in two volumes of RAID-1 sets. One set shall be used for Operating System and the other shall be used for data.
- **f.** NICs: 4 Nos (2X2) of Ethernet 1Gbps with teaming support.
- g. Interfaces: At least two USB Ports.
- **h.** Dual, Hot-plug and Redundant Power Supply with IEC C14-IEC C13 power cords.
- i. Internal Optical Drive: DVD+/-RW.
- j. Monitor 30 Inch LED with built-in speakers.
- k. Operating System compatibility: Microsoft Windows Server 2016, RHEL
- **1.** Comprehensive Onsite warranty for 5 years.

- Supplied Servers shall meet or exceed detailed Item Description given above.
- The servers shall be certified by Microsoft for Windows Server and Certified for RHEL.
- Contractor (System-Integrator) is required to provide Onsite Comprehensive Warranty for 5 years
  at RailTel's Customer Hyderabad. The warranty support shall be on Next Business Day basis from
  date of complaint registration. Defective components other than hard disks will be returned on
  replacement by new parts. However, the Contractor (System-Integrator) must replace defective
  hard disks with new hard disks without demanding return of defective hard disks.
- The scope covers installation of Operating System and configuration of Virtualization on the Server. Contractor (System-Integrator) is required to submit paper copy procedure for installation of operating system and Virtualization Service on the server. Required Operating System either CentOS or compatible will be provided by RailTel's Customer.

## 2. Specifications of hardware - Type I Servers with Tape

#### Make: Dell, Model: Power Edge 750

Dual Socket Server in 2U Rack Form Factor as per following Specifications or better.

- a. Form Factor: 2U size with necessary rack mount accessories & Cable Management Arm.
- **b.** CPU Processor: 2 Nos of Intel Xeon Silver 12 Core CPU; 2.1GHz or better; Intel Compatible chipset motherboard;
- c. Memory: 128 GB (8 x 16GB) DDR4 ECC RAM with Memory protection.
- d. Hardware RAID controller, supporting RAID 0,1,5 with at least 2GB of NV Cache.
- **e.** 2 Nos of 1.6TB Enterprise NVMe Mixed Use Drive. Hard Drives configured in two volumes of RAID-1 sets. One set shall be used for Operating System and the other shall be used for data.
- f. NICs: 4 Nos (2X2) of Ethernet 1Gbps with teaming support.
- g. Interfaces: At least two USB Ports.
- h. Dual, Hot-plug and Redundant Power Supply with IEC C14-IEC C13 power cords.
- i. Internal Optical Drive: DVD+/-RW.
- j. External LTO Ultrium 8 tape drive with 6 Gbps SAS interface
- k. Operating System compatibility: Microsoft Windows Server 2016, RHEL
- I. Comprehensive Onsite warranty for 5 years.

- Supplied Servers shall meet or exceed detailed Item Description given above.
- The servers shall be certified by Microsoft for Windows Server and Certified for RHEL.
- Contractor (System-Integrator) is required to provide Onsite Comprehensive Warranty for 5 years
  at RailTel's Customer Hyderabad. The warranty support shall be on Next Business Day basis from
  date of complaint registration. Defective components other than hard disks will be returned on
  replacement by new parts. However, the Contractor (System-Integrator) must replace defective
  hard disks with new hard disks without demanding return of defective hard disks.
- The scope covers installation of Operating System and configuration of Virtualization on the Server. Contractor (System-Integrator) is required to submit paper copy procedure for installation of operating system and Virtualization Service on the server. Required Operating System either CentOS or compatible will be provided by RailTel's Customer.

## 3. Specifications of hardware - Type II Servers

#### Make: Dell, Model: Power Edge 750

Dual Socket Server in 2U Rack Form Factor as per following Specifications or better.

- a) Form Factor: 2U size with necessary rack mount accessories and Cable Management Arm.
- b) CPU Processor: 2 Nos of Intel Xeon Silver 12 Core CPU; 2.1GHz or better; Compatible chipset motherboard.
- c) Memory: 64 GB (4 x 16GB) DDR4 ECC RAM with Memory protection.
- d) Hardware RAID controller should support Raid 0, 1, 5 and have at least 2GB of NV Cache.
- e) Hard Disk: 9 Nos. of SAS 900GB 15K RPM, 12Gbps and 2.5in Hot-plug Hard Drives configured in RAID-5 set, with one disk acting as hot spare.
- f) NICs: 4 nos. (2X2) of Ethernet 1Gbps with teaming support.
- g) Interfaces: At least four USB Ports.
- h) Power supply: Dual, Hot-plug and Redundant Power Supply with IEC C14 IEC C13 power cords.
- i) Internal Optical Drive: DVD+/-RW.
- i) Monitor: 24 Inch LED.
- k) Operating System compatibility: Microsoft Windows Server 2016, RHEL
- I) Comprehensive Onsite warranty for 5 years.

- Supplied Servers shall meet or exceed detailed Item Description given above.
- The servers shall be certified by Microsoft for Windows Server and Certified for RHEL.
- Contractor (System-Integrator) is required to provide Onsite Comprehensive Warranty for 5 years at RailTel's Customer Hyderabad. The warranty support shall be on Next Business Day basis from date of complaint registration. Defective components other than hard disks will be returned on replacement by new parts. However, the Contractor (System-Integrator) must replace defective hard disks with new hard disks without demanding return of defective hard disks.
- The scope covers installation of Operating System and configuration of Virtualization on the Server. Contractor (System-Integrator) is required to submit paper copy procedure for installation of operating system and Virtualization Service on the server. Required Operating System either CentOS or compatible will be provided by RailTel's Customer.

#### 4. Specifications of hardware - Type II Server with Tape

#### Make: Dell, Model: Power Edge 750

Dual Socket Server in 2U Rack Form Factor as per following Specifications or better.

- a) Form Factor: 2U size with necessary rack mount accessories and Cable Management Arm.
- b) CPU Processor: 2 Nos of Intel Xeon Silver 12 Core CPU; 2.1GHz or better
- c) Intel Compatible chipset motherboard, with expansion port to connect an external SAS LTO-8 tape drive with 6 Gbps SAS interface.
- d) Memory: 64 GB (4 x 16GB) DDR4 ECC RAM with Memory protection.
- e) Hardware RAID controller should support Raid 0, 1, 5 and have at least 2GB of NV Cache.
- f) Hard Disk: 9 Nos. of SAS 900GB 15K RPM, 12Gbps and 2.5in Hot-plug Hard Drives configured in RAID-5 set, with one disk acting as hot spare.
- g) NICs: 4 nos. (2X2) of Ethernet 1Gbps with teaming support.
- h) Interfaces: At least four USB Ports.
- i) Dual, Hot-plug and Redundant Power Supply with IEC C14 IEC C13 power cords.
- j) Internal Optical Drive: DVD+/-RW.
- k) Monitor: 24 Inch LED.
- 1) External LTO Ultrium 8 tape drive with 6 Gbps SAS interface
- m) Operating System compatibility: Microsoft Windows Server 2016, RHEL
- n) Comprehensive Onsite warranty for 5 years.

- Supplied Servers shall meet or exceed detailed Item Description given above.
- The servers shall be certified by Microsoft for Windows Server and Certified for RHEL.
- Contractor (System-Integrator) is required to provide Onsite Comprehensive Warranty for 5 years
  at RailTel's Customer Hyderabad. The warranty support shall be on Next Business Day basis from
  date of complaint registration. Defective components other than hard disks will be returned on
  replacement by new parts. However, the Contractor (System-Integrator) must replace defective
  hard disks with new hard disks without demanding return of defective hard disks.
- The scope covers installation of Operating System and configuration of Virtualization on the Server. Contractor (System-Integrator) is required to submit paper copy procedure for installation of operating system and Virtualization Service on the server. Required Operating System either CentOS or compatible will be provided by RailTel's Customer.

#### 5. Specifications of hardware - Type III Servers

#### Make: Dell, Model: Power Edge 750

Dual Socket Server in 2U Rack Form Factor as per following Specifications or better.

- a) Form Factor: 2U size with necessary rack mount accessories and Cable Management Arm.
- b) CPU Processor: 2 Nos of Intel Xeon Silver 12 Core CPU; 2.1GHz or better; Intel Compatible chipset motherboard.
- c) Memory: 64 GB (4 x 16GB) DDR4 ECC RAM with Memory protection.
- d) Hardware RAID controller should support Raid 0, 1, 5 and have at least 2GB of NV Cache.
- e) Hard Disk: 2 Nos of 1.6TB Enterprise NVMe Mixed Use Drive configured in two volumes of RAID-1 set. The Operating System shall be installed on one set and the other set shall be data.
- f) NICs: 4 nos. (2X2) of Ethernet 1Gbps with teaming support.
- g) Interfaces: At least four USB Ports.
- h) Power supply: Dual, Hot-plug and Redundant Power Supply with IEC C14 IEC C13 power cords.
- i) Internal Optical Drive: DVD+/-RW.
- j) Operating System compatibility: Microsoft Windows Server 2016, RHEL
- k) Comprehensive Onsite warranty for 5 years.

- Supplied Servers shall meet or exceed detailed Item Description given above.
- The servers shall be certified by Microsoft for Windows Server and Certified for RHEL.
- Contractor (System-Integrator) is required to provide Onsite Comprehensive Warranty for 5 years
  at RailTel's Customer Hyderabad. The warranty support shall be on Next Business Day basis from
  date of complaint registration. Defective components other than hard disks will be returned on
  replacement by new parts. However, the Contractor (System-Integrator) must replace defective
  hard disks with new hard disks without demanding return of defective hard disks.
- The scope covers installation of Operating System and configuration of Virtualization on the Server. Contractor (System-Integrator) is required to submit paper copy procedure for installation of operating system and Virtualization Service on the server. Required Operating System either CentOS or compatible will be provided by RailTel's Customer.

#### 6. Supply of hardware for E-Mail system management stations

Make: Dell, Model: OptiPlex 7000 Tower

Workstation Server with following or better specs:

Make: Dell, HP

Form factor: Mini Tower

Processor: 8th Generation Intel Core i7-8700 with Intel® UHD Graphics 630

Chipset: Intel

Memory: 2 x 8 GB DDR4

Management: Server management software

**Network connectivity:** Ethernet 2 x 1Gbps

Ports: At least 2 USB

Storage: 2 x 1TB SATA HDD

Operating System: Microsoft Windows 10 Pro 64

Input Devices: USB Optical Mouse and Slim Keyboard

Network interface: LAN and Wi-Fi

Warranty: 3-year parts, labor, and on-site repair.

Display: 24 Inch LED

• The scope covers installation & configuration. Contractor (System-Integrator) is required to submit paper copy procedure for installation and configuration.

• The warranty support shall be on Next Business Day basis from date of complaint registration. Defective components other than hard disks will be returned on replacement by new parts. However, the Contractor (System-Integrator) must replace defective hard disks with new hard disks without demanding return of defective hard disks.

#### 7. Specification of hardware for Network Attached Storage in a replicated configuration

Make: Dell, Model: EMC Unity 380 Storage

Network Storage with following or better specification:

Processor: Dual Intel Xeon processors per controller

Drive Controllers: Dual and Redundant

Connectivity: Back-end Connectivity SAS (6Gb ,12Gb) Storage:

20TB with following distribution

SSD:6TB

SAS:14TB (10000 rpm) and

**Cluster:** Should Support Active/Passive Network storage cluster with replication enabled.

RAID support: Raid 5

Front-end network protocols: NFS, CIFS, (support simultaneous multiprotocol)

Form Factor: 2U/4U with Rack mount kit

**Power Supply**: Dual and Redundant **Memory**: 128GB (64 GB per controller)

Management: Browser based GUI management console,

**OS Support:** Shall integrate with RHEL 7 and Windows Server 2016 and above

Operating temperature: 10 - 35°C

Desirable Features: (1) Capability to configure Hierarchical storage (2) Backside Connectivity port to

connect a LTO Ultrium 8 tape drive

- Contractor (System-Integrator) is required to provide Onsite Comprehensive Warranty for 5 years
  at RailTel's Customer Hyderabad. The warranty support shall be on Next Business Day basis from
  date of complaint registration. Defective components other than hard disks will be returned on
  replacement by new parts. However, the Contractor (System-Integrator) must replace defective
  hard disks with new hard disks without demanding return of defective hard disks.
- The scope covers installation & configuration. Contractor (System-Integrator) is required to submit paper copy procedure for installation & configuration. Required Operating System either CentOS or compatible will be provided by RailTel's Customer.

#### Chapter-IV

Form-1

#### OFFER LETTER

To, Executive Director, Railtel Corporation of India Ltd., 1-10-39 to 44, 6A, 6th Floor, Begumpet Airport Road, Opp. Shoppers Stop, BEGUMPET, HYDERABAD- 500 016, Telangana Tender no: RAILTEL/E-TENDER/LT/SR/SC/2022-23/164 DATED 16-01-2023 have read the various conditions detailed in tender documents attached here to and hereby agree to ABIDE BY THE SAID CONDITIONS. I/We also agree to keep this tender open for acceptance for a period of 20 days from the date fixed for opening the same and in default thereof, I/We will be liable for forfeiture of my/our Earnest Money. I/We offer to supply of material and provide support as per Schedule of requirement given in the Tender Document in Chapter II at the rates quoted in the attached schedule and hereby bind myself/ourselves to complete the supply within 20 days from the date of issue of Purchase Order. I/We also hereby agree to abide by the Various Conditions of Contract and to carry out the supplies according to the Specifications for materials and works laid down by the RailTel for the present contract. EMD for SOR (Supply and installation): 2. A sum of Rs. \_\_\_\_\_ as an Account Payee ENIVIDA Ref No.\_\_\_\_ dt. \_ in favor of RailTel Corporation India Ltd. Secunderabad is herewith forwarded as "Earnest Money." The full value of Earnest Money shall stand forfeited without prejudice to any other rights or remedies if, I/We withdraw or modify the offer within validity period to that effect. SIGNATURE OF SUPPLIER (S) with Seal Date: SIGNATURE OF WITNESS CONTTRACTOR (S) ADDRESS

1.

2.

## PROFORMA FOR STATEMENT OF DEVIATIONS

(1) The following are the particulars of deviations from the requirements of the tender specification.

Clause	Deviation	Remarks		
		(Including justification)		

(2) The following are the particulars of deviations from the requirements of the instructions to Tenderers, General and Special Conditions of contract-

Clause		
		(Including justification)

Signature and seal of the Manufacturer/Tenderer.

Note: Where there is no deviation, the statement should be returned duly signed with an endorsement indicating "No Deviations".

Form-3

## PERFORMANCE BANK GURANTEE BOND (On Stamp Paper of Rs. One Hundred) (To be used by approved Scheduled Banks)

	Gumidelli	Towers, I		port Road,		d: 1-10-39 to ers Stop, Beg		
1.	(Herein	after	called	RailTel)	having	agreed	to	exempt
	Contractor(	s)") from		under the	terms and	(Hereinafter conditions of		ement No. between
	Agreement' conditions of (Rs hereinafter hereby under damage cau breach by	") of securicontained in contained in contained in contained to certake to pused to or the said	ty deposit for in the said Agrib. We,	the due fulfil reement, or p ") at the requ an amount r	lment by the roduction of	for (hereinafter said Contractor a Bank Guaran (indicate the	or (s) of the tee for Rs. name of Contr Against lTel by rea	the Bank) ractor(s) do any loss or ason of any
2.	(in	dicate de	etail address	of local	Bı	Bank <b>and ou</b> ranch with ou	ode no.)	do hereby
	on demand caused to o Contractor( Contractor( be conclusion	from the for would be so of any costs failure to the sour liability	RailTel stating oe caused to of terms or co o perform the gards the amo	that the am or suffered l nditions cont said Agreen ount due an	ount is claim by the RailTo ained in the nent. Any su d payable b	ed is due by well by reason of said Agreemer and demand may the Bank under to an amou	ray of loss of breach to the or by reade on the onder this	or damage by the said ason of the Bank shall guarantee.
3.	demanded any suit or	notwithsta proceedin	nding any dis	pute or disp fore any cou	utes raised b	pay to the R by the Contract al relating there	tor(s) / Su	pplier(s) in
						discharge of ou o claim agains		
	contained sperformance the RailTel or discharge been fully a Guarantee. the (1 thereafter.	shall remains of the same under or the defender or till I and prope Unless and the control of th	in in full force id Agreement by virtue of the RailTel certifie rly carried ou demand or cla	e and effect and that it s e said Agreen s that the te t by the sai im under the We shall be o	during the phall continuement have be rms and cond Contractor Guarantee is discharged from	agree that the period that wo to be enforced een fully paid a ditions of the set of the	uld be takuble till allend its clair said Agree lingly disconuncer this	ten for the the dues of ms satisfied ement have harges this n or before Guarantee
	Bank) Furth consent and and conditi- time any of enforce any relieved from	ner agree d without a ons of the the power of the t om our liab	with the Rail affecting in an Agreement of sexercisable erms and corbility by reason	Tel that the y manner ou to extend to extend to the RailTenditions related of the following the	RailTel shall r obligations me of to poel against the ing to the san variation, or	have the fuller hereunder to vistpone for any e said contracted aid Agreement r extension to to or any includes	st liberty wary any o time or fror(s) and to and we so the said Co	without our of the terms om time to of forbear or hall not be ontractor(s)

the said Contractor(s) or by any such matter of sureties would, but for this provision, have effect This Guarantee will not be discharged due to Contractor(s) Supplier(s)	ect of so relieving us.	J
We, the	(indicate detailed address of local ng advised accordingly. n not to revoke this Guarantee during its	
Dated the	day of . (Indicate the name of the Bank)	2022 for
This Guarantee will not be discharged due to Contractor(s) Supplier(s).  We, the	the change in the Constitution of the Batter agree that this guarantee shall be (indicate detailed address of localing advised accordingly. In not to revoke this Guarantee during its elin writing.	invokable

## Witness

- 1. Signature Name
- 2. Signature Name

## RAILTEL/E-TENDER/LT/SR/SC/2022-23/164 Form-4

To Executive Director Railtel Corporation 1-10-39 to 44, 6A, Begumpet Airport BEGUMPET, HYD	n of India Ltd., 6th Floor, Road, Opp. Shop				Dated:	
_	acturer Authori			s 1	for	•••••
(Product	details),	having	our	rer and service pr registered		
We herebybid to execute th said bid.	e supply and Inst	M/s to allation & Co	participate in mmissioning o	(Bidder bid and subseque four range of processor our range our range of processor our range our	ently upon awar lucts against yo	rd of the ur above
	gainst the above-s		<b>,</b>	<b>3</b> • F		, i

Thanking you, Best regards,

**Authorized Signatory**