

# RAILTEL CORPORATION OF INDIA LIMITED (A Govt. of India Undertaking) (CIN: U64202DL2000GOI107905)

#### **ELECTRONIC TENDER DOCUMENT**

#### FOR WORK OF

Supply, Installation, Integration, & Commissioning of Internet Gateways including IT & Security equipment's for RailTel

**Open E-TENDER (Single stage -Two Packet System)** 

खुली ई-निविदा न. RailTel/Tender/OT/CO/TP/2025-26/Internet Gateway & Security system/06
Dated: 12.11.2025

E-TENDER NO. RailTel/Tender/OT/CO/TP/2025-26/ Internet Gateway & Security System/06
Dated: 12.11.2025

निविदा दस्तावेज की कीमत: NIL Cost of Tender Document – NIL

#### निविदा सूचना

# E Tender No.- RailTel/Tender/OT/CO/TP/2025-26/ Internet Gateway & Security System/06 Dated: 12.11,2025

रेलटेल कॉर्पोरेशन ऑफ इंडिया लि. (रेलटेल) " रेलटेल के लिए इंटरनेट गेटवे सहित आईटी और सुरक्षा उपकरणों की आपूर्ति, स्थापना, एकीकरण और कमीशनिंग आपूर्ति के लिये भारतीय पंजीकृत फर्मों से सिंगल स्टेज-दो पैकेट सिस्टम के माध्यम से ई-टेंडर आमंत्रित करता है।

क)	निविदा का डाउनलोडिंग के खुलने की तिथि	12.11.2025
ख)	बोली प्रस्तुत करने की अंतिम तिथि और समय	16.12.2025 को 15.00 बजे तक
ग)	बोली-पूर्व प्रश्न जमा करने की अंतिम तिथि	25.11.2025
ਬ)	ई-बिड खुलने की तिथि और समय	16.12.2025 को 15.30 बजे
ड़)	निविदा की लागत(ए एम सी को छोड़कर)	लगभग रु. 23.15 Cr (टैक्स सहित)
ਚ)	बयाना राशि (ईएमडी) या ज़मानत बांड निविदा दस्तावेज़ के खंड	₹. 46.31 Lakh
	4.ए.22 के अनुसार	
छ)	निविदा दस्तावेज की फीस	NIL
ज)	TReDS सुविधा उपलब्ध है	हाँ, m1xchange पोर्टल पर
		(url: https://www.m1xchange.com)

नोट: निविदा सूचना और निविदा प्रलेख रेलटेल की वेबसाइट पर उपलब्ध हैं और <u>www.railtel.in</u> या ई-टेंडरिंग पोर्टल <a href="https://www.railtel.enivida.com">https://www.railtel.enivida.com</a> से डाउनलोड किए जा सकते हैं। ऑनलाइन बोली जमा करने के लिए निविदाकर्ता को पोर्टल <a href="https://www.railtel.enivida.com">https://www.railtel.enivida.com</a> से निविदा प्रलेख की आधिकारिक ऑनलाइन प्रति डाउनलोड करनी होगी। सभी भविष्य की जानकारी अर्थात् इस निविदा के लिए शुद्धिपत्र / परिशिष्ट / संशोधन आदि ई-निविदा पोर्टल, रेलटेल वेबसाइट और सीपीपी पर पोस्ट की जाएगी। रेलटेल कार्यालय से निविदा प्रलेख की मुद्रित प्रति नहीं बेची जाएगी।

यह निविदा रेलटेल के इंटीग्रिटी पैक्ट प्रोग्राम के तहत कवर की गई है और बोलीदाताओं को इंटीग्रिटी पैक्ट पर हस्ताक्षर करने और बोली के साथ ही रेलटेल को जमा करने की आवश्यकता है।

बोली दाता तैयारी, बोली की तैयारी/प्रस्तुति /भागीदारी से संबंधित सभी लागतों को वहन करेगा। रेलटेल किसी भी तरह से आचरण या परिणाम की उदासीनता से इन लागतों के लिए जिम्मेदार या उत्तरदायी नहीं होगा।

> हिमांशु कुमार महाप्रबंधक/टीपी



#### **TENDER NOTICE**

#### E Tender No.- RailTel/Tender/OT/CO/TP/2025-26/Internet Gateway & Security System/06

Dated: 12.11.2025

RailTel Corporation of India Ltd. (RailTel) invites E-Tender in Single Stage – Two Packet System for "Supply, Installation, Integration, & Commissioning of Internet Gateways including IT & Security equipment's for RailTel" from Indian registered firms.

a)	Opening date of Tender downloading	12.11.2025
b)	Last date & time of submission of bid	16.12.2025 upto 15:00 hrs.
c)	Last date of submission of pre-bid queries	25.11.2025
d)	Opening of e-bid	16.12.2025 at 15:30 hrs.
e)	Estimated cost of work (excluding AMC)	Approx. Rs. 23.15 Cr (including taxes).
Ð	Earnest Money (EMD) or Surety Bond as	Rs. 46.31 Lakh
f)	pér Clause 4.A.22 of Tender document	
g)	Cost of Tender Document	NIL
h)	TReDS feature available	Yes, on m1xchange portal
11)		(url: https://www.m1xchange.com)

Note: Tender Notice and Tender Document are available on RailTel's website and can be downloaded from <a href="www.railtel.in">www.railtel.in</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 e-Nivida Portal, RailTel's Website and CPP portal. Printed copy of Tender document will not be sold from RailTel office.

This tender is covered under Integrity Pact Programme of RailTel and the bidders are required to sign the Integrity Pact and submit the same to RailTel along with the bid.

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

Himanshu Kumar GM/TP

## TABLE OF CONTENTS

निविदा सूच	ना	2
	R NOTICE	
	OF CONTENTS	
	R 1	
	ER-2 JULE OF REQUIREMENT	
	ER 3A	
	OF WORK, TECHNICAL REQUIREMENTS AND SPECIFICATIONS	
3.A.1	INTRODUCTION	13
3.A.2	OVERVIEW OF THE SCOPE OF WORK	13
3.A.3	TECHNICAL REQUIREMENTS & SPECIFICATIONS	16
3.4.4 Te	chnical Specification of Tier-1, Tier-2, Tier-3 and Tier-4 SDN Routers	17
3.A.4	DEPENDENCIES AND RESPONSIBILITY MATRIX	38
(End of	Chapter-3A)	40
СНАРТЕ	R 3B	41
	CTION, INSTALLATION AND SUPERVISION OF TESTING, COMMISSIONING & INTEGRATI	
	ER 4A	
	ERCIAL TERMS & CONDITIONS	
4.A.1	Offer letter and Validity of offer	
4.A.2	Warranty	
4.A.3.	Long Term Maintenance Support	
4.A.4.	Delivery, Installation, Testing, Commissioning & Integration period	
4.A.5.	Payment Terms for Schedule of Supply (A)	
4.A.6.	Performance Bank Guarantee (Security Deposit) or Insurance Surety Bond	
4.A.7.	Taxes & Duties	
4.A.8.	Insurance	
4.A.9.	Liquidated Damages	
4.A.10.	Transportation	
4.A.11.	Statutory Deduction	54
4.A.12.	Qualification Criteria- Pre-Qualification Criteria (PQC)	
4.A.12.1	8	54
4.A.12.2 Applian	Eligibility Criteria Requirements for OEMs: Schedule (A)-SDN Router & CGNAT ce/module & Schedule B-Firewall (NGFW)	58
	3 Deleted	
4.A.12.4	4 Eligibility Credentials and Verification	61
4.A.13.	CONSORTIUM BIDS: Deleted	62
4.A.14.	Participation Of Joint Venture (JV) Firms in Works Tender: Deleted	62
4.A.15.	System Performance Guarantee	62
4.A.16.	Evaluation of Offer	63
4.A.16.1	. Evaluation of bids will be done on totality and the Total Cost (all-inclusive) including the AMC	63
4.A.17.	Security Considerations & Security Agreement	63
4.A.18.	Purchaser's Right to Vary Quantities	63
4.A.19.	Purchaser's Right to accept any offer / Bid and to reject any or all offer/ Bid	64

4.A.20.	Execution of Purchase Order/LOA	64
4.A.21.	Annulment of Award	64
4.A.22.	Earnest Money Deposit (EMD) or Surety Bond	64
4.A.23.	For Micro and Small Enterprises (MSEs)	65
4.A.24.	Offer/ Bid Prices	65
4.A.25	Clause wise Compliance	66
4.A.26	Inspection	66
4.A.27	Force Majeure	66
4.A.28	Settlement of Disputes	67
4.A.29	Governing Laws:	67
4.A.30.	Termination for Default	67
4.A.31	Risk & Cost	67
4.A.32.	Termination for Insolvency	68
4.A.33.	Rates During Negotiation	68
4.A.34.	Deleted	68
4.A.35.	Submission of Offers	68
4.A.36.	Constitution of Firm and power of Attorney	69
4.A.37.	Opening of Tender	69
4.A.38.	Non-Transferability & Non-Refundability	69
4.A.39.	Errors, Omissions & Discrepancies	69
4.A.40.	Wrong Information by Tenderer	70
4.A.41.	Public Procurement: Preference to Make in India:	70
4.A.42	Updation of Labour data on Railway's shramikkalyan Portal:	72
4.A.43.	Integrity Pact Program	72
4.A.44	Compliance for procurement of Telecommunication equipment from trusted source	73
4.A.45	Availability of Spares	74
4.A.46	Contract Agreement:	74
	ER-4B	
	UCTIONS TO THE BIDDERS	
4.B.0	General	
4.B.1	Submission of the bid:	
4.B.2	Following documents shall be submitted in Technical and Price bid as given below:	
4.B.3.	Fax Quotations & Late Tenders:	
4.B.4.	Attendance of Representatives for Tender Opening:	
4.B.5.	Addenda / Corrigenda:	
4.B.6	Bid submission and Opening date	
4.B.7	Submission of offline documents:	
4.B.8	Clarification Requests:	
CHAPTI E-tende	ER-4C pring Instructions to Bidders	
4.C.0	GENERAL:	
4.C.1	GUIDELINES FOR REGISTRATION:	
4.C.2	SEARCHING FOR TENDER DOCUMENTS:	
4.C.3	PREPARATION OF BIDS:	
4.C.4	SUBMISSION OF BIDS:	

4.C.5	For any clarification in using eNivida Portal:	81
_	- 5	_
	- <b>6</b>	
PROFORM	AA FOR PERFORMANCE BANK GUARANTEE	84
Form No. 2	2	86
PROFORM	MA FOR THE SYSTEM PERFORMANCE GUARANTEE	86
Form No. 3	3	87
PROFORM	AA FOR THE LONG-TERM MAINTENANCE SUPPORT	87
Form No. 4	4	89
CHECKLI	ST OF ESSENTIAL DOCUMENTATION/ACTIVITY	89
Document	uploaded along with Financial Bid/Price Bid	90
Form No. :	5	92
Manufactu	rer Authorisation form (MAF)	92
Form No. (	5	94
	instruction to be provided by vendor/contractor for RTGS payment to be made to them by RailTel ders.	94
Form No.	7	96
STANDIN	G INDEMNITY BOND	96
Form No. 8	3	97
AFFIDAV	IT	97
Form No. 9	)	98
Insurance	Surety Bond for Performance Security (PBG)	98
Form No.	10	. 101
Surety Bor	nd for BID Security (EMD)	. 101
FORM No	. 11	. 104
	FOR AFFIDAVIT TO BE UPLOADED BY TENDERER ALONGWITH THE TENDER NTS	. 104
Form No.1	2	. 106
PROFORM	MA FOR Nil Deviation Component Compliance Undertaking Letter	. 106
(TO BE SI	GNED BY BIDDER)	. 106
Form No.	13	. 107
Form No.	14	. 108
	AA FOR "NO MALICIOUS CODE UNDERTAKING LETTER	
BY BIDDI	ER and OEM"	. 108
	). 15	
DETAILS	OF OFFERED EQUIPMENT:	. 109
Form No.	16	. 110
CONTRAC	CT AGREEMENT	. 110
Form No.	17	. 112
PROFOR	MA FOR SIGNING THE INTEGRITY PACT	. 112
CHAPTER Detailed st	<b>-7</b> andard conditions applicable for the Annual Maintenance Contract	<b>117</b> . 117
Annevure	_T	130

## **CHAPTER 1**

RailTe	l Corporation of India Ltd.		
Plate-A	A, 6th Floor,		
Office	Block Tower-2,		
East K	idwai Nagar,		
New D	Delhi-110023		
Ref: R	ailTel/Tender/OT/CO/	date:	
1.	THE SAID CONDITION period of as mentioned in default thereof. I/We will I/We offer to supply varihereby bind myself/ourse of Purchase Order/LOA. Contract and to carry out the said of the	NS. I/We also agree Clause 4.A.1 of Clause 4.A.1 of Clause equipment at the complete the I/We also hereby the supplies according to the complete according to the complete according to the complete the	have read the various ached here to and hereby agree to ABIDE BY to keep this offer open for acceptance for a hapter-4A from the date of submission and in ture of my/our Earnest Money or Surety Bond. The rates quoted in the attached schedules and the work within 180 days from the date of issue agree to abide by the Various Conditions of the Specifications for materials and works
2.	laid down by the RailTel. A sum of Rs. submitted as "EMD". T prejudice to any other right	(amount in value of I	words) through eNivida Portal herewith Earnest Money shall stand forfeited without
	-	nk Guarantee) withi	validity period or do not deposit the security in specified days as per tender after issue of or
	I/We do not execute the c the RailTel that such docu	ontract agreement v	within 15 days after receipt of notice issued by
			or
	I/We do not commence th	e work within 15 d	ays after receipt of orders to that effect.
	shall constitute a binding	contract between us	ecuted the acceptance of this tender document s subject to modifications, as may be mutually Letter of Acceptance" of my/our offer for this
			SIGNATURE OF CONTRACTOR(S)
		~ II ~	
			Date
	D/	VII.	CONTRACTOR (S) ADDRESS
	SIGNATURE OF WITNI	ESS	
	1.		
	2		

#### **CHAPTER-2**

## SCHEDULE OF REQUIREMENT

**Schedule of Supply (A)- Internet Gateways** 

SN	Description of Item	Unit	Qty.	Unit Rate in Fig (in Rs.)	Total Cost in Fig. (in Rs.)	Unit Rate in words (in Rs.)	Total Cost in words (in Rs.)
1	2	3	4	5	6	7	8
A	SCHEDULE OF SUPPLIES						
A1	Supply Installation, Integration & Commissioning of Internet Gateways as per specifications given in the tender document	Lot	1				
	Total Cost of Schedule of Supplies (A)						

# Schedule of Supply (B)- IT & Security Equipment's

SN	Description of Item	Unit	Qty.	Unit Rate in Fig (in Rs.)	Total Cost in Fig. (in Rs.)	Unit Rate in words (in Rs.)	Total Cost in words (in Rs.)
1	2	3	4	5	6	7	8
В	SCHEDULE OF SUPPLIES						
B1	Supply Installation & Commissioning of IT equipment viz. Desktop, Laptops, Security gateway, Device Manager and Other items as per specifications given in the tender document.	Lot					
	Total Cost of Schedule of Supplies (B)	1		~	9		

**Schedule of Services (C)** 

SN	Description of Item	Unit	Qty.	Unit Rate in Fig. (in Rs.)	Total Cost in Fig. (in Rs.)	Unit Rate in words (in Rs.)	Total Cost in words (in Rs.)
1	2	3	4	5	6	7	8
C	SECHEDULE OF SERVICES						

	C1	AMC charges per annum after warranty period as percentage of overall cost of material covered in Schedule A & B above, as per the terms & conditions of tender document.	year	5		
		Total Cost of Schedule of Services (C)	1			
•		Total Value of Schedule of Supplies (A,B) & Schedule of Services (C)				



			<b>N</b> T - 4 -						
I	Note  Unit rate quoted against SOR above should be CIP destination inclusive of all duties, taxes, insurance and freight etc. (with break-up as per Performa attached as Annexure-A and B of this Chapter). The materials as per SOR are required to be delivered at site as indicated in clause 4.A.4 of Chapter-4A. It shall be the responsibility of Tenderer to transport the equipment to site.								
II	units/cards/module/	/chassis	iled Bill of Mater /License/Patch Cords	, in the	price bi	id for Sch	nedule-A	& B.	
III	assembly, card, mo	Tenderer shall attach Unit Rate Analysis of the item of Schedule-A & B i.e. cost of each sub-assembly, card, module, License, Patch Cords etc. in their Price Bid. The quoted Unit Rate should correspond to the referred Rate Analysis.							
IV	quantities of variou	ıs modul	the configuration/ted les/ sub modules/ card n in the Technical bid	ds/ sub					
V	quoted by the tende	Cost of any license fee required to be paid for hardware & software shall be included in the rate quoted by the tenderer. All software supplied by the bidder should have perpetual license. There shall be no post contractual liability of license fee on RailTel for hardware & software supplied							
	This Bill of Material will be called "Bill of Material for Schedule of Requirement" and will be comprised of duly filled rates of each item and will be prepared according to Note (I) to (V) above. The Priced copy of the SOR along with the Breakup of individual itemized BOM (as per Format given below) and site wise distribution as per BOM should be submitted for evaluation.  BOM shall be duly vetted by the OEM.  Bidder(s) shall upload the complete SOR along with the price Breakup of individual itemized BOM for EACH ITEM (as per Format given below) along with the Financial bid. The Financial Bid submitted without Site-Wise itemized priced Detailed BOM may liable to be rejected  The Format of "Bill of Material for Schedule of Requirement Schedule - A" is as below:								
VI		SN	Item	Make & Model	Unit	Qty	Sch- A		
	_	2	(to be provided by bidder) (to be provided by bidder)		C	4			
	The Format of "Bill of Material for Schedule of Requirement Schedule - B" is as below:								
		SN	Item	Make & Model	Unit	Qty	Sch- B		
				-					

				ı		1				
	2	Laptops	Nos.	23						
	3	NGFW	Nos.	10						
	4	Device Manager	Nos.	1						
	5	POE Switches	Nos	10						
	6	Microsoft Office Licenses	Pack s	20						
VII	Non-compliance of follo i. EMD or Surety Bond 4A.									
VIII	Evaluation of bids will be done based on Total cost of Schedule-A ,Schedule-B and Schedule-C									
IX	The Bidder(s)/OEM(s) will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to									
	restrict competitiveness or to introduce cartelization in the bidding process.  Only Class-I & Class-II local suppliers are eligible to participate in this tender. Work is not divisible. Purchase preference will be given to Class-I local supplier meeting the criteria of minimum 50% Local Content (LC) or as notified in the Notification no. 18-10/2017-IP dated 29.08.2018 issued by Department of Telecommunication (DOT) and Notification No. 33(1)/2017-IPHW dated 14.09.2017 issued by MeitY or latest notification issued till opening of tender.									
X	Among all qualified bids, the lowest bid will be termed as L1. If L1 is Class-I local supplier, the contract will be awarded to L1. If L1 is not Class-I local supplier, the lowest bidder among the Class-I local supplier, will be invited to match the L1 price subject to local supplier's quote price falling with in the margin of purchase preference of 20%, and the contract shall be awarded to such Class-I local supplier subject to matching the L1 price. In case such lowest eligible Class-I local supplier fails to match the L1 price, the Class-I local supplier with the next higher bid within the margin of purchase preference of 20%, shall be invited to match the L1 price and so on and contract shall be awarded accordingly. In case none of the Class-I local supplier within the margin of purchase preference of 20%, matches the L1 price, the contract may be awarded to the L1 bidder. Please refer clause-4.A.41 of Chapter-4A of this tender.									



Annexure-A
Price Schedule for Supply Items (Schedule-A & B)

SN	HSN Code	Description	Total Qty	EX-Factory Price (Basic	Unit Price exclusive of all levies and charges)	Pkg &	Forwarding Charges	Freight &	Insurance Charges	Other Charges and Levies (to be specified by	CGST, IGST,	SGST & GST	Price Per Unit (all inclusive) for delivery at destination	(**************************************
	H	De	T	EX-Fact	Unit Pric	%	Amt (in Rs.)	%	Amt (in Rs.)	Amt (in Rs.)	%	Amt (in Re)	Amt (in Rs.)	
1		2	3		4	5	6	7	8	9	10	11	12	1
				- 10										

Annexure-B
Price Schedule for Services (Schedule-C)

SN	Description	Total Qty	1.1 Basic Unit Price exclusive of all levies and charges (in Rs.)	Amt (in Rs.) He specified specified by bidder)	% %	Amt (in GST & GST	Amt (in (all (all (ars.) (4+5+7)
1	2	3	4	5	6	7	8
		7/2					
			10	26.		- 100	

(End of Chapter- 2)



#### **CHAPTER 3A**

#### SCOPE OF WORK, TECHNICAL REQUIREMENTS AND SPECIFICATIONS

#### 3.A.1 INTRODUCTION

RailTel is having MPLS based broadband telecom long haul network with next generation MPLS Network systems. The desired network should accommodate the growing demand for bandwidth, while maintaining compatibility, quality and enhanced flexibility to transport and route all traffic types like Internet Protocol (IP) data, Voice, Video, Tele-presence etc. The technical specification given in this part describes functional as well as performance requirement of the proposed SDN Based MPLS routers and CGNAT.

#### 3.A.2 OVERVIEW OF THE SCOPE OF WORK

#### A. For Schedule-A:

#### 1. Objective

The project aims to comply directives by segregating Internet Leased Line (ILL) and MPLS services, deploying infrastructure to capture IPDR logs for IPv4 and IPv6 traffic, and enhancing network security and scalability across RailTel's backbone.

#### 2. Network Segregation

Separate routers at (Tier-1 Locations) will be deployed for ILL and MPLS services at key locations. Each service will operate under distinct Autonomous System Numbers (ASNs), ensuring logical and physical separation. Redundancy will be maintained at major gateways such as NDLS, MX, KOL, and MAS.

#### 3. IPDR Log Management

CGNAT devices will be installed at aggregation points to facilitate NAT logging and IPDR logs for IPv4 and IPv6 traffic, Syslog collectors will be provisioned at each location.

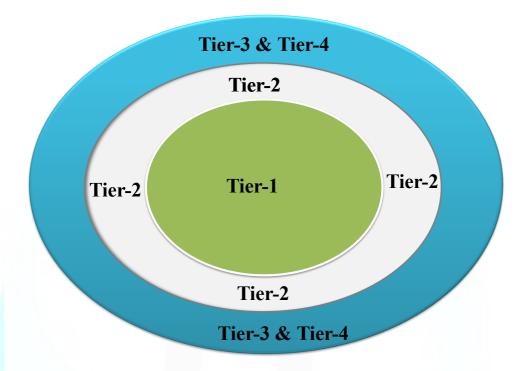
#### 4. Infrastructure Deployment

The initiative includes setting up 100 Internet Service Delivery Gateways across India at Tier-3 and Tier-4 (Locations), deploying Speed Test and DNS servers at all aggregation points (as mentioned in Annexure-II), and provisioning peering and caching capacity. Existing routers will be upgraded where feasible, including line card enhancements and CGNAT license activation.

#### 5. Deployment Locations (as mentioned in Annexure-II).

The project will span 22 aggregation gateways (e.g., NDLS, HWH, MUM, CHENNAI, ERNAKULAM, ADI, JAIPUR, DDU, GHY, VZM, NGP, SC, SBC) and 100 service delivery PoPs across all telecom circles, with NE-1 and NE-2 covered via GHY.

#### 6. Network topology:



7. The scope of work would be Supply of offered Hardware and Software at various sites/locations of Pop's (as mentioned in Annexure-II). The scope also includes Design, Installation, Testing & Commissioning of the Router and Integration with the existing network. The scope of work shall include, but not be limited to the following:

#### a. Project Management

The scope encompasses comprehensive project management, including the supply of all associated equipment and provision of necessary services. This includes customs clearance (where applicable), transportation, installation, testing, commissioning, and Acceptance Testing (AT) of the telecom system. Additionally, training shall be imparted to designated RailTel personnel. The entire project shall be executed under the supervision of the Original Equipment Manufacturer (OEM) to ensure adherence to quality and compliance standards.

#### b. Tier-1 to Tier-1 Interconnect

Each Tier-1 to Tier-1 interconnect within the same Point of Presence (PoP) shall be provisioned with 400G capacity (1×400G). The optical modules deployed must support transmission over a minimum distance of 2 kilometers using single-mode fiber, ensuring robust intra-PoP connectivity.

#### c. Tier-1 SDN Router Deployment

At every Tier-1 location, two SDN routers shall be deployed in High Availability (HA) mode. These routers will be integrated with CGNAT appliances to provide seamless redundancy and failover capabilities, thereby enhancing network resilience.

## d. CGNAT Appliance

Each Tier-1 SDN router shall be provisioned with at least one Type-1 CGNAT appliance, module, or card. This is essential to support carrier-grade NAT functionalities and ensure scalable IP address management.

#### e. SDN Controller Provisioning at CNOC

The scope includes the supply, design, installation, testing, and commissioning of an SDN Controller at the Central Network Operations Center (CNOC) of same make with DC & DR or DC with application Backup at DR. This controller will

centrally manage all deployed SDN routers and CGNAT devices, enabling unified orchestration and policy enforcement. In case CGNAT devices cannot be managed by SDN controller then a dedicated EMS of same make for managing CGNAT devices should be proposed as part of the solution with DC & DR or DC with application Backup at DR.

## f. Tier-1 Network Integration

Mesh connectivity shall be established among Tier-1 locations, with bandwidth provisioned as nx100G. This architecture ensures high-capacity backbone integration and supports efficient traffic distribution across the network.

#### g. SRv6-Based Path Selection

Segment Routing over IPv6 (SRv6) shall be implemented across the proposed network. Path selection will be governed by SRv6 policies based on performance parameters such as path delay, packet drop rate, jitter, and other relevant metrics, enabling intelligent traffic engineering.

#### h. VRF Segmentation and Global Routing

Separate Virtual Routing and Forwarding (VRF) instances shall be implemented in Hub & Spoke mode for Broadband and Internet Leased Line (ILL) customers. All upstream, peering, and caching links shall operate on global routing tables at Tier-1 and Tier-2 locations to ensure optimal reachability and routing efficiency.

#### i. Tier-2 Network Integration

All Tier-2 PoPs shall be connected to Tier-1 PoPs using nx100G links. This ensures high-capacity backbone integration and supports scalable service delivery across regions.

#### j. Tier-3 and Tier-4 Network Integration

Tier-3 and Tier-4 PoPs shall be minimum dual-homed to Tier-2 PoPs. Each link shall be provisioned with nx100G or nx40G capacity to ensure redundancy, fault tolerance, and optimal traffic distribution.

#### k. Layer-1/Layer-2 Ethernet Connectivity.

RailTel shall provide Layer-1 and Layer-2 Ethernet connectivity over DWDM/RON infrastructure for interconnectivity among Tier-1, Tier-2, Tier-3, and Tier-4 routers.

#### 1. Quality of Service (QoS)

QoS mechanisms shall be implemented across Tier-1 to Tier-4 routers to prioritize critical traffic, manage bandwidth allocation, and enhance overall service quality.

#### m. Router Security Policy

A standardized router security policy shall be enforced across all Tier-1, Tier-2, Tier-3, and Tier-4 routers. This includes access control, threat mitigation, and compliance with RailTel's cybersecurity framework.

#### n. BGP FlowSpec Implementation

BGP Flow Specification (FlowSpec) shall be implemented at all Tier-1 and Tier-2 routers. This enables the exchange of traffic filtering rules using BGP Network Layer Reachability Information (NLRI) from an external BGP router provided by RailTel. These rules define specific flow characteristics—such as source/destination IP, ports, protocol, and packet length—and associate actions like drop, rate-limit, or redirect to specific VRFs.

- o. Firewall Session Limits shall also be implemented per Source IP at all Tier-1 and Tier-2 CGNAT appliance/module for Broadband subscribers (Public and Private IPs).
- p. Pre-Production Lab Setup at CNOC: The Bidder/OEM shall also establish a dedicated Lab environment at the Central Network Operations Center (CNOC) for pre-production testing and validation, at no financial cost to RailTel. The Lab shall be provisioned with a minimum of six (6) additional routers, ensuring representation of at least one unit of each distinct equipment type proposed under

the production environment. In the case of Carrier Grade NAT (CGNAT), if the Bidder/OEM has proposed two distinct CGNAT solutions, they may opt to deploy either one of the proposed types within the Lab environment, subject to compatibility and functional equivalence with the production design.

**B.** The scope of work would be Supply and Supervision of installation, testing, commissioning of offered IT Hardware and Software at various sites/locations of RailTel NOCs (as mentioned in Annexure-II). The scope is limited to supply of IT Hardware and Software with the existing network. The scope of work shall include following Supply of IT Hardware and Software:

#### **B.1**

S.No.	Description of Item	Unit	Qty
1	Desktops	Nos.	70
2	Laptops	Nos.	23
3	Next Generation Firewall	Nos.	10
4	Device Manager	Nos.	1
5	POE Switches	Nos.	10
6	Microsoft Office Licenses	Packs	20

## 3.A.3 TECHNICAL REQUIREMENTS & SPECIFICATIONS

## 1. GENERAL SYSTEM GUIDELINES

- a) Tenderer shall be responsible for the successful completion of the project.
- b) Purchaser/Engineer reserves the right to modify, revise, and alter the specifications of equipment system prior to acceptance of any offer.
- c) If during the course of execution of the work any discrepancy or inconsistency, error or omission in any of the provisions of the contract is discovered, the same shall be referred to the Purchaser/Engineer who shall give his decision in the matter and issue instructions directing the manner in which the work is to be carried out. The decision of the Purchaser/Engineer shall be final and conclusive, and the Tenderer shall carry out the work in accordance thereof.

#### 2. TECHNICAL RESPONSE

The technical response should be fully comprehensive and detailed and will include detailed guaranteed specifications of the equipment and systems to be supplied. Marginal performance shall not be accepted.

#### 3. FEATURES AND CAPABILITIES OF SYSTEM

The specifications given in this chapter contain the necessary requirements of RailTel with regard to the features and capabilities of the system to be offered by the

Tenderers. These will be carefully studied and commented upon by the Tenderer. These should not be treated as maximum specifications.

#### 3.4 COMPLIANCE TO TECHNICAL REQUIREMENTS

#### 3.4.1 CLAUSE BY CLAUSE COMPLIANCE

In the offer, the Tenderer shall include statement of clause-by-clause compliance of the tender document and sufficient documentation such that RailTel can validate the compliance statements. In the statement of compliance, the Tenderer shall state:

- a) "FULLY COMPLIANT," if systems and functions offered fully meet the tender requirement.
- b) "PARTIALLY COMPLIANT," if systems and functions offered meet the tender requirement partially. The Tenderer shall state the reason why the offer is partially compliant. However, if the Tenderer is able to fulfill the specified requirement later, the time schedule for this shall be stated. In such cases, the Tenderer shall clearly mention the extent to which other requirements or specifications are affected.
- c) "NON COMPLIANT," if systems and functions cannot meet the requirements. The Tenderer shall also state the reasons for it.
- d) In addition to the above mentioned compliance statements, wherever statement is given for some numerical parameter specified in tender, Tenderer shall state the actual numerical value of specification as met by the offered systems / equipment.

#### 3.4.2 NIL OR UNCLEAR RESPONSE STATEMENTS

In case of nil or unclear statements of compliance for any specified requirement, RailTel will interpret that particular requirement as being "NON-COMPLIANT."

#### 3.4.3 VARIANCE FROM SPECIFIED REQUIREMENTS

In case of variance of the offered system from the specified technical requirements, the decision of RailTel on whether the system offered is responsive to the bid requirements shall be final and binding upon the Tenderer.

#### 3.4.4 Technical Specification of Tier-1, Tier-2, Tier-3 and Tier-4 SDN Routers

This section describes the various network components and functionalities required for the deployment of IP/MPLS Routers for Tier-1, Tier-2, Tier-3 and Tier-4 POP locations along with its integration with the existing MPLS based IP infrastructure at RailTel's network.

**a.** The relevant or applicable TEC GR specs for the equipment sought under this tender as below:

S. N	Equipment	Category	TEC GR No
	Name / Feature		
1	MPLS SDN	1. Router Category V for Tier-4	TEC/GR/IT/TCP-
	Router		006/01 AUG 2016 or
		2. Router Category VI for Tier-3	Latest
		3. Router Category X for for Tier	
		1 &Tier 2	

- **b.** In addition to feature mapped as required (Y) in clause No. 10.5 of TEC GR no. TEC/GR/IT/TCP-006/01 AUG 2016, the following Optional and Not Required (O and N) features given shall be mandatory requirements routers for RailTel.
  - (a) Section 3.18.4 MPLS Layer-3 VPN
  - (b) Section 8.1.14 Lawful Interception [Port Mirroring]
- c. The following sections are Not Applicable or Optional of TEC GR no. TEC/GR/IT/TCP-006/01 AUG 2016 or Latest.

Section 2.6.1, 2.6.6, 2.6.7

Section 3.0 Functional Requirements: Part-I hardware requirement.

Section 3.0 Functional Requirements: Part-II Functional Specifications of the SDN Controller.

Section 3.9 Operating System-related features.

Section 3.10.1 support of Layer 2 protocol transport for PPP

Section 8.1.1 Port Address Translation

Section 8.1.2 Network Address Translation (NAT)

Section 3.21.1 Ring Protection Mechanism

Section 6.0 EMI/EMC REQUIREMENTS

3.10.6.1: The Router shall support Flow control as per IEEE 802.3x.

4.3.3-4.3.3.1(d): MPLS TP.

- d. The following clauses of the above TEC GR are partially relaxed as per the comments against each of them:
- e. Clause 3.20.9.1: Reference to MPLS-TP is dropped.
- f. 3.16.1.4: Support for RIPv2 authentication is required. Reference to RFC 4822 is dropped.
- g. For the clauses 3.12.1.14, 3.13.2.1, 3.13.2.2, 3.15.5.3, 3.16.1.4, 3.16.4.4, 3.16.4.11, 3.16.6.13, 3.18.1.2, 3.18.3.1, 3.18.3.2, 3.18.3.3, 3.18.6.1, 3.19.4.7, 3.19.4.8, 3.20.2.5, 3.23.3.4, the sought protocol/feature implementation shall be supported by the bidder mandatorily and partial compliance, if any, to the respective RFC cited is allowed. However, bidder should ensure the interoperability and integration across OEM devices is seamless.
- h. At least 1 million flows shall be supported against Clause 3.5.2 of the TEC GR TEC/GR/IT/TCP-06/01/AUG-16.
- i. Any reference to OpenFlow shall be read as OpenFlow or BGP-LS & PCEP.
- j. Any reference to Load balancing on "bearer pin-hole assignment "should be read as" bearer pin-hole assignment "or "Hash" or "Entropy Label"
- k. In case of a mismatch between tender clause and TEC GR clause, tender clause will prevail and in case of deviation from the TEC specifications, the compliance to relevant ITU-T specification shall be submitted by tenderer. Proposed equipment shall have at least 70% compliance of TEC GR by considering each sub-clause as one clause.

#### 3.5. DETAILED TECHNICAL REQUIREMENTS AND SPECIFICATIONS:

3.5.1 The Tenderer shall include in his proposal the detailed technical information, drawings and functional descriptions of the hardware / software offered to support the Compliance to RailTel's Technical requirements. Compliance to following specifications shall be submitted clause wise along with Credential Bid:

## A. Technical specifications for schedule of supply (A)

# A.1 Technical Specifications for SDN Router (Tier-1,2,3&4)

	Technical Specifications f	or SDN Router	(Tier-1,2,3&	24)	
SN	Description	Tier-1	Tier-2	Tier-3	Tier-4
1	Minimum Ports (excluding SFP/SFP28/QSFP/QSFP28) from day one.	24x400/100G QSFP-DD	16x100G QSFP28	8x100G QSFP28 & 24x10/25G SFP28	2x40G QSFP+ & 12x10/25G SFP28
2	Proposed devices should be equipped optics	8x100G QSFP28 LR4	4x100G QSFP28 LR4	4x100G QSFP28 LR4	2x40G QSFP+ LR & 6x10 SFP+
3	Minimum Total throughput (Full duplex)	2.4 Tbps	1.5 Tbps	800 Gbps	100 Gbps
4	Minimum MAC Table Size	1M	1M	128K	64K
5	Minimum IPv4 RIB/FIB	10M/5M	10M/5M	1M/32K	64K/16K
6	Minimum IPv6 RIB/FIB	2M/1M	2M/1M	32K/8K	16K/4K
7	Minimum MPLS Labels	256K	256K	32K	16K
8	Minimum Label Stack	8	8	5	5
9	Minimum Number of L2 / L3 VPN VRF	10K	10K	1K/500	150/100
10	Minimum Support of number of queues per Interface	8	8	8	8
11	Minimum Number of VLAN support	8K	8K	1000	250
12	Minimum Number of Multicast Routes	64K	64K	5K	100
Feat	ures Required				
1	Router can be of either modular/fixed type and shall have modular Operating system where it shall support individual restart of critical processes without affecting other processes or rebooting the entire operating system.	Yes	Yes	Yes	Yes
2	All Interfaces should support LR optics	Yes	Yes	Yes	Yes
3	Router shall have option checking configuration before committing and option of rolling back to at least five configurations.	Yes	Yes	Yes	Yes
4	Digital Optical Monitoring (DOM) should be supported, optics information retrievable including RX/TX-power, threshold-monitoring/alarming, inventory.	Yes	Yes	Yes	Yes
5	It shall support role based privileges for the system access and radius authentication for the System admin.	Yes	Yes	Yes	Yes
6	The router should have a Console or Out- of-band Management.	Yes	Yes	Yes	Yes
7	Alerts for environmental or other hardware based alarms should be visibly implemented on the chassis.	Yes	Yes	Yes	Yes

1	A11		1		1
0	All interfaces shall support services like	<b>3</b> 7	<b>X</b> 7	<b>3</b> 7	3.7
8	L2VPN, L3VPN, VPLS and multicast	Yes	Yes	Yes	Yes
	VPN for both IPv4 and IPv6.				
9	The router should be IPv6 ready from day	Yes	Yes	Yes	Yes
	one.		1 65		1 65
	The router should support filtering based				
10	on different parameters like: src ip, dst ip,	Yes	Yes	Yes	Yes
	src port, dst port, protocol etc				
11	The router should support Netflow/Jflow	Vaa	Vas	V~~	Vaa
11	or equivalent	Yes	Yes	Yes	Yes
	The router should support IP SLA or RPM				
	(or equivalent) for performance				
	measurements, it should also support				
12	monitoring of IP SLA/RPM (or	Yes	Yes	Yes	Yes
	equivalent) probes using SNMP polling				
	(OEM has to provide SNMP MIB				
	information)				
1.0	Shall support QoS, option of traffic	**	**	**	* *
13	shaping per Interface based.	Yes	Yes	Yes	Yes
	Shall support following class of service				
14	features:				
	a) Classification, policing, marking,				
	shaping, filtering	Yes	Yes	Yes	Yes
	b) Manage congestion using a weighted				
	random early detection (WRED) algorithm	Yes	Yes	Yes	Yes
	c) RFC 2474, Definition of the				
	Differentiated Services Field in the IPv4	Yes	Yes	Yes	Yes
	and IPv6 Headers	1 65	1 03	1 03	1 05
	d) Single Rate Three Color Policer RFC				
	2697	Yes	Yes	Yes	Yes
	e) RFC 2698, A Two Rate Three Color				
	Policer	Yes	Yes	Yes	Yes
	f) congestion Management through				
	CBWFQ, Round-Robin or equivalent,	Yes	Yes	Yes	Yes
		1 68	1 68	1 68	1 68
	WFQ or equivalent		+		
	g) RFC 2597, Assured Forwarding PHB	Yes	Yes	Yes	Yes
	Group  h) REC 2508 An Expedited Foreyording				
	h) RFC 2598, An Expedited Forwarding PHB	Yes	Yes	Yes	Yes
-					
	i) Router should be able to classify based	Yes	Yes	Yes	Yes
	on 802.1 ad, 802.1 p, EXP and DSCP bits		+		
	j) The router shall support traffic interface	V	Was	V	Vac
	mirroring in both ingress & egress	Yes	Yes	Yes	Yes
	directions for both IPv4 & IPv6				
	The router shall support provision for				
15	event based scripts that shall be capable of	Yes	Yes	Yes	Yes
	performing actions based on certain				
	triggers				
	The router shall support aggregated	••			
16	Ethernet and it shall be possible to bundle	Yes	Yes	Yes	Yes
	Upto 16 links.				
17	Shall support following MPLS features				

	a) LDP ,RSVP signalling and LDP over RSVP.	Yes	Yes	Yes	Yes
	b) RFC 5036, LDP Specification	Yes	Yes	Yes	Yes
	c) RFC 3212 OR Constraint-Based LSP	Yes	Yes	Yes	Yes
	Setup using LDP d) RFC 3215, LDP State Machine	Yes	Yes	Yes	Yes
	e) RFC 3478, Graceful Restart Mechanism			1 68	
	for LDP	Yes	Yes	Yes	Yes
	f) RFC 2858, Multiprotocol Extensions for BGP-4	Yes	Yes	Yes	Yes
	g) RFC 3063, MPLS Loop Prevention Mechanism	Yes	Yes	Yes	Yes
	h) RFC 3031, Multiprotocol Label Switching Architecture	Yes	Yes	Yes	Yes
	i) RFC 3032, MPLS Label Stack Encoding	Yes	Yes	Yes	Yes
	j) The router should be able to do load- balancing over multiple equal cost MPLS LSP	Yes	Yes	Yes	Yes
	k)BGP Labeled Unicast (BGP-LU)	Yes	Yes	Yes	Yes
	1) Loop Free Alternate (LFA) and Remote Loop-Free Alternate (LFA)	Yes	Yes	Yes	Yes
18	The Router shall support MPLS Fast Reroute both link protection and Node protection.	Yes	Yes	Yes	Yes
19	MPLS Ping, MPLS Trace Route	Yes	Yes	Yes	Yes
20	Fast Reroute Extensions to RSVP-TE for LSP Tunnels	Yes	Yes	Yes	Yes
21	The router shall Support of Sync-E & PTP technology (License price to be quoted separately)	Yes	Yes	Yes	Yes
22	Shall support MPLS based VPN services				
	a) L3VPN & L2VPN	Yes	Yes	Yes	Yes
	b) Internet draft, draft-ietf-l2vpn-vpls-bgp- 08.txt, Virtual Private LAN Service (VPLS) Using BGP for Auto-discovery and Signaling	Yes	Yes	Yes	Yes
	c) RFC 4762 Virtual Private LAN Service (VPLS) Using Label Distribution Protocol (LDP) Signaling	Yes	Yes	Yes	Yes
	d) Next Generation mVPN (P2MP) based on (Draft-ietf-13vpn-2547bis-mcast-01.txt) & mVPN (draft-rosen-vpn-mcast).	Yes	Yes	Yes	Yes
23	The router shall support the following routing features				
	a) BGPv4, BGP confederations and route reflector	Yes	Yes	Yes	Yes
	b) Dynamic Host Configuration Protocol (DHCP)	Yes	Yes	Yes	Yes
	c) RFC 3101, The OSPF NSSA Option	Yes	Yes	Yes	Yes
	d) RFC 2328, OSPF Version 2	Yes	Yes	Yes	Yes
	e) RFC 3623, OSPF Graceful Restart	Yes	Yes	Yes	Yes

	f) RFC 3630, Traffic Engineering (TE)				
	Extensions to OSPF Version 2 or IS-IS	Yes	Yes	Yes	Yes
	Extensions for Traffic Engineering.				
	g) RFC 1195, Use of OSI IS-IS for Routing in TCP/IP and Dual Environments	Yes	Yes	Yes	Yes
	h) RFC 2104, HMAC: Keyed-Hashing for				
	Message Authentication	Yes	Yes	Yes	Yes
	i) RFC 2973, IS-IS Mesh Groups	Yes	Yes	Yes	Yes
	j) RFC 3358, Optional Checksums in IS-IS	Yes	Yes	Yes	Yes
	k) RFC 3359, Reserved Type, Length and				
	Value (TLV) Code points in IS-IS	Yes	Yes	Yes	Yes
	1) RFC 3373, Three-Way Handshake for	Yes	Yes	Yes	Yes
	IS-IS Point-to-Point Adjacencies	1 CS	1 65	1 05	1 03
	m) RFC 5305, IS-IS Extensions for Traffic	Yes	Yes	Yes	Yes
	Engineering				
	n) RFC 3847, Restart Signalling for IS-IS o) RFC 3590, Source Address Selection	Yes	Yes	Yes	Yes
	for Multicast Listener Discovery Protocol	Yes	Yes	Yes	Yes
	The router shall support Virtual Router				
24	Redundancy Protocol (VRRP) as per IETF	Yes	Yes	Yes	Yes
	RFC 3768 OR alternate option				
25	Router shall support SNMP v2/v3 and	Yes	Yes	Yes	Yes
23	NTP	1 68	1 68	1 68	1 68
26	Shall support BFD for both single hop and	Yes	Yes	Yes	Yes
	multihop sessions  Shall averaget the following OAM feetures				
	Shall support the following OAM features and actions such as syslog/link down				
27	should be configurable on OAM event				
	trigger:				
	a) 802.3ah	Yes	Yes	Yes	Yes
	b) 802.1ag	Yes	Yes	Yes	Yes
	c) Y.1731	Yes	Yes	Yes	Yes
28	Shall support Multi-chassis LAG or EVPN	Yes	Yes	Yes	Yes
	Multi-Homing		1 22		1 22
29	IPv6 Features	Vac	Vac	Vac	Vac
	a) IPv6 Ping b) IPv6 trace route	Yes Yes	Yes Yes	Yes Yes	Yes Yes
	c) IS-IS	Yes	Yes	Yes	Yes
	d) VRRPv3 or alternate option	Yes	Yes	Yes	Yes
	f) IPv6 CoS (classification & rewrite,				
	scheduling based on TC )	Yes	Yes	Yes	Yes
	g) IPv6 ACL	Yes	Yes	Yes	Yes
	h) 6PE/6VPE	Yes	Yes	Yes	Yes
30	Multicast Feature: It shall support	Yes	Yes	Yes	Yes
	following:				
	a) It shall support IGMP snooping v3	Yes	Yes	Yes	Yes
	b) RFC 3569, Source Specific Multicast (SSM)	Yes	Yes	Yes	Yes
<u> </u>	(DOINT)				

31	The proposed router should be NEBS level 3 compliant. NEBS Certification is not required for PMA. However OEM has to produce certificate from standard lab approved or authorized by Govt. of India that the supplied Products are equivalent to NEBS and meet all standard and specification of NEBS.	Yes	Yes	Yes	Yes
32	The device should comply to the following safety standards or equivalent.				
	a) EN 55022 Class A Emissions (Europe)	Yes	Yes	Yes	Yes
	b) FCC Class A (USA) Radiated				
	Emissions	Yes	Yes	Yes	Yes
	c) UL 60950-1 Information Technology Equipment – Safety	Yes	Yes	Yes	Yes
	d) EN 60825-1 Safety of Laser Products	Yes	Yes	Yes	Yes
	e) EN-61000-4-11 Voltage Dips and Sags	Yes	Yes	Yes	Yes
	f) ETS-300386 Electromagnetic Compatibility Requirements	Yes	Yes	Yes	Yes
	g) The device will conform to the following EN/IEC standard:	Yes	Yes	Yes	Yes
	i. 61000-4-2 – ESD	Yes	Yes	Yes	Yes
	ii. 61000-4-3 Radiated Immunity	Yes	Yes	Yes	Yes
	iii. 61000-4-4 – EFT	Yes	Yes	Yes	Yes
	iv. 61000-4-5 – Surge	Yes	Yes	Yes	Yes
	v. 61000-4-6 – Low Frequency common immunity	Yes	Yes	Yes	Yes
33	The offered devices must support following functionalities to support 3rd party SDN (in future)				
	(a) The router should support RFC 6020, YANG - A Data Modeling Language for the Network Configuration	Yes	Yes	Yes	Yes
	(b) Protocol (NETCONF)	Yes	Yes	Yes	Yes
	(c) The solution should support the network configuration protocol (NETCONF) that provides mechanisms to install, manipulate, and delete the configuration of network devices, RFC 6241	Yes	Yes	Yes	Yes
	(d) The router should be able to act as Path computation client in the PCE architecture defined in RFC 4655.	Yes	Yes	Yes	Yes
	(e) The router should support PCECP as defined in RFC5440.	Yes	Yes	Yes	Yes
	(f) The router should support BGP link-state (BGP-LS), RFC 4655	Yes	Yes	Yes	Yes
	(g) The router should support SPRING or Segment routing	Yes	Yes	Yes	Yes

I	Devices shall support following natively or		1		
	through EMS for Provisioning. If it is				
34	supported through NMS, NMS should be				
	provided without additional cost to RailTel				
	(a) Use NETCONF (RFC 6241, RFC 6242,	***	***	**	***
	RFC 5277)	Yes	Yes	Yes	Yes
	(b) REST /NETCONF based CRUD				
	operations for configuration and	Yes	Yes	Yes	Yes
	management.				
	The offered devices must support				
35	API/NBIs/SNMP for auto discovery of	Yes	Yes	Yes	Yes
	Services and Physical & Logical Topology				
36	TELEMETRY Function: It shall support				
	following:				
	a) The router should support telemetry	37	37	3.7	37
	based on push model for monitoring network devices	Yes	Yes	Yes	Yes
	b) The router should support various				
	software models/sensors for capturing				
	different health parameters from the	Yes	Yes	Yes	Yes
	devices				
	c) The router should support sending				
	telemetry data to multiple consumers	Yes	Yes	Yes	Yes
	simultaneously				
	d) The router shall support				
	GPB/GRPC/KAFKA encoding for	Yes	Yes	Yes	Yes
	telemetry data				
	e) The software model/sensors should be	Yes	Yes	Yes	Yes
	based on either yang, xml or open config		1		
	f) The solution shall use either UDP or	Yes	Yes	Yes	Yes
	GRPC for transport of telemetry data				
	g) The system should support streaming granularity of atleast 10 sec	Yes	Yes	Yes	Yes
	h) The router shall have the ability to				
	interact with open standard based tools	Yes	Yes	Yes	Yes
	i) The system should support REST				
	API/NETCONF for communication with	Yes	Yes	Yes	Yes
	third party tools and applications	1 05	105	1 05	1 65
	j) Enabling telemetry should not have any				
	adverse impact on the performance of the	Yes	Yes	Yes	Yes
	device/router				
	k) Some of the streaming models/sensors	Yes	Yes	Yes	Yes
	the router should support are:	1 68	1 68	1 68	1 68
	System	Yes	Yes	Yes	Yes
	Chassis Environment	Yes	Yes	Yes	Yes
	Line card utilization (memory, processor,				
	QoS, Temp, Port utilization ), errors	Yes	Yes	Yes	Yes
	counters				
	Controller Card sensors (memory, CPU,	Yes	Yes	Yes	Yes
	Temp etc)		Vac	V.	V
	Fabric statistics	Yes	Yes	Yes	Yes
<u></u>	ARP table state	Yes	Yes	Yes	Yes

	Routing prefix information	Yes	Yes	Yes	Yes
	Interface	Yes	Yes	Yes	Yes
	Interface statistics (Physical and logical				
	interfaces)	Yes	Yes	Yes	Yes
	Interface optical diagnostic	Yes	Yes	Yes	Yes
	Congestion and latency	Yes	Yes	Yes	Yes
	Filter statistics	Yes	Yes	Yes	Yes
	Protocol	Yes	Yes	Yes	Yes
	BGP peer information	Yes	Yes	Yes	Yes
	ISIS State, Interface, Adjacency statistics, LSDB	Yes	Yes	Yes	Yes
	ISIS SPRING / Segment Routing Statistics	Yes	Yes	Yes	Yes
	RSVP Interface Statistics	Yes	Yes	Yes	Yes
	LSP statistics	Yes	Yes	Yes	Yes
	LSP Event Export, Experimental	Yes	Yes	Yes	Yes
	IP SLA/RPM (or equivalent) reporting	Yes	Yes	Yes	Yes
	Segment Routing statistics	Yes	Yes	Yes	Yes
	DHCP statistics	Yes	Yes	Yes	Yes
37	Router should support Dual Image/Partition with USB flash drive booting option for OS recovery	Yes	Yes	Yes	Yes
38	Router should support jumbo frame.	Yes	Yes	Yes	Yes
39	Router should support port mirroring	Yes	Yes	Yes	Yes
40	Router should support security features of Broadcast/Mulitcast/Unicast Storm control.	Yes	Yes	Yes	Yes
41	Router should comply to following Temperature performance parameters:				
	i. Operating Temperature: 5 to 40 degree C or better	Yes	Yes	Yes	Yes
	ii. Storage Temperature: 0 to 60 degree C or better	Yes	Yes	Yes	Yes
42	Routers should support following Metro Ethernet Features:				
	i. ITU-T G.8032 Ethernet Ring Protection designed for loop protection or alternate mechanism to achieve ring protection in less than 50 ms.	Yes	Yes	Yes	Yes
	ii. Should support multiple Ring up to 8 ring(main and sub ring) protection failover with in 50 ms or ITU-T G.8032 v2.	Yes	Yes	Yes	Yes
43	The operating system of the Routers category/series/family should be MEF-9/14 or CE(Carrier Ethernet) or MEF 3.0 Certified.	Yes	Yes	Yes	Yes
44	The Router shall be designed for continuous operations with dual fan system.	Yes	Yes	Yes	Yes
45	Router should support CFM and LFM alarms.	Yes	Yes	Yes	Yes

46	Shall support HQoS, option of traffic shaping per VLAN based.				
	i. Per-VLAN policing.	Yes	Yes	Yes	Yes
	ii. Per-VLAN rewrite	Yes	Yes	Yes	Yes
	Iii. Per-VLAN two-rate tri-color marking.	Yes	Yes	Yes	Yes
	iv. Per-VLAN classification	Yes	Yes	Yes	Yes
	v. Per-VLAN filtering	Yes	Yes	Yes	Yes
	Support for P and PE router functionality	1 65	1 03	1 05	1 03
47	for MPLS on the same router simultaneously and on all the interfaces.	Yes	Yes	Yes	Yes
48	Router shall support E-Line or E-LAN MEF standards.	Yes	Yes	Yes	Yes
49	Routers should be rack mountable to fit into a standard 19-inch rack	Yes	Yes	Yes	Yes
50	OEM shall ensure that use of third party optics shall not be explicitly blocked on the Router. Router must support all MSA complied Optics available in market.	Yes	Yes	Yes	Yes
51	Segment Routing				
i	Router should be able to support SRv6 standards whenever it is firmed upt without any cost to RCIL.	Yes	Yes	Yes	Yes
ii	The router should support SR-MPLS dataplane and protocols OSPF,IS-IS and BGP Segment routing extensions	Yes	Yes	Yes	Yes
iii	Traffic Steering of SR policies with Autoroute Include and Segment Routing TI-LFA SRLG Protection	Yes	Yes	Yes	Yes
iv	LSP ping, trace-route, Pseudo wire Ping over Segment Routing, trace route for binding-SID	Yes	Yes	Yes	Yes
v	MPLS-LDP interworking with SR-ISIS and SR-OSPF	Yes	Yes	Yes	Yes
vi	BGP peer information	Yes	Yes	Yes	Yes
vii	Controller instantiated SR Policy (PCEP, BGP) and SR policy based on On demand next hop	Yes	Yes	Yes	Yes
viii	Router should have capability to calculate Bandwidth based path using centralized controller.	Yes	Yes	Yes	Yes
ix	Shall support SR and MPLS (LDP) Interworking	Yes	Yes	Yes	Yes
X	The router shall support dynamic point-to-point interface latency performance measurement. The measurement must be integrated in the IGP and BGP LS for SDN Controller Analysis.	Yes	Yes	Yes	Yes
xi	Label distribution protocol and segment routing should coexist and there should support option to prefer LDP over segment routing.	Yes	Yes	Yes	Yes
52	EVPN Features				

ı			1	1	İ
	Router should have support of Ethernet				
i	VPN (EVPN with single homing, multi	Yes	Yes	Yes	Yes
	homing				
	Router should have support of following				
ii	features on EVPN: EVPN-IRB, EVPN	Yes	Yes	Yes	Yes
111	VPWS, EVPN VPWS Preferred Path over	res	res	1 es	res
	SR-TE Policy				
	Should have power supply arrangement				
	without any external adaptors with				
53	redundant/dual feeds power supply:Type-I	Yes	Yes	Yes	Yes
	& II & III -48 V DC supply (with the	1 05		1 05	1 65
	operating range of -48 to -60 VDC).				
	Proposed devices should be Interoperable				
54	with Juniper, Cisco and Nokia devices on	Yes	Yes	Yes	Yes
34	the above features	1 68	1 68	1 68	1 68
	RailTel may ask to showcase (PoC) for				
55	those devices (same series/family) which	Yes	Yes	Yes	Yes
22	are not deployed in RailTel for all the	Y es	res	Y es	Yes
	above features to comply with technical				
-	specs asked if required.				
	Bidder/OEM has to provide Training and				
	OEM certification of at least 20 employees				
56	of RailTel for those devices (same	Yes	Yes	Yes	Yes
	series/family) which are not deployed in				
	RailTel existing Network for CGNAT &				
	MPLS Network.				
57	OEM should be listed in telecom trusted	Yes	Yes	Yes	Yes
	portal as trusted source.				
	Note: Bidder can propose dual box for				
	CGNAT Router. In case of dual box				
	solution, CGNAT box should have Min				
58	2x100G interface with required optics to	Yes	Yes	Not	Not
	connect the CGNAT Router & redundant	1 05	105	Applicable	Applicable
	DC (-48 V) power supply and should				
	meet CGNAT Specification as per				
	CGNAT Appliance.				
59	Note:				
	i. NEBS Certification is not required for				
	PMA. However, they have to produce				
	certificate from standard lab approved/	Yes	Yes	Yes	Yes
	authorized by Govt. of India that their	1 68	1 68	1 68	1 68
	product are equivalent to NEBS and meets				
	all standard and specification of NEBS.				
	ii.The offered product of same				
	series/family should have Satisfactorily				
	working for at least 6 months (during last				
	3 FY and current FY) as on date of opening	Vac	Vas	Vac	Vac
	of tender, in India in at least two	Yes	Yes	Yes	Yes
	Government /PSUs/Telecom Service				
	Providers (NLD or Class-A ISP)/Public				
	Listed Company. Documentary evidence				
	, , , , , , , , , , , , , , , , , , , ,		1	I .	<u> </u>

for same should be submitted a offer.	along with				
iii.The proposed devices(CGNA and CGNAT Appliance) shad managed from SDN-Controller/	hould be	Yes	Yes	Yes	Yes

# A.2 .Technical Specifications for CGNAT Appliance/Module (Type-1 &4)

Technical Specifications for CGNAT Appliance				
Shall support following CGNAT capability and Functional Features.	Type 1	Type 2		
a. The CGN must support source-based NAT.	Yes	Yes		
b. The CGN should allow for enabling/disabling of NAT capabilities at different levels of the NAT components hierarchy: card or outside pool.	Yes	Yes		
c. The CGN must employ endpoint-independent mapping	Yes	Yes		
d. The CGN must allow the NAT outside pool to be made up of contiguous IPv4 subnets, non-contiguous IPv4 subnets and/or a combination thereof. Please specify the number of subnets that can be used to for one pool.	Yes	Yes		
e. The CGN support the ability to configure static mappings. (operator configured permanent IP address and port bindings)	Yes	Yes		
f. The CGN must support static-port forwarding to allow a subscriber to define a mapping of (protocol, outside IP, outside port, inside address, inside port) on the CGN	Yes	Yes		
g. The CGN support a capability to configure the maximum number of ports that can be assigned to a customer.	Yes	Yes		
h. The CGN must support "hair pinning" (when both the source and destination are managed by the same CGN)	Yes	Yes		
i. The CGN must allow configurability of UDP NAT entry timeout.	Yes	Yes		
j. The CGN must provide means to prohibit mapping of the privileged/well-known TCP and UDP ports (<1024).	Yes	Yes		
k. The CGN implementation must have support for following but not limited to the protocols/application:	Yes	Yes		
1. Support for DNS, FTP, ICMP, PPTP, Sun RPC and, RTSP, SIP, SQLNET, TFTP, Unix Remote Shell Service, TELNET	Yes	Yes		
m. The CGN must support NAT44 and 444	Yes	Yes		
n. The CGN must support NAT64	Yes	Yes		
o. Support bypass within the NAT rule to not NAT certain traffic.	Yes	Yes		
p. IP address/range filter before traffic hits the CGN module or while being processed by CGN module.	Yes	Yes		
q. The NAT platform shall translate (modify) IP datagrams passing between two IPv4 domains (an external domain e.g. the public internet, and an internal private operator domain).	Yes	Yes		
r. The NAT function shall modify the headers of all IP datagrams in a session	Yes	Yes		

	s. The NAT function shall adjust the checksum values of all IP, UDP, TCP and ICMP headers	Yes	Yes
	t. The CGN must support monitoring the actual usage of sessions per card/chassis, and associated logging of threshold crossing.	Yes	Yes
	u. The CGN must support monitoring the actual usage of ports per outside address/port pool, and associated logging of threshold crossing.	Yes	Yes
	v. The operator shall be able to view the current static and dynamic IP address and port bindings and the operator shall be able to terminate any arbitrarily selected static or dynamic IP address and port binding.	Yes	Yes
	w. The CGN must provide a configurable limit for sessions per subscriber.	Yes	Yes
	x. The CGN must support thresholds for monitoring the actual usage of sessions per subscriber.	Yes	Yes
2	The device should support SNMP v1, v2 and v3.	Yes	Yes
3	CGN should also supports IPFIX for NAT logging or more compressed NAT logging method than Syslog.	Yes	Yes
4	CGN should support extensive and flexible logging capabilities and should store information such as private-to-public IP address translation, destination addresses, port numbers, times of day, and other session details. DOT Letter No. 820- 01/98-LR/Vol.(IX) Pt. I dated 01.10.2013 or latest to be followed for NAT Logs .	Yes	Yes
5	The device should support traffic logging in case of the following:	Yes	Yes
	i. ICMP data session created	Yes	Yes
	ii. TCP data session created	Yes	Yes
	iii. UDP data session created	Yes	Yes
	iv. ICMP data session deleted	Yes	Yes
	v. TCP data session deleted	Yes	Yes
	vi. UDP data session deleted	Yes	Yes
	vii. CGN port mapping created for ICMP	Yes	Yes
	viii. CGN port mapping created for TCP	Yes	Yes
	ix. CGN port mapping created for UDP	Yes	Yes
	x. CGN port mapping for ICMP freed	Yes	Yes
	xi. CGN port mapping for TCP freed	Yes	Yes
	xii. CGN port mapping for UDP freed	Yes	Yes
6	The proposed platform shall support CGNAT functionalities like Deterministic, fixed Network Address Translation (NAT) and Port block allocation (PBA).	Yes	Yes
7	Proposed platform shall support minimum concurrent established connections from day 1.	60 Million	30 Million
8	Proposed platform shall be able to provide network address translation with static 1 to 1,dynamic many internal to one external, dynamic many internal to many external, port address translation to use same external IP on different services to different internal servers	Yes	Yes
9	Proposed platform shall support policy-based NAT, where it is possible to match a condition and then apply NAT.	Yes	Yes
10	System shall protect itself from DOS and DDOS attacks	Yes	Yes
11	Shall be able to protect against protocol flood attacks such as TCP, UDP, and ICMP etc.	Yes	Yes

12	Shall be able to protect against malformed packet, fragmented packet, TCP reassembly related attacks	Yes	Yes
13	Shall support NAT for SIP service		Yes
14	Platform shall support high availability using active-hot- standby and active-active setup in case of dual box solution.	Yes	Yes
15	Failover shall support stateful session mirroring to ensure that in case of active unit failure the system can handle the active connections seamlessly without interruption.	Yes	Yes
16	Platform shall support CGNAT and logging to support minimum IMIX throughput. Proposed devices should be equipped required optics to connect with upstream Routers in case of external box solution.	300Gbps	150Gbps
17	Platform shall have the capability to define failure condition to invoke failover such as, gateway reachability, availability of ports in trunk etc.	Yes	Yes
18	Platform shall have the capability to limit IPV4 NAT sessions based on source IPs .	Yes	Yes
19	Platform shall have the capability to support firewall sessions IPv4 & IPv6 based on source IPs .	Yes	Yes
20	Platform shall have the capability to support firewall sessions logging .	Yes	Yes
21	Platform shall have the capability to support stateful firewall and stateless firewall functionality.	Yes	Yes
22	The Equipment offered by the tenderer or equipment of the same series/family from the same OEM should have been satisfactorily working in Government/ PSUs/Telecom Service Providers (NLD/Class-A ISP) network for at least 12 months, in India. As documentary evidence, the tenderer shall submit the relevant End User Purchase Order (PO) along with an End User Certificate confirming the satisfactory performance of the equipment, both of which must accompany the offer.	Yes	Yes
24	OEM should be listed in telecom trusted portal as trusted source.	Yes	Yes

# **A.3 SDN Controller**

1	System Architecture		
1.1.1	The SDN controller should include a unified cloud architecture that integrates		
	management, control, and analysis.		
1.1.2	The SDN controller must support a unified portal to access all SDN components,		
	including device management, service provisioning, network optimization, and		
	network monitoring.		
1.1.3	The SDN controller must provide a unified user authentication mechanism. Multiple		
	logins are not required when all SDN functional components are used.		
1.1.4	All SDN components should support a unified user authorization mechanism. The		
	SDN system should be a complete system with uniform authentication to avoid		
	jumping out of different applications and ensure security.		
1.1.5	The SDN controller should provide unified service monitoring capabilities in one		
	service window, including service DASHBOARD, service-related alarms, historical		
	performance curves, and OAM tools.		

<b>-</b>	
1.1.6	The SDN controller must provide unified deployment and installation tools and deploy
	all components at a time.
1.1.7	The SDN controller must support RADIUS/LDAP authentication
1.1.8	The SDN controller must support standard southbound protocols
1.1.23	The SDN controller must provide unified northbound interfaces to integrate with the
	upper-layer OSS management system, orchestrator, and super controller. Multiple
	components do not need to provide multiple northbound interfaces for
	interconnection.
1.1.25	The SDN controller must support the local blade active/standby protection
	mechanism.
1.1.26	The SDN controller must support the remote disaster recovery capability. The active
	and standby controllers must support the database synchronization mechanism.
1.1.27	The SDN controller must have the full lifecycle management capability of the
	network, including the following functions:
1.1.28	Zero Touch device deployment
1.1.29	Automatic service provisioning
1.1.30	MPLS network optimization and optimal path computation
1.1.31	Network traffic monitoring and analysis
1.1.32	Network SLA and E2E service performance analysis
1.1.33	IP network optimization
1.1.34	Network assurance
1.1.35	Configuration Management
1.1.36	Fault management
2	Network discovery and basic configuration management
2.1.1	The SDN controller should support automatic discovery of network devices and
2.1.1	connection relationships through protocols such as LLDP, and generate network
	topology of the entire network.
2.1.2	The SDN controller should automatically discover the logical topology of the network
2.1.2	through protocols such as BGP-LS.
2.1.3	The SDN controller should support real-time network topology change update.
2.1.4	The SDN controller should support the display of L3 topology by region.
2.1.5	The SDN controller should support GIS map-based network topology display.
2.1.6	The SDN controller should support automatic combination of topology and inventory
2.1.0	information and display topology information on the WebUI.
2.1.7	The SDN controller inventory can be queried based on multiple criteria and reports
2.1.7	can be exported.
2.1.8	The SDN controller must be capable of hierarchical path view and visualization from
2.1.0	services to tunnels to links.
2.1.9	The SDN controller must support the graphical display of the entire network topology
2.1.9	and support subnet topology division and visualization.
2.1.10	The SDN controller should support the zero touch function, automatically discover
2.1.10	new routers on the network, and automatically generate and deploy basic
	configurations for new routers. (LSR ID, IP address, IGP, protocol) to automatically
	add new routers and build the physical topology.
3	MPLS/SRv6 Path Computation and Network Optimization
3.1.1	The SDN controller should be able to manage RSVP-TE LSPs, SR-TE LSPs, and SR
2.1.1	policies at the same time
4	Automatic service provisioning and management
4.1.1	The SDN controller supports E2E configuration of the following service types:
4.1.2	- RSVP-TE/SR-TE
4.1.3	- EVPN
	- L3VPN
4.1.4	- LJ V I IV

4.1.5	- L2VPN
4.1.6	- VLL
4.1.7	- VPLS
5	Network monitoring and analysis
5.1.1	The SDN controller must support real-time collection of network performance
	information through Telemetry/SNMP/NetSteam
5.1.2	The SDN controller must support dynamic collection of link and tunnel data delay
	information
5.1.3	The SDN controller should support report and visual display of network performance,
	including packet loss, delay, jitter, and bandwidth utilization
5.1.4	The SDN controller must support reports and visualized display of QoS queue/VPN
	service performance and quality, including packet loss, delay, and jitter
5.1.5	The SDN controller should support the generation of alerts when performance exceeds
	threshold limits
6.	OEM should be listed in telecom trusted portal as trusted source.

# A.4 Rack Servers for DNS/Speed Test Server/Syslog Collector

1	Processor with		
	2 GHZ or better	24 Cores Single/Dual Intel/AMD/ARM-based or better	
2	RAM	128 GB	
3	Drives	2TB SSD Usable Space with RAID 0 or 1 or 10	
4	RAID	RAID 0,1,10	
5	NIC	Dual Port SFP+ with LR optics	
6	USB	2 x USB	
7	Drivers	Should be available on Web.	
8	Power Supplies	Hot Plug AC 230V/50Hz, Redundant Power supply	
9	Management	Server Support SNMP trap/event log in case failure of hard ware	
10	IPMI	Integrated IPMI with KVM and Dedicated LAN	
11	Rack Mount	1 U Rack mount with all accessories	
12	Application	Application: Unbound (DNS server), Speed Test Server,	
	Supported	Collection of Syslog using rsyslog & logstash & Filebeat.	
13	OS Supported	Red Hat, CentOS, Ubuntu, Oracle Linux and Debian.	
14		OEM must be ISO 9001 and 14000 certified & OEM should be	
	7.07	listed in telecom trusted portal as trusted source.	
	<b>OEM Compliance</b>	e Caracteristics of the Caracteristics of th	
15	Regulatory	ROHS, FCC / UL/CE and 80% Plus Platinum Level for power	
	Compliance	supplies.	
16	Satisfactorily	The Equipment offered by the tenderer or equipment of the same	
	working.	series/family (minimum Qty 40 Nos) from the same OEM should	
	11	have been satisfactorily working in Government/ PSUs/Telecom	
	The second second	Service Providers (NLD/Class-A ISP) network for at least 12 months,	
		in India. As documentary evidence, the tenderer shall submit the	
	10 10	relevant End User Purchase Order (PO) along with an End User	
		Certificate confirming the satisfactory performance of the equipment,	
		both of which must accompany the offer.	
	t	1 7	

# B. Technical specifications for schedule of supply (B)

# 1. Desktops/ Workstation: (Makes :HP, DELL, LENOVO or similar or of better make)

SN	Component	Specification		
1	Form Factor	Desktops		
2	Display	27-inch Full HD Monitor		
3	Processor	Intel Core i5 or higher		
4	Memory (RAM)	16 GB DDR4 or higher		
5	Storage	SSD (Minimum 960 GB recommended)		
6	Operating System	Pre-installed Windows Enterprises support for Active Directory integration		
7		Windows Enterprises operating system. Must support: Webex, Microsoft Teams, Zoom Meeting		
8	Virtualization Support	Hardware-assisted virtualization (Intel VT-x/VT-d)		
9	Virtualization Support	OS must support virtual machines		
10	Central Authentication	OS should support integration with Active Directory/FreeIPA/LDAP for centralized authentication		
11	USB Ports	Minimum 6 x USB 3.0 ports		
12	Keyboard & Mouse	Wireless Keyboard and Wireless Mouse (included)		
13	HDMI Input	External HDMI input support on the monitor		
14	Networking	Integrated Wi-Fi (802.11ac or better) 1 x 1G LAN Port (RJ45 Ethernet)		
15	Warranty	Minimum 3 years hardware warranty		

## 2. Laptops (Makes HP, DELL, LENOVO or similar or of better make)

SN	Component	Specification	
1	Form Factor	Minimum 13 -inch Laptop	
2	Display	Minimum 13-inch HD/Full HD Display (1366x768 or 1920x1080)	
3	Processor	Intel Core i5 or M1	
4	Memory (RAM)	8 GB DDR4	
5	Storage	128 GB SSD	
6		Windows Pro Edition/Mac OS	
	Operating System	Supports: Webex, Microsoft Teams, Zoom	
7		Meetings	
8	Warranty	3 Year standard warranty	

## 3. Next Generation Firewall

SN	Section	Feature	Specification
	Deployment Mode	Modes	Gateway (L3) and Transparent
1	Deproyment Wode	Supported	(L2)
		Supported	OSPF V2 & V3, BGP, RIP, Static
	Douting	Protocols	Routing
2	Routing	Advanced	Policy based forwarding, PIM-SM,
		Routing	PIM-SSM, Bidirectional scanning

		Compliance	IPv6 ready & certified from day one
3	IPv6 Support	Features	Application awareness/control, content inspection, zero-day threat detection, SSL traffic inspection
		User Licenses	100 users from day one
4	IDG VDN	Key Exchange	Manual Key, IKEv1, IKEv2 (pre- shared key, certificate-based)
	IPSec VPN	Encryption	3DES, AES (128/192/256-bit)
		Authentication	MD5, SHA-1, SHA-256, SHA-384, SHA-512
		IPv4 NAT	Static IP, dynamic IP, dynamic IP
5	NAT	Modes	and port (PAT)
	NAI	IPv6 NAT	NAT64
		Features	Dynamic IP reservation
	A S	Modes	Active/Active & Active/Passive
6	High Availability (HA)	Failure	Path monitoring, interface
	11/20	Detection	monitoring
7	SSL VPN	User Support	Minimum 100 users
8	Architecture	Hardware	Multi-core CPU-based hardware
		ISP Support	ILL, broadband, MPLS etc.
9	SD-WAN	Features	Automatic failover, per-app SLAs (packet loss, jitter, latency), dynamic link selection, load balancing, Forward Error Correction.
10	Software & Security Modules	Included Modules  Subscription	Firewall, IPS, Anti-Virus & Anti-Malware, Anti-Bot, Content/Application Awareness, Web & URL Filtering, Gateway Anti-Spam, Cloud-based Sandboxing, Category Based blocking.  NGFW should support DPI, as well as use artificial intelligence/machine learning algorithms to detect potential threats.  NGFW should have capability for customization.  Valid for 3 years from date of supply.
	n/A	Access &	Role-based access, SNMP traps
11	Administration, Management & Logging	Alerts	The state of the s
		Integration	Syslog output, SIEM integration, AAA for user authentication
		GUI & Management	Built-in GUI
12	Performance	NGFW	≥ 2 Gbps Mbps with full features enabled

		SSL Inspection	≥2Gbps
		Connections	$\geq$ 30,000 new connections/sec
		Virtualization	Support for $\geq 10$ virtual firewalls
		VPN Throughput	≥ 2Gbps
		Firewall Throughput	25 Gbps .
13	Storage	SSD	≥ 128 GB SSD for logging
14		1GE RJ45	≥ 6 ports
17	Ports	10 GE SFP+	$\geq 2 \text{ slots}$
		Web	≥ 1 port (10/100/1000 RJ45 or
15		Management	1G/10G SFP with optics)
10	Management Ports	Console	≥ 1 port
		USB	≥ 1 port
16	Power Supply	Adaptor/inbuilt	DC PSU with two sources or Redundant DC PSU.
17	OEM Compliance	Compliance	OEM must be ISO 27001 certified The OEM should be registered on Trusted Telecom Portal (Authority: DOT notification No. 20-1263/2021-AS-I Dated: 30.03.2021, https://trustedtelecom.gov.in).
			UTM Firewall is not acceptable
18	Warranty	1	Minimum 3 years hardware warranty
	Satisfactorily working	12	The Equipment offered by the tenderer or equipment of the same series/family from the same OEM should have been satisfactorily working in Government/ PSUs/Telecom Service Providers (NLD/Class-A ISP) network for at least 12 months, in India. As documentary evidence, the tenderer shall submit the relevant End User Purchase Order (PO) along with an End User Certificate confirming the satisfactory performance of the equipment, both of which must
19			accompany the offer.

# 4. Device Manager

S. No.	Specification Item	Details
1	Firewall Integration Support	Proposed Hardware & Software Supports integration with up to 20 next generation firewalls for proposed NGFW (Item-02) with same make.

2	Firewall configuration support	integration with up to 20 firewalls for management	
3	<b>Deployment Type</b>	VM-based installation (compatible with	
3		VMware/Hyper-V/KVM environments)	
4	OS Platform Support	Linux-based (typically CentOS, Ubuntu, or	
4		appliance OS)	
5	CPU Requirements	X86 based CPU	
6	User Interface	Web-based GUI with role-based access control	
7	Central Authentication	LDAP,AAA, and sso suport for single sign on	
8	Security Compliance	Supports logging for PCI-DSS, HIPAA, ISO27001,	
0		etc.	
9	High Availability	Supports HA deployment in VM environment	
10	<b>Integration Options</b>	REST APIs, SNMP	
11	Vendor/Brand Options	Compatible to NGFW quoted	
12	Hardware	Rack mountable Server Hardware	
13	Warranty	Minimum 3 years hardware warranty	

# 5. POE Switches

SN	Component	Specification	
1	Switch Type	Layer 2 Managed PoE++ Switch	
2	Ports	24 × 10/100/1000BASE-T RJ45 PoE++ ports	
		(IEEE 802.3at compliant)	
3	Uplink Ports	2 × 1G SFP ports	
4	PoE Standard	IEEE 802.3af / 802.3at	
5	PoE Power Budget	Minimum 300W	
6	Switching Capacity	≥ 56 Gbps	
7	Forwarding Rate	≥ 41.7 Mpps	
8	Routing Protocols	Static Routing	
9	VLAN Support	IEEE 802.1Q, up to 4096 VLANs	
10	Inter-VLAN Routing	Supported	
11	QoS Features	802.1p, DSCP, traffic shaping, rate limiting	
12	Voice Support	Auto-VoIP, LLDP-MED, traffic prioritization	
13	Management	Web GUI, CLI (SSH/Telnet), SNMP	
		v1/v2c/v3	
14	Security Features	802.1X, ACLs, DHCP Snooping, Storm	
		Control	
15	DHCP	DHCP Server, DHCP Relay, DHCP Snooping	
16	Multicast	IGMP v1/v2/v3 Snooping	
17	Power Supply	Internal AC	
18	Cooling	Fan.	
19	Operating Temp.	0°C to 40°C	
20	Certifications	FCC, RoHS	
21	OEM Compliance	The OEM should be registered on Trusted	
		Telecom	
		Portal (Authority: DOT notification No. 20-	
		1263/2021-AS-I Dated: 30.03.2021,	
		https://trustedtelecom.gov.in).	
22	Warranty	Minimum 3 years hardware warranty	

23	Satisfactorily working	The Equipment offered by the tenderer or
		equipment of the same series/family from the
		same OEM should have been satisfactorily
		working in Government/ PSUs/Telecom
		Service Providers (NLD/Class-A ISP) network
		for at least 12 months, in India. As
		documentary evidence, the tenderer shall
		submit the relevant End User Purchase Order
		(PO) along with an End User Certificate
		confirming the satisfactory performance of the
		equipment, both of which must accompany the
		offer.

## 6. Microsoft Office Licenses

#### Note:

- 1. Please specify compliances fulfilment through product features or through customizations in comments column.
- 2. If any brand / products are found un-suitable as per requirement of Tender, Bidder can replace the product with better products during contract period with the approval of competent authority in RailTel, meeting the tender requirements, without any change in commercial bid.
- 3. Bidder/OEM can also leverage existing Management system deployed in RailTel, if the OEM shall provide undertaking for long term support for 8 years for all existing components irrespective of End of Life of the existing hardware/License/Software. Hardware/License/Software required for such up gradation shall be included in the price bid.
- 4. It may kindly be noted that in the specification wherever support for a feature has been asked for, it will mean that the feature should be available without RailTel requiring any other hardware/software/licenses. Thus all hardware/software/licenses required for enabling the support/feature shall be included in the offer.

# 3.6. POWER SUPPLY ARRANGEMENT

As per Clause 4.4.1 of Chapter 3D of this Tender Document.

## 3.7. EARTHING:

3.7.1. The earthing arrangement shall be provided by RailTel. Tenderer should indicate required value of earthing for the equipment.

# 3.8. SYSTEM ENGINEERING GUIDELINES:

- 3.8.1 With 100% concurrent users loaded on the system the target response times should be as follows:
- 3.8.1.1. Total time for Ticket creation after submission should be less than 10 seconds.
- 3.8.1.2. Any ticket object, when opened in modify mode for state change or any other information update, should be saved in less than 10 seconds, after pressing the save button.

- 3.8.1.3. Any ticket object, when opened in modify mode, for assignment or reassignment to a user, should be saved in less than 10 seconds, after pressing the save button.
- 3.8.1.4. Tab navigation (such as moving from dash-boarding to reporting etc.) <2seconds.
- 3.8.1.5. Screen opening from user login<3 seconds.
- 3.8.1.6. For a qualified search criteria, search results should be fetched within stipulated time of less than 20 seconds for each 100 results.
- 3.8.1.7. Simple & Medium Report generation <30 seconds
- 3.8.1.8. With auto TT in place (post both-way integration with alarm management system), automatic ticket should be opened within 20 seconds from the time of getting trigger from alarm management system.
- 3.8.1.9. With auto TT in place (post both-way integration with alarm management system The system triggering the ticket update should get the response back with update success status in less than 60 seconds.
- 3.8.1.10. In parent child ticket scenario, the updation in parent ticket should reflect in child ticket in less than 60 seconds.

## 3.A.4 DEPENDENCIES AND RESPONSIBILITY MATRIX

#### 1. **DESIGN OF THE SYSTEM**

The deployment location(s) will be decided by RailTel based on requirement. It will be in the scope of the vendor to technically support RailTel with design parameters, process flow fine tuning, ITIL alignment, optimization, escalation matrix definition, SLA rules definition & implementation etc within the limitations of ordered configurations (SOR, Specifications etc) for successful commissioning of the system. Design of system would include the following:

- a) Study of existing process flows, SLA Rules etc.
- b) Process flow fine tuning, ITIL alignment, optimization, escalation matrix definition, SLA rules definition & implementation etc.
- c) Provision for integration with other modules / systems. System Designs shall be approved by RailTel before implementation.

The Tenderer shall submit detailed report on the above parameters and the complete system design including system performance to meet the technical requirements including codes for customization.

# 2. QUALITY ASSURANCE PROGRAMME AND IMPLEMENTATION METHODOLOGY

The tenderer with quality assurance should prepare Implementation Methodology covering:

- a) Supply, installation, customization, SAT (Site Acceptance Test), UAT, trial runs, Commissioning etc.
- b) Allocation of manpower for different activities.
- c) Submission of PERT chart indicating completion of various activities within targeted time frame.

## 3. MANUFACTURING, SUPPLY AND STORAGE OF EQUIPMENT

The tenderer will be fully responsible for Manufacturing, Supply of Equipment/cards/interfaces/ software and all related items for installation and commissioning of the system including the following:

- a) Spares required for Commissioning & warranty period shall be maintained by the Contractor at his own cost.
- b) All necessary cables and connectors required.
- c) The tenderer shall be responsible for transportation and storage of Equipment and all other items required for Installation and Commissioning of the system to RailTel's stores/sites as advised.

# 4. SITE PREPARATION

# 4.1. RailTel's Responsibility

Following shall be arranged by RailTel:-

- a) Space / Buildings / equipment room for housing rack / space in rack for location of equipment.
- b) AC/DC power supply required for equipment.
- c) Earthing as per requirement of equipment.
- d) Cooling arrangement.

Power Supply will be made available by RailTel at locations adjacent/near to the Equipment. Earthing will be made available on earthing bus- bar in the equipment room.

# 4.2 TENDERER's Responsibility

The tenderer will be responsible for "Supply, Installation, Integration, Customization, Testing, Training & Commissioning" of complete work for this tender. It shall be the responsibility of Supplier to transport the equipment to site for the Installation & Commissioning. Requirement for the following will be clearly indicated by the tenderer in the bid:

- a) Power Supply requirement (AC/DC).
- b) Power Load.
- c) Space.
- d) IT Racks.
- e) Cooling Requirement.
- f) Switch LAN Ports.
- g) Firewall

## 4.3 OUTSIDE PLANT ACCEPTANCE

The tenderer should check and ascertain that the power supply and earthing arrangement existing at the site to meet the requirement of equipment proposed to be installed. Augmentation required if any may be clearly brought out by tenderer.

# 4.4 INSTALLATION, INTEGRATION, CUSTOMIZATION, TESTING, TRIAL RUN AND COMMISSIONING OF SYSTEM

The Tenderer shall be fully responsible for Quality Assurance of equipment & other elements of the system including the following:-

- a) Installation, Integration & Customization of the above-mentioned equipment / items as per System design.
- b) Testing of the System as specified in the tender document.
- c) Trial run of the System.
- d) Commissioning of the System.

## 4.5 TRAINING OF PURCHASER'S PERSONNEL

Training on the Process Management System shall be provided by the Tenderer as per details given in the schedule of requirement and the tender document.

Admin and User Training shall be provided by OEM certified personnel qualified for the offered product.

## 4.6 FINAL COMMISIONING

The System shall be considered to be commissioned only after successful completion of the SAT/UAT, Trial Run and after issue of Provisional Acceptance Certificate (PAC).

Any item of Tenderer's goods/services not specifically mentioned, but considered essential for completion/commissioning of the work in all respects shall be deemed to be included in the scope of work. The tenderer may bring out any additional requirement and quote the price for the same as per the relevant SOR item, otherwise, it shall be required to be supplied by the tenderer free of cost.

## 4.7 PROJECT PLAN- DELETED

## 4.8 Proof of Concept (POC) Testing:

RailTel reserves the right to ask bidder to conduct POC. The POC scope and use cases for demonstration would be a sub set of this RFP and details of the same will be shared in a different POC document.

(End of Chapter-3A)



#### **CHAPTER 3B**

# INSPECTION, INSTALLATION AND SUPERVISION OF TESTING, COMMISSIONING & INTEGRATION

**3.B.1 INSPECTION:** Inspection shall be carried out by RailTel or its authorized agency.

## 3.B.2 TEST CATEGORIES

- i) The following tests shall be conducted for acceptance of the equipment and the system before final acceptance of the system. Waiver of Part or whole of type tests can be considered if proof of having done the tests by independent body or PTT authority is submitted.
  - a) Pre-commissioning test (after installation) for total integrated system.
  - b) Site Acceptance Testing (SAT)
  - c) Trial Run
- ii) These tests shall be carried out on all equipment supplied by Tenderer including those supplied by sub-vendors, if any.
- iii) Tenderer shall arrange all necessary test instruments, manpower, test-gear, accessories etc.
- iv) All technical personnel assigned by Tenderer shall be fully conversant with the system specifications and requirements. They shall have the specific capability to make the system operative quickly and efficiently and shall not interfere or be interfered by other concurrent testing, construction and commissioning activities in progress. They shall also have the capability to incorporate any minor modifications/suggestions put forward by purchaser /Engineer.
- v) **Test Plan**: The Contractor shall submit to Purchaser 'Test Plans' well in advance of commencement of actual testing in each of the above-mentioned test categories.

## The plans shall include:

- 1) System/Equipment functional and performance description (in short) and Tests to be conducted and purpose of test.
- 2) Test procedures (including time schedule for the tests) and identification of test inputs details and desired test results.

## 3) Test Report:

The observations and test results obtained during various tests conducted shall be compiled and documented to produce Test Reports by Tenderer. The Test Reports shall be given for each equipment/item and system as a whole. The report shall contain the following information to a minimum:

- i) Test results
- ii) Comparison of test results and anticipated (as per specifications) test result as given in test plans and reasons for deviations, if any.
- iii) The data furnished shall prove convincingly that
  - a. The system meets the Guaranteed Performance objectives
  - b. Mechanical and Electrical limits were not exceeded.
  - c. Failure profile of the equipment during the tests are well within the specified limits

# iv) Failure of Cards/Components:

Till the system is accepted by the Purchaser, a log of each and every failure of components shall be maintained. It shall give the date and time of failure, description of failed component, circuit, module, component designation, effect of failure of component on the system/equipment, cause of failure, date and time of repair, mean time to repair etc. Repair/modification done at any point of time at one site, shall be carried out by Tenderer at all the sites. Detailed documentation for the same shall be submitted to Purchaser for future reference.

If the malfunction and/or failures of a unit/module/sub-system/equipment repeat during the test, the test shall be terminated and Tenderer shall replace the necessary component or module to correct the deficiency. Thereafter, the tests shall commence all over again from the start.

If after the replacement the equipment still fails to meet the specification, Tenderer shall replace the equipment with a new one and tests shall begin all over again. If a unit/subsystem/module has failed during the test, the test shall be suspended and restarted all over again only after the Tenderer has placed the Equipment back into acceptable operation. Purchaser's approval shall be obtained for any allowable logical time required to replace the failed component/unit/module/sub-system.

## v) Readjustments

No adjustments shall be made to any equipment during the acceptance tests. If satisfactory test results cannot be obtained unless readjustments are made, Tenderer shall carry out only those readjustment needed to ready the equipment/system for continuance of tests. A log of all such adjustments shall be kept giving date and time, equipment, module, circuit, adjustments, reasons, test result before and after adjustment etc. Fresh acceptance tests shall be conducted after the readjustments have been completed.

## 3.B.3 Pre Factory Acceptance Testing- Deleted

## 3.B.4 Factory Acceptance Testing (FAT)- Deleted

#### 3.B.5 Installation

After Inspection Hardware equipment shall be sent to site for installation. Equipment without Inspection certificates shall not be acceptable at site.

Prior to installation, all equipment shall be checked for completeness as per the specifications of equipment required for a particular station. Installation shall be carried out in accordance with the installation manuals and approved installation drawings in the best workmanship.

Tenderer shall indicate the number of teams and the list of equipment for each team to be required for installation of the total telecom system in order to complete the work within the stipulated time frame.

Tenderer shall bring all installation tools, accessories, special tools, test gears, spare parts etc. at his own cost as required for the successful completion of the job.

If during installation and commissioning under the supervision of the tenderer any repairs are undertaken, the maintenance spares, if supplied with equipment shall not be used for the repair. Tenderer shall arrange his own spare parts for such activities till such time the system has been finally accepted by the Purchaser. A detailed report & log of all such repairs shall be made available by the Tenderer to Purchaser/Engineer and shall include cause of faults and repair details, within 2 weeks of fault occurrence.

A detailed time schedule for these activities shall be submitted by Tenderer to Purchaser/Engineer to enable their representatives to be associated with the job.

Tenderer shall supply all installation materials required for proper installation of the equipment. These shall include but not be limited to, all connectors, interbay and inter equipment cables, power supply cables and connectors, power distribution boxes, anchoring bolts, nuts, screws, washers, main distribution frames, audio distribution frames, voice frequency cables, junction boxes etc.

The installation of equipment shall be supervised by the tenderer in such a manner so as to ensure neat and clean appearance in accordance with approved installation document drawings. All inter bay, power supply and other cables shall be routed through wall mounted cable trays. No cable shall be visible. All through wall openings, trenches etc. shall be properly sealed to prevent the entry of rodents, insects and foreign materials.

Telecom room of one of the attended & unattended sites shall be made as model rooms and Tenderer shall take approval from Purchaser/engineer on various aspects spacing etc. After taking approval Tenderer shall take up installation at other sites in similar fashion in association with RailTel installation team.

# 3.B.6 Pre-Commissioning

On completion of installation of equipment, the correctness and completeness of the installation as per Manufacturer's manual and approved installation documents shall be checked by the Tenderer on his own.

A list of Pre-Commissioning tests (same as approved by the Purchaser/Engineer for site acceptance testing) and activities shall be prepared by Tenderer and the test shall be carried out by the Tenderer on his own. After the tests have been conducted to the Tenderer's own satisfaction, the Tenderer shall provide the test results for review by Purchaser/Engineer and then offer the system for Site Acceptance Testing.

During pre-commissioning, if any fault occurs to any equipment or system, Tenderer shall identify the same and provide report/history of all faults to the Purchaser.

During installation and pre-commissioning of the telecom system, Tenderer shall have enough number of commissioning spares so that the installation is not held up because of non-availability of commissioning spares. Tenderer shall ensure that the spares meant for operation and maintenance are not used during installation and commissioning.

# 3.B.7 Site Acceptance Testing (SAT)

On completion of Pre-commissioning & submission of Full-Link Budget Calculation, site acceptance testing shall be conducted on the system as per approved SAT procedures and its constituents by the Tenderer under the presence of Purchaser/Engineer.

The tests shall include, but not be limited the following:

- a) Checks for proper installation as per the approved installation drawings for each equipment/item and system as a whole.
- b) Guaranteed performance specifications of individual equipment/item.
- c) Self diagnostics test on individual equipment
- d) Tests on metering and alarm panels
- e) Tests on remote alarm transmission and reception
- d) System tests on per hop basis and End to End for the system, all complete.

## 3.B.7.1 PROVISIONAL ACCEPTANCE CERTIFICATE (PAC)

On successful installation, commissioning, Site Acceptance Test and integration of the equipment's with the existing network, Provisional Acceptance Certificate (PAC) will be signed by authorized representative of RailTel. Part PAC may also be issued for payment purposes. PAC will not be held back for want of minor deficiencies not affecting the functioning of the overall system. Deficiency, if any, pointed at the time of issuance of PAC, will be rectified by the contractor within one month.

## 3.B.8 SPARES

## 3.B.8.1 MAINTENANCE SPARES: Deleted.

## 3.B.8.2 Commissioning spares

The commissioning spare shall be arranged by the Tenderer to cater to the requirement during installation, commissioning, site acceptance testing, trial run and warrantee period. These spares shall be readily available with the Tenderer, at specified locations.

These commissioning spares are different from maintenance spares and Tenderer shall not use maintenance spares as commissioning spares till expiry of warranty period.

## 3.B.9 TRIAL RUN/FIELD TRIALS

Upon conclusion of the site acceptance testing the Tenderer shall keep the facilities commissioned for one months for 'TRIAL RUN/FIELD TRIALS'. During this period Tenderer shall provide all specialist Engineers & Technicians including experts to maintain the total log, incidents, failures & for assisting site engineer & for total co-ordination. However, the normal operation and maintenance of the system shall be performed by the personnel of the Purchaser trained for the purpose.

If during 'Trial run' any defect is noted in the system, the Tenderer shall rectify, replace the same to the satisfaction of Purchaser's/Engineer. The decision to repeat the final test or restart the 'Trial' shall be of Purchaser/Engineer depending upon the severity of the defect.

During trial run, if any fault occurs to any equipment of system, Tenderer shall identity and rectify the same and provide report, history of all faults to the Purchaser.

Ideally, during the 'Trial run, no shutdown of the system due to failure of equipment, power supply etc. should happen. A record of all failures shall be kept for each manned/unmanned station and the availability of the system on per hop and end to End basis shall be calculated, accordingly and results submitted to Purchaser/engineer.

If the system fails to come up to the guaranteed performance, the Tenderer, within a period of thirty (30) days shall take any and all corrective measures and resubmit the system for another 'Trial Run' of trial period. All modifications, changes, corrective measures, labour etc. shall be at the cost of the Tenderer. In case the date of completion for the second trial run exceeds the time schedule for the project, he shall be liable to pay liquidated damages. If the system fails to reach the guaranteed performance even after the second trial run, the Purchaser shall be free to take any action as he deems fit against the Tenderer and to bring the system to the guaranteed performance with the help of third party at the expense of the Tenderer.

## 3.B.10 FINAL ACCEPTANCE

The final acceptance of the works completed shall take effect from the date of successful completion of 12 months after issue of final/last PAC in any case that the contractor has complied fully with his obligations in respect of each item under the contract. The Final Acceptance Certificate shall be signed by authorized representative of RailTel.Not withstanding the issue of Final Acceptance Certificate, the contractor and the purchaser shall remain liable for fulfillment of any obligation incurred under the provision of the contract prior to the issue of Final Acceptance Certificate which remains unperformed at the time such certificate is issued and for determining the nature and extent of such obligation the contract shall be deemed to remain in force between the parties hereto.

## 3.B.11 QUALITY ASSURANCE

- i) Tenderer shall submit the details of Quality Assurance program followed by him beginning with raw materials, active, passive and fabricated components, units, sub-assemblies, assemblies, wiring, interconnections, structures. etc. to finished product. Tenderer shall obtain and forward the Quality Assurance Program for equipment supplied by Sub-vendor, if any.
- ii) The Purchaser's/engineer reserves the right to inspect and test each equipment at all stages of production and commissioning of the system. The inspection and testing shall include but not be limited to raw materials, components, sub-assemblies, prototypes, production units, guaranteed performance specifications etc.
- iii) For Factory inspection and testing, Tenderer shall arrange all that is required e.g. quality assurance personnel, space, test gear etc. for successful carrying out of the job by the Purchaser/Engineer, at Tenderer's cost, at the Manufacturer's works.
- iv) Purchaser's/Engineer shall have free entry and access to any and all parts of the Manufacturer's facilities associated with manufacturing and testing of the system at any given time.
- v) It shall be explicitly understood that under no circumstances shall any approval of the Purchaser's/Engineer relieve the Tenderer of his responsibility for material, design, quality assurance and the guaranteed performance of the system and its constituents.
- vi) Tenderer shall invite the Purchaser's/Engineer, at least 7 days in advance, of the date at which system shall be ready for Inspection and Testing. All relevant documents and manuals approved Engineering drawings etc. shall be available with the Purchaser/Engineer well in advance of the start of Inspection and Testing.
- vii) Purchaser's Engineer or his representative shall, after completion of inspection and testing to their satisfaction, issue factory acceptance certificates to release the equipment for shipment. No equipment shall be shipped under any circumstances unless a factory acceptance certificate has been issued for it, unless agreed otherwise by Purchaser's Engineer.

(End of Chapter-3B)

#### **CHAPTER 4A**

## **COMMERCIAL TERMS & CONDITIONS**

## 4.A.1 Offer letter and Validity of offer

- 4.A.1.1 The bidder shall complete the offer letter (Chapter 1) and the Price Schedule (Chapter 2) furnished in the tender documents, indicating the goods to be supplied, description of the goods, associated technical literature, quantity and prices etc.
- 4.A.1.2 The offer should remain valid for a minimum period as per BDS Chapter 5.

# 4.A.2 Warranty

- 4.A.2.1 The warranty would be valid for a period as indicated in Bid Data Sheet (BDS) Chapter 5. The supplier 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 materials of the type ordered and shall perform in full conformity with the specifications and drawings. The supplier shall be responsible for any defects that may develop under the conditions provided by the contract and under proper use, arising from faulty materials, design or workmanship such as corrosion, inadequate quantity of material to meet equipment requirements, inadequate contact protection, deficiencies in 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.
- 4.A.2.2 If it becomes necessary for the contractor to replace or renew any defective portion/portions of the supplies under this clause, the provisions of the clause shall apply to the portion/portions of the equipment so replaced or renewed or until the end of the above mentioned period or twelve months, whichever may be later. If any defect is not remedied within a reasonable time of 10 days, the Purchaser may proceed to do the work at the contractor's risk & cost, but without prejudice to any other rights which the Purchaser may have against the contractor in respect of such defects.
- 4.A.2.3 Replacement under warranty clause shall be made by the contractor free of all charges at site including freight, insurance and other incidental charges.

## 4.A.2.4 Warranty Support

4.A.2.4.1 Material for repair during Warranty Period shall be handed over /taken over to contractor's engineer/representative at RailTel's regional NOC locations or sites where equipments are installed.

During the warranty period, the contractor shall remain responsible to arrange replacement within time period as per clause 7.4.1.1 of Chapter-7 and for setting right at his own cost any equipment installed by him which is of defective manufacture or design or becomes unworkable due to any cause whatsoever. The decision of the RailTel's representative in this regard to direct the contractor to attend to any damage or defect in work shall be final and binding on the Contractor. In case contractor fails to replace any faulty part within time period as per clause 7.4.1.1 of Chapter-7, penalties will be imposed as per clause 7.5.2 of Chapter-7.

- 4.A.2.4.2 During the warranty period, the contractor shall be responsible to the extent expressed in this clause for any defects that may develop under the conditions provided for by the contract and under proper use, arising from faulty materials, design or workmanship in the plant, or from faulty execution of the plant by the contractor but not otherwise and shall remedy such defects at his own cost when called upon to do so by the Purchaser Engineer who shall state in writing in what respect the portion is faulty.
- 4.A.2.4.3 During the free warranty maintenance period, contractor shall stabilize the working of the system. Purchaser has the right to extend the period of supervision of the maintenance, free of cost till the system stabilizes and works satisfactorily for a reasonable period of time. If during the time any equipment etc. is to be added or deficiencies are to be rectified to make the system work trouble free, the same also will have to be done by the contractor at no cost to RailTel as to make good all the deficiencies.

# 4.A.2.5 **Maintenance Supervision:**

4.A.2.5.1 After the proposed network is commissioned and placed in service and after provisional acceptance certificate is issued, the contractor shall be responsible for proper maintenance supervision of the network free of cost for a period of twelve months from the date of provisional acceptance.

For this purpose, Bidder/OEM shall prepare a maintenance plan and make available the services of qualified maintenance engineers stationed at the location approved by Purchaser's Engineer who will guide and supervise the RailTel maintenance staff. The tenderer shall keep minimum two maintenance engineers at the locations approved by RailTel, who will visit the total installation as per the instructions of Purchaser's Engineer or earlier if the situation so warrants with the provision that monthly reports of the failures and health of the equipment is generated from the NMS and is made available jointly signed by contractor and RailTel Official.

- 4.A.2.5.2 During this period of maintenance supervision if any lacuna is noticed in the functioning, as a result of any deficiency in work, the contractor will rectify the same at no cost to RailTel. During such rectification if any faulty equipment/modules need replacement or repair, they shall be provided by the contractor from the set of equipment or modules that the contractor should bring to the site of installation in addition to all the materials to be supplied against this contract. Use of spare modules covered under the Schedule of material of this tender shall not be permitted to be used during installation, commissioning and maintenance supervision.
- 4.A.2.5.3 To summarize, the total period of warranty as per BDS in Chapter-5, will comprise of first 12 months of Maintenance Supervision (after issue of PAC) extendable by RailTel for reasons as explained above, post which FAC will stand issued. Issue of FAC will be followed by 24 months of warranty.

## 4.A.3. Long Term Maintenance Support

4.A.3.1 Bidder/OEM shall provide maintenance support after successful completion of the warranty obligations for a minimum period of 3 Years. The long term maintenance support shall be

comprehensive and include all hardware and software equipment supplied against this contract. RailTel should be extended the benefits of software update/up-grades made by OEM on the system from time to time to improve performance. During this period the scope of work as mentioned in clause 4.A.2 above & its sub clauses will be applicable.

4.A.3.2 Bidder/OEM shall be paid @10% (minimum) of supply cost of SOR-A (basic price excluding taxes, levies and all other charges) per annum towards Long Term Maintenance Support after completion of warranty period, to undertake repairs/replacements of all type of module/card/assembly/subassembly and update/upgrade of software released during this period and /or which may fail in the network after the warranty. Taxes will be as per actual at the time of execution of the AMC i.e. issue of AMC LOA.

If the bidder quotes higher than 10%, he will be paid at his quoted rate per annum. Total AMC cost for five years will be taken for evaluation purpose. AMC would have to be valid for minimum period of 5 years after completion of warranty. This period of 5 year may be extended further with mutual consent of RailTel and Bidder/OEM.

In case a bidder quotes AMC rates lower than 10% and if the bidder wins the contract, his cost against supply items will be reduced by differential (w.r.t. 10%) of AMC rates & he will be paid accordingly against the cost of supply. AMC charges to him, however, will be paid only @ 10% per annum.

- 4.A.3.3 Separate LOA for AMC shall be issued by RailTel 3 months prior to the completion of warranty period and separate Agreement shall be signed with the Bidder/OEM. A fresh Bank Guarantee valid for a period of 4 months beyond the completion of AMC from the date of LOA shall be required to be submitted by OEM/ Tenderer for due fulfillment of Long term maintenance support obligation. Value of PBG will be 10% of the total value of LOA issued for AMC for five years. This PBG of AMC shall be submitted by the bidder within 30 days from the date of issue of LOA for the AMC. In case bidder does not submit the PBG in the stipulated time period, RailTel may encash the PBG given with the original LOA (main contract). The contractor will inform to RailTel in writing and ask for the AMC LOA six months prior to expiry of warranty period. In case issue of LOA for AMC is delayed due to non-intimation by the contractor, he will extend the original PBG till issue of LOA for AMC and submission of PBG else original PBG will be encashed.
- 4.A.3.4 Quarterly payment for AMC Charges would be made by RailTel after successful completion of AMC Services of that quarter and on the certificate furnished by concerned RailTel representative.
- 4.A.3.5 Detailed standard conditions applicable for the Annual Maintenance Contract between RailTel and the Contractor are given in Chapter-7.

**Note:** The acceptance of the above clauses is mandatory and specific acceptance from OEM is required to be enclosed as per Form no. 3 of Chaper-6. Any deviation / non acceptance may lead to rejection of the bid.

## 4.A.4. Delivery, Installation, Testing, Commissioning & Integration period

• The materials as per schedule A & B are required to be delivered, installed, tested, commissioned & integrated within period as per BDS. The bidder is required to submit the PERT chart showing the various activities which are required for supply, installation, testing, commissioning and integration of the equipment. Consignee address and details will be provided to the successful bidder.

## 4.A.4.1 RailTel's office details

SN	Region	Office	Address	
1.	Corporate Office	New Delhi	Plate-A, 6th Floor, Office Tower-2, NBCC Building, East Kidwai Nagar, New Delhi-110023	
2.	CNOC	New-Delhi	6 <sup>th</sup> Floor, Block-III, Delhi IT Park, Shastri Park. Delhi-110053.	

# 4.A.5. Payment Terms for Schedule of Supply (A)

- 4.A.5.1 75% payment of the value of supply (Schedule-A) would be made on receipt of material by the consignee duly inspected and on submission of the following documents subject to any deductions or recovery which RailTel may be entitled to make under the contract:
  - (i) Valid Tax Invoice
  - (ii) Delivery Challan/ E-way bill
  - (iii) Packing list.
  - (iv) Purchaser's Inspection certificate
  - (i) Consignee receipt//material delivery receipt
  - (v) Warranty certificate of OEM
  - (vi) Insurance certificate
  - (vii) Submission of PBG
  - (viii) A certificate duly signed by the firm certifying that equipment/ materials being supplied are new and conform to technical specification.
- 4.A.5.2 15% payment of the value of Schedule-A shall be made by RailTel on successful Installation & Commissioning at site and Site Acceptance Test (SAT) Report issued by concerned representative of RailTel. Further 5% payment of the value of Schedule-A shall be made by RailTel on issue of Provisional Acceptance Certificate (PAC) by GM/TP as per clause 3.B.7.1, Chapter-3B. Last 5% payment of the value of Schedule-A shall be made by RailTel on issue of Final Acceptance Certificate (FAC) by concerned region.
- 4.A.5.3 15% + 5% payment of value of supply items of Schedule-A which could not be installed for want of site readiness, will be made on issue of final PAC as per the decision of GM/TP and remaining 5% on issue of FAC.

**Note:** In case of PAC issued with minor deficiency, Payment shall not be made by RailTel against PAC & FAC till resolution of minor deficiency.

4.A.5.4 The breakup of taxes has to be furnished and same should be reflected in the bills so that any input credit can be availed by RailTel.

# 4.A.5.5 Payment term for Schedule of Supply (B)

100% payment of the value of supply (Schedule-B) would be made on receipt of material by the consignee duly inspected and on submission of the following documents subject to any deductions or recovery which RailTel may be entitled to make under the contract

- (ii) Valid Tax Invoice
- (iii) Delivery Challan/ E-way bill
- (iv) Packing list.
- (v) Purchaser's Inspection certificate
- (vi) Consignee receipt/material delivery receipt
- (vii) Warranty certificate of OEM
- (viii) Insurance certificate
- (ix) Submission of PBG
- (x) A certificate duly signed by the firm certifying that equipment/ materials being supplied are new and conform to technical specification.

## 4.A.5.6 Payment term for Schedule of Services (C)

4.A.5.6.1 Payment of schedule of service (C) towards "AMC/ Long Term Maintenance Support" would be paid quarterly by the concerned Office as per clause 7.6.4 of Chapter 7.

Note: If the bidder intends to claim advance payment against the Annual Maintenance Cost, Bidder shall provide a Performance Bank Guarantee (PBG) equivalent to the amount claimed and claimed period plus four months along with a valid warranty certificate from the OEM.

- 4.A.5.7 In case of supply orders which are not associated with any Design & Installation and Commissioning work (out of schedule of supply (A)), the payment terms against such supply orders will be as follows:
- 4.A.5.7.1 95% of the payment at the time of delivery. All the documents required will be as per clause 4.A.5.1 above.
- 4.A.5.7.2 Next 5% of the payment shall be made after expiry of one year from the date of delivery. The Warranty of the equipment will start from the Date of Delivery of Material.
- 4.A.5.8 Bill passing and paying unit for the items under SOR is respective office.

# 4.A.6. Performance Bank Guarantee (Security Deposit) or Insurance Surety Bond

4.A.6.1 The successful bidder has to furnish security deposit in the form of Performance Bank guarantee @ 10% or Insurance Surety Bond (Form no. 9 of Chapter-6) of issued PO/ LOA value, the same should be submitted within 30 days of issue of LOA/PO, failing which a penal interest of 15% per annum shall be charged for the delay period i.e. beyond 30 (thirty) days from the date of issue of LOA/PO. This PBG should be from a Scheduled Bank and should cover warranty period plus four months for lodging the claim. The performance Bank Guarantee will be discharged by the Purchaser after completion of the supplier's performance obligations including any warranty obligations under the contract.

- 4.A.6.2 The earnest money shall be released on submission of PBG. The Performa for PBG is given in Form no.-1 of Chapter-6. If the delivery period gets extended, the PBG should also be extended appropriately.
- 4.A.6.3 The Performance Bank Guarantee (security deposit) will bear no interest.
- 4.A.6.4 This PBG would be released after satisfactory completion of contract including warranty period and only after submission of PBG towards AMC as per clause 4.A.3.3 of this Chapter.
- 4.A.6.5 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.

# SFMS report guidelines: -

BG advising message – IFN 760COV/ IFN 767COV via SFMS

- To mandatorily send the Cover message at the time of BG issuance.
- IFSC Code of ICICI Bank to be used (ICIC0000007).
- Mention the unique reference (RAILTEL6103) in field 7037.)
- 4.A.6.6. The Performance Security will be forfeited and credited to the RailTel Corporation of India Limited (RCIL) account in the event of a breach of contract by the contractor.

## 4.A.7. Taxes & Duties

- 4.A.7.1 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.
- 4.A.7.2 Bidder shall issue 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.
- 4.A.7.3 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.
- 4.A.7.4 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.
- 4.A.7.5 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.

- 4.A.7.6 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.
- 4.A.7.7 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.
- 4.A.7.8 In regards to service support, the tenderer should have registration no. for GST and shall furnish GST registration certificate on award of LOA.
- 4.A.7.9 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 there upon 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 for receipt of tender, bidder has to pass on the benefits to RailTel.
- 4.A.7.10 Bidder has to submit an Indemnity Bond as per Form no. 7 of Chapter- 6.

#### 4.A.8. Insurance

- 4.A.8.1 The Contractor shall take out and keep in force a policy or policies of insurance from the date, the delivery of material starts (including the transit portion) against all liabilities of the Contractor or the Purchaser. The contractor shall take out and keep in force a Policy or policies of Insurance for all materials covered in schedule of requirement irrespective of whether used up in the portion of work already done or kept for the use in the balance portion of the work until such material are provisionally handed over to RailTel. The goods will be issued by purchaser to supplier and risk of goods shall remain with supplier until the issue of PAC by RailTel. Insurance policy has to be kept valid by the contractor till issue of PAC by RailTel.
- 4.A.8.2 The Contractor should ensure the stores brought to site, against risks in consequence of war and invasion, as required under the Emergency Risk (Goods) Insurance Act inforce from time to time.
- 4.A.8.3 It may be noted that the beneficiary of the insurance policy should be RailTel or the policies should be pledged in favour of RailTel. The contractor shall keep the policy/policies current till the equipment are handed over to the purchaser. It may also be noted that in the event of contractor's failure to keep the policy current and alive, renewal of policy will be done by purchaser for which the cost of the premium plus 20% of premium shall be recovered from the contractor.

## 4.A.9. Liquidated Damages

The timely delivery is the essence of this tender. Liquidated damages will be applicable at the rate of half percent per week or part thereof for undelivered portion of SOR subject to a maximum of

10% of the cost of Purchase order/LOA for any reason whatsoever attributed to failure of tenderer. RailTel will have the right to cancel the order, place order on alternative source besides levying the liquidated damages as above.

# 4.A.10. Transportation

The rates quoted should be CIP destination. The destination shall be defined POP / nominated office of RailTel in the proposed sections which shall be indicated by RailTel's representative.

# 4.A.11. Statutory Deduction

These will be made at source as per the rules prevalent in the area of work.

## 4.A.12. Qualification Criteria- Pre-Qualification Criteria (PQC)

Qualifying criteria under this clause lays down minimum acceptable qualifications in various areas to ensure that qualified bidder has necessary experience, technical expertise, equipment and financial and human resources to successfully complete the project. Bids from bidder not meeting these qualification criteria may liable to be rejected. Bids from the consortium of tenderers and Joint Ventures would not be considered for award of work. The Tenderer/bidder should be an Original Equipment Manufacturer (OEM) or authorized representative of OEM specifically authorized by OEM for bidding in this tender.

All the document should be in English/Hindi language only. Document other than English/Hindi will not be entertained. However, Tech. Specification and details should be in English only.

The bids of the bidders not meeting PQC will not be evaluated further for relative ranking of offers and will be summarily rejected.

## 4.A.12.1 Eligibility Criteria Requirements for Bidders:--

SN	Eligibility Criteria Requirements	Supporting Document Required
1)	Legal Entity: The bidder should be a Company registered in India under the Companies Act (India) with their registered office in India for the last three years.	<ul> <li>Certificate of Incorporation / Registration or</li> <li>Memorandum of Association (MoA)</li> <li>Supporting document to prove eligibility for exemption under Startup.</li> </ul>
2)	Financial Capability: The bidder should have minimum cumulative turnover from operation of Rs. 34.73Crs in the last three financial years plus current year upto the date of opening of tender.  For Startups* (recognized by Department of Industrial policy and promotion, Ministry of Commerce and Industry) a minimum turnover from operation of Rs. 11.58 Crs is required.	<ul> <li>Certificates to this effect which may be an attested Certificate from the concerned department / client or Audited Balance Sheet duly certified by the Chartered Accountant / Certificate from Chartered Accountant duly supported by Audited Balance Sheet.</li> <li>The contact details of CA/Statutory Auditor along with UDIN No. shall be mandatorily mentioned on copy of certified Balance Sheet/Certificate.</li> </ul>

SN	Eligibility Criteria Requirements		Supporting Document Required
		•	For startups, in addition to above, Certificate of Startup issued by Department of Industries Policy and promotions, Ministry of Commerce and Industries shall also be required.
3)	Technical Capability: The tenderer must have successfully completed any of the following during last 07 (seven) years, ending last day of month previous to the one in which tender is invited:  Single order of similar works# costing not less than Rs. 13.89Crs,  or  Two orders of similar works# each costing not less than Rs. 9.26Crs,  or  Three orders of similar work# each costing not less than Rs. 6.95 Crs.  For Startups* (recognized by Department of Industrial policy and promotion, Ministry of Commerce and Industry), the bidder should have completed in last three financial years, ending last day of month previous to the one in which tender is invited:  Single order of similar work# each costing not less than the amount equal to 35% of advertised value of the tender i.e. 8.10Cr. or  Two orders of similar work# each costing not less than the amount equal to 20% of advertised value of the tender i.e. 4.63Cr., or  Three orders of similar work# each costing not less than the amount equal to 15% of advertised value of the tender i.e. 4.63Cr.,  or  Three orders of similar work# each costing not less than the amount equal to 15% of advertised value of the tender 3.47Cr.  Note:		<ul> <li>Completion certificates with Satisfactory working and value of the work completed from the User Organizations is required to be submitted.</li> <li>The copy of Purchase Order is mandatorily required as supporting document.</li> <li>In case of substantially completed work, certificate from user for bidder share regarding total value of bidders share of work and value of completed work (minimum 80% of total value of bidders share of work) is required to be submitted.</li> <li>In case of composite work purchase orders, bidder shall submit CA certificate certifying the actual amount pertaining to similar work definition as mentioned in the clause.</li> <li>(The set of document(s) submitted should clearly certify eligibility criteria and should be verifiable from the user/customer)</li> </ul>
	Completion of work should fall in the above period. The bidder shall also furnish work		

SN	Eligibility Criteria Requirements	Supporting Document Required
	completion/ substantial work completion certificate issued by customer/s for the Purchase Orders/ Work Orders. Substantial completion shall be 80% (value wise) or more works completed under the contract. For contracts under which bidder participated as a Joint Venture member or sub-contractor, only the bidder's share, by value, shall be considered to meet this requirement.	
	# Similar Work: Projects of CGNAT/MPLS Routers/SDN Routers/Firewall in Government /PSUs/Telecom Service Providers network/ISP Network.	
	Note: Work experience certificate issued by Public listed company having average annual turnover of Rs 500 Cr and above in last 3 financial years excluding the current financial year, listed on National Stock Exchange or Bombay Stock Exchange, incorporated/registered at least 5 years prior to the date of opening of tender, shall also be considered provided the work experience certificate has been issued by a person authorized by the Public listed company to issue such certificates.	
4)	The bidder including Sub contractors should not have been black-listed currently by Central Govt./State Govt./CPSU/any reputed Telecom service provider in India or anywhere globally by Government for the supply of material / security reasons.	Self-Declaration by the Bidder on Company's letter head.
5)		Undertaking to be submitted by the Bidder.
6)	1	• MAF as per Form no. 5 of Chapter-6.
7)	•	Notarized Affidavit as per Form no. 11 of Chapter-6.

SN	Eligibility Criteria Requirements	Supporting Document Required
SN	are true and factual. Standard format of the affidavit to be submitted by the bidder is enclosed as Form No. 11 of Chapter-6. Non submission of an affidavit by the bidder shall result in summarily rejection of his/their bid. And it shall be mandatorily incumbent upon the tenderer to identify, state and submit the supporting documents duly self-attested by which they/he is qualifying the Qualifying Criteria mentioned in the Tender Document. It will not be obligatory on the part of Tender Committee to scrutinize beyond the submitted document of tenderer as far as his qualification for the tender is concerned. The RailTel (RCIL) reserves the right to verify all statements, information and documents submitted by the bidder in his tender offer, and the bidder shall, when so required by the RailTel (RCIL), make available all such in-formation, evidence and documents as may be necessary for such verification by the RailTel (RCIL) shall	
	not relieve the bidder of its obligations or liabilities here under nor will it affect any rights of the RailTel thereunder.	
8)	Hardware and Software supplied by OEM should not have any malicious code.	• No Malicious Code Undertaking Letter to be provided (as per Form No. 14 of Chapter-6).

## Note:

Credentials if submitted in foreign currency shall be converted into Indian currency i.e., Indian Rupee as under:

The conversion rate of US Dollars into Rupees shall be the daily representative exchange rates published by the Reserve Bank of India for the relevant date. Where, relevant date shall be as on the last day of month previous to the one in which tender is invited. In case of any other currency, the same shall first be converted to US Dollars as on the last day of month previous to the one in which tender is invited, and the amount so derived in US Dollars shall be converted into Rupees at the aforesaid rate. The conversion rate of such currencies shall be the daily representative exchange rates published by the International Monetary Fund for the relevant date

Explanation for clause - Eligibility Criteria:

1. In case a contract is started prior to 07 (seven) years, ending last day of month previous to the one in which tender is invited, but completed in last 07 (seven) years, ending last day of month

- previous to the one in which tender is invited, the completed work shall be considered for fulfillment of credentials.
- 2. If a contract is physically completed and completion certificate to this extent is issued by the concerned organization but final bill is pending, such contract shall be considered for fulfillment of credentials.
- 3. If a part or a component of contract is completed but the overall scope of contract is not completed, this work shall not be considered for fulfillment of technical credentials even if the cost of part completed work/component is more than required for fulfillment of credentials.
- 4. In case a contract is considered similar in nature for fulfillment of technical credentials, the overall cost of that work including PVC amount if any shall be considered and no separate evaluation for each component of that work shall be made to decide eligibility.
- 5. In case a tenderer is LLP, the credentials of tenderer shall be worked out on above lines similar to a partnership firm.
- 6. In case company A is merged with company B, then company B would get the credentials of company A also.

# 4.A.12.2 Eligibility Criteria Requirements for OEMs: Schedule (A)-SDN Router & CGNAT Appliance/module & Schedule B-Firewall (NGFW)

OEM's whose products are proposed to be used in this deployment should meet following criteria –

SN	Eligibility Criteria Requirements	Supporting Document
		Required
1.	OEM should have proven facilities for Engineering, manufacture, assembly, integration and testing of Data Network equipment and basic facilities with respect to space, Engineering, Personnel, Test equipment, Manufacture, Training, Logistic Supports for at least past three years.	• The certificates/Undertaking along with the complete address for the same will have to be submitted along with bid.
2.	The Equipment offered by the tenderer or equipment of the same series/family (an undertaking by the OEM has to be submitted in support in case of immediate predecessor) from the same OEM should have been satisfactorily working in Government/ PSUs/Telecom Service Providers network for at least 12 months, in India or Abroad.	• Satisfactory Working Performance of the same series/family from the same OEM by the end user is required to be submitted and it should be issued during last one year from the date of
	Note: Work experience certificate issued by Public listed company having average annual turnover of Rs 500 Cr and above in last 3 financial years excluding the current financial year, listed on National Stock Exchange or Bombay Stock Exchange, incorporated/registered at	opening of Tender  OR  Undertaking from OEM contains details of purchaser

SN	Eligibility Criteria Requirements	Supporting Document Required
	least 5 years prior to the date of opening of tender, shall be considered provided the work experience certificate has been issued by a person authorized by the Public listed company to issue such certificates.	Organization - Firm Name, Firm Address, Name of Contact person, Designation, Telephone Number, Fax, Official mail id etc.) is also acceptable against END User certificate.  The copy of Purchase Order is mandatorily required as supporting document.  An undertaking by the OEM has to be submitted in support in case of immediate predecessor
3.	OEM should have supplied the equipment/software offered or equipment/software of the same series/family at least of the value Rs. 8.10 Cr during last preceding 3 financial years (i.e. current year and three previous financial years) as on opening of bid to Government /PSUs / Telecom Service Providers.  Note:  (i) For Startups* (recognized by Department of Industrial policy and promotion, Ministry of Commerce and Industry) only 1/3 of value as mentioned above is required.  (ii) Public listed company having average annual turnover of Rs 500 Cr and above in last 3 financial years excluding the current financial year, listed on National Stock Exchange or Bombay Stock Exchange, incorporated/registered at least 5 years prior to the date of opening of tender, shall be considered.	<ul> <li>OEM should submit self-certificate with proper contact detail of clients along with PO reference and amount supplied (Firm Name, Contact person, Designation, Telephone Number, Fax, Official mail id etc.). The same should be issued by authorized signatory.</li> <li>The copy of Purchase Order is mandatorily required as supporting document.</li> </ul>
4.	OEM and its subcontractors should not have been black-listed currently by Central Govt./State Govt./CPSU/any reputed Telecom service provider in India or anywhere globally by Government for the supply of material / security reasons.	Self- Declaration by the OEMs on Company's letter head.
5.	Hardware and Software supplied by OEM should not have any malicious code.	• No Malicious Code Undertaking Letter to be provided (as per Form No. 14 of Chapter 6).

SN	Eligibility Criteria Requirements	Supporting Document Required
6.	The OEM shall ensure that Intellectual Property Rights of Hardware (including MAC address) and Source Code of Software must not reside in any Country that shares a Land Border with India. Moreover, OEM must ensure that they are not getting 3rd party manufacturing from any Country that shares a Land Border with India. Note –  OEM's from country that shares a Land Border with India are allowed to offer their products provided OEM's is registered with DPIIT as per para 4.A.41.2, Chapter-4A of tender.	OEM Undertaking on their Respective Letter Heads:-  We certify that our offered products are genuine, have our own manufacturing setups and IPR for the hardware(s)/software(s), and not have 3rd party manufacturing from any company blacklisted in India or abroad (due to proven backdoor access and data vulnerability) or any company sharing land border with India. The Intellectual Property Rights (IPR) of all offered product and source code of all offered software are not residing in countries sharing land borders with India. Proof of IPR & source code will be provided by the OEM. Or (in case of OEM from country that shares a land border with India)  IPR of offered products and source code of offered software including are residing in country (Please mention the country name) and OEM has been registered with the Competent Authority of Govt. of India and are eligible to be considered (evidence of valid registration by the competent authority is enclosed)

<sup>\*</sup> Relaxations given in eligibility criteria are indicative in nature and startup companies are required to submit their proposal for seeking relaxation in above mentioned eligibility criteria. Their proposal will be dealt on case to case basis only.

- Note: 1. Bidder shall submit proper contact detail of all the users (Firm Name, Contact person, Designation, Telephone Number, Fax, Official mail id etc.) for all the certificates asked in the Qualification Criteria. The bidder is required to submit complete chain of credentials, e.g. purchase order (prices blanked out), showing relevant value of the PO and satisfactory working/implementation certificate issued by the user/customer. Purchase orders without relevant organization's confirmation through a credential letter will not be considered as implementation certificate from the client.
  - 2. Bidder shall provide details of offered equipment and details of credentials submitted against eligibility criteria in Form no. 15 of Chapter-6.
  - 3. **Same series/family** refers to products from the same OEM line that support Routing, Switching, or Optical Transport function.
- **4.** As per the latest Public Procurement (Preference to Make in India) Order (till opening of tender), eligible Class-I local suppliers (OEMs) shall be exempted from the eligibility criteria specified under Clauses 3.3.2-1 and 3.3.2-2 of this tender. However, OEMs seeking such exemption must fulfill the following conditions:
- a. Submit valid documentation from OEM confirming Class-I local supplier status in accordance with the latest DPIIT guidelines.
- b. Proof of concept (POC) shall be conducted in accordance with technical requirements defined in Tender.
- c. Payment shall be made against Supply after successful deployment of equipment's with satisfactory performance of equipment's for minimum 6 months period in RailTel.

#### **4.A.12.3** Deleted

## 4.A.12.4 Eligibility Credentials and Verification

- i. The bidder is required to submit purchase order and satisfactory working/implementation certificate issued by the user/customer. Purchase orders without relevant organization's confirmation through a credential letter will not be considered as implementation certificate from the client.
- ii. For client credentials where NDA has been signed, the bidder may submit the corresponding NDA document along with a self-declaration confirming the requirements of the eligibility criteria for which the NDA is being submitted.
- iii. The tenderers shall submit a notarized affidavit on a non-judicial stamp paper stating that they are not liable to be disqualified and all their statement/documents submitted along-with bid (including documents submitted by OEMs) are true and factual. Standard format of the affidavit to be submitted by the bidder is enclosed as Form no. 4 (Chapter-6, Section-I). NON-SUBMISSION OF AN AFFIDAVIT BY THE BIDDER SHALL RESULT IN SUMMARY REJECTION OF HIS/THEIR BID. And it shall be mandatorily incumbent upon the tenderer to identify, state and submit the supporting documents duly self-attested by which they/he is qualifying the Qualifying Criteria mentioned in the Tender Document. It will not be obligatory

- on the part of Tender Committee to scrutinize beyond the submitted document of tenderer as far as his qualification for the tender is concerned.
- iv. The RailTel (RCIL) reserves the right to verify all statements, information and documents submitted by the bidder in his tender offer, and the bidder shall, when so required by the RailTel (RCIL), make available all such information, evidence and documents as may be necessary for such verification. Any such verification or lack of such verification by the RailTel (RCIL) shall not relieve the bidder of its obligations or liabilities hereunder nor will it affect any rights of the railway there under.
- v. In case of any wrong information submitted by tenderer, the contract shall be terminated. Performance Guarantee (PG) and Security Deposit (SD) of contract forfeited and agency barred for doing business on RailTel (RCIL) for 5 (five) years.
- vi. For International project if the original client certificate and other documents are in language other than English than a translated copy duly confirmed by Indian embassy/ One of the board of directors of the lead bidder/ consortium member shall be submitted along with bid document.
- vii. In the event of Foreign Original Equipment Manufacturer (OEM), it's Indian Subsidiary fully authorized for bidding on behalf of OEM is allowed to participate with the experience and financial credential of parent company with specific authorization for doing so from the OEM. The specific authorization addressed to RailTel should be submitted by the bidder.

# RailTel Reserves the right:

- i. To verify, if so desired, the correctness of documentary evidence furnished by the bidder.
- ii. To verify the successful operation and performance of qualifying projects and bidder shall arrange permission for the same.
- iii. To carry out capability assessment of the bidder(s) including referral to in-house information.
- iv. RailTel shall not be responsible for any delay in the receipt of tenders and reserves the right to ACCEPT/REJECT any or all tenders without assigning any reason. RailTel may ask the clarification and supporting documents in respect to submitted eligibility documents.

## 4.A.13. CONSORTIUM BIDS: Deleted

## 4.A.14. Participation Of Joint Venture (JV) Firms in Works Tender: Deleted

## **4.A.15.** System Performance Guarantee

4.A.15.1. The tenderer shall give unqualified and unconditional guarantee that when the equipment / material supplied by him is installed and commissioned at site, it shall achieve the desired objective and that in the event of performance of the system when installed not complying with the end objective or with the specifications, he shall provide further inputs to enable the RailTel to realize the end objectives with full compliance of the specifications contained in these documents. No additional payment will be made to the contractor for supply of any additional goods and service required in this regard.

4.A.15.2. This certificate in the Proforma given in Chapter 6, Form No. 2, shall accompany the final offer. Absence of this certificate which will form part of the agreement shall disqualify the tenderer automatically.

#### 4.A.16. Evaluation of Offer

- 4.A.16.1. Evaluation of bids will be done on totality and the Total Cost (all-inclusive) including the AMC amount for a period as mentioned.
- 4.A.16.2. Additional features offered by the bidder, over and above the ones asked for in the tender documents, shall not be considered for evaluation of bids.
- 4.A.16.3. The bidders should quote for all items & the offer will be evaluated in totality. The bidders should indicate brand name, type/model number of the products offered. The equipment should be supplied as per Technical Specifications given in Chapter-3A.
- 4.A.16.4 Inter se position of the offers will be determined on total unit rate on CIP destination basis which will include basic rate, custom duty, CGST, 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.

# 4.A.17. Security Considerations & Security Agreement

- 4.A.17.1 While evaluating the tender, regards would be paid to National Defence and Security considerations.
- 4.A.17.2 The directives issued from time to time by the Department of Telecommunications (DoT), Ministry of Communications and IT or any other Ministry of Govt. of India on security considerations shall be applicable to the present tender. Accordingly, as per the extent amendment of the National Long Distance (NLD) Service License Agreement for Security related concerns for expansion of Telecom Services in various zones of the country issued vide Department of Telecommunication, Ministry of Communication and IT, Govt. of India's letter no. 10-54/2010-CS-III (NLD) dated: 31.05.2011, the successful tenderer (OEM) shall comply with the provisions stated in the above mentioned directive of DoT and shall have to enter into an agreement with RailTel as per the mutual agreement between Telecom Service Provider and the vendor of equipment, product and services (based on template, available on DoT website), covering all relevant clauses. **The tenderer must submit a declaration along with their bid in this regard.**

## 4.A.17.3 **Deleted**

## 4.A.18. Purchaser's Right to Vary Quantities

4.A.18.1 The purchaser shall be at liberty to enhance or reduce the quantity mentioned in the LOA/Sub PO/PO as indicated in Bid Data Sheet (BDS) Chapter 5 without assigning any reasons. The bidder shall comply with such modifications unconditionally provided these are made before completion of the deliveries under the purchase order/LOA. Any such change in quantity shall have no impact on the rates mentioned in the purchase order/LOA for any such item.

## 4.A.18.2 Rate Contract: Deleted

# 4.A.19. Purchaser's Right to accept any offer / Bid and to reject any or all offer/ Bid

4.A.19.1 The Purchaser reserves the right to accept or reject any offer / bid, and to annul the bidding process and reject all offers / bids, at any time prior to award of order 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.

## 4.A.20. Execution of Purchase Order/LOA

- 4.A.20.1 POs will be issued by Corporate office/RailTel.
- 4.A.20.2 The successful bidder has to submit the copy of the Purchase order/LOA duly signed on each page including Annexure & will submit the Performance Bank Guarantee as per Clause no. 4.A.6 of this chapter for due fulfillment of the PO/LOA.
- 4.A.20.3 If the successful bidder fails to submit the accepted copy of PO/LOA within 15 days from the date of issue, it shall constitute a breach of the agreement affected by the acceptance of the tender in which case the full value of the earnest money accompanying the tender shall stand forfeited without prejudice to any other rights or remedies.
- 4.A.20.4 In the event of any tenderer whose tender is accepted and refuses to execute the PO/LOA as herein before provided, RailTel may determine that such tenderer has abandoned the Purchase Order/LOA and thereupon his tender and acceptance thereof shall be treated as cancelled and RailTel shall be entitled to forfeit the full amount of the Earnest Money and to recover the damages for such default.

## 4.A.21. Annulment of Award

Failure of the successful bidder to comply with the requirement of various clauses of tender document shall constitute sufficient ground for the annulment of the award and forfeiture of EMD in which event the Purchaser may make the award to any other bidder at the discretion of the Purchaser or call for new offers/ bids.

## 4.A.22. Earnest Money Deposit (EMD) or Surety Bond

- 4.A.22.1 All the Bidders/OEM are required to deposit EMD amount or Surety Bond as per Form No. 10 of Chapter-6 as mentioned in NIT and BDS through e-Nivida Portal as "Earnest Money". EMD in no other form shall be accepted. Offers without applicable EMD amount or Surety Bond (as per Form no. 10 of Chapter-6) shall be summarily rejected.
- 4.A.22.3 The EMD may be forfeited if a bidder withdraws his offer or modifies the terms and conditions of the offer during validity period and in the case of a successful bidder, if the bidder fails to accept the Purchase order/LOA and fails to furnish performance bank guarantee (security deposit) in accordance with clause 4.A.6 of this chapter.

- 4.A.22.4 Offers without complete amount of Earnest Money shall be summarily rejected.
- 4.A.22.5 Earnest Money of unsuccessful bidders during first stage i.e. technical evaluation etc. shall be returned within 30 days of declaration of result of first stage.
- 4.A.22.6 The successful bidder's EMD will be discharged upon the bidder's acceptance of the purchase order/LOA satisfactorily and furnishing the performance bank guarantee and verification by RailTel in accordance with clause 4.A.6 (Chapter-4A).
- 4.A.22.7 Earnest Money will bear no interest.

# 4.A.23. For Micro and Small Enterprises (MSEs)

- 4.A.23.1 RailTel is registered with m1xchange TReDS Platform having Buyer registration Number "BUYER00001496". The URL for m1xchange Platform is <a href="https://www.m1xchange.com">https://www.m1xchange.com</a>. MSE suppliers/Vendors are required to register themselves on m1xchange Plateform for availing the facility of bill discounting on TReDS portal. The bidder is mandatorily required to submit its TReDS registration number (as provided by m1xchange portal) and GRN (Goods/Service Receipt Note) Number (as provided by RailTel on delivery of Goods/Service) while submitting the invoices if requires to avail TReDS facility.
- 4.A.23.2 MSE vendor will bear all costs relating to availing the facility of discounting on TReDS platform including but not limited to Registration charges, Transaction charges for financing, Discounting Charges, Interest on financing, or any other charges known by any name shall be born by MSE Vendor.
- 4.A.23.3 MSE Vendor hereby agrees to indemnify, hold harmless and keep RailTel and its affiliates, Directors, officers, representatives, agents and employees indemnified, from any and all damages, losses, Claims and liabilities (including legal costs) which may arise from Sellers submission, posting or display, participation, in any manner, on the TReDS Platform or form the use of Services or from the Buyer's breach of any of the terms and conditions of the Usage Terms or of this Agreement and any Applicable Law on a full indemnity basis.
- 4.A.23.4 RailTel shall not be liable for any special, indirect, punitive, incidental or consequential damages or any damages whatsoever (including but not limited to damages for loss of profits or savings, business interruption, loss of information), whether in contract, tort, equity or otherwise or any other damages resulting from using TReDS platform for discounting their (MSE Vendors) invoices.

## 4.A.24. Offer/ Bid Prices

- 4.A.24.1 The bidder shall give the prices indicating all levies and taxes, packing forwarding, freight and insurance etc. The basic unit price and all other components of the price need to be individually indicated against the goods it proposes to supply under the tender document asper schedule given in Chapter 2. The price shall be quoted in Indian Rupees (FOR/CIP destination).
- 4.A.24.2 The breakup of price of each item of SOR in terms of basic Unit price, Custom duty, CGST/SGST/IGST/GST and other taxes and any other Levies/charges already paid or payable by

- the tenderer shall be quoted in Annexure-A & B of Chapter 2. Any changes in statutory duties/taxes after opening of technical bid will be to RailTel's account within the contracted delivery period.
- 4.A.24.3 All prices and other information like discounts etc. having a bearing on the price shall be written both in figures and in words in the prescribed offer form (SOR). In case of difference in words and figures, the amount written in words will be taken into consideration. In the event of any discrepancy between total unit cost and total cost, the value shown in total unit cost will be taken for evaluation purpose.
- 4.A.24.4 Deleted.

# 4.A.25 Clause wise Compliance

- 4.A.25.1 <u>For Bidder</u> Bidder has to submit Nil Deviation (Form No. 12, Chapter-6) form as a compliance against all the terms and conditions of Tender document. Bidder may submit Deviation, if any, in his bid from Tender document in the format given in Form no. 12. However, in case of submission of any Deviation from Tender conditions, RailTel reserves the right to reject the bid without giving any justification.
  - Note: In case of non-submission of Form no. 12 (Chapter-6) with bid, the bidders bid may be rejected.
- 4.A.25.2 **For OEM** Clause wise compliance statement of Technical Specifications (Chapter-3A).

# 4.A.26 Inspection

- 4.A.26.1 Pre-shipment / pre-dispatch inspection shall be carried out at manufacturer's / tenderer's works by RailTel's authorized representative. Material should be offered for inspection ensuring supply, installation, testing, commissioning and integration within the period as specified in tender. Traveling, 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 to carry out tests/witness inspection shall be provided by the manufacturer/ tenderer, free of cost. Under exceptional circumstances, if it is not possible to carry out pre-dispatch inspection at Manufacturer's premises, exemption for the same shall be obtained from competent authority.
- 4.A.26.2 Along with inspection call, the tenderer/manufacturer shall submit details of test procedures, test programme, test parameters together with permitted values, etc., and their Quality Assurance Plan.
- 4.A.26.3 In case material fails during inspection, the fresh lot of material shall be offered without any extra cost, by the manufacturer/tenderer. In such a case, total cost of re-inspection including travel, lodging & boarding of the inspecting officials shall be to manufacturer's/ tenderer's account.

## 4.A.27 Force Majeure

4.A.27.1 If during the Agreement, the performance in whole or in part, by either party, of any obligation under this is prevented or delayed, by reason beyond the control of the parties including war, hostility, acts of the public enemy, civic commotion, sabotage, Act of State or direction from Statutory Authority, explosion, epidemic, quarantine restriction, strikes and lockouts (as are not

limited to the establishments and facilities of the parties), fire, floods, earthquakes, natural calamities or any act of GOD (hereinafter referred to as EVENTS), provided notice of happenings of any such EVENT is given by the affected party to the other, within twenty one (21) days from date of occurrence thereof, neither party shall have any such claims for damages against the other, in respect of such non-performance or delay in performance. Provided service under this Agreement shall be resumed as soon as practicable, after such EVENT comes to an end or ceases to exist.

4.A.27.2 In the event of a Force Majeure, the affected party will be excused from performance during the existence of the Force Majeure. When a Force Majeure occurs, the affected party after notifying the other party will attempt to mitigate the effect of the Force Majeure as much as possible. If such delaying cause shall continue for more than sixty (60) days from the date of the notice stated above, the party injured by the inability of the other to perform shall have the right, upon written notice of thirty (30) days to the other party, to terminate this Agreement. Neither party shall be liable for any breach, claims, damages against the other, in respect of non-performance or delay in performance as a result of Force Majeure leading to such termination.

# 4.A.28 Settlement of Disputes

In case of any dispute concerning this order both the tenderer and RailTel shall try to settle the same amicably through mutual discussion/negotiations. Any unsettled dispute shall be settled in terms of Indian Act of Arbitration and conciliation 1996 or any amendment thereof. Place of arbitration shall be New Delhi. Arbitrator shall be appointed by Chairman & Managing Director, RailTel Corporation of India Limited.

# 4.A.29 Governing Laws:

The APO/Sub PO/Purchase Order 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.

#### 4.A.30. Termination for Default

- 4.A.30.1 The purchaser may, without prejudice to any other remedy for breach of contract, by written notice of default, sent to the Tenderer, terminate this contract in whole or in part.
  - a) If the tenderer fails to deliver any or all of the goods within the time period(s) specified in the contract.
  - b) If the tenderer fails to perform any other obligation(s) under the contract; and
  - c) If the tenderer, in either of the above circumstance(s) does not remedy his failure within a period of 30 days (or such longer period as the Purchaser may authorize in writing) after receipt of the default notice from the Purchaser.

## 4.A.31 Risk & Cost

If the contractor fails to deliver the equipment or honour the contractual commitment within the period fixed for such delivery in the contract, the Purchaser may terminate the Purchase order/LOA/contract in whole or in part, the Purchaser may proceed to purchase, upon such terms and in such manner as it deems appropriate, goods similar to those undelivered at no risk and cost to contractor.

However, the security deposit of tenderer shall be forfeited/ Performance Bank Guarantee shall be encashed. The failed tenderer shall not be permitted to take part in the tender for balance work.

4.A.31.1 The Maximum Liability of tenderer to any Loss/Damages to RailTel including Liquidity Damages and Performance Guarantee shall be limited to 100% of Value of contract.

# **4.A.32.** Termination for Insolvency

The purchaser may at any time terminate the LOA/Sub PO/PO by giving written notice to the tenderer, without compensation to the tenderer, if the tenderer becomes bankrupt or otherwise insolvent as declared by the competent court provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the Purchaser.

## 4.A.33. Rates During Negotiation

The tenderer/s shall not increase his/their quoted rates including payment terms 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.A.34. Deleted

## 4.A.35. Submission of Offers

This e-tender should be duly submitted online using e-Procurement Portal <a href="https://railtel.enivida.com">https://railtel.enivida.com</a>.

- a. The offer shall be submitted in Single Stage Single Packet on eNivida Portal as per instructions given in Chapter-4B & 4C of tender.
- b. Tenderer shall quote in SOR provided in eNivida portal. In case the schedule of requirement quoted by tenderer is incomplete with reference to tender document, the offer is liable to be rejected.
- c. Any document submitted/uploaded in eNivida portal must be duly signed & stamped by the tenderer in each page.
- d. The rates quoted should be written both in words and figures. The unit of rates should be in metric system and as per tendered specification/schedule. In case of difference between words and figures, the rate in words will prevail. If there is a discrepancy between the unit price and total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected by the purchaser accordingly.
- e. Tenderers are requested to go through all the conditions of the tender document and note that, by submitting the tender documents, duly signed, they have accepted these conditions and undertake to abide by these conditions (unless specifically disagreed to clause wise).
- f. ATTESTATION OF ALTERATION: No scribbling is permissible in the tender documents. Tender containing erasures and alterations in the tender documents are liable to be rejected. Any

correction made by the tenderer/ tenderers in his/their entries must be signed (not initialed) by him/them.

# 4.A.36. Constitution of Firm and power of Attorney

- 4.A.36.1. Any individual(s) signing the tender or other documents connected therewith should specify whether he is signing:-
  - (a) As sole proprietor of the concern or as attorney of the sole Proprietor.
  - (b) As a partner or partners of the firm.
  - (c) 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.
- 4.A.36.2. 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.
- 4.A.36.3. The 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.
- 4.A.36.4. 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.
- 4.A.36.5. The duly notarized Power of Attorney shall be submitted in original or duly signed.

# 4.A.37. Opening of Tender

4.A.37.1 Tenderer's Bid will be opened on specified date & time as mentioned in BDS (Chapter 5) of the tender in presence of such Tenderers/Representatives who choose to be present.

## 4.A.38. Non-Transferability & Non-Refundability

The tender documents are not transferable.

# 4.A.39. Errors, Omissions & Discrepancies

The Contractor(s) shall not take any advantage of any mis-interpretation of the conditions due to typing or any other error and if in doubt, shall bring it to the notice of the purchaser without delay. In case of any contradiction only the printed rules, and books should be followed and no claim for the mis-interpretation shall be entertained.

## 4.A.40. Wrong Information by Tenderer

If the tenderer/s deliberately gives/give wrong information in his/their tender which creates/create circumstances for the acceptance of his/their tender the RailTel reserves the right to reject such tender at any stage.

## 4.A.41. Public Procurement: Preference to Make in India:

- i. The provisions of the revised "Public Procurement (Preference to Make in India) Order 2017" dated 15.06.2017, dated 16.09.2020 and 19.07.2024 (or subsequent revisions, if any till opening of tender) by Department of Promotion of Industry and Internal Trade (DPIIT), GoI shall apply to this tender.
- ii. In procurement of all goods, services or works in respect of which the Nodal Ministry / Department (i.e. DOT & MeitY) has communicated that there are sufficient local capacity and local competition, only 'Class-I local supplier', as defined under the Orders, shall be eligible to bid.
- iii. Only Class-I local suppliers (meeting minimum 50% local content) & Class-II local suppliers (meeting minimum 20% local content) are eligible to participate in this tender.
- iv. Minimum Local Content shall be 50% for purchase preference or as per the Notification No. 18-10/2017-IP dated 29th August 2018 issued by Department of Telecommunications, Ministry of Communications and Notification No. 33(1)/2017-IPHW dated 14.09.2017 issued by MeitY or latest notification issued till opening of tender.
- v. Among all qualified bids, the lowest bid will be termed as L1. If L1 is Class-I local supplier, the contract will be awarded to L1. If L1 is not Class-I local supplier, the lowest bidder among the Class-I local supplier, will be invited to match the L1 price subject to local supplier's quote price falling with in the margin of purchase preference of 20%, and the contract shall be awarded to such Class-I local supplier subject to matching the L1 price. In case such lowest eligible Class-I local supplier fails to match the L1 price, the Class-I local supplier with the next higher bid within the margin of purchase preference of 20%, shall be invited to match the L1 price and so on and contract shall be awarded accordingly. In case none of the Class-I local supplier within the margin of purchase preference of 20%, matches the L1 price, the contract may be awarded to the L1 bidder. Please refer clause-4.A.41.1 of Chapter-4A of this tender.
- vi. As per para 9 of PPP-MIII order 16.09.2020, bidder shall be required to indicate percentage of local content and provide self-certification in his bid (without mention of any price) that the item offered meets the local content requirement for Class-I/Class-II local supplier, as the case may be and shall also give details of the location(s) at which the local value addition is made. In case of procurement for a value in excess of Rs. 10 Crores, the bidder shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content. Bidder shall upload the certificate along with their techno-commercial bid. The bidder shall also provide calculation of Local Content with price Break-up of "Local Content" and "Imported Content" for each SOR item (certified by CA/Statutory Auditor) as per DPIIT's PMI Policy and its clarifications and same

shall be uploaded by the bidder along with their price bid. In case of any false declaration, action shall be taken in line with the provisions of the PPP-MIII order. Performa for self-certification regarding local content is given in the Notification No. 18-10/2017-IP dated 29th August 2018 issued by Department of Telecommunications. Self certification in the prescribed performa is required to be submitted by both bidder and OEM. The cost of transportation, insurance, installation, commissioning, training and after sales service support like AMC/CMC etc. will not be taken into account for calculating local content in any item. The contact details of CA/Statutory Auditor along with UDIN No. shall be mandatorily mentioned on certificate from CA/Statutory Auditor.

v.	Self-certification of bidder as above shall be supported by the following certificate from
	Statutory Auditor engaged by the bidder, on the letter head of such Statutory Auditor.
	"We the statutory auditor of M/s (name of the bidder) hereby certify that
	M/s (name of bidder) meet the mandatory Local Content requirements of the
	Project Work under this tender i.e% (to be filled by the work center) quoted vide offer
	No. dated against RAILTEL tender No. by M/s. (Name of the
	bidder).

**Note:** In case of bidder(s) for whom Statutory Auditor is not required as per law, required certificates shall be provided by a practicing Chartered Accountant.

- i) Notification dated 21.10.24 (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 or latest.
- ii) Official website of Department of Promotion of Industry and Internal Trade (DPIIT) i.e. "https://dpiit.gov.in/public-procurements" may be referred by tenderers for above mentioned orders or any revision issued. Frequently Asked Question (FAQ) available there may also be referred by tenderers.
- In terms of Clause 2, 3 and II of the DPIIT's PPP-MII Order dated 19.07.2024, Department of Telecommunications vide Notification dated 21.10.24 notified that telecom products, services and works listed in Table-A have sufficient local capacity and local competition. A Class-I local supplier must meet the Minimum Local Content (MLC) requirement specified against each item in Table-A. Table- A also specifies the maximum ceiling of LC percentage for design out of total LC against each item. The conditions for the inputs to be qualified as Local Content (LC) are specified in Table-B. Only 'Class-I local supplier', as defined under the Order, shall be eligible to bid irrespective of purchase value
- **4.A.41.2 Bidders sharing a land border with India**: Office Memorandum F.No.6/18/2019-PPD dated 23.07.2020 by Ministry of Finance, Department of Expenditure, Public Procurement Division shall also apply to this tender. **A certificate as per Annexure-I shall be submitted by all the bidders regarding their compliance with this order.** If such certificate given by a bidder whose bid is accepted is found to be false, this would be a ground for immediate termination and further legal action in accordance with law. Registration should be valid at the time of submission of bids and at the time of acceptance of bids. In respect of supply otherwise than by tender, registration should be valid at the time of placement of order.

# 4.A.42 Updation of Labour data on Railway's shramikkalyan Portal:

- A. Contractor is to abide by the provisions of Payment of Wages Act & Minimum Wages Act in terms of clause 54 and 55 of Indian Railways General Condition of Contract. In order to ensure the same, an application has been developed and hosted on website 'www.shramikkalyan.indianrailways.gov.in'. Contractor shall register his firm/company etc. and upload requisite details of labour and their payment in this portal. These details shall be available in public domain. The Registration/updation of Portal shall be done as under:
  - (a) Contractor shall apply for one-time registration of his company/firm etc. in the Shramikkalyan portal with requisite details subsequent to issue of Letter of Acceptance. Engineer shall approve the contractor's registration on the portal within 7 days of receipt of such request.
  - (b) Contractor once approved by any Engineer, can create password with login ID (PAN No.) for subsequent use of portal for all LOAs issued in his favour.
  - (c) The contractor once registered on the portal, shall provide details of his Letter of Acceptance (LoA)/Contract Agreements on shramikkalyan portal within 15 days of issue of any LoA for approval of concerned engineer. Engineer shall update (if required) and approve the details of LoA filled by contractor within 7 days of receipt of such request.
  - (d) After approval of LOA by Engineer, contractor shall fill the salient details of contract labours engaged in the contract and ensure updating of each wage payment to them on shramikkalyan portal on monthly basis.
  - (e) It shall be mandatory upon the contractor to ensure correct and prompt uploading of all salient details of engaged contractual labour & payments made thereof after each wage period.
- B. While processing payment of any 'On Account bill' or 'Final bill' or release of 'Advances' or 'Performance Guarantee / Security deposit', contractor shall submit a certificate to the Engineer or Engineer's representatives that "I have uploaded the correct details of contract labours engaged in connection with this contract and payments made to them during the wage period in Railway's Shramikkalyan portal at 'www.shramikkalyan.indianrailways.gov.in' till \_\_\_\_\_\_Month, \_\_\_\_\_\_ Year."

# 4.A.43. Integrity Pact Program

RailTel has adopted Integrity Pact Program and for implementation thereof all tenders relating to procurement of OFC, quad cable, pre-fab shelters, electronic equipments and its installation and/or commissioning etc and other item(s) or activity/activities proposed to be carried out or required by the Company for the value exceeding Rs. 15 crores at a time including for repair and maintenance of cable/network and any other items required for special works assigned to RailTel will be covered under the Integrity Pact Program and the vendors are required to sign the IP document and submit the same to RailTel before or along with the bids.

a) Only those vendors who have purchased the tender document and signed the IP document can send their grievances, if any, to the Independent External Monitors (IEMNs) through the nodel officer, i.e. Executive Director/ITP, RailTel.

Name of IEMs and contact details:

Shri. Vinit Kumar Jayaswal
 Shri. Punati Sridhar
 Shri. Bipin Bihari Mallick
 E-Mail: <a href="mailto:gkvinit@gmail.com">gkvinit@gmail.com</a>
 E-mail: <a href="mailto:bipinmallick@gmail.com">bipinmallick@gmail.com</a>

### Name & contact details of Nodal Officer (IP) in RailTel:

ED/ITP

RailTel Corporation of India Ltd 6th Floor, Office Block Tower-2, NBCC Complex, East Kidwai Nagar,

New Delhi-110023

E-Mail: ravi@railtelindia.com

- b) If the order, with total value equal to or more than the threshold value, is split to more than one vendor and even if the value of PO placed on any/each vendor(s) is less than the threshold value, IP document having been signed by the vendors at bid stage itself, the Pact shall continue to be applicable.
- c) Bidder of Indian origin shall submit the Integrity Pact (in 2 copies) on a non-judicial stamp paper of Rs. 100/- duly signed by the person signing the bid. If the bidder is a partnership or a consortium, the Integrity Pact shall be signed by all the partners or consortium members.
- d) Bidder of foreign origin may submit the Integrity Pact on its company's letterhead, duly signed by the person signing the bid.
- e) The 'Integrity Pact' shall be submitted by the Bidder duly signed on all pages along with the Bid in a separate envelope, duly superscripted with 'Integrity Pact'. Tender received without a signed copy of the Integrity Pact document will be liable to be rejected. Proforma for signing the Integrity Pact is available in Chapter-6 of this tender document (Form No. 17).
- f) One copy of the Integrity Pact shall be retained by RailTel and the 2nd copy will be issued to the representative of the bidders during bid opening. If the Bidders representative is not present during the Bid opening, the 2nd copy shall be sent to the bidder by post/courier.

The Integrity Pact is applicable in this tender vide CVC circular no. 10/05/09 dt. 18.05.09 and revised guideline of CVC circular no. 015/VGL/091 dt. 13.01.17 or the latest updated from time to time shall be followed

# 4.A.44 Compliance for procurement of Telecommunication equipment from trusted source

Department of Telecommunication (DOT) notification no. 20-1236/2021-AS-I Dated: 30.03.2021 regarding procurement of Telecommunications equipment from trusted source shall be applicable to this tender. Bidder/OEM should be registered on Trusted Telecom Portal. Bidder/OEM shall obtain Trusted Source certificate from concerned department of Government of India as defined in above mentioned notification before delivery of the equipment. Undertaking from OEM in this regard shall be submitted by the bidder along with technical bid.

4.A.44.1 Offered equipment should comply Mandatory Testing and Certification of Telecommunications equipment (MTCTE). MTCTE certificate for the offered equipment shall be submitted by the bidder.

### 4.A.45 Availability of Spares

- 4.A.45.1 The Tenderer shall warrant that spare part for the system would be available for minimum of 10 years from the date of commissioning.
- 4.A.45.2 Tenderer shall give at least one year advance intimation regarding stoppage of production of spares for the installed equipment besides ensuring their availability for a minimum period of 10 years.
- 4.A.45.3 RailTel shall hold successful bidder responsible for all SLAs mentioned in the RFP and subsequently in the contract document. However, for ensuring the same, Certificates from OEM and/or authorized vendors/representatives will be produced to confirm the life time maintenance support (warranty & AMC) by provisioning of spares.

#### **4.A.46** Contract Agreement:

On completion of the selection process, RailTel will enter into a contract agreement (as per Form no. 16 of Chapter-6) with the selected bidder(s). The contract entered with RailTel would be operated by RailTel. The Contract Agreement shall be entered by RailTel only after submission of valid Performance Guarantee by the successful bidder. Failure to do so shall constitute a breach of the agreement affected by the acceptance of the tender. In such cases the RailTel may determine that such tenderer has abandoned the contract and there upon his tender and acceptance thereof shall be treated as cancelled and the RailTel shall be entitled to forfeit the EMD and to forfeit other dues payable to the Contractor under this contract. The failed Contractor shall be debarred from participating in the retender for that work.

The following documents would form part of the agreement between RailTel & the successful bidder:

- i) This tender document and all the issued addendum/ corrigendum.
- ii) The bidder's proposal in response to this tender and clarifications made in course of evaluation, including all Annexures and supporting documents.
- iii) The implementation plan identifying the tasks to be completed, the assigned responsibilities and the scheduled completion dates.
- iv) Copy of Signed LOA along with the copy of the PBG document.

(End of chapter- 4A)

#### **CHAPTER-4B**

### INSTRUCTIONS TO THE BIDDERS

#### 4.B.0 General

These are the Special Instructions to the Bidders for Tendering.

The RailTel Tenders are published on <u>www.railtelindia.com</u> and on e-Procurement Portal <u>https://railtel.enivida.com</u>

For E-Tendering bids /information by bidders is to be submitted "Online" on e-Procurement Portal <a href="https://railtel.enivida.com">https://railtel.enivida.com</a>. Any document / information pertaining to this tender will have to be submitted by the bidder on line. The digital signature of the tenderer on the e-tender form will be considered as confirmation that the tenderer has read, understood and accepted all the documents, unless special deviation is quoted by the tenderer in the technical & commercial deviation templates.

PLEASE NOTEALL COLUMNS SHOULD BE FILLED AND BLANK COLUMNS, IF ANY, SHOULD BE MARKED AS NIL.

PLEASE READ CAREFULLY ALL THE CLAUSES OF THE TENDER BEFORE UPLOADING THE TENDER FORM. PLEASE SIGN ON EACH PAGE.

THE TENDERER MAY DOWNLOAD TENDER FORM FROM THE WEB SITE 'www.railtelindia.com' OR FROM THE e-Procurement Portal <a href="https://railtel.enivida.com">https://railtel.enivida.com</a>',

NOTE: For online bid submission the tenderer will have to necessarily download an official online copy of the tender documents from e-Procurement Portal <a href="https://railtel.enivida.com">https://railtel.enivida.com</a> and this should be done well before the deadline for bid-submission.

#### 4.B.1 Submission of the bid:

The bidder is required to submit the Technical bid and Price bid in eNivida portal before due date & time of submission of bids specified in this tender document.

## 4.B.2 Following documents shall be submitted in Technical and Price bid as given below:

- (a) "TECHNICAL BID"; -The bid shall consist of the following:-
  - 1) Offer Letter complete.
  - 2) Signed Copy of Tender Document/ Corrigenda
  - 3) E-receipt of EMD
  - 4) **Power of attorney** to be submitted in accordance with Clause-4.A.36.5, Chapter-4A of Tender Document.
  - 5) **Indemnity Bond** (Form No. 7 of Chapter-6).
  - 6) In case bidder happens to be an eligible MSE, the documentary evidence for same shall be submitted (clause 4.A.23, chapter-4A). MSE benefits are not applicable if supplier is a trader. it is allowed to only Manufacturers and Service provider.

- 7) Specific authorization addressed to RailTel from the OEM (Parent Company) for Indian Subsidiary or authorized partner i.e. **Manufacturer Authorization Form** (Form no. 5 of Chapter-6).
- 8) Complete technical data and particulars of the equipment offered, as specified in the Tender document together with descriptive literature, leaflets, Drawings, if any, complete with list etc.
- 9) **System Performance Guarantee** (form no. 2, chapter-6).
- 10) Acceptance for Long Term Maintenance Support as per Clause 4.A.3.5, Chapter-4A of Tender Document (form no. 3, chapter-6).
- 11) Declaration regarding acceptance of clarification issued from DoT (Clause 4.A.17.2, Chapter 4A of Tender Document).
- 12) Schedule of Requirements with quantities but with prices blanked out (this will be a replica of price bid with prices blanked out) and detailed unpriced Bill of Material including break up of common units/cards/backplane/Fan Tray unit etc. for building up the SOR items for supply.
- 13) Clause wise compliance to tender conditions as per clause 4.A.25 of Chapter-4A.
- 14) Documentary proof of qualifying criteria (Clause 4.A.12 of Chapter 4A of Tender Document)
- 16) Form no. 4, 6, 7, 8, 9, 10, 11, 12, 13, 14 & 15 of Chapter-6
- 19) Certificate of Local Content as per clause 4.A.41.1, Chapter-4A
- 20) Certificate by bidders sharing a land border with India as per clause 4.A.41.2, Chapter-4A.
- 21) Any other document asked in the tender but not listed above.
- 22) Any Other information desired to be submitted by the tenderer.
- 23) Un-priced SOR & Un-priced BOM (duly vetted by OEM)

#### b) "Price Bid" Shall contain

The price bid for "Schedule of requirements" as per Note of Chapter 2 along with "Bill of Material" (BOM) for each item quoted exactly according to the proforma, as also submitted along with "Technical Bid". Calculation of Local Content as per clause 4.A.41.1, Chapter-4A.

Note: Non-submission of the above-mentioned documents may lead to rejection of the bid

#### 4.B.3. Fax Quotations & Late Tenders:

Fax Tender documents and Late/Delayed tenders would not be considered.

### 4.B.4. Attendance of Representatives for Tender Opening:

Representatives of tenderers desirous to attend the tender opening can do so on production of a proper letter of authority from the respective firm, failing which they may not be allowed to attend the tender opening.

## 4.B.5. Addenda / Corrigenda:

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 Website, eNivida portal and CPP. Tenderers who are unable or unwilling to bring their tenders to conform to the requirements of the RailTel are liable to be rejected.

## 4.B.6 Bid submission and Opening date

- 1. The bid should be submitted along with Technical & Price bid document (all documents) in eNivida portal as per date & time given in the Bid Data Sheet (BDS).
- 2. The tenderer's bids will be opened at the time & date of opening of the tender given in the Bid Data Sheet (BDS) in presence of such Tenderers/Representatives who choose to be present.
- 3. Bids received after due date and time shall be summarily rejected and shall not be opened.

#### 4.B.7 Submission of offline documents:

Original copy of following documents is needed to be submitted by the bidders offline before due date & time of submission of bids at RailTel/Corporate Office, New Delhi. The packet containing the original copies should be sealed by the personal seal of the bidder. The envelop shall bear name of work, the tender no. and the words "DO NOT OPEN Before" (-due date and time -).

- a. Power of Attorney.
- b. Form No. 2 (System Performance Guarantee), Form No, 3 (Performa for Long Term Maintenance Support), Form No. 5 (Manufacturer Authorization Form), Form No. 7 (Standing Indemnity Bond), Form no. 11 (Affidavit) and Integrity Pact (Form no.17).

Non submission of original copy of above documents may lead to rejection of the bid.

#### 4.B.8 Clarification Requests:

The written queries/ clarification request may be sent to RailTel's office through e-mail to <a href="mailto:deeptichauhan@railtelindia.com">deeptichauhan@railtelindia.com</a> with copy to <a href="mailtelindia.com">himanshu@railtelindia.com</a> (in pdf & excel format) or by post latest by the date as indicated in the Bid Data sheet (BDS). Reply of relevant clarifications sought will be uploaded in eNivida portal. Clarifications sought shall be submitted in the following format:

**Oueries/Clarifications from M/s -----**

SN	Clause	Page	Sub-	Content of the	Points of	Remarks
	no. &	no.	clause	clause requires	clarification	
	Chapter		no./ Point	clarification	required	
	no.		no.			

(End of Chapter- 4B)

#### **CHAPTER-4C**

### **E-tendering Instructions to Bidders**

#### 4.C.0 GENERAL:

These Special Instructions (for e-Tendering) supplement 'Instruction to Bidders', as given in Chapter- 4B of the Tender Document. Submission of Bids only through online process is mandatory for this Tender.

E-Tendering is a new methodology for conducting Public Procurement in a transparent and secured manner. Now, the Government of India has made e-tendering mandatory. Suppliers/ Vendors will be the biggest beneficiaries of this new system of procurement. For conducting electronic tendering, RailTel has decided to use the portal <a href="https://railtel.enivida.com">https://railtel.enivida.com</a>. 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 for submitting online bids on the eNivida Portal may be obtained at: <a href="https://railtel.enivida.com">https://railtel.enivida.com</a>

#### **4.C.1 GUIDELINES FOR REGISTRATION:**

- 1. 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.
- 2. As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their account.
- 3. 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.
- 4. 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.
- 5. Only valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's 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.
- 6. The scanned copies of all original documents should be uploaded in pdf format on e-tender portal.
- 7. 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.

#### **4.C.2 SEARCHING FOR TENDER DOCUMENTS:**

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

2. Once the bidders have selected the tenders they are interested in, bidders can pay the Tender fee and processing fee (NOT REFUNDABLE) by net-banking / Debit / Credit card then bidder may download the required documents / tender schedules, Bid documents etc. Once bidder 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.

### **4.C.3 PREPARATION OF BIDS:**

- 1. Bidder should take into account any corrigendum published on the tender document before submitting their bid.
- 2. Please go through the tender notice and the tender document carefully to understand the documents required to be submitted as part of the bid.
- 3. 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 Colour option, which helps in reducing size of the scanned document.
- 4. 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.
- 5. 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.

#### **4.C.4 SUBMISSION OF BIDS:**

- 1. 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.
- 2. The bidder has to 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.
- 3. Bidder has to select the payment option as "e-payment" to pay the tender fee / EMD as applicable and enter details of the instrument.
- 4. 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.

- 5. 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.
- 6. The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 7. 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.
- 8. The tender summary has to 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.

Note: Bidder has to submit all required document online only. Original copy is needed to be submitted by the successful bidder before due date and time of submission of bids.

## 4.C.5 For any clarification in using eNivida Portal:

- 1. 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.
- 2. 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 related to e-tendering. Phone No. 011-49606060/844828988, EMail id: <a href="mailto:eprocurement@railtelindia.com">eprocurement@railtelindia.com</a>

(End of Chapter- 4C)

# **CHAPTER-5**

# BID DATA SHEET (BDS)

The section consists of provisions that are specific to various Clauses of the tender document.

Clause	Description
Clause 4.A.1.2, Chapter-4A	Validity of offer 120 days from the date of opening of tender including date of opening.  Warranty
Clause 4.A.2.1, Chapter-4A	FOR SOR-A, 36 months from the date of issue of PAC (comprising of 12 months of Maintenance Supervision between issue of PAC and FAC, followed by 48 months of warranty support).
	<b>For SOR-B</b> : 36 months from date of delivery.
Clause 4.A.3.1,	Long Term Maintenance Support (AMC)
Chapter-4A	5 Years from the date of completion of Warranty for SOR-A.
Clause 4.A.4, Chapter-4A	Delivery, installation, Commissioning & Integration period 180 days from date of issue of LOA/Purchase Order.
Clause 4.A.6, Chapter-4A	Performance Bank Guarantee (Security Deposit) Performance Bank Guarantee of 10% of total value of the LOA/PO is required to be submitted within 30 days of issue of LOA/PO. Validity of this shall be 4 months beyond warranty period.
	Billing Address:
	RailTel Corporate office
Clause 4.A.18.1, Chapter-4A	Purchaser's Right to Vary Quantities  (A) Upto maximum extent of +/- 50% subject to following condition  i. Upto +25% with no rebate.  ii. From +25% to +40% with 2% rebate  iii. From +40% to +50% with 4% rebate  (B) For variation beyond +50% of the quantity mentioned in the SOR may be done after proper negotiation with the selected bidder.
Clause 4.A.22.1, Chapter-4A	Earnest Money Deposit (EMD)/ Bid Security As per NIT (Page-2 and 3 of Tender document)
Clause 4.B.8, Chapter-4B	Last date of submission of queries/ clarification request: Date: 25.11.2025

Clause	Description
Tender Notice	Last date & time of submission of offer (Online) Date: 16.12.2025 and Time: 15:00 hours
Clause 4.A.37.1, Chapter-4A	Date & time of Opening of Tender (Online) Date: 16.12.2025 and Time: 15:30 hours

**Note:** If the details given in BDS contradict with referred clause in the detailed tender document, the details in BDS will have overriding priority over the referred clause in the tender document.

(End of Chapter- 5)

## **CHAPTER-6**

## Form No. 1 PROFORMA FOR PERFORMANCE BANK GUARANTEE

In consideration of the RailTel Corporation of India Limited., Plate-A, 6th Floor, Office Tower-2,

## PERFORMANCE BANK GAURANTEE BOND

(On Stamp Paper of Rs one hundred) (To be used by approved Scheduled Banks)

1.

	NBCC Building, East Kidwai Nagar, New Delhi-110023 (Herein after called RailTel) having agreed to exempt
2.	We,
3.	We,
4.	We,

	Unless a demand or claim under the Guarantee is made on us in writing on or before the
5.	We,
	This Guarantee will not be discharged due to the change in the Constitution of the Bank or the Contractor(s) / Tenderer(s).
	We, the
	(indicate the name of Bank) lastly undertake not to revoke this Guarantee during its currency except with the previous consent of the RailTel in writing.
Dated tl	he day of ,20
	for (indicate the name of the Bank)
	Witness
1.	Signature Name
2.	Signature Name

# PROFORMA FOR THE SYSTEM PERFORMANCE GUARANTEE

(On Stamp Paper of Rs. one hundred)

1	n
-	·

RailTel Corporation of India Limite	d
Plate-A, 6 <sup>th</sup> Floor, Office Tower-2,	
NBCC Building, East Kidwai Nagar,	,
New Delhi-110023	

	I / We
	(Signature of Firm's Authorized Officer) Seal
	Signature of witness:
1.	
2.	

# PROFORMA FOR THE LONG-TERM MAINTENANCE SUPPORT (To be signed O.E.M. on their respective Letter Head)

To RailTel Corporation of India Limited, Plate-A, 6th Floor, Office Tower-2, NBCC Building, East Kidwai Nagar, **New Delhi-110023** Applicable for OEM directly participating in the tender I / We ...... hereby confirm that we have that the requirement of Long Term Maintenance Support as per Clause 4.A.3 of Chapter-4A shall be met by us directly or through our subsidiary in India as per rates quoted in the Price Bid. I/We shall provide services as per terms and conditions pertaining to Long Term Maintenance Support of tender document. Or Applicable for Authorized representative of OEM participating in the tender (To be signed by OEM) I / We ...... hereby confirm that we have that the requirement of Long Term Maintenance Support as per Clause 4.A.3 of Chapter-4A shall be met by Authorized Distributor/Partner of OEM. However, if Authorized Distributor/Partner fails to fulfil the support obligation due to any un-foreseen circumstances, the same shall be provided by us directly or through our subsidiary in India or through authorized Indian representative for the mentioned/remaining period at the quoted prices by the bidder. I/We have gone through the requirement mentioned in the Tender Document and shall provide services as per terms and conditions pertaining to Long Term Maintenance Support of tender document. (Signature of OEM's Authorized Officer) Seal **Signature of witness:** 

2.											
<b>Z</b> .											

**Note:** Submission of above format is mandatory and required to be submitted by both OEM and Bidder separately on their respective letter heads. Any deviation / non acceptance may lead to rejection of the bid.

# CHECKLIST OF ESSENTIAL DOCUMENTATION/ACTIVITY

Note: Tenderer is required to submit offer as per following check list by giving page no. of submitted documents

SN	Item/Clause of Tender Document	Details/Remarks
1.	Signed Copy of Tender Document/ Corrigenda	
2.	EMD or Surety Bond as per Clause 4.A.22 of Tender document	
3.	Offer Letter duly signed by authorized signatory (Chapter -1 of Tender Document)	
4.	Bidder should have authorization specific to this tender from respective OEM as per Form no. 5 of Chapter-6.	
5.	Power of Attorney to Signing the Bid & Board resolution (Clause 4.A.36, Chapter- 4A of Tender Document)	
6.	HLD Design as per Chapter-3A	
7.	Clause 3.B.5 - Number of teams and the list of equipment for each team to be required for installation	
8.	OEM Vetted BOM as per Point-VI, Note Under SOR, Chapter-2	
9.	Clause wise compliance (Clause 4.A.25.1 and 4.A.25.2 of Chapter-4A)	
10.	Bidder/OEM Eligibility Clause as per Clause 4.A.12	
11.	Declaration regarding acceptance of clarification issued from DoT for Latest Security Clause which includes sign of Agreement between RailTel & Vendor/OEM (Clause 4.A.17.2, Chapter- 4A of Tender Document)	
12.	Complete technical data and particulars of the equipment offered, as specified in the Tender papers together with descriptive literature, leaflets, Drawings, if any, complete with list etc.	
13.	Form no. 2 (System Performance Guarantee) (Clause 4.A.15.2 Chapter-4A of Tender Document)	
14.	Form no. 3 (Undertaking for Long Term Maintenance Support from OEM) (Clause 4.A.3, Chapter-4A of Tender Document)	
15.	Form No. 6 of Chapter-6- RTGS Payment	
16.	Form No. 7 of Chapter-6- Indemnity Bond.	
17.	Form No. 10 of Chapter-6 - Surety Bond for Bid Security, if applicable.	

SN	Item/Clause of Tender Document	Details/Remarks
18.	Form No. 11 of Chapter-6- Affidavit as per clause 4.A.12 of Chapter-4A	
19.	Form No. 12 of Chapter-6 (Nil Deviation Component Compliance)	
20.	Form no. 14 of Chapter-6 - No Malicious Code	
21.	Form no. 15 of Chapter-6 (Details of offered equipment)	
22.	Form no. 17 of Chapter-6- Integrity Pact-	
23.	i)Schedule of Requirements (SOR) with quantities but with prices blanked out (this will be a replica of price bid with prices blanked out) and ii) Detailed unpriced Bill of Material including break up of common units/cards/backplane/SFP/Fan Tray unit etc. for building up the SOR items for supply. iii) Site wise distribution of materials as per BOM.	
24.	Certificate of Local Content as per clause 4.A.41.1 of Chapter-4A (without calculation sheet)	
25.	Certificate by bidders sharing a land border with India as per clause 4.A.41.2 of Chapter-4A - <b>Annexure-I</b>	
26.	Certificate of MSME, if applicable as per clause 4.A.23 of Chapter-4A	
27.	Documents/certificates as asked in Chapter-3A (Technical requirement and Specifications)	
28.	Undertaking of Trusted Source of offered equipment as per clause 4.A.44 of Chapter-4A	
29.	Submission of Offline Documents as per clause 4.B.7	
Docume	ent uploaded along with Financial Bid/Price Bid	
1	Price Bid for Schedule of Requirements as per Chapter-2	
2	Unit rate analysis of each SOR item with break-up of taxes/duties as per proforma attached as Annexure- A and B of Chapter-2	
3	Bill of Material (BOM) with prices of each module/cards etc.	
4	Calculation sheet of Local Content as per clause 4.A.41.1 of Chapter-4A	

## **Note:**

- i. All document need to be submitted online only. Original documents as mentioned in Clause 4.B.7 of Chapter-4B are needed to be submitted by the bidders before due date and time of bid submission.
- ii. Non submission/ non-compliance of above documents as detailed in above Check List will make the offer liable to be rejected.

# Manufacturer Authorisation form (MAF)

Plate NBC New	Tel Corporations.  E-A, 6 <sup>th</sup> Floor,  EC Building, E  Delhi-110023  Ed:	Office Tower Cast Kidwai N	r-2,					
•	ect: Manufact Tender No			n (MAF) to M/s	S	for	••••••	
	M/s(Pro	oduct c	letails),	and reputed having	our			
We	hereby	authorise	M/s	to participate of pr	te in bid and	subsequently	upon award of	
	further extend ast the above-sa	-	for three y	ears for our ran	ge of produ	cts offered by	M/s	•••••
	aking you, regards,							

**Authorised Signatory of OEM** 

# Format for instruction to be provided by vendor/contractor for RTGS payment to be made to them by RailTel against tenders.

Date:  To  RailTel Corporation of India Ltd.  Plate-A, 6th Floor, Office Tower-2,  NBCC Building, East Kidwai Nagar,  New Delhi-110023.
Dear Sir,
Re: Option for payment of our bills/dues relating to tenders floated by RailTel.
Kindly refer to tender no dated dated Which was awarded /participated to / by our company as per your award letter no dated against the above PO/LOA participated/awarded to us, we authorize you make payment or dues/bills to us in RTGS/EFT mode against the particulars mentioned below:
<ol> <li>Name of the agency as given in Bank account</li> <li>Name of the Bank</li> <li>Bank Branch &amp; address</li> <li>Bank account no.</li> <li>Bank account type (savings / current/Over Draft)</li> <li>IFSC code</li> <li>NEFT Code</li> <li>Agency's Address</li> <li>Agency's telephone &amp; mobile no.</li> <li>GST Registration Details.</li> </ol>
We also enclose herewith a copy of canceled cheque of the above mentioned bank account for verification of particulars.
hereby declare that the above particulars given above are correct and complete.
Encl: As above.
(Sign & Seal of the Vendor)
Certified that the particulars furnished at item no. 1 to 6 above are correct as per our records.

**Signature of Authorized** 

Official from the bank.

# Form No. 7 STANDING INDEMNITY BOND

(For on Account Payments and Stores supplied by RailTel) (On Stamp Paper of Rs one hundred)

We, M/s hereby undertake that we hold at our Stores Depot/s at
for and on behalf of RailTel Corporation of India Limited in the premises
through ED/RGM/RailTel/ Region or his successor hereinafter referred to as "the Purchaser" all
materials for which 'On Account' payments have been made to us against the Contract for
vide letter of Acceptance/PO of Tender No.
and the materials handed over to us by the
Purchaser for all purpose of execution of the said Contract, until such time the materials are duly erected or
otherwise handed over to him.
We shall be entirely responsible for the safe custody and protection of said materials against all risk till they
are duly delivered as erected equipment to the purchaser or as he may direct otherwise and shall indemnify
the Purchaser against any loss, damage or deterioration whatsoever in respect of the said materials while in
our possession and against disposal of surplus materials. The said materials shall at all times be open to
inspection by any engineer authorized by the Regional General Manager (RGM)/Executive Director (ED)
Region (whose address will be intimated in due course).
Charled any loss demands an detanionation of motonials account on symplys metanials dismosal off and refund
Should any loss, damage or deterioration of materials occur or surplus materials disposed off and refund becomes due, the purchaser shall be entitled to recover from us the full cost as per prices included in the
Contract (as applicable) and also compensation for such loss or damage, if any, along with the amount to be
refunded without prejudice to any other remedies available to him by deduction from any sum due or any sum
which at any time hereafter becomes due to us under the said or any other Contract.
which at any time hereafter occomes due to as ander the said of any other confiden.
In the event of any loss, damage or deterioration as aforesaid the assessment of such loss or damage and the
assessment of such compensation therefore would be made by the RGM/ED/RailTel/Region, or his
authorized nominee and the said assessments shall be final and binding upon us.
Dated this day of,20
C 1 1 . 1 . 1 . 1 . C . C M / .
for and on behalf of M/s(Contractor)
Signature of witness
Name and witness in Block letters

Address

# Form No. 8 AFFIDAVIT

**Deleted** 

# **Insurance Surety Bond for Performance Security (PBG)**

(Address)	
Date:	
Name of the issuer of surety bond:	
Surety Bond No:	Issue
Amount of Bond:	Expiry
WHEREAS,	
( name & Address of the contractor) ( herein after called the address of RCIL) have entered into an agreement ( herein - ( name of the work) subject to and in accordance with the	after called the "agreement") for the
The agreement requires the contractor to furnish Performs of its obligations, under and in accordance with the agreed duration/warranty period/AMC period) (as defined in the (figures)only (Rupeesonly (words)).( the surety Bond amount).	ment /contract/purchase order, during the ( project
We through our branch at ( surety In after called the surety Bond) by way of Performance Guard	· · · · · · · · · · · · · · · · · · ·

SB No: Date:

WHEREAS, we , (Name of Surety Insurer/insurance company) hereinafter called the Surety, acting

through [Designation(s) of the authorised person of the Surety), have, at the request of the M/s. XXXX contractor, agreed to give Bond for performance security/ additional performance security as hereinafter contained:

KNOW ALL MEN by these present that I/We, the undersigned [Insert name(s) of authorized representatives of the Surety), being fully authorized to sign and incur obligations for and on behalf of the Surety, confirm that the Surety, hereby, unconditionally and irrevocably Bond to pay the RCIL the full amount in the sum of XXXX (Rupees XXXX Only) as above stated.

The Surety Insurer undertakes to immediately pay on presentation of demand by the RCIL any amount up to and including aforementioned full amount without any demur, reservation or recourse. Any such demand made by the RCIL on the Surety Insurer shall be final, conclusive and binding, absolute and unequivocal notwithstanding any disputes raised/pending before any Court, tribunal, arbitration or any authority or any threatened litigation by the Bidder.

On payment of any amount less than aforementioned full amount, as per demand of the RCIL, the Surety Bond shall remain valid for the balance amount i.e. the aforementioned full amount less the payment made to the RCIL.

The Surety Insurer shall pay the amount as demanded immediately on presentation of the demand by RCIL without any reference to the contractor and without the RCIL being required to show grounds or give reasons for its demand or the amount demanded.

The Surety Bond shall be unconditional and irrevocable.

The Surety Bond hereinbefore shall not be affected by any change in the constitution of the Surety Insurer or in the constitution of the Contractor.

The Surety Insurer agrees that no change, addition, modifications to the terms of the Contract Agreement or to any documents, which have been or may be made between the RCIL and the Contractor, will in any way release us from the liability under this Bond; and the Surety Insurer, hereby, waives any requirement for notice of any such change, addition or modification to the Surety Bond.

This Surety Bond is valid and effective from the date of its issue, which is [insert date of issue). The Bond and our obligations under it will expire on XXXX (Expiry Date). All demands for payment under the Bond must be received by us on or before that date.

The Surety Insurer agrees that the RCIL right to demand payment of aforementioned full amount in one instance or demand payments in parts totaling up to the aforementioned full amount in several instances will be valid until either the aforementioned full amount is paid to the RCIL or the surety Bond is released by RCIL before the Expiry date.

The Surety Insurer agrees that its obligation to pay any amount demanded by the RCIL before the expiry of this Suret Bond will continue until the amount demanded has been paid in full.

The expressions Surety Insurer and RCIL hereinbefore used shall include their respective successors, administrators and assigns.

The Surety Insurer hereby undertakes not to revoke the Surety Bond during its currency, except with the previous consent in writing of the RCIL. This Surety Bond is subject to the Uniform Rules for Demand Bonds, ICC Publication No. 758.

We, the Surety Insurer, further agree that the RCIL shall be the sole judge to decide as to whether the Bidder is in default of due and faithful fulfillment and compliance with the terms and conditions contained in the Bidding Documents including, inter alia, the failure of the Bidder to keep its Bid open during the Bid validity period set forth in the said Documents, and the decision of the Authority that the Bidder is in default as aforesaid shall

be final and binding on us, notwithstanding any differences between the RCIL and the Bidder or any dispute pending before any Court, tribunal, arbitrator or any other authority. The Surety Bond shall be in addition to and without prejudice to any other security Bond (s) of the contractor in favour of the RCIL available with the RCIL. The Surety Insurer, under this Bond, shall be deemed as Principal Debtor of the RCIL.

Notwithstanding anything to the contrary contained in these presents, Our liability under this Surety Bond shall not exceed XXXX (Rupees XXXXX Only). This Surety Bond shall be valid up to XXXX (being the date of expiry); Unless the Surety Insurer/insurance Company is served a written claim or demand on or before XXXX [date of expiry) all rights under this Surety Bond shall be forfeited and the Surety Insurer shall be relieved and discharged from all liabilities under this Surety Bond irrespective of whether or not the original Surety bond is returned to the Surety Insurer.

Dated the day of 2025

The Insurance Surety Bond shall be ve	rified by sending mail to [email id of Surety Insurer]
Place	
	[P/Attorney] No.
Witness	
1.	
2.	

Note: All italicized texts are for guidance on how to prepare this Insurance Surety Bond and shall be deleted from the final document.

## Form No. 10 Surety Bond for BID Security (EMD)

B.G.	No	 												 	
Date	d:	 	 	 											

- In consideration of you, \*\*, (hereinafter referred to as the "RCIL", which expression shall, unless it be repugnant to the subject or context thereof, include its, successors and assigns) having agreed to receive the BID of (a company registered under Companies 1956/2013) and having its registered office at New Delhi (and acting on behalf of its Consortium) (hereinafter referred to as the "Bidder" which expression shall, unless it be repugnant to the subject or context thereof, include its/their executors, administrators, successors and assigns), for the\*\* \*\* Project on ...... (Hereinafter referred and other related documents including without limitation the draft contract Agreement (hereinafter collectively referred to as "Bidding Documents"), we (Name of the Surety Insurer") having our registered office at ...... and one of its branches at (hereinafter referred to as the "Surety Insurer"), at the request of the Bidder, do hereby in terms of Clause 1.2.10 read with Clause 2:20 of the RFP Document, irrevocably, unconditionally and without reservation, guarantee the due and faithful fulfillment and compliance of the terms and conditions of the Bidding Documents (including the RFP Document) by the said Bidder and unconditionally and irrevocably undertake to pay forthwith to the "RCIL" an amount of Rs. \*\* \*\* (Rs. \*\* \*\*only) (hereinafter referred to as the "Surety Bond")") as our primary obligation without any demur, reservation, recourse, contest or protest and without reference to the Bidder if the Bidder shall fail to fulfill or comply with all or any of the terms and conditions contained in the said Bidding Documents.
- **2.** Any such written demand made by the "RCIL" stating that the Bidder is in default of the due and faithful fulfillment and compliance with the terms and conditions contained in the Bidding Documents, shall be final, conclusive and binding on the *Surety Insurer*.
- 3. We, the *Surety Insurer*, do hereby unconditionally undertake to pay the amounts due and payable under this Surety Bond without any demur, reservation, recourse, contest or protest and without any reference to the Bidder or any other person and irrespective of whether the claim of the "RCIL" is disputed by the Bidder or not, merely on the first demand from the "RCIL" stating that the amount claimed is due to the "RCIL" by reason of failure of the Bidder to fulfill and comply with the terms and conditions contained in the Bidding Documents including failure of the said Bidder to keep its BID open during the BID validity period as set forth in the said Bidding Documents for any reason whatsoever. Any such demand made on the Surety Insurer shall be conclusive as regards amount due and payable by the *Surety Insurer* under this Surety Bond. However, our liability under this Surety Bond shall be restricted to an amount not exceeding Rs. \*\*

  \* \*(Rupees\*\* \*\* only).

- 4. This Surety Bond shall be irrevocable and remain in full force for a period of 180 (one hundred and eighty) days from the BID Due Date Inclusive of a claim period of 60 (sixty) days or for such extended period as may be mutually agreed between the RCIL and the Bidder, and agreed to by the Surety Insurer, and shall continue to be enforceable till all amounts under this Surety Bond have been paid. 5. We, the Surety Insurer, further agree that the RCIL shall be the sole judge to decide as to whether the Bidder is in default of due and faithful fulfillment and compliance with the terms and conditions contained in the Bidding Documents including, inter alia, the failure of the Bidder to keep its BID open during the BID validity period set forth in the said Bidding Documents, and the decision of the RCIL that the Bidder is in default as aforesaid shall be final and binding on us, notwithstanding any differences between the RCIL and the Bidder or any dispute pending before any Court, Tribunal, Arbitrator or any other Authority.
- **6**. The Surety Bond shall not be affected by any change in the constitution or winding up of the Bidder or the *Surety Insurer* or any absorption, merger or amalgamation of the Bidder or the *Surety Insurer* with any other person.
- 7. In order to give full effect to this Surety Bond, the RCIL shall be entitled to treat the *Surety* **Insurer** as the principal debtor. The RCIL shall have the fullest liberty without affecting in any way the liability of the Surety Insurer under this Surety Bond from time to time to vary any of the terms and conditions contained in the said Bidding Documents or to extend time for submission of the BIDs or the BID validity period or the period for conveying acceptance of Letter of Award by the Bidder or the period for fulfillment and compliance with all or any of the terms and conditions contained in the said Bidding Documents by the said Bidder or to postpone for any time or from time to time any of the powers exercisable by it against the said Bidder and either to enforce or forbear from enforcing any of the terms and conditions contained in the said Bidding Documents or the securities available to the RCIL, and the Surety Insurer shall not be released from its liability under these presents by any exercise by the RCIL of the liberty with reference to the matters aforesaid or by reason of time being given to the said Bidder or any other forbearance, act or omission on the part of the RCIL or any indulgence by the RCIL to the said Bidder or by any change in the constitution of the RCIL or its absorption, merger or amalgamation with any other person or any other matter or thing whatsoever which under the law relating to sureties would but for this provision have the effect of releasing the *Surety Insurer* from its such liability.
- **8**. Any notice by way of request, demand or otherwise hereunder shall be sufficiently given or made if addressed to the *Surety Insurer* and sent by courier or by certified e-mail to the *Surety Insurer* at the address set forth herein.
- 1. We undertake to make the payment on receipt of your notice of claim on us addressed to [name *Surety Insurer* along with branch address) and delivered at our above branch which shall be deemed to have been duly authorised to receive the said notice of claim.
- 2. It shall not be necessary for the RCIL to proceed against the said Bidder before proceeding against the *Surety Insurer* and the Surety Bond herein contained shall be enforceable against the *Surety Insurer*, notwithstanding any other security which the RCIL may have obtained

from the said Bidder or any other person and which shall, at the time when proceedings are taken against the *Surety Insurer* hereunder, be outstanding or unrealised.

- **3.** We, the *Surety Insurer*, further undertake not to revoke this Surety Bond during its currency period except with the previous express consent of the RCIL in writing.
- **4.** The *Surety Insurer* has power to issue this Surety Bond and discharge the obligations contemplated herein, the undersigned is duly authorised and has full power to execute this Surety Bond for and on behalf of the *Surety Insurer*.
- 5. For the avoidance of doubt, the *Surety Insurer*'s liability under this *Surety Bond* shall be restricted to Rs. \*\*\* crore (Rupees \*\*\* \*\*\* crore only). The *Surety Insurer* shall be liable to pay the said amount or any part thereof only if the RCIL serves a written claim on the *Surety Insurer* in accordance with paragraph 9 hereof, on or before [\*\*\* (indicate date falling 180 days after the BID Due Date)
- 7. The Insurance Surety Bond shall be verified from the branch concerned/ specific portal created for this purpose.

Signed and sealed this	day of	, 20	at	
SIGNED, SEALED AND	) DELIVERED			

For and on behalf of the Surety Insurer by: (Signature) (Name) (Designation) (Code Number) (Address)

#### **NOTES:**

The Surety Bond should contain the name, designation and code number of the officer(s) signing the Surety Bond.

The address, telephone number and other details of the head office of the Surety Insurer as well as of issuing branch should be mentioned on the covering letter of issuing branch.

# FORM No. 11

# FORMAT FOR AFFIDAVIT TO BE UPLOADED BY TENDERER ALONGWITH THE TENDER DOCUMENTS

	e executed in presence of Public notary on non-judicial stamp paper of the value of Rs.100/-stamp paper has to be in the name of the tenderer)
signate M/s of the the term	
1.	I/We the tenderer (s), am/are signing this document after carefully reading the contents.
2.	I/we the tenderer(s) also accept all the conditions of the tender and have signed all the pages in confirmation thereof.
3.	I/We hereby declare that I/We have downloaded the tender documents from electronic tender portal. I/We have verified the content of the document from the website and there is no addition, no deletion or no alteration to the content of the tender document. In case of any discrepancy noticed at any stage i.e. evaluation of tenderers, execution of work or final payment of the contract, the master copy available with the RailTel Administration shall be final and binding upon me/us.
4.	I/We declare and certify that I/we have not made any misleading or false representation in the forms, statements and attachments in proof of the qualification requirements.
5.	I/We also understand that my/our offer will be evaluated based on the documents/credentials submitted alongwith the offer and same shall be binding upon me/us.
6.	I/We declare that the information and documents submitted alongwith the tender by me/us are correct and I/we are fully responsible for the correctness of the information and documents submitted by us.
7.	I/We understand that if the content of the certificates submitted by us are found to be forged/false at any time during process for evaluation of tenders, it shall lead to forfeiture of the tender EMD and may also lead to any other action provided in the contract including banning of business for a period upto two years in RailTel. Further, I/we (insert name of the tenderer)** and all my/our constituents understand that my/our offer shall be summarily rejected.
8.	I/we also understand that if the content of the certificates submitted by us are found to be false/forged at any time after the award of the contract, it will lead to termination of the contract, alongwith forfeiture of EMD and Performance Guarantee and may lead to any other action provided in the contract including banning of business for a period of two years in RailTel.

## DEPONENT SEAL AND SIGNATURE OF THE TENDERER

## **VERIFICATION**

I/We above named tenderer do hereby solemnly affirm and verify that the contents of my/our above affidavit are true and correct. Nothing has been concealed and no part of it is false.

DEPONENT SEAL AND SIGNATURE OF THE TENDERER

Place: Dated:

\*\* The contents in Italics are only for guidance purpose. Details as appropriate, are to be filled in suitably by tenderer. Attestation before Magistrate/Notary Public

# PROFORMA FOR Nil Deviation Component Compliance Undertaking Letter (TO BE SIGNED BY BIDDER)

	п		

RailTel Corporation of India Ltd. Plate-A, 6th Floor, Office Block Tower-2, East Kidwai Nagar, New Delhi-110023

	lhi-110023	•				
Date: dd	-тт-уууу					
Dear Sir,	,					
Sub:	NIL	Deviation	Compliance	for	Tender	no
	l above all of FP, we conf		mations and submis	ssions as p	er your require	ments
1	W/2 xxxi11	044 C1144 C114 1144 C C4	ditional assemblians	a af all tha	4 <b>1</b>	مدنند

1. We will ensure our unconditional compliance of all the terms and conditions as mentioned in the Tender document. In case of any deviation, the same should be attached as an Annexure (as per Format given below) to this form. In case of any deviation, RailTel reserves the right to reject the bid without giving any justification.

**Format of Annexure (Deviation Statement)** 

S. No.	Clause No. & Chapter No.	Existing Clause of Tender	Proposed Clause	Remarks, if any

- 2. All the proposed Hardware and Software to be supplied as per SOR are compliant to the technical specifications as mentioned in Chapter-3A of Tender document.
- 3. We hereby certify that the hardware and software mentioned in our Bill of Material (BOM) are complete.
- 4. We confirm that there is no requirement of any other hardware and software to fulfill requirements as per scope against the RFP. If any additional hardware and software is required to meet in scope requirements, then it would be provided by us at no extra cost to RailTel.

Place:	
Date:	Seal and signature of

the bidder

(This Form along with Annexure (if required) should be on the letterhead of the bidder duly signed by an authorized signatory)

Form No. 13

Deleted

# PROFORMA FOR "NO MALICIOUS CODE UNDERTAKING LETTER BY BIDDER and OEM"

To

signatory)

Plate-A East K	el Corporation of India Ltd. A, 6th Floor, Office Block Tower-2, Kidwai Nagar, Delhi-110023
Tende	r Reference No.:
Sub:	Undertaking for No Malicious Code.
Dear S	ir,
	Over and above all our earlier conformations and submissions as per your requirements of the RFP, we confirm that,
1.	All proposed hardware and software components in scope of supplies when shipped by, does not contain embedded malicious code that would activate procedures to:-
	<ul><li>a. Inhibit the desired and designed function of the equipment.</li><li>b. Cause physical damage to the user or equipment during the exploitation.</li><li>c. Tap information resident or transient in the equipment/networks.</li></ul>
2.	We, will be considered to be in breach in case physical damage or malfunctioning is caused due to activation of any such malicious code in embedded software and thus be liable to repair, replace or refund the price of the infected software if reported (or, upon request, return) to the party supplying the software to Customer, if different than
3.	Security breach or damages to system, if any, so caused by any embedded malicious code or otherwise, due to the act of either OEM or bidder or both, the OEM as well as the bidder would be considered liable jointly or severally and shall be banned for conducting any business with RailTel. Also the present contract, may liable to be terminated by the purchaser.
Place: Date:	Seal and signature of the bidder/OEM

(This letter should be on the letter head of the Bidder & OEM duly signed by an authorized

# FORM NO. 15 DETAILS OF OFFERED EQUIPMENT:

SN	SOR Item no.	Item Description	Make	Model	Data Sheet Placed at Page No. of Bid
1					
2					
3					
4					

## Form No. 16 CONTRACT AGREEMENT (On Stamp paper of Rs. One hundred)

(CA	No.
	)
This AGREEMENT is made at <location> on this thousand and twenty, by and between RailTel Corpora of India Undertaking) having its Registered &amp; Regional off Block-II, East Kidwai Nagar, New Delhi-110023, acting in Executive Director/Infra or his authorized representative 'RailTel', which expression should unless repugnant to the include its successors and permitted assigns) of the one part</location>	ation of India Limited (A Govt. fice at Plat-A, 6th Floor, Office the premises through Principal ve (hereinafter referred to as the context or meaning thereof
Andhaving its registered office acting in the premises through  "Contractor", which expression should unless repugnant to include its successor and permitted assigns) of the other part	the context or meaning thereof
Whereas in response to a call for Tender by "  for RailTel Corporation of India Limited as per tender par Corrigendum issued by RailTel hereto, offer letter as per Annexure 'B' hereto  AND WHEREAS the said Tender of the Contractor has the said Tender	pers at Annexure 'A' read with the Contractor has submitted
"	
Tender No dated c accepted rates and agreed deviations from tender papers contract value of Rs (Rupees duly accepted by the contractor.	omplete with enclosures at the as per Annexure-C hereto at
Now this agreement witnesses that in consideration of the parade by the Purchaser (RailTel) to the Contractor provided supply all equipment and materials and execute and perfor Tender of the Contractor has been accepted strictly according Annexure 'B' and 'C' hereto and upon such supply, expectation of the purchaser (RailTel) and the purchaser (Rail at the rates accepted as per the said Annexure 'C' and in terms.	for herein, the Contractor shall m all works for which the said ing to the various provisions in ecute and performance to the ITel) shall pay to the Contractor
IN WITNESS whereof both the parties have hereunto set a hands and/or seals on the day and year respectively men signatures.	<u> </u>
Signed and delivered by ShriCorporation of India Ltd. in the presence of:	for and on behalf of RailTel

1.	Signatures Date Name in Block Capit Address:	tals	
2.	Signatures Date Name in Block Capit Address:	tals	
Signed	d and delivered by Sh	ri in the presence of :	for and on behalf of
1.	Signatures Date Name in Block Capit Address:	tals	
2.	Signature Date Name in Block Capit Address:	tals	
	Annexure 'A': Annexure 'B': Annexure 'C': enclosures.	Tender Document No with C Contractor's offer letter. Letter of Acceptance/Purchase order	
	Annexure 'D':	Copy of Performance Bank Guarantee	(PBG)

## Form No. 17 PROFORMA FOR SIGNING THE INTEGRITY PACT

(On Non-judicial stamp paper of Rs. 100/-)

RailTel Corporation of India Limited, hereinafter referred to as "The Principal".

And
, hereinafter referred to as "The Bidder/ Contractor"
Preamble
The Principal intends to award, under laid down organizational procedures, contract/s for

relations with its Bidder(s) and /or Contractor(s).

In order to achieve these goals, the Principal will appoint an Independent External Monitor (IEM), who will monitor the tender process and the execution of the contract for compliance with the

laws of the land, rules, regulations, economic use of resources and of fairness/transparency in its

## **Section 1- Commitments of the Principal**

principles mentioned above.

- 1. The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:
  - a. No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
  - b. The Principal will during the tender process treat all Bidder(s) with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential/additional information through which the Bidder(s) could obtain an advantage in relation to the process or the contract execution.
  - c. The Principal will exclude from the process all known prejudiced persons.
- 2. If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the IPC/PC Act, or if there be a substantive suspicion in this regard, the Principal will inform the Chief Vigilance Officer and in addition can initiate disciplinary actions.

#### **Section 2- Commitments of the Bidder(s) / Contractor(s)**

- 1. The Bidder(s)/Contractor(s) commit himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.
  - a. The Bidder(s)/contractor(s) will not, directly or through any other persons or firm, offer promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage during tender process or during the execution of the contract.

- b. The Bidder(s)/Contractor(s) will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
- c. The Bidder(s)/Contractor(s) will not commit any offence under the relevant IPC/PC Act; further the Bidder(s) /Contractors will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
- d. The Bidder(s)/Contractor(s) of foreign origin shall disclose the name and address of the Agents/representatives in India, if any. Similarly, the bidder(s)/contractor(s) of Indian Nationality shall furnish the name and address of the foreign principals, if any. Further details as mentioned in the "Guidelines on Indian Agents of Foreign Suppliers" shall be disclosed by the Bidder(s)/Contractor(s). Further, as mentioned in the Guidelines all the payments made to the Indian agent/representative have to be in Indian Rupees only. Copy of the "Guidelines on Indian Agents of Foreign Suppliers' as annexed and marked as Annexure A.
- e. The Bidder(s)/Contractor(s) will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.
- 2. The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

## Section 3: Disqualification from tender process and exclusion from future contracts

If the Bidder(s)/Contractor(s), before award or during execution has committed a transgression through a violation of Section 2, above or in any other form such as to put his reliability or credibility in question, the Principal is entitled to disqualify the Bidder(s)/Contractor(s) from the tender process or take action as per the procedure mentioned in the "Guidelines on Banning of business dealings". Copy of the "Guidelines on Banning of business dealings" is annexed and marked as Annex-"B".

#### **Section 4: Compensation for Damages**

- 1. If the Principal has disqualified the Bidder(s) from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover the damages equivalent to Earnest Money Deposit/Bid Security.
- 2. If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to be terminated the contract according to Section 3, the Principal shall be entitled to demand and recover from the Contractor liquidated damages of the Contract value or the amount equivalent to Performance Bank Guarantee.

## **Section 5: Previous Transgression**

- 1. The Bidder declares that no previous transgressions occurred in the last three years with any other company in any country conforming to the anti corruption approach or with any other public sector enterprise in India that could justify his exclusion from the tender process.
- 2. If the bidder makes incorrect statement on this subject, he can be disqualified from the

tender process for action can be taken as per the procedure mentioned in "Guidelines on Banning of business dealings".

#### Section 6: Equal treatment of all Bidders / Contractors/Subcontractors.

- 1. The Bidder(s)/Contractor(s) undertake(s) to demand from all subcontractors a commitment in conformity with this Integrity Pact, and to submit it to the Principal before contract signing.
- 2. The Principal will enter into agreements with identical conditions as this one with all bidders, contractors and subcontractors.
- 3. The Principal will disqualify from the tender process all bidders who do not sign this Pact or violate its provisions.

#### Section 7: Criminal charges against violation by Bidder(s) / Contractor(s) / Sub contractor(s)

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the same to the Chief Vigilance Officer.

#### **Section 8: Independent External Monitor / Monitors**

- 1. The Principal appoints competent and credible Independent External Monitor for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.
- 2. The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the CMD, RailTel.
- 3. The Bidder(s)/Contractor(s) accepts that the Monitor has the right to access without restriction to all project documentation of the Principal including that provided by the Contractor. The Contractor will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors. The Monitor is under contractual obligation to treat the information and documents of the Bidder(s)/ Contractor(s)/Subcontractor(s) with confidentiality.
- 4. The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.
- 5. As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of the Principal and request the Management to discontinue or take corrective action, or to take other relevant action. The monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.
- 6. The Monitor will submit a written report to the CMD, RailTel within 8 to 10 weeks from the date of reference or intimation to him by the Principal and, should the occasion arise, submit proposals for correcting problematic situations.
- 7. Monitor shall be entitled to compensation on the same terms as being extended to provided to Independent Directors on the RailTel Board.

- 8. If the Monitor has reported to the CMD, RailTel, a substantiated suspicion of an offence under relevant IPC/PC Act, and the CMD, RailTel has not, within the reasonable time taken visible action to proceed against such offence or reported it to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commissioner.
- 9. The word 'Monitor' would include both singular and plural.

#### **Section 9: Pact Duration**

This pact begins when both parties have legally signed it. It expires for the Contractor 10 months after the last payment under the contract, and for all other Bidders 6 months after the contract has been awarded.

If any claim is made / lodged by either party during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged / determined by CMD of RailTel.

#### **Section 10: Other Provisions**

- 1. This agreement is subject to Indian Law, Place of performance and jurisdiction is the Registered Office of the Principal, i.e. New Delhi.
- 2. Changes and supplements as well as termination notices need to be made in writing.
- 3. If the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.
- 4. Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

(For & on behalf of the Principal) (Office Seal)	(For & On behalf of Bidder/Contractor) (Office Seal)
Place ———	
Date	
Witness 1:	
(Name & Address)	
Witness 2:	
(Name & Address)	

(End of Chapter-6)

#### **CHAPTER-7**

#### Detailed standard conditions applicable for the Annual Maintenance Contract

#### 7.1.0 Introduction

This document contains the standard conditions applicable for the Annual Maintenance Contract between RailTel and the Contractor. Contractor is defined as the company whose products/equipments have been deployed over the RailTel telecommunication network and the warranty of these equipments has expired or going to be expire shortly. All the equipments/ cards/ modules of SOR-A will be covered under this contract. This Annual Maintenance Contract will cover up the provision of remote services to be provided by the contractor for proper working of Network created through the contractor's equipments. This document will also cover up the Repair and Return services for the rectification of defective modules/cards/parts etc. which are the key tools in use for uninterrupted traffic. It also includes the Key performance parameter which will decide the outcome of the contractor within reasonable time frame along with the provision of penalties. This Annual Maintenance Contract will cover the following services:

- Technical Support service.
- Repair and Return Service.
- Software Updates.

#### 7.2.0 Basic Definitions and terminology used:-

**RailTel:** RailTel Corporation of India Limited having its registered and Corporate office office at Plate-A, 6th Floor, Office Tower-2, NBCC Building, East Kidwai Nagar, New Delhi-110023.

**Contractor:** Contractor means firm/company whom equipments are deployed over the Telecommunication Network of RailTel.

**TSC:** Technical Support Center created by the Contractor for 2<sup>nd</sup> level support.

**TEC:** Telecom Excellence Center created by the contractor for 3<sup>rd</sup> level support.

WC: Welcome Center of contractor through which the RailTel may interact with contractor.

**AR:** Assistance Request created by WC of contractor for a specific request of RailTel which will be used for all references until its closure and also for future correspondence.

**Maintained Products:** Details of equipment's with location wise deployment and serial identification numbers to be incorporated in a statement jointly signed by RailTel and Contractor, which will be covered under AMC contract.

**Severity Levels:** 

Severity Levels are defined as the condition of the system when RailTel submits an Assistance Request (AR). There are three severity levels for reported problems. Severity levels are defined as follows:

"Critical" (also known as Severity Level 1, SL1): The system is inoperative and RailTel's inability to use the product has a critical effect on RailTel's operations. This condition is generally characterized by complete system failure and requires immediate correction.

"Major" (also known as Severity Level 2, SL2): The system is partially inoperative but still usable by RailTel. The inoperative portion of the product severely restricts RailTel's operations, but has a less critical effect than a severity level 1 condition.

"Minor" (also known as Severity Level 3, SL3): The system is usable by RailTel, with little or limited impact to the function of the system. This condition is not critical and does not severely restrict overall RailTel operations.

RailTel shall inform the severity based on above definitions, at the time of opening of AR with Contractor's TSC. If TSC feels to disagree on the severity, may discuss with RailTel on correction of severity. Where parties disagree on the classification of a particular reported problem, RailTel and Contractor's technical contacts will discuss the classification in good faith to reach a mutually acceptable classification. In the event, the parties are unable to reach agreement on the classification, the reported problem shall be classified at the discretion of RailTel.

## 7.2.1 **Key Performance Indicators (KPIs):**

The key performance indicators (KPI) established by contractor and RailTel, are dependent on the severity level of the request as reported by RailTel to the TSC through telephone. Contractor's KPIs extend to Maintained Products running on a currently supported software version release only. These are KPIs which will decide the penalties to be imposed on contractor if he fails to achieve the fixed parameter for both remote services and Repair & Return services.

"Response Time" (also known as Specialist Call-back) means the time period from when RailTel first notifies the Contractor's welcome center of a reported problem to when an contractor's expert attempts to contact RailTel via telephone or preferred contact method as defined when submitting the request.

"Restore Time" (also known as Remote Neutralization) means a measure of the length of time from when contractor is contacted and an event is determined to be loss of service and/or functionality affecting, to the time when contractor provides the means to return a system to operational status. This will be applicable only for services impacting cases. Travel time of field's engineers or TSC engineers and spare arrangement times will be excluded in this.

Resolve Time (Also known as Final Resolution Time) means a measure of the length of time from when RailTel first notifies the contractor's welcome center to

the time when a solution to address the issue is made available to RailTel. This may or may not occur simultaneously with Restore Time.

#### Patch Releases/Maintenance Releases:-

"Patch Release" means a software release that contains minor modifications to address a specific problem and help restore a system. A Patch Release may also be known as "Craft Release".

"Maintenance Release" means a software release that contains modifications intended to resolve problems that prevent products from performing up to the manufacturer's technical specification. Typically they are comprised of a collection of Patch Releases. Maintenance Release may also be known as an "Update Release" or a "Point Release".

## 7.3.0 Technical Support Service:-

During this AMC period, whenever needed, RailTel may contact the Contractor's Support center (WC) through a dedicated phone no. or e-mail address or Web for every issue or request. The Welcome Center of the Contractor (WC) will be available 24 hours a day and 365 days of the year. Welcome Centre creates the Assistance Request (AR) in the database and this AR will be used for all future correspondence /references and it will route to either for Repair or Return services or to Technical support center (TSCs) for remote assistance. These level 2 services provided through Technical support center may escalate to Technical Experts centre or to OEM dedicated technical support centers (for OEM support for hardware and /or software portion of the products).

The Welcome centre of contractor (WC) keeps track of the assistance request (AR) or part request until closure.

### 7.3.1 Contractor's responsibilities:

Contractor shall login RailTel Network in support of product related questions troubleshooting assistance, diagnostic procedures, and Patch & Maintenance Releases, as are made available, to restore and resolve network troubles. The following services will be provided:

- 7.3.1.1 Troubleshoot network problems via phone, virtual private network, or modem connection down to Maintained product component level, or sufficiently to the maintained products as the root cause.
- 7.3.1.2 Provide technical advice and guidance via telephone or email by Contractor's product specialists located in their Technical Support Centers (TSC). Upon request from RailTel, RailTel will receive information, advice and assistance for the Maintained Products.
- 7.3.1.3 Provide Patch & Maintenance Releases for Maintained Products, as provided in accordance with the applicable product software support policy. For selected

products noted on Maintained Products Contractor will remotely install software fixes, patches, and updates that may be made available.

- 7.3.1.4 For Severity Level Critical (Severity 1) and Major (Severity 2) will restore Maintained Products to operational status by identifying defective hardware components or providing software and/or procedural workarounds, where feasible. All software workarounds will be licensed subject to the same terms, restrictions, and limitations as contained in the licenses under which the software was acquired.
- 7.3.1.5 Not Used.
- 7.3.1.6 Not Used.

### 7.3.1.7 **Software Update:**

RailTel will be extended the benefits of software updates made by OEM on the installed systems on existing release from time to time to improve performance. If required to restore or rectification of severe problems all the software up-gradation, re-installation will be done by contractor during the period of AMC.

## 7.3.2 RailTel Responsibility:-

When reporting an AR, RailTel shall include Severity Level of problem and output of any diagnostic, printed logs, already performed to help reproduce the conditions under which the trouble occurred. Identify site ID or contact number, submitter name & location, callback telephone number and/or email address, system name and location, processor location, type and serial number, and alternate contact.

- 7.3.2.1 RailTel will notify contractor in writing immediately of any change in the employment or authorization status of any personnel having authorized access to the Web site.
- 7.3.2.2 RailTel will provide remote access to Contractor's TSC to access their network, either through VPN, ISDN or Team viewer.
- 7.3.2.3 RailTel will perform first level diagnostics before handing over the ticket to the Contractor. RailTel will share all network layouts, link details etc which may be needed by Contractor to help troubleshooting the issue.
- 7.3.2.4 RailTel will provide all necessary documents for repair of cards.
- 7.3.2.5 RailTel will provide all necessary technical field support in the form of field technical staff equipped with necessary equipment's etc. to give remote access to Contractor.

#### 7.4.0 Repair and Return Services

### 7.4.1 **Repair**

#### 7.4.1.1 Contractor's Responsibility:-

- 1. The Contractor will take- over the defective cards/SFPs from RNOC/site where equipment is installed and hand-over the repaired card at the same location. The following activities will be performed by the contractor:
- 2. After receiving a defective part request through Welcome Centre (dedicated phone line or e-mail), the defective part will be taken over by the contractor from RNOC/site where equipment is installed. All the documentation, including identification number (Serial number) will be provided by RailTel.
- 3. There will be initial one time activity of all existing faulty cards being repaired by Contractor before commencement of the AMC. AMC will cover only equipment's which are in working condition.
- 4. The received defective part will be got repaired by the contractor **within 10 days** from the date of receiving and will be installed/handed over to RailTel authorized representative at RNOC/site. The contractor will also give probable reason for repeated failure of cards/ modules.

**Uninterrupted Network:** For smooth and uninterrupted traffic during the repair being carried out by the contractor.

- 1. Contractor shall make spares available at his own cost.
- 2. All transportation, freight and insurance charges will be borne by the contractor.
- 3. Contractor will keep the record of repair on each defective part/cards/SFP with serial numbers (unique identification) particulars.

#### 7.4.1.2 RailTel's Responsibility

RailTel will hand over the defective card/SFP/Parts/etc. to the contractor's authorized representative at RNOC/site along with the following relevant information & documentation.

- 1. Identification/serial number and location of use.
- 2. Fault report document duly filled-in in a format as per requirements of Contractor.
- 3. All relevant documentation including failure description, diagnostic tests results.
- 4. Adequate packing material to protect against reasonable risk of damages.
- 5. Provide all necessary government authorization and documentation necessary to facilitate custom clearance processing.
- 6. Perform a physical check test on the repaired parts.

#### 7.4.2 **Return**

If any part goes beyond repair due to Contractor at the time of repair being carried out, this is to be communicated to RailTel and after agreed upon, it will be labeled as "unworkable". If it will be required to deploy a new part on that location that will be provided by the contractor to RailTel free of cost. To achieve this, contractor is required to always keep adequate spares with it during the period of AMC. However, this excludes damaged, spoiled, rusted or misused parts. Any such parts will be not-repairable and no replacements shall be provided by contractor. RailTel will have to purchase fresh spares in case the cards are non repairable due to these reasons.

## 7.5.0 Services Level Agreement Values (SLA):

As described above, if the contractor fails to provide the Technical Support Services and Repair services within the reasonable time, the following KPIs will be used.

## 7.5.1 **Technical Support Services**

#### **KPIs & SLA:**

Severity Levels/KPIS	Critical	Major	Minor
Respond	1Hr	3Hr	5Hr
Restore	6 Hr	BE	BE

<sup>\*</sup>BE-Best Effort

## 7.5.2 Repair and Return Services

## If the contractor fails to return the card within 10 days from the date of receipt, the following penalties will be imposed:

Equipment	Duration of repair	<b>Deduction/Penalties</b>
All Modules and accessories	Upto 10 days	NIL
All Modules and accessories	More than 10 days and up to 30 days	10% of the cost of affected Equipment.
All Modules and accessories	More than 30 days and up to 40 days	25% of the cost of affected Equipment.
All Modules and accessories	More than 40 days and up to 50 days	75% of the cost of affected Equipment.
All Modules and accessories	More than 50 days	Full cost of affected part/module.

#### Note:

a. OEM should provide facility to RailTel for direct fault case open on TAC Support in case

of emergency.

b. The above replacement services will be applicable during maintenance supervision, warranty and AMC period.

#### 7.6.0 General Conditions:

#### 7.6.1 **Period of AMC:**

This Annual Maintenance Contract will be valid for a period of 5 years from the date of issue of LOA/PO for AMC. This period (i.e. 5 years) may be extended further with mutual consent of RailTel and Contractor.

RailTel at its discretion is free to change the location of the equipments installed during the currency of AMC and the contractor shall carry out the AMC with same commercial terms.

#### 7.6.2 **Performance Bank Guarantee: -**

As mentioned in Clause 4.3 of Chapter-4.

#### 7.6.3 **Prices and Taxes:-**

- The prices for the services shall be in INR which will be the currency of account invoicing and payment.
- If in respect of the provision of services, Contractor has to pay the additional admissible taxes, the same will be get reimbursed after receiving he documentary proof by RailTel.
- Price will not include the cost of any financing (if any).
- The Octroi/entry tax shall be paid extra as per actual on production of proof of payment/document.

#### 7.6.4 **Payment Terms:-**

AMC charges shall be paid on quarterly basis by the respective office after successful completion of maintenance within 30 days from the date of invoicing accompanied with Invoice, Monthly trouble ticket report, Monthly repair report subject to any deductions or recovery (which the RailTel may be entitled to make under contract) through RTGS. Monthly reports will be shared with RailTel regularly. Format will be mutually decided by RailTel and Contractor.

#### 7.6.5 **Execution of contract**

The nominated representatives will be responsible for the execution of the contract under their respective jurisdiction. Certificate regarding proper execution of the AMC along with proposed deductions/penalties with reasons thereof shall be prepared for every billing cycle (quarterly) for arranging payment to the contractor.

#### 7.6.6 Tenderers Address

Tenderer shall state in the tender his postal address fully and clearly. Any communication sent to the Tenderers by post at his said address shall be deemed to have reached the tenderer duly & timely, not withstanding the fact the communication could not reach the tenderer at all or in time for whatever reason. Important documents shall be sent by Registered post.

## 7.6.7 Law governing the contract.

The contract shall be governed by the law for the time being in force in the Republic of India. Compliance to regulations and bye-laws-The contractor shall conform to the provision of any statute relating to the works and regulations and bye-laws of any local authority and of any water and lighting companies or undertakings, with whose system the work is proposed to be connected and shall before making any variation from the drawings or the specifications that may be necessitated by so confirming give to the Engineer notice specifying the variation proposed to be made and the reason for making the variation and shall not carry out such variation until he has received instructions from the Engineer in respect thereof. The Contractor shall be bound to give all notices required by statute, regulation or bye-laws as aforesaid and to pay all fees and taxes payable to any authority in respect thereof.

### 7.6.8 Force Majeure clause:-

If at any time, during the 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, quarantine restrictions, lockouts, epidemics, any statute, rules/regulation, order of requisitions issued by any Government Department of Competent Authority or acts of God (here-in-after 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 of 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 to 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.

#### 7.6.9 **Illegal Gratification**

Any bribe, commission, gift or advantage given, promised or offered by or on behalf to the contractor or his partner, agent or servant or anyone on his behalf to any officer or employees of the RailTel, or to any person on his behalf in relation to obtaining or the execution of this or any other contract with the RailTel shall, in addition or any criminal liability which he may incur, subject the contractor to the rescission of the contract and all other contracts with the RailTel and to the payment of any loss or damage resulting from such decision and the RailTel shall be entitled to deduct the amounts so payable from any moneys due to the Contractor (s) under this contract or any other contracts with the RailTel.

The contractor shall not lend or borrow from or have or enter into any monitory dealings or transactions either directly or indirectly with any employee of the RailTel and if he shall do so, the RailTel shall be entitled forthwith to rescind the contract and all other contracts with the RailTel. Any question or dispute as to the commission or any shall offence or compensation payable to the RailTel under this clause shall be settled by the Regional General Manager of RailTel, in such a manner as shall consider fit and sufficient and his decision shall be final and conclusive. In the event of rescission of the contract under this clause, the contractor will not be paid any compensation whatsoever except payment for the work done up to date of rescission.

#### 7.6.10 **LABOUR**

Wages to Labour- The contractor shall be responsible to ensure compliance with the provisions of the Minimum Wages Act, 1948 (hereinafter referred to as the "said Act") and the Rules made there-under in respect of any employees directly or through petty contractors or sub contractors employed by him on road construction or in building operations or in stone breaking or stone crushing for the purpose of carrying out this contract. If in compliance with the terms of the contract, the contractor supplied any labour to be used wholly or partly under the direct orders and control of the RailTel whether in connection with any work being executed by the contractor or otherwise for the purpose of the RailTel such labour shall, for the purpose of the clause, still be deemed to be persons employed by the contractor. If any moneys shall as a result of any claim or application made under the said Act be directed to be paid by the RailTel, such moneys shall be deemed to be moneys payable to the RailTel by the Contractor and on failure by the contractor to repay any moneys paid by it as aforesaid with seven days after the same shall have been demanded, the RailTel shall be entitled to recover the same form any moneys due or accruing to the contractor under this or any other contractor with the RailTel.

#### 7.6.10.1 Apprentices Act

The contractor shall be responsible to ensure compliance with the provisions of the Apprentices Act 1961 and the Rules and Orders issued the re-under from time to time in respect of apprentices directly through petty contractors or subcontractors employed by him for purpose of carrying out the contract. If the Contractor directly or through petty contractor or sub-contractors fails to do so, his failure will be breach of the contract and the RailTel may, in its discretion, rescind the contract. The Contractor shall also be liable for any pecuniary liability arising on account of any violation of the provisions of the Act.

### 7.6.10.2 Provisions of Payments of Wages Act

The Contractor shall comply with the provisions of the payment of Wages Act, 1936 and the rules made there under in respect of all employees directly or through petty contractors or sub-contractors employed by him in the works. If in compliance with the terms of the contract, the contractor directly or through petty contractors or sub-contractors shall supply any labour to be used wholly or partly under the direct orders and control of the Engineer whether in connection with the works to be executed hereunder or otherwise for the purpose of the Engineer such labour shall nevertheless be deemed to comprise persons employed by the contractor, and any moneys which may be ordered to be paid by the Engineers shall be deemed to be moneys payable by the Engineer on moneys due to the contractor in terms of the contractor (whether under this contract or any other contract all moneys paid or payable by the RailTel by way of compensation of aforesaid or for costs of expenses in connection with any claim thereto and the decision of the Engineer upon any question arising out of the effect or force of this clause shall be final and binding upon the contractor.

### 7.6.10.3 Provision of Contract Labour (Regulation and Abolition) Act 1970

- 1. The contractor shall comply with the provision of the Contract Labour (Regulation and Abolition) Act 1970 and the Contract Labour (Regulation and Abolition) Act, Central Rules 1971 as modified from time to time, whenever applicable and shall also indemnify the RailTel from and against any claims under the aforesaid Act and the Rules.
- 2. The contractor shall obtain a valid license under the aforesaid Act as modified from time to time before the commencement of the work and continue to have a valid license until the completion of the work. Any failure to fulfill this requirement shall attract the penal provision of the Contract arising out of the resultant non-execution of the work.
- 3. The contractor shall pay to the labour employed by him directly or through subcontractors the wages as per provisions of the aforesaid Act and the Rules wherever applicable. The Contractor shall notwithstanding the provisions of the contract to the contrary, cause to be paid the wages to labour indirectly engaged on the work including any engaged by his sub contractors in connection with the said work, as if the labour had been immediately employed by him.
- **4.** In respect of all labour directly or indirectly employed in the work for performance of the contractor's part of the contract the contractor shall comply with or cause to be complied with the provisions of the aforesaid Act and the Rules wherever applicable.
- 5. In every case in which, by virtue of the provisions of the aforesaid Act or the Rules, the RailTel is obliged to pay any amount of wages to a workmen employed by the contractor or his sub-contractor in execution of the work or to

incur any expenditure in providing welfare and health amenities required to be provided under the aforesaid Act and the Rules or to incur any expenditure in providing welfare and health amenities required to be provided under the aforesaid Act the Rules or to incur any expenditure on account of the contingent liability of the RailTel due to contractor's failure to fulfill his statutory obligations under the aforesaid Act or the Rules the RailTel will recover from the contractor, the amount of wages so paid or the amount of expenditure so incurred, and without prejudice to the rights of the RailTel under section 20, sub section (2) and section 2 sub-section (4) of the aforesaid Act, the RailTel shall be at liberty to recover such amount or part thereof by deducting it from the security deposit and/or from any sum due by the RailTel to the contractor whether under the contract or otherwise. The RailTel shall not be bound to contest any claim made against it under sub section (1) of section 20 and sub section (4) of section 21 of the aforesaid Act except on the written request of the contractor and upon his giving to the RailTel full security for all costs for which the RailTel might become liable in contesting such claim. The decision of the RailTel regarding the amount actually recoverable from the contractor as stated above shall be final and binding on the contractor.

## 7.6.10.4 Reporting of Accidents to Labor

The contractor shall be responsible for the safety of all employees directly or through petty contractors or sub-contractors employed by him on the works and shall report serious accidents to any of them however and wherever occurring on the works to the Engineer or the Engineer's representative and shall make every arrangement to render all possible assistance.

#### 7.6.10.5 Provisions of Workmen's Compensation Act

In every case, in which by virtue of the provision of section 12 sub section (1) of the Workmen's Compensation Act, 1923, RailTel is obliged to pay compensation to workman directly or through the petty contractor employed by the contractor or sub-contractor, in executing the work, RailTel will recover from the contractor the amount of the compensation so paid, and without prejudice to the right of RailTel under section 12 sub section (2) of the said Act. RailTel shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any sum due by RailTel to the Contractor whether under these conditions or otherwise, RailTel shall not be bound to contest any claim made against it under Section 12, Sub Section (1) of the said Act except on the written request of the contractor and upon his giving to RailTel full security for the all costs for which RailTel might become liable in consequence of contesting such claim.

#### 7.6.11 **Determination of Contract**

**Right of RailTel to determine the contract:** The RailTel shall be entitled to determine and terminate the contract at any time, should in the RailTel's opinion, the cessation of the work becomes necessary owing to paucity of funds

or from any other cause whatever, in which case the value of approved materials at site and of work done to date by the Contractor will be paid for in full at the rate specified in the contract. Notice in writing from the RailTel of such determination and the reasons thereof shall be conclusive evidence thereof.

Payment on determination of contract: Should the contract be determined under sub clause (1) of this clause and the Contractor claims payment for expenditure incurred by him in the expectation of completing the whole of the work, the RailTel shall admit and consider such claims as are deemed reasonable and are supported by vouchers to the satisfactions of the Engineer. The RailTel's decision on the necessity and property of such expenditure shall be final and conclusive.

The contractor shall have no claim to any payment of compensation of otherwise, however on account of any profit or advantage which he might have derived from the execution of the work in full but which he did not derive in consequence of determination of contract.

## 7.6.12 TERMINATION OF CONTRACT OWING TO DEFAULT OF CONTRACTOR:

As per clause 4.A.30, Chapter-4A of tender document.

## 7.6.13 RIGHT OF RAILTEL AFTER TERMINATION OF CONTRACT OWING TO DEFAULT OF CONTRACTOR:

- a) The contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchased or procured any materials or entered into any commitments or made any advances on account of or with a view to the execution of the works or the performance of the contract and contractor shall not be entitled to recover or be paid any sum for any works thereto not actually performed under the contract, unless or until the Engineer shall have certified the performance of such work and the value payable in respect thereof and the Contractor shall only be entitled to be paid the value so certified.
- b) The Engineer or Engineer's Representative shall be entitled to take possession of any materials, tools, implements, machinery or buildings on the works or on the property on which these are being or ought to have been executed, and to retain the employ the same in further execution of the works without the contractor being entitled to any compensation for the use and employment thereof or for wear and tear or destruction thereof.
- c) The Engineer shall, as soon as may be practicable after removal of the contractor fix and determine expert or by or after reference to the parties or after such investigation or enquiries as he may consider fit to make or institute and shall certify what amount (if any) has at the time of termination of the contract been reasonably earned by or would reasonably accrue to the Contractor in respect

of the work then actually done by him under the contract what was the value of any unused or partially use materials, any constructional plants and any temporary works upon the site. The legitimate amount due to the contractor after making necessary deductions and certified by the Engineer should be released expeditiously.

#### 7.6.14 SETTLEMENT OF DISPUTE AND ARBITRATION:-

- Any dispute or difference whatsoever arising between the parties out of 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 as amended and the award made in pursuance thereof shall be binding on the parties. The venue of such arbitration or proceedings thereof shall be New Delhi.
- All arbitration proceedings shall be conducted in English. Resources against any
  Arbitral award so rendered may be entered into court having jurisdiction or
  application may be made to such court for the order of enforcement as the case
  may be.
- The arbitral tribunal shall consist of the sole Arbitrator if the value of claim is upto Rs. 10 lakhs. The arbitrator will be appointed by the Managing Director of RailTel Corporation of India Ltd. If the value of claim or amount under dispute is more than Rs. 10 lakhs, the matter shall be referred to the adjudication of arbitral council. Chairman & Managing Director/RailTel shall furnish a panel of three names to the contractor, out of which the contractor will recommend one name to be his nominee and then Managing Director/RailTel shall appoint out the panel, one name as RailTel's nominee and these two arbitrators with mutual consent appoint a third arbitrator who shall act as deciding. The award of sole arbitrator or Arbitral council as the case may be, shall be final and binding on both the parties, i.e. contractor and RailTel Corporation of India Ltd.
- Each of the parties agree that no withstanding that the matter may be referred to Arbitrator as provided therein, the parties shall nevertheless pending the resolution of the controversy or disagreement continue to fulfill their obligation under this agreement so far as they are reasonably able to do so.

(End of Chapter- 7)

- 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 [The Competent Authority for the purpose of registration under this Order shall be the Registration Committee constituted by the Department for Promotion of Industry and Internal Trade (DPIIT)].
- II. "Bidder" (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.
- III. "Bidder from a country which shares a land border with India" for the purpose of this Order means: -
  - 1. An entity incorporated, established or registered in such a country; or
  - 2. A subsidiary of an entity incorporated, established or registered in such a country; or
  - 3. An entity substantially controlled through entities incorporated, established or registered in such a country; or
  - 4. An entity whose beneficial owner is situated in such a country; or
  - 5. An Indian (or other) agent of such an entity; or
  - 6. A natural person who is a citizen of such a country; or
  - 7. 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.
- 6. An Agent is a person employed to do any act for another, or to represent another in dealings with third person.
- 7. 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.

### Certificate to be given by the Tenderer:

"I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I certify that I am not from such a country or, if from such a country, I have been registered with the Competent Authority. I hereby certify that I fulfill all requirements in this regard and I am eligible to be considered. [Where applicable, evidence of valid registration by the Competent Authority shall be attached.]"

## Certificate to be given by Tenderer for Works involving possibility of sub-contracting:

"I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and on sub-contracting to contractors from such countries; I certify that I am not from such a country or, if from such a country, I have been registered with the Competent Authority and will not sub-contract any work to a contractor from such countries unless such contractor is registered with the Competent Authority. I hereby certify that I fulfill all requirements in this regard and I am eligible to be considered. [Where applicable, evidence of valid registration by the Competent Authority shall be attached.]"

- 1. The materials as per schedule A are required to be commissioned as per the plan below.
  - A. Routers along with CGNAT Appliances/Module to be deployed as below plan:

S.N.	Gateway Locations	Scope of Work
	•	1. DNS Server & Speed Test Server shall be deployed in
		single Server using VM.
		2. Syslog Collector shall be deployed.
1	Jammu	3. Routers (Tier-2) shall be deployed.
		1. Syslog Collector shall be deployed.
2	New Delhi	2.Two Upstream Routers (Tier-1) shall be deployed
	New Dellii	along with CGNAT Appliance/Card Type-1 in high
		availability (1+1) mode.
		1. DNS Server & Speed Test Server shall be deployed in
		single Server using VM.
3	Ambala	2. Syslog Collector shall be deployed.
		1. DNS Server & Speed Test Server shall be deployed in
		single Server using VM.
		2. Syslog Collector shall be deployed.
		3. Routers (Tier-2) shall be deployed along with CGNAT
4	Rohtak	Appliance/Card Type-2.
		1.New Delhi Nokia-7750 SR-7 Router shall be shifted
_		to Jaipur along with CGNAT Appliance/Card.
5	Jaipur	2. Syslog Collector shall be deployed.
		1. DNS Server & Speed Test Server shall be deployed in
	Dhanal	single Server using VM.
6	Bhopal	2. Syslog Collector shall be deployed.
		1.Mumbai Nokia-7750 SR-7 Router shall be shifted to
		Nagpur along with CGNAT Appliance/Card.
7	Nagpur & Pune	<ul><li>2. Syslog Collector shall be deployed at Nagpur.</li><li>3. Routers (Tier-2) shall be deployed at Pune.</li></ul>
'	Nagpur & Purie	Syslog Collector shall be deployed.
		2.Two Upstream Routers (Tier-1) shall be deployed
		along with CGNAT Appliance/Card Type-1 in high
		availability (1+1) mode.
8	Mumbai (MX)	, , ,
		1. DNS Server & Speed Test Server shall be deployed in
		single Server using VM.
	Ab debe d	2. Syslog Collector shall be deployed.
9	Ahmedabad	3. Routers (Tier-2) shall be deployed.
		1.Chennai Nokia-7750 SR-7 Router shall be shifted to
		Secundrabad along with CGNAT Appliance/Card.
10	Secundrabad	2. Syslog Collector shall be deployed.
		1. Secundrabad Nokia-7750 SR-7 Router shall be
		shifted to Hubli along with CGNAT Appliance/Card.
11	Bangalore & Hubli	2. Syslog Collector shall be deployed at both Bangalore
		& Hubli.
		3. DNS Server & Speed Test Server shall be deployed in
		single Server using VM at Hubli.

		1. DNS Server & Speed Test Server shall be deployed in
		single Server using VM.
		2. Syslog Collector shall be deployed.
12	Vijayawada	3. Routers (Tier-2) shall be deployed along with CGNAT Appliance/Card Type-2.
		1. Syslog Collector shall be deployed.
		2.Two Upstream Routers (Tier-1) shall be deployed
		along with CGNAT Appliance/Card Type-1 in high
13	Chennai	availability (1+1) mode.
		1. Syslog Collector shall be deployed.
		2. Routers (Tier-2) shall be deployed along with CGNAT
14	Ernakulam	Appliance/Card Type-1.
		1. DNS Server & Speed Test Server shall be deployed in
		single Server using VM.
		2. Syslog Collector shall be deployed.
15	Cabarannur	3. Routers (Tier-2) shall be deployed along with CGNAT
15	Saharanpur	Appliance/Card Type-2.  1. Syslog Collector shall be deployed.
16	Lucknow	1. Sysiog Collector shall be deproyed.
10	Luckilow	Syslog Collector shall be deployed.
		2. Routers (Tier-2) shall be deployed along with CGNAT
17	Patna	Appliance/Card Type-2.
	- della	Syslog Collector shall be deployed.
18	Bhubneshwar	
		1. Syslog Collector shall be deployed.
		2.Two Upstream Routers (Tier-1) shall be deployed
		along with CGNAT Appliance/Card Type-1 in high
19	Kolkata	availability (1+1) mode.
		1. DNS Server & Speed Test Server shall be deployed in
		single Server using VM.
		2. Syslog Collector shall be deployed.
20	Guwahati	3. Routers (Tier-2) shall be deployed.
		1. DNS Server & Speed Test Server shall be deployed in
		single Server using VM.
		2. Syslog Collector shall be deployed.
24	Freds	3. Routers (Tier-2) shall be deployed along with CGNAT
21	Erode	Appliance/Card Type-2.
		1. DNS Server & Speed Test Server shall be deployed in single Server using VM
		single Server using VM.  2. Syslog Collector shall be deployed.
		3. Kolkatta Nokia-7750 SR-7 Router shall be shifted to
22	Asansol	Asansol along with CGNAT Appliance/Card.
	54.1551	Routers (Tier-2) –2 Nos along with One CGNAT
	Spares at Shastri Park	Appliance/Card Type-2.
		1 11 11 11

Note: Shifting & Configuration of Existing Routers from one Location to another will be arranged by RailTel

## B. Internet Delivery Routers (Tier-3 & 4):

Sr. No.	Location Type	Location	<b>Location Name</b>	Region
1	Tier-1	NDLS	New Delhi	NR
2	Tier-2	JP	Jaipur	NR
3	Tier-4	BINA	Bina	WR
4	Tier-3	CNB	Kanpur	NR
5	Tier-3	ITARSI	Itarsi	NR
6	Tier-4	KATNI	Katni	WR
7	Tier-4	MGS	Mughal Sarai	NR
8	Tier-4	BSL	Bhusaval	WR
9	Tier-4	ST	Surat	WR
10	Tier-2	NGP	Nagpur	WR
11	Tier-3	MMR	Manmad	WR
12	Tier-1	MUM	Mumbai	WR
13	Tier-2	SC	Secunderabad	SR
14	Tier-4	BSP	Bilaspur	ER
15	Tier-2	ASN	Asansol	ER
16	Tier-1	HWH	Howrah NKG	ER
17	Tier-3	KGP	Kharagpur	ER
18	Tier-2	PUNE	Pune	WR
19	Tier-3	GOA	Goa	WR
20	Tier-3	GTL	Guntakal	SR
21	Tier-4	VZM	Vizianagram	SR
22	Tier-2	BZA	Vijayawada	SR
23	Tier-4	MAQ	Mangalore	SR
24	Tier-4	HASAN	Hassan	SR
25	Tier-2	SBC	Bangalore	SR
26	Tier-1	MAS	Chennai	SR
27	Tier-4	SRR	Shornur	SR
28	Tier-2	ED	Erode	SR
29	Tier-3	TPJ	Tiruchchirapali	SR
30	Tier-2	ERS	Ernakulam	SR
31	Tier-2	ADI	Ahmedabad	WR
32	Tier-3	PNVL	Panvel	WR
33	Tier-4	TVC	TRIVANTPURAM	SR
34	Tier-4	QLN	Kollam	SR
35	Tier-4	KYJ	Kayankulam	SR
36	Tier-4	PGT	Palaghat	SR
37	Tier-3	CBE	Coimbatore	SR
38	Tier-4	KRR	Karur	SR
39	Tier-4	DG	Dindigul	SR
40	Tier-3	MDU	Madurai	SR
41	Tier-4	VRI	Vridhachalam	SR
42	Tier-4	SA	Salem	SR
43	Tier-4	VM	Villupuram	SR

4.4	т: 2	CCI	C1 1 4	CD
44	Tier-3	CGL	Chengalpettu	SR
45	Tier-3	AJJ	Arakkonam	SR
46	Tier-3	KPD	Katpadi	SR
47	Tier-4	JTJ	Jolarpetai	SR
48	Tier-2	UBL	Hubli	SR
49	Tier-4	MRJ	Miraj	SR
50	Tier-4	SUR	Solapur	SR
51	Tier-4	Wadi	Wadi	SR
52	Tier-3	BAY	Ballari	SR
53	Tier-3	RU	Renigunta	SR
54	Tier-3	VSKP	Viskhaptnam	SR
55	Tier-4	NED	Sahib Nanded	WR
56	Tier-4	GONDIA	GONDIA	WR
57	Tier-3	JBP	Jabalpur	WR
58	Tier-2	BPL	Bhopal	WR
59	Tier-3	RTM	Ratlam	WR
60	Tier-3	PRTN	Pratap nagar	WR
61	Tier-3	AII	Ajmer	NR
62	Tier-3	PNU	Palanpur	NR
63	Tier-3	FL	Phulera	NR
64	Tier-3	VG	Viramgram	NR
65	Tier-3	BLDI	Bhildi	NR
66	Tier-3	COR	Chittorgarh	NR
67	Tier-4	LAR	Laitpur	NR
68	Tier-3	JHS	Jhansi	NR
69	Tier-4	GWL	Gwalior	NR
70	Tier-4	ALD	Allahabad	NR
71	Tier-3	BSB	Varanasi	NR
72	Tier-4	GKP	Gorakhpur	NR
73	Tier-2	LKO	Lucknow	NR
74	Tier-4	BE	Bareily	NR
75	Tier-3	MTJ	Mathura	NR NR
76	Tier-4	OKH	Okhla	NR NR
77	Tier-4	GGN-DC	GURUGRAM-DC	NR NR
78	Tier-3	GGN-DC GGN		NR NR
			Gurugram	
79	Tier-3	RE	Rewari	NR ND
80	Tier-3	JU	Jodhpur	NR NB
81	Tier-4	SDLP	Sadulpur	NR NB
82	Tier-2	ROK	Rohtak	NR
83	Tier-4	PNP	Panipat	NR
84	Tier-3	SP	Shastripark	NR
85	Tier-3	GZB	Gaziabad	NR
86	Tier-4	NOIDA	Noida	NR
87	Tier-3	MB	Moradabad	NR
88	Tier-2	SRE	Saharanpur	NR
89	Tier-2	UMB	Ambala	NR
90	Tier-4	BTI	Bhatinda	NR

91	Tier-3	BKN	Bikaner	NR
92	Tier-4	LDH	Ludhiana	NR
93	Tier-3	CDG	Chandigarh	NR
94	Tier-3	JUC	Jalandhar	NR
95	Tier-3	Raipur	Raipur	ER
96	Tier-4	JSG	Jharsuguda	ER
97	Tier-2	BBS	Bhubaneswar	ER
98	Tier-4	TATA	Jamshedpur	ER
99	Tier-3	RNC	Ranchi	ER
100	Tier-4	DGR	Durgapur	ER
101	Tier-3	MLDT	Malda	ER
102	Tier-3	SGUJ	Siliguri	ER
103	Tier-2	GHY	Guwahati	ER
104	Tier-4	GAYA	Gaya	ER
105	Tier-2	PNBE	Patna	ER
106	Tier-4	НЈР	Hajipur	ER
107	Tier-4	CPR	Chhapra	ER
108	Tier-2	JAT	Jammu	NR
109	Tier-3	DDN	Dharadun	NR
110	Tier-4	HW	Haridwar	NR
111	Tier-4	SML	Shimla	NR
112	Tier-3	PTK	Patankot	NR
113	Tier-4	SNP	Sonipat	NR
114	Tier-3	GGN-	Gurgaon-02	NR
		DC-2		
115	Tier-3	SC	Secunderabad	SR
116	Tier-3	SC-02	Secunderabad-2	SR

## Note:

- **1. Tier-3 & 4:** One Qty for each Routers shall be delivered at NR, SR, WR and ER Stores as spares (O&M).
- **2.** Installation of Tier-3 & 4 will be done by RailTel. However, configuration shall be done by Bidder..
  - C. Gateway & Redundant Gateway Locations in all Telcom Circle PAN India:

SN	Telecom Circle	Proposed Internet Gateway	Redundant Internet Gateway
1	Jammu & Kashmir	Jammu	New Delhi
2	Himachal Pradesh	Ambala	New Delhi
3	Punjab	Ambala	New Delhi
4	Haryana	Rohtak	New Delhi
5	Rajasthan	Jaipur	New Delhi
6	Madhya Pradesh	Bhopal/Bina	Mumbai (MX)
7	Maharashtra	Nagpur	Mumbai (MX)
8	Mumbai	Mumbai (MX)	Secundrabad
9	Gujarat	Ahmedabad	Mumbai (MX)
10	Telangana	Secundrabad	Mumbai (MX)

11	Karnataka	Banglore	chennai	
12	Andhra Pradesh	Vijaywada	chennai	
13	Chennai (metro)	chennai	chennai	
14	Tamilnadu	Erode	chennai	
15	Kerala	Ernakulam	chennai	
16	Delhi	New Delhi	Mumbai (MX)	
17	UPW	Saharanpur	New Delhi	
18	UPE	Lucknow	New Delhi	
19	Bihar	Patna	Kolkata	
20	Odisha	Bhubneshwar	Kolkata	
21	West Bengal	Asansol	Secundrabad	
22	Kolkata	Kolkata	Secundrabad	
23	Sikkim	Guwahati	Kolkata	
24	Assam	Guwahati	Kolkata	
25	North East	Guwahati	Kolkata	

2. The materials as per Schedule-B are required to be delivered within period as per BDS. Consignee address and details given below:

SN	Consignee	Consignee Address	RailTel Region	Items to be delivered
1	Sr Mgr/Store	RailTel Office, NKG Building, 1st Floor, 14 Strand Road Kolkata700001	Eastern Region	Item No-1- 15 Nos. Item No.2 – 2 Nos Item No. 3 – 2 Nos Item No. 5 – 2 Nos. Item No. 6 – 4 Nos.
2	AGM/CNOC	RailTel Corporation of India Ltd, 6th Floor, Block III, Delhi IT Park, Shastri Park, New Delhi-110053	Corporate office	Item No-1- 15 Nos. Item No.2 - 2 Nos Item No. 3 - 2 Nos Item No. 4 - 1 No. Item No. 5 - 2 Nos. Item No. 6 - 4 Nos.
3	Sr Mgr/Store	Sr. Manager/store, Ist floor, Microwave Tower Complex, Railway Colony, Thompson Road, New Delhi- 110002.	Northern Region	Item No-1- 15 Nos. Item No.2 – 2 Nos Item No. 3 – 2 Nos Item No. 5 – 2 Nos.

				Item No. 6 – 4 Nos.
4	Sr. Mgr/Store	Senior manager/Store, RailTel corporation of India Ltd, Western railway microwave tower, Sports complex, Senapati Bapat Marg, Mahalaxmi (W), Mumbai-400013.	Western Region	Item No-1- 15 Nos. Item No.2 - 2 Nos Item No. 3 - 2 Nos Item No. 5 - 2 Nos. Item No. 6 - 4 Nos.
5	Secundrabad RailTel	RailTel Corporation of India Limited, Southern Region Office, 2nd Floor, B-Block, Rail Nilayam, Secundrabad - 500025, Telangana.	Southern Region	Item No-1- 15 Nos. Item No.2 - 2 Nos Item No. 3 - 2 Nos Item No. 5 - 2 Nos. Item No. 6 - 4 Nos.

(END OF TENDER DOCUMENT)