



रेलटेल कॉर्पोरेशन ऑफ इंडिया लिमिटेड (आरसीआईएल)
RailTel Corporation of India Limited (RCIL)

"भारतीय रेलवे के कोचों पर आपूर्ति, स्थापना, परीक्षण, कमीशनिंग, मौजूदा वीएसएस इन्फ्रा के साथ इंटीग्रेशन, आईपीआधारित क्लोज्ड सर्किट टेलीविजन (सीसीटीवी) निगरानी प्रणाली के संचालन और रख रखाव हेतु"

"Supply, Installation, Testing, Commissioning, Integration with Existing VSS Infra, Operation and Maintenance of IP based Closed Circuit Television (CCTV) Surveillance System at Coaches of Indian Railways"

इलेक्ट्रॉनिक निरीक्षण प्रलेख
Electronic Tender Document

खुली निविदा (दो पैकेट- रिवर्स नीलामी)
Open Tender (Single Stage Two packet-Reverse Auction)

ई- निविदा सं. रेलटेल / टेंडर / ओटी / सीओ / एनटीपी / 2022-23/ वीएसएस /005
E-Tender No. RailTel/Tender/OT/CO/NTP/2022-23/VSS/005

OPEN E-TENDER NOTICE

E-Tender No. RailTel/Tender/OT/CO/NTP/2022-23/VSS/005, Dated 29-12-2022

RailTel Corporation of India Ltd. (RailTel) invites E-Tenders in Single Stage Two Packet (Part I –Credential/ Tech-no commercial Bid and Part II - Price Bid) Reverse Auction System for “**Supply, Installation, Testing, Commissioning, Integration with Existing VSS Infra, Operation and Maintenance of IP based Closed Circuit Television (CCTV) Surveillance System at Coaches of Indian Railways**”.

The details are as under: -

a)	Closing date for Submission of E-Bids	Up to 15:00 hrs of 27-01-2023 (online)
b)	Date of opening of E-Bids	Up to 15:30 hrs. of 27-01-2023 (online)
c)	Earnest Money Deposit (EMD) #	As defined in Offer letter (Chapter-1) and Clause 4.A.22 (Chapter-4A) of Tender document.
d)	Cost of Tender Document #	Rs 11,800/- (including GST)
e)	Place of Opening of Tender	Corporate Office, RailTel, New Delhi

#Eligible MSEs are exempted from cost of Tender Documents& EMD, more details are given in clause 4.A.23, Chapter-4 (Section-I).

In case, bidder is participating in more than one package, basic EMD amount should be remitted through IREPS Portal while balance EMD amount should be remitted in account of RailTel Corporation of India Limited (Bank account details given in BDS, Chapter-5), before the stipulated time and date of bid submission. Please read the examples of EMD to be remitted in Clause 4.A.22 of Tender document.

Note: Tender Notice and link for Tender Document are available on RailTel’s website, CPP portal and e-Tendering portal <https://ireps.gov.in> for download. Tender notice will also be published in newspaper. For online bid submission the bidder will have to necessarily download an official online copy of the tender documents from IREPS-portal. All future Information viz. corrigendum/addendum/ amendments etc. for this Tender shall be posted on the RailTel’s website, CPP portal and e-Tendering Portal only. Printed copy of Tender document will not be sold from RailTel office. Bid will be submitted online on IREPS portal only.

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 of the bidding process.

This tender is covered under Integrity Pact Program of RailTel and bidders are required to sign the Integrity Pact and submit the same to RailTel along with the bids. Tender received without signed copy of the Integrity Pact document shall be liable to be **REJECTED**.

(Harish Pawaria)
GM/NTP/CO
For and on behalf of
RailTel Corporation of India Ltd.

खुली ई-निविदा सूचना

ई-निविदा सं. रेलटेल / टेंडर / ओटी / सीओ / एनटीपी / 2022-23/ वीएसएस/005, दिनांक - 29-12-2022

रेलटेल कॉर्पोरेशन ऑफ इंडिया लिमिटेड (रेलटेल) “भारतीय रेलवे के कोचों पर आपूर्ति, स्थापना, परीक्षण, कमीशनिंग, मौजूदा वीएसएस इन्फ्रा के साथ इंटीग्रेशन, आईपी आधारित क्लोज्ड सर्किट टेलीविजन (सीसीटीवी) निगरानी प्रणाली के संचालन और रखरखाव के लिए सिंगल स्टेज टू पैकेट (भाग 1 - क्रेडेंशियल / तकनीकी वाणिज्यिक बोली और भाग 2 - मूल्य बोली) रिवर्स नीलामी प्रणाली में ई-निविदाएं आमंत्रित करता है।

विवरणप्रकारहैं: -

क)	ई-बोलियां जमा करने की अंतिम तिथि	दि. 27-01-2023 को 15:00 बजे तक (ऑनलाइन)
ख)	ई-बोलियां खोलने की तिथि	दि. 27-01-2023 को 15:30 बजे तक (ऑनलाइन)
ग)	बयाना धनजमा (ईएमडी) #	जैसा कि निविदा दस्तावेज के प्रस्ताव पत्र (अध्याय-1) और खंड 4.ए.22 (अध्याय-4ए) में परिभाषित किया गया है
घ)	निविदा दस्तावेज की लागत #	रु. 11,800 (जीएसटी सहित)
ङ)	निविदा खोलने का स्थान	बीडीएस, अध्याय-5 में यथा उल्लिखित पता
* कृपया विवरण के लिए खंड 4.क.22, अध्याय-4 देखें।		

योग्य एमएसई (MSEs) को निविदा दस्तावेजों की लागत और बयाना धनजमा (ईएमडी) से छूट दी गई है, खंड 4.क.23, अध्याय-4 में अधिक विवरण दिए गए हैं।

यदि बोलीदाता एक से अधिक पैकेज में भाग ले रहा है, एक ईएमडी राशि आईआरईपीएस पोर्टल के माध्यम से प्रेषित की जानी चाहिए, जबकि शेष ईएमडी राशि रेलटेल कॉर्पोरेशन ऑफ इंडिया लिमिटेड (बीडीएस, अध्याय-5 में दिए गए बैंक खाते के विवरण) के खाते में निर्धारित समय और बोली जमा करने की तारीख से पहले प्रेषित की जानी चाहिए। कृपया निविदा दस्तावेज के खंड 4.ए.22 में जमा की जाने वाली ईएमडी के उदाहरण पढ़ें।

नोट: निविदा सूचना और निविदा दस्तावेज के लिए लिंक रेलटेल की वेबसाइट, सीपीपी पोर्टल और ई-टेंडरिंग पोर्टल <https://ireps.gov.in> डाउनलोड के लिए उपलब्ध हैं। निविदा सूचना समाचार पत्र में भी प्रकाशित की जाएगी। ऑनलाइन बोली जमा करने के लिए बोलीदाता को आईआरईपीएस-पोर्टल से निविदा दस्तावेजों की एक आधिकारिक ऑनलाइन प्रति डाउनलोड करनी होगी। इस निविदा के लिए भविष्य की सभी जानकारी जैसे शुद्धिपत्र/परिशिष्ट/संशोधन आदि केवल रेलटेल की वेबसाइट, सीपीपी पोर्टल और ई-टेंडरिंग पोर्टल पर ही पोस्ट की जाएगी। निविदा दस्तावेज की मुद्रित प्रति रेलटेल कार्यालय से नहीं बेची जाएगी। बोली केवल आईआरईपीएस/IREPS पोर्टल पर ऑनलाइन जमा की जाएगी।

बोलीदाता बोली को तैयार करने, प्रस्तुत करने/उसमें भागीदारी से संबंधित सभी लागतों को वहन करेगा। बोली प्रक्रिया के संचालन या परिणाम की परवाह किए बिना रेलटेल किसी भी तरह से इन लागतों के लिए जिम्मेदार या उत्तरदायी नहीं होगा।

यह निविदा रेलटेल के इंटीग्रेटी पैकेट प्रोग्राम के तहत कवर की गई है और बोलीदाताओं को इंटीग्रेटी पैकेट पर हस्ताक्षर करने और बोली के साथ रेलटेल को प्रस्तुत करना आवश्यक है। इंटीग्रेटी पैकेट दस्तावेज की हस्ताक्षरित प्रति के बिना प्राप्त होने वाली निविदा को अस्वीकार कर दिया जाएगा।

(हरीश पवारिया)
महाप्रबंधक/एनटीपी/सीओ
रेलटेल कॉर्पोरेशन ऑफ इंडिया लि.
के लिए और की ओर से

TABLE OF CONTENT

SECTION-I	10
CHAPTER-1	10
OFFER LETTER.....	10
SECTION-I	12
CHAPTER- 2	12
SCHEDULE OF REQUIREMENT (SOR)	12
Package-1 - (EMU/MEMU/DEMU Trains) – Northern Region	12
Package-2 - (EMU/MEMU/DEMU Trains) – Eastern Region	18
Package-3 -(EMU/MEMU/DEMU Trains) – Western Region	24
Package-4 - (EMU/MEMU/DEMU Trains) – Southern Region.....	31
Package-5 - (Premium Trains) – Northern Region.....	37
Package-6 (Premium Trains) – Eastern Region	43
Package-7 -(Premium Trains) – Western Region.....	50
Package-8 - (Premium Trains) – Southern Region.....	55
SECTION-I	69
CHAPTER-3	69
SCOPE OF WORK AND TECHNICAL REQUIREMENTS	69
3.A.1 Introduction	69
3.A.1.1 About RailTel.....	69
3.A.1.2 Project Background	69
3.A.1.3 Scope of Work.....	70
3.A.1.4 Quality Assurance Programme and Implementation Methodology.....	73
3.A.1.5 Manufacturing, Supply and Storage of Equipment.....	73
3.A.1.6 Support from Indian Railways/RailTel	73
3.A.1.7 Bidder's Responsibility	75
3.A.1.8 Installation, Integration, Testing, Trial Run and Commissioning of Network/System	75
3.A.1.9 Training of Purchaser's Personnel and Change Management	75
3.A.1.10 Final Commissioning	76
3.A.1.11 General System Guidelines	76
3.A.1.12 Technical Response.....	77
3.A.1.13 Features and Capabilities of Equipment.....	77
3.A.1.14 Compliance to Technical Requirements	77
3.A.1.15 Supply of Software.....	78
SECTION-I	79
CHAPTER-3	79

B.	PROPOSED ARCHITECTURE FOR CCTV SURVEILLANCE SYSTEM..	79
3.B.1	Architecture Overview	79
3.B.2	Architecture of CCTV Surveillance System in Coaches	79
3.B.3	Power and Fiber Distribution Design for Coaches.....	79
3.B.4	Network Design for Coaches	79
3.B.5	IP based CCTV Surveillance System for Different Type of Coaches	80
3.B.6	Network layout at RailTel Datacenters and RPF Thana/Post	80
3.B.7	Installation of Panic Button and Associated VMS Requirements for Coaches ..	81
	SECTION-I	83
	CHAPTER-3	83
C.	ENTERPRISE MANAGEMENT SYSTEM (to be provided by RailTel).....	83
3.C.1	Introduction	83
3.C.2	Enterprise Management System (EMS)	83
	SECTION-I	86
	CHAPTER-3	86
D.	INSPECTION AND SUPERVISION OF INSTALLATION, TESTING & COMMISSIONING.....	86
3.D.1.	Inspection	86
3.D.2.	Pre-Factory Acceptance Testing	87
3.D.3.	Inspection/Factory Acceptance Test	88
3.D.4.	Installation	89
3.D.5.	Pre-Commissioning	89
3.D.6.	Site Acceptance Testing (SAT).....	90
3.D.7.	Trial Run/Field Trials.....	90
3.D.8.	Provisional Acceptance Certificate (PAC).....	91
3.D.9.	Maintenance Spares.....	92
3.D.10.	Commissioning spares.....	93
3.D.11	Final Acceptance	93
	SECTION-I	94
	CHAPTER-3	94
E.	TRAINING, VENDOR DATA REQUIREMENT, DOCUMENTATION, AND DESIGN GUIDELINES.....	94
3.E.1	Training of RailTel/Railway Personnel.....	94
3.E.2	Vendor Data Requirement and Documentation	95
3.E.3	Design Guidelines	96
	SECTION-I	97
	CHAPTER 4.....	97
A.	COMMERCIAL TERMS & CONDITIONS.....	97

4.A.1	Offer letter and Validity of offer	97
4.A.2	Warranty.....	97
4.A.3	Long Term Maintenance Support (AMC).....	99
4.A.4	Phase-wise Delivery/Implementation timelines.....	100
4.A.5	Payment Terms.....	102
4.A.6	Rolling Performance Bank Guarantee (R-PBG)	105
4.A.7	Taxes & Duties.....	106
4.A.8	Service Level Agreement (SLA) and Penalties during AMC	107
4.A.9	Manpower Support.....	113
4.A.10	Insurance	113
4.A.11	Liquidated Damages.....	114
4.A.12	Transportation	114
4.A.13	Statutory Deduction.....	114
4.A.14	Qualification Criteria.....	114
4.A.15	Consortium Bids.....	131
4.A.16	System Performance Guarantee	138
4.A.17	Evaluation of Offer.....	139
4.A.18	Security Considerations & Security Agreement	140
4.A.19	Purchaser's Right to Vary Quantities.....	142
4.A.20	Purchaser's Right to accept any offer / Bid and to REJECT any or all offer/ Bid 142	
4.A.21	Annulment of Award.....	142
4.A.22	Earnest Money Deposit (EMD)/Bid Security	142
4.A.23	For Micro and Small Enterprises (MSEs)	148
4.A.24	Rate Contract.....	149
4.A.25	Offer/ Bid Prices.....	150
4.A.26	NIL Deviation Compliance	150
4.A.27	Inspection	150
4.A.28	Force Majeure	151
4.A.29	Settlement of Disputes/Arbitration.....	151
4.A.30	Governing Laws	152
4.A.31	Termination for Default	152
4.A.32	Risk & Cost.....	152
4.A.33	Termination for Insolvency	153
4.A.34	Rates During Negotiation.....	153
4.A.35	Pre-Bid Clarification Requests.....	153
4.A.36	Submission of Offer (Online Tendering)	153
4.A.37	Constitution of Firm and power of Attorney.....	154

4.A.38	Opening of Tender	154
4.A.39	Non-Transferability & Non-Refundability.....	154
4.A.40	Errors, Omissions & Discrepancies	155
4.A.41	Wrong Information by bidder	155
4.A.42	Limitation of Liability:.....	155
4.A.43	Mandatory Updation of Labour Data on Railway's Shramikkalyan Portal	155
4.A.44	Integrity Pact Program	156
4.A.45	Preference to Domestic Manufacturers	157
4.A.46	The Network for customers.....	159
4.A.47	Proof of Concept (POC).....	159
4.A.48	Make in India	161
4.A.49	Contract Agreement	161
4.A.50	Damage to Railway/RailTel Property or Private Life and Property:	162
SECTION-I		163
CHAPTER-4		163
B.	INSTRUCTIONS TO THE BIDDERS.....	163
4.B.0	General	163
4.B.1	Order of Priority of Contract Documents:.....	163
4.B.2	Submission of Bids only through online process is mandatory for this Tender	163
4.B.3	Online Submissions:.....	164
4.B.4	Submission of Eligibility Criteria related documents	165
4.B.5	Preparation of Bids.....	165
4.B.6	Instructions for Tender Document TO THE BIDDERS	165
4.B.7	Submission of Offers and Filling of Tender:	166
4.B.8	Attendance of Representatives for Tender Opening:	166
4.B.9	e- Reverse Auction:	166
4.B.10	Addenda / Corrigenda:	168
4.B.11	Ambiguity/ Pre- Bid Clarification Requests:	168
4.B.12	Compulsory Compliance Conformations by all Participating Bidders.....	168
SECTION-I		169
CHAPTER- 5		169
BID DATA SHEET (BDS).....		169
SECTION-I		177
CHAPTER- 6 -FORM (S)/PROFORMA (S)		177
Form No. 1 - PROFORMA FOR "ROLLING - PERFORMANCE BANK GUARANTEE BOND (R-PBG)"		177
Form No. 2 - PROFORMA FOR "SYSTEMPERFORMANCE GUARANTEE"		179
Form No. 3 - PROFORMA FOR "LONG TERM MAINTENANCE SUPPORT"		181

Form No. 4 -PROFORMA FOR AFFIDAVIT TO BE UPLOADED BY TENDERER ALONG WITH THE TENDER DOCUMENTS	182
Form No. 5 - PROFORMA FOR “SIGNING THE INTEGRITY PACT”	184
Form No. 6 - PROFORMA FOR “NIL DEVIATION COMPLIANCE UNDERTAKING” ..	198
Form No. 7 –OEM’s Undertaking on Letter Head for MAF, Proven Facility, Blacklisting, Malicious Code, IPR & restriction on companies from Land Border sharing Countries with India	199
Form No. 8 – Bidder’s Undertaking on Letter Head for Blacklisting, IPR, Interoperability, Malicious Code, Site Inspection & Restriction on companies on Land border sharing countries with India.	202
(To be signed by the Bidder)	202
Form No. 9 -Certificate from Bidder’s Cost/Statutory Auditor	205
Form No. -10 –ANNEXURE AFFIDAVIT by EACH Consortium/JV member (on Stamp Paper)	206
Form No. -11 - JOINT VENTURE AGREEMENT/MEMORANDUM OF AGREEMENT .	207
Form No. -12 - CONSORTIUM AGREEMENT /MEMORANDUM OF AGREEMENT	210
(On Stamp Paper of appropriate value)	210
Form No. 13 - PAST EXPERIENCE FORM.....	213
Form No. 14 - CONTRACT AGREEMENT	215
SECTION-I	217
CHAPTER-7	217
Annexure-I - List of RPF Thana/Post/Depot and List of Divisional and Headquarter Control Offices covered under present Tender	217
Annexure-II - List of Coaches covered under the scope of present tender	229
Annexure-III - Functional Requirement for Bidders during Proof of Concept (POC)	233
SECTION-I	249
CHAPTER- 8	249
8.0 TECHNICAL, FUNCTIONAL REQUIREMENTS & SPECIFICATIONS	249
8.1 CCTV Surveillance System in Coaches.....	249
8.2 Existing Infra already installed at Security Control Rooms of IR	249
8.3 Technical Specification	250
SECTION-I	263
Chapter-9	263
CHECK LIST (To be filled up & uploaded)	263
A. List of Documents to be Submitted with Technical Bid	263
SECTION – II	267
TECHNICAL REQUIREMENTS & SUPPLEMENT	267
SECTION - II	268
CHAPTER - 1	268

Precautions to be Taken in 25 KV A.C. Traction AREA:..... 268

RailTel

SECTION-I CHAPTER-1

OFFER LETTER

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

1. I/We _____ have read the various conditions detailed in tender documents attached here to and hereby agree to ABIDE BY THE SAID CONDITIONS. I/We also agree to keep this offer open for acceptance for a period of 180 days from the date of submission and in default thereof, I/We will be liable for forfeiture of my/our Earnest Money. I/We offer to do the work at the rates quoted in the attached schedules and hereby bind myself/ourselves to complete the work of subject tender within timeline mentioned in Clause 4.A.4 of Chapter-4. I/We also hereby agree to abide by the Various Conditions of Tender/Contract and to carry out the supplies/services according to the Specifications for items/materials and works laid down by the RailTel.
- A. I/We agreed to pay applicable amount of Grand Total EMD online for packages (out of total eight packages) for which I/We have submitted our bid(s), as per details given below -

SN	Packages	Preference for packages (to be filled by bidder)	Total EMD Amount to be Deposited for below mentioned for Packages (all inclusive)	Basic EMD Amount to be deposited on IREPS Portal (in ₹)	Balance EMD amount to be deposited to RailTel's Bank account as mentioned in BDS Chapter-5 (in ₹)	Amount and Transaction Details of Total EMD amount Deposited by the Bidder (Online on IREPS Portal and RailTel's Bank Account) (to be filled by bidder) (in ₹)
A	B	C	D	E	F	G
1.	Package-1 (Northern Region-EMU)		₹ 44,94,400	₹ 27,05,300	₹ 17,89,100	
2.	Package-2 (Eastern Region-EMU)		₹ 94,45,900	₹ 27,05,300	₹ 67,40,600	
3.	Package-3 (Western Region-EMU)		₹ 97,00,900	₹ 27,05,300	₹ 69,95,600	
4.	Package-4 (Southern Region-EMU)		₹ 50,00,000	₹ 27,05,300	₹ 22,94,700	
5.	Package-5 (Northern Region-Premium)		₹ 50,00,000	₹ 27,05,300	₹ 22,94,700	
6.	Package-6		₹ 50,00,000	₹ 27,05,300	₹ 22,94,700	

	(Eastern Region-Premium)					
7.	Package-7 (Western Region-Premium)		₹ 38,03,500	₹ 27,05,300	₹ 10,98,200	
8.	Package-8 (Southern Region-Premium)		₹ 27,05,300	₹ 27,05,300	₹ 0	
	Grand Total EMD Amount**		₹ 4,51,50,000			

* Offers without applicable EMD amount mentioned under “Total EMD” shall be summarily rejected.

** Grand Total EMD Amount is the Sum of Total EMDs amount of Packages for which Bidder has submitted their bids.

B. **I/We have read examples of applicable Grand Total EMD amount mentioned in Clause 4.A.22 carefully and have remitted applicable Grand Total EMD amount on IREPS portal and to RailTel’s Bank account. In case, I/We failed to remit applicable Grand Total EMD amount than action can be taken as per Tender conditions.**

C. The respective value of Earnest Money for package(s) shall stand forfeited without prejudice to any other rights or remedies if,

I/We withdraw or modify the offer within validity period or do not deposit the R-PBG (Rolling-Performance Bank Guarantee) as mentioned in Clause 4.A.6 after issue of LOA for package(s),

or

I/We do not execute the contract agreement for package(s) within 15 days after receipt of notice issued by the RailTel that such documents are ready,

or

I/We do not commence the work for package(s) within 15 days after receipt of orders to that effect.

D. Until a formal agreement is prepared and executed the acceptance of this tender document shall constitute a binding contract between us subject to modifications, as may be mutually agreed to between us and indicated in the “Letter of Acceptance” of my/our offer for this work.

SIGNATURE OF CONTRACTOR (S)

Date

SIGNATURE OF WITNESS

CONTRACTOR (S) ADDRESS

1.

2

**SECTION-I
CHAPTER- 2**

SCHEDULE OF REQUIREMENT (SOR)

Package-1 - (EMU/MEMU/DEMU Trains) – Northern Region

Package-I – NR (EMU) - Schedule 'A'

SN	Description	Unit	Qty	Unit Rate (Excl d. GST)	Total Cost (Excl d. GST)	GST in Percentage	Total Cost (Incl d. GST)	Make & Model	% of Local Content (Please refer Clause no. 4.A.45 of Chapter-4A)
A	B	C	D	E	F	G	H	I	J
1	Supply of following infrastructure, applications and associated items in Train coaches as defined in Chapter-8 -								
1a	Fixed Dome type IP Colour Camera along with housing and mount and all accessories required for installation purposes.	No.	5604						
1b	Video Recorder Unit (VRU)/Mobile Network Video Recorder (M-NVR) inside train coach. This also includes MCB of required capacity, STP CAT-6 cable (for Cameras & Wireless Access point) and Electrical Power Cables along with required accessories.	No.	934						
1c	Wireless Access Point for train coaches and Controller software & hardware with all accessories required for their installation. Controller software & hardware will be installed at Rail-Tel Datacenter (One each at Gurgaon & Secunderabad).	No.	934						
1d	Metal enclosure to house CCTV system and various data cables & electrical cables inside a coach.	No.	934						
1e	Video FRS software in Video Recorder Unit (VRU)/Mobile Network Video Recorder (M-NVR) inside train coach.	No.	3736						

1f	Video Analytic software in Video Recorder Unit (VRU)/Mobile Network Video Recorder (M-NVR) inside train coach.	No.	5604						
1g	Panic Switch (IK10 and IP66 rated) with Mushroom Cap Push- Button in Red Color, DPDT contacts 2Amps 24 VDC, Stainless Steel Face Plate with GI Junction Box of suitable size and flasher cum strobe of min. 100dB including all accessories required for installation in Train Coaches as defined in chapter 8 as defined in chapter 8.	No.	1868						
2	Supply of following IT infrastructure, applications and associated items at RailTel Datacenter(s) as defined in Chapter-8 (All Servers and Softwares are required to be supplied for DC & DR in N+1 configuration):								
2a	Video Management System software (Video Management Software & Video Recording Software) for number of cameras inside train coach and VMS license for failover	No.	5604						
2b	Central Video Management System Server Hardware and all accessories required for installation purposes (One Set for DC and One Set for DR).	Set	2						
2c	Server hardware for FRS (database) in RailTel data-center and all accessories required for installation purposes (One Set for DC and One Set for DR).	Set	2						
2d	Server hardware for FRS (matching) in RailTel data-center and all accessories required for installation purposes (One Set for DC and One Set for DR).	Set	2						
2e	Storage System for video footage archival of incidents at RailTel datacenter with all accessories required for installation purposes. Storage system to be divided equally between DC and DR.	TB	266						

2f	Type-III Switches along with required Optics and all accessories required for their installation.	No.	8						
3	Supply of PC Workstation at RPF Thana/Post for viewing, monitoring and system management including 24" 4K UHD LED monitors, all required licensed software, spike bus-ter 1KVA UPS as defined in Chapter-8.	No.	52						
4	8% Spares of Item no. 1-a	No.	448						
	Total Cost of Schedule – 'A' in Figures								
	Total Cost of Schedule – 'A' in Words								

Package-I – NR (EMU) - Schedule 'B'

SN	Description	Unit	Qty	Unit Rate (Excl. d. GST)	Total Cost (Excl. GST)	GST in Percentage	Total Cost (Incl. GST)
A	B	C	D	E	F	G	H
1	Installation, Testing & Commissioning of following infrastructure, applications and associated items in Train coaches as defined in Chapter-8 :						
1a	Fixed Dome type IP Colour Camera along with housing and mount and all accessories required for installation purposes.	No.	5604				
1b	Video Recorder Unit (VRU)/Mobile Network Video Recorder (M-NVR) inside train coach. This also includes MCB of required capacity, STP CAT-6 cable (for Cameras & Wireless Access point) and Electrical Power Cables along with required accessories.	No.	934				

1c	Wireless Access Point for train coaches and Controller software & hardware with all accessories required for their installation. Controller software & hardware will be installed at Rail-Tel Datacenter (One each at Gurgaon & Secunderabad).	No.	934				
1d	Metal enclosure to house CCTV system and various data cables & electrical cables inside a coach.	No.	934				
1e	Video FRS software in Video Recorder Unit (VRU)/Mobile Network Video Recorder (M-NVR) inside train coach.	No.	3736				
1f	Video Analytic software in Video Recorder Unit (VRU)/Mobile Network Video Recorder (M-NVR) inside train coach.	No.	5604				
1g	Panic Switch (IK10 and IP66 rated) with Mushroom Cap Push- Button in Red Color, DPDT contacts 2Amps 24 VDC, Stainless Steel Face Plate with GI Junction Box of suitable size and flasher cum strobe of min. 100dB including all accessories required for installation in Train Coaches as defined in chapter 8 as defined in chapter 8.	No.	1868				
2	Installation, Testing & Commissioning of following IT infrastructure, applications and associated items at RailTel Datacenter(s) as defined in Chapter-8 (All Servers and Softwares are required to be supplied for DC & DR in N+1 configuration) :						
2a	Video Management System software (Video Management Software & Video Recording Software) for number of cameras inside train coach and VMS license for failover	No.	5604				
2b	Central Video Management System Server Hardware and all accessories required for installation purposes (One Set for DC and One Set for DR).	Set	2				

2c	Server hardware for FRS (database) in RailTel data-center and all accessories required for installation purposes (One Set for DC and One Set for DR).	Set	2				
2d	Server hardware for FRS (matching) in RailTel data-center and all accessories required for installation purposes (One Set for DC and One Set for DR).	Set	2				
2e	Storage System for video footage archival of incidents at RailTel datacenter with all accessories required for installation purposes. Storage system to be divided equally between DC and DR.	TB	266				
2f	Type-III Switches along with required Optics and all accessories required for their installation.	No.	8				
3	Installation, Testing & Commissioning of PC Workstation at RPF Thana/Post for viewing, monitoring and system management including 24" 4K UHD LED monitors, all required licensed software, spike bus-ter 1KVA UPS as defined in Chapter-8.	No.	52				
4	Training of personnel over and above the on-site training, during the installation, maintenance and supervision period as detailed in the tender document.	Man-weeks	93				
	Total Cost of Schedule – 'B' in Figures						
	Total Cost of Schedule – 'B' in Words						

Package-I – NR (EMU) - Schedule 'C'

Schedule 'C'					
---------------------	--	--	--	--	--

SN	Description	Unit	Qty	Unit Rate (Excl d. GST)	Total Cost (Excl d. GST)	GST in Percentage	Total Cost (Incl d. GST)
A	B	C	D	E	F	G	H
1	Annual Maintenance Charges (AMC) after warranty period of overall cost (excluding Taxes & Du-ties) of supply portion of Schedule 'A' as detailed in clause 4.A.3 of Chapter-4A of Tender Document.	Years	5				
	Total Cost of Schedule – 'C' in Figures						
	Total Cost of Schedule – 'C' in Words						

Description	Total (All Inclusive)
Total of Schedule-A – Package-1-NR (EMU)	
Total of Schedule-B– Package-1-NR (EMU)	
Total of Schedule-C– Package-1-NR (EMU)	
Grand Total	

Package-2 - (EMU/MEMU/DEMU Trains) – Eastern Region

Package-2-ER (EMU) -Schedule 'A'

SN	Description	Unit	Qty	Unit Rate (Excl. GST)	Total Cost (Excl. GST)	GST in Percentage	Total Cost (Incl. GST)	Make & Model	% of Local Content (Please refer Clause no. 4.A.45 of Chapter-4A)
A	B	C	D	E	F	G	H	I	J
1	Supply of following infrastructure, applications and associated items in Train coaches as defined in Chapter-8 :								
1a	Fixed Dome type IP Colour Camera along with housing and mount and all accessories required for installation purposes.	No.	23556						
1b	Video Recorder Unit (VRU)/Mobile Network Video Recorder (M-NVR) inside train coach. This also includes MCB of required capacity, STP CAT-6 cable (for Cameras & Wireless Access point) and Electrical Power Cables along with required accessories.	No.	3926						
1c	Wireless Access Point for train coaches and Controller software & hardware with all accessories required for their installation. Controller software & hardware will be installed at RailTel Datacenter (One each at Gurgaon & Secunderabad).	No.	3926						
1d	Metal enclosure to house CCTV system and various data cables & electrical cables inside a coach.	No.	3926						
1e	Video FRS software in Video Recorder Unit (VRU)/Mobile Network Video Recorder (M-NVR) inside train coach.	No.	15704						

1f	Video Analytic software in Video Recorder Unit (VRU)/Mobile Network Video Recorder (M-NVR) inside train coach.	No.	23556						
1g	Panic Switch (IK10 and IP66 rated) with Mushroom Cap Push- Button in Red Color, DPDT contacts 2Amps 24 VDC, Stainless Steel Face Plate with GI Junction Box of suitable size and flasher cum strobe of min. 100dB including all accessories required for installation in Train Coaches as defined in chapter 8 as defined in chapter 8.	No.	7852						
2	Supply of following IT infrastructure, applications and associated items at RailTel Datacenter(s) as defined in Chapter-8 (All Servers and Softwares are required to be supplied for DC & DR in N+1 configuration):								
2a	Video Management System software (Video Management Software & Video Recording Software) for number of cameras inside train coach and VMS license for failover	No.	23556						
2b	Central Video Management System Server Hardware and all accessories required for installation purposes (One Set for DC and One Set for DR).	Set	2						
2c	Server hardware for FRS (database) in RailTel datacenter and all accessories required for installation purposes (One Set for DC and One Set for DR).	Set	2						
2d	Server hardware for FRS (matching) in RailTel datacenter and all accessories required for installation purposes (One Set for DC and One Set for DR).	Set	2						

2e	Storage System for video footage archival of incidents at RailTel datacenter with all accessories required for installation purposes. Storage system to be divided equally between DC and DR.	TB	1119						
2f	Type-III Switches along with required Optics and all accessories required for their installation.	No.	8						
3	Supply of PC Workstation at RPF Thana/Post for viewing, monitoring and system management including 24" 4K UHD LED monitors, all required licensed software, spike buster 1KVA UPS as defined in Chapter-8.	No.	218						
4	8% Spares of Item no. 1-a	No.	1884						
	Total Cost of Schedule – 'A' in Figures								
	Total Cost of Schedule – 'A' in Words								

Package-2-ER (EMU)-Schedule 'B'

SN	Description	Unit	Qty	Unit Rate (Excl. GST)	Total Cost (Excl. GST)	GST in Percentage	Total Cost (Incl. GST)
A	B	C	D	E	F	G	H
1	Installation, Testing & Commissioning of following infrastructure, applications and associated items in Train coaches as defined in Chapter-8 :						
1a	Fixed Dome type IP Colour Camera along with housing and mount and all accessories required for installation purposes.	No.	23556				

1b	Video Recorder Unit (VRU)/Mobile Network Video Recorder (M-NVR) inside train coach. This also includes MCB of required capacity, STP CAT-6 cable (for Cameras & Wireless Access point) and Electrical Power Cables along with required accessories.	No.	3926				
1c	Wireless Access Point for train coaches and Controller software & hardware with all accessories required for their installation. Controller software & hardware will be installed at RailTel Datacenter (One each at Gurgaon & Secunderabad).	No.	3926				
1d	Metal enclosure to house CCTV system and various data cables & electrical cables inside a coach.	No.	3926				
1e	Video FRS software in Video Recorder Unit (VRU)/Mobile Network Video Recorder (M-NVR) inside train coach.	No.	15704				
1f	Video Analytic software in Video Recorder Unit (VRU)/Mobile Network Video Recorder (M-NVR) inside train coach.	No.	23556				
1g	Panic Switch (IK10 and IP66 rated) with Mushroom Cap Push-Button in Red Color, DPDT contacts 2Amps 24 VDC, Stainless Steel Face Plate with GI Junction Box of suitable size and flasher	No.	7852				

	cum strobe of min. 100dB including all accessories required for installation in Train Coaches as defined in chapter 8 as defined in chapter 8.						
2	Installation, Testing & Commissioning of following IT infrastructure, applications and associated items at RailTel Datacenter(s) as defined in Chapter-8 (All Servers and Softwares are required to be supplied for DC & DR in N+1 configuration):						
2a	Video Management System software (Video Management Software & Video Recording Software) for number of cameras inside train coach and VMS license for failover	No.	23556				
2b	Central Video Management System Server Hardware and all accessories required for installation purposes (One Set for DC and One Set for DR).	Set	2				
2c	Server hardware for FRS (database) in RailTel datacenter and all accessories required for installation purposes (One Set for DC and One Set for DR).	Set	2				
2d	Server hardware for FRS (matching) in RailTel datacenter and all accessories required for installation purposes (One Set for DC and One Set for DR).	Set	2				
2e	Storage System for video footage archival of incidents at RailTel datacenter with all accessories required for installation purposes. Storage system to be divided equally between DC and DR.	TB	1119				
2f	Type-III Switches along with required Optics and all accessories required for their installation.	No.	8				

3	Installation, Testing & Commissioning of PC Workstation at RPF Thana/Post for viewing, monitoring and system management including 24" 4K UHD LED monitors, all required licensed software, spike buster 1KVA UPS as defined in Chapter-8.	No.	218				
4	Training of personnel over and above the on-site training, during the installation, maintenance and supervision period as detailed in the tender document.	Ma n- we eks	392				
	Total Cost of Schedule – 'B' in Figures						
	Total Cost of Schedule – 'B' in Words						

Package-2-ER(EMU)-Schedule 'C'

Schedule 'C'							
SN	Description	Unit	Qty	Unit Rate (Excl. GST)	Total Cost (Excl. GST)	GST in Percentage	Total Cost (Incl. GST)
A	B	C	D	E	F	G	H
1	Annual Maintenance Charges (AMC) after warranty period of overall cost (excluding Taxes & Du-ties) of supply portion of Schedule 'A' as detailed in clause 4.A.3 of Chapter-4A of Tender Document.	Yea rs	5				
	Total Cost of Schedule – 'C' in Figures						
	Total Cost of Schedule – 'C' in Words						

Description	Total (All Inclusive)
Total of Schedule-A – Package-2-ER (EMU)	
Total of Schedule-B– Package-2-ER (EMU)	
Total of Schedule-C– Package-2-ER (EMU)	
Grand Total	

Package-3 -(EMU/MEMU/DEMU Trains) – Western Region

Package-3-WR (EMU)-Schedule 'A'

SN	Description	Unit	Qty	Unit Rate (Excl. GST)	Total Cost (Excl. GST)	GST in Percentage	Total Cost (Incl. GST)	Make & Model	% of Local Content (Please refer Clause no. 4.A.45 of Chapter-4A)
A	B	C	D	E	F	G	H	I	J
1	Supply of following infrastructure, applications and associated items in Train coaches as defined in Chapter-8 :								
1a	Fixed Dome type IP Colour Camera along with housing and mount and all accessories required for installation purposes.	No.	24192						
1b	Video Recorder Unit (VRU)/Mobile Network Video Recorder (M-NVR) inside train coach. This also includes MCB of required capacity, STP CAT-6 cable (for Cameras & Wireless Access point) and Electrical Power Cables along with required accessories.	No.	4032						
1c	Wireless Access Point for train coaches and Controller software & hardware with all accessories required for their installation. Controller software & hardware will be installed at RailTel Datacenter (One each at Gurgaon & Secunderabad).	No.	4032						

1d	Metal enclosure to house CCTV system and various data cables & electrical cables inside a coach.	No.	4032						
1e	Video FRS software in Video Recorder Unit (VRU)/Mobile Network Video Recorder (M-NVR) inside train coach.	No.	16128						
1f	Video Analytic software in Video Recorder Unit (VRU)/Mobile Network Video Recorder (M-NVR) inside train coach.	No.	24192						
1g	Panic Switch (IK10 and IP66 rated) with Mushroom Cap Push- Button in Red Color, DPDT contacts 2Amps 24 VDC, Stainless Steel Face Plate with GI Junction Box of suitable size and flasher cum strobe of min. 100dB including all accessories required for installation in Train Coaches as defined in chapter 8 as defined in chapter 8.	No.	8064						
2	Supply of following IT infrastructure, applications and associated items at RailTel Datacenter(s) as defined in Chapter-8 (All Servers and Softwares are required to be supplied for DC & DR in N+1 configuration):								
2a	Video Management System software (Video Management Software & Video Recording Software) for number of cameras inside train coach and VMS license for failover	No.	24192						
2b	Central Video Management System Server Hardware and all accessories required for installation purposes (One Set for DC and One Set for DR).	Set	2						
2c	Server hardware for FRS (database) in RailTel datacenter and all accessories required for installa-	Set	2						

	tion purposes (One Set for DC and One Set for DR).								
2d	Server hardware for FRS (matching) in RailTel datacenter and all accessories required for installation purposes (One Set for DC and One Set for DR).	Set	2						
2e	Storage System for video footage archival of incidents at RailTel datacenter with all accessories required for installation purposes. Storage system to be divided equally between DC and DR.	TB	1149						
2f	Type-III Switches along with required Optics and all accessories required for their installation.	No.	8						
3	Supply of PC Workstation at RPF Thana/Post for viewing, monitoring and system management including 24" 4K UHD LED monitors, all required licensed software, spike buster 1KVA UPS as defined in Chapter-8.	No.	224						
4	8% Spares of Item no. 1-a	No.	1936						
	Total Cost of Schedule – 'A' in Figures								
	Total Cost of Schedule – 'A' in Words								

Package-3-WR (EMU)-Schedule 'B

SN	Description	Unit	Qty	Unit Rate (Excl. GST)	Total Cost (Excl. GST)	GST in Percentage	Total Cost (Incl. GST)
A	B	C	D	E	F	G	H
1	Installation, Testing & Commissioning of following infrastructure, applications and associated items in Train coaches as defined in Chapter-8 :						

1a	Fixed Dome type IP Colour Camera along with housing and mount and all accessories required for installation purposes.	No.	24192				
1b	Video Recorder Unit (VRU)/Mobile Network Video Recorder (M-NVR) inside train coach. This also includes MCB of required capacity, STP CAT-6 cable (for Cameras & Wireless Access point) and Electrical Power Cables along with required accessories.	No.	4032				
1c	Wireless Access Point for train coaches and Controller software & hardware with all accessories required for their installation. Controller software & hardware will be installed at RailTel Datacenter (One each at Gurgaon & Secunderabad).	No.	4032				
1d	Metal enclosure to house CCTV system and various data cables & electrical cables inside a coach.	No.	4032				
1e	Video FRS software in Video Recorder Unit (VRU)/Mobile Network Video Recorder (M-NVR) inside train coach.	No.	16128				
1f	Video Analytic software in Video Recorder Unit (VRU)/Mobile Network Video Recorder (M-NVR) inside train coach.	No.	24192				

1g	Panic Switch (IK10 and IP66 rated) with Mushroom Cap Push- Button in Red Color, DPDT contacts 2Amps 24 VDC, Stainless Steel Face Plate with GI Junction Box of suitable size and flasher cum strobe of min. 100dB including all accessories required for installation in Train Coaches as defined in chapter 8 as defined in chapter 8.	No.	8064				
2	Installation, Testing & Commissioning of following IT infrastructure, applications and associated items at RailTel Datacenter(s) as defined in Chapter-8 (All Servers and Softwares are required to be supplied for DC & DR in N+1 configuration):						
2a	Video Management System software (Video Management Software & Video Recording Software) for number of cameras inside train coach and VMS license for failover	No.	24192				
2b	Central Video Management System Server Hardware and all accessories required for installation purposes (One Set for DC and One Set for DR).	Set	2				
2c	Server hardware for FRS (database) in RailTel datacenter and all accessories required for installation purposes (One Set for DC and One Set for DR).	Set	2				
2d	Server hardware for FRS (matching) in RailTel datacenter and all accessories required for installation purposes (One Set for DC and One Set for DR).	Set	2				
2e	Storage System for video footage archival of incidents at RailTel datacenter with all accessories required for installation purposes. Storage system to be	TB	1149				

	divided equally between DC and DR.						
2f	Type-III Switches along with required Optics and all accessories required for their installation.	No.	8				
3	Installation, Testing & Commissioning of PC Workstation at RPF Thana/Post for viewing, monitoring and system management including 24" 4K UHD LED monitors, all required licensed software, spike buster 1KVA UPS as defined in Chapter-8.	No.	224				
4	Training of personnel over and above the on-site training, during the installation, maintenance and supervision period as detailed in the tender document.	Man-weeks	402				
	Total Cost of Schedule – 'B' in Figures						
	Total Cost of Schedule – 'B' in Words						

Package-3-WR(EMU)-Schedule 'C'

Schedule 'C'							
SN	Description	Unit	Qty	Unit Rate (Excl. GST)	Total Cost (Excl. GST)	GST in Percentage	Total Cost (Incl. GST)
A	B	C	D	E	F	G	H
1	Annual Maintenance Charges (AMC) after warranty period of overall cost (excluding Taxes & Du-ties) of	Years	5				

	supply portion of Schedule 'A' as detailed in clause 4.A.3 of Chapter-4A of Tender Document.						
	Total Cost of Schedule – 'C' in Figures						
	Total Cost of Schedule – 'C' in Words						

Description	Total (All Inclusive)
Total of Schedule-A – Package-3-WR (EMU)	
Total of Schedule-B– Package-3-WR (EMU)	
Total of Schedule-C– Package-3-WR (EMU)	
Grand Total	

Package-4 - (EMU/MEMU/DEMU Trains) – Southern Region

Package-4-SR (EMU)-Schedule 'A'

SN	Description	Unit	Qty	Unit Rate (Excl. GST)	Total Cost (Excl. GST)	GST in Percentage	Total Cost (Incl. GST)	Make & Model	% of Local Content (Please refer Clause no. 4.A.45 of Chapter-4A)
A	B	C	D	E	F	G	H	I	J
1	Supply of following infrastructure, applications and associated items in Train coaches as defined in Chapter-8 :								
1a	Fixed Dome type IP Colour Camera along with housing and mount and all accessories required for installation purposes.	No.	8742						
1b	Video Recorder Unit (VRU)/Mobile Network Video Recorder (M-NVR) inside train coach. This also includes MCB of required capacity, STP CAT-6 cable (for Cameras & Wireless Access point) and Electrical Power Cables along with required accessories.	No.	1457						
1c	Wireless Access Point for train coaches and Controller software & hardware and all accessories required for their installation. Controller software & hardware will be installed at RailTel Datacenter (One each at Gurgaon & Secunderabad).	No.	1457						
1d	Metal enclosure to house CCTV system and various data cables & electrical cables inside a coach.	No.	1457						
1e	Video FRS software in Video Recorder Unit (VRU)/Mobile Network Video Recorder (M-NVR) inside train coach.	No.	5828						

1f	Video Analytic software in Video Recorder Unit (VRU)/Mobile Network Video Recorder (M-NVR) inside train coach.	No.	8742						
1g	Panic Switch (IK10 and IP66 rated) with Mushroom Cap Push- Button in Red Color, DPDT contacts 2Amps 24 VDC, Stainless Steel Face Plate with GI Junction Box of suitable size and flasher cum strobe of min. 100dB including all accessories required for installation in Train Coaches as defined in chapter 8 as defined in chapter 8.	No.	2914						
2	Supply of following IT infrastructure, applications and associated items at RailTel Datacenter(s) as defined in Chapter-8 (All Servers and Softwares are required to be supplied for DC & DR in N+1 configuration):								
2a	Video Management System software (Video Management Software & Video Recording Software) for number of cameras inside train coach and VMS license for failover	No.	8742						
2b	Central Video Management System Server Hardware and all accessories required for installation purposes (One Set for DC and One Set for DR).	Set	2						
2c	Server hardware for FRS (database) in RailTel datacenter and all accessories required for installation purposes (One Set for DC and One Set for DR).	Set	2						
2d	Server hardware for FRS (matching) in RailTel datacenter and all accessories required for installation purposes (One Set for DC and One Set for DR).	Set	2						

2e	Storage System for video footage archival of incidents at RailTel datacenter with all accessories required for installation purposes. Storage system to be divided equally between DC and DR.	TB	414						
2f	Type-III Switches along with required Optics and all accessories required for their installation.	No.	8						
3	Supply of PC Workstation at RPF Thana/Post for viewing, monitoring and system management including 24" 4K UHD LED monitors, all required licensed software, spike buster 1KVA UPS as defined in Chapter-8.	No.	81						
4	8% Spares of Item no. 1-a	No.	700						
	Total Cost of Schedule – 'A' in Figures								
	Total Cost of Schedule – 'A' in Words								

Package-4-SR-Schedule 'B'

SN	Description	Unit	Qty	Unit Rate (Excl. GST)	Total Cost (Excl. GST)	GST in Percentage	Total Cost (Incl. GST)
A	B	C	D	E	F	G	H
1	Installation, Testing & Commissioning of following infrastructure, applications and associated items in Train coaches as defined in Chapter-8 :						
1a	Fixed Dome type IP Colour Camera along with housing and mount and all accessories required for installation purposes.	No.	8742				
1b	Video Recorder Unit (VRU)/Mobile Network Video Recorder (M-NVR) inside train coach. This also includes MCB of required capacity, STP CAT-6 cable (for	No.	1457				

	Cameras & Wireless Access point) and Electrical Power Cables along with required accessories.						
1c	Wireless Access Point for train coaches and Controller software & hardware with all accessories required for their installation. Controller software & hardware will be installed at RailTel Datacenter (One each at Gurgaon & Secunderabad).	No.	1457				
1d	Metal enclosure to house CCTV system and various data cables & electrical cables inside a coach.	No.	1457				
1e	Video FRS software in Video Recorder Unit (VRU)/Mobile Network Video Recorder (M-NVR) inside train coach.	No.	5828				
1f	Video Analytic software in Video Recorder Unit (VRU)/Mobile Network Video Recorder (M-NVR) inside train coach.	No.	8742				
1g	Panic Switch (IK10 and IP66 rated) with Mushroom Cap Push- Button in Red Color, DPDT contacts 2Amps 24 VDC, Stainless Steel Face Plate with GI Junction Box of suitable size and flasher cum strobe of min. 100dB including all accessories required for installation in Train Coaches as de-	No.	2914				

	defined in chapter 8 as defined in chapter 8.						
2	Installation, Testing & Commissioning of following IT infrastructure, applications and associated items at RailTel Datacenter(s) as defined in Chapter-8 (All Servers and Softwares are required to be supplied for DC & DR in N+1 configuration):						
2a	Video Management System software (Video Management Software & Video Recording Software) for number of cameras inside train coach and VMS license for failover	No.	8742				
2b	Central Video Management System Server Hardware and all accessories required for installation purposes (One Set for DC and One Set for DR).	Set	2				
2c	Server hardware for FRS (database) in RailTel datacenter and all accessories required for installation purposes (One Set for DC and One Set for DR).	Set	2				
2d	Server hardware for FRS (matching) in RailTel datacenter and all accessories required for installation purposes (One Set for DC and One Set for DR).	Set	2				
2e	Storage System for video footage archival of incidents at RailTel datacenter with all accessories required for installation purposes. Storage system to be divided equally between DC and DR.	TB	414				
2f	Type-III Switches along with required Optics and all accessories required for their installation.	No.	8				
3	Installation, Testing & Commissioning of PC Workstation at RPF Tha-	No.	81				

	na/Post for viewing, monitoring and system management including 24" 4K UHD LED monitors, all required licensed software, spike buster 1KVA UPS as defined in Chapter-8.						
4	Training of personnel over and above the on-site training, during the installation, maintenance and supervision period as detailed in the tender document.	Man-weeks	145				
	Total Cost of Schedule – 'B' in Figures						
	Total Cost of Schedule – 'B' in Words						

Package-4-SR-Schedule 'C'

Schedule 'C'							
SN	Description	Unit	Qty	Unit Rate (Excl. GST)	Total Cost (Excl. GST)	GST in Percentage	Total Cost (Incl. GST)
A	B	C	D	E	F	G	H
1	Annual Maintenance Charges (AMC) after warranty period of overall cost (excluding Taxes & Du-ties) of supply portion of Schedule 'A' as detailed in clause 4.A.3 of Chapter-4A of Tender Document.	Years	5				
	Total Cost of Schedule – 'C' in Figures						
	Total Cost of Schedule – 'C' in Words						

Description	Total (All Inclusive)
-------------	-----------------------

Total of Schedule-A – Package-4-SR (EMU)	
Total of Schedule-B– Package-4-SR (EMU)	
Total of Schedule-C– Package-4-SR (EMU)	
Grand Total	

Premium Trains

Package-5 - (Premium Trains) – Northern Region

Package-5 – NR (Premium)-Schedule 'A'

SN	Description	Unit	Qty	Unit Rate (Excl. GST)	Total Cost (Excl. GST)	GST in Percentage	Total Cost (Incl. GST)	Make & Model	% of Local Content (Please refer Clause no. 4.A.45 of Chapter-4A)
A	B	C	D	E	F	G	H	I	J
1	Supply of following infrastructure, applications and associated items in Train coaches as defined in Chapter-8 :								
1a	Fixed Dome type IP Colour Camera along with housing and mount and all accessories required for installation purposes.	No.	12096						
1b	Video Recorder Unit (VRU)/Mobile Network Video Recorder (M-NVR) inside train coach. This also includes MCB of required capacity, STP CAT-6 cable (for Cameras & Wireless Access point) and Electrical Power Cables along with required accessories.	No.	1512						
1c	Wireless Access Point for train coaches and Controller software & hardware with all accessories required for their installation. Controller software & hardware will be installed at RailTel Datacenter (One each at Gurgaon & Secunderabad).	No.	1512						
1d	Metal enclosure to house CCTV system and various data cables & electrical cables inside a coach.	No.	1512						

1e	Video FRS software in Video Recorder Unit (VRU)/Mobile Network Video Recorder (M-NVR) inside train coach.	No.	6048						
1f	Video Analytic software in Video Recorder Unit (VRU)/Mobile Network Video Recorder (M-NVR) inside train coach.	No.	12096						
1g	Panic Switch (IK10 and IP66 rated) with Mushroom Cap Push- Button in Red Color, DPDT contacts 2Amps 24 VDC, Stainless Steel Face Plate with GI Junction Box of suitable size and flasher cum strobe of min. 100dB including all accessories required for installation in Train Coaches as defined in chapter 8 as defined in chapter 8.	No.	3024						
2	Supply of following IT infrastructure, applications and associated items at RailTel Datacenter(s) as defined in Chapter-8 (All Servers and Softwares are required to be supplied for DC & DR in N+1 configuration):								
2a	Video Management System software (Video Management Software & Video Recording Software) for number of cameras inside train coach and VMS license for failover	No.	12096						
2b	Central Video Management System Server Hardware and all accessories required for installation purposes (One Set for DC and One Set for DR).	Set	2						
2c	Server hardware for FRS (database) in RailTel datacenter and all accessories required for installation purposes (One Set for DC and One Set for DR).	Set	2						
2d	Server hardware for FRS (matching) in RailTel datacenter and all accessories required for installa-	Set	2						

	tion purposes (One Set for DC and One Set for DR).								
2e	Storage System for video footage archival of incidents at RailTel datacenter with all accessories required for installation purposes. Storage system to be divided equally between DC and DR.	TB	431						
2f	Type-III Switches along with required Optics and all accessories required for their installation.	No.	8						
2g	Command and Control Center including GIS Map and incident Management system and all accessories required for their installation.								
	i. Hardware	Set	2						
	ii. Software	Set	2						
3	Supply of PC Workstation at RPF Thana/Post for viewing, monitoring and system management including 24" 4K UHD LED monitors, all required licensed software, spike buster 1KVA UPS as defined in Chapter-8.	No.	84						
4	8% Spares of Item no. 1-a	No.	968						
	Total Cost of Schedule – 'A' in Figures								
	Total Cost of Schedule – 'A' in Words								

Package-5-NR-Schedule 'B'

SN	Description	Unit	Qty	Unit Rate (Excl. GST)	Total Cost (Excl. GST)	GST in Percentage	Total Cost (Incl. GST)
A	B	C	D	E	F	G	H
1	Installation, Testing & Commissioning of following infrastructure, applications and associated items in Train coaches as defined in Chapter-8 :						

1a	Fixed Dome type IP Colour Camera along with housing and mount and all accessories required for installation purposes.	No.	12096				
1b	Video Recorder Unit (VRU)/Mobile Network Video Recorder (M-NVR) inside train coach. This also includes MCB of required capacity, STP CAT-6 cable (for Cameras & Wireless Access point) and Electrical Power Cables along with required accessories.	No.	1512				
1c	Wireless Access Point for train coaches and Controller software & hardware with all accessories required for their installation. Controller software & hardware will be installed at RailTel Datacenter (One each at Gurgaon & Secunderabad).	No.	1512				
1d	Metal enclosure to house CCTV system and various data cables & electrical cables inside a coach.	No.	1512				
1e	Video FRS software in Video Recorder Unit (VRU)/Mobile Network Video Recorder (M-NVR) inside train coach.	No.	6048				

1f	Video Analytic software in Video Recorder Unit (VRU)/Mobile Network Video Recorder (M-NVR) inside train coach.	No.	12096				
1g	Panic Switch (IK10 and IP66 rated) with Mushroom Cap Push- Button in Red Color, DPDT contacts 2Amps 24 VDC, Stainless Steel Face Plate with GI Junction Box of suitable size and flasher cum strobe of min. 100dB including all accessories required for installation in Train Coaches as defined in chapter 8 as defined in chapter 8.	No.	3024				
2	Installation, Testing & Commissioning of following IT infrastructure, applications and associated items at RailTel Datacenter(s) as defined in Chapter-8 (All Servers and Softwares are required to be supplied for DC & DR in N+1 configuration):						
2a	Video Management System software (Video Management Software & Video Recording Software) for number of cameras inside train coach and VMS license for failover	No.	12096				
2b	Central Video Management System Server Hardware and all accessories required for installation purposes (One Set for DC and One Set for DR).	Set	2				
2c	Server hardware for FRS (database) in RailTel datacenter and all accessories required for installation purposes (One Set for DC and One Set for DR).	Set	2				

2d	Server hardware for FRS (matching) in RailTel datacenter and all accessories required for installation purposes (One Set for DC and One Set for DR).	Set	2				
2e	Storage System for video footage archival of incidents at RailTel datacenter with all accessories required for installation purposes. Storage system to be divided equally between DC and DR.	TB	431				
2f	Type-III Switches along with required Optics and all accessories required for their installation.	No.	8				
2g	Command and Control Center including GIS Map and incident Management system and all accessories required for their installation.						
	i. Hardware	Set	2				
	ii. Software	Set	2				
3	Installation, Testing & Commissioning of PC Workstation at RPF Thana/Post for viewing, monitoring and system management including 24" 4K UHD LED monitors, all required licensed software, spike buster 1KVA UPS as defined in Chapter-8.	No.	84				

4	Training of personnel over and above the on-site training, during the installation, maintenance and supervision period as detailed in the tender document.	Ma n- we eks	151				
	Total Cost of Schedule – 'B' in Figures						
	Total Cost of Schedule – 'B' in Words						

Package-5-NR-Schedule 'C'

SN	Description	Unit	Qty	Unit Rate (Excl. GST)	Total Cost (Excl. GST)	GST in Percentage	Total Cost (Incl. GST)
A	B	C	D	E	F	G	H
1	Annual Maintenance Charges (AMC) after warranty period of overall cost (excluding Taxes & Du-ties) of supply portion of Schedule 'A' as detailed in clause 4.A.3 of Chapter-4A of Tender Document.	Years	5				

Description	Total (All Inclusive)
Total of Schedule-A – Package-5-NR (Premium)	
Total of Schedule-B– Package-5-NR (Premium)	
Total of Schedule-C– Package-5-NR (Premium)	
Grand Total	

Package-6 (Premium Trains) – Eastern Region

Package-6-ER (Premium) -Schedule 'A'

SN	Description	Unit	Qty	Unit Rate (Excl. GST)	Total Cost (Excl. GST)	GST in Percentage	Total Cost (Incl. GST)	Make & Model	% of Local Content (Please refer Clause no. 4.A.45 of Chapter-4A)
A	B	C	D	E	F	G	H	I	J
1	Supply of following infrastructure, applications and associated items in Train coaches as defined in Chapter-8 :								
1a	Fixed Dome type IP Colour Camera along with housing and mount and all accessories required for installation purposes.	No.	9872						
1b	Video Recorder Unit (VRU)/Mobile Network Video Recorder (M-NVR) inside train coach. This also includes MCB of required capacity, STP CAT-6 cable (for Cameras & Wireless Access point) and Electrical Power Cables along with required accessories.	No.	1234						
1c	Wireless Access Point for train coaches and Controller software & hardware with all accessories required for their installation. Controller software & hardware will be installed at RailTel Datacenter (One each at Gurgaon & Secunderabad).	No.	1234						
1d	Metal enclosure to house CCTV system and various data cables & electrical cables inside a coach.	No.	1234						
1e	Video FRS software in Video Recorder Unit (VRU)/Mobile Network Video Recorder (M-NVR) inside train coach.	No.	4936						

1f	Video Analytic software in Video Recorder Unit (VRU)/Mobile Network Video Recorder (M-NVR) inside train coach.	No.	9872						
1g	Panic Switch (IK10 and IP66 rated) with Mushroom Cap Push- Button in Red Color, DPDT contacts 2Amps 24 VDC, Stainless Steel Face Plate with GI Junction Box of suitable size and flasher cum strobe of min. 100dB including all accessories required for installation in Train Coaches as defined in chapter 8 as defined in chapter 8.	No.	2468						
2	Supply of following IT infrastructure, applications and associated items at RailTel Datacenter(s) as defined in Chapter-8 (All Servers and Softwares are required to be supplied for DC & DR in N+1 configuration):								
2a	Video Management System software (Video Management Software & Video Recording Software) for number of cameras inside train coach and VMS license for failover	No.	9872						
2b	Central Video Management System Server Hardware and all accessories required for installation purposes (One Set for DC and One Set for DR).	Set	2						
2c	Server hardware for FRS (database) in Rail-Tel datacenter and all accessories required for installation purposes (One Set for DC and One Set for DR).	Set	2						
2d	Server hardware for FRS (matching) in Rail-Tel datacenter and all accessories required for installation purposes (One Set for DC and One Set for DR).	Set	2						

2e	Storage System for video footage archival of incidents at RailTel datacenter with all accessories required for installation purposes. Storage system to be divided equally between DC and DR.	TB	352						
2f	Type-III Switches along with required Optics and all accessories required for their installation.	No.	8						
3	Supply of PC Workstation at RPF Thana/Post for viewing, monitoring and system management including 24" 4K UHD LED monitors, all required licensed software, spike buster 1KVA UPS as defined in Chapter-8.	No.	69						
4	8% Spares of Item no. 1-a	No.	790						
	Total Cost of Schedule – 'A' in Figures								
	Total Cost of Schedule – 'A' in Words								

Package-6-ER-Schedule 'B'

SN	Description	Unit	Qty	Unit Rate (Excl. GST)	Total Cost (Excl. GST)	GST in Percentage	Total Cost (Incl. GST)
A	B	C	D	E	F	G	H
1	Installation, Testing & Commissioning of following infrastructure, applications and associated items in Train coaches as defined in Chapter-8:						
1a	Fixed Dome type IP Colour Camera along with housing and mount and all accessories required for installation purposes.	No.	9872				
1b	Video Recorder Unit (VRU)/Mobile Network Video Recorder (M-NVR) inside train coach. This also includes MCB of re-	No.	1234				

	quired capacity, STP CAT-6 cable (for Cameras & Wireless Access point) and Electrical Power Cables along with re-quired accessories.						
1c	Wireless Access Point for train coaches and Controller software & hardware with all accessories re-quired for their installation. Controller software & hardware will be installed at RailTel Datacenter (One each at Gurgaon & Secunderabad).	No.	1234				
1d	Metal enclosure to house CCTV system and various data cables & electrical cables inside a coach.	No.	1234				
1e	Video FRS software in Video Recorder Unit (VRU)/Mobile Network Video Recorder (M-NVR) inside train coach.	No.	4936				
1f	Video Analytic software in Video Recorder Unit (VRU)/Mobile Network Video Recorder (M-NVR) inside train coach.	No.	9872				
1g	Panic Switch (IK10 and IP66 rated) with Mushroom Cap Push- Button in Red Color, DPDT contacts 2Amps 24 VDC, Stainless Steel Face Plate with GI Junction Box of suitable size and flasher cum strobe of min. 100dB including all accessories required	No.	2468				

	for installation in Train Coaches as defined in chapter 8 as defined in chapter 8.						
2	Installation, Testing & Commissioning of following IT infrastructure, applications and associated items at RailTel Datacenter(s) as defined in Chapter-8 (All Servers and Softwares are required to be supplied for DC & DR in N+1 configuration):						
2a	Video Management System software (Video Management Software & Video Recording Software) for number of cameras inside train coach and VMS license for failover	No.	9872				
2b	Central Video Management System Server Hardware and all accessories required for installation purposes (One Set for DC and One Set for DR).	Set	2				
2c	Server hardware for FRS (database) in Rail-Tel datacenter and all accessories required for installation purposes (One Set for DC and One Set for DR).	Set	2				
2d	Server hardware for FRS (matching) in Rail-Tel datacenter and all accessories required for installation purposes (One Set for DC and One Set for DR).	Set	2				
2e	Storage System for video footage archival of incidents at RailTel datacenter with all accessories required for installation purposes. Storage system to be divided equally between DC and DR.	TB	352				
2f	Type-III Switches along with required Optics and all accessories required for their installation.	No.	8				

3	Installation, Testing & Commissioning of PC Workstation at RPF Thana/Post for viewing, monitoring and system management including 24" 4K UHD LED monitors, all required licensed software, spike buster 1KVA UPS as defined in Chapter-8.	No.	69				
4	Training of personnel over and above the on-site training, during the installation, maintenance and supervision period as detailed in the tender document.	Ma n- we eks	123				
	Total Cost of Schedule – 'B' in Figures						
	Total Cost of Schedule – 'B' in Words						

Package-6-ER-Schedule 'C'

SN	Description	Unit	Qty	Unit Rate (Excl. GST)	Total Cost (Excl. GST)	GST in Percentage	Total Cost (Incl. GST)
A	B	C	D	E	F	G	H
1	Annual Maintenance Charges (AMC) after warranty period of overall cost (excluding Taxes & Du-ties) of supply portion of Schedule 'A' as detailed in clause 4.A.3 of Chapter-4A of Tender Document.	Years	5				

Description	Total (All Inclusive)
Total of Schedule-A – Package-6-ER (Premium)	

Total of Schedule-B– Package-6-ER (Premium)	
Total of Schedule-C– Package-6-ER (Premium)	
Grand Total	

Package-7 -(Premium Trains) – Western Region

Package-7-WR (Premium) -Schedule 'A'

SN	Description	Unit	Qty	Unit Rate (Excl. GST)	Total Cost (Excl. GST)	GST in Percentage	Total Cost (Incl. GST)	Make & Model	% of Local Content (Please refer Clause no. 4.A.45 of Chapter-4A)
A	B	C	D	E	F	G	H	I	J
1	Supply of following infrastructure, applications and associated items in Train coaches as defined in Chapter-8:								
1a	Fixed Dome type IP Colour Camera along with housing and mount and all accessories required for installation purposes.	No.	6040						
1b	Video Recorder Unit (VRU)/Mobile Network Video Recorder (M-NVR) inside train coach. This also includes MCB of required capacity, STP CAT-6 cable (for Cameras & Wireless Access point) and Electrical Power Cables along with required accessories.	No.	755						
1c	Wireless Access Point for train coaches and Controller software & hardware with all accessories required for their installation. Controller software & hardware will be installed at RailTel Datacenter (One each at Gurgaon & Secunderabad).	No.	755						
1d	Metal enclosure to house CCTV system and various data cables & electrical cables inside a coach.	No.	755						

1e	Video FRS software in Video Recorder Unit (VRU)/Mobile Network Video Recorder (M-NVR) inside train coach.	No.	3020						
1f	Video Analytic software in Video Recorder Unit (VRU)/Mobile Network Video Recorder (M-NVR) inside train coach.	No.	6040						
1g	Panic Switch (IK10 and IP66 rated) with Mushroom Cap Push- Button in Red Color, DPDT contacts 2Amps 24 VDC, Stainless Steel Face Plate with GI Junction Box of suitable size and flasher cum strobe of min. 100dB including all accessories required for installation in Train Coaches as defined in chapter 8 as defined in chapter 8.	No.	1510						
2	Supply of following IT infrastructure, applications and associated items at RailTel Datacenter(s) as defined in Chapter-8 (All Servers and Softwares are required to be supplied for DC & DR in N+1 configuration):								
2a	Video Management System software (Video Management Software & Video Recording Software) for number of cameras inside train coach and VMS license for failover	No.	6040						
2b	Central Video Management System Server Hardware and all accessories required for installation purposes (One Set for DC and One Set for DR).	Set	2						
2c	Server hardware for FRS (database) in RailTel data-center and all accessories required for installation purposes (One Set for DC and One Set for DR).	Set	2						
2d	Server hardware for FRS (matching) in RailTel data-center and all accessories required for installation purposes (One Set for DC and One Set for DR).	Set	2						
2e	Storage System for video footage archival of incidents at RailTel datacenter with all accessories required for installa-	TB	215						

	tion purposes. Storage system to be divided equally between DC and DR.								
2f	Type-III Switches along with required Optics and all accessories required for their installation.	No.	8						
3	Supply of PC Workstation at RPF Thana/Post for viewing, monitoring and system management including 24" 4K UHD LED monitors, all required licensed software, spike buster 1KVA UPS as defined in Chapter-8.	No.	42						
4	8% Spares of Item no. 1-a	No.	483						
	Total Cost of Schedule – 'A' in Figures								
	Total Cost of Schedule – 'A' in Words								

Package-7-WR-Schedule 'B'

SN	Description	Unit	Qty	Unit Rate(Excl. GST)	Total Cost (Excl. GST)	GST in Percentage	Total Cost (Incl. GST)
A	B	C	D	E	F	G	H
1	Installation, Testing & Commissioning of following infrastructure, applications and associated items in Train coaches as defined in Chapter-8 :						
1a	Fixed Dome type IP Colour Camera along with housing and mount and all accessories required for installation purposes.	No.	6040				
1b	Video Recorder Unit (VRU)/Mobile Network Video Recorder (M-NVR) inside train coach. This also includes MCB of required capacity, STP CAT-6 cable (for Cameras & Wireless Access point) and Electrical Power Cables along with required accessories.	No.	755				

1c	Wireless Access Point for train coaches and Controller software & hardware with all accessories required for their installation. Controller software & hardware will be installed at RailTel Datacenter (One each at Gurgaon & Secunderabad).	No.	755				
1d	Metal enclosure to house CCTV system and various data cables & electrical cables inside a coach.	No.	755				
1e	Video FRS software in Video Recorder Unit (VRU)/Mobile Network Video Recorder (M-NVR) inside train coach.	No.	3020				
1f	Video Analytic software in Video Recorder Unit (VRU)/Mobile Network Video Recorder (M-NVR) inside train coach.	No.	6040				
1g	Panic Switch (IK10 and IP66 rated) with Mushroom Cap Push- Button in Red Color, DPDT contacts 2Amps 24 VDC, Stainless Steel Face Plate with GI Junction Box of suitable size and flasher cum strobe of min. 100dB including all accessories required for installation in Train Coaches as defined in chapter 8 as defined in chapter 8.	No.	1510				
2	Installation, Testing & Commissioning of following IT infrastructure, applications and associated items at RailTel Datacenter(s) as defined in Chapter-8 (All Servers and Softwares are required to be supplied for DC & DR in N+1 configuration):						
2a	Video Management System software (Video Management Software & Video Recording Software) for number of cameras inside train coach and VMS license for failover	No.	6040				
2b	Central Video Management System Server Hardware and all accessories required for installation purposes (One Set for DC and One Set for DR).	Set	2				

2c	Server hardware for FRS (database) in RailTel data-center and all accessories required for installation purposes (One Set for DC and One Set for DR).	Set	2				
2d	Server hardware for FRS (matching) in RailTel data-center and all accessories required for installation purposes (One Set for DC and One Set for DR).	Set	2				
2e	Storage System for video footage archival of incidents at RailTel datacenter with all accessories required for installation purposes. Storage system to be divided equally between DC and DR.	TB	215				
2f	Type-III Switches along with required Optics and all accessories required for their installation.	No.	8				
3	Installation, Testing & Commissioning of PC Workstation at RPF Thana/Post for viewing, monitoring and system management including 24" 4K UHD LED monitors, all required licensed software, spike buster 1KVA UPS as defined in Chapter-8.	No.	42				
4	Training of personnel over and above the on-site training, during the installation, maintenance and supervision period as detailed in the tender document.	Man- n- wee ks	75				
	Total Cost of Schedule – 'B' in Figures						
	Total Cost of Schedule – 'B' in Words						

Package-7-WR-Schedule 'C'

SN	Description	Unit	Qty	Unit Rate (Excl. GST)	Total Cost (Excl. GST)	GST in Percentage	Total Cost (Incl. GST)
A	B	C	D	E	F	G	H

1	Annual Maintenance Charges (AMC) after warranty period of overall cost (excluding Taxes & Du-ties) of supply portion of Schedule 'A' as detailed in clause 4.A.3 of Chapter-4A of Tender Document.	Years	5				
	Total Cost of Schedule – 'C' in Figures						
	Total Cost of Schedule – 'C' in Words						

Description	Total (All Inclusive)
Total of Schedule-A – Package-7-WR (Premium)	
Total of Schedule-B– Package-7-WR (Premium)	
Total of Schedule-C– Package-7-WR (Premium)	
Grand Total	

Package-8 - (Premium Trains) – Southern Region

Package-8-SR (Premium)-Schedule 'A'

SN	Description	Unit	Qty	Unit Rate (Excl. GST)	Total Cost (Excl. GST)	GS T in Per cen tag e	Total Cost (Incl. GST)	Make & Model	% of Local Content (Please refer Clause no. 4.A.45 of Chapter-4A)
A	B	C	D	E	F	G	H	I	J
1	Supply of following infrastructure, applications and associated items in Train coaches as defined in Chapter-8:								
1a	Fixed Dome type IP Colour Camera along with housing and mount and all accessories required for installation purposes.	No.	4296						
1b	Video Recorder Unit (VRU)/Mobile Network Video Recorder (M-NVR) inside train coach. This also includes MCB of required capacity, STP CAT-6 cable (for Cameras &Wireless Access point) and Electrical Power Cables along with required accessories.	No.	537						

1c	Wireless Access Point for train coaches and Controller software & hardware with all accessories required for their installation. Controller software & hardware will be installed at RailTel Datacenter (One each at Gurgaon & Secunderabad).	No.	537						
1d	Metal enclosure to house CCTV system and various data cables & electrical cables inside a coach.	No.	537						
1e	Video FRS software in Video Recorder Unit (VRU)/Mobile Network Video Recorder (M-NVR) inside train coach.	No.	2148						
1f	Video Analytic software in Video Recorder Unit (VRU)/Mobile Network Video Recorder (M-NVR) inside train coach.	No.	4296						
1g	Panic Switch (IK10 and IP66 rated) with Mushroom Cap Push-Button in Red Color, DPDT contacts 2Amps 24 VDC, Stainless Steel Face Plate with GI Junction Box of suitable size and flasher cum strobe of min. 100dB including all accessories required for installation in Train Coaches as defined in chapter 8 as defined in chapter 8.	No.	1074						
2	Supply of following IT infrastructure, applications and associated items at RailTel Datacenter(s) as defined in Chapter-8 (All Servers and Softwares are required to be supplied for DC & DR in N+1 configuration):								
2a	Video Management System software (Video Management Software & Video Recording Software) for number of cameras inside train coach and VMS license for failover	No.	4296						

2b	Central Video Management System Server Hardware and all accessories required for installation purposes (One Set for DC and One Set for DR).	Set	2						
2c	Server hardware for FRS (database) in RailTel datacenter and all accessories required for installation purposes (One Set for DC and One Set for DR).	Set	2						
2d	Server hardware for FRS (matching) in RailTel datacenter and all accessories required for installation purposes (One Set for DC and One Set for DR).	Set	2						
2e	Storage System for video footage archival of incidents at RailTel datacenter with all accessories required for installation purposes. Storage system to be divided equally between DC and DR.	TB	153						
2f	Type-III Switches along with required Optics and all accessories required for their installation.	No.	8						
3	Supply of PC Workstation at RPF Thana/Post for viewing, monitoring and system management including 24" 4K UHD LED monitors, all required licensed software, spike buster 1KVA UPS as defined in Chapter-8.	No.	30						
4	8% Spares of Item no. 1-a	No.	344						
	Total Cost of Schedule – 'A' in Figures								
	Total Cost of Schedule – 'A' in Words								

Package-8-SR-Schedule 'B'

SN	Description	Unit	Qty	Unit Rate (Excl d. GST)	Total Cost (Excl d. GST)	GS T in Per cen tag e	Total Cost (Incl d. GST)
A	B	C	D	E	F	G	H
1	Installation, Testing & Commissioning of following infrastructure, applications and associated items in Train coaches as defined in Chapter-8 :						
1a	Fixed Dome type IP Colour Camera along with housing and mount and all accessories required for installation purposes.	No.	4296				
1b	Video Recorder Unit (VRU)/Mobile Network Video Recorder (M-NVR) inside train coach. This also includes MCB of required capacity, STP CAT-6 cable (for Cameras & Wireless Access point) and Electrical Power Cables along with required accessories.	No.	537				
1c	Wireless Access Point for train coaches and Controller software & hardware with all accessories required for their installation. Controller software & hardware will be installed at RailTel Datacenter (One each at Gurgaon & Secunderabad).	No.	537				
1d	Metal enclosure to house CCTV system and various data cables & electrical cables inside a coach.	No.	537				
1e	Video FRS software in Video Recorder Unit (VRU)/Mobile Network Video Recorder (M-NVR) inside train coach.	No.	2148				
1f	Video Analytic software in Video Recorder Unit (VRU)/Mobile Network Video Recorder (M-NVR) inside train coach.	No.	4296				

1g	Panic Switch (IK10 and IP66 rated) with Mushroom Cap Push- Button in Red Color, DPDT contacts 2Amps 24 VDC, Stainless Steel Face Plate with GI Junction Box of suitable size and flasher cum strobe of min. 100dB including all accessories required for installation in Train Coaches as defined in chapter 8 as defined in chapter 8.	No.	1074				
2	Installation, Testing & Commissioning of following IT infrastructure, applications and associated items at RailTel Datacenter(s) as defined in Chapter-8 (All Servers and Softwares are required to be supplied for DC & DR in N+1 configuration):						
2a	Video Management System software (Video Management Software & Video Recording Software) for number of cameras inside train coach and VMS license for failover	No.	4296				
2b	Central Video Management System Server Hardware and all accessories required for installation purposes (One Set for DC and One Set for DR).	Set	2				
2c	Server hardware for FRS (database) in RailTel datacenter and all accessories required for installation purposes (One Set for DC and One Set for DR).	Set	2				
2d	Server hardware for FRS (matching) in RailTel datacenter and all accessories required for installation purposes (One Set for DC and One Set for DR).	Set	2				

2e	Storage System for video footage archival of incidents at RailTel datacenter with all accessories required for installation purposes. Storage system to be divided equally between DC and DR.	TB	153				
2f	Type-III Switches along with required Optics and all accessories required for their installation.	No.	8				
3	Installation, Testing & Commissioning of PC Workstation at RPF Thana/Post for viewing, monitoring and system management including 24" 4K UHD LED monitors, all required licensed software, spike buster 1KVA UPS as defined in Chapter-8.	No.	30				
4	Training of personnel over and above the on-site training, during the installation, maintenance and supervision period as detailed in the tender document.	Man-weeks	54				
	Total Cost of Schedule – 'B' in Figures						
	Total Cost of Schedule – 'B' in Words						

Package-8-SR-Schedule 'C'

SN	Description	Unit	Qty	Unit Rate (Excl. GST)	Total Cost (Excl. GST)	GST in Percentage	Total Cost (Incl. GST)
A	B	C	D	E	F	G	H
1	Annual Maintenance Charges (AMC) after warranty period of overall cost (excluding Taxes & Du-ties) of supply portion of Schedule 'A' as detailed in	Years	5				

clause 4.A.3 of Chapter-4A of Tender Document.						
Total Cost of Schedule – 'C' in Figures						
Total Cost of Schedule – 'C' in Words						

Description	Total (All Inclusive)
Total of Schedule-A – Package-8-SR (Premium)	
Total of Schedule-B– Package-8-SR (Premium)	
Total of Schedule-C– Package-8-SR (Premium)	
Grand Total	

Note	Description
I.	Before quoting, please read RDSO Specification no. RDSO/SPN/TC/106/2022, Version-2.1 or latest (for IP based CCTV Surveillance System in Coaches of Indian Railways) and bidder's offered solution shall fully comply technically to RDSO specification. No deviations from RDSO specification version 2.1 or latest is permitted and offered solution having any deviation from RDSO specification version 2.1 or latest shall be SUMMARILY REJECTED .
II.	Unit rates quoted against each packages above should be CIP destination inclusive of basic rate, including GST, freight, insurance, Inspection/Audit charges (if applicable i.e. for RDSO, CERT-IN empanelled Government agency etc.) and any other charges or cost quoted by the tenderer. The materials as per Packages are required to be delivered within the delivery period as indicated in Bid Data Sheet (BDS, Chapter 5, Section-I) to the sites as mentioned in tender or decided by the authorized representative of RailTel.
III.	Item no. 1 under Schedule – 'C' for each packages: Bidder shall be paid @ 3.5% (minimum) of overall cost (excluding Taxes and Duties) of supply portion of Schedule (A) per annum towards Long Term Maintenance Support after completion of warranty period, to undertake maintenance, repairs and replacements of all type of equipment/module/card/assembly/subassembly and update/upgrade of software released during this period and /or which may fail in the system after the warranty. For more details, please refer to Clause no. 4.A.3 Chapter-4 (Section-I) of this document. Evaluation will be done on Total cost (Schedule 'A', Schedule 'B' and Schedule 'C') for each packages.
IV.	Bidder can bid either for one Package or Multiple packages depending upon their eligibility (including OEMs eligibility) as per the qualification criteria as mentioned in clause 4.A.14 of Chapter-4-A. All terms and conditions mentioned in this tender document, are applicable independently to all packages unless mentioned specifically.

	Bidders quoting for more than one package, are allowed to submit eligibility documents covering cumulative eligibility requirement of quoted packages for meeting technical & financial eligibility criteria. Please refer Clause no. 4.A.14.1.1 of Chapter-4 for further clarification. Bidders are advised to leave formats “BLANK” for packages in which they are not bidding. OEMs are allowed to meet their eligibility criteria through single or multiple Supply and Satisfactory working certificates including in the name of OEM System integrators issued by Government/PSU/Telecom Service Provider/Public Listed company having average annual turnover of Rs 500 Cr in last 3 financial years. However, make & model of hardware/software should be clearly mentioned in such certificates.
V.	Bidder must validate all the quantities quoted in their technical solution proposed supported by calculations, datasheets and design documents through respective OEMs as same would be required for the technical evaluation of their offer. Bidder would be responsible for ensuring that the complete system is operational and meeting the requirements as mentioned in the tender document. However, if at any stage during contract validity period {as mentioned in clause 3.D.11 of Chapter-3 (Section-I)}, it is found that the system performance is not compliant with the functional requirements and specifications given in the tender document, the bidder shall be liable/obliged to supply additional hardware/Software required to meet the functional requirements and specifications, mentioned in the tender document, at no additional cost to RailTel. RailTel decision in this context will be final.
VI.	The Bill of Material (BOM) for each package shall be prepared for each item of Schedule of Requirement (SOR) as per Format (I & II) given below. This Bill of Material will be called “Detailed itemized Bill of Material for Schedule of Requirement” and will be prepared according to Note given under SOR. Technical Bid - Bidder(s) shall upload the complete un-priced copy (with make & model and Local Content in percentage for each package. SOR along with the Breakup of individual itemized un-priced BOM for each item (as per Format given below) should also be submitted with the Technical Bid for evaluation. The above document submitted should not include any prices, if found so, the technical bid will be REJECTED. Financial Bid - Bidder(s) shall upload the complete priced copy of each quoted package(s), which should be exact replica of unpriced detailed BOM(s) submitted with Technical bid. SOR of package along with the Breakup of individual itemized priced BOM for each item (as per Format given below) should also be submitted with the Financial Bid for evaluation. The Financial Bid submitted without itemized priced BOM for mandatory items may liable to be REJECTED. Bidders should submit Technical and Financial Bid in accordance with “Grand Total EMD” paid (for quoted packages) and based on their eligibility for each package as prescribed in Offer Letter (Chapter-1). Note – (i) This priced copy submitted in the Financial bid should be the replica of the un-priced copy submitted in the Technical bid for evaluation.

	(ii) Detailed Un-Priced/Priced BOM is required to be submitted by the Bidders for all the Items which can be divided into logical units and which may be required by RailTel after installation phase. Some of the parts of the SOR items may be required by RailTel for Augmentation of CCTV network. For SOR Items, which can't be divided into logical separate units for preparing detailed priced/un-priced BOM, only SOR price may be mentioned. (iii) Bidder should provide unit rate of each item offered in detailed BOM against items given below – - Central Video Management Software (VMS)Hardware{including Central Management System(CMS)}, - FRS (Database Server), - FRS (Matching Server) and - CCC Hardware &CCC Software. (iv) The Bidder should provide unit Rate for additional server (along with additional necessary hardware & software if any) for face image database and matching forFRS software (for database of size 1 Lakh, 5 Lakh and 10 Lakh) at Datacenters along with necessary licenses in detailed BOM.
VII.	The bidder is required to supply Central VMS Server hardware(including required hardware for CMS), Server Hardware for Facial Recognition Software (Database Server),Server Hardware for Facial Recognition Software (matching Server) and CCC Hardware along with associated software for these items in a centralized set-up in the RailTel Datacenters (Gurugram and Secunderabad) in DC and DR configuration with N+1 redundancy. Access to VMS & CMS for CCTV infra at all coaches under the region shall be provided by the bidders from the centralized set-up through the existing VMS clients installed (on existing PC Workstations) at the RPF Chowki/Thana, Zonal Headquarter, Divisional Headquarter and CCC location (including any other location decided by RailTel). VMS &CMS access shall also be provided on PC Workstations (covered under each packages), which are required to be installed at Coaching Depots and other locations, as decided by RailTel.
VIII.	Along with the Server/Workstation, bidder is required to propose necessary hardware/software required for remote management of Servers/Workstation like IPMI Port with KVM over LAN or equivalent. Remote management functionalities include remote OS/Software updation/installation, reboot, shutdown etc.
IX.	RailTel will provide Rack space at Gurugram and Secunderabad Datacenters for hosting CCTV infrastructure as defined in the tender. Bidders are requested to optimize the number of racks requirement in the datacenters.
X.	The supply of items shall be done in phased manner strictly in line with the progress of the work. Successful bidder is required to proposed project progress and planning of supply of related material in consultation with the RailTel. Bidder shall submit the Supply and Inspection plan along with destination(s) for delivery to RailTel for approval. After approval of Supply and Inspection plan by RailTel, the bidder will arrange for supply and inspection of material as per approved plans and payment of items in Schedule-A shall be released as per approved supply plan.
XI.	Bidder must ensure network security of the CCTV system at Coaches under the scope of work (including standard policies, processes & practices adopted by Industry to prevent, detect & monitor unauthorized access, misuse and modification of CCTV infrastructure).

	Bidder to ensure that proposed system is protected from malicious attacks, malware etc., during complete project duration and suitable measures have been taken in the system. Declaration in this regard should be given as per Performa given in Form-7, Chapter-6 (Section-I).
XII.	The Bidders are required to meet all eligibility criteria mentioned in this tender document and financial bid of eligible bidders will be opened. eRA will be conducted among the eligible bidders for each package, as per time schedule given by RailTel. LOA will be issued to the lowest acceptable bid, after eRA, separately for each package.
XIII.	For implementation of each package, all terms & conditions of this tender document shall be applicable independently for all the packages.
XIV.	Evaluation of bids will be done separately for each package, based on Total cost (Schedule 'A', Schedule 'B' and Schedule 'C') of each package. After completion of evaluation process, Purchase Orders will be issued for each package in favour of the selected bidder(s). Bidder has to submit the separate rolling PBG as mentioned in the clause no. 4.A.6 for each package. Contract management (including payments) for each package will be looked after by the respective regions after issue of LOA/POs for each package.
XV.	All Bidders are required to conduct POC immediately after bid opening time (as mentioned in BDS) as per Clause 4.A.47 of Chapter-4A (Section-I). Bidder are also required to submit details of Hardware and Software offered for POC as per Table-2 (Chapter-7, Annexure-III, Point-3) with-in 7 working days (except Saturday, Sunday and any gazetted Holidays). BIDDER SHOULD BE READY FOR POC TESTING IMMEDIATELY AFTER SUBMITTING THE BID. POC by bidder will be carried out in two parts: POC Part-A (General): to be tested by RailTel and POC Part-B (FRS): to be tested jointly by RailTel & officers nominated by Railways, as per details given in Annexure-III, Chapter-7. POC should be completed within 30 Days from the date of availability of coach(s) by Railways and rack space by RailTel. Decision of RailTel/Railways regarding type of Coach(s) for POC shall be final and binding on the bidder. Details of POC schedule will be issued by POC team to the bidders through email. During POC, apart from successful working of the offered CCTV solution, capability of the bidder will also be assessed. Maximum three attempts will be given to the bidder, during POC, to fine-tune settings & configurations of the offered CCTV solution. In case bidders either fails to arrange POC as per given schedule or fails to demonstrate the failed parameter(s) during POC, he will be declared failed in POC by the POC team and his bid will not be evaluated further. Any decision of RailTel will be final and binding on the bidder.
XVI.	The selected bidder after issue of LOA will start roll-out of the CCTV project as per the scope of Work. After completing installation at initial Coaches, the bidder shall ensure Security Audit of Bidder's CCTV solution at one of the selected Coach(as selected by Rail-

	Tel) from STQC (Ministry of Electronics & Information Technology) or any other Government Agency from the list of CERT-IN empanelled Information Security Auditing Organization for arranging security audit as per RDSO specification version-2.1 or latest. PAC for each Coach shall be issued after successful compliance of all critical points (related to network security) raised by the testing agency. Critical points related to network security and non-critical points will be as per the advice of the testing agency. All non-critical points raised by testing agency shall be complied by the bidder before issuance of Provisional Acceptance Certificate (PAC) for IT setup at RailTel Datacenters at Gurugram and Secunderabad. Before issuance of FAC, sample test at a Coach randomly selected by STQC (Ministry of Electronics & Information Technology) or any other Government Agency from the list of CERT-In empaneled Information Security Auditing Organization to be performed. Any deficiency pointed out by the auditing agency shall be attended by the selected bidder without any additional cost to RailTel. For any deficiency pointed by auditing agency in the existing VSS infra, corrective action will be taken by RailTel. However, any deficiency pointed out by the auditing agency due to integration with proposed CCTV infra quoted in Schedule of Requirement shall be attended by the selected bidder without any additional cost to RailTel. Note –All Certifications including Interoperability certificate and Security Verification Certification required as per RDSO specification no. RDSO/SPN/TC/106/2022 version 2.1 or latest, for various Hardware and Software, are required to be submitted at the time of RDSO Inspection.
XVII.	Inspection of following items will be done by RDSO as per RDSO specification – (a) Item no. 1(a, b, c, d, e, f), 2 (a, b, c, d, e, f), 3 and 4 of Schedule-A of packages 1 to 4. (b) Item no. 1(a, b, c, d, e, f), 2 (a, b, c, d, e, f), 3 and 4 of Schedule-A of packages 5 to 8. (c) Item no. 2(g) (i) and (ii) of Schedule-A of Package-5. All remaining items will be inspected by RailTel authorized representative(s).
XVIII.	Non-conformities between Figures and Words Sometimes, non-conformities/errors are also observed in responsive tenders between the quoted prices in figures and in words. This situation normally does not arise in case of e-Procurement. This should be taken care of in the manner indicated below: i) If, in the price structure quoted for the required goods, there is discrepancy between the unit price and total price (which is obtained by multiplying the unit price by the quantity), the unit price shall prevail and the total price corrected accordingly; ii) If there is an error in a total corresponding to the addition or subtraction of sub-totals, the sub-totals shall prevail and the total shall be corrected; and iii) If there is a discrepancy between words and figures, the amount in words shall prevail;
XIX.	Bidders are required to provide Storage Calculation Sheet against supply SOR item no. 1(b) – Video Recorder Unit (VRU) / Mobile Network Video Recorder (M-NVR) as mentioned in RDSO Specification version 2.1 or latest. Note – 8 numbers of Cameras are required to be provided in each Premium Coach and 6 numbers of Cameras are required to be provided in each EMU/DEMU/MEMU Coach.
XX.	RailTel reserves the right to use/shift licenses for VA, VMS, CMS and FRS software procured under this Tender to existing/additional Cameras at same Coaches or at different Coaches as per Field requirement without any additional cost to RailTel during entire

	project duration (i.e., upto AMC).
XXI.	All forms pertaining to OEMs as mentioned in Chapter-6 are to be submitted by OEMs of Hardware and Software mentioned in Eligibility Clause 4.A.14.2.
XXII.	Bidders, participating in multiple packages, are allowed to optimize their offered solution (Hardware, Software & Manpower) at Datacenters and are required to offer proportionate Hardware/Software in respective Packages after optimization. However, in case bidder, who has optimized his offered solution at Datacenters for multiple packages, gets selected for a smaller number of packages after completion of Tendering process, then the bidder is required to supply complete Hardware & Software at Datacenter required for the allotted packages without any additional cost to RailTel.
XXIII.	Bidder has to provide all Servers at Datacenter (DC and DR both) in N+1 Configuration, where N is the number of Server proposed by the Bidder.
XXIV.	Bidder has to provide Wireless Access Point, GPS/Indian Regional Navigation Satellite System (IRNSS) and LTE Antennae as defined in RDSO specification.
XXV.	Training under item no. B-4 shall be carried out only as per approved training plan.
XXVI.	RailTel will provide SIM/e-SIM card for LTE based Mobile Communication for each VRU/M-NVR supplied by the Bidder under this Tender.
XXVII.	<u>Change in OEM –</u> Bidders are allowed to quote maximum upto three OEMs each for Camera, VRU/M-NVR, VMS Software, FRS Software, Server for VMS and Database & Matching Server for FRS, along with original bid giving documents of each OEM (as mentioned in Clause 4.A.14 of Tender). Bidders will be allowed to change OEMs for above mentioned products from three quoted OEMs only as per conditions mentioned below. For other supply items, Bidders shall quote only one OEM. However, during implementation stage, bidder shall be allowed to supply SOR quantity for each item in each package from only one OEM as approved during POC. OEMs can be changed under following conditions – <u>During POC Stage -</u> As per Clause no. 4.A.47.5, Bidders will be required to demonstrate all functional parameters successfully in maximum three attempts during POC. In case of failure to demonstrate any functional parameter(s) during POC, bidder is allowed to change OEM(s) of its offered solution for remaining 02 attempts from three quoted OEMs for hardware/software as mentioned above, without any additional cost to RailTel. In case of change in OEM(s), all functional parameters will be tested again by RailTel. However, only three attempts will be given to the bidder (including failed attempts) and in case of failure to demonstrate all functional parameters successfully in all the three attempts, Bidder's POC will be treated as unsuccessful. <u>During Technical Evaluation Stage -</u> Technical and Financial eligibility of Bidders and OEMs of their offered solution will be carried out after completion of POC phase. In case any OEM of offered solution fails to meet any of the prescribed eligibility criteria during technical & financial evaluation of OEM or its offered FRS not accepted by Railways, bidder will be allowed to change its OEM(s) (from quoted OEMs) by matching any one of the offered solutions of

	other bidders, who have successfully demonstrated all functional parameters during POC, as per details given below: i. For Part-A: only Camera, VRU/M-NVR & VMS Software and ii. For Part-B: only FRS Software. Bidder shall match EITHER combination of Camera, VRU/M-NVR & VMS Software OR FRS Software OR both, as applicable from alternate quoted OEMs. For other hardware/software, bidder is required to offer alternate hardware/software, as per the applicable RDSO specification or tender specifications. In case hardware/Software offered by alternate quoted OEM, for Camera/VRU/M-NVR/VMS Software/FRS Software, has not been successfully tested for other bidders during POC, Bidder will be required to conduct POC of his solution with alternate quoted hardware/software as per clause no. 4.A.47. <u>Note for (a) & (b)</u> - In case of change in OEM(s), it will be the responsibility of the bidder to ensure that the changed OEM(s) is meeting all eligibility conditions prescribed in this Tender document. c. <u>After issue of LOA</u> - In case of failure in arranging interoperability Certificate or Security Verification certificate for offered Hardware/Software or delay in supply of offered Hardware/Software at the time of supply (to be certified by the concerned OEM of offered hardware/software), bidder will arrange alternate Hardware/Software as per RDSO specification no. RDSO/SPN/TC/106/2022 version 2.1 or latest without any additional cost to RailTel. However, for alternate Hardware/Software, bidder shall match either Part-A or Part-B or both of the successful POC solutions from his quoted OEMs, as applicable {defined above in (b)} and OEM of alternate Hardware & Software shall meet eligibility criteria mentioned in Clause no. 4.A.14 for the concerned package. If OEM of alternate Hardware/Software has offered lower rates in other packages of this Tender, than such lower rates will also be applicable on the alternate Hardware and Software. However, bidder will not be allowed to increase the price due to change in OEM.
--	---

Detailed Bill of Material (BOM) format against each Package for Supply Items (Schedule-A) (Format-I)

SOR Item No. XX (PC Workstation) – Qty. - 1 Number													
Items Description	Make & Model No.	Total Qty	HSN Code	EX-Factory Price (Basic Unit Price exclusive of all levies and charges)	Pkg. & Forwarding Charges		Other Charges and Levies		Freight & Insurance Charges		IGST/CGST/SGST/GST		Unit Rate (all inclusive) as quoted by the tenderer (6+8+10+12+14)
										Amt			
2	3	4	5	6						12			14
Dome Camera	Bosch & XXX	1											
VRU/M-NVR	Sony & XXXX	1											

	UPS	APC & XXX	1											

Note – The item description in the above format for BOM is indicative only and Bidder is required to submit the detailed BOM covering all local & important components of their offered solution.

Price Schedule for Service Items (Schedule-B) and AMC (Schedule-C) (Format-II)

SN	Description	Total Qty	HSN Code	Basic Unit Price	Other Charges and Levies		IGST/CGST/SGST/GST		Price Per Unit (all inclusive)
					%	Amt	%	Amt	(5+7+9)
1	2	3	4	5	6	7	8	9	10
	SOR Item-1								
	SOR Item-2								

SECTION-I CHAPTER-3

SCOPE OF WORK AND TECHNICAL REQUIREMENTS

3.A.1 Introduction

3.A.1.1 About RailTel

RailTel Corporation of India Limited (RailTel), an ISO-9001:2000 organization is a Government of India undertaking under the Ministry of Railways. The Corporation was formed in Sept 2000 with the objectives to create nationwide Broadband Telecom and Multimedia Network in all parts of the country, to modernize Train Control Operation and Safety System of Indian Railways and to contribute to realization of goals and objective of national telecom policy 1999.

RailTel with strong nationwide presence is committed to bring cutting edge technology and offer innovative services to the Indian Telecom market. RailTel is in the forefront in providing nationwide Broadband Telecom & Multimedia Network in all parts of the country. With its Pan India high-capacity network, RailTel is working towards creating a knowledge society at various fronts.

In addition, RailTel with its rich experience in the domain of Telecom and ICT field have been selected for implementation of various mission-mode Govt. projects in the telecom field including National Optical Fibre Network (NOFN), National Knowledge Network (NKN) and NE-I & NE-II under USOF/DoT etc.

In line with its commitment to bring next generation telecommunication technologies and services to people across the length and breadth of the country, RailTel is already providing high speed Wi-Fi network at train Coaches across the country.

3.A.1.2 Project Background

3.A.1.2.1 Indian Railways (IR) is a governmental entity under the Ministry of Railways which operates India's National Railway System. It is run by the government as a public transport and manages the third-largest railway network in the world by size. Indian Railways is the lifeline of India and has an estimated daily ridership of more than 2 crores.

In order to enhance security for passengers especially women & children at Railway Stations and Coaches, which are major hubs of transportation, IR intended to install Internet Protocol (IP) based CCTV at Stations and Closed Circuit Television (CCTV) Surveillance System at Coaches of Indian Railways.

3.A.1.2.2 RailTel, a Miniratna PSU under Ministry of Railways, has been entrusted with the work of providing IP based Surveillance System with Video analytics and Facial recognition system at Railway Stations and Train Coaches. Number of Cameras in each Coach is to be installed as per drawing given in RDSO specification and requirement

of IR. In case, type of coaches is not covered under RDSO specification then cameras are to be installed as per Railway Requirement.

- 3.A.1.2.3 RailTel has provided (or in process of implementation) VSS system at Railway Stations. These Railway Stations are being monitored from their controlling RPF Thanas/Post (List give in Annexure-I), Divisional& Zonal Security Control, Railway Board and Command & Control Centre at Delhi(List given in Annexure-I).RailTel has already provided large format displays, Workstation and GUI (VMS) at these locations.

Under this Tender, selected Bidder(s) is required to provide IP based CCTV Surveillance system in Coaches of EMU/MEMU/DEMU & Premium Trains like Rajdhani, Duranto, Shatabdi etc.List of Coaches for each package to be covered under the presentscope of tender is mentioned in BDS (Chapter-5, Section-I). Indicative list of Coaches along with their Zonal Railwaysis enclosed as Annexure-II of Chapter-7.

It is pointed out that the bidder is required to integrate these locations also with the proposed CCTV infra under the scope of this tender.

3.A.1.3 Scope of Work

3.A.1.3.1 IP based CCTV Surveillance System in Coaches of Indian Railways

The scope of work includes Supply, Installation, Testing, Commissioning, Integration (with existing VSS Infra at RPF Thana/Post, Divisional/Zonal Security control, RailTel's Data Centers, Command & Control Centre-Delhi, Railway Board etc.), operation and maintenance of IP based CCTV Surveillance System at Coaches of Indian Railways.

The requirement mentioned in this Tender/RFP, BEING A TURNKEY BASIS PROJECT, calls for a complete working system and not components thereof. Therefore, the Bids must be complete with all equipment and required accessories along with necessary power systems including all type of connectors, patch leads, mounting, reinforcement (cable/wire) and fitting hardware, plugs, sockets and any hardware/software, etc. as required for complete installation& commissioning of the System under this contract.

The complete project consists of following phases:

1. **Proof of Concept (POC)** - All Bidders shall conduct POC as mentioned in Clause 4.A.47 of Chapter-4A (Section-I).
2. **Supply, Installation, Commissioning and Integration** with Existing VSS Infrastructure.
3. **Maintenance & Warranty**- Maintenance supervision period as mentioned in clause 4.A.2.5 and warranty as mentioned in BDS (Chapter-5, Section-I).
4. AMC (5 years after completion of Warranty Period).

The detailed scope of work includes following:

- i) Planning, Design, Supply, Installation, Testing, Commissioning, Integration with Existing VSS Infra (existing VSS Infra at RPF Thana/Post, Divisional/Zonal Security control, RailTel's Data Centers, Command & Control Centre-Delhi, Railway Board etc.), Operation and Maintenance of the IP based CCTV Surveillance System at various Coaches of Indian Railways as per RDSO specification no. RDSO/SPN/TC/106/2022, Version 2.1 or latest. However, RailTel reserves the right to include other type of coaches under the scope of work as per the requirement of Indian Railways.

The system shall comply with RDSO Specification RDSO/SPN/TC/106/2022, Version 2.1 or latest. However, in case of any conflict on the solution design parameters, system functional requirements and technical specification of a system/item between RDSO specification mentioned and the tender conditions, the RDSO specifications will prevail.

- ii) The bidder should prepare a site plan showing exact location of different type of Camera, NVR etc. at various locations inside Coaches as per site requirement in consultation with RailTel & Railways after the proper site survey. The proposed site plan should have an optimum number of cameras so as to cover Coaches from security point of view. Installation of the CCTV systems at Coaches shall be carried out **only as per Railway's approved drawings & plans.**
- iii) Supply, laying and fixing of electrical wiring and network cabling including OFC.
- iv) Supply of complete hardware components for the proposed solution (Cameras, Servers, Video Recorder Unit (VRU)/Mobile NVR (M-NVR), storage system etc.) including AMC and Warranty.
- v) Supply of any other equipment/infrastructure or services required for the proper installation, testing, commissioning, operation, and maintenance of CCTV surveillance system as per the approved design.
- vi) Supply of all software/licenses for the solution including peripheral applications, middleware, environmental software or any other related software/licenses as required in the proposed solution (Including AMC and Warranty).
- vii) Seamless integration of the Server(s), VRU/M-NVR, Cameras, Network devices, Storage hardware, Software etc. including existing VSS infra.
- viii) Remote operation and monitoring of CCTV Surveillance system installed in Coaches & Data Centers from RPF Thana/Post/Coaching Depot, Divisional HQ and Zonal HQ through the RailTel/Railways TCP/IP/MPLS network as prescribed in RDSO Specification RDSO/SPN/TC/106/2022, Version 2.1 or latest. Bidder is required to plan sufficient number of CMS (including VMS), VA, FRS & CCC licenses and other IT equipment to facilitate the same. Bidder is required to extend Network connectivity from the CCTV Surveillance system installed in Coaches to the RailTel's Data Centre through Wi-Fi Network & Mobile Network. List of Divisional HQ, Zonal HQ is mentioned in Annexure-I (Chapter-7). Details of RPF Thana/Post having is mentioned in Annexure-I (Chapter-7) & Clause 8.2 of Chapter-8 (Section-I). List of Coaches covered under the scope of present tender is mentioned in Annexure-II (Chapter-7).

- ix) Integration of existing CCC application with Central Management System including CMSat API/SDK and application level. The bidder should provide API/SDK of CMS, VA & FRS software to the OEM of CCC application. During project duration (i.e., upto AMC), if required by RailTel, the bidder shall provide the API/SDK of supplied software (under the scope of this tender) to RailTel without any additional cost.
- x) To identify, develop and deliver the training to the Railways/RailTel staff for the CCTV System to be installed and commissioned.
- xi) To demonstrate the functioning of all the modules of software and features of hardware component as and when required by Railways.
- xii) Integration of the proposed CCTV Surveillance System with existing VSS system at Coaches and existing LAN infra (at RPF Thana/Post location), where VMS is already available.
- xiii) Preparation of Digital Network topology of CCTV at Coaches (including RPF Thana/Post) showing makes, model, IP address, connectivity etc. (including existing VSS infra). The Video and Tampering Alarm data feeds from CCTV cameras of Coaches shall be stored in the Video Recorder Unit for at least 30 days at 25 FPS with Full HD resolution with H.265 or higher Video Compression.
- xiv) Remote operation and monitoring of Coaches from RPF Thana/Post, Divisional HQ and Zonal HQ etc. shall be done through the RailTel/Railways MPLS network or OFC Network (to be decided by RailTel).
- xv) There shall be provision of minimum two number of Panic Button in each Coach. Pressing Panic Button shall provide local buzzer as well as alarm to the Data Centre / Centralized location through available network for CCTV application.
- xvi) RailTel will provide SIM/e-SIM card for LTE based Mobile Communication for each VRU/M-NVR supplied by the Bidder under this Tender.
- xvii) Replacement of **all consumable items including batteries** of UPS supplied by the contractor (at no additional cost to RailTel) during Maintenance supervision, warranty and AMC period.
- xviii) Provision of necessary man-power for maintaining CCTV as per SLA requirement during Maintenance supervision period of 12 months after issue of final PAC, warranty period of 24 months and AMC period of 5 years without any additional cost to RailTel.
- xix) After the completion of contract duration, the successful bidder shall hand over all the components of the video surveillance system in working condition to Railways/RailTel.
- xx) In Future (during project duration of this Tender including AMC period) for implementation of CCTV in Coaches, the bidder shall assist in integration of software ap-

plications installed at RPF Thana/Post or at DC&DR with software applications installed under this tender without any additional cost to RailTel.

- xxi) Bidder shall follow best practices(in addition to RDSO specifications) during installation, commissioning, maintenance, warranty and AMC period for CCTV Surveillance Systemproject.
- xxii) Bidder is required to submit the Server calculation sheet for CMS Hardware, FRS Database & Matching Server duly vetted by their respective OEMs.
- xxiii) Bidder is required to integrate the existingCCTV Surveillance system at Coaches (not covered in present scope of Tender) with the CCTV Surveillance system proposed in the Tender during project duration, if required by RailTel/IR.
- xxiv) Bidder shall ensure Integration of his CCTV Infra with EMS application provided by RailTel.
- xxv) Bidder shall attend failures related to defective cameras and general maintenance in Coaches covered under other packages of this Tender (for SLA calculation of such failures please refer to Clause no. 4.A.8.5 (6) of this tender. Bidder, maintaining these defective coaches, shall extend all possible help to other bidder in rectification of the failure.

3.A.1.4 Quality Assurance Programme and Implementation Methodology

The bidder with quality assurance should prepare Implementation Methodology covering:

- a) Schedule of Type Test/Acceptance Test/Inspection, supply, installation, SAT (Site Acceptance Test), trial runs, commissioning, integration etc.
- b) Allocation of manpower for different activities.
- c) Submission of PERT chart indicating completion of various activities within targeted time frame.

3.A.1.5 Manufacturing, Supply and Storage of Equipment

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

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

3.A.1.6 Support from Indian Railways/RailTel

- 3.A.1.6.1 For CCTV Surveillance System installed at Railway Coaches, the Executive Director/Regional General Manager/Group General Manager/General Manager of each Region of RailTel shall be the Project Coordinator for coaching depots falling under their region. RGMs/EDs of Regions shall nominate officer(s) as an authorized representative(s) for this project for planning, Coordination with Railway, execution, verification, maintenance and release of payment for coaching depots under their respective regions. The successful bidder shall take all instructions/approvals etc. for the project from EDs/RGMs or their nominated authorized representatives.
- 3.A.1.6.2 Coaching depot wise Drawing & Plans for installation of CCTV Coaches shall be submitted by the contractor to authorized representative of RailTel for approval of Railway in the respective regions. A schedule for supply of Coach-wise drawings /plans by the Contractor & their clearance by the RailTel/Railway shall be drawn so as to avoid bunching of documents and to ensure that the time taken for approval is minimized. The Railway, after receiving drawings & plans from RailTel, will arrange to scrutinize the drawings/plans and offer their remark if required, within 7 working days of submission of the same by RAILTEL. Contractor shall ensure compliance within the next 5 working days, after receiving it from RailTel. Thereafter, Railway will communicate the approval within next 07 working days. Installation of CCTV at Coaches shall be carried out as per Railway's approved drawings & plans only.
- At Coaches under the scope of work, number of cameras shall be as per site requirement based on duly approved drawings after site survey. Before commencement of the work at a Coach, bidder has to take approval for camera location. Camera location drawing will be signed by the nominated representatives of Railway & RailTel.
- 3.A.1.6.3 The Railway will provide free access to Railway premises in connection with carrying out the project related activities. However, prior permission/valid temporary ID card may be issued to the concerned persons by the Project Coordinator of RAILTEL and duly counter signed by concerned Railway officer.
- For execution of projects, Railway will permit the bidder to use the available Railway Land temporarily on the same terms & conditions as applicable to Railway's contractors.
- 3.A.1.6.4 Adequate power supply will be arranged by Indian Railways for Installation and Commissioning of the CCTV system as per applicable charges. For Operation of CCTV Infrastructure, Railway will provide power supply free of cost.
- 3.A.1.6.5 Indian Railways will permit to install CCTV Surveillance system related infrastructure at Coaches subject to non-interference with the existing devices and to the rail users.
- 3.A.1.6.6 If required by special order, the successful bidder would be allowed to carry out the work even in night. RailTel's decision in this regard in consultation with Indian Railways shall be binding on the successful bidder.

3.A.1.6.8 RailTel shall facilitate the availability of point of presence to the successful bidder to connect with the RailTel's Network foreachCoach, coaching depot and other locations, where CCTV infra is to be installed under this tender.

3.A.1.6.9 Temporary depot for tools and equipment of any kind can only be opened within the Railway's premises during installation phase only after getting prior permission from the authorized Railway personnel as per Railway's terms and conditions. Any land required by the bidder may be made available by Railways, if available, at the lease cost as per the latest norms of Railways

3.A.1.7 Bidder's Responsibility

The bidder will be responsible for all the activities mentioned in Scope of Work. Bidder will also responsible for the following activities:

3.A.1.7.1 Planning, designing and drawing of CCTV system at Coaches, Divisional& Zonal HQ. Preparation of Drawings & Plans clearly showing Active CCTV infra (Cameras, Switches, UPS, Rack etc) and passive CCTV infra (OFC, power cable, CAT etc) for railway's approval and their modifications as per railway requirements. (Note: In addition to the proposed CCTV infra under this project, existing LAN infra and existing VSS infra shall be clearly visible in the drawings with different colors & plans prepared by the selected contractor for RailTel/Railways approval, showing the extent of their utilization in the proposed CCTV system at Coaches).

3.A.1.7.2 It shall be the responsibility of Supplier to transport the equipment to site for the Installation & Commissioning.

3.A.1.7.3 Maintenance of CCTV system during implementation, maintenance supervision period, warranty period & AMC period as per terms & conditions of RFP and its corrigendum.

3.A.1.8 Installation, Integration, Testing, Trial Run and Commissioning of Network/System

The bidder shall be fully responsible for Quality Assurance of equipment & other network elements and supervision of following: -

- a) Installation and integration of the above said equipment/ items as per System design
- b) Integration with existing network/system
- c) Testing of the Network/System as specified in the document
- d) Trial run of the network/system
- e) Commissioning of Network/system

3.A.1.9 Training of Purchaser's Personnel and Change Management

For successful implementation and monitoring of the CCTV surveillance system, the successful bidder will need to identify training needs for Indian Railways/ RailTel. To provide professional training and development services at each stage of the project viz. installation, testing, operation and maintenance including AMC period.

The successful bidder shall provide hands on training and online training with detailed course material on the installed equipment and software covering at least the following as per the schedule given by RailTel during complete project duration:

- Configuration and their operation of Networking Equipment, Cameras and other equipment etc. supplied under the project.
- Installation & Monitoring of Software Applications including alerts.
- Introduction to computers, Servers/Workstation/NVR, and their configuration and operations
- Trouble shooting and preventive maintenance
- Training on operation of CCTV system.

These personnel shall work with the Bidder technical team staff to gain confidence and to get expertise right from the execution stage of the project till completion of AMC period. The training content to be designed and delivered by successful bidder at successful bidder's own cost. All equipment used for training shall be identical to those quoted and supplied for site installation in hardware and software versions.

Timelines for Training and Development are as follows:

SN	Deliverable	Timeline in Months (M) (D= Date of award of LoA)
1	Preparation of training material, course etc. for IT awareness, role/function-based training of CCTV monitoring room operators, system technicians and supervisors etc.	D + 2M
2	Completion of IT awareness training	D + 3M
3	Continuous training and retraining during installation, warranty & AMC phase	As and when required by RailTel/Railways

Sets of training manual in two hard copies & two soft copies containing details of technical specification, installation & commissioning, troubleshooting & maintenance schedule etc. shall be supplied by the bidder.

The bidder shall update the course material of manuals in case there are any changes owing to revision/modifications in equipment/system specifications.

3.A.1.10 Final Commissioning

The CCTV shall be considered to be commissioned only after successful completion of the SAT, trial Run, successful completion of 12 months of Maintenance Supervision after issue of PAC and after issue of Final Acceptance Certificate (FAC).

Any item of bidder'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. Any additional item, if required for completion of work, shall be required to be supplied by the bidder free of cost.

3.A.1.11 General System Guidelines

- a) Bidder shall be responsible for the successful completion of the project.
- b) 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 bidder shall carry out the work in accordance thereof.

3.A.1.12 Technical Response

The technical response shall 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.A.1.13 Features and Capabilities of Equipment

The specifications defined under Chapter-8 contain the necessary requirements of RailTel with regard to the features and capabilities of the equipment to be offered by the bidders. These will be carefully studied and commented upon by the bidder.

3.A.1.14 Compliance to Technical Requirements

- 3.A.1.14.1 In the offer, the bidder shall include NIL deviation certificate (Form No. 6 of Chapter-6) statement for compliance of terms and conditions mentioned in the tender document and RDSO specification version-2 or latest.

In case of any deviation from terms and conditions mentioned in the tender document and RDSO specification RDSO/SPN/TC/106/2022, Version 2.1 or latest, the bidder may include item-wise statement for partially complied/non complied clauses as Annexure with NIL Deviation statement as per details given below:

- a) "PARTIALLY COMPLIANT," if systems and functions offered meet the tender requirement partially. The bidder shall state the reason why the offer is partially compliant. However, if the bidder is able to fulfill the specified requirement later, the time schedule for this shall be stated. In such cases, the bidder shall clearly mention the extent to which other requirements or specifications are affected.
- b) "NON-COMPLIANT," if systems and functions cannot meet the requirements. The bidder shall also state the reasons for it.
- c) In addition to the above-mentioned compliance statements, wherever statement is given for some numerical parameter specified in tender, then bidder shall state the actual numerical value of specification as met by the offered systems/equipment.
- d) In case of partially compliant or non-compliant bid, RailTel reserves the rights to **REJECT** the bid without assigning any reason.

3.A.1.14.2 Unclear Statements

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

3.A.1.14.3 Detailed Technical Information

The bidder shall include in his proposal the detailed Technical information, drawings and functional descriptions of the offered equipment to support the Compliance to CCTV Technical Specifications as in Chapter-8 of this tender document.

3.A.1.15 Supply of Software - Bidders should give undertaking that all the licenses of Firmware and Software of the offered CCTV solution under this Tender would be registered in favor of M/s RCIL or its nominated organization (Form no. 8, Point no. G).

SECTION-I CHAPTER-3

B. PROPOSED ARCHITECTURE FOR CCTV SURVEILLANCE SYSTEM

3.B.1 Architecture Overview

To implement CCTV Surveillance System, each coach should have robust, secure and scalable network architecture implemented which will cover doorways, Vestibule portion and aisle area as per railway requirements. Actual locations of switches in the proposed CCTV solution will depend on the location of cameras decided by Railways.

In addition to robust, secure and scalable network architecture on coaches, fully secure network architecture will be required at Coaching depots, RPF Thana/Post and Datacenter(s). Existing LAN Infra and existing VSS infra at Coaches is also required to be integrated with the proposed CCTV infra at Coaches and Thana/posts, without any additional cost to RailTel. This network will work as a platform for implementation of Video Management, Video Recording, Video Analytics, CCC and Facial Recognition System etc., which are part of infrastructure for IP based CCTV Surveillance System for coaches. Same network architecture can be used for deployment of Information Display System and other services as per the requirements of RailTel/Railways.

As this is a highly visible project for Indian Government, Ministry of Railways and RailTel, therefore, the proposed architecture must be secure end to end so as to ensure by the selected contractor to eliminate any unauthorized misuse of recorded video or video clips of CCTV System.

3.B.2 Architecture of CCTV Surveillance System in Coaches

Tentative architecture of CCTV system in coaches will be as mentioned in RDSO specification no. RDSO/SPN/TC/106/2022, Version 2.1 or latest with all amendments.

3.B.3 Power and Fiber Distribution Design for Coaches

Power and Fiber Distribution Design in coaches will be as mentioned in RDSO specification no. RDSO/SPN/TC/106/2022, Version 2.1 or latest with all amendments.

3.B.4 Network Design for Coaches

3.B.4.1 Network Design for Coaches in coaches will be as mentioned in RDSO specification no. RDSO/SPN/TC/106/2022, Version 2.1 or latest with all amendments.

3.B.4.2 Use of Existing LAN Set-up at Coaches:

Railways is providing LAN Service in various Railway Coaches for other applications. Therefore, to avoid duplicacy of LAN in Coaches, existing LAN Infra maybe required to be used by bidder. Decision regarding utilization of LAN infra taken by RailTel will be final and binding.

3.B.4.3 Typical Network Architecture for different Coaches are given RDSO specification no. RDSO/SPN/TC/106/2022 Version 2.1 or latest with all amendments.

3.B.5 IP based CCTV Surveillance System for Different Type of Coaches

The main objective of the project is to implement IP based CCTV Surveillance Solution to monitor and manage multiple Railway Coaches across various divisions at RPF Thana/Post/Depot, central locations as well as from any other locations required by RailTel.

The system implemented shall act as tool to respond to situations/incidents effectively, aiding faster decision making and act as a great learning for better preparedness to meet any incident and eventualities.

The system is expected to help in following area:

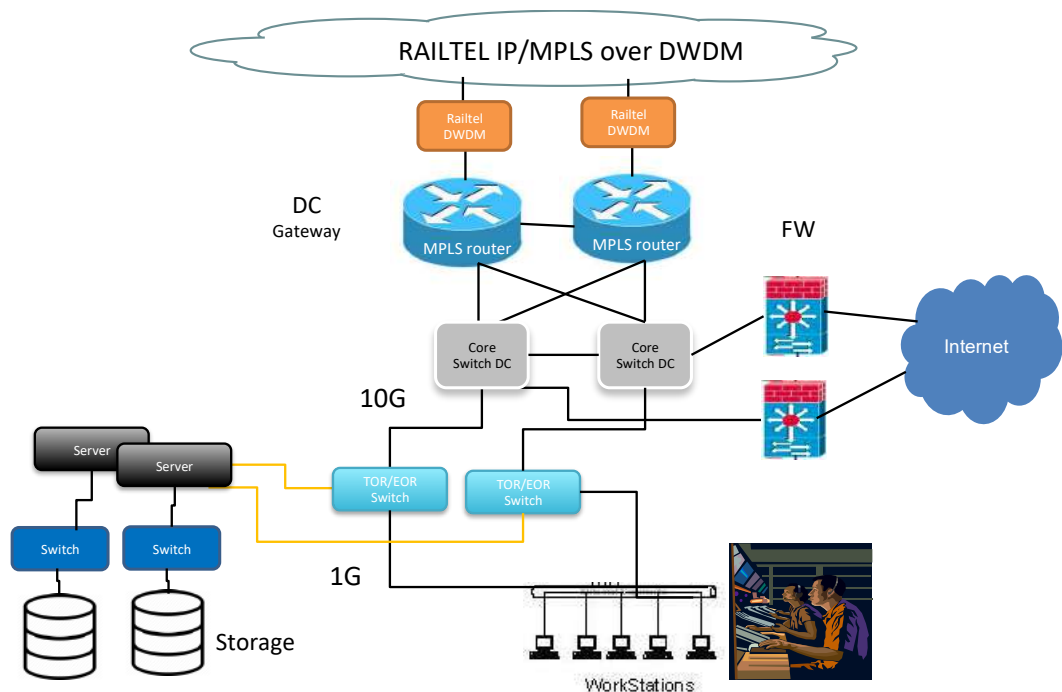
- a) Centrally Monitor and Control Security Systems
- b) Immediate Response and Management System
- c) Integration with Video Management

IP based cameras would be Dome Type Cameras.

The Alarm from each Coaches should go to the nearest RPF Thana/Post, Divisional headquarter, Zonal headquarter or any other location as specified by RailTel.

3.B.6 Network layout at RailTel Datacenters and RPF Thana/Post

3.B.6.1 At RailTel Datacenters (Gurugram and Secunderabad)



Data Centre Architecture including networking, computing, storage, management, and security is planned as described below:

In each Data Centre, there will be two Core Routers (to be provided by RailTel) interfacing towards the RailTel MPLS network thorough DWDM in physical layer.

The two Core routers will work as a Gateway Router from the network towards Rail-Tel Datacenter.

There will Two-tier Architecture Core/Aggregation and Access Switching Layer. This architecture accommodates a north-south traffic pattern where client data comes in from a WAN or the Internet to be processed by a server/workstation in the data center and is then pushed back out of the data center.

Data Centre Core and Aggregation layer—Provides the high-speed packet switching backplane for all flows going in and out of the data center. Provide important functions such as Layer 2 domain definitions, spanning tree processing, and default gateway redundancy. Server-to-server multi-tier traffic flows through the aggregation layer and can use services, such as firewall, to optimize and secure applications.

Data Centre Access layer—Where the servers/workstation physically attach to the network. The server/workstation components consist of 1RU rack servers/workstation, blade servers/workstation with integral switches, blade servers/workstation with pass-through cabling, clustered servers/workstation. The access layer network infrastructure consists fixed configuration 1 or 2RU stackable switches (Top of Rack/End of ROW). Switches provide both Layer 2 and Layer 3 topologies.

Resiliency is achieved by load balancing the network traffic between the tiers
Security is achieved by placing firewalls between the tiers.

3.B.7 Installation of Panic Button and Associated VMS Requirements for Coaches

- 3.B.7.1 The VMS software shall include required licenses to support Alarm Input monitoring and Output activation for the proposed IP Cameras. **Number of licenses should be as per the quantity of panic buttons mentioned in each packages.**
- 3.B.7.2 Two numbers of Panic Button shall be installed at each coach. The potential free contact of the Panic Button shall be connected to the Alarm Input of the IP Fixed Camera installed nearby wherein Panic Button is in the Field of View of the Camera.
- 3.B.7.3 Once the Panic Button is activated by any person in distress, an alarm shall appear on the VMS along with the pop-up of the associated camera on the operator workstation.
- 3.B.7.4 Panic Button shall be installed at average person's height at the Coach or as decided by RailTel.

RailTel

SECTION-I CHAPTER-3

C. ENTERPRISE MANAGEMENT SYSTEM (to be provided by RailTel)

3.C.1 Introduction

For the provision of CCTV Surveillance System at Railway Coaches, this tender is being floated by RailTel. Accordingly, for monitoring of CCTV Equipment installed/ planned to be installed at Railway Coaches, RPF Thana/Posts, Data Centers, Command Control Centre or any other location, Enterprise Management System (EMS) to be provisioned.

Enterprise Management System (EMS) will be required to integrate all the IP devices of CCTV system including Camera, Server/Workstation, Storage, Switches, VMS, VA, FRS System etc. to be procured under Schedule of Requirement for each packages.

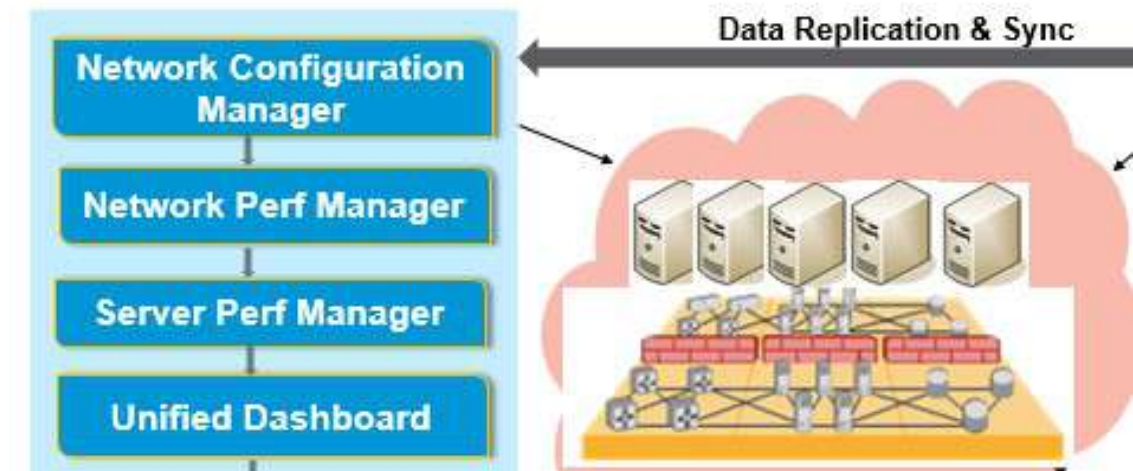
3.C.2 Enterprise Management System (EMS)

3.C.2.1 For effective operations and management of IT Operations, an industry standard Enterprise Management System (EMS) has been provisioned for monitoring of CCTV Equipment (Cameras, Server/Workstation, Storage, PCWorkstations etc). Given the expanse and scope of the project to operate, configure, monitor & maintain IP based CCTV Surveillance System across Railway Coaches of Indian Railways, EMS becomes very critical for IT Operations and SLA Measurement.

3.C.2.2 Some of the critical aspects that need to be considered for operations of IT setup are:

- Centralized and Integrated Dashboard View
- Centralized and Customizable Service Level Reporting
- Server/workstation Change, Provisioning & Configuration
- Network Automation
- Service Management (Helpdesk) & SLA Management
- Centralized IT Asset Inventory discovery & tracking
- Server/Workstation Monitoring
- Network Fault & Performance Management
- Penalty Monitoring and Management

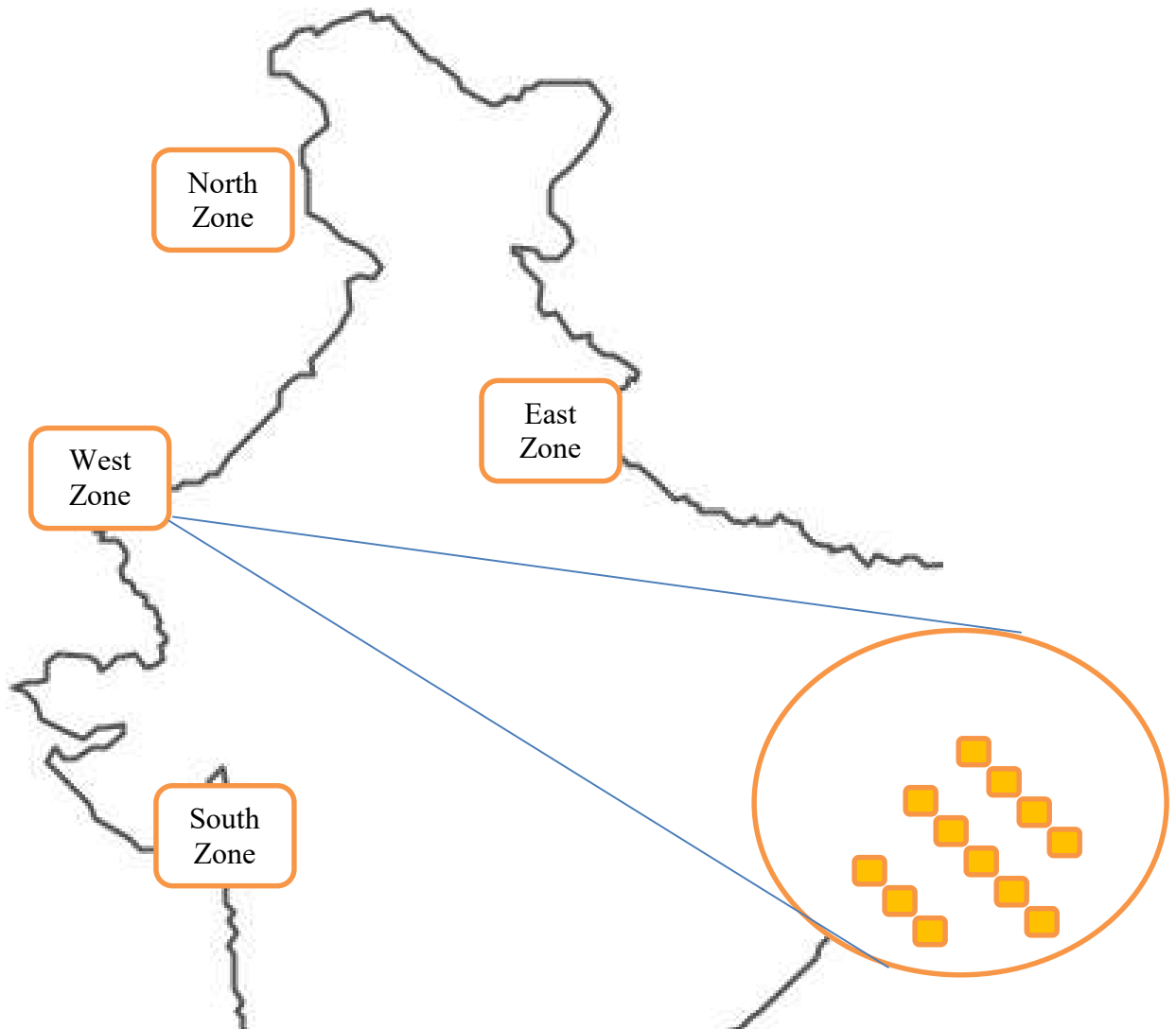
Enterprise Management Solut



3.C.2.3

All the assets of VMS System (including all IP devices of CCTV System like Cameras, Storage, Servers/Workstationsetc) are required to be monitored through the concerned Regional NOC, Central NOC (CNOC) and concerned Railway unit. EMS System to be deployed at one Data Center as a DC with the redundant infrastructure configured in other Data Center as a DR, in case of failover. There will be a continuous data replication & synchronization from DC to DR site on daily basis to prevent a loss of configuration changes in the event of losing the production instance.

The EMS solution deployed in DC & DR will act as a manager of manager, where all the events from cameras, storages, servers/workstations, networks (switches etc.) and UPS solutions would be aggregated. It provides the advanced level of correlation like the event de-duplication, filtering, enrichment etc. to find out the most casual event in the network. The dashboard can be personalized by individual users based on their roles & thus can be extended to various RPF Thana/Post/Coaching Depot, Divisional HQ's etc. for web-based access, as per their role & responsibilities. The operators in various RPF Thana/Post/Depot, HQ's will have personalized views of topology, alarms & reports as per the business requirement.



Service Desk Manager would be the central service desk solution, which would act as a single point of contact for logging incidents automatically from the monitoring solutions from event management console as well as manual incidents via mail and telephone from the end users. The solution would also provide Knowledge Management for the engineers to populate and search solutions. The knowledge management component would also be installed on the same server/workstation. The processes of Change Management will be carried out using the same solution. The incident, problem, change and request process can be tied to the Service Level Management process to send notifications, escalate etc. so that the response and availability SLAs are met. Email will be the primary notification method. There are a number of out-of-box reports available. Customized reports can be created, scheduled and published on a central portal.

Network Management component offers fault, availability, and performance monitoring, with real-time network monitoring and network incident management, for physical and virtualized network infrastructure. It will also provide historical performance reporting on all the managed nodes.

3.C.2.4 Specification of EMS is given in Chapter-8.

**SECTION-I
CHAPTER-3**

D. INSPECTION AND SUPERVISION OF INSTALLATION, TESTING & COMMISSIONING

3.D.1. Inspection

- (A) Inspection will be carried by RDSO for all the items for which RDSO specifications are referred. For other items the inspection will be carried out by RailTel or its authorized agency.
- (B) **Test Categories (This should be for all the items to be inspected by RailTel)**
- 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-Factory Acceptance Testing
b) Factory Acceptance Testing
c) Pre-commissioning test (after installation) for total integrated system.
d) Site Acceptance Testing (SAT)
e) Trial Run
- ii) These tests shall be carried out on all equipment supplied by bidder including those supplied by sub-vendors, if any.
- iii) Bidder shall arrange all necessary test instruments, manpower, test-gear, accessories etc.
- iv) All technical personnel assigned by the bidder 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 bidder. 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
- vi) **Failure of Equipment/Cards/Components:**

Till the system is accepted by the Purchaser, a log of each and every failure of equipment/cards/components shall be maintained. It shall give the date and time of failure, description of failed equipment, circuit, module, equipment designation, effect of failure of equipment 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 bidder 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 bidder shall replace the necessary equipment 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, bidder shall replace the equipment with a new one and tests shall begin all over again. If a unit/subsystem/module have failed during the test, the test shall be suspended and restarted all over again only after the bidder has placed the equipment back into acceptable operation. Purchaser's approval shall be obtained for any allowable logical time required to replace the failed equipment/unit/module/sub-system.

- vii) **Readjustments**

No adjustments shall be made to any equipment during the acceptance tests. If satisfactory test results cannot be obtained unless readjustments are made, bidder 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.D.2. Pre-Factory Acceptance Testing

The bidder on his own exactly in line with pre-approved test plan shall conduct pre-factory acceptance testing and test reports for the same shall be forwarded to Purchaser/Engineer before inspection.

3.D.3. Inspection/Factory Acceptance Test

Inspection will be carried by RDSO for all the items for which RDSO specifications are referred. For other items the inspection will be carried out by RailTel or its authorized agency.

Testing Procedure for CCTV equipment for which requisite testing facility is not available in India:

Necessary type tests as well as acceptance tests on the equipment offered shall be conducted to ascertain conformance of the equipment to the requisite RDSO specification. These tests shall be got conducted by the OEM/Vendor at 3rd party test houses of international repute such as UL, TUV etc.

- 3.D.3.1 In case the requisite test facilities are available with OEM, the 3rd party test house may conduct these tests in the OEM premises if specifically requested by OEM to RDSO. **The details of 3rd party test house (proposed-to be entrusted with the testing) shall be submitted by the bidder along with the technical bid document.** The same shall be sent to RDSO for prior clearance. These details shall include testing capability of the test house & shall confirm that the test house has undertaken testing of such equipment earlier. Only after the clearance of RDSO, testing shall be entrusted to proposed 3rd party test house. RDSO shall advise the test format and details regarding quantity of equipment on which type test and acceptance test is required to be conducted.
- 3.D.3.2 3rd(Third) Party test house after conducting requisite type test & acceptance test shall submit the test report directly to RDSO. In case the equipment conforms to the RDSO specification, necessary clearance for supply of the equipment shall be given by RDSO to the OEM/vendor.
- 3.D.3.3 On arrival of such cleared equipment in India, sample tests covering only visual and functional parameters shall be undertaken by RDSO.
- 3.D.3.4 On successful visual and functional tests as above, the equipment may be considered to be in conformance with RDSO specification. However, the vendor shall submit special bank guarantee equivalent to 10% of the value of the equipment inspected by third party abroad & valid for a period of one year (in addition to Performance Guarantee) and undertaking to the purchaser that the equipment supplied shall meet all the requisite parameters of the specification and shall work satisfactorily failing which bank guarantee may be encashed. Firm shall also submit suitable undertaking regarding satisfactory repair /service support to the purchaser.
- 3.D.3.5 Once type test has been successfully completed on a equipment, only acceptance test shall be conducted subsequently, in case the same equipment (make, model & version) is offered again within a period of 2 years.

- 3.D.3.6 Any expenses against inspection by 3rd party shall be borne by the bidder. Traveling, lodging & boarding expenses of RailTel's/Railway representative shall be borne by RailTel/Railway.

3.D.4. Installation

After successful completion of inspection, equipment shall be sent to site for installation. Equipment without factory acceptance/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 coach. Installation shall be carried out in accordance with the installation manuals and approved installation drawings & site plan in the best workmanship.

Bidder shall indicate the number of teams and the list of equipment for each team to be required for installation of the CCTV Surveillance System in order to complete the work within the stipulated time frame.

Bidder 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 bidder any repairs are undertaken, the maintenance spares supplied with equipment shall not be used for the repair. Bidder 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 bidder 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 bidder to Purchaser/Engineer to enable their representatives to be associated with the job.

Bidder 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 bidder 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.

3.D.5. Pre-Commissioning

On completion of installation of CCTV system at coaches, the correctness and completeness of the installation as per Manufacturer's manual and approved installation documents shall be checked by the bidder 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 bidder and the test shall be carried out by the bidder on his own. After the tests have been conducted to the bidder's own satisfaction, the bidder 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, bidder shall identify the same and provide report/history of all faults to the Purchaser.

During installation and pre-commissioning of the Edge Infrastructure of CCTV system at coaches, bidder shall have enough number of commissioning spares so that the installation is not held up because of non-availability of commissioning spares.

3.D.6. Site Acceptance Testing (SAT)

On completion of Pre-commissioning, site acceptance testing shall be conducted on the system as per approved SAT procedures and its constituents by the bidder 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 remote alarm transmission and reception.
- e) System tests on END TO END for the system, all complete.

3.D.7. Trial Run/Field Trials

Upon conclusion of the Site Acceptance Testing (SAT), the bidder shall keep the facilities commissioned for one month for 'TRIAL RUN/FIELD TRIALS'. During this period bidder shall provide all Support engineers & Technicians to maintain the total log, incidents and failures. 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 bidder 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, bidder shall identify 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 Coach and the availability of the system per Coach basis shall be calculated, accordingly and results submitted to Purchaser/engineer.

If the system fails to come up to the guaranteed performance, the bidder, 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 bidder. 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 bidder and to bring the system to the guaranteed performance with the help of third party at the expense of the bidder.

3.D.8. Provisional Acceptance Certificate (PAC)

- (i) After SAT, Bidder will hand over the complete Coach for usage to RPF. Bidder will sign off Coach wise joint physical installation & commissioning report with RPF, Mechanical representative of the respective division, RailTel and the Bidder.

Coach wise physical installation & commissioning report must contain details of each Coach Number along with their installed VRU (with their unique digital identification number)/M-NVR.

In case of any deficiency affecting the overall working of the system, the contractor shall rectify the deficiencies within one month and verify them from RailTel and Railway representatives.

- (ii) On the basis of joint physical installation & commissioning report with RPF, Mechanical department representative of the respective division, RailTel and the Bidder, Railway Mechanical department representative of the respective division will issue Coach wise work completion report covering all cameras and other IT infrastructure at Coaches/RPF Thana/Post & Coaches clustered within the Depot and Fiber/Network connectivity, monitoring facilities.

All completion drawings/plans and joint report duly signed by RAILTEL & Railway Officers shall be handed over to the respective division of each zonal railway at the time of signing of completion certificate in soft copies and hard copies of which prints in the required numbers shall be supplied by the bidder. One set of diagrams of the concerned Coach (all coaches) along with Working Rules Booklet for CCTV System has to be provided by the bidder for each Coach.

- (iii) For CCTV work at Coaches, RailTel's respective Territory Managers shall issue a Provisional Acceptance certificate (PAC) for each Coach/RPF Thana/Post/Depot after receiving completion report from Railway Mechanical department representative of the respective division (including attending all deficiencies mentioned in commissioning report of all available Coaches), subject to compliance of Clause no. 4.A.4.3 of Chapter-4A. PAC for first Coach/RPF Thana/Post/Depot shall be issued after successful compliance of all critical points (related to network security) raised by STQC (Ministry of Electronics & Information Technology) or any other Government Agency from the list of CERT-In empanelled Information Security Auditing Organization. All non-critical points raised by Auditing Organization shall be complied by the bidder before issuance of Provisional Acceptance Certificate (PAC) for IT setup at RailTel Datacenters at Gurugram & Secunderabad.

- (iv) For IT setup at RailTel Datacenters at Gurugram and Secunderabad, Provisional Acceptance certificate (PAC) shall be issued by the respective Datacenter in-charges after issue of PAC for last Coach/RPF Thana/Post/Depot for respective packages, subject to closure of all non-critical points raised by STQC (Ministry of Electronics & Information Technology) or any other Government Agency from the list of CERT-In empanelled Information Security Auditing Organization. In case PAC for last Coach/RPF Thana/Post/Depot is pending for want of site readiness, PAC for IT setup at Data Center shall be released after approval of the concerned RGMs/EDs.

3.D.9. Maintenance Spares

- 3.D.9.1 Unit rates for each spare required for operation and maintenance shall be provided. Bidder shall also provide the address, contact person, mail-id, fax, and telephone no. of the manufacturer of the spare parts, if different from the bidder itself. The bidder shall warrant that spare part for the system would be available for minimum of 8(1 Year Maintenance Supervision+ 2Year Warranty+5 Year AMC)years after issue of PAC for IT setup at DC-DR as per clause no. 3.D.8 (iv).

In case of stoppage/discontinuation of production of spares for the installed equipment by OEMs, the bidder has to provide one year advance intimation to the Purchaser so that the Purchaser may order the requirements of spares in one lot.

Sufficient number of spares (for operation and maintenance) shall be kept against SOR items as mentioned (with round off at the higher side) to maintain the SLAs. Spares shall be provided from the same manufacturing facilities/location from where the respective equipment, subsystems are offered.

The list of the required spares being supplied with unit cost and total cost should be attached along with the bid.

8% spares taken in the SOR (Chapter-2) against Schedule 'A' are not maintenance spares and should not be considered for maintaining SLAs during the entire project duration (i.e., upto AMC period).

- 3.D.9.2. Spare part management for spare during the maintenance support services, warranty and AMC phase in order to meet the SLAs shall be undertaken by the successful bidder.
- 3.D.9.3. The list of maintenance spares, required for providing maintenance support with Uptime being asked for, shall be worked out by the bidder in consultation with the OEM and submitted for RailTel's approval. These spares shall be stocked at various locations proportionately and checked by RailTel at the time of acceptance of the network (to be defined by RailTel later).
- 3.D.9.4. 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 all OEMs and/or authorized vendors/representatives (as per Forms of Chapter 6, (Section-I)) will be produced to confirm that the life time maintenance support (three years warranty & five years AMC) by provisioning of spares.

3.D.9.5. In case the equipment offered/supplied under the contract is out of production/support or not available due to any reason, the contractor shall supply equipment with prior approval of purchaser's engineer.

3.D.10. Commissioning spares

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

3.D.11 Final Acceptance

Before issue of FAC, the bidder will offer its complete CCTV work for sample testing of any randomly selected coaches by STQC (Ministry of Electronics & Information Technology) or any other Government Agency from the list of CERT-IN empaneled Information Security Auditing Organization for arranging security verification certification. FAC shall be issued only after submission of security verification certification by the bidder and closure of all points raised by the Auditing Organization.

The final acceptance of the complete work shall take effect from the date of successful completion of 12 months of Maintenance Supervision (Clause 4.A.2.5 of Chapter-4, Section-I) of IT setup at RailTel Datacenters at Gurugram & Secunderabad and 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 nominated by the Executive Director of the Region and the contractor. Notwithstanding 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.

SECTION-I CHAPTER-3

E. TRAINING, VENDOR DATA REQUIREMENT, DOCUMENTATION, AND DESIGN GUIDELINES

3.E.1 Training of RailTel/Railway Personnel

3.E.1.1. Scope of Training:

The successful bidder shall provide hands on training and online training with detailed course material on the installed equipment and software covering at least the following as per the schedule given by RailTel during complete project duration:

- i) Configuration and their operation of Networking Equipment, Cameras and other equipment etc. supplied under the project.
- ii) Introduction to computers, servers/workstations/NVR, and their configuration and operations
- iii) Trouble shooting and preventive maintenance
- iv) Training on operation of CCTV system.

These personnel shall work with the Bidder technical team staff to gain confidence and to get expertise right from the execution stage of the project till completion of AMC period. The training content to be designed and delivered by successful bidder at successful bidder's own cost. All equipment used for training shall be identical to those quoted and supplied for site installation in hardware and software versions.

3.E.1.2 Timelines for Training and Development:

SN	Deliverable	Timeline in Months (M) (D= Date of award of LoA)
1.	Preparation of training material, course etc. for IT awareness, role/function-based training of CCTV monitoring room operators, system technicians and supervisors etc.	D + 2M
2.	Completion of IT awareness training	D + 3M
3.	Continuous online training during installation, warranty & AMC phase	As and when required by Rail Tel/Railways

Sets of training manual in two hard copies & two soft copies containing details of technical specification, installation & commissioning, troubleshooting & maintenance schedule etc. shall be supplied by the bidder.

The bidder shall update the course material of manuals in case there are any changes owing to revision/modifications in equipment/system specifications.

The training course shall be conducted at the manufacturing facilities from where the respective equipment/subsystems are manufactured/ offered or at full-fledged training facilities.

It shall be explicitly understood, that Purchaser's/Engineer's personnel shall be fully associated during Engineering, Installation, Testing and Commissioning activities and this opportunity shall be taken by bidder to impart on the job training in addition to the above training course.

Bidder offer excludes costs of transportation, lodging and boarding of the trainees which shall be arranged by the Purchaser.

The training course to be conducted at the manufacturing facilities or at full-fledged training facility as the case may be, shall be designed to train the trainees in all aspects of System engineering, equipment operation, installation and functional details, theory of operation of equipment, trouble shooting and familiarization with the equipment at card and component level. All equipment used for training shall be identical to those quoted and supplied for site installation in hardware and software versions.

Bidder shall provide comprehensive documentation, course material, manuals, literature etc. as required for proper training of personnel at his own cost. Consolidated and comprehensive documentation shall be available to each participant. After the completion of course, all such materials shall become the property of the PURCHASER. Bidder shall update the course material of manuals in case there are any changes owing to revision/modifications in equipment/system specifications.

Bidder shall, prior to start of training, send complete training program including details of each course, duration, subject matter etc. The Purchaser/Engineer reserves their right to suggest any additions/deletions in the program, which shall be incorporated by the bidder at no additional cost.

3.E.2 Vendor Data Requirement and Documentation

One set of Documentation with hard and soft copy shall be supplied for each Coaches.

The following documents for the complete system shall be supplied and approved by Purchaser/Engineer in order to start Factory Acceptance Testing:

- A) System description, System configuration diagram & Connectivity diagram
- B) Detail technical manual of each type of equipment

Equipment interconnection diagram including details of various interfaces, signaling protocols used at each stage.

Layout of equipment and space requirements for each Coaches.

Installation manual including installation procedure and commissioning.

Supervisory configuration, alarm list, operator interface etc.

- C) Maintenance manual of each type of equipment containing:

- i) Preventive maintenance procedures.
- ii) Trouble shooting/repairs procedures including failure analysis shall provide exhaustive information about repairs including but not limited to removal, reinsertion of components and cards, repairs, adjustments, tuning, calibration, tools required for a particular operation, test points, including turn-around time for repair and the details of the maintenance support service center to be furnished in the bid and all other maintenance related details.
- iii) Expansion possibilities of the system without causing deterioration in the system performance.
- iv) Any other data, document not specifically mentioned, but required for the satisfactory testing, installation and commissioning, operation and maintenance of the system shall be provided.
- v) Documents to be supplied after trial runs but before System commissioning (Acceptance of the System by Purchaser/Engineer).

3.E.3 Design Guidelines

- i) Equipment shall conform to the similar housing standards and shall preferably be integrated in dimension as mentioned in RDSO Specification.
- ii) All venting, cooling shall be natural. However, in case of equipment with internal forced cooling, suitable dust filters may be used, if required.
- iii) All equipment shall be immune to EMI; RFI interference generated by any nearby source including traction overhead equipment & shall meet the latest international standards in this regard.
- iv) The equipment shall be capable of functioning with minimum maintenance and shall be preferred to have no requirement of any preventive maintenance.
- v) All the wiring work whether power cable, network cable or OFC cable should be wired and clamped properly on the channels and coding may be provided for the identification of the cables.
- vi) All equipments (except for equipments at DC-DR) proposed for procurement in this tender document, are planned to be installed at Railway Coaches/RPF Thana/Depot/Zonal/Divisional HQ or any other location as decided by RailTel. Therefore, all such equipments should be able to withstand Heat and Dust in accordance with Indian environment.

SECTION-I CHAPTER 4

A. 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, Section-I) and the Price Schedule(Chapter-2, Section-I) 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 from the date of opening of tender including the date of opening as indicated in Bid Data Sheet (BDS) Chapter-5, Section-I.

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, Section-I. 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 30 days, the Purchaser may proceed to do the work at the contractor's 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 by contractors engineer at respective site or mutually agreed RailTel PoP location/Railway Depot/Railway Station.
- 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 work 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 should 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. The bidder shall ensure that the downtime of the CCTV infra installed at RPF Thana/Post shall not be more than 4 hours. Additional Manpower, if considered necessary, shall be provided by the bidder to stabilize the network at no additional cost to RailTel. A penalty of Rs. 1000/- per hour of down time of network shall be imposed on the contractor for not meeting the down time prescribed. The Contractor's Engineer shall be responsible to identify the fault and advise corrective measures and ensure that defective cards are replenished.

4.A.2.4.4 **Replacement Services**

In case of hardware failure, the replacement must be given in next business day, subject to the availability of coach. If the bidder fails to replace as per below mentioned duration, the following penalties will be imposed:

If the Bidder fails to replace /Equipment card/Part in next business day, the following penalties will be imposed.

Equipment	Duration of re-pair	Deduction/Penalties
All Modules and accessories	More than 1 days and up to 7 days	2% of the cost of affected Equipment.
All Modules and accessories	More than 7 days and up to 15 days	10% of the cost of affected Equipment.
All Modules and accessories	More than 16 days and up to 30 days	25% of the cost of affected Equipment.
All Modules and accessories	More than 30 days	100% of the cost of affected Equipment.

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.

4.A.2.5 **Maintenance Supervision**

- 4.A.2.5.1 After issue of last provisional acceptance certificate {as mentioned in Clause 3.D.8 (iv)} is issued (including trial run period if any), the contractor shall be responsible for proper maintenance supervision of the complete system free of cost for a period of twelve months. For this purpose, he shall prepare a maintenance plan and make available the services of qualified maintenance engineer stationed at the location approved by RailTel authorized representative who will supervise and maintain the CCTV infra.
- 4.A.2.5.1.2 The Contractor's Engineer shall be responsible to identify the fault and advise corrective measures and ensure that defective cards are replenished. The bidder shall ensure that the downtime of the CCTV infra installed at Coach/RPF Thana/Post/Coaching depot/other locations shall not be more than 4 hours. Additional Manpower, if considered necessary, shall be provided by the bidder to stabilize the network at no additional cost to RailTel. A penalty of Rs. 1000/- per hour of down time of network shall be imposed on the contractor for not meeting the down time prescribed. The Contractor's Engineer shall be responsible to identify the fault and advise corrective measures and ensure that defective cards are replenished.
- 4.A.2.5.2 During this period of maintenance supervision if any shortfall 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.
- 4.A.2.5.3 To summarize, the total period of warranty as per BDS in Chapter-5 (Section-I), will comprise of first 12 months of Maintenance Supervision (after issue of PAC) extendable by RailTel for reasons as explained, as per para 4.A.2.5 above, post which FAC will stand issued. Issue of FAC will be followed by 24 months of warranty as per para 4.A.2 & 4.A.2.4 above.
- 4.A.3 Long Term Maintenance Support (AMC)**
- 4.A.3.1 Bidder shall provide maintenance support after successful completion of the warranty obligations for a minimum period of 5 years. The long-term maintenance support shall be comprehensive and include all hardware and software of equipment **Camera, Video Recorder Unit (VRU)/Mobile Network Video Recorder Unit (M-NVR), PC Workstation, Wireless Access Point, FRS Software, Central Management Software (CMS)** etc. supplied against this contract. RailTel should be extended the benefits of software update/up-grades made by Bidder on the system from time to time to improve performance. During this period the scope of work as mentioned in Clause 3.A.1.4 (Chapter-3, Section-I) & its sub clauses will be applicable.
- 4.A.3.2 Bidder shall be paid @ 3.5% + Taxes (minimum) of overall cost (excluding Taxes and Duties) of supply portion of Schedule (A) per annum towards Long Term Maintenance Support after completion of warranty period, to undertake maintenance, repairs and replacements of all type of equipment/module/ card/assembly/subassembly and update/upgrade of software released during this period and /or which may fail in the system after the warranty. Taxes will be as per actual at the time of execution of the AMC i.e., issue of AMC's LOA.

If the bidder quotes a higher base rate for AMC, 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.

In case a bidder quotes AMC rates lower than 3.5% and if the bidder wins the contract, his cost against supply items will be reduced by differential (w.r.t. 3.5%) of AMC rates & bidder will be paid accordingly against the cost of supply. AMC charges to him, however, will be paid only @ 3.5% per annum.

4.A.3.3 Separate agreement for AMC after completion of warranty period shall be entered with bidder by RailTel. The R-PBG submitted by the selected bidder after issue of Purchase order/LOA, shall remain valid during complete project duration (including AMC Period) plus three months. There is no need to submit the separate PBG for AMC.

4.A.3.4 Deleted

4.A.3.5 Quarterly payment for AMC Charges as per the Service Level Agreement (SLA) at the end of every quarter would be made by RailTel after successful completion of AMC Services of that quarter and on the certificate furnished by concerned RailTel representative of the Executive Director of the Region.

Note: The acceptance of the above clause is mandatory and specific acceptance from OEM is required to be enclosed as per Form no.3 (Chapter-6, Section-I). Any deviation /non acceptance will lead to **REJECTION** of the bid summarily.

4.A.4 Phase-wise Delivery/Implementation timelines

Milestones for Design, Supply, Installation and Commissioning from the date of issue of Letter of Acceptance (LOA) is tabulated as under.

Phase	Completion Target	Deliverable	Timeline in Months (M) (D= Date of issue of LOA)
I.	<u>Package no. 1 to 4-</u> EMU Trains & associated Coaches (Originating, Terminating and Halt), RPF / GRP Thana/Post	Submission of Final Design Document for EMU Trains & associated Coaches after doing site surveys for approval and complete due diligence along with mobilization of equipment, materials etc required	D+ 2 M
		Completion of Installation, Testing and Commissioning of CCTV and associated infrastructure	D+ 6 M

II.	Package no. 5 to 8- Premium Trains & associated Coaches (Originating, Terminating and Halt), RPF/GRP Thana/Post	Submission of Final Design Document for Premium Trains & associated Coaches after doing site surveys for approval and complete due diligence along with mobilization of equipment, materials etc. required.	D+ 2 M
		Completion of installation, Testing and Commissioning of CCTV and associated infrastructure	D+ 12 M

All timeline calculations are from the date of issue of LOA. Bidders need to share their detailed project plan as per the schedule mentioned above. Time is essence of the contract and all timelines should be strictly followed. Bidders are required to plan all activities in such a manner that the project is completed within the above prescribed timeline and to carry out activities in parallel to the extent possible.

- 4.A.4.1 The first phase of deliverable also includes security verification as per Clause 8.3 (Chapter-8), Note, Point-iv.
- 4.A.4.2 In case the security verification is declared unsuccessful, either on the basis of delay in implementation and/or on the basis on inability to adhere to the functional and operational requirements of the System as stated in this RFP, RailTel will be within its right to take measures as detailed in Terms and Conditions of the Contract.
- 4.A.4.3 All spare items as mentioned in SOR shall be supplied before issuance of PAC for first Coach.
- 4.A.4.4 Bidder in all cases is required to adhere to the project timelines and the project plan shared. In case of delay in implementation and/or on the basis on inability to adhere to the functional and operational requirements of the System as stated in this RFP, RailTel will be within its right to take measures as detailed in Terms and Conditions of the Contract.

4.A.4.4 RailTel Region's Details:

SN	Region/Head Office	Address
1	Northern Region/ New Delhi	Executive Director 6th Floor, IIIrd Block, Delhi Technology Park, Shastri Park, New Delhi-110053 Fax: +91-11-22185978 Tel: +91-11-22185933 Email: vijaylaxmi@railtelindia.com
2	Eastern Re-	Executive Director

	gion/ Kolkata	3rd floor, Chatterjee International Centre, 33A, Jawaharlal Nehru Road, Kolkata - 700071 Fax: +91-33-44041499, Tel: +91-33-44041499, Email: zakir.siddiqui@railtelindia.com
3	Southern Re- gion/ Secunderabad	Executive Director 2nd Floor, B-Block, Rail Nilayam, Secunderabad- 500071. Fax: +91-40-27820682, Tel: +91-40-27821134 Email: kmr@railtelindia.com
4	Western Re- gion/ Mum- bai	Executive Director Western Railway Microwave Complex, Senapati Bapat Marg, Mahalaxmi, Mumbai-400013 Fax: +91-22-24923913, Tel: +91-22-24923907, Email: vinod.agarwal@railtelindia.com

4.A.4.5 Project Preparation

- 4.A.4.5.1 The successful bidder shall submit a detailed implementation plan as per the project deliverables timelines before the commencement of the project.

4.A.4.6 Design and approval phase

- 4.A.4.6.1 The successful bidder shall conduct a detailed study of functional and technical requirements of the CCTV Surveillance System work to make the required system configuration and design modifications to its solution if required in order to achieve the desired functionality. However, the same must be tested, accepted and approved by RailTel/Railways.
- 4.A.4.6.2 Submission of Design Document for proposed IP based CCTV Surveillance System indicating all the components of the Edge infrastructure of CCTV system including cameras, servers/workstation, storage, switches, NVR etc. for RailTel/Railway's approval
- 4.A.4.7 Installation, Configuration and Customization
- 4.A.4.7.1 Installation and commissioning of software, hardware and equipment as per terms and condition of the tender.
- 4.A.4.7.2 Carry out all the customization/configuration activities as identified during Design phase by RailTel/Railway.
- 4.A.4.7.3 RailTel/Railways reserves the right to seek customization to meet its requirements.

4.A.5 Payment Terms

Note: It may be noted that bidder is permitted to quote only in Indian Rupees. Accordingly, all payments will be made in Indian Rupees only.

4.A.5.1 Payment Terms for Supply Items:

4.A.5.1.1 For hardware supply items, payments will be made on the basis of the supply plan approved by the competent authority in RailTel's Regional Office in phased manner.

- a) 75% payment of the items would be made on receipt and acceptance 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) Tax Invoice
 - ii) Delivery Challan
 - iii) Packing list.
 - iv) Factory Test Report.
 - v) Consignee receipt
 - vi) Warranty certificate of OEM
 - vii) Insurance certificate for transit insurance
 - viii) Contractor's All Risk Insurance Policy (refer clause 4.A.10)
 - ix) Inspection certificate (refer clause 3.D.1/3.D.3)
 - x) A certificate duly signed by the firm certifying that equipment/ materials being delivered are new and conform to technical specification or RDSO inspection certificate wherever applicable.

b) 15% payment of the value of items of Schedule after deduction of penalty, if any– A shall be made by RailTel on issue of Provisional Acceptance Certificate (PAC) for Coaches and Datacenter. For hardware installed at locations other than coaches & datacenter, payment shall be made by RailTel on issue of PAC for first concerned coach.

c) 5% payment on issue of Final Acceptance Certificate (FAC) after deduction of penalty, if any, as per clause 4.A.2.4 and 4.A.8.

d) Remaining 5% payment shall be made by RailTel on successful completion of Warranty Period after deduction of penalty, if any, as per clause 4.A.2.4 and 4.A.8.

4.A.5.1.1.1 15% 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 PAC of the last available Coach, for which site was available for installation of CCTV in with approval of Executive Director/Regional General Manager of the concerned region. 5% on issue of FAC and remaining 5% after completion of warranty period after deduction of penalty, if any, as per clause 4.A.2.4 and 4.A.8.

For spares 15% will be made after issue of PAC of the first coach (for Packages 1 to 8), 5% on issue of FAC and remaining 5% payment after completion of warranty period.

4.A.5.1.2 For software items, payment shall be made for the software/licenses supplied in stages as per approved supply plan.

a) 40% payment of the items would be made on receipt of software/licenses by the consignee duly inspected and on submission of the following documents -

- (i) Tax Invoice
- (ii) Delivery Challan
- (iii) Consignee receipt
- (iv) Warranty certificate of OEM
- (v) Contractor's All Risk Insurance Policy (refer clause 4.A.10)
- (vi) Inspection certificate (refer clause 3.D.1/3.D.3)
- (vii) A certificate duly signed by the firm certifying that Software licenses are registered in the name of RailTel and conform to technical specification of Tender or RDSO inspection certificate, whichever is applicable.

- b) 25% payment of the value of items of Schedule – A shall be made by RailTel on installation & commissioning of Coaches/datacenter/other locations.
- c) 25% payment on issue of Provisional Acceptance Certificate (PAC).
- d) 5% payment on issue of Final Acceptance Certificate (FAC) after deduction of penalty, if any, as per clause 4.A.2.4 and 4.A.8.
- e) Remaining 5% payment shall be made by RailTel on successful completion of Warranty Period after deduction of penalty, if any, as per clause 4.A.2.4 and 4.A.8.

4.A.5.1.2.1 (25% + 25%) payment of value of software items of Schedule – A which could not be installed for want of site readiness or as per the decision of Executive Director/Regional General Manager of the region, will be made on issue of PAC of the last available Coach. 5% on issue of FAC and remaining 5% after completion of warranty period after deduction of penalty, if any, as per clause 4.A.2.4 and 4.A.8.

4.A.5.2 Payment of Service Items:

4.A.5.2.1 90% payment of items (except those mentioned in paras below) shall be made **by respective Executive Director/Regional General Manager of the Region** on successful Installation, Testing and Commissioning of the Coaches/sites in accordance with location of service items, 5% on issue of PAC and final 5% on issue of Final Acceptance Certificate.

4.A.5.2.2 100% Payment towards "Training of personnel over and above the on-site training during the installation, maintenance and supervision period as detailed in the tender document" shall be made **by respective Executive Director/Regional General Manager of the Region** on successful completion of specified trainings.

4.A.5.3 Payment of Services (Long Term Maintenance, AMC)

4.A.5.3.1 For CCTV work at Coaches, Payment of due amount for SOR item towards "AMC/Long term maintenance Support" would be paid quarterly by the concerned Region after satisfactory completion of AMC Services of that quarter and on certificate furnished by concerned RailTel(RCIL)'s representative of the Region.

- 4.A.5.4 All the invoices raised by the bidder will be raised in the name of M/s RailTel Corporation of India Limited and corresponding payments will be made by RailTel (RCIL).**
- 4.A.5.5 Accounting unit/bill passing unit for the supplies under Package 1 to 8 are respective Executive Director/RGM of Regions. Bills to be submitted to the authorized representative of Executive Director/RGM of Regions for certifying receipt of material & services, for passing for payment.
- 4.A.5.6 The breakup of taxes has to be furnished and same should be reflected in the bills so that input GST credit can be availed by RailTel(RCIL).
- 4.A.5.7 All invoices will be raised by the contractor state-wise as per clause 4.A.7.
- 4.A.6 Rolling Performance Bank Guarantee (R-PBG)**
- 4.A.6.1 To ensure due performance of the contract, Rolling Performance Bank Guarantee (R-PBG) is to be obtained from the successful bidder after issue of LOA. R-PBG should be 3% of the LOA value (rounded off to the nearest higher Rs. 10) as specified in the bid documents. R-PBG may be furnished in the form of an account payee demand draft, fixed deposit receipt from a Scheduled Bank, bank guarantee issued/confirmed from any of the Scheduled Bank in India in the prescribed form, safeguarding the purchaser's interest in all respects.
- 4.A.6.2 R-PBG shall be furnished within 30 (thirty) days of issue of LOA and it should be valid for a period of three years initially and shall be renewed on annual basis. R-PBG shall remain valid for a period of 90 (ninety) days beyond the date of completion of all contractual obligations of the Bidder including warranty and AMC obligations.
- 4.A.6.3 Successful tenderer is required to furnish R-PBG (as per Form no. 1, Chapter-6 of Section-I), the same should be submitted within 30 days of issue of LOA 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. This R-PBG should be from a Scheduled Bank and should cover Warranty and AMC period as per tender conditions.
- The R-PBG will be forfeited and credited to the RailTel's Account in the event of a breach of contract by the contractor. It should be refunded to the contractor without interest, after he duly performs and completes the contract in all respects but not later than 60 (sixty) days of completion of all such obligations including the warranty and AMC under the contract.
- 4.A.6.4 The R-PBG will bear no interest.
- 4.A.6.5 **Verification of R-PBG** - A separate advice of the R-PBG will invariably be sent by the R-PBG issuing bank to the RailTel's Bank through SFMS and only after this the R-PBG 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 R-PBG issuing bank and request them to send advice of R-PBG through SFMS to the RailTel's Bank.

- 4.A.6.6 The onus is on the successful bidder to ensure submission of R-PBG for 36 months validity initially and annually afterwards as per clause 4.A.6.2 mentioned above and to ensure that R-PBG shall be renewed every time at least 30 days before the expiry of last R-PBG validity.

A live R-PBG is to be maintained at all times and in case of non-adherence, the last valid R-PBG will be forfeited and RailTel reserves the right to terminate the contract.

4.A.7 Taxes & Duties

The price quoted in the offer should be firm, fixed indicating the breakup and inclusive of all taxes & duties like import, custom, antidumping, CGST, SGST, IGST, UTGST etc. The Offer should be inclusive of packing, forwarding, freight upto destination, insurance charges.

- 4.A.7.1 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.7.2 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. The GST will be paid to the successful bidder only when it will be reflected on GST Portal otherwise Basic Invoice amount will be paid after necessary statutory deductions.
- 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 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.7.7 In regards to works contract, the tenderer should have registration no. of GST in respective state where work is to be executed and shall furnish GST registration certificate on award of LOA.
- 4.A.7.8 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.7.9 **Incase of imported equipment**

Anti-Dumping duty if applicable on the equipment proposed to be supplied by OEM/Tenderer as per extant instructions of Ministry of Commerce/Finance Government of India, has to be borne by the tenderer and shall be deducted from the amount payable to the bidder at the time of making payment to the firm, if this duty amount is paid to Custom Authority by RailTel.

4.A.8 **Service Level Agreement (SLA) and Penalties during AMC**

4.A.8.1 The purpose of this Service Level Agreement (SLAs) is to define the level of service to be provided by the successful bidder to RailTel for the AMC period. The successful bidder has to comply with all SLAs defined below to ensure adherence to project timelines, quality and availability of CCTVSytem. Non-compliance of SLAs will lead to penalties as defined in subsequent sections.

4.A.8.2 Penalties shall not be levied on the successful bidder in the following cases: -

- a) Non-compliance of SLAs has been solely due to reasons (acceptable to RailTel) beyond the control of the successful bidder and
- b) There's a Force Majeure event affecting the SLA which is beyond the control of the successful bidder.

4.A.8.3 **Definitions**

For the purposes of this SLA, the definitions and terms are specified in the contract along with the following terms shall have the meanings set forth below:

- **“Uptime”** shall mean the time period for the specified services / components with the specified technical service standards are available to the user department. Uptime, in percentage, of any component (Non-IT& IT) will be calculated as:
$$\text{Uptime} = \{1 - [(\text{Downtime}) / (\text{Total Time} - \text{Planned Downtime})]\} * 100$$
- **“Downtime/ Non-Availability”** shall mean the time period for which the specified services / components with specified technical and service standards are not available to the user department and excludes downtime owing to Force Majeure & Reasons beyond control of the bidder. For items being monitored/reported by EMS, downtime/non-availability will be reckoned from the time failure has been reported by EMS. For other item not being monitored/informed by EMS (to be provided by Rail-Tel), down time/non-availability will be reckoned from the time contractor or his representative has been informed by the means of Telephone/mobile, fax, email or any

other method at the address as specified by the contractor (whichever is earlier). The bidder shall specify the details of a) Telephone no. for calling, b) Fax no., c) Mobile no. for calling & SMS, d) e-mail id, e) postal address for correspondence. **Non-availability of back-up/stand-by system shall also be counted for down-time calculation.**

- **“Incident”** refers to any event / abnormalities in the functioning of the CCTV System specified as part of the Scope of Work of the Bidder that may lead to disruption in normal operations of the CCTV System.
- **“Helpdesk Support”** shall mean the L2 Support Engineer at Regional NOC which shall handle Fault reporting, Trouble Ticketing and related enquiries during this contract.
- **“Resolution Time”** shall mean the time taken (after the incident has been reported at the helpdesk or EMS), in resolving (diagnosing, troubleshooting and fixing) the incident by making the service/component available to the user department.

4.A.8.4 Planned Downtime

Any planned application / System downtime would not be included in the calculation of application / System availability. However, the Successful Bidder should take at least 10 days prior approval from RailTel in writing for the planned outage, which should not be for more than 30 minutes, would be in lean period (non-movement period) and limited to max. 4 outages in a year. The bidder would ensure that the activities under the planned downtime are started only after getting the approval from the authorized representative of RailTel. In case activities are carried out without approval, the time period shall be considered as downtime under SLA.

4.A.8.5 Measurement of SLA

The SLA metrics specifies performance parameters as baseline performance, lower performance and breach conditions. **Coach wise SLA calculations** will be done on monthly basis and penalties will be recovered on quarterly basis during AMC period. Payment to the successful bidder will be linked to the compliance with the SLA metrics.

For period pertaining to Pre-Implementation SLA- Please refer to Liquidated damages Clause at 4.A.11.

SLA Matrix for AMC period:

S N	SLA Parameter	Description/ Reporting	Target	Definition of Downtime	Monitoring Mechanism
1	Availability of Cameras & associated CCTV hardware and Software.	Reporting per coach wise (including CCTV infra at DC/DR & other locations required for monitoring coach CCTV infra)	Uptime- 98% (System functional at least 98% of time measured on monthly basis for a 24x7x365 time period)	Shall include the service disruptions caused due to reasons including but not limited to camera failures, server/workstation failures, VRU/ Mobile	Time of defective coach made available for Coach infra and automated EMS Reports for Data Centre Infra including other locations. In case EMS report

				NVR failures, software breakdowns, networking device failures, UPS failures, electricity circuit breakdown (excluding ACMains outage) or data network break down), Display, Video Management, Viewing and Recording System, Switches and UPS(24x7x365).	is not available for the incident, down time/non-availability will be reckoned from the time contractor or his representative has been informed by the means of Telephone/mobile, fax, email or any other method at the address as specified by the contractor (whichever is earlier)
2	Availability of Data-centre Infra (DC and DR) hardware and Software.	Reporting Server wise	Uptime- 99% (System functional at least 99% of time measured on monthly basis for a 24x7x365 time period)	Shall include failure of Hardware and Software of Server due to reasons including but not limited to Server failures, Software breakdowns, Switch failures (excluding ACMains outage) (24x7x365).	Automated EMS Reports. In case EMS report is not available for the incident, down time/non-availability will be reckoned from the time contractor or his representative has been informed by the means of Telephone/mobile, fax, email or any other method at the address as specified by the contractor (whichever is earlier)
3	PC WorkStation Unit	Same as above	Uptime- 98%(System functional at least 98 % of time measured on monthly basis for a 24x7x365 time period.)	Shall include the disruption in display of CCTV infra at system at the location of work station installation-caused due to reasons including but not limited to failure of display, workstation failures, networking device failures, UPS failures or data network break down.	Automated EMS Reports. In case EMS report is not available for the incident, down time/non-availability will be reckoned from the time contractor or his representative has been informed by the means of Telephone/mobile, fax, email or any other method at the address as specified by the contractor (whichever is earlier)

4	Availability Centralized help desk.	Two L2 Support engineer(for Hardware and Software) 24x7 in RailTel Regional NOC	Availability 100%	Non-availability	Attendance log/register mechanism to be maintained by bidder and shared with RailTel every month. The actual availability on ground-reported by RailTel officials will also be cross-checked and taken into consideration while finalizing SLA penalty.
5	Log and Response to issue raised	Response to an incident call will include sending a notification to the person raising the call, either through email or on Phone/SMS, acknowledging the call and informing him/her of the expected resolution time for the call. The contractor is expected to log and respond to 98% of all the incident calls registered within the stipulated time frame of max. 60mins.	98%(Log and response in max. 60 minutes of min. 98% of incident raised)	Response to calls raised in more than 60 mins or non-response	Automated reporting tool from helpdesk
6	Coaches having CCTV system installed under other packages of this Tender {Only fault related to Faulty Cameras (including	Coach wise – Based on number of coaches offered to the bidder for attending the faults at Coaching depot/shed or its nearest railway station/washing line.	95%	Time from which the coach is offered to the bidder till fault (as defined under SLA parameter) is rectified.	Downtime and Uptime to be measured automatically from EMS. For SLA calculation, time of coach offered for attending fault and uptime recorded in EMS will be considered. Time of Coach offered will be reckoned from the time

replace- ment) and general mainten- ance re- lated faults will be consi- dered} Note – For replace- ment, Camera will be provided by RailTel and defec- tive cam- era will be sent by RailTel under Cash on Delivery (COD courier) to the Con- tractor, who is re- sponsible for main- taining the defective coach (Same contractor will be re- sponsible for replac- ing defec- tive cam- eras to RailTel as per Clause no. 4.A.2.4.4).				contractor or his rep- resentative has been informed by the means of Tele- phone/mobile, fax, email or any other method at the ad- dress as specified by the contractor (whi- chever is earlier)
---	--	--	--	---

Note: Period for SLA calculation: Monthly

4.A.8.6 Penalty

Penalty table includes penalty that would be levied on the successful bidder on non-achievement of SLAs defined above. Slabs have been created for each SLA and penalty would be imposed on bidder as per the SLA achievement/non-achievement for the period under consideration. System downtime/Non availability will be calculated as per monitoring mechanism defined in SLA matrix.

- Annual Maintenance Charges shall be paid on quarterly basis at the end of the quarter, subject to the deduction for the down time mentioned below.
- SLAs will be monitored and reported through EMS on monthly basis to RailTel by the 5th working day of each month.
- Penalties shall be calculated and is to be deducted from the Annual Maintenance Charges on quarterly basis. Overall penalty in a quarter shall not exceed 15% of the due amount of the quarterly AMC work executed by the Bidder.

Penalty during AMC Period

SN	Penalty Description	
1	Availability of Cameras	Penalty to be charged on a quarterly basis of annual cost of AMC.
	Above or equal to 98%	No penalty
	Below 98% to more than or equal to 95%	5%
	Less than 95%	10%
2	Availability of Servers at DC & DR	Penalty to be charged on a quarterly basis of annual cost of AMC.
	Above or equal to 99%	No penalty
	Below 99% to more than or equal to 96%	5%
	Less than 96%	10%
3	Availability of PC Workstation units	Penalty to be charged on a quarterly basis
	Above or equal to 98%	No penalty
	Below 98% to more than or equal to 95%	5%
	Less than 95%	10%
4	Availability of L-2 support	Penalty to be charged on a quarterly basis
	Equal to 100%	No penalty
	Below 100% to more than or equal to 95%	5%
	Less than 95%	10%
5	Log and Response to issue raised	Penalty to be paid on a quarterly basis
	Above or equal to 98%	No penalty
	Below 98% to more than or equal to 95%	5%
	Less than 95%	10%
6	Coaches having CCTV system installed under other packages of this Tender	Penalty to be paid on a quarterly basis
	Above or equal to 95%	No penalty
	Below 95% to more than or equal to 90%	5%

SN	Penalty Description	
	Less than 90%	10%

In addition to the above penalty for breach of the SLA parameters, No payment for the month would be made for all Coaches under a Depot, where the down time observed for more than 20% of the installed cameras in all the Coaches under a Depot.

In case of frequent SLA breaches, RailTel reserve the right to forfeit the R-PBG submitted by the bidder.

The R-PBG submitted by the selected bidder after issue of LOA, shall remain valid during complete project duration including AMC Period plus three months. There is no need to take separate R-PBG for AMC.

4.A.9 Manpower Support

For CCTV work at Railway Coaches, bidder shall keep suitable no. of L1 Support engineer in Field (for List of Depots-Annexure-II, Chapter-7) and two L2 Support engineer i.e. one for Hardware and one for Software for 24x7 in RailTel Regional NOC during Maintenance Supervision, Warranty and Long term Maintenance (AMC) period. The Field engineer will visit the total installation sites once in every month or earlier if the situation so warrants with the provision that monthly/quarterly reports of the failures and health of the equipment is generated from the NMS and submitted to the Purchaser. Additional manpower, if considered necessary shall be provided by contractor to stabilize the network. The bidder shall arrange the suitable replacement in case the assigned support engineer goes on leave or is unavailable due to any other reason to ensure uninterrupted support services.

4.A.10 Insurance

4.A.10.1 The Contractor shall take out and keep in force a policy or policies of insurance against all liabilities of the Contractor or the Purchaser at common law or under any statute in respect of accidents to persons who shall be employed by the contractor in or around the site for the purpose of carrying out the works on the site. The Contractor shall also take out and keep in force a policy or policies of Insurance against all recognized risks to their offices and depots. Such insurance shall in all respects be to the approval of the Purchaser.

4.A.10.1.1 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 (RCIL). Insurance policy has to be kept valid by the contractor till issue of PAC by RailTel (RCIL).

4.A.10.2 The Contractor should also insure the stores brought to site, against risks in consequence of war and invasion, as required under the Emergency Risk (Goods) Insurance Act in force from time to time.

4.A.10.3 It may be noted that the beneficiary of the insurance policy should be RailTel(RCIL) or the policies should be pledged in favor of RailTel(RCIL). The contractor shall keep the policy/policies current till the equipment are installed and commissioned on the site. 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.11 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 bidder. RailTel will have the right to cancel the order, place order on alternative source besides levying the liquidated damages as above.

4.A.12 Transportation

4.A.12.1 The rates quoted should be CIP destination. The destination shall be defined Station/Coaches Depot/POP/designated place of RailTel/Railways in the proposed sections/zone which shall be indicated by RailTel's representative.

4.A.12.2 It shall be the responsibility of Bidder to transport the equipment to site for the Installation & Commissioning. Materials not installed / not to be installed at one location need to be shipped from that location to another location by the bidder as may be decided by RGM/Executive Director of the Region. All transportation cost to be borne by the bidder.

4.A.13 Statutory Deduction

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

4.A.14 Qualification Criteria

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 consortia of tenderers and Joint Ventures meeting the below defined Qualification criteria would also be considered for award of work.

In case bidder has submitted the CA certificate or statutory auditor certificate against eligibility clause, contact details of CA or statutory auditor along with UDIN No. shall be mandatorily mentioned.

4.A.14.1 Eligibility Criteria Requirements for Bidders:

SN	Basic Requirement	Eligibility Criteria Requirements	Supporting Document Required
1.	EMD	The responding bidder should have deposited EMD on IREPS Portal and RailTel's Bank account (as mentioned in BDS, Chapter-5).	Scanned copy of EMD submitted on IREPS portal and UTR number of Bank transfer to RailTel is to be submitted along with the bid.
2.	Legal Entity	The bidder should be a Company registered in India under the Companies Act (India) with their registered office in India should have been operating for the last three years. Note: - In case of Consortium/JV, requirement shall be met by the lead bidder.	Bidder (Lead member in case of Consortium/JV) – (i) Certificate of Incorporation / Registration (ii) Memorandum of Association (MoA)
3.	Financial Capability	The bidder should have received contractual payments (Sum of Package wise cumulative Financial Capability for quoted packages) as mentioned in BDS (Chapter-5, Section-I) in the last three financial years plus current financial year up to the date of inviting of tender. Note: i) In case of Consortium/JV, each member's relevant turnover (as defined in Clause 4.A.15 of Chapter-4A) combined together shall be considered against the above-mentioned financial capability criteria. ii) For Startups* (recognized by Department of Industrial policy and promotion, Ministry of Commerce and Industry) only 1/3 of minimum cumulative contract amount (Sum of Package wise Financial Capability for quoted packages) mentioned above.	Bidder should provide CA certificate for annual contractual turnover (in the last three financial years plus current financial year up to the date of opening of tender) duly supported by Audited Balance Sheets (for current year, the Statutory Auditor's certificate for turnover of current year up to the date of bid opening for which Balance Sheet may not be available). Contact details of CA/Statutory Auditor along with UDIN No. shall be mandatorily mentioned on copy of certified Balance sheet/Certificate.
4.	Technical Capability	The Bidder must have successfully completed or substantially completed any of the following during last 07 (seven) years, ending last day of month previous to the one in which tender is invited:	(i) Completion certificates from the User Organizations is required to be submitted In case of composite work purchase orders, bidder shall submit CA certificate certifying the actual

SN	Basic Requirement	Eligibility Criteria Requirements	Supporting Document Required
		Three similar works# each costing not less than the amount equal as mentioned in BDS (Chapter-5, Section-I), or Two similar works# each costing not less than the amount as mentioned in BDS (Chapter-5, Section-I), or One similar work# each costing not less than the amount as mentioned in BDS (Chapter-5, Section-I). 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 plus current year upto the date of opening of tender: Single order of similar work# for an amount as mentioned in BDS (Chapter-5, Section-I) OR Two orders of similar work# for an amount as mentioned in BDS (Chapter-5, Section-I) OR Three orders of similar work# for an amount as mentioned in BDS (Chapter-5, Section-I) Note: (a) In Case bidder has quoted for more than one package, than bidder is allowed to submit Completion/Substantial completion	amount pertaining to similar work definition as mentioned in the clause. (ii) Past Experience Form as per Form No.13 of Chapter-6 (Section-I). (The set of document(s) submitted should clearly certify eligibility criteria and should be verifiable from the user/customer)

SN	Basic Requirement	Eligibility Criteria Requirements	Supporting Document Required
		certificate of cumulative amount of Three/Two/One similar work for quoted packages (as mentioned in BDS, Chapter-5, Section-I) shall be considered for meeting the above mentioned criteria of similar work experience. (b) In case of Consortium/JV, only Lead bidder experience shall be considered against the above-mentioned criteria of similar work experience. Completed work means, work should be physically completed or substantially completed. In addition to project value for single work order, Annual Maintenance Contract (AMC) amount for the completed period as on date of opening will also be counted in the value of completed work. Substantial completion shall be based on 80 (eighty) per cent (value wise) or more works completed under the contract. For contracts under which the applicant participated as a joint venture member or sub-contractor, only the applicant's share, by value, shall be considered to meet this requirement. For arriving at cost of similar work, the value of work executed shall be brought to current costing level by enhancing the actual value of work at simple rate of seven percent per annum, calculated from the date of completion to the date of Bid opening. # Similar Work: Works entailing completion of Supply, Installation,	

SN	Basic Requirement	Eligibility Criteria Requirements	Supporting Document Required
		Testing and Commissioning of a project in the field of CCTV/VSS/Security Surveillance/IT/ICT/Telecom for any Government department or Public Sector Units or public listed companies (as per note below). 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.	
5.	Undertaking to be Submitted by the Bidder	A. The bidder (in case of consortium/JV, all members) should not have been black-listed currently by Central Govt./State Govt./CPSU in India or anywhere globally by Government for security reasons. B. The bidder shall ensure that the Intellectual Property Rights of Hardware and Source Code of Software supplied under this project must not reside in any Country that shares a Land Border with India.	Point-A, B of Form no. 8 (Chapter-6) - To be signed by the Bidder (in case of consortium/JV, all members on their respective letter heads).
6.	Bidder Type	A. The bidder should be OEM or a System Integrator authorized by OEMs for supply of licenses/commercial support, solution implementation and maintenance support under warranty/AMC/commercial support, for the following products:	(i) Point-A of Form no. 7 (Chapter-6) - MAF/Authorization Letter by OEM. (ii) Form no. 3 (Chapter-6) – Bidder as well as OEM undertaking for Long Term Maintenance Support.

SN	Basic Requirement	Eligibility Criteria Requirements	Supporting Document Required
		(i) Camera, (ii) VRU/M-NVR, (iii) VMS Software, (iv) Server for VMS & FRS (Database & Matching Server) (v) Command & Control Centre (Hardware + Software) (vi) FRS Software B. Hardware and Software supplied by OEM should not have any malicious code (Point-D of form no. 8).	(iii) Point-D of Form no. 8 (Chapter-6) – Bidder undertaking for no Malicious Code. NOTE: Bidders are allowed to submit eligibility documents from upto maximum three quoted OEMs of hardware/software and under clause no. 4.A.14.2.1 below, bidders will be allowed to offer alternate hardware/software from these three OEMs during POC stage, without any additional cost to RailTel. Please note that during supply, Bidder shall be allowed to supply SOR quantity for each item for each allotted package from ONLY one OEM as approved during POC.
7.	Financial Capability	As per clause no. 3 (b) of the PPP-MII Order dated 16.09.2020, only bidders offering minimum 20% of local content of supply portion of their offered bid (Class-I Local suppliers/bidders-minimum 50% LC and Class-II Local Suppliers/bidders- minimum 20% LC as per PPP-MII Order) are eligible to participate in this tender. Bid of bidders offering less than 20% local content of supply portion of their offered bid will be <u>SUMMARILY REJECTED</u>.	Form no. 9 (Chapter-6) - Certificate by statutory auditor or cost auditor of the company. Contact details of Statutory auditor or cost auditor along with UDIN No. shall be mandatorily mentioned.
8.	Bidder's Capacity	Bidder's available bid capacity shall be equal to or more than the total bid value of the quoted packages for this Tender (as mentioned in BDS Chapter-5). In case of Consortium, only Lead bidder's available bid capacity shall be considered against the	Bidder shall provide available Bid Capacity duly certified by CA as mentioned in Clause no. 4.A.14.1.2. In case if a bidder has participated as JV (each members) / Consortium(Lead member), the tenderer must furnish the required details as

SN	Basic Requirement	Eligibility Criteria Requirements	Supporting Document Required
		quoted packages. In case of JV, each members available bid capacity shall be considered against the quoted packages. In case, the available bid capacity is lesser than estimated cost of quoted packages, Bidder's offer shall not be considered even if Bidder's has been found eligible in other eligibility criteria/tender requirement.	mentioned in Clause no. 4.A.14.1.2 Note (b).

***: 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:

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. The value of final bill including PVC amount-if paid, or otherwise in case final bill is pending the contract cost in last approved variation statement plus PVC amount paid or cumulative amount paid up to last on-account bill including PVC amount and statutory deductions whichever is less, shall be considered as the completion cost of contract.
6. In case of newly formed partnership firm, the credentials of individual partners from previous propriety firm(s) or dissolved previous partnership firm(s) or split previous partnership firm(s), shall be considered only to the extent of their share in previous entity on the date of dissolution / split and their share in newly formed partnership firm. For example, a partner A had 30% share in previous entity and his share in present partnership firm is 20%. In the present tender under consideration, the credentials of partner A will be considered to the extent of 0.3×0.2 * value of the work done in the previous entity. For this purpose, the tenderer shall submit along with his bid all the relevant documents which include copy of previous partnership deed(s), dissolution deed(s) and proof of surrender of PAN No.(s) in case of dissolution of partnership firm(s) etc.
7. In case of existing partnership firm, if any one or more partners quit the partnership firm, the credentials of remaining partnership firm shall be re-worked out i.e., the quitting partner(s) shall take away his credentials to the extent of his share on the date of quitting the partnership firm (e.g. in a partnership firm of partners A, B & C having share 30%, 30% & 40% respectively and credentials of Rs 10 crore; in case partner C quits the firm, the credentials of this partnership firm shall remain as Rs 6 crore). For this purpose, the tenderer shall submit along with his bid all the relevant documents which include copy of previous partnership deed(s), dissolution deed(s) and proof of surrender of PAN No.(s) in case of dissolution of partnership firm(s) etc.
8. In case of existing partnership firm if any other partner(s) joins the firm, the credentials of partnership firm shall get enhanced to the extent of credentials of newly added partner(s) on the same principles as mentioned in item 6 above. For this purpose, the tenderer shall submit along with his bid all the relevant documents which include copy of previous partnership deeds, dissolution/splitting deeds and proof of surrender of PAN No.(s) in case of dissolution of partnership firm etc.
9. Any partner in a partnership firm cannot use or claim his credentials in any other firm without leaving the partnership firm i.e., In a partnership firm of A&B partners, A or B partner cannot use credentials of partnership firm of A&B partners in any other partnership firm or propriety firm without leaving partnership firm of A&B partners.
10. In case a partner in a partnership firm is replaced due to succession as per succession law, the proportion of credentials of the previous partner will be passed on to the successor.

11. If the percentage share among partners of a partnership firm is changed, but the partners remain the same, the credentials of the firm before such modification in the share will continue to be considered for the firm as it is without any change in their value. Further, in case a partner of partnership firm retires without taking away any credentials from the firm, the credentials of partnership firm shall remain the same as it is without any change in their value.
12. In a partnership firm “AB” of A&B partners, in case A also works as propriety firm “P” or partner in some other partnership firm “AX”, credentials of A in propriety firm “P” or in other partnership firm “AX” earned after the date of becoming a partner of the firm AB shall not be added in partnership firm AB.
13. In case a tenderer is LLP, the credentials of tenderer shall be worked out on above lines similar to a partnership firm.
14. In case company A is merged with company B, then company B would get the credentials of company A also.

4.A.14.1.1 Bidding for more than one packages

- a) In case the tenderer wants to quote for more than one packages, **the financial and technical criterion will have to be meet separately for eachpackage and cumulatively for the packages being quoted combined together as per eligibility criteria mentioned in BDS Chapter-5.**
- b) **In case a tenderer is bidding for multiple packages, the tenderer will be required to indicate their preference for each package for which the tenderer is submitting its bid. In case bidder fails to indicate the preferences against each package in their submission then the default preference shall be considered in following order of experience requirements for Technical and Financial eligibility criteria as under:**

Package	Default Preference for Packages
Package-1-NR (EMU)	6
Package-2-ER(EMU)	2
Package-3-WR(EMU)	1
Package-4-SR(EMU)	4
Package-5-NR (Premium)	3
Package-6 - ER(Premium)	5
Package-7-WR(Premium)	7
Package-8- SR(Premium)	8

- c) **Below is the example of showing technical capability qualification status of various packages against separate and cumulative experience.**

- d) **Case-I (Q-Qualified, NQ – Not Qualified)- One number of Single Work Experience of Rs. 80 Crores is submitted.**

Package	Requisite single Work Experience (in Cr)	Situation-1		Situation-2	
		Preference (Given by Bidder)	Qualifying Status	Preference (Given by Bidder)	Qualifying Status
Package-1-NR (EMU)	26.97	1	Q	2	Q
Package-6-ER (Premium)	37.30	2	Q	1	Q

- e) **Case-II–Two number of Work Experience of Rs. 50Crores and Rs 25 Cr is submitted:**

Package	Requisite single Work Experience (in Cr)	Situation-1		Situation-2	
		Preference (Given by Bidder)	Qualifying Status	Preference (Given by Bidder)	Qualifying Status
Package-1-NR (EMU)	26.97	1	Q	2	NQ
Package-6-ER (Premium)	37.30	2	NQ	1	Q

- f) **Case-III–Two number of Work Experience of Rs. 35Crores and Rs 35 Cr is submitted:**

Package	Requisite single Work Experience (in Cr)	Situation-1		Situation-2	
		Preference (Given by Bidder)	Qualifying Status	Preference (Given by Bidder)	Qualifying Status
Package-1-NR (EMU)	26.97	1	Q	2	Q
Package-6-ER (Premium)	37.30	2	NQ	1	NQ

- g) **Case-IV–Two number of Work Experience of Rs. 53 Crores and Rs 26 Cr is submitted:**

Package	Requisite	Requisite	Situation-1	Situation-2
---------	-----------	-----------	-------------	-------------

	single Work Ex- perience (in Cr)	two Work Experience (in Cr)	Prefer- ence (Given by Bidder)	Qualify- ing Status	Preference (Given by Bidder)	Qualifying Status
Package-1-NR (EMU)	26.97	17.98	1	Q(Single work: ₹26.97 Cr out of ₹ 53 Cr used as single work with remaining part of ₹ 26.03 Cr)	2	NQ (Two works: remaining part of ₹ 14.81 Cr of ₹ 53 Cr and ₹ 26 Cr)
Package-6-ER (Premium)	37.30	24.87	2	Q(Two works: remaining part of ₹ 26.03 Cr of ₹ 53 Cr and ₹ 26 Cr)	1	Q(Single work: ₹38.19 Cr out of ₹ 53 Cr used as single work with remaining part of ₹ 14.81 Cr)

h) Below is the example of showing financial capability qualification status of various packages against cumulative contract amount received in last three financial year plus current year.

i) Case-I Cumulative Turnover of Rs. 150 Crores:

Package	Requisite Amount of turn-over (in Cr)	Situation-1		Situation-2	
		Preference (Given by Bidder)	Qualifying Status	Preference (Given by Bidder)	Qualifying Status
Package-1-NR (EMU)	67.42	1	Q	2	NQ
Package-6-ER (Premium)	93.25	2	NQ	1	Q

j) Case-II Cumulative Turnover of Rs. 180 Crores

Package	Requisite Amount of turn-over (in Cr)	Situation-1		Situation-2	
		Preference (Given by Bidder)	Qualifying Status	Preference (Given by Bidder)	Qualifying Status
Package-1-NR (EMU)	67.42	1	Q	2	Q
Package-6-ER (Premium)	93.25	2	Q	1	Q

4.A.14.1.2 BIDDER'S AVAILABLE BID CAPACITY

- 4.A.14.1.2.1 The Bidder will be qualified only if its available bid capacity shall be equal to or more than the total bid value of the quoted packages for this Tender (as mentioned in BDS Chapter-5). The available bid capacity shall be calculated as under:

$$\text{Available Bid Capacity} = [A \times N \times 2] - 0.33 \times N \times B$$

Where,

- A = Maximum value of works executed and payment received in any one of the previous three financial years or the current financial year (up to date of inviting tender), taking into account the completed as well as works in progress.
- N = Number of years prescribed for completion of work for which bids have been invited as defined in clause no. 4.A.4 (I & II).
- B = Value of existing commitments and balance amount of ongoing works with the tenderer as on date one month prior to the tender closing date to be completed in next 'N' years.

Note:

- (a) The Tenderer(s) shall furnish the details of -
- (i) Maximum value of works executed and payment received in any one of the previous three financial years or the current financial year (up to date of inviting tender) for calculating A, and
 - (ii) Existing commitments and balance amount of ongoing works with tenderer as per the prescribed formulae for "**Available Bid Capacity**" for statement of all works in progress and also the works which are awarded to tenderer but yet not started up to the date of inviting of tender for calculating B. In case of no works in hand, a 'NIL' statement should be furnished.

The submitted details for (i) and (ii) above should be duly verified by Chartered Accountant. UDIN Number to be mandatorily mentioned.

- 4.A.14.1.2.2 In case of Consortium, above mentioned criteria shall be met by the Lead member only.

- 4.A.14.1.2.3 **In case if a bidder is JV**, the tenderer(s) must furnish the details of
- (i) Maximum value of works executed and payment received in any one of the previous three financial years or the current financial year (up to date of inviting tender) by each member of JV for calculating A, and
 - (ii) Existing commitments and balance amount of ongoing works with each member of JV either in individual capacity or as a member of other JVs as per the prescribed formulae for "**Available Bid Capacity**" for statement of all works in progress and also the works which are awarded to each member of JV either in individual capacity or as a member of other JV but yet not started up to the date of inviting of tender for calculating B. In case of no works in hand, a 'NIL' statement should be furnished.

The submitted details for (i) and (ii) above should be duly verified by Chartered Accountant. UDIN Number to be mandatorily mentioned.

- (iii) Value of a completed work/Work in progress/Work awarded but yet not started for a Member in an earlier JV shall be reckoned only to the extent of the concerned member's share in that JV for the purpose of satisfying his/her compliance to the above-mentioned bid capacity in the tender under consideration.
- (iv) The arithmetic sum of individual “bid capacity” of all the members shall be taken as JV’s “Bid Capacity”.

- 4.A.14.1.2.4 In case, the tenderer/s failed to submit the above statement along with offer, their/his offer shall be considered as incomplete and will be **REJECTED SUMMARILY**.
- 4.A.14.1.2.5 The available bid capacity of tenderer shall be assessed based on the details submitted by the tenderer. **In case, the available bid capacity is lesser than estimated cost of quoted packages, his offer shall not be considered even if Bidder’s has been found eligible in other eligibility criteria/tender requirement.**

4.A.14.2 Eligibility Criteria Requirements for OEM’s:

OEMs of Camera, VRU/M-NVR (including FRS software), VMS Software, Server for VMS & FRS (Database & Matching Server) and Command & Control Centre (Hardware + Software) whose products are proposed to be used in this CCTV surveillance system deployment should meet following criteria–

SN	Eligibility Criteria Requirements	Supporting Document Required
1.	The Equipment offered by the OEM or equipment/software of the same series/family from the same OEM should have been satisfactorily working in Government/PSUs/Telecom Service Providers/ Public Listed Company for at least 12 months as on date of opening of tender, in India or Abroad. 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 or any global 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.	Satisfactory Working certificate from End User clearly mentioning the make & model number of the offered Hardware. An undertaking by the OEM has to be submitted in support, in case issued satisfactory working certificate is the immediate predecessor of same series/family of the offered Hardware.
2.	OEM should have supplied the hardware/software offered or hard-	OEM should submit self-certificate with proper contact detail of clients along with PO reference

SN	Eligibility Criteria Requirements	Supporting Document Required
	ware/software of the same series/family of minimum value{as mentioned in BDS (Chapter-5, Section-I)} during last preceding 3 financial years(i.e., current year and three previous financial years) as on opening date of bid to Government/PSUs/Telecom Service Providers/Public Listed Company in India or Abroad. 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 or any global 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. Note: (a) 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. (b) In Case OEM has offered its Hardware/Software for more than one package, than OEM is allowed to submit PO reference and amount supplied certificate of cumulative amount for quoted packages (as mentioned in BDS, Chapter-5, Section-I) for meeting the above mentioned criteria.	and amount supplied (Details of purchaser Organization - Firm Name, Firm Address, Name of Contact person, Designation, Telephone Number, Fax, Official mail id etc.). The self-certificate by OEM shall mention that the supplied equipments/software are of same series/family or its immediate predecessor. RailTel reserves the right to verify PO reference and amount supplied from Purchaser Organization. POs issued in the name of System Integrator are also acceptable. For required amount{as mentioned in BDS (Chapter-5, Section-I)}, multiple POs in favour of OEM's System Integrators are also acceptable. For OEMs of VRU/M-NVR, multiple POs of servers of same series/family of offered VRU and multiple POs of mobile NVR of same series/family of offered mobile NVR shall be considered.
3.	Undertaking by OEM on their respective letter Heads - 1. OEM should have proven facilities for Engineering, manufac-	Point- B, C, D & E of Form no. 7 (Chapter-6).

SN	Eligibility Criteria Requirements	Supporting Document Required
	ture, assembly, integration, testing and basic facilities with respect to space, Engineering, Personnel, Test equipment, Manufacture, Training, Logistic Supports for at least past three years in the country from where the proposed equipment are planned to be supplied. In case OEM is located outside India, it should have training, repair and service center facilities in India also (Point-B of form no. 7). 2. OEM should not have been black-listed currently by Central Govt./State Govt./CPSU in India or anywhere globally by Government for security reasons (Point-C of form no. 7). 3. Hardware and Software supplied by OEM should not have any malicious code (Point-D of form no. 7). 4. The OEM shall ensure that Intellectual Property Rights of Hardware (including MAC address) and Source Code and 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: OEMs from country that shares a Land Border with India are allowed to offer their products provided OEM's is registered with DPIIT as per Clause 4.A.18.6.(Point-E of form no. 7)	

*: 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.

4.A.14.2.1 **Change in OEM –**

Bidders are allowed to quote maximum upto three OEMs each for Camera, VRU/M-NVR, VMS Software, FRS Software, Server for VMS and Database & Matching Server for FRS, along with original bid giving documents of each OEM (as mentioned in Clause 4.A.14 of Tender). Bidders will be allowed to change OEMs for above mentioned products from three quoted OEMs only as per conditions mentioned below. For other supply items, Bidders shall quote only one OEM.

However, during implementation stage, bidder shall be allowed to supply SOR quantity for each item in each package from only one OEM as approved during POC.

OEMs can be changed under following conditions –

- a. **During POC Stage** - As per Clause no. 4.A.47.5, Bidders will be required to demonstrate all functional parameters successfully in maximum three attempts during POC. In case of failure to demonstrate any functional parameter(s) during POC, bidder is allowed to change OEM(s) of its offered solution for remaining 02 attempts from three quoted OEMs for hardware/software as mentioned above, without any additional cost to RailTel. In case of change in OEM(s), all functional parameters will be tested again by RailTel. However, only three attempts will be given to the bidder (including failed attempts) and in case of failure to demonstrate all functional parameters successfully in all the three attempts, Bidder's POC will be treated as unsuccessful.
- b. **During Technical Evaluation Stage** - Technical and Financial eligibility of Bidders and OEMs of their offered solution will be carried out after completion of POC phase. In case any OEM of offered solution fails to meet any of the prescribed eligibility criteria during technical & financial evaluation of OEM or its offered FRS not accepted by Railways, bidder will be allowed to change its OEM(s) (from quoted OEMs) by matching any one of the offered solutions of other bidders, who have successfully demonstrated all functional parameters during POC, as per details given below:
 - i. **For Part-A:** only Camera, VRU/M-NVR & VMS Software and
 - ii. **For Part-B:** only FRS Software.

Bidder shall match EITHER combination of Camera, VRU/M-NVR & VMS Software OR FRS Software OR both, as applicable from alternate quoted OEMs. For other hardware/software, bidder is required to offer alternate hardware/software, as per the applicable RDSO specification or tender specifications. In case hardware/Software offered by alternate quoted OEM, for Camera/VRU/M-NVR/VMS Software/FRS Software, has not been successfully tested for other bidders during POC, Bidder will be required to conduct POC of his solution with alternate quoted hardware/software as per clause no. 4.A.47.

Note for (a) & (b) - In case of change in OEM(s), it will be the responsibility of the bidder to ensure that the changed OEM(s) is meeting all eligibility conditions prescribed in this Tender document.

- c. **After issue of LOA** - In case of failure in arranging interoperability Certificate or Security Verification certificate for offered Hardware/Software or delay in supply of

offered Hardware/Software at the time of supply (to be certified by the concerned OEM of offered hardware/software), bidder will arrange alternate Hardware/Software as per RDSO specification no. RDSO/SPN/TC/106/2022 version 2.1 or latest without any additional cost to RailTel. However, for alternate Hardware/Software, bidder shall match either Part-A or Part-B or both of the successful POC solutions from his quoted OEMs, as applicable {defined above in (b)} and OEM of alternate Hardware & Software shall meet eligibility criteria mentioned in Clause no. 4.A.14 for the concerned package. **If OEM of alternate Hardware/Software has offered lower rates in other packages of this Tender, than such lower rates will also be applicable on the alternate Hardware and Software. However, bidder will not be allowed to increase the price due to change in OEM.**

4.A.14.3 Eligibility Credentials and Verification

- 4.A.14.3.1 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.
- 4.A.14.3.2 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.
- 4.A.14.3.3 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 alongwith 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.

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.

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.

- 4.A.14.3.4 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.

- 4.A.14.3.5 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.

4.A.14.4 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. To ask the clarification and supporting documents in respect to submitted eligibility documents.

4.A.15 Consortium Bids

- 4.A.15.1 In view of nature of work, it is anticipated that some of the intending tenderers will pool their resources and experience to form consortia. Consortium bids are permitted with each consortium of tenderers allowed to have at maximum three members, the consortia of tenderers must clearly define the lead bidder of the consortia along with its roles and responsibilities.
- 4.A.15.2 The Lead bidder should meet the eligibility criteria. In their own interest the tenderers, who form such consortia, are advised to investigate capabilities, availability of resources, experienced personnel, financial soundness, past experience and concurrent engagements of Constituting partners.
- 4.A.15.3 Consortia of tenderers, if any, must clearly define role/scope of store/work of each partner/member. Further the legal agreement for a consortium must accompany the bid and should clearly define the leader of such a consortium who will be the contractor and will be responsible for timely completion of work as also during execution of work, if awarded, coordinate with Purchaser on behalf of the consortium, receive payments for the works executed and be liable for due performance of the contract in all respect.
- 4.A.15.4 Qualification documents, details etc. must however, be provided by Lead member firm complete in all respects strictly in requisite proforma.
- 4.A.15.5 A consortium formed will not be subject to alteration with regard to change in constituting firms and/or reorientation of roles. Any changes, if proposed by consortium to take advantage of certain developments during evaluation stage will render the bid li-

able to be **REJECTED**. As all details are required to be furnished along with the bids and will be critically examined during evaluation of bids, it is imperative that such details should have been thoroughly examined as a safeguard against a possible disqualification of bids on these grounds.

- 4.A.15.6 All partners of the consortium shall be jointly and severally liable to RailTel for the execution of the entire contract in accordance with its terms.
- 4.A.15.7 Deleted.
- 4.A.15.8 For evaluation purposes, Exchange rate applicable on the date of technical bid opening (T.T. selling Exchange rate of State Bank of India applicable on the date technical bid opening) will be considered.
- 4.A.15.9 Release of payments in foreign exchange for imported items to foreign companies as A consortium partner, shall be on request of lead bidder along with bill.
- 4.A.15.10 Consortium shall not have more than three members and each consortium member shall have minimum 20% contribution in the work. A Consortium must submit a Power of Attorney by the other member of the Consortium in favor of the Lead Member. This is also to be enshrined in Memorandum of Agreement signed by the Consortium Members and submitted along with the bid. Members of consortium should sign every sheet of price bid as a token of acceptance of all quoted prices by members, failing which the offer will stand summarily **REJECTED**.
- 4.A.15.11 An individual bidder or a member of Consortium cannot be a member of another Consortium or a JV partner and participate in this tender.
- 4.A.15.12 Firms should submit the affidavit (As per Form no. 10 of Chapter-6, Section-I) & Consortium Agreement (As per Form no. 12 of Chapter-6, Section-I) along with the bid/offer.
- 4.A.15.13 Each consortium member shall make equal contribution towards the total R-PBG amount to be submitted along with acceptance of LOA.
- 4.A.15.14 Conditions for Participation of Joint Venture (JV) Firms**
- 4.A.15.14.1 Separate identity/name shall be given to the Joint Venture.
- 4.A.15.14.2 Number of members in a JV shall not be more than five. One of the members of the JV shall be its Lead Member who shall have a majority (at least 51%) share of interest in the JV. The other members shall have a share of not less than 10% each in case of JV with more than three members. In case of JV with foreign member(s), the Lead Member has to be an Indian firm/company with a minimum share of 51%.
- 4.A.15.14.3 A member of JV shall not be permitted to participate either in individual capacity or as a member of another JV in the same tender.
- 4.A.15.14.4 The tender form shall be purchased and submitted only in the name of the JV and not in the name of any constituent member. The tender form can however be submitted

by JV or any of its constituent member or any person authorized by JV through Power of Attorney to submit tender.

- 4.A.15.14.5 Earnest Money Deposit (EMD) shall be submitted by JV or authorized person of JV as mentioned in tender document
- 4.A.15.14.6 A copy of Memorandum of Understanding (MoU) duly executed by the JV members on a stamp paper, shall be submitted by the JV along with the tender. The complete details of the members of the JV, their share and responsibility in the JV etc. particularly with reference to financial, technical and other obligations shall be furnished in the MoU(Form No. 11 of Chapter-6).
- 4.A.15.14.7 Once the tender is submitted, the MoU shall not be modified / altered / terminated during the validity of the tender. In case the tenderer fails to observe/comply with this stipulation, the full Earnest Money Deposit (EMD) shall be liable to be forfeited.
- 4.A.15.14.8 Approval for change of constitution of JV shall be at the sole discretion of the Rail-Tel. The constitution of the JV shall not be allowed to be modified after submission of the tender bid by the JV, except when modification becomes inevitable due to succession laws etc., provided further that there is no change in qualification of minimum eligibility criteria by JV after change of composition. However, the Lead Member shall continue to be the Lead Member of the JV. Failure to observe this requirement would render the offer invalid.
- 4.A.15.14.8 Similarly, after the contract is awarded, the constitution of JV shall not be allowed to be altered during the currency of contract except when modification become inevitable due to succession laws etc. and minimum eligibility criteria should not get vitiated. Failure to observe this stipulation shall be deemed to be breach of contract with all consequential penal action as per contract conditions.
- 4.A.15.14.10 On award of contract to a JV, a single Performance Guarantee shall be submitted by the JV as per tender conditions. All the Guarantees like Performance Guarantee, Bank Guarantee for Mobilization Advance, Machinery Advance etc. shall be accepted only in the name of the JV and no splitting of guarantees amongst the members of the JV shall be permitted.
- 4.A.15.14.11 On issue of LOA (Letter of Acceptance), the JV entity to whom the work has been awarded, with the same shareholding pattern as was declared in the MOU/JV Agreement submitted along with the tender, shall be got registered before the Registrar of the Companies under 'The Companies Act -2013' (in case of Company) or before the Registrar/Sub-Registrar under the 'The Indian Partnership Act, 1932' (in case of Partnership Firm) or under 'The LLP Act 2008' (in case of LLP). A separate PAN shall be obtained for this entity. The documents pertaining to this entity including its PAN shall be furnished to the RailTel before signing the contract agreement for the contract. In case the tenderer fails to observe/comply with this stipulation within 60 days of issue of LOA, contract is liable to be terminated. In case contract is terminated, RailTel shall be entitled to forfeit the full amount of the Earnest Money Deposit and other dues payable to the Contractor under this contract. The entity so registered, in the registered documents, shall have, inter-alia, following Clauses:

- a) Joint And Several Liability - Members of the entity to which the contract is awarded, shall be jointly and severally liable to the RailTel for execution of the project in accordance with General and Special Conditions of Contract. The members of the entity shall also be liable jointly and severally for the loss, damages caused to the RailTel during the course of execution of the contract or due to non-execution of the contract or part thereof.
 - b) Duration of the Registered Entity - It shall be valid during the entire currency of the contract including the period of extension, if any and the maintenance period after the work is completed.
 - c) Governing Laws - The Registered Entity shall in all respect be governed by and interpreted in accordance with Indian Laws.
- 4.A.15.14.12 Authorized Member - Joint Venture members in the JV MoU shall authorize one of the members on behalf of the Joint Venture to deal with the tender, sign the agreement or enter into contract in respect of the said tender, to receive payment, to witness joint measurement of work done, to sign measurement books and similar such action in respect of the said tender/contract. All notices/correspondences with respect to the contract would be sent only to this authorized member of the JV.
- 4.A.15.14.13 No member of the Joint Venture shall have the right to assign or transfer the interest right or liability in the contract without the written consent of the other members and that of the RailTel in respect of the said tender/contract.
- 4.A.15.14.14 Documents to be enclosed by the JV along with the tender:
- a) In case one or more of the members of the JV is/are partnership firm(s), following documents shall be submitted:
 - i) A notarized copy of the Partnership Deed,
 - ii) A copy of consent of all the partners or individual authorized by partnership firm, to enter into the Joint Venture Agreement on a stamp paper,
 - iii) A notarized or registered copy of Power of Attorney in favour of the individual to sign the MOU/JV Agreement on behalf of the partnership firm and create liability against the firm.
 - b) In case one or more members is/are HUF, the following documents shall be enclosed:
 - i) A copy of notarized affidavit on Stamp Paper declaring that he who is signing the affidavit on behalf of HUF is in the position of “Karta” of Hindu Undivided Family (HUF) and he has the authority, power and consent given by other members to act on behalf of HUF.
 - c) In case one or more members of the JV is/are companies, the following documents shall be submitted:
 - i) A copy of resolutions of the Directors of the Company, permitting the company to enter into a JV agreement,

- ii) The copies of MOA (Memorandum of Association) / AOA (Articles of Association) of the company
- iii) A copy of Certificate of Incorporation
- iv) A copy of Authorization/copy of Power of Attorney issued by the Company (backed by the resolution of Board of Directors) in favour of the individual to sign the tender, sign MOU/JV Agreement on behalf of the company and create liability against the company
- d) All the Members of JV shall certify that they are not blacklisted or debarred by RailTel or Railways or any other Ministry / Department of the Govt. of India from participation in tenders/contract on the date of opening of bids either in their individual capacity or as a member of the JV in which they were/are members.
- e) All other documents in terms of explanatory notes in clause 4.A.15.14 above.
- f) Credentials & Qualifying Criteria: Technical, financial eligibility and Bid capacity of the JV shall be adjudged based on satisfactory fulfillment of the following criteria:

4.A.15.14.15 Technical Eligibility Criteria ('a' or 'b' mentioned hereunder):

- (a) For Contracts without composite components

The technical eligibility for the contract as per para 4.A.14.1 above, shall be satisfied by either the 'JV in its own name & style' or 'any member having min 26% share'. Each other member of JV shall have technical capacity of minimum 10% of the cost of work i.e., each JV member must have satisfactorily completed during the last 07 (seven) years, ending last day of month previous to the one in which tender is invited, one similar single work for a minimum of 10% of advertised value of the tender.

- (b) For Contracts with composite components

- (i) The technical eligibility for major component of contract as per para 4.A.14.1 above, shall be satisfied by either the 'JV in its own name & style' or 'any member of JV having min 26% share' and technical eligibility for other components of contract as per para 5.4.1 above, shall be satisfied by either the 'JV in its own name & style' or 'any member of the JV'. Each other member of JV shall have technical capacity of minimum 10% of the cost of any component of contract. i.e., each JV member must have satisfactorily completed during the last 07 (seven) years, ending last day of month previous to the one in which tender is invited, one similar single work for a minimum of 10% of cost of any component of contract.

(Note for Clause 4.A.15.14.15:

- (a) The Major component of the contract for this purpose shall be the component of contract having highest value. In cases where value of two or more component of contract is same, any one work can be classified as Major component of contract.

- (b) Value of a completed contract done by a Member in an earlier JV shall be reckoned only to the extent of the concerned member's share in that JV for the purpose of satisfying his/her compliance to the above mentioned technical eligibility criteria in the tender under consideration).

4.A.15.14.16 Financial Eligibility Criteria

The JV shall satisfy the requirement of “Financial Eligibility” mentioned at para 4.A.14.1 above. The “financial capacity” of the lead partner of JV shall not be less than 51% of the financial eligibility criteria mentioned at para 4.A.15.14.2 above.

The arithmetic sum of individual “financial capacity” of all the members shall be taken as JV’s “financial capacity” to satisfy this requirement.

(Note: Contractual payment received by a Member in an earlier JV shall be reckoned only to the extent of the concerned member’s share in that JV for the purpose of satisfying compliance of the above mentioned financial eligibility criteria in the tender under consideration).

4.A.15.14.17 Participation of Partnership Firms in contracts:

- i) The Partnership Firms participating in the tender should be legally valid under the provisions of the Indian Partnership Act.
- i) The partnership firm should have been in existence or should have been formed prior to submission of tender. Partnership firm should have either been registered with the Registrar or the partnership deed should have been notarized prior to date of tender opening as per the Indian Partnership Act.
- ii) Separate identity / name should be given to the partnership firm. The partnership firm should have PAN / TAN number in its own name and PAN / TAN number in the name of any of the constituent partners shall not be considered. The valid constituents of the firm shall be called partners.
- iii) Once the tender has been submitted, the constitution of the firm shall not normally be allowed to be modified / altered / terminated during the validity of the tender as well as the currency of the contract except when modification becomes inevitable due to succession laws etc., in which case prior permission should be taken from RailTel and in any case the minimum eligibility criteria should not get vitiated. The re-constitution of firm in such cases should be followed by a notary certified Supplementary Deed. The approval for change of constitution of the firm, in any case, shall be at the sole discretion of the RailTel and the tenderer shall have no claims whatsoever. Any change in the constitution of Partnership firm after opening of tender shall be with the consent of all partners and with the signatures of all partners as that in the Partnership Deed. Failure to observe this requirement shall render the offer invalid and full EMD shall be forfeited.

If any Partner/s withdraws from the firm after opening of the tender and before the award of the contract, the offer shall be **REJECTED** and EMD of the tenderer will be forfeited. If any new partner joins the firm after opening of tender but prior to

award of contract, his / her credentials shall not qualify for consideration towards eligibility criteria either individually or in proportion to his share in the previous firm. In case the tenderer fails to inform RailTel beforehand about any such changes / modification in the constitution which is inevitable due to succession laws etc. and the contract is awarded to such firm, then it will be considered a breach of the contract conditions liable for determination of the contract under Clause 62 of General Conditions of Contract of Indian Railways.

- iv) A partner of the firm shall not be permitted to participate either in his individual capacity or as a partner of any other firm in the same tender.
- v) The tender form shall be submitted only in the name of partnership firm. The EMD shall be deposited by partnership firm through e-payment gateway or as mentioned in tender document. The EMD submitted in the name of any individual partner or in the name of authorized partner(s) shall not be considered.
- vi) One or more of the partners of the firm or any other person (s) shall be designated as the authorized person (s) on behalf of the firm, who will be authorized by all the partners to act on behalf of the firm through a “Power of Attorney”, specially authorizing him / them to submit & sign the tender, sign the agreement, receive payment, witness measurements, sign measurement books, make correspondences, compromise / settle / relinquish any claim (s) preferred by the firm, sign “No Claim Certificate”, refer all or any dispute to arbitration and to take similar such action in respect of the said tender / contract. Such “Power of Attorney” shall be notarized / registered and submitted along with the tender.
- vii) On issue of Letter of Acceptance (LOA) to the partnership firm, all the guarantees like Performance Guarantee, Guarantee for various Advances to the Contractor shall be submitted only in the name of the partnership firm and no splitting of guarantees among the partners shall be acceptable.
- viii) On issue of Letter of Acceptance (LOA), contract agreement with partnership firm shall be executed in the name of the firm only and not in the name of any individual partner.
- ix) In case the Letter of Acceptance (LOA) is issued to a partnership firm, the following undertakings shall be furnished by all the partners through a notarized affidavit, before signing of contract agreement.

Joint and several liabilities:

The partners of the firm to which the Letter of Acceptance (LOA) is issued, shall be jointly and severally liable to the RailTel for execution of the contract in accordance with General and Special Conditions of the Contract. The partners shall also be liable jointly and severally for the loss, damages caused to the RailTel during the course of execution of the contract or due to non-execution of the contract or part thereof.

Duration of the partnership deed and partnership firm agreement:

The partnership deed/partnership firm agreement shall normally not be modified/altered/ terminated during the currency of contract and the maintenance period

after the work is completed as contemplated in the conditions of the contract. Any change carried out by partners in the constitution of the firm without permission of RailTel, shall constitute a breach of the contract, liable for determination of the contract under Clause 62 of the General Conditions of Contract.

Governing laws: The partnership firm agreement shall in all respect be governed by and interpreted in accordance with the Indian laws.

No partner of the firm shall have the right to assign or transfer the interest right or liability in the contract without the written consent of the other partner/s and that of the RailTel.

- x) The tenderer shall clearly specify that the tender is submitted on behalf of a partnership firm. The following documents shall be submitted by the partnership firm, with the tender:

A notarized copy of partnership deed: A notarized or registered copy of Power of Attorney in favor of the individual to tender for the work, sign the agreement etc. and create liability against the firm.

- (i) An undertaking by all partners of the partnership firm that they are not blacklisted or debarred by RailTel or Railways or any other Ministry / Department of the Govt. of India from participation in tenders / contracts as on the date of opening of bids, either in their individual capacity or in any firm in which they were / are partners. Concealment / wrong information in regard to above shall make the contract liable for termination under Clause 62 of the General Conditions of Contract.
- (ii) All other documents in terms of explanatory notes in clause 4.A.14.1 above.
- xi) Evaluation of eligibility of a partnership firm:

Technical and financial eligibility of the firm shall be adjudged based on satisfactory fulfillment of the eligibility criteria laid down in Clause 4.A.14.1 above.

4.A.15.15 **Foreign Exchange & Custom Clearance**

Deleted

4.A.16 **System Performance Guarantee**

- 4.A.16.1. The Bidder 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 further strengthen the system to realize the end objectives with full compliance of the specifications contained in these documents and inform RailTel. No additional payment will be made to the contractor for supply of any additional goods and service required in this regard.

- 4.A.16.2. This certificate in the Performa given in Chapter-6(Section-I) Form No. 2, shall accompany the final offer. Absence of this certificate which will form part of the agreement shall **DISQUALIFY** the bidder automatically.
- 4.A.16.3 The OEM has also to give unqualified and unconditional guarantee that when the Hardware/Software supplied by him is installed and commissioned at site, it shall achieve the desired objective mentioned in the Tender document. The certificate in the Performa given in Chapter-6(Section-I) Form No. 2.
- 4.A.17 Evaluation of Offer**
- 4.A.17.1 During evaluation of offer, if required RailTel may ask clarification from the bidder.
- 4.A.17.2 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.17.3 The bidder should make available the offered products, if desired during technical evaluation of offered equipment for testing and benchmarking at any testing facility approved by RailTel.
- 4.A.17.4 The bidders should quote for all items & the offer will be evaluated in totality (read with clause 4.A.3.2). The bidders should indicate brand name, type/model number of the products offered. Optional items (if any) will not be considered for evaluation of offers. The equipment and software should be supplied as per Technical Specifications given in Chapter-8.
- 4.A.17.5 Inter se position of the offers will be determined on total cost which will include basic rate, custom duty, CGST, SGST, IGST, UTGST, freight, insurance and any other charge or cost quoted by the tenderer, including GST payable, on reverse charge by RailTel.
- 4.A.17.6 POC will be conducted for all the eligible bidders who have submitted their bids on IREPS portal in two parts: **POC Part-A (General) and POC Part-B (FRS)**. Acceptance of **POC Part-B (FRS) report will subject to the acceptance of Railways**. Technical bids of the bidders, who have successfully demonstrated all the parameters of the POC, will only be evaluated. **However, in case rejection of POC Part-B (FRS) report for bidder(s) by Railways, RailTel reserves the right to consider bids of the bidder(s), who have successfully demonstrated all parameters of POC Part-A (General) and not to procure FRS related hardware and Software offered under package 1 to 8 by Bidder(s).**
- 4.A.17.6 After opening of Price Bid, Reverse Auction (RA) will be applicable as per clause 4.B.9.1.1 of tender document.
- 4.A.17.7 Eligible Bidders who have fulfilled the eligibility criteria as detailed in Clause 4.A.45 and are within 20% of L1 price, will be added to the list of bidders eligible for eRA.
- 4.A.17.8 Further after eRA, if reduced price of PMA bidder(s) is within 20% of revised L1 price received after eRA, PMA bidder(s) will be considered for award of work under PMA in terms of Clause 4.A.45 of tender document.

4.A.17.9 Purchase order will be issued Region Wise and Package Wise. Bidder has to submit the separate PBG for each packages.

4.A.17.10 All Contract management including payment will be done by the respective regions.

4.A.18 Security Considerations & Security Agreement

4.A.18.1 Deleted

4.A.18.2 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.

4.A.18.3 To ensure security and network vulnerabilities & breaches and to discourage false undertaking from OEMs, Security auditing and testing shall be carried out from STQC (Ministry of Electronics & Information Technology) or any other Government Agency from the list of CERT-In empanelled Information Security Auditing Organization agencies as mentioned in Clause 4.A.47 of Chapter-4A (Section-I) and Clause 8.3, Chapter-8 (Section-I), Note, Point-iv.

4.A.18.4 In case any security breach is found in the system at any stage, the contract shall be terminated and R-PBG shall be forfeited and the banning/blacklisting of the bidder and the concerned OEM will be initiated.

4.A.18.5 Deleted.

4.A.18.6 **Additional guidelines issued by Ministry of Finance through OM no. 6/18/2019-PPD dated 23.07.2020.**

4.A.18.6.1 Relevant guidelines have been given below and in case of contradiction with any condition of this tender document, guidelines issued by Ministry of Finance vide above mentioned OM (including any addendum/corrigendum issued by MoF and any other relevant guidelines pertaining to the subject issued by GoI) shall prevail:

1. Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority.
2. “Bidder” (including the term ‘tendered’, ‘consultant’, ‘service provider’ or ‘OEM’ in certain contexts) means any person or firm or company, including any member of a consortium, 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.
3. “Bidder from a country which shares a land border with India” for the purpose of this Order means:
 - i) An entity incorporated, established or registered in such a country; or
 - ii) A subsidiary of an entity incorporated, established or registered in such a country; or
 - iii) An entity substantially controlled through entities incorporated, established or registered in such a country; or
 - iv) An entity whose beneficial owner is situated in such a country; or

- v) An Indian (or other) agent of such an entity; or
 - vi) A natural person who is a citizen of such a country; or
 - vii) A consortium or joint venture where any member of the consortium or joint venture falls under any of the above.
4. Subcontractor for the purpose of this order means:
- i) An entity engaged by the bidder for execution of work or part of work; or
 - ii) An entity engaged by any Subcontractor for execution of work or part of work; or
 - iii) An entity engaged by OEM for supply of part of material used in manufacturing of supplied item under CCTVProject.
5. The beneficial owner for the purpose of (iii) above will be as under:
- I. 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-**
- “Controlling ownership interest” means ownership of or entitlement to more than twenty-five percent of shares or capital or profits of the company;
- “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;
- II. In case of a partnership firm, the beneficial owner is the natural persons(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:
- III. 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;
- IV. 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;
- V. 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 Competent Authority i.e., DPIIT.
- 4.A.18.6.2 Undertaking regarding such clause need to submit in the format given below:
- i) Certificate to be provided by the bidder as mentioned in Form no. 8 of Chapter-6 on their letter heads.
- ii) Certificate to be provided by the OEMs as mentioned in Form no. 7 of Chapter-6 on their letter heads.
- 4.A.18.6.3 The said instructions will not apply to the bidders from those countries (even if sharing a land border with India) to which the Government of India has extended lines of credit or in which the Govt. Of India is engaged in development projects. Updated list of countries to which line of credit have been extended or in which development projects are undertaken are given in the website of the Ministry of external affairs.
- 4.A.18.6.4 Any discrepancy between above mentioned clauses and guidelines issued from Public Procurement Division of Department of Expenditure under Ministry of Finance vide letter no. F. No. 6/18/2019-PPD dt. 23.07.2020, later will be applicable.
- 4.A.19 Purchaser's Right to Vary Quantities**
- The purchaser shall be at liberty to enhance or reduce the quantity mentioned in the LOA as indicated in Bid Data Sheet (BDS) Chapter-5(Section-I) 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.
- 4.A.20 Purchaser's Right to accept any offer / Bid and to REJECT any or all offer/ Bid**
- 4.A.20.1 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.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)/Bid Security**
- 4.A.22.1 There are total eight packages in the Tender – four region-wise Packages for EMU/DEMU/MEMU Coaches (Package-1 to 4) and four region-wise Packages for Premium Coaches (Package-5 to 8). Bidders are allowed to participate in one or

more Packages depending upon the eligibility of Bidder and OEMs as defined in Clause no. 4.A.14.

4.A.22.2 All the bidders have to deposit Grand Total EMD Amount online on IREPS Portal and RailTel Bank account as per details given in the Offer Letter, Chapter-1.

4.A.22.2 In case, bidder has participated in more than one packages then bidder is required to pay sum of Total EMD amount for all the packages in which the bidder has participated. This Total EMD has to be deposited online in two parts -

- (i) First Part of EMD Amount (i.e. ₹ 27,05,300) has to be deposited online on IREPS Portal.
- (ii) Second Part (i.e. Balance Total EMD) amount to be deposited online on RailTel Bank account details for packages for which bidder has submitted its bid.

In case, bidder fails to remit applicable Grand Total EMD amount (as defined in Offer Letter) for packages and has submitted only partial amount of applicable Grand Total EMD amount, before the stipulated time and date of bid submission, bidder's bid will be considered only for those packages (based on bidder's preference submitted through its offer letter) which meets the Criteria for applicable Grand Total EMD amount.

Bidders are advised to read following three examples for applicable Grand Total EMD Amount before remitting EMD amount on IREPS portal and RailTel's Bank account -

Example-1

If bidder has participated in only one Package as mentioned below –

Pack-ages	Preference for pack-ages – (To be filled by the bidder)	EMD Amount required to be Deposited	Total EMD amount required to be deposited by the Bidder for quoted packages	EMD Amount deposited by bidder a. First Part of EMD Amount (in ₹) - on IREPS Portal. b. Second Part of EMD Amount to RailTel's Bank account (in ₹)	Transaction details of EMD amount submitted by the Bidder
Pack- age- 1-NR (EMU)	1	₹ 44,94,400	₹ 44,94,400	a. ₹ 27,05,300 - on IREPS Portal. b. ₹ 17,89,100 - to RailTel's Bank account	a. First Part of EMD Amount - ₹ 27,05,300 on IREPS Portal. Transaction Details – Transaction ID - XXXXXX, Date & Time. b. Second Part (i.e. Balance EMD) of EMD Amount - ₹ 17,89,100 in RailTel Bank Account. Transac-

					tion Details – Transaction ID - XXXXXX, Date & Time.
Grand Total EMD Amount remitted					₹ 44,94,400

As per details given above, Bidder has to deposit Total EMD amount of ₹ 44,94,400/- for the SOR-I-NR Package.

Example-2

If bidder has participated in two Packages as mentioned below –

Pack-ages	Preference for pack-ages – (To be filled by the bidder)	EMD Amount re-quired to be Deposited	Total EMD amount re-quired to be deposited by the Bidder for quoted pack-ages	EMD Amount deposited by bidder - a. First Part of EMD Amount (in ₹) - on IREPS Portal. b. Second Part of EMD Amount to RailTel’s Bank account (in ₹)	Transaction detailsof EMD amount submitted by the Bidder
Pack-age-1 – NR (EMU)	1	₹ 44,94,400	₹ 82,97,900	a) ₹ 27,05,300- on IREPS Portal. b) ₹ 55,92,600 - to RailTel’s Bank account	a. First Part of EMD Amount - ₹ 27,05,300on IREPS Portal. Transaction De-tails – Transaction ID - XXXXXX, Date & Time.
Pack-age-7 – WR (Pre-mium)	2	₹ 38,03,500			b. Second Part (i.e. Balance EMD) of EMD Amount - ₹ 55,92,600 in RailTel Bank Account. Transac-tion Details – Transac-tion ID - XXXXXX, Date & Time.
Grand Total EMD Amount remitted					₹ 82,97,900

As per details given above, Bidder has to deposit Grand Total EMD amount of ₹ ₹ 82,97,900 for the two packages.

Example-3

If bidder has participated in all the 8 Packages as per details mentioned below –

Pack ages	Prefe- rence for pack- ages – (as filled by the bidder)	EMD Amount required to be Deposited	Total EMD amount required to be deposited by the Bidder for quoted packages	EMD Amount deposited by bidder – a. First Part of EMD Amount (in ₹) - on IREPS Portal. b. Second Part of EMD Amount to Rail- Tel’s Bank account (in ₹)	Transaction detailsof EMD amount submitted by the Bidder
Packa ge-1- NR (EM U)	1	₹ 44,94,400	₹ 4,51,50,000	a. ₹ 27,05,300 - on IREPS Portal. b. ₹4,24,44,700 to RailTel’s Bank account	a. First Part of EMD Amount - ₹ 27,05,300 on IREPS Portal. Trans- action Details – Transac- tion ID - XXXXXX, Date & Time. b. Second Part (i.e. Balance EMD) of EMD Amount - ₹ 4,24,44,700 in RailTel Bank Account. Transac- tion Details – Transac- tion ID - XXXXXX, Date & Time.
Packa ge-2- ER (EM U)	2	₹ 94,45,900			
Packa ge-3- WR (EM U)	3	₹ 97,00,900			
Packa ge-4- SR (EM U)	4	₹ 50,00,000			
Packa ge-5- NR (Prem ium)	5	₹ 50,00,000			
Packa ge-6 - ER (Prem ium)	6	₹ 50,00,000			
Packa ge-7- WR (Prem ium)	7	₹ 38,03,500			
Packa ge-8- SR (Prem ium)	8	₹ 27,05,300			
Grand Total of EMD					₹ 4,51,50,000

As per details givenabove, Bidder has to deposit Total EMD amount of ₹ 4,24,44,700for the eight packages.

Example-4 (In case Partial Grand Total of EMD Amount submitted by the Bid-der)

If bidder has participated in two Packages and has remitted Grand Total EMD amount of ₹ 42,05,300/-, then his bid will be considered as per details mentioned below –

Pack-ages	Prefe- rence for pack- ages – (To be filled by the bidder)	EMD Amount required to be Deposited	Total EMD amount required to be deposited by the Bidder for quoted packages	EMD Amount deposited by bidder – c. First Part of EMD Amount (in ₹) - on IREPS Portal. Second Part of EMD Amount to Rail- Tel's Bank account (in ₹)	Transaction detailsof EMD amount submitted by the Bid- der
Pack- age-1 – NR (EMU)	2	₹ 44,94,400	₹ 82,97,900	(a) ₹ 27,05,300 - on IREPS Portal. (b) ₹ 15,00,000- to RailTel's Bank account	a. First Part of EMD Amount - ₹ 27,05,300 on IREPS Portal. Transaction Details – Transaction ID - XXXXXX, Date & Time.
Pack- age-7 – WR (Pre- mium)	1	₹ 38,03,500			b. Second Part (i.e. Bal- ance EMD) of EMD Amount - ₹ 42,05,300/- in RailTel Bank Account. Trans- action Details – Transaction ID - XXXXXX, Date & Time.
Grand Total of EMD remitted					₹ 42,05,300

As per details given above, Bidder has to deposit Grand Total of EMD amount of ₹ 82,97,900 for the two packages and bidder has remitted Grand Total EMD amount of ₹ 42,05,300/-.

In case, If bidder has deposited partial EMD amount of ₹ 42,05,300 and preference of packages as Package-1-NR (EMU) as 2nd Preference and Package-7-WR (Premium) as 1st preference than his bid will be considered only for Package-7-WR (Premium) and his bid for Package-1-NR (EMU) will be rejected. Balance applicable amount of EMD will be released after completion of Tendering process.

Example-5 (In case Partial Grand Total of EMD Amount submitted by the Bidder)

If bidder has participated in two Packages and has remitted Grand Total EMD amount of ₹ 27,05,300 then his bid will be considered as per details mentioned below –

Pack-ages	Prefe-rence for pack-ages – (To be filled by the bidder)	EMD Amount required to be Deposited	Total EMD amount required to be deposited by the Bidder for quoted packages	EMD Amount deposited by bidder – a. First Part of EMD Amount (in ₹) - on IREPS Portal. b. Second Part of EMD Amount to RailTel’s Bank account (in ₹)	Transaction detailsof EMD amount submitted by the Bidder
Pack- age-1 – NR (EMU)	1	₹ 44,94,400	₹ 71,99,700	a. ₹ 27,05,300- on IREPS Portal. b. Not Submitted - to RailTel’s Bank account	a. First Part of EMD Amount - ₹ 27,05,300on IREPS Portal. Transaction De- tails – Transaction ID - XXXXXX, Date & Time.
Pack- age-8 – SR (Pre- mium)	2	₹ 27,05,300			(i) Second Part (i.e. Bal- ance EMD) of EMD Amount – Not submit- ted in RailTel Bank Ac- count.
Grand Total of EMD remitted					₹ 27,05,300

As per details given above, Bidder has to deposit Grand Total EMD amount of ₹ 71,99,700for the two packages.

In case, If bidder has deposited partial EMD amount of ₹ 27,05,300and preference of packages as Package-1-NR (EMU) as 1st Preference and Package-8-SR (Premium) as 2nd preference than his bid will be considered only for Package-8-SR (Pre- mium)(2nd preference) package and his bid for Package-1-NR (EMU)will be rejected.

Example-6 (In case Partial Grand Total of EMD Amount submitted by the Bid-der)

If bidder has participated in two Packages and has remitted Grand Total EMD amount of ₹ 27,05,300then his bid will be considered as per details mentioned below

Pack-ages	Prefe-rence for pack-ages – (To be filled by the bidder)	EMD Amount required to be Deposited	Total EMD amount required to be deposited by the Bidder for quoted packages	EMD Amount deposited by bidder – a. First Part of EMD Amount (in ₹) - on IREPS Portal. b. Second Part of EMD Amount to RailTel's Bank account (in ₹)	Transaction detailsof EMD amount submitted by the Bidder
Pack- age-1 – NR (EMU)	1	₹ 44,94,400	₹ 82,97,900	a. ₹ 27,05,300 - on IREPS Portal. b. Not Submitted - to RailTel's Bank account	b. First Part of EMD Amount - ₹ 27,05,300 on IREPS Portal. Trans- action Details – Transac- tion ID - XXXXXX,

Pack- age-7 – WR (Pre- mium)	2	₹ 38,03,500			Date & Time. (i) Second Part (i.e. Bal- ance EMD) of EMD Amount – Not submit- ted in RailTel Bank Ac- count. (Bidder submitted Partial amount of EMD)
Grand Total of EMD remitted					₹ 27,05,300

As per details given above, Bidder has to deposit Grand Total EMD amount of ₹ 82,97,900 for the two packages.

In case, If bidder has deposited partial EMD amount of ₹ 27,05,300(i.e. on IREPS portal only) and preference of packages as Package-1-NR (EMU)as 1st Preference and Package-7-WR (Premium) as 2nd preference than his bid will be rejected in both the packages submitted by the bidder. EMD will be released after completion of Tendering process.

- 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 6.
- 4.A.22.4 Offers not accompanied with “Total EMD”,as detailed in Offer Letter, Chapter-1, shall be **SUMMARILY REJECTED**.
- 4.A.22.5 Earnest Money of the unsuccessful bidder will be discharged / returned as promptly as possible but not later than 30 days after the expiry of the period of offer / bid validity prescribed by the Purchaser.
- 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 in accordance with clause 6.
- 4.A.22.7 Earnest Money will bear no interest.
- 4.A.23 For Micro and Small Enterprises (MSEs)**
- 4.A.23.1 Eligible MSEs are exempted from cost of tender document. However, MSEs are required to meet the eligibility criteria as specified in tender clause 4.A.14.1 and 4.A.14.2 above as the case may be. **Further, the subject work being a works contract having scope of integrating various IT products and applications, the purchase preference criteria for MSME will also be not applicable in the tender.**
- 4.A.23.2 MSEs who are interested in availing themselves of above benefits will enclose with their offer the proof of their being MSE registered with any of the agencies mentioned in the notification of Ministry of MSME.
- 4.A.23.3 The MSEs should submit valid Udyam certificate(UAM No.) along with the Bid.

4.A.23.4 Failing 4.A.23.1 and 4.A.23.2 above, such offers will not be liable for consideration of benefits detailed in the notification of Government of India.

4.A.24 **Rate Contract**

4.A.24.1 RailTel would also enter into Rate Contract with the firm to whom the contract is awarded for catering to additional requirement as per items covered in Schedule of requirements (SOR) as and when arise in future. Package wise Rate Contract on the successful tenderer would be placed separately and would be operative from the date of PAC of the first Coach of the respective package and would be valid for a period of 12 months. The validity of rate contract may be extended for further 12 months with mutual agreement. This Rate Contract would be at the same rates as finalized in main contract or Variation PO, whichever is lesser. During the validity of Rate Contract, RailTel will place Sub Purchase Orders for items detailed in SOR, as per requirement. The total value of all the Sub Purchase Orders under Rate Contract shall be restricted to 50% of the value of the respective package, however, there is no guaranteed offtake against this Rate Contract.

4.A.24.2. The supplier shall have to implement the items against these Sub Purchase Orders within 60 days from the date of issue of such Sub Purchase Orders and should submit a Performance Bank Guarantee (R-PBG) within 30 days of the issue of such Sub Purchase orders @ 3% of the value (rounded off to nearest Ten of rupees) of the Sub PO as per performa given in Chapter-6(Section-I), Form No.1. The R-PBG submitted against Sub PO is for the satisfactory performance of materials/software and should be valid for a period of 4 months beyond warranty period. Terms & conditions of this tender document (including AMC period) will be applicable for the Sub POs issued against rate Contract, if any. If the delivery period gets extended, the R-PBG should also be extended appropriately. Terms and condition for submission of R-PBG shall be as per clause 4.A.6. The R-PBG submitted against SPO's issued under Rate Contract will be released after successful completion of warranty obligations. AMC for items under Rate Contract will be as per same Terms and Conditions as mentioned in the clause 4.A.3. AMC rates for items under Rate Contract will be at same percentage as finalized in the main contract.

4.A.24.3 **Payment Conditions against Rate Contract**

The payment conditions against Rate Contract will be as under:

4.A.24.3.1 75% of the payment at the time of delivery;

4.A.24.3.2 Additional 15% of the payment at the time of delivery, if installation is not included in LOA. In case installation is included, the terms will remain same as in clause 4.A.5 of Chapter-4(Section-I).

4.A.24.3.3 Additional 5% of the payment after one year from the date of delivery, if supervision of installation is not included in LOA. In case installation is included, the terms will remain same as in clause 4.A.5 of Chapter-4(Section-I).

4.A.24.3.4 5% of the payment after expiry of three year from the date of delivery, if installation is not included in LOA. In case installation is included, the terms will remain same as in clause 5 of this Chapter-4.

4.A.24.3.5 In case installation is not included, warranty of the supplied item will be 3 years from the date of delivery of material. In case installation is included, warranty of the material will be as per Clause 4.A.2.

4.A.25 Offer/ Bid Prices

4.A.25.1 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 as per schedule given in Chapter-2(Section-I). The price shall be quoted in Indian Rupees only.

4.A.25.2 The break-up of price of each item of SOR in terms of basic Unit price, GST/CGST/IGST, Freight, Custom Duty, Forwarding, Packing, Insurance and any other Levies/charges already paid or payable by the bidder shall be quoted in the SOR Chapter-2(Section-I). Bidder has to quote all-inclusive rates (with tax break-up).

4.A.25.3 Deleted

4.A.26 NIL Deviation Compliance

4.A.26.1 Bidder is required to submit the “**NIL Deviation compliance undertaking**” for all the terms and conditions of tender including all corrigenda and RDSO specification version-2 or latest shall be enclosed with the offer as per proforma given in Form no. 6 (Chapter-6, Section-I).

4.A.27 Inspection

4.A.27.1 RDSO specifications are to be followed for the items for which the specifications have been defined by RDSO in the latest version available on the RDSO Website. Any change in the specifications may be noted from website and will be followed. For the items which are not in the RDSO specifications shall be inspected by RailTel as under:

4.A.27.2 Pre-shipment / pre-dispatch inspection shall be carried out at manufacturer's / bidder's works by RailTel's authorized representative. At least part of the material should be offered for inspection within 30 days of issue of confirmed LOA. Traveling, lodging & boarding expenses of RailTel's representative shall be borne by RailTel but necessary facilities to carry out tests/witness inspection shall be provided by the manufacturer/ bidder, free of cost.

4.A.27.3 Along with inspection call, the Bidder/manufacturer shall submit details of test procedures, test programme, test parameters together with permitted values, etc., and their Quality Assurance Plan.

4.A.27.4 In case material fails during inspection, the fresh lot of material shall be offered without any extra cost, by the manufacturer/bidder. In such a case, total cost of re-inspection including travel, lodging & boarding of the inspecting officials shall be to manufacturer's/ bidder's account.

4.A.28 Force Majeure

4.A.28.1 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.28.2 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 thirty (30) 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.29 Settlement of Disputes/Arbitration

- 1) Any dispute or difference whatsoever arising between the parties out of or relating to the construction, meaning, scope, operation or effect of this contract or the validity or the breach thereof shall be settled by arbitration in accordance with the 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 at New-Delhi.
- 2) All arbitration proceedings shall be conducted in English. Recourse against any arbitral award so rendered maybe entered into court having jurisdiction or application may be made to such court for the order of enforcement as the case may be.
- 3) The Arbitral Tribunal shall consist of the Sole Arbitrator appointed by CMD/RailTel Corporation of India Limited, if the value of claim is up to Rs. 10 lakhs. If the value of the 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 (CMD) of RailTel Corporation shall furnish a panel of three names to the contractor, out of which, contractor will recommend one name to be his nominee and then CMD/RailTel shall appoint one name as RailTel's nominee and these two arbitrators with mutual consent shall appoint a third arbitrator who shall act as the deciding arbi-

trator in terms of Arbitration and Conciliation Act. The award of the sole arbitrator or the Arbitral council, as the case may be, shall be final and binding on both the parties. Each of the parties agree that notwithstanding that the matter may be referred to Arbitrator as provided herein, 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.

4.A.30 Governing Laws

The LOA 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.30.1 Indemnity by Contractors

The Contract shall indemnify and save harmless the RailTel from and against all actions, suit proceedings, losses, costs, damages, charges, claims, and demands of every nature and description brought or recovered against the RailTel by reason of any act or omission of the Contractor, his agents or employees, in the execution of the works or in his guarding of the same. All sums payable by way of compensation under any of these conditions shall be considered as reasonable compensation to be applied to the actual loss or damage sustained, and whether or not any damage shall have been sustained.

4.A.31 Termination for Default

4.A.31.1 The purchaser may, without prejudice to any other remedy for breach of contract, by written notice of default, sent to the bidder, terminate this contract in whole or in part.

- a) If the bidder fails to deliver any or all of the goods within the time period(s) specified in the contract.
- b) If the bidder fails to perform any other obligation(s) under the contract; and
- c) If the bidder, 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.32 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 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, Rolling Performance Bank Guarantee shall be encashed. The failed bidder shall not be permitted to take part in the tender for balance work.

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

4.A.33 Termination for Insolvency

The purchaser may at any time terminate the LOA by giving written notice to the bidder, without compensation to the bidder, if the bidder 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.34 Rates During Negotiation

The purchaser may call the successful bidder for the negotiation for reducing the rates. During negotiation the bidder/s shall not increase his/their quoted rates including payment terms in case the RailTel 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 bidder/s.

4.A.35 Pre-Bid Clarification Requests

It is solicited that the written queries/ clarifications may be sent to the RailTel's office latest by date as indicated in the Bid Data sheet (BDS, Chapter-5, (Section-I) through e-mail in (Excel format) as mentioned in BDS (Chapter-5). All relevant clarifications sought will be addressed during the pre-bid meeting scheduled as per BDS(Chapter-5). The clarification should be submitted in the below given format:

SN	Page No	Chapter No.	Tender Clause No.	Point number of Clause, if any	Bidders Query	Justification/Reason
1						
2						

4.A.36 Submission of Offer (Online Tendering)

- 4.A.36.1 All offers in the prescribed forms should be submitted before the time and date fixed for the receipt of the offers.
- 4.A.36.2 In case the schedule of requirement quoted by tenderer is incomplete with reference to tender document, the offer is liable to be **REJECTED**.
- 4.A.36.3 ATTECOACHE 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.36.4 The tenderer shall submit his bid online using the e-Procurement Portal <https://IREPS.gov.in>. For detailed instructions please refer to IREPS Portal.
- 4.A.36.5 The offer shall be submitted in two packet. Both Bids, Credential Bid (Techno-Commercial Bid) & Price Bid shall be submitted online using the e-Procurement Portal <https://IREPS.gov.in>. The bid shall consist of following documents as mentioned in Checklist of **Chapter-9**.

4.A.37 Constitution of Firm and power of Attorney

4.A.37.1 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.37.2 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.37.3 The RailTel will not be bound by Power of Attorney granted by the bidder or by the changes in the composition of the firm made subsequent to the execution of the contract agreement.

4.A.37.4 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.37.5 Power of attorney in favour of the signatory duly authorizing the signatory. Original copy is need to be submitted by the successful bidder before issuance of LOA.

4.A.38 Opening of Tender

4.A.38.1 Bidder's Credential Bid (Part-I) will be opened on specified date & time as mentioned in BDS Chapter-5(Section-I) of the tender

4.A.38.2 After scrutinizing Credential Bid, "Price Bid (Part- II)" will be opened on a time and date to be informed separately to those bidders who qualify in "Credential Bid (Part-I)" as per qualifying criteria laid down in Clause 4.A.14 of this Chapter-4 (Section-I).

4.A.38.3 Price Bid (part-II) envelopes of those bidders who are not found to meet tender conditions will not be opened.

4.A.39 Non-Transferability & Non-Refundability

The tender documents are not transferable. The cost of tender paper, if any, is not refundable.

4.A.40 Errors, Omissions & Discrepancies

The Contractor(s) shall not take any advantage of any misinterpretation 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 misinterpretation shall be entertained.

4.A.41 Wrong Information by bidder

If the Bidder/s deliberately gives/give wrong information in his/their tender which creates/create circumstances for the acceptance of his/their tender the RailTel(RCIL) reserves the right to **REJECT** such bidder at any stage.

4.A.42 Limitation of Liability:

Provided the following does not exclude or limit any liabilities of either party in ways not permitted by applicable law:

- 4.A.42.1 The Supplier shall not be liable to the Purchaser, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the Supplier to pay liquidated damages to the Purchaser; and
- 4.A.42.2 The aggregate liability of the Supplier to the Purchaser, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price, provided that this limitation shall not apply to any obligation of the Supplier to indemnify the Purchaser with respect to intellectual property rights infringement.

4.A.43 Mandatory Updation of Labour Data on Railway's Shramikkalyan Portal

- 4.A.43.1 Contractor is to abide by the provisions of Payment of Wages Act & 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.shramikkalyam.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 onetime registration of his company/firm etc in the Shramikkalyam 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 re-

quired) and approve the details of LoA filled by contractor within 7 days of receipt of such request.

- (d) After approval of LoA, contractor shall fill the salient details of contract labours engaged in the contract and ensure updating of each wage payment to them on shramikkalyam portal on monthly basis.
- (e) It shall be mandatory upon the contractor to ensure correct and prompt uploading of all salient of engaged contractual labour& payments made thereof after each wage period.

4.A.43.2 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 Shramikkalyam portal at 'shramikkalyam.indianrailways.gov.in' till Month Year."

4.A.44 Integrity Pact Program

RailTel has adopted Integrity Pact Program and for implementation thereof all tenders relating to procurement of OFC, quad cable, prefab shelters, electronic equipment 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 (IEMs) through the nodal officer, i.e.GM/NTP, RailTel.

Name of IEMs and contact details:

1. Shri. Vinit Kumar Jayaswal, E-Mail: gkvinit@gmail.com
2. Shri. Punati Sridhar, E-mail: poonatis@gmail.com

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

GM/NTP

RailTel Corporation of India Ltd
6th Floor, Office Block Tower-2,
NBCC Complex, East Kidwai Nagar,
New Delhi-110023
E-Mail: pawaria@railtel.in

- 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 online by all the Bidders duly signed in all pages along with the Bid. Tender received online without signed copy of the Integrity Pact document along with the technical bid documents will be liable to be **REJECTED**. Proforma for signing the Integrity Pact is available in Chapter-6 (Section-I) of this tender document (Form No. 5). Original copies are needed to be submitted by the successful bidder before issuance of LOA as per Clause 4.B.3, Point (b) of Chapter-4B.
- 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 before issuance of LOA to the successful bidder. If the Bidders representative is not present during the issuance of LOA, the 2nd copy shall be sent to the bidder by post/courier.
- g) The Integrity Pact is applicable in this tender vide CVC circular no. 10/05/09 dated 18.05.09 and revised guideline of CVC circular no. 015/VGL/091 dated 13.01.17 or the latest updated from time to time shall be followed.

4.A.45 Preference to Domestic Manufacturers

The provisions of the revised "Public Procurement (Preference to Make in India), Order 2017", dated 16.09.2020 (and subsequent amendments, if any, till opening of the tender) by Department of Industrial Policy and Promotion, GoI shall apply to this tender to the extent feasible. The criteria for Capability (verifiable evidence that they have manufacturing capability to manufacture the specified quantity and supply the same within stipulated time period), Equipment and Manufacturing facilities as well as net worth under the financial standing eligibility criteria shall be applicable to local suppliers also.

Bidders seeking Purchase preference for this tender shall submit the documents/declarations etc. as per latest DIPP guidelines and the applicable/associated latest letters if any till date of opening of the bid.

The necessary documentation for items being declared to be Local shall be as per the stipulated guidelines as laid down in above mentioned policy letters and to be signed by the Bidder's Statutory Auditor/Cost Auditor as per **Form no. 9 (Chapter-6)**.

- 4.A.45.1 As per clause no. 3 (b) of the PPP-MII Order dated 16.09.2020, only bidders offering minimum 20% of local content of supply portion of their offered bid (Class-I Local suppliers/bidders - minimum 50% LC and Class-II Local Suppliers/bidders- minimum 20% LC as per PPP-MII Order) are eligible to participate in this tender. Bid of

bidders offering less than 20% local content of supply portion of their offered bid will be SUMMARILY REJECTED.

As per DPIIT's OM dated 4th March 2021, services such as transportation, insurance, installation, commissioning, training and after sales service support like AMC/CMC etc. can't be claimed as local value addition.

Calculation of Offered Local Content of Supply Items

Local Content of offered bid for multiple supply items of Schedule-A (say "X1", "X2" and "X3") by a bidder shall be calculated as per the formulae given below –

Local content = {(Sale price of "X1" - Value of imported content in "X1") + (Sale price of "X2" - Value of imported content in "X2") + (Sale price of "X3" - Value of imported content in "X3")} * 100/ (Sale price of "X1" + Sale price of "X2" + Sale price of "X3").

4.A.45.2 The margin of purchase preference shall be 20% and shall be given to 'Class-I local suppliers/bidders'. 'Margin of purchase preference' means the maximum extent to which the price quoted by a Class-I local suppliers/bidders may be above the L1 (Class-II local suppliers/bidders) for the purpose of purchase preference.

4.A.45.3 Since value of procurement under this tender is more than ₹ 10 Cr, Class-I & Class-II local suppliers/bidders are required to provide a certificate (with UDIN number) from the statutory auditor or cost auditor of the company giving percentage of local content of all scheduled supply items. In the certificate, Local content shall be calculated as per the formulae given in Clause 4.A.45.1 above. Certificate as per **Form-13 (Chapter-6)** issued by statutory auditor or cost auditor of the company on their letter head to be submitted along with the technical bid.

These undertaking/certificate shall not mention any unit price or total amount quoted by the bidder. Any mention of price or quoted amount will lead to SUMMARILY REJECTION of the bid. In case of non-submission of above-mentioned undertaking/certificate with technical bid documents, RailTel reserves the right to reject the bid.

4.A.45.4 In price bid, the bidder shall submit price Break-up of "Local Content" and "Imported Content" for each SOR item issued by statutory auditor or cost auditor of the company on their letter head (with UDIN No.) as per DPIIT's PMI Policy and its clarifications and same shall be uploaded by the bidders along with their price bid in the e-procurement portal.

4.A.45.5 If after opening of price bid, lowest bid is of Class-II local supplier/bidder the eligible (techno-commercially qualified) Class-I local supplier(s)/bidder(s) shall be granted a purchase preference of 20% i.e., where their evaluated price bid is within 20% of the evaluated lowest price bid of Class-II local supplier/bidder. Such eligible Class-I local bidders, to whom purchase preference of 20% has been granted, will be allowed to participate in eRA irrespective of the selection criteria for eRA mentioned in Clause no. 4.B.9.1.6.

However, if after opening of price bid, lowest bid is of Class-I Bidder then bidders for eRA will be selected as selection criteria mentioned in Clause no. 4.B.9.1.6. After completion of eRA process, RailTel's reserve the right to negotiate price with the eligible lowest bidder.

4.A.45.6 After completion of e-RA process as detailed in Clause 4.B.9.1.12, if L1 is a Class-I bidder then the contract will be awarded to L1. If L1 is a Class-II bidder then only those Class-I bidders, whose bids after completion of e-RA are within 20% of the Class-II L1's bid, would be allowed an opportunity to match L1's bid as detailed in Para 3A(c) of DPIIT's PMI Policy dated 16-09-2021. All the such eligible Class-I bidders shall be asked to submit their confirmation to match their price in sealed envelopes as per PMI Policy. Envelopes of the bidders shall be opened and award for the complete tender shall be made to the lowest evaluated TA/CA (Techno-Commercial Acceptable) bidder among the eligible Class-I bidders. In case the lowest eligible Class-I bidder fails to match L1 price, the offer of next eligible Class-I bidder in sealed envelope will be checked and so on. In case none of the eligible Class-I bidders matches the Class-II bidder's L1 bid, complete contract will be awarded to the Class-II bidder holding L1 price.

4.A.45.7 For the purpose of this policy, all terms used vide aforesaid policy shall be governed by the definitions specified in Para 2 of the policy document notified by DIPP vide letter No. P-45021/2/2017-B.E.-II dated 16.09.2020.

4.A.45.8 The successful bidder shall be obliged to fulfill the requirements of quality and delivery time in accordance with the provisions of the Purchase order/contract.

4.A.45.10 Sanctions

4.A.45.10.1 RailTel shall impose sanction of bidder/successful bidder for not fulfilling LC in accordance with the value mentioned in certificate of LC.

4.A.45.10.2 The sanctions may be in the form of written warning, financial penalty and blacklisting.

4.A.45.10.3 If the bidder does not fulfill the obligation after the expiration of the period specified in such warning. RailTel shall initiate action for blacklisting such bidder/successful bidder.

4.A.46 The Network for customers

The CCTV Network is being provided primarily to meet the requirements of Ministry of Railways. Accordingly, the CCTV network shall take into consideration the National Security requirements and National Security aspects.

4.A.47 Proof of Concept (POC)

4.A.47.1 **All Bidders are required to conduct POC immediately after bid opening time (as mentioned in BDS).** Bidders are required to arrange Proof of Concept (POC) for checking the Functional requirement of their offered CCTV solution immediately after submission of bid documents at location specified by RailTel(or its authorized representative) as per Clause 4.A.47 of Chapter-4A (Section-I). Details of Functional

requirement are mentioned in Annexure-III of Chapter-7 (Section-I).

- 4.A.47.2 Before start of functional verification by RailTel or its authorized representative, bidders will install their offered CCTV solution (as offered in their technical bid) at POC location & offer installation for checking by RailTel or its authorized representative, after submission of details as per Table-2 of Annexure-III of Chapter-7. Bidders must ensure that make and model of Hardware & Software used in POC should be same as offered in their submitted bids. The same will be verified by the RailTel or its authorized representative (nominated by RailTel). In case of any deviation in Hardware offered for POC from Hardware offered in technical bid, bidder's bid will be liable to be rejected. Bidders shall install hardware in offered coaches and RailTel's datacenter for demonstration of POC.
- 4.A.47.3 Bidder shall offer its complete CCTV solution as per list of Hardware/Software mentioned in Table-1 of Annexure-III of Chapter-7 for testing of functional requirement by RailTel or its authorized representative. **All expenses for the POC (including testing charges, if any) will be borne by the bidder.**
- 4.A.47.4 RailTel or its authorized representative will certify at the start of testing that the bidder has installed complete CCTV solution as per its offered CCTV solution submitted in bid documents clearly mentioning Make & Model number of the Hardware and Make & Version of software as per format given in Table-2 of Annexure-III of Chapter-7. RailTel or its authorized representative will also ensure that the set-up of bidder's CCTV solution remain same and intact during complete testing process.
- 4.A.47.5 **POC by bidder will be carried out in two parts: POC Part-A (General): to be tested by RailTel and POC Part-B(FRS): to be tested jointly by RailTel & officers nominated by Railways, as per details given in Annexure-III, Chapter-7.** POC should be completed within 30 Days from the date of availability of coach(s) by Railways and rack space by RailTel. Decision of RailTel/Railways regarding type of Coach(s) for POC shall be final and binding on the bidder. Details of POC schedule will be issued by POC team to the bidders through email. During POC, apart from successful working of the offered CCTV solution, capability of the bidder will also be assessed. Maximum three attempts will be given to the bidder, during POC, to fine-tune settings & configurations of the offered CCTV solution. In case bidders either fails to arrange POC as per given schedule or fails to demonstrate the failed parameter(s) during POC, he will be declared failed in POC by the POC team and his bid will not be evaluated further. Any decision of RailTel will be final and binding on the bidder.
- 4.A.47.6 RailTel/Railway or its authorized representatives and authorized representative of Bidder are required to Jointly sign the Annexure-III of Chapter-7 for completion of POC {Railway's representative(s) will test only POC Part-B (FRS)}. In case of refusal to sign the Joint report by bidder, copy of report signed by RailTel or its authorized representative will be sent to the bidder for information only. Acceptance of joint report for POC Part-B (FRS) will be subject to the approval of Security Department of railways. After approval of POC Part-B (FRS) reports for bidders by Railway, Final complete POC report for each bidder will be submitted to RailTel for further evaluation of Tender bids. **However, in case rejection of POC Part-B (FRS) report for bidder(s) by Railways, RailTel reserves the right to consider bids of the bidder(s), who have successfully demonstrated all parameters of POC Part-**

A (General) and not to procure FRS related hardware and Software offered under Packages 1 to 8 by Bidder(s).

- 4.A.47.7 Financial bids will be opened for those bidders who have successfully completed the POC as detailed in abovePara and are also eligible as per tender technical eligibility criteria.
- 4.A.47.8 In case any bidder offers same unique solution in two or more packages floated by RailTel's, having same Hardware & Software as per Table-2 of Annexure-III of Chapter-7, bidder is allowed to submit request for conducting POC only for one package. However, in case of any difference in make and models of Hardware & Software required for POC as per Table-2 of Annexure-III of Chapter-7, any request by bidder for conducting common POC for different solutions will not be considered and bidder is required to conduct separate POC for different solutions. RailTel decision in this regard will be final and binding on the bidder.
- 4.A.47.9 Extension of POC time period (including time period given for second attempt) will be given only in exceptional cases beyond the control of the bidder.
- 4.A.47.10 It is the responsibility of the Bidder to ensure proper Valid Ticket for its authorized representative along with the OEMs for POC. Bidder should first dry run the POC to meet all the parameters before offering for inspection by RailTel/Railways.

4.A.48 Make in India

The bidder may set up his manufacturing unit in India to the extent possible through a subsidiary or under license or through transfer of technology to any local manufacturer permitted by the purchaser. The bidder may indicate such tie ups for manufacturing in India if an arrangement is already in place.

The provisions of the Public Procurement (Preference to Make in India) Order 2017 dated June 15, 2017 (including revision issued on and 16.09.2020 subsequent amendments issued till opening of tender, if any) by Department of Industrial Policy and Promotion, GoI shall apply to this tender to the extent feasible. The eligibility criteria as mentioned in clause 4.A.14.2 shall be applicable to local manufacturers/OEMs also.

4.A.49 Contract Agreement

On completion of the selection process, RailTel will enter into a contract agreement (**Form no. 14, 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 full amount of the Earnest Money Deposit and other dues payable to the Contractor under this contract. The failed Contractor shall be debarred from participating in the re-tender for that work.

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

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

4.A.50 Damage to Railway/RailTel Property or Private Life and Property: The Contractor shall be responsible for all risk to the work and for trespass and shall make good at his own expense all loss or damage whether to the works themselves or to any other property of the Railway/RailTel or the lives, persons or property of others from whatsoever cause in connection with the works until they are taken over by the Railway/RailTel, although all reasonable and proper precautions may have been taken by the Contractor. In case the Railway/RailTel shall be called upon to make good any costs, loss or damages, or to pay any compensation, including that payable under the provisions of the Workmen's Compensation Act or any statutory amendments thereof to any person or persons sustaining damages as aforesaid by reason of any act, or any negligence or omissions on the part of the Contractor; the amount of any costs or charges including costs and charges in connection with legal proceedings, which the Railway/RailTel may incur in reference thereto, shall be charged to the Contractor. The Railway/RailTel shall have the power and right to pay or to defend or compromise any claim of threatened legal proceedings or in anticipation of legal proceedings being instituted consequent on the action or default of the Contractor, to take such steps as may be considered necessary or desirable to ward off or mitigate the effect of such proceedings, charging to Contractor, as aforesaid; any sum or sums of money which may be paid and any expenses whether for reinstatement or otherwise which may be incurred and the propriety of any such payment, defence or compromise, and the incurring of any such expenses shall not be called in question by the Contractor.

SECTION-I CHAPTER-4

B. INSTRUCTIONS TO THE BIDDERS

4.B.0 General

These are the Special Instructions to the Bidders for e-Tendering.

4.B.1 Order of Priority of Contract Documents:

The documents forming this Tender document are to be taken as mutually explanatory of each other. For purpose of interpretation, the precedence and priority of the documents shall be in the following sequence:

- 1) Agreement (applicable only after signing)
- 2) Letter of Acceptance of Tender
- 3) Notice Inviting Tender
- 4) Bid Data Sheet
- 5) Schedule of Requirements
- 6) Instructions to the Bidders
- 7) Annexure/Appendix to Tender
- 8) Form of Bid
- 9) Commercial Terms and Conditions of the Contract
- 10) Technical Specifications
- 11) Relevant Codes and Standards
- 12) Drawings

Note: If any ambiguity or discrepancies is found in the Tender document, Rail-Tel reserves the right to issue any clarification or instructions necessary to correct such ambiguity or discrepancy and such clarification/instruction shall be final and binding on the bidder and RailTel.

4.B.2 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 <https://IREPS.gov.in>.

Benefits to Suppliers are outlined on the Home-page of the portal. Bidders are advised to visit the IREPS Portal for details related to E-Tender i.e. Registration, FAQ, Helpdesk, Learning Center etc.

In case there is a conflict regarding online bidding process between the IREPS condition and the Tender Condition, IREPS conditions will supersede.

4.B.2.1 Tender Bidding Methodology:

Sealed Bid System - 'Single Stage – Two Packet': In this, bidder has to submit each packet of the bid (Part I –Credential/ Techno commercial Bid and Part II - Price Bid) "ONLINE".

IREPS Helpdesk

Please visit Helpdesk section on IREPS Portal.

RailTel Contact-I (for general Information)

As mentioned in BDS (Chapter-5, Section-I)

RailTel Contact-II (for general Information)

As mentioned in BDS (Chapter-5, Section-I)

4.B.2.2 Bid related Information for this Tender (Sealed Bid)

The entire bid-submission would be online on IREPS Portal.

Broad outline of submissions are as follows:

1. Submission of Bid Security/ Earnest Money Deposit (EMD) as per BDS Chapter-5 (Clause 4.A.22).
2. Submission of digitally signed copy of Tender Documents/Addenda
3. Two Packet (Part I –Credential/ Techno commercial Bid and Part II - Price Bid)
4. Online response to Terms & Conditions of Tender.

NOTE:

- I. Bidder must ensure that the bid must be successfully submitted online as per instructions of IREPS Portal.
- II. Bidder may submit their offer depending upon meeting of the qualification criteria and other terms & conditions of the tender. However, Price bid of the bidder shall only be opened once the bidder offer is found meeting the qualification criteria and other terms & conditions of the tender.

4.B.3 Online Submissions:

The bidder is required to submit all the relevant documents online only with the following documents:

- a) Tender Cost and EMD submission to be done online **through IREPS portal only. In case bidders is participating in more than one package, balance EMD of "Grand Total EMD" to be remitted to RailTel's bank account (bank account details given in BDS, Chapter-5).**
- b) Integrity pact to be submitted as per Clause 4.A.44 (Form No. 5, Chapter-6). Original copies are needed to be submitted by the successful bidder before issuance of LOA.
- c) Constitution of Firm and Power of attorney to be submitted online as per Clause 4.A.37. Original copy is needed to be submitted by the successful bidder before is-

suance of LOA.

- d) In case bidder happens to be an MSE bidder, the documentary evidence for same shall be submitted on line.
- e) System Performance Guarantee (Form No. 2, Chapter-6). Original copy is needed to be submitted by the successful bidder before issuance of LOA.
- f) Affidavit (Form No. 10, Chapter-6) by EACH Consortium/JV member. Original copy is needed to be submitted by the successful bidder before issuance of LOA.

Hard copy may be sought by RailTel offline for verification/clarification, after opening of the e-bid response on IREPS portal (e-Procurement), if required.

4.B.4 Submission of Eligibility Criteria related documents

All Eligibility criteria related documents as applicable shall be scanned and submitted ONLINE.

NOTE: It is advised to all bidders to submit their offer online well before the closing time of tender to avoid any last minute issues in uploading. Its bidders responsibility to proactively plan for the bid submission and in case of internet related problem at a bidder's end, especially during 'critical events' such as a short period before bid-submission deadline, during online public tender opening event, during e-auction, it is the bidder's responsibility to have backup internet connections.

4.B.5 Preparation of Bids

- a) Bidder should take into account any corrigendum published on the tender document before submitting their bids. Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents including the names and content of each of the document that need to be submitted.
- b) 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/SLS/RAR/DWF formats. Bid documents may be preferably scanned with 100 dpi with black and white option.

4.B.6 Instructions for Tender Document TO THE BIDDERS

The NIT and link to Tender is published on www.railtelindia.com, IREPS portal and CPP portal and the tender is published on IREPS Portal <https://IREPS.gov.in> and CPP portal. **Tender offers shall be submitted online at IREPS portal-<https://IREPS.gov.in> only.** In addition to submitting the e Tender documents online, the tender fees has to be deposited online through IREPS portal. Tender notice will also be published in newspaper.

NOTE: For online bid submission the bidder will have to necessarily download an official online copy of the tender documents from IREPS portal, and this should be done well before the deadline for bid-submission.

4.B.7 Submission of Offers and Filling of Tender:

This e-tender should be duly submitted online using the e-Procurement Portal <https://IREPS.gov.in>. For detailed instructions please refer to IREPS Portal.

4.B.8 Attendance of Representatives for Tender Opening:

Representatives of bidders 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. Authorized representatives of those firms who have submitted the tender documents alone shall be allowed to attend the tender opening.

4.B.9 e- Reverse Auction:

The procurement in this tender will be done on reverse auction. The procedure for the reverse auction will be done package-wise as per IREPS i.e., eRA will be conducted for each packages in sequence as decided by RailTel and bidders will be able to participate in their quoted package(s). **In case of any contradiction between tender clause(s) and procedure on IREPS Portal, guidelines issued by IREPS Portal shall prevail.**

All bidders are required to check IREPS Portal guidelines **for contractors for Two Stage Reverse Auction (Goods & Services Module)** in details to avoid any last minute issues.

4.B.9.1 Submission of Bids

4.B.9.1.1 In addition to the instructions given above, the bids shall be processed through Two Stage Reverse Auction method, to be implemented through IREPS portal. Two packets system shall be followed for the 1st stage of reverse auction, which means that Techno-commercial bid will be opened first; and after deciding the suitability or otherwise of the technical bids, the financial bids of only those firms which are found to be suitable shall be opened.

{For details please refer also user manual for contractors-for Two Stage Reverse Auction (Goods & Services Module) of IREPS available on IREPS portal.}

4.B.9.1.2 The financial bid of those firms whose technical bids have been found to be suitable shall be opened on or after scheduled date and time. The financial tabulation statement shall be generated immediately thereafter, and can be viewed by the participating bidders by logging into IREPS account.

4.B.9.1.3 After opening the financial bids, the tendering department shall schedule the start of reverse auction. The tenderers who are eligible for the participation in the reverse auction process can view the reverse auction catalogue by logging into their IREPS account.

4.B.9.1.4 The lowest Initial Price Offer (L1 offer price) as submitted by the technically qualified bidders during the financial evaluation stage shall be the base price for starting the reverse auction. The base price shall be notified to the bidder.

4.B.9.1.5 Date and time of start of eRA will be informed on IREPS website/RailTel Website. eRA for each package will be conducted package-wise.

4.B.9.1.6 **Selection of vendors for eRA shall be as under:**

If the number of tenderers qualified for award of contract is less than 3, No RA shall be conducted and the tender shall be decided on the basis of initial price offer. If the numbers of tenderers qualified are 3 to 6, only 3 tenderers shall be eligible for participating in eRA.

If the numbers of tenderers qualified are more than 6, only 50% of tenderers shall be eligible for eRA (rounded off to next higher integer).

The bids disallowed from participating in the eRA shall be the highest bidder(s). In case the highest bidders quote the same rate, the initial price offer received last as per time log of IREPS, shall be removed first, on the principle of last in first out, by IREPS system itself.

Initial Cooling Off period shall be 2 hours.

Auto Extension Period shall be 30 minutes.

Minimum Decrement in percentage shall be 0.1% of Current Lowest Bid.

4.B.9.1.7 Once the reverse auction process is closed the lowest rate received in the reverse auction/financial offer will be evaluated. RailTel reserves the right not to consider the lowest bid received in the reverse auction/financial bid process.

4.B.9.1.8 In case of no participation in eRA process by any bidder, the base value of eRA process will be considered for commercial bid assessment.

4.B.9.1.9 Technical e-RA training can be opted by the bidder to know the procedure of e-RA (Reverse Auction).

4.B.9.1.10 RailTel may discharge the tender at any stage without assigning any reason.

4.B.9.1.11 Bidders may please note that Bidding close Date/Time gets extended automatically every time an offer is received against the tender during a time interval equivalent to Cooling Off prior to the closing date and time. For example: If the Closing Time of RA is 13:00 Hrs and the Cooling Off period is 30 Minutes, if two offers are received between 12:30 Hrs and 13:00 Hrs, let's say at 12:40 Hrs and 12:55 Hrs, the Closing Time shall be extended by 30 Minutes from the time of submission of the last bid i.e. up to 13:25 Hrs.

4.B.9.1.12 **Award of Contracts**
Financial Evaluation

Reverse Auction (e-RA):

After the evaluation of technical proposals, the financial bids (initial price offer) of those firms whose technical bids meet eligibility criteria shall be categorized as qualified for the purpose of Reverse Auction (e-RA). These financial bids shall be opened on the scheduled date and time (as per procedure explained in the IREPS User Ma-

nual for vendors – Two Stage Reverse Auction Goods & Services Module para C, D and E available at IREPS Helpdesk & Learning Centre). The e-RA procedure has been implemented through IREPS Portal and as per guidelines issued by Ministry of Railways Letter No. 2017/Trans/01/Policy/Pt-S Dated 28.03.2018. As per the procedure a minimum of three bids are mandatory for conduct of e-RA. In case the numbers of qualified bids are less than three, the L-1 would be decided on the initial price offer quoted by the bidder on IREPS. In case of more than three qualified bidders, the e-RA as explained in the manual mentioned above will be implemented. After the end of e-RA, L-1, L-2 and so on stand identified.

4.B.10 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 IREPS e-Procurement Portal, RailTel website and CPP portal. Bidders who are unable or unwilling to bring their tenders to conform to the requirements of the RailTel are liable to be **REJECTED**.

4.B.11 Ambiguity/ Pre- Bid Clarification Requests:

If there is any ambiguity or doubt as to the meaning of any of the tender clauses/ conditions or if any additional information required, the matter should immediately be referred to the RailTel in writing through emails to RailTel Contacts defined under Para 4.B.3. The format to be used for seeking clarification is mentioned in Clause 4.A.35.

4.B.12 Compulsory Compliance Conformations by all Participating Bidders

- 4.B.12.1 The instructions given in the tender document are binding on the bidder and submission of the tender shall imply unconditional acceptance of all the Terms & conditions by the bidder.
- 4.B.12.2 Each and every page of submitted tender document including documentation shall be serially numbered & indexed. Bidders shall enclose relevant documents in their bid document to support their claims of experience/ eligibility/compliance meeting criteria mentioned under different clauses of the tender.
- 4.B.12.3 **In case some false information is submitted by any bidder in support of experience, performance certificate, financial turnover, etc., then the bidder tender shall be REJECTED and EMD will be forfeited.**
- 4.B.12.4 RailTel shall be sole judge in the matter of short listing bidders at all stages of the tender and the decision of RailTel shall be final and binding on the bidders.

SECTION-I
CHAPTER- 5
BID DATA SHEET (BDS)

The section consists of provisions that are specific to various Clauses of the tender document {Chapter-1, Chapter 3, Chapter 4(A) & Chapter-4(B), Chapter-6 of Section-I}.

Clause	Description																																																								
Clause 3.A.1.4, Chapter-3-A, (Section-I)	<u>Scope of Work</u>																																																								
	Number of Coaches covered under scope of this tender –																																																								
	<table><tr><th>SN</th><th>Package</th><th></th><th>Number of Coaches</th></tr><tr><td colspan="4">MEMU-DEMU-EMU Coaches</td></tr><tr><td>1</td><td>Package-1-NR (EMU)</td><td></td><td>934</td></tr><tr><td>2</td><td>Package-2-ER (EMU)</td><td></td><td>3,926</td></tr><tr><td>3</td><td>Package-3-WR (EMU)</td><td></td><td>4,032</td></tr><tr><td>4</td><td>Package-4-SR (EMU)</td><td></td><td>1,457</td></tr><tr><td></td><td>Total number of EMU-MEMU-DEMU Coaches</td><td>A</td><td>10,349</td></tr><tr><td colspan="4">Premium Coaches</td></tr><tr><td>5</td><td>Package-5-NR (Premium)</td><td></td><td>1,512</td></tr><tr><td>6</td><td>Package-6-ER (Premium)</td><td></td><td>1,234</td></tr><tr><td>7</td><td>Package-7-WR (Premium)</td><td></td><td>755</td></tr><tr><td>8</td><td>Package-8-SR (Premium)</td><td></td><td>537</td></tr><tr><td></td><td>Total number of Premium Coaches</td><td>B</td><td>4,038</td></tr><tr><td></td><td>Total Number of EMU-MEMU/DEMU Coaches and Premium Coaches</td><td>C = A+B</td><td>14,387</td></tr></table>	SN	Package		Number of Coaches	MEMU-DEMU-EMU Coaches				1	Package-1-NR (EMU)		934	2	Package-2-ER (EMU)		3,926	3	Package-3-WR (EMU)		4,032	4	Package-4-SR (EMU)		1,457		Total number of EMU-MEMU-DEMU Coaches	A	10,349	Premium Coaches				5	Package-5-NR (Premium)		1,512	6	Package-6-ER (Premium)		1,234	7	Package-7-WR (Premium)		755	8	Package-8-SR (Premium)		537		Total number of Premium Coaches	B	4,038		Total Number of EMU-MEMU/DEMU Coaches and Premium Coaches	C = A+B	14,387
	SN	Package		Number of Coaches																																																					
	MEMU-DEMU-EMU Coaches																																																								
	1	Package-1-NR (EMU)		934																																																					
	2	Package-2-ER (EMU)		3,926																																																					
	3	Package-3-WR (EMU)		4,032																																																					
	4	Package-4-SR (EMU)		1,457																																																					
		Total number of EMU-MEMU-DEMU Coaches	A	10,349																																																					
	Premium Coaches																																																								
	5	Package-5-NR (Premium)		1,512																																																					
	6	Package-6-ER (Premium)		1,234																																																					
	7	Package-7-WR (Premium)		755																																																					
	8	Package-8-SR (Premium)		537																																																					
	Total number of Premium Coaches	B	4,038																																																						
	Total Number of EMU-MEMU/DEMU Coaches and Premium Coaches	C = A+B	14,387																																																						
	List of coaches covered under the scope of present tender is mentioned in Annexure-II (Chapter-7).																																																								
Clause 4.A.1, Chapter-4-A, (Section-I)	Validity of offer 180 Days																																																								
Clause 4.A.2, Chapter-4-A, (Section-I)	Warranty (i) 36 months (comprising of 12 months of Maintenance Supervision vide clause 4.A.2.5, between issue of PAC for IT setup at Data Center{Clause 3.D.8 (iv)} and FAC, followed by 24 months of warranty support under clause 4.A.2 &4.A.2.4). (ii) Warranty of material from Date of complete supply of material as per LOA upto issuance of PAC for IT setup at Data Center{Clause 3.D.8 (iv)} is the responsibility of the Bidder backed up by OEM.																																																								
Clause 4.A.4,	Delivery/Implementation Timelines																																																								

Chapter-4-A, (Section-I)	Refer Clause 4.A.4 of Chapter-4		
Clause 4.A.5.7, Chapter-4-A, (Section-I)	Billing Address: Complete RailTel Regional Address as mentioned in Clause 4.A.4.4		
RailTel’s Bank Account details	Account Num- ber	340601010050446	
	IFSC	UBIN0534064	
	Bank & Branch	Union Bank of India, Yusuf Sarai Branch, New Delhi	
	Account holder Name	RailTel Corporation of India Limited	
Clause 4.A.6, Chapter-4-A, (Section-I)	Rolling Performance Bank Guarantee Equivalent to 3% of the total value of the LoA issued. For more details please refer Clause 4.A.6 of Chapter-4.		
Clause 4.A.14.1, Chapter-4-A, (Section-I)	Eligibility Criteria Requirements for Bidders <u>Point-3 - Financial Eligibility –</u>		
	SN	Package	Amount
	1	Package-1-NR (EMU)	₹ 67,41,52,235
	2	Package-2-ER (EMU)	₹ 2,83,37,49,115
	3	Package-3-WR (EMU)	₹ 2,91,02,58,898
	4	Package-4-SR (EMU)	₹ 1,05,16,48,615
	5	Package-5-NR (Premium)	₹ 1,18,18,36,027
	6	Package-6-ER (Premium)	₹ 93,24,86,959
	7	Package-7-WR (Premium)	₹ 57,05,24,841
	8	Package-8-SR (Premium)	₹ 40,57,90,516
Point-4 - Technical Eligibility – Three similar works each costing not less than the amount equal as mentioned below			

S N	Package	Amount
1	Package-1-NR (EMU)	₹ 13,48,30,447
2	Package-2-ER (EMU)	₹ 56,67,49,823
3	Package-3-WR (EMU)	₹ 58,20,51,780
4	Package-4-SR (EMU)	₹ 21,03,29,723
5	Package-5-NR (Premium)	₹ 23,63,67,205
6	Package-6-ER (Premium)	₹ 18,64,97,392
7	Package-7-WR (Premium)	₹ 11,41,04,968
8	Package-8-SR (Premium)	₹ 8,11,58,103

Two Similar Works each costing not less than the amount equal as mentioned below

S N	Package	Amount
1	Package-1-NR (EMU)	₹ 17,97,73,929
2	Package-2-ER (EMU)	₹ 75,56,66,431
3	Package-3-WR (EMU)	₹ 77,60,69,039
4	Package-4-SR (EMU)	₹ 28,04,39,631
5	Package-5-NR (Premium)	₹ 31,51,56,274
6	Package-6-ER (Premium)	₹ 24,86,63,189
7	Package-7-WR (Premium)	₹ 15,21,39,958
8	Package-8-SR (Premium)	₹ 10,82,10,804

One Similar Works each costing not less than the amount equal as mentioned below

S N	Package	Amount
1	Package-1-NR (EMU)	₹ 26,96,60,894
2	Package-2-ER (EMU)	₹ 1,13,34,99,646
3	Package-3-WR (EMU)	₹ 1,16,41,03,559
4	Package-4-SR (EMU)	₹ 42,06,59,446

5	Package-5-NR (Premium)	₹ 47,27,34,411
6	Package-6-ER (Premium)	₹ 37,29,94,784
7	Package-7-WR (Premium)	₹ 22,82,09,937
8	Package-8-SR (Premium)	₹ 16,23,16,207

For Start-ups

Three similar works each costing not less than the amount equal as mentioned below

SN	Package	Amount
1	Package-1-NR (EMU)	₹ 6,74,15,223
2	Package-2-ER (EMU)	₹ 28,33,74,912
3	Package-3-WR (EMU)	₹ 29,10,25,890
4	Package-4-SR (EMU)	₹ 10,51,64,861
5	Package-5-NR (Premium)	₹ 11,81,83,603
6	Package-6-ER (Premium)	₹ 9,32,48,696
7	Package-7-WR (Premium)	₹ 5,70,52,484
8	Package-8-SR (Premium)	₹ 4,05,79,052

Two similar works each costing not less than the amount equal as mentioned below

SN	Package	Amount
1	Package-1-NR (EMU)	₹ 8,98,86,965
2	Package-2-ER (EMU)	₹ 37,78,33,215
3	Package-3-WR (EMU)	₹ 38,80,34,520
4	Package-4-SR (EMU)	₹ 14,02,19,815
5	Package-5-NR (Premium)	₹ 15,75,78,137
6	Package-6-ER (Premium)	₹ 12,43,31,595
7	Package-7-WR (Premium)	₹ 7,60,69,979
8	Package-8-SR (Premium)	₹ 5,41,05,402

One similar works each costing not less than the amount equal as mentioned below

SN	Package	Amount
1	Package-1-NR (EMU)	₹ 15,73,02,188
2	Package-2-ER (EMU)	₹ 66,12,08,127
3	Package-3-WR (EMU)	₹ 67,90,60,409
4	Package-4-SR (EMU)	₹ 24,53,84,677
5	Package-5-NR (Premium)	₹ 27,57,61,740
6	Package-6-ER (Premium)	₹ 21,75,80,291

Clause 4.A.14.2, Chapter-4-A, (Section-I)	7	Package-7-WR (Premium)	₹ 13,31,22,463
	8	Package-8-SR (Premium)	₹ 9,46,84,454
	Point-2 – Eligibility Criteria Requirements for OEM's -		
	Cameras		
	SN	Description	Total Amount
	1	Package-1-NR (EMU)	₹ 1,74,50,968
	2	Package-2-ER (EMU)	₹ 7,33,53,855
	3	Package-3-WR (EMU)	₹ 7,53,34,372
	4	Package-4-SR (EMU)	₹ 2,72,22,763
	5	Package-5-NR (Premium)	₹ 3,76,67,186
	6	Package-6-ER (Premium)	₹ 3,07,41,605
	7	Package-7-WR (Premium)	₹ 1,88,08,681
	8	Package-8-SR (Premium)	₹ 1,33,77,830
		Total	₹ 29,39,57,260
	Video Recorder Unit (VRU) /Mobile -Network Video Recorder (including FRS software)		
	SN	Description	Total Amount
	1	Package-1-NR (EMU)	₹ 10,04,90,588
	2	Package-2-ER (EMU)	₹ 42,24,04,763
	3	Package-3-WR (EMU)	₹ 43,38,09,476
	4	Package-4-SR (EMU)	₹ 15,67,61,014
	5	Package-5-NR (Premium)	₹ 16,26,78,554
	6	Package-6-ER (Premium)	₹ 13,27,68,079
	7	Package-7-WR (Premium)	₹ 8,12,31,685
	8	Package-8-SR (Premium)	₹ 5,77,76,709
		Total	₹ 1,54,79,20,868
	VMS Software		
	SN	Description	Total Amount
	1	Package-1-NR (EMU)	₹ 24,25,765
	2	Package-2-ER (EMU)	₹ 1,01,96,524
	3	Package-3-WR (EMU)	₹ 1,04,71,824
	4	Package-4-SR (EMU)	₹ 37,84,089
	5	Package-5-NR (Premium)	₹ 39,26,934
	6	Package-6-ER (Premium)	₹ 32,04,919
	7	Package-7-WR (Premium)	₹ 19,60,870
	8	Package-8-SR (Premium)	₹ 13,94,685
		Total	₹ 3,73,65,610
	Server for VMS & FRS (Database & Matching Server)		
	SN	Description	Total Amount
	1	Package-1-NR (EMU)	₹ 4,12,578

	2	Package-2-ER (EMU)	₹ 17,34,243
	3	Package-3-WR (EMU)	₹ 17,81,067
	4	Package-4-SR (EMU)	₹ 6,43,605
	5	Package-5-NR (Premium)	₹ 6,67,900
	6	Package-6-ER (Premium)	₹ 5,45,098
	7	Package-7-WR (Premium)	₹ 3,33,508
	8	Package-8-SR (Premium)	₹ 2,37,211
	Total		₹ 63,55,211
	Command & Control Centre (H/W + S/W)		
	SN	Description	Total Amount
	1	Package-5-NR (Premium)	₹ 77,99,295
	Total		₹ 77,99,295
Clause 4.A.14.1.2, Chapter-4-A, (Section-I)	<u>Bid value of Packages for Schedule-A & Schedule-B (all inclusive) –</u>		
	SN	Package	Bid Value (in INR)
	1	Package-1-NR (EMU)	₹ 38,28,37,373
	2	Package-2-ER (EMU)	1,60,92,28,613
	3	Package-3-WR (EMU)	₹ 1,65,26,76,966
	4	Package-4-SR (EMU)	₹ 59,72,09,906
	5	Package-5-NR (Premium)	₹ 67,10,95,105
	6	Package-6-ER (Premium)	₹ 52,95,19,362
	7	Package-7-WR (Premium)	₹ 32,39,76,595
	8	Package-8-SR (Premium)	₹ 23,04,31,035
Clause 4.A.19, Chapter-4-A, (Section-I)	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.		
	(C) AMC rates for items under Variation Order will be at same percentage as finalized in the main contract.		
Offer Letter (Chapter-1) & Clause 4.A.22, (Section-I)	Earnest Money Deposit (EMD) – To be deposited online on IREPS Portal only		
	SN	Packages	EMD Amount
	1	Package-1-NR (EMU)	₹ 44,94,400
	2	Package-2-ER (EMU)	₹ 94,45,900
	3	Package-3-WR (EMU)	₹ 97,00,900
	4	Package-4-SR (EMU)	₹ 50,00,000
	5	Package-5-NR (Premium)	₹ 50,00,000

	<table><tr><td>6</td><td>Package-6-ER (Premium)</td><td>₹ 50,00,000</td></tr><tr><td>7</td><td>Package-7-WR (Premium)</td><td>₹ 38,03,500</td></tr><tr><td>8</td><td>Package-8-SR (Premium)</td><td>₹ 27,05,300</td></tr></table>	6	Package-6-ER (Premium)	₹ 50,00,000	7	Package-7-WR (Premium)	₹ 38,03,500	8	Package-8-SR (Premium)	₹ 27,05,300
6	Package-6-ER (Premium)	₹ 50,00,000								
7	Package-7-WR (Premium)	₹ 38,03,500								
8	Package-8-SR (Premium)	₹ 27,05,300								
Clause 4.A.35, Chapter-4-A, (Section-I)	Pre- Bid Clarification Requests (Online) Last date of Submission of Clarification Date: 07-01-2023 Online Pre-bid Conference date Date: 09-01-2023 Time: 11:00 hours Online Meeting link: Link for Online Pre- Bid Meeting will be shared by Rail-Tel on its website at least two days before the due date of Online Pre-Bid meeting. The Bidder/OEM who is attending the pre-bid conference should send their Pre-bid queries and Contact number along with company details to email id's as mentioned in clause 4.B.2.1 of BDS (Chapter-5) at least two days before the due date of Online Pre-Bid meeting. Pre-bid meeting of all the four regions will be done on the same date & time.									
Clause 4.A.36, Chapter-4-A, (Section-I)	Last Date of Submission of Offer (Online) Date: 27-01-2023 Time: 15:00 hours Date of Opening of Tender (Online) Date: 27-01-2023 Time: 15:30 hours									
Clause 4.B.2.1, Chapter-4-B, (Section-I)	RailTel Contact-I (for general Information) RailTel's Contact Person /Designation Harish Pawaria, GM/NTP Telephone/ Mobile: +91-9267997000 E-mail ID: pawaria@railtel.in RailTel Contact-II (for general Information) RailTel's Contact Person /Designation Prashant Yadav, DGM/NTP									

	Telephone/ Mobile : +91-9717644439 E-mail ID: pyadav@railtel.in
Chapter-1, Chapter-6, Regional Address, (Section-I)	GM/NTP RailTel Corporation of India Limited Corporate Office, Plate-A, 6th Floor, Office Block Tower-2, East Kidwai Nagar, New Delhi-110023

Note:

1. If the details given in BDS contradict with referred clause in the detailed tender document, the details in BDS will have overriding priority (as per clause 4.B.1) over the referred clause in the tender document.
2. In the tender document, RailTel and Indian Railways have been used at various places. It can be interchangeably used wherever required for various purposes of contract management purposes, as may be decided / intimated by the contract managing authority, i.e. RailTel.

SECTION-I
CHAPTER- 6 -FORM (S)/PROFORMA (S)

**Form No. 1 - PROFORMA FOR “ROLLING - PERFORMANCE BANK GUARANTEE
BOND (R-PBG)”**

(To be stamped in accordance with stamp act)

(To be used by approved Indian scheduled commercial banks)

(To be customized and use for bank guarantee for financial closure and for operational
bankguarantee as well)

1. In consideration of the RailTel Corporation Of India Ltd, “**RailTel Regional Address as mentioned in Clause 4.A.4.4**”)(Hereinafter called “ the RailTel”) having agreed to exempt(hereinafter called “ the said Contractor(s)”) from the demand, under the terms and conditions of an Agreement No. dated made between..... and for (hereinafter called “ the said Agreement”) of total cost of ownership for the due fulfillment by the said contractor(s) of the terms and conditions contained in the said Agreement, or production of a Bank Guarantee for Rs. (Rs..... only). We,(indicate the name of the Bank) hereinafter referred to as “ the Bank”) at the request ofContractor(s) do hereby undertake to pay the RailTel an amount not exceeding Rs. Against any loss or damage caused to or suffered or would be caused to or suffered by the RailTel by reason of any breach by the said Contractor(s) of any of the terms or conditions contained in the said Agreement.
2. We, Bank do hereby undertake to pay the amount due and payable under this Guarantee without any demur, merely on demand from the RailTel stating that the amount is claimed is due by way of loss or damage caused to or would be caused to or suffered by the RailTel by reason of breach by the said Contractor(s) of any of terms or conditions contained in the said Agreement or by reason of the Contractor(s) failure to perform the said Agreement. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs.
3. We, bank undertake to pay to the RailTel any money so demanded notwithstanding any dispute or disputes raised by the Contractor(s) / Supplier(s) in any suit or proceedings pending before any court or Tribunal relating there-to our liability under this present being, absolute and unequivocal.
4. The payment so made by us under this Bond shall be a valid discharge of our liability for payment there under and the Contractor(s) / Supplier(s) shall have no claim against us formaking such payment.

5. We, Bank further agree that the Guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Agreement and that it shall continue to be enforceable till all the dues of the RailTel under or by virtue of the said Agreement have been fully paid and its claims satisfied or discharged or till RailTel certifies that the terms and conditions of the said Agreement have been fully and properly carried out by the said Contractor(s) and accordingly discharges this Guarantee. Unless a demand or claim under the Guarantee is made on us in writing on or before the (A*) We shall be discharged from all liability under this Guarantee thereafter.
6. We, (indicate the name of Bank) Further agree with the RailTel that the RailTel shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the Agreement or to extend time of to postpone for any time or from time to time any of the powers exercisable by the RailTel against the said contractor(s) and to forbear or enforce any of the terms and conditions relating to the said Agreement and we shall not be relieved from our liability by reason of any such variation, or extension to the said Contractor(s) or for any forbearance, act or omission on the part of RailTel or any indulgence by the RailTel to the said Contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have affect of so relieving us.
7. This Guarantee will not be discharged due to the change in the Constitution of the Bank or the Contractor(s) Supplier(s).
8. We,the Bank further agree that this guarantee shall be invokable at our place of business at (Indicate detailed address of local Branch of location of RailTel's Regional Office for quoted packages along with code no.).The branch at above mentioned address of bank is being advised accordingly.

(Indicate the name of Bank) lastly undertaken not to revoke this Guarantee during its currency except with the previous consent of the RailTel in writing.

Dated the day of 2022

for

(Indicate the name of the Bank)
Witness

1. Signature

Name

2. Signature

Name

Form No. 2 - PROFORMA FOR “SYSTEMPERFORMANCE GUARANTEE”

(On Stamp Paper of Rs. One Hundred)
(To be signed by the Bidder as well as the OEM's)

To

**RailTel Corporation of India Limited,
CO Office, East Kidwai Nagar,
New Delhi-110023.**

Tender No. RailTel/Tender/OT/CO/NTP/2022-23/VSS/005

Applicable for Bidder/OEM(s) directly participating in the tender

Dear Sir,

I / We hereby guarantee that the design on the basis of which we have submitted our tender no. has been carefully made to conform to the end objectives in the tender documents and to technical specification therein. We further guarantee that in the event of the performance of the system, when installed, not complying with the end objectives or with the specifications contained in the tender documents, we shall provide further inputs to enable the RailTel to realize the end objectives contained in these documents without any additional payment for any additional equipment which may be required in this regard. We further guarantee that all the expenses for providing the additional inputs under the System Guarantee will be borne by us. We further guarantee that these additional inputs will be provided by us to make the system workable within 1 month from the date on which this guarantee is invoked by the Purchaser. The guarantee is valid for a period of one year from the date of commissioning of the system.

(Signature of Firm's Authorized Officer)
Seal

Signature of witness:

1.
2.

Or

Applicable for OEM(s)

I / We hereby guarantee that the design on the basis of which we have submitted our tender no. has been carefully made to conform to the end objectives

in the tender documents and to technical specification therein related to OEM's scope. We further guarantee that in the event of the performance of the system, when installed, not complying with the end objectives or with the specifications contained in the tender documents as per OEM's scope, we shall provide further inputs to enable the RailTel to realize the end objectives contained in these documents without any additional payment for any additional equipment which may be required in this regard. We further guarantee that all the expenses for providing the additional inputs under the System Guarantee will be borne by us. We further guarantee that these additional inputs will be provided by us to make the system workable within 1 month from the date on which this guarantee is invoked by the Purchaser. The guarantee is valid for a period of one year from the date of commissioning of the system.

(Signature of OEM's Authorized Officer)
Seal

Signature of witness:

3.

4.

Form No. 3 - PROFORMA FOR “LONG TERM MAINTENANCE SUPPORT”

(To be signed by the Bidder as well as the OEM's)

To

**RailTel Corporation of India Limited,
CO Office, East Kidwai Nagar,
New Delhi-110023.**

Tender No. RailTel/Tender/OT/CO/NTP/2022-23/VSS/005

Applicable for Bidder/OEM directly participating in the tender

I / We hereby confirm that we have read specifications & tender conditions of RailTel Tender No.and accept that the requirement of Long Term Maintenance Support as per Clause 4.A.3 of Chapter-4(Section-I), 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 Distributor/Partner of OEM

I / We hereby confirm that we have read specifications & tender conditions of RailTel Tender No.and accept that the requirement of Long Term Maintenance Support as per Clause 4.A.3 of Chapter-4(Section-I) shall be met **by Authorized Distributor/Partner of OEM. However, if Authorized Distributor/Partner fails to fulfill the support obligation due to any un-foreseen circumstances, the same shall be provided by us directly or through our subsidiary in India 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 Firm's Authorized Officer)
Seal

Signature of witness:

5.

6.

Note: Please Strike out whichever is not applicable.

**Form No. 4 -PROFORMA FOR AFFIDAVIT TO BE UPLOADED BY TENDERER-
LONGWITH THE TENDER DOCUMENTS**
(To be signed by the Bidder)

(To be executed in presence of Public notary on non-judicial stamp paper of the value of Rs.100/-. The stamp paper has to be in the name of the tenderer)**

I.....(Name and designation)** appointed as the attorney/authorized signatory of the tenderer (including its constituents),

M/s. _____ (hereinafter called the tenderer) for the purpose of the Tender documents for the work of

as per the tender No. _____ of (-----RailTel Region), do hereby solemnly affirm and state on the behalf of the tenderer including its constituents as under:

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 railway 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 undersigned that if the certificates regarding eligibility criteria submitted by us are found to be forged/false or incorrect at any time during process for evaluation of tenders, it shall lead to forfeiture of the tender EMD besidesbanning of business for five year 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 certificates submitted by us or by OEM's of the offered Hardware/Software are found to be false/forged or incorrect at any time after the award of the contract, it will lead to termination of the contract, alongwith forfeiture of SD

and Performance Guarantee besides any other action provided in the contract including banning of business for five year on entire 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.**

Form No. 5 - PROFORMA FOR “SIGNING THE INTEGRITY PACT”

(To be signed by the Bidder)

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 forThe Principal values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness/transparency in its 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 principles mentioned above.

Section 1- Commitments of the Principal

1. The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:-
 - 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) / Subcontractor(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:

Annexure-A of INTEGRITY PACT

GUIDELINES FOR INDIAN AGENTS OF FOREIGN SUPPLIERS

1.0 There shall be compulsory registration of agents for all global (Open) Tender and Limited Tender. An agent who is not registered with RailTel Units shall apply for registration in the prescribed Application-Form.

1.1 Registered agents will file an authenticated Photostat copy duly attested by a Notary Public/ Original certificate of the principal confirming the agency agreement and giving the status being enjoyed by the agent and the commission/ remuneration/retainer-ship being paid by the principal to the agent before the placement of order by RailTel.

1.2 Wherever the Indian representatives have communicated on behalf of their principals and the foreign parties have stated that they are not paying any commission to the Indian agents, and the Indian representative is working on the basis of salary or as retainer, a written declaration to this effect should be submitted by the party (i.e. Principal) before finalizing the order.

2.0 DISCLOSURE OF PARTICULARS OF AGENTS/ REPRESENTATIVES IN INDIA, IF ANY.

2.1 Tenderers of Foreign nationality shall furnish the following details in their offer:

2.1.1 The name and address of the agents/representatives in India, if any and the extent of authorization and authority given to commit the Principals. In case the agent/representative be a foreign Company, it shall be confirmed whether it is real substantial Company and details of the same shall be furnished.

2.1.2 The amount of commission/ remuneration included in the quoted price(s) for such agents/representatives in India.

2.1.3 Confirmation of the Tenderer that the commission/ remuneration if any, payable to his agents/ representatives in India, may be paid by RAILTEL in Indian Rupees only.

2.2 Tenderers of Indian Nationality shall furnish the following details in their offers:

2.2.1 The name and address of the foreign principals indicating their nationality as well as their status, i.e. whether manufacturer or agents of manufacturer holding the Letter of Authority of the Principal specifically authorizing the agent to make an offer in India in response to tender either directly or through the agents/representatives.

2.2.2 The amount of commission /remuneration included in the price(s) quoted by the tenderer for himself.

2.2.3 Confirmation of the foreign principals of the Tenderer that the commission/ remuneration, if any, reserved for the Tenderer in the quoted price(s), may be paid by RAILTEL in India in equivalent Indian Rupees on satisfactory completion of the Project or supplies of Stores and Spares in case of operation items.

2.3 In either case, in the event of contract materializing, the terms of payment will provide for payment of the commission/ remuneration, if any payable to the agents/representatives in India in Indian Rupees on expiry of 90 days after the discharge of the obligations under the contract.

2.4 Failure to furnish correct and detailed information as called for in paragraph 2.0 above will render the concerned tender liable to **REJECTION** or in the event of a contract materializing, the same liable to termination by RAILTEL. Besides this there would be a penalty of banning business dealings with RAILTEL or damage or payment of a named sum.

Annexure-B of INTEGRITY PACT

GUIDELINES ON BANNING OF BUSINESS DEALINGS

CONTENTS

S.N.	Description
1	Introduction
2	Scope
3	Definitions
4	Initiation of Banning / Suspension
5	Suspension of Business Dealings
6	Ground on which Banning of Business Dealings can be initiated 8-9
7	Banning of Business Dealing
8	Removal from List of approved Agencies-Suppliers/ Contractors etc.
9	Procedure for issuing Show-cause Notice.
10	Appeal against the Decision of the Competent Authority
11	Review of the Decision by the Competent Authority
12	Circulation of the names of Agencies with whom Business Dealings have been banned

1. Introduction

1.1 RailTel Corporation of India Ltd (RAILTEL), being a Public Sector Enterprise, under the administrative control of the Ministry of Railways and therefore being an authority deemed to be 'the state' within the meaning of Article 12 of Constitution of India, has to ensure preservation of rights enshrined in Chapter III of the Constitution. RAILTEL has also to safeguard its commercial interests. RAILTEL deals with Agencies, who have a very high degree of integrity, commitments and sincerity towards the work undertaken. It is not in the interest of RAILTEL to deal with Agencies who commit deception, fraud or other misconduct in the execution of contracts awarded / orders issued to them. In order to ensure compliance with the constitutional mandate, it is incumbent on RAILTEL to observe principles of natural justice before banning the business dealings with any Agency.

1.2 Since banning of business dealings involves civil consequences for an Agency concerned, it is incumbent that adequate opportunity of hearing is provided and the explanation, if tendered, is considered before passing any order in this regard keeping in view the facts and circumstances of the case.

2. Scope

2.1 The General Conditions of Contract (GCC) of RAILTEL generally provide that RAILTEL reserves its rights to remove from list of approved suppliers/ contractors or to ban business dealings if any Agency has been found to have committed misconduct and also to suspend business dealings pending investigation. If such provision does not exist in any GCC, the same may be incorporated.

2.2 Similarly, in case of sale of material there is a clause to deal with the Agencies/ customers/ buyers, who indulge in lifting of material in unauthorized manner. If such a stipulation does not exist in any Sale Order, the same may be incorporated.

2.3 However, absence of such a clause does not in any way restrict the right of Company (RAILTEL) to take action / decision under these guidelines in appropriate cases.

2.4 The procedure of (i) Removal of Agency from the List of approved suppliers/ contractors; (ii) Suspension and (iii) Banning of Business Dealing with Agencies, has been laid down in these guidelines.

2.5 These guidelines apply to Corporate Office, all Regions and Subsidiaries of RAILTEL.

2.6 It is clarified that these guidelines do not deal with the decision of the Management to avoid entertaining any particular Agency due to its poor / inadequate performance or for any other reason.

2.7 The banning shall be with prospective effect, i.e., future business dealings.

3. Definitions

In these Guidelines, unless the context otherwise requires:

i) 'Party / Contractor / Supplier / Purchaser / Customer' shall mean and include a public limited company or a private limited company, a firm whether registered or not, an

individual, a cooperative society or an association or a group of persons engaged in any commerce, trade, industry, etc. 'Party / Contractor / Supplier / Purchaser / Customer' in the context of these guidelines is indicated as 'Agency'.

- ii) 'Inter-connected Agency' shall mean two or more companies having any of the following features:
 - a) If one is a subsidiary of the other;
 - b) If the Director(s), Partner(s), Manager(s) or Representative(s) are common;
 - c) If management is common;
 - d) If one owns or controls the other in any manner;
- iii) 'Competent Authority' and 'Appellate Authority' shall mean the following:
 - a) For Company (entire RAILTEL) wide Banning: The Director shall be the 'Competent Authority' for the purpose of these guidelines. CMD, RAILTEL shall be the 'Appellate Authority' in respect of such cases except banning of business dealings with Foreign Suppliers of imported items.
 - b) For banning of business dealings with Foreign Suppliers of imported items, RAILTEL Directors Committee (RDC) shall be the 'Competent Authority'. The Appeal against the Order passed by RDC, shall lie with CMD, as First Appellate Authority.
 - c) In case the foreign supplier is not satisfied by the decision of the First Appellate Authority, it may approach Railway Board as Second Appellate Authority.
 - d) For RailTel Regions only: Any officer not below the rank of General Manager appointed or nominated by the Executive Director of concerned Region shall be the 'Competent Authority' for the purpose of these guidelines. The Executive Director of the concerned Region shall be the 'Appellate Authority' in all such cases.
 - e) For Corporate Office only: For procurement of items / award of contracts, to meet the requirement of Corporate Office only, Concerned Group General Manager / General Manager shall be the 'Competent Authority' and concerned Director shall be the 'Appellate Authority'.
 - f) CMD, RAILTEL shall have overall power to take suo-moto action on any information available or received by him and pass such order(s) as he may think appropriate, including modifying the order(s) passed by any authority under these guidelines.
- iv) 'Investigating Department' shall mean any Department or Unit investigating into the conduct of the Agency and shall include the Vigilance Department, Central Bureau of Investigation, the State Police or any other department set up by the Central or State Government having powers to investigate.
- v) 'List of approved Agencies - Parties / Contractors / Suppliers/ Purchaser/ Customers' shall mean and include list of approved /registered Agencies - Parties/ Contractors / Suppliers / Purchasers / Customers, etc.

4. Initiation of Banning / Suspension

Action for banning / suspension of business dealings with any Agency should be initiated by the department having business dealings with them after noticing the irregularities or misconduct on their part. Besides the concerned department, Vigilance Department of each Region / Unit/ Corporate Office may also be competent to initiate such action.

5. Suspension of Business Dealings

- 5.1 If the conduct of any Agency dealing with RAILTEL is under investigation by any department (except Foreign Suppliers of imported items), the Competent Authority may consider whether the allegations under investigation are of a serious nature and whether pending investigation, it would be advisable to continue business dealing with the Agency. If the Competent Authority, after consideration of the matter including the recommendation of the Investigating Department, if any, decides that it would not be in the interest to continue business dealings pending investigation, it may suspend business dealings with the Agency. The order to this effect may indicate a brief of the charges under investigation. If it is decided that inter-connected Agencies would also come within the ambit of the order of suspension, the same should be specifically stated in the order. The order of suspension would operate for a period not more than six months and may be communicated to the Agency as also to Investigating Department. The Investigating Department may ensure that their investigation is completed and whole process of final order is over within such period.
- 5.2 The order of suspension shall be communicated to all the departmental heads within the unit/ region/ Corporate Office as the case may be. During the period of suspension, no business dealing may be held with the agency.
- 5.3 As far as possible, the existing contract(s) with the Agency may continue unless the Competent Authority, having regard to the circumstances of the case, decides otherwise.
- 5.4 If the gravity of the misconduct under investigation is very serious and it would not be in the interest of RAILTEL, as a whole, to deal with such an Agency pending investigation, the Competent Authority may send his recommendation to Chief Vigilance Officer (CVO), RAILTEL Corporate Office alongwith the material available. If Corporate Office considers that depending upon the gravity of the misconduct, it would not be desirable for all the units/ regions of RAILTEL to have any dealings with the Agency concerned, an order suspending business dealings may be issued to all the units/ Regions / Corporate Office by the Competent Authority of the Corporate Office, copy of which may be endorsed to the Agency and all concerned. Such an order would operate for a period of six months from the date of issue.
- 5.5 For suspension of business dealings with Foreign Suppliers of imported items, following shall be the procedure:
- i) Suspension of the foreign suppliers shall apply throughout the Company/ Regions including Subsidiaries.

- ii) Based on the complaint forwarded by ED / GGM / GM or received directly by Corporate Vigilance, if gravity of the misconduct under investigation is found serious and it is felt that it would not be in the interest of RAILTEL to continue to deal with such agency, pending investigation, Corporate Vigilance may send such recommendation on the matter to Executive Director / GGM / GM, to place it before a Committee consisting of the following:
1. ED / GGM/ GM (viz. Representative of Corporate Finance).
 2. ED / GGM/ GM (viz. Representative of Department concerned with procurement of imported items)- Convener of the Committee.
 3. ED / GGM/ GM (to be nominated on case to case basis).
 4. ED / GGM/ GM ((viz. Representative of Corporate Law).

The committee shall expeditiously examine the report and give its comments / recommendations within twenty one days of receipt of the reference by ED/ GGM/ GM.

- iii) The comments / recommendations of the Committee shall then be placed by ED/GGM/GM, before RAILTEL Directors' Committee (RDC) constituted for import of items. If RDC opines that it is a fit case for suspension, RDC may pass necessary orders which shall be communicated to the foreign supplier by the ED/GGM/GM.

5.6 If the Agency concerned asks for detailed reasons of suspension, the Agency may be informed that its conduct is under investigation. It is not necessary to enter into correspondence or argument with the Agency at this stage.

5.7 It is not necessary to give any show-cause notice or personal hearing to the Agency before issuing the order of suspension. However, if investigations are not complete in six months time, the Competent Authority may extend the period of suspension by another three months, during which period the investigations must be completed.

6. Ground on which Banning of Business Dealings can be initiated

- 6.1 If the security consideration, including questions of loyalty of the Agency to the State, so warrants;
- 6.2 If the Director / Owner of the Agency, proprietor or partner of the firm, is convicted by a Court of Law for offences involving moral turpitude in relation to its business dealings with the Government or any other public sector enterprises or RAILTEL, during the last five years;
- 6.3 If there is strong justification for believing that the Directors, Proprietors, Partners, owner of the Agency have been guilty of malpractices such as bribery, corruption, fraud, substitution of tenders, interpolations, etc;
- 6.4 If the Agency continuously refuses to return / refund the dues of RAILTEL without showing adequate reason and this is not due to any reasonable dispute which would attract proceedings in arbitration or Court of Law;
- 6.5 If the Agency employs a public servant dismissed / removed or employs a person convicted for an offence involving corruption or abetment of such offence;

- 6.6 If business dealings with the Agency have been banned by the Govt. or any other public sector enterprise;
- 6.7 If the Agency has resorted to Corrupt, fraudulent practices including misrepresentation of facts;
- 6.8 If the Agency uses intimidation/ threatening or brings undue outside pressure on the Company (RAILTEL) or its official in acceptance/ performances of the job under the contract;
- 6.9 If the Agency indulges in repeated and / or deliberate use of delay tactics in complying with contractual stipulations;
- 6.10 Willful indulgence by the Agency in supplying sub-standard material irrespective of whether pre-dispatch inspection was carried out by Company (RAILTEL) or not;
- 6.11 Based on the findings of title investigation report of CBI / Police against the Agency for malafide/ unlawful acts or improper conduct on his part in matters relating to the Company (RAILTEL) or even otherwise;
- 6.12 Established litigant nature of the Agency to derive undue benefit;
- 6.13 Continued poor performance of the Agency in several contracts;
- 6.14 If the Agency misuses the premises or facilities of the Company (RAILTEL), forcefully occupies tampers or damages the Company's properties including land, water resources, etc.

(Note: The examples given above are only illustrative and not exhaustive. The Competent Authority may decide to ban business dealing for any good and sufficient reason).

7. Banning of Business Dealings

- 7.1 Normally, a decision to ban business dealings with any Agency should apply throughout the Company including subsidiaries. However, the Competent Authority of the Region/ Unit except Corporate Office can impose such ban Region-wise only if in the particular case banning of business dealings by respective Region/ Unit will serve the purpose and achieve its objective and banning throughout the Company is not required in view of the local conditions and impact of the misconduct/ default to beyond the Region/ Unit. Any ban imposed by Corporate Office shall be applicable across all Regions/ Units of the Company including Subsidiaries.
- 7.2 For Company-wide banning, the proposal should be sent by ED of the Region/ Unit to the CVO/RailTel setting out the facts of the case and the justification of the action proposed along with all the relevant papers and documents except for banning of business dealings with Foreign Suppliers of imported items.

The Corporate Vigilance shall process the proposal of the concerned Region/ Unit for a prima-facie view in the matter by the Competent Authority nominated for Company-wide banning.

The CVO shall get feedback about that agency from all other Regions/ Units. Based on this feedback, a prima-facie decision for banning / or otherwise shall be taken by the Competent Authority.

If the prima-facie decision for Company-wide banning has been taken, the Corporate Vigilance shall issue a show-cause notice to the agency conveying why it should not be banned throughout RAILTEL.

After considering the reply of the Agency and other circumstances and facts of the case, a final decision for Company-wide banning shall be taken by the competent Authority.

- 7.3 There will be a Standing Committee in each Region/ Unit to be appointed by Chief Executive Officer for processing the cases of "Banning of Business Dealings" except for banning of business dealings with foreign suppliers. However, for procurement of items/ award of contracts, to meet the requirement of Corporate Office only, the committee shall be consisting of General Manager/ Dy. General Manager each from Operations, Finance, Law & Project. Member from Project shall be the convener of the committee. The functions of the committee shall, inter-alia include:
- (i) To study the report of the investigating Agency and decide if a prima-facie case for Company-wide / Region wise banning exists, if not, send back the case to the Competent Authority.
 - (ii) To recommend for issue of show-cause notice to the Agency by the concerned department.
 - (iii) To examine the reply to show-cause notice and call the Agency for personal hearing, if required.
 - (iv) To submit final recommendation to the Competent Authority for banning or otherwise.
- 7.4 If the Competent Authority is prima-facie of view that action for banning business dealings with the Agency is called for, a show- cause notice may be issued to the Agency and an enquiry held accordingly.
- 7.5 Procedure for Banning of Business Dealings with Foreign Suppliers of imported items.
- i) Banning of the agencies, shall apply throughout the Company including subsidiaries.
 - ii) Based on the complaint forwarded by Executive Director or received directly by Corporate Vigilance, an investigation shall be carried out by Corporate Vigilance. After investigation, depending upon the gravity of the misconduct, Corporate Vigilance may send their report to Executive Director/ GGM/ GM, to be placed before a Committee consisting of the following:
- 1. ED / GGM/ GM (viz. Representative of Corporate Finance).

2. ED / GGM/ GM (viz. Representative of Department concerned with procurement of imported items)- Convener of the Committee.
3. ED / GGM/ GM (to be nominated on case to case basis).
4. ED / GGM/ GM ((viz. Representative of Corporate Law).

The Committee shall examine the report and give its comments/ recommendations within 21 days of receipt of the reference by ED.

- iii) The comments/recommendations of the Committee shall be placed by ED/ GGM/ GM before RAILTEL Directors' Committee (RDC) constituted for import of foreign items. If RDC opines that it is a fit case for initiating banning action, it will direct ED/ GGM/ GM to issue show-cause notice to the agency for replying within a reasonable period.
- iv) On receipt of the reply or on expiry of the stipulated period, the case shall be submitted by ED to RDC for consideration & decision.
- v) The decision of the RDC shall be communicated to the agency by ED/GGM/GM concerned.

8. Removal from List of Approved Agencies –Suppliers/ Contractors, etc.

- 8.1 If the Competent Authority decides that the charge against the Agency is of a minor nature, it may issue a show-cause notice as to why the name of the Agency should not be removed from the list of approved Agencies - Suppliers / Contractors, etc.
- 8.2 The effect of such an order would be that the Agency would not be disqualified from competing in Open Tender Enquiries but LTE (Limited Tender Enquiry) may not be given to the Agency concerned.
- 8.3 Past performance of the Agency may be taken into account while processing for approval of the Competent Authority for awarding the contract.

9. Show-cause Notice

- 9.1 In case where the Competent Authority decides that action against an Agency is called for, a show-cause notice has to be issued to the Agency. Statement containing the imputation of misconduct or misbehavior may be appended to the show-cause notice and the Agency should be asked to submit within 15 days a written statement in its defence.
- 9.2 If the Agency requests for inspection of any relevant document in possession of RAILTEL, necessary facility for inspection of documents may be provided.
- 9.3 The Competent Authority may consider and pass all appropriate speaking order:
 - a) Forex one rating the Agency if the charges are not established.
 - b) For removing the Agency from the list of approved Suppliers/ Contractors, etc.

c) For banning the business dealing with the Agency.

9.4 If it decides to ban business dealings, the period for which the ban would be operative may be mentioned. The order may also mention that the ban would extend to the interconnected Agencies of the Agency.

10. Appeal against the Decision of the Competent Authority

10.1 The agency may file an appeal against the order of the Competent Authority banning business dealing, etc. The appeal shall lie to Appellate Authority. Such an appeal shall be preferred within one month from the date of receipt of the order banning business dealing, etc.

10.2 Appellate Authority would consider the appeal and pass appropriate order which shall be communicated to the Agency as well as the Competent Authority.

11. Review of the Decision by the Competent Authority

Any petition / application filed by the Agency concerning the review of the banning order passed originally by Chief Executive / Competent Authority under the existing guidelines either before or after filing of appeal before the Appellate Authority or after disposal of appeal by the Appellate Authority, the review petition can be decided by the Chief Executive / Competent Authority upon disclosure of new facts / circumstances or subsequent development necessitating such review. The Competent Authority may refer the same petition to the Standing Committee for examination and recommendation.

12. Circulation of the names of Agencies with whom Business Dealings have been banned

12.1 Depending upon the gravity of misconduct established, the Competent Authority of the Corporate Office may circulate the names of Agency with whom business dealings have been banned, to the Government Departments, other Public Sector Enterprises, etc. for such action as they deem appropriate.

12.2 If Government Departments or a Public Sector Enterprise requests for more information about the Agency with whom business dealings have been banned, a copy of the report of the Inquiring authority together with a copy of the order of the Competent Authority / Appellate Authority may be supplied.

12.3 If business dealings with any Agency have been banned by the Central or State Government or any other Public Sector Enterprise, RAILTEL may, without any further enquiry or investigation, issue an order banning business dealing with the Agency and its interconnected Agencies.

12.4 Based on the above, Regions / Units may formulate their own procedure for implementation of the guidelines.

Form No. 6 - PROFORMA FOR “NIL DEVIATION COMPLIANCE UNDERTAKING”
(To be signed by the Bidder)

To

**RailTel Corporation of India Limited,
CO Office, East Kidwai Nagar,
New Delhi-110023.**

Tender No. RailTel/Tender/OT/CO/NTP/2022-23/VSS/005

Sub: NIL Deviation Compliance

Over and above all our earlier conformations and submissions as per your requirements of the RFP, we confirm that,

1. All proposed in scope supplies (Cameras, Servers/Workstation, Storage, Switches, CCC (For Northern Region Only), VMS, FRS and VA etc.) are compliant to the technical specifications of the equipment as mentioned in the latest version of the specifications for IP-based CCTV surveillance system issued by RDSO dated DD-Month-YYYY.
2. We hereby certify that the hardware and software mentioned in our technical solution and Bill of Material (BOM) are complete.
3. 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 procured by us at no extra cost to RailTel.
4. We will also ensure our unconditional compliance of all the terms and conditions as mentioned in the Tender document including all corrigenda and RDSO specifications.
5. List of deviations (Partial Compliance and Non-compliance) from terms and conditions as mentioned in the Tender document including all corrigenda and RDSO specifications, if any, is enclosed as Annexure with this form. We understand that any partial compliance or non-compliance, may result in **REJECTION** of our bid.

Seal and signature of the bidder

Place:

Date:

(This letter should be on the letterhead of the bidder duly signed by an authorized signatory)

Form No. 7 –OEM’s Undertaking on Letter Head for MAF, Proven Facility, Blacklisting, Malicious Code, IPR & restriction on companies from Land Border sharing Countries with India

(To be signed by the OEM)

To

**RailTel Corporation of India Limited,
CO Office, East Kidwai Nagar,
New Delhi-110023.
Tender Reference No.**

Sub: OEM Undertaking

Dear Sir,

Over and above all our earlier conformations and submissions as per your requirements of the RFP, we confirm that,

- A. I/We, M/s....., are established and reputed manufacturer and service provider of (Product details), having our registered office at

We hereby authorize M/s (OEMname), Office to participate in bid and subsequently upon award of the bid to execute the supply and Installation & Commissioning of our range of products against your above said bid.

I/We further extend our warranty for years and AMC for years for our range of products offered by M/s against the above-said bid.

- B. I/We undertake/Certify that

“I/We have proven facilities at (Complete Address along with Pin Code) for Engineering, manufacture, assembly, integration, testing and basic facilities with respect to space, Engineering, Personnel, Test equipment, Manufacture, Training, Logistic Supports for at least past three years in the country from where the proposed equipment are planned to be supplied.”

“In case OEM is located outside India, we have training, repair and service center facilities in India at(Complete Address along with Pin Code) also.”

- C. I/We have not been black-listed or debarred currently by Central Govt./State Govt./CPSU in India or anywhere globally by Government for security reasons either in Individual capacity or as a member of partnership firm/LLP/JV/Society/Trust.

- D. I/We Certify that,

- (i) All proposed hardware and software components in scope of supplies when shipped by _____, does not contain embedded malicious code that would activate proce-

dures to:-

- a. Inhibit the desired and designed function of the equipment.
 - b. Cause physical damage to the user or equipment during the exploitation.
 - c. Tap information resident or transient in the equipment/networks.
- (ii) I/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 _____
- (iii) 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.
- E. I/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 including camera firmware, switch firmware etc. are not residing in countries sharing land borders with India. Proof of IPR & source code will be provided by the OEM.
- or
- IPR of offered products and source code of offered software including camera firmware, switch firmware etc. are residing incountry (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)
- In case any breach or false declaration is found at any stage, immediate strict penal action will be taken by RailTel.
- F. I/We have read the clause regarding restrictions on procurement from a OEMs of a country which shares a land border with India; I certify that I/We is/are not from such a country or, if from such a country, has been registered with the Competent Authority, I/We hereby certify that I/We fulfils all requirements in this regard and is eligible to be considered.
- G. Following are our package wise preferences for considering our offered solution under this Tender based on eligibility conditions defined in Clause 4.A.14.2 :

Package	Preference for Packages
Package-1-NR (EMU)	
Package-2-ER(EMU)	

Package-3-WR(EMU)	
Package-4-SR(EMU)	
Package-5-NR (Premium)	
Package-6 - ER(Premium)	
Package-7-WR(Premium)	
Package-8- SR(Premium)	

In case I/We failed to submit above package wise preferences, than RailTel should consider default package wise preference for our offered solution as defined in Para 4.A.14.2.2.

Place:
Date:

Seal and signature of the authorized representative of OEM
Name and Designation of the authorized representative of OEM

Form No. 8 – Bidder’s Undertaking on Letter Head for Blacklisting, IPR, Interoperatibility, Malicious Code, Site Inspection & Restriction on companies on Land border sharing countries with India.

(To be signed by the Bidder)

To

**RailTel Corporation of India Limited,
CO Office, East Kidwai Nagar,
New Delhi-110023.**

Tender No. RailTel/Tender/OT/CO/NTP/2022-23/VSS/005

Sub: Bidder Undertaking

Dear Sir,

I / Wehereby certify that

- A. I/We have not been black-listed or debarred currently by Central Govt./State Govt./CPSU in India or anywhere globally by Government for security reasons either in Individual capacity or as a member of partnership firm/LLP/JV/Society/Trust.
- B. I/We have ensured that the Intellectual Property Rights of Hardware and Source Code of Software supplied under this project are not residing in any Country that shares a Land Border with India. I/We have read the clause regarding restriction on Procurement from a Bidder of a Country which shares a Land Border with India and certify that I am / We are not from such a country or,

If from such a country, have been registered with the Competent Authority. I/We hereby certify that I/We fulfill all the requirement in this regard and are eligible to be considered (evidence of valid registration by the competent authority is enclosed).
- C. All the Hardware and Software, offered in our bid documents, are as per Technical specifications mentioned in Chapter-8 of the above referred tender document.

I/We hereby also certify the following:

- i. Interoperatibility certificate (as per clause 3.3 of RDSO specification) and Security Verification Certification required as per RDSO specification no. RDSO/SPN/TC/106/2022 version 2.1 or latest, for various Hardwares/Softwares will be submitted at the time of supply while offered for Inspection.
- ii. In case of failure in arranging Interoperatibility Certificate or Security Verification certificate for offered Hardware/Software at the time of supply, I/We shall arrange alternate Hardware/Software as per RDSO specification no. RDSO/SPN/TC/106/2022 version 2.1 or latest without any additional cost to RailTel.

- D. All proposed hardware and software components in scope of supplies when shipped by _____, does not contain embedded malicious code that would activate procedures to:-
- a. Inhibit the desired and designed function of the equipment.
 - b. Cause physical damage to the user or equipment during the exploitation.
 - c. Tap information resident or transient in the equipment/networks.
- i. I/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 _____
- ii. 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.
- E. Before submitting a tender, the tenderer will be deemed to have satisfied himself by actual inspection of the sites and locality of the works, that all conditions liable to be encountered during the execution of the works are taken into account and that the rates he enters in the tender forms are adequate and all inclusive.
- F. I/We 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/We certify that I/We is/are not from such a country or, if from such a country, has been registered with the Competent Authority and will not sub-contract any work to a contractor from such countries unless such contractor is registered with the Competent Authority. I hereby certify that I/We fulfils all requirements in this regard and is eligible to be considered.
- G. I/We certify that all the licenses of Firmware and Software of the offered CCTV solution under this Tender would be registered in favor of M/s RCIL or its nominated organization.

Seal and signature of the authorized representative of Bidder

Name and Designation of the authorized representative of Bidder

Place:

Date:

RailTel

Form No. 9 -Certificate from Bidder's Cost/Statutory Auditor

To

**RailTel Corporation of India Limited,
CO Office, East Kidwai Nagar,
New Delhi-110023.**

Tender No. RailTel/Tender/OT/CO/NTP/2022-23/VSS/005

Sub: Calculation of Local Content of Supply Items as per formulae given in Tender Clause no. 4.A.45.1

1. I/We _____ the statutory auditor/cost auditor of M/s.____ (name of the bidder) hereby certify that M/s_____ (name of bidder) are offering _____% Local Content against the supply item of the Project Work under this tender in accordance with DPIIT's PMI Policy & it's clarifications/guidelines vide offer No. _____ dated _____ against RAILTEL tender No. _____.
2. I/We certify that Local Content Calculation for Supply items in the offered bid has been done as per the formulae given in Tender Clause no. 4.A.45.1.

To be signed by Authorized signature of Bidder's Statutory Auditor/Cost Auditor
Name and Designation of the authorized representative of Bidder's Statutory Auditor/Cost Auditor

UDIN No. -

Form No. -10 –ANNEXUREAFFIDAVIT by EACH Consortium/JV member (on Stamp Paper)

(To be given separately by each Consortium/Joint Venture member of the Bidder on Stamp Paper of appropriate value)

I, _ S/o , Resident of _ ,
, the [insert designation] of the [insert name of single bidder / Consortium/Joint Venture member if Consortium/Joint Venture] do solemnly affirm and state as follows:

- 1) I say that I am the authorized signatory of [insert name of company/Consortium/Joint Venture member] (hereinafter referred to as “Bidder/Consortium/Joint Venture Member”) and I am duly authorized by the Board of Directors of the Bidder/Consortium/Joint Venture Member to swear and depose this Affidavit on behalf of the Bidder/Consortium/Joint Venture Member.
- 2) I say that I have submitted information with respect to our eligibility for RailTel Corporation of India Ltd. (hereinafter referred to as “RCIL”) (NAME OF WORK) (hereinafter referred to as ‘Project’) Request for Proposal (‘RFP’) document and I further state that all the said information submitted by us is accurate, true and correct and is based on our records available with us.
- 3) I say that, we hereby also authorize and request any bank, authority, person or firm to furnish any information, which may be requested by RCIL to verify our credentials / information provided by us under this tender and as may be deemed necessary by RCIL.
- 4) I say that if at any point of time including the extension period, in case RCIL requests any further/additional information regarding our financial and/or technical capabilities, or any other relevant information, we shall promptly and immediately make available such information accurately and correctly to the satisfaction of RCIL.
- 5) I say that, we fully acknowledge and understand that furnishing of any false or misleading information by us in our RFP shall entitle us to be disqualified from the tendering process for the said Project. The costs and risks for such disqualification shall be entirely borne by us.
- 6) I state that all the terms and conditions of the Request for Proposal (RFP) document has been duly complied with.

DEPONENT

VERIFICATION

I, the above-named deponent, do verify that the contents of paragraphs 1 to 6 of this affidavit are true and correct to my own knowledge. No part of it is false and nothing material has been concealed. Verified at , on this day of .

DEPONENT

Form No. -11 - JOINT VENTURE AGREEMENT/MEMORANDUM OF AGREEMENT
(On Stamp Paper of Rs fifty)

This Joint Venture Agreement/Memorandum of Agreement is executed at (place) on this _____ day of _____, 2020.

BETWEEN

M/s. _____, a Company incorporated under the Companies Act, 1956 and having its Registered Office at _____ acting through its Managing Director, _____ duly authorized by a resolution of the Board of Directors dated _____ (hereinafter referred to as the 'LEAD MEMBER' which expression unless excluded by or repugnant to the subject or context be deemed to mean and include its successors in interest, legal representatives, administrators, nominees and assigns) of the ONE Part;

AND

M/s. _____, a Company incorporated under the Companies Act, 1956 and having its Registered Office at _____ and Office at _____, acting through its Joint President, _____, duly authorized by a resolution of the Board of Directors dated _____ (hereinafter referred to as the ('Participant member') which expression unless excluded by or repugnant to the subject or context be deemed to mean and include its successors in interest, legal representatives, administrators, nominees and assigns) of the 'OTHER PART'

AND

M/s. _____, a Company incorporated under the Companies Act, 1956 and having its Registered Office at _____ and Office at _____, acting through its Joint President, _____, duly authorized by a resolution of the Board of Directors dated _____ (hereinafter referred to as the ('Participant member') which expression unless excluded by or repugnant to the subject or context be deemed to mean and include its successors in interest, legal representatives, administrators, nominees and assigns) of the 'OTHER PART'

Whereas RailTel Corporation of India Ltd. (hereinafter referred to as 'RCIL') has invited tenders for the "(NAME OF WORK)" in terms of the tender documents issued for the said purpose and the eligibility conditions required that the applicants bidding for the same should meet the conditions stipulated by RCIL for participating in the bid by the Joint Venture for handling the project for which the tender has been floated by RCIL.

AND WHEREAS in terms of the bid documents both the parties jointly satisfy the eligibility criteria laid down for a bidder for participating in the bid process by forming a Joint Venture between themselves.

AND WHEREAS both the parties hereto have discussed and agreed to form a Joint Venture for participating in the aforesaid bid and have decided to reduce the agreed terms to writing.

NOW THIS JOINT VENTURE AGREEMENT/Memorandum of Agreement hereby WITNESSES:

1. That in the premises contained herein the Lead Member and the Participant Member having decided to pool their technical know-how, working experiences and financial resources, have formed themselves into a Joint Venture to participate in the tender process for “(NAME OF WORK)” in terms of the tender invited by RailTel Corporation of India Ltd., (RCIL).
2. That the members of the Joint Venture have represented and assured each other that they shall abide by and be bound by the terms and conditions stipulated by RCIL for awarding the tender to the Joint Venture so that the Joint Venture may take up the aforesaid “(NAME OF WORK)” in case the Joint Venture turns out to be the successful bidder in the bid being invited by RCIL for the said purpose.
3. That the members of the Joint Venture have satisfied themselves that by pooling their technical know-how and technical and financial resources, the Joint Venture fulfills the prequalification/ eligibility criteria stipulated for a bidder, to participate in the bid for the said tender process for “(NAME OF WORK)”
4. That the Joint Venture have agreed to nominate any one of _____, _____ and _____ as the common representative who shall be authorized to represent the Joint Venture for all intents and purposes for dealing with the Government and for submitting the bid as well as doing all other acts and things necessary for submission of bid documents such as Tender Application Form etc., Mandatory Information, Financial Bid. Etc., and such other documents as may be necessary for this purpose.
5. That the share-holding of the members of the Joint Venture for this specified purpose shall be as follows:
 - (i) The Lead Member shall have _____ per cent (____ %) of share-holding/participation with reference to the Joint Venture for this specified project.
 - (ii) The Participant Member shall have _____ (____ %) of share-holding/participation with reference to the Joint Venture for this specified project.
 - (iii) The Participant Member shall have _____ (____ %) of share-holding/participation with reference to the Joint Venture for this specified project.
6. That in order to fulfill the requirement of the tender process and also keep an altogether separate legal entity of the Joint Venture, the Members of the Joint Venture undertake to provide their own nominees as share-holders to the extent of their respective share-holding for the purpose of formation of a Special Purpose Company (SPC) through which the Joint Venture proposes to undertake the _____ of RCIL.
7. That if any change in the membership of the Joint Venture be required to be made by the members of the Joint Venture, the same shall be done with the consent of RCIL subject to the conditions as may be stipulated by them in this regard.
8. That in case to meet the requirements of bid documents or any other stipulations of RCIL, it becomes necessary to execute and record any other documents amongst the members of the Joint Venture, they undertake to do the needful and to participate in the same for the purpose of the said project.
9. That it is clarified by and between the members of the Joint Venture that execution to this Joint Venture Agreement/Memorandum of Agreement by the members of the Joint Venture does not constitute any type of partnership for the purposes of provisions of

the Indian Partnership Act and that the members of the Joint Venture shall otherwise be free to carry on their independent business or commercial activities for their own respective benefits under their own respective names and styles. This Joint Venture Agreement is limited in its operation to the specified project.

10 That the Members of the Joint Venture undertake to specify their respective roles and responsibilities for the purposes of implementation of this Joint Venture Agreement and the said project if awarded to the Joint Venture in the Memorandum & Articles of Association of the proposed Special Purpose Company to be got incorporated by the Joint Venture Members to meet the requirements and stipulations of RCIL.

IN FAITH AND TESTIMONY WHEREOF, THE PARTIES HERETO HAVE SIGNED THESE PRESENTS ON THE DATE, MONTHS AND YEAR FIRST ABOVE WRITTEN.

1. (_____)
Managing Director
(_____)
For (Name of company)

2. (_____)
Managing Director
(_____)
For (Name of company)

3. (_____)
Managing Director
(_____)
For (Name of company)

WITNESSES:

1. _____
2. _____

Enclosure:

Board resolution of each of the Joint Venture Members authorizing:

- (i) Execution of the Joint Venture Agreement, and
- (ii) Appointing the authorized signatory for such purpose.

**Form No. -12 - CONSORTIUM AGREEMENT /MEMORANDUM OF AGREEMENT
(On Stamp Paper of appropriate value)**

This Consortium Agreement is executed at on this _ day of _____.

BETWEEN

M/s..... , a Company incorporated under the Companies Act, 1956 and having its Registered Office at acting through its Managing Director, duly authorized by a resolution of the Board of Directors dated (hereinafter referred to as the „LEAD MEMBER“ which expression unless excluded by or repugnant to the subject or context be deemed to mean and include its successors in interest, legal representatives, administrators, nominees and assigns) of the ONE Part;

AND

M/s , a Company having its Office at and Office at
acting through its Joint President/ MD/.., , duly authorized by a resolution of the Board of Directors dated _ (hereinafter referred to as the (“Participant member”) which expression unless excluded by or repugnant to the subject or context be deemed to mean and include its successors in interest, legal representatives, administrators, nominees and assigns) of the OTHER PART“

AND

M/s. , a Company having its Office at and Office at
, acting through its Joint President/ MD/.., , duly authorized by a resolution of the Board of Directors dated (hereinafter referred to as the (“Participant member”) which expression unless excluded by or repugnant to the subject or context be deemed to mean and include its successors in interest, legal representatives, administrators, nominees and assigns) of the OTHER PART“

Whereas RailTel Corporation of India Ltd. (hereinafter referred to as „RCIL“) has invite tenders for the “(NAME OF WORK)” in terms of the tender documents issued for the said purpose and the eligibility conditions required that the applicants bidding for the same should meet the conditions stipulated by RCIL for participating in the bid by the Consortium for handling the project for which the tender has been floated by RCIL.

AND WHEREAS in terms of the bid documents the parties jointly satisfy the eligibility criteria laid down for a bidder for participating in the bid process by forming a Consortium between themselves.

AND WHEREAS the parties hereto have discussed and agreed to form a Consortium for participating in the aforesaid bid and have decided to reduce the agreed terms to writing.

NOW THIS CONSORTIUM Agreement hereby WITNESSES:

9. That in the premises contained herein the Lead Member and the Participant Member having decided to pool their technical know-how, working experiences and financial resources, have formed themselves into a Consortium to participate in the tender process for “(NAME OF WORK)” in terms of the tender invited by RailTel Corporation of India Ltd., (RCIL).

10. That the members of the Consortium have represented and assured each other that they shall abide by and be bound by the terms and conditions stipulated by RCIL for awarding the tender to the Consortium so that the Consortium may take up the aforesaid “(NAME OF WORK)” in case the Consortium turns out to be the successful bidder in the bid being invited by RCIL for the said purpose.

11. That the members of the Consortium have satisfied themselves that by pooling their technical know-how and technical and financial resources, the Consortium fulfills the prequalification/ eligibility criteria stipulated for a bidder, to participate in the bid for the said tender process for “(NAME OF WORK)”

12. That the Consortium have agreed to nominate any one of , and as the common representative who shall be authorized to represent the Consortium for all intents and purposes for dealing with the Government and for submitting the bid as well as doing all other acts and things necessary for submission of bid documents such as Tender Application Form etc., Mandatory Information, Financial Bid. Etc., and such other documents as may be necessary for this purpose.

13. That if any change in the membership of the Consortium be required to be made by the members of the Consortium, the same shall be done with the consent of RCIL subject to the conditions as may be stipulated by them in this regard.

14. That in case to meet the requirements of bid documents or any other stipulations of RCIL, it becomes necessary to execute and record any other documents amongst the members of the Consortium, they undertake to do the needful and to participate in the same for the purpose of the said project.

15. That it is clarified by and between the members of the Consortium that execution to this Consortium Agreement by the members of the Consortium does not constitute any type of partnership for the purposes of provisions of the Indian Partnership Act and that the members of the Consortium shall otherwise be free to carry on their independent business or commercial activities for their own respective benefits under their own respective names and styles. This Consortium Agreement is limited in its operation to the specified project.

16. That the Members of the Consortium undertake to specify their respective roles and responsibilities for the purposes of implementation of this Consortium Agreement and the said project, if awarded to the Consortium, to meet the requirements and stipulations of RCIL.

17. The consortium formed will not be subject to alteration with regard to change in constituting firms and/or reorientation of roles. Any changes, if proposed by Consortium to take advantage of certain developments during evaluation stage will render the bid liable to be **REJECTED**.
18. All partners of the consortium shall be jointly and severally liable to RailTel for the execution of the entire contract in accordance with its terms.
19. Each Consortium member has minimum 20% contribution in the work and role/scope of each member is enclosed.
20. Power of Attorney by all members of the Consortium in favor of the Lead Member is also enclosed.

IN FAITH AND TESTIMONY WHEREOF, THE PARTIES HERETO HAVE SIGNED
THESE PRESENTS ON THE DATE, MONTHS AND YEAR FIRST ABOVE WRITTEN

1. ()	2. ()	3. ()
Managing Director	Managing Director	Managing Director
For (Name of company)	For (Name of company)	For (Name of com- pany)

WITNESSES:

- 1.
- 2.

Enclosure:

Board resolution of each of the Consortium Members authorizing:

- (i) Execution of the Consortium Agreement, and
- (ii) Appointing the authorized signatory for such purpose.

Form No. 13 - PAST EXPERIENCE FORM

	Item	Details
1.	General Information	
	Customer Name	
	Details of Contact Person	
i.	Name	
ii.	Designation	
iii.	Email	
iv.	Mailing Address	
v.	Phone	
vi.	Fax	
2.	General Information	
i.	Name of the Project	
ii.	Government/Private/PSU/Others please specify	
iii.	Start Date and End Date of PO/LOA	
iv.	Current Status (Completed/Work in Progress)	
v.	Contract Tenure	
vi.	Geographical Coverage (No. of locations the project covers)	
3.	Size of the Project	
i.	Order Value of the project	
ii.	Capital Expenditure involved	
iii.	Cost of services provided by the bidder	
iv.	Cost of services provided by the partners if involved	
v.	Approximate number of concurrent users for VA/VMS/FRS/CCC (for Northern Region Only)	
vi.	No of Video Cameras implemented (if applicable)	
vii.	No of Network Devices managed (if applicable)	
viii.	Please Provide customer certificate/Work order for executed Scope	
4.	Brief description of scope of Project	
i.	Highlights of the Key Result Areas expected and achieved	
ii.	List of modules and sub-modules implemented	
iii.	Narrative description of Project including technology deployed	
iv.	Description of actual services provided by your firm	

Certification: I, the undersigned, certify that these data correctly describe the Projects implemented by our Company.

(Signature)
(Name of Authorized Signatory)
(Designation)
(Date)

(Name and address of the bidder)
(Company Seal)

RailTel

Form No. 14 - CONTRACT AGREEMENT

(CA _____) No. _____)

This AGREEMENT is made at <Location of RO Office> on this day of _____ two thousand and twenty one by and between RailTel Corporation of India Limited (A Govt. of India Undertaking) having its Registered & Regional office at Plat-A, 6th Floor, Office Block-II, East Kidwai Nagar, New Delhi-110023, acting in the premises through RGM/ED or his authorized representative (hereinafter referred to as 'RailTel', which expression should unless repugnant to the context or meaning thereof include its successors and permitted assigns) of the one part;

And _____ having its registered office at ----- acting in the premises through..... (hereafter referred to as "Contractor", which expression should unless repugnant to the context or meaning thereof include its successor and permitted assigns) of the other part.

Whereas in response to a call for Tender by RailTel for the work of "....." for RailTel Corporation of India Limited as per tender papers at Annexure 'A' read with Corrigendum..... issued by RailTel hereto, the Contractor has submitted offer letter as per Annexure 'B' hereto

AND WHEREAS the said Tender of the Contractor has been accepted for the work of "....." for RailTel Corporation of India Limited as per copy of Letter of Acceptance of Tender No. _____ dated _____ complete with enclosures at the accepted rates and agreed deviations from tender papers as per Annexure-C hereto at contract value of Rs. _____ (Rupees _____ Only) duly accepted by the contractor.

Now this agreement witnesses that in consideration of the premises and the payment to be made by the Purchaser (RailTel) to the Contractor provided for herein, the Contractor shall supply all equipment and materials and execute and perform all works for which the said Tender of the Contractor has been accepted strictly according to the various provisions in Annexure 'B' and 'C' hereto and upon such supply, execute and performance to the satisfaction of the purchaser (RailTel) and the purchaser (RailTel) shall pay to the Contractor at the rates accepted as per the said Annexure 'C' and in terms of the provisions therein.

IN WITNESS whereof both the parties have hereunto set and subscribed their respective hands and/or seals on the day and year respectively mentioned against their respective signatures.

Signed and delivered by Shri _____ for and on behalf of RailTel Corporation of India Ltd.

The contract within named in the presence of:

1. Signatures
Date
Name in Block Capitals
Address:

2. Signatures
Date
Name in Block Capitals
Address:

Signed and delivered by Shri. _____ for and on behalf of

The contractor within named in the presence of :

1. Signatures
Date
Name in Block Capitals
Address:

2. Signature
Date
Name in Block Capitals
Address:

Annexure 'A' : Tender Document No..... with Corrigendum(s), if any.
Annexure 'B' : Contractor's offer letter.
Annexure 'C' : Letter of Acceptance No..... with all enclosures.
Annexure 'D' : Copy of Rolling Performance Bank Guarantee (R-PBG)

**SECTION-I
CHAPTER-7**

Annexure-I - List of RPF Thana/Post/Depot and List of Divisional and Headquarter Control Offices covered under present Tender

A. List of RPF Thana/Post/Depot

SN	Name of Controlling RPF Thana/Posts/Depot	Railway Zone	RailTel Region
1	Aburoad	NWR	NR
2	Adarshnagardelhi	NR	NR
3	Agra Cantt	NCR	NR
4	Agra Fort	NCR	NR
5	Akbar Pur	NR	NR
6	Aligarh	NCR	NR
7	Alwar	NWR	NR
8	Azamgarh	NER	NR
9	Azamgarh	NER	NR
10	Balia	NER	NR
11	Balia	NER	NR
12	Banda	NCR	NR
13	Banda	NCR	NR
14	Bandikui	NWR	NR
15	Dausa	NWR	NR
16	Barabanki	NR	NR
17	Bareilly City	NER	NR
18	Barmer	NWR	NR
19	Barmer	NWR	NR
20	Basti	NER	NR
21	Khalilabad	NER	NR
22	Beas	NR	NR
23	Beawar	NWR	NR
24	Pali Marwar	NWR	NR
25	Bhatinda	NR	NR
26	Bhatni	NER	NR
27	Bhatni	NER	NR

28	Bhilwara	NWR	NR
29	Bhiwani	NWR	NR
30	Chandausi	NR	NR
31	Chitrakutdham Karwi	NCR	NR
32	Dabra	NCR	NR
33	Dehradun	NR	NR
34	Delhi Kishanganj	NR	NR
35	Delhi Shahdara	NR	NR
36	Deoria Sadar	NER	NR
37	Dholpur	NCR	NR
38	Etawah	NCR	NR
39	Falna	NWR	NR
40	Falna	NWR	NR
41	Falna	NWR	NR
42	Faridabad	NR	NR
43	Faridabad	NR	NR
44	Faridabad	NR	NR
45	Farrukhabad Jn.	NER	NR
46	Farrukhabad Jn.	NER	NR
47	Fatehpur	NCR	NR
48	Firozabad	NCR	NR
49	Firozpur Cantt.	NR	NR
50	Amroha	NR	NR
51	Gandhinagar	NWR	NR
52	Gonda Jn	NER	NR
53	Gurgaon	NR	NR
54	Gwalior	NCR	NR
55	Hanumangarh	NWR	NR
56	Suratgarh	NWR	NR
57	Hapur	NR	NR
58	Haridwar	NR	NR
59	Rishikesh	NR	NR
60	Hisar	NWR	NR
61	Jagadhri	NR	NR
62	Jaisalmer	NWR	NR
63	Jalandhar Cant	NR	NR
64	Jalandhar Cant	NR	NR
65	Janghai	NR	NR
66	Bhadohi	NR	NR

67	Datia	NCR	NR
68	Jaunpur	NR	NR
69	Jaunpur	NR	NR
70	Jind	NR	NR
71	Jodhpur	NWR	NR
72	Kannauj	NER	NR
73	Kannauj	NER	NR
74	Kasganj Jn	NER	NR
75	Kashipur Jn.	NER	NR
76	Kathgodam	NER	NR
77	Kathgodam	NER	NR
78	Kathua	NR	NR
79	Kotkapura	NR	NR
80	Laksar	NR	NR
81	Nazibabad	NR	NR
82	Roorkee	NR	NR
83	Lalgarh	NWR	NR
84	Lalitpur	NCR	NR
85	Babina	NCR	NR
86	Lalkuan	NER	NR
87	Rudrapur City	NER	NR
88	Badshahnagar	NER	NR
89	Lucknow City	NER	NR
90	Mahoba	NCR	NR
91	Mahoba	NCR	NR
92	Lakhimpur	NER	NR
93	Manduadih	NER	NR
94	Manikpur	NCR	NR
95	Mankapur Jn	NER	NR
96	Marwar Jn.	NWR	NR
97	Mau Jn	NER	NR
98	Mau Jn	NER	NR
99	Meerut City	NR	NR
100	Meerut City	NR	NR
101	Merta Road	NWR	NR
102	Merta Road	NWR	NR
103	Makrana	NWR	NR
104	Nagaur	NWR	NR
105	Mirzapur	NCR	NR
106	Mirzapur	NCR	NR

107	Morena	NCR	NR
108	Morena	NCR	NR
109	Muzaffarnagar	NR	NR
110	Muzaffarnagar	NR	NR
111	Nangaldam	NR	NR
112	Nihal Garh	NR	NR
113	Ghazipur City	NER	NR
114	Hardoi	NR	NR
115	LDH	NR	NR
116	Palwal	NR	NR
117	Panipat	NR	NR
118	KUN	NR	NR
119	Partapgarh	NR	NR
120	Amethi	NR	NR
121	Pathankot	NR	NR
122	Phaphund	NCR	NR
123	Phulera	NWR	NR
124	Kishangarh	NWR	NR
125	Pilibhit Jn.	NER	NR
126	Prayag	NR	NR
127	Phul Pur	NR	NR
128	Raebareli	NR	NR
129	Rajpura Jn.	NR	NR
130	Rampur	NR	NR
131	Rewari	NWR	NR
132	Sikar	NWR	NR
133	Rohtak	NR	NR
134	Rohtak	NR	NR
135	Shahganj	NR	NR
136	Shahjahanpur	NR	NR
137	Shakurbasti	NR	NR
138	Shakurbasti	NR	NR
139	Shikohabad	NCR	NR
140	Sirhind Jn.	NR	NR
141	Sirsa	NWR	NR
142	Sitapur	NER	NR
143	Siwan Jn	NER	NR
144	Siwan Jn	NER	NR
145	Sonipat	NR	NR

146	Sri Ganganagar	NWR	NR
147	Sultanpur	NR	NR
148	Tundla	NCR	NR
149	Udaipur City	NWR	NR
150	Udaipur City	NWR	NR
151	Unnao	NR	NR
152	Begusarai	ECR	ER
153	Mansi	ECR	ER
154	Bakhtiarpur/Barh	ECR	ER
155	Biharshariff	ECR	ER
156	Jamui	ECR	ER
157	Danapur	ECR	ER
158	Jhajha	ECR	ER
159	Mokama	ECR	ER
160	Rajgir	ECR	ER
161	Anugraha Narayan Road/ De- hri-On-Sone	ECR	ER
162	Singrauli	ECR	ER
163	Renukut	ECR	ER
164	Chopan	ECR	ER
165	Parasnath	ECR	ER
166	Chandrapura	ECR	ER
167	Sakari	ECR	ER
168	Sonepur	ECR	ER
169	Sasaram	ECR	ER
170	Bagaha	ECR	ER
171	Betiah	ECR	ER
172	Chakia	ECR	ER
173	Hasanpur Road	ECR	ER
174	Saharsa/Sagauli	ECR	ER
175	Samastipur/Madhubani	ECR	ER
176	Sitamarhi(Darbhangha)	ECR	ER
177	Bandel	ER	ER
178	Rampurhat	ER	ER
179	NAIHATI JN.	ER	ER
180	BERHAMPUR COURT	ER	ER
181	Chittaranjan	ER	ER
182	Jasidih	ER	ER
183	MADHUPUR	ER	ER
184	RANIGANJ	ER	ER
185	JAMALPUR	ER	ER
186	Bhagalpur	ER	ER
187	Sultanganj	ER	ER

188	Bally/Howrah	ER	ER
189	Chandanpur	ER	ER
190	Dankuni	ER	ER
191	Sheoraphuli /Tarakeswar	ER	ER
192	Ballygunge	ER	ER
193	SDAH/KOAA	ER	ER
194	Dumdum	ER	ER
195	BARRACKPORE	ER	ER
196	Ranaghat	ER	ER
197	NEW FARAKKA	ER	ER
198	Ambikakalna/Nabadwipdham	ER	ER
199	Katwa	ER	ER
200	Pakur	ER	ER
201	Saktigarh	ER	ER
202	Bangaon Jn	ER	ER
203	Barasat	ER	ER
204	BARUIPUR JN	ER	ER
205	SONARPUR	ER	ER
206	SAHIBGANJ	ER	ER
207	Hatia	SER	ER
208	Balasore	SER	ER
209	Digha	SER	ER
210	Kharagpur	SER	ER
211	Muri	SER	ER
212	Chakradharpur	SER	ER
213	Rourkella	SER	ER
214	Adra	SER	ER
215	Purulia	SER	ER
216	Bhatapara	SECR	ER
217	Bhilai	SECR	ER
218	Tilda	SECR	ER
219	Bilaspur	SECR	ER
220	Anupur	SECR	ER
221	Agartala	NFR	ER
222	New Alipurduar	NFR	ER
223	New Coochbehar	NFR	ER
224	Alipurduar Junction	NFR	ER
225	Bongaigaon	NFR	ER
226	Barpeta Road	NFR	ER
227	Coochbehar	NFR	ER
228	Purnea Jn	NFR	ER
229	Raiganj	NFR	ER
230	Samsi	NFR	ER

231	Jorhat Town	NFR	ER
232	Tinsukia	NFR	ER
233	Bhadrak	ECOR	ER
234	Brahmapur	ECOR	ER
235	Jajpur-Keonjhar Road	ECOR	ER
236	Khurda Road	ECOR	ER
237	Palasa	ECOR	ER
238	Rayagada	ECOR	ER
239	Sambalpur	ECOR	ER
240	Srikakulam road	ECOR	ER
241	Vizianagaram	ECOR	ER
242	Angul	ECOR	ER
243	Balangir	ECOR	ER
244	Dhenkanal	ECOR	ER
245	Jagdalpur	ECOR	ER
246	Koraput	ECOR	ER
247	Ahmednagar	CR	WR
248	AJNI	CR	WR
249	Amravati	CR	WR
250	Anand	WR	WR
251	Ankleshwar	WR	WR
252	Badlapur	CR	WR
253	Ballarshah	CR	WR
254	Belapur	CR	WR
255	Betul	CR	WR
256	Bharatpur	WCR	WR
257	Bharuch	WR	WR
258	Bhavnagar Terminus	WR	WR
259	Bina	WCR	WR
260	Boisar	WR	WR
261	Botad	WR	WR
262	Burhanpur	CR	WR
263	Byculla	CR	WR
264	Chandrapur	CR	WR
265	Chittorgarh Jn.	WR	WR
266	CSMT	CR	WR
267	Dadar	CR	WR
268	Dahanu Road	WR	WR
269	Dahod	WR	WR
270	Damoh	WCR	WR
271	Daund	CR	WR
272	Dehu Road	CR	WR
273	Dewas	WR	WR
274	Diwa	CR	WR

275	Dombivli	CR	WR
276	Dwarka	WR	WR
277	Gandhidham	WR	WR
278	Ghatkopar	CR	WR
279	Ghorawadi	CR	WR
280	Godhra	WR	WR
281	Gulbarga	CR	WR
282	HABIBGANJ	WCR	WR
283	Hoshangabad	WCR	WR
284	Igatpuri	CR	WR
285	Indore	WR	WR
286	Jabalpur	WCR	WR
287	Jalgaon	CR	WR
288	Jamnagar	WR	WR
289	Junagarh	WR	WR
290	Kalyan	CR	WR
291	Karjat	CR	WR
292	Kasara	CR	WR
293	Katni	WCR	WR
294	Khadki	CR	WR
295	Khandwa	CR	WR
296	Kolhapur	CR	WR
297	Kopergaon	CR	WR
298	Kota	WCR	WR
299	Kurduwadi	CR	WR
300	Kurla	CR	WR
301	Latur	CR	WR
302	Lonavala	CR	WR
303	Mahesana	WR	WR
304	Maihar	WCR	WR
305	Malkapur	CR	WR
306	Mandsaur	WR	WR
307	Mankhurd	CR	WR
308	Mhow	WR	WR
309	Miraj	CR	WR
310	Mulund	CR	WR
311	Nadiad	WR	WR
312	Nagda	WR	WR
313	Nandurbar	WR	WR
314	Nashik Road	CR	WR
315	Navsari	WR	WR
316	New Bhuj	WR	WR
317	Nimach	WR	WR
318	Palanpur	WR	WR

319	Palghar	WR	WR
320	Panvel	CR	WR
321	Pipariya	WCR	WR
322	Porbandar	WR	WR
323	Rajkot	WR	WR
324	Ratlam	WR	WR
325	Rewa	WCR	WR
326	Sainagar Shirdi	CR	WR
327	Samakhlyali	WR	WR
328	Satara	CR	WR
329	Satna	WCR	WR
330	Saugor	WCR	WR
331	Sawai Madho- pur	WCR	WR
332	Shegaon	CR	WR
333	Shivajingar	CR	WR
334	Solapur	CR	WR
335	Surendranagar	WR	WR
336	Thane	CR	WR
337	Turbhe	CR	WR
338	Udhana	WR	WR
339	Vadala Rd.	CR	WR
340	Vadodara	WR	WR
341	Valsad	WR	WR
342	Vapi	WR	WR
343	Vashi	CR	WR
344	Veraval	WR	WR
345	Vidisha	WCR	WR
346	Viramgam	WR	WR
347	Virar	WR	WR
348	Wadi	CR	WR
349	Wardha	CR	WR
350	Adilabad	SCR	SR
351	Alappuzha (Alleppey)	SR	SR
352	Anantapur	SCR	SR
353	Arakkonam Jn	SR	SR
354	Aurangabad	SCR	SR
355	Bhadrachalam Road	SCR	SR
356	Bharath Nagar	SCR	SR
357	Lingampalli	SCR	SR
358	Bhimavaram Jn.	SCR	SR
359	Narasapur	SCR	SR
360	Bidar	SCR	SR
361	Chengannur	SR	SR
362	Chengalpattu Jn.	SR	SR

363	Bapatla	SCR	SR
364	Chittoor	SCR	SR
365	Coimbatore	SR	SR
366	Dindigul	SR	SR
367	Nidadavolu Jn	SCR	SR
368	Ernakulam Town	SR	SR
369	Erode	SR	SR
370	Guntakal Jn.	SCR	SR
371	Guntur Jn.	SCR	SR
372	Begumpet	SCR	SR
373	Hyderabad	SCR	SR
374	Jalna	SCR	SR
375	Jolarpettai Jn	SR	SR
376	Kacheguda	SCR	SR
377	Falaknuma	SCR	SR
378	Kamareddi	SCR	SR
379	Kannur	SR	SR
380	Payyannur	SR	SR
381	Thalassery	SR	SR
382	Karur	SR	SR
383	Kasargod	SR	SR
384	Kanhangad	SR	SR
385	Katpadi	SR	SR
386	Kayankulam Jn	SR	SR
387	Kazipet Jn.	SCR	SR
388	Kadapah	SCR	SR
389	Khammam	SCR	SR
390	Kollam Jn	SR	SR
391	Kottayam	SR	SR
392	Vadakara	SR	SR
393	Kurnool Town	SCR	SR
394	Mahaboobnagar	SCR	SR
395	Mahbubabad	SCR	SR
396	Mangalore Central	SR	SR
397	Mayiladuthurai Jn.	SR	SR
398	Kumbakonam	SR	SR
399	Nagarsol	SCR	SR
400	Nagercoil	SR	SR
401	Kanniyakumari	SR	SR
402	Nanded	SCR	SR
403	Mudkhed Jn.	SCR	SR
404	Nandlur	SCR	SR
405	Nandyal	SCR	SR
406	Nizamabad	SCR	SR

407	Aluva	SR	SR
408	Thrisur	SR	SR
409	Ongole	SCR	SR
410	Kavali	SCR	SR
411	Pakala	SCR	SR
412	Palakkad	SR	SR
413	Parli Vaijnath	SCR	SR
414	Purna	SCR	SR
415	Raichur	SCR	SR
416	Rajahmundry	SCR	SR
417	Samalkot Jn.	SCR	SR
418	Manchiryal	SCR	SR
419	Rameswaram	SR	SR
420	Salem	SR	SR
421	Secunderabad	SCR	SR
422	Shoranur	SR	SR
423	Tirur	SR	SR
424	Sirpur Kaghaznagar	SCR	SR
425	Krishna Canal	SCR	SR
426	Thanjavur Jn	SR	SR
427	Tirumayilai	SR	SR
428	Tirunelveli Jn	SR	SR
429	Tiruppur	SR	SR
430	Tuni	SCR	SR
431	Tuticorin	SR	SR
432	Vijayawada	SCR	SR
433	Gudivada Jn.	SCR	SR
434	Vikarabad Jn.	SCR	SR
435	Villupuram Jn.	SR	SR
436	Virudhunagar	SR	SR
437	Kovilpatti	SR	SR
438	Warangal	SCR	SR
439	Yerraguntla	SCR	SR

B. List of Divisional and Headquarter Control Offices

List of Divisional and Headquarter Control Offices				
SN	Railway Zone	Headquarters	Divisional Control Office	RailTel Region
1	Railway Board	Delhi	-	Northern
2	Command Control Centre Location	Delhi	-	Northern

3	North Central Railway	Allahabad	Allahabad, Tundla, Agra, Jhansi	Northern
4	North Eastern Railway	Gorakhpur	Izzatnagar, Lucknow, Varanasi	Northern
5	North Western Railway	Jaipur	Jaipur, Ajmer, Bikaner, Jodhpur	Northern
6	Northern Railway	Delhi	Delhi, Ambala, Firozpur, Lucknow, Moradabad	Northern
7	Eastern Railway	Fairlie place, Kolkata	Howrah, Sealdah, Asansol, Maldatown	Eastern
8	East Coast Railway	Bhubaneswar	Khurda, Waltair, Sambalpur	Eastern
9	East Central Railway	Hazipur, Patna	Dhanbad, Danapur, Sonapur, Samastipur, Mugalsarai	Eastern
10	North East Frontier Railway	Maligaon, Guwahati	Alipurduar, Katihar, Lumding, Rangiya, Tinsukia	Eastern
11	South East Central Railway	Bilaspur	Raipur	Eastern
12	South Eastern Railway	Garden Reach	Kharagpur, Ranchi	Eastern
13	Central Railway	CSMT	Mumbai, Bhusawal, Nagpur, Pune & Solapur.	Central
14	Western Railway	CCG	Ahmedabad, Vadodara, Bhavnagar, Mumbai,	Western
15	West Central Railway	JBP	Jabalpur, Bhopal and Kota	West Central
16	South Central Railway	Secunderabad	Secunderabad, Hyderabad, Vijaya-wada, Guntur, Guntakal and Nanded	Southern
17	Southern Railway	Chennai	Madras, Madurai, Palakkad, Salem, Trichy and Trivandrum	Southern

Annexure-II - List of Coaches covered under the scope of present tender

1. SOR-I EMU/DEMU/MEMU Coaches

S. No.	Rail-Tel Region	Zonal Rail-way	Name of Shed	EMU			MEMU			Total EMU/ME MU Coaches
				Motor Car (MC)	Trail-ing Coac h (TC)	Total	MC	TC	Total	
1	NR	NR	GZB	113	224	337	109	325	434	934
			SRE	0	0	0	41	122	163	
			Total	113	224	337	150	447	597	
2	ER	ER	Howrah	163	338	501	77	231	308	3926
			Bandel	118	250	368	7	21	28	
			NKG	123	261	384	0	0	0	
			Barasat	129	277	406	0	0	0	
			Sonarpur	156	324	480	0	0	0	
			Ranaghat	70	148	218	0	0	0	
			Total	759	1598	2357	84	252	336	
		SER	Thiapa-ra/Panska ra	146	283	429	0	0	0	
		SECR	Kharag-pur	0	0	0	43	126	169	
			Bhilai	0	0	0	38	113	151	
			Total	0	0	0	81	239	320	
		ECR	Jalna	0	0	0	120	363	483	
3	WR	CR	AC-DC siemens	298	595	893	0	0	0	4032
			Total	298	595	893	0	0	0	
			AC-Retro	68	144	212	0	0	0	
			AC-DC Siemens	102	205	307	0	0	0	
			AC-DC Bhek	58	116	174	0	0	0	
			Total	228	465	693	0	0	0	
			AC-Retro	105	212	317	0	0	0	
			AC-DC Siemens	107	214	321	0	0	0	
			Total	212	426	638	0	0	0	
			G.Total	738	1486	2224	0	0	0	
		WR	BCT, KILE & VR	0	0	0	79	233	312	
			DC EMU	1	19	20	0	0	0	

			AC (Re-trofitted)	48	99	147	0	0	0	
			AC EMU	1	0	1	0	0	0	
			AISTOM Sie-mens/M UTP	30	63	93	0	0	0	
			Phase-I	68	133	201	0	0	0	
			MUTP Phase-II	335	671	1006	0	0	0	
			Medha	9	19	28	0	0	0	
			Total	493	1003	1496	79	233	312	
4	SR	SR	Avadi	142	285	427	27	79	106	1457
			Tamba-ram	140	278	418	9	28	37	
			Velachery	33	66	99	9	28	37	
			Total	315	629	944	45	135	180	
		SCR	Maula Ali	37	75	111	6	17	23	
			Raja-mundary	0	0	0	34	98	132	
			Total	37	75	112	40	115	155	
		SWR		0	0	0	17	50	67	
			Grand Total	2600	5298	7898	617	1834	2451	

2. SOR-II – Premium Trains

SN	Railway Zone	RailTel Region	Zone Wise Coach Data
1	NR	NR	1313
2	NCR		119
3	NER		40
4	NWR		40
5	ECR	ER	80
6	ECOR		278
7	ER		398
8	NFR		219
9	SER		259
10	WR	WR	457
11	WCR		40

12	CR		258
13	SR	SR	219
14	SCR		199
15	SWR		119
			4038

2.1 Premium Train Coaching Depots

SN	RailTel Region	Railway Division	Coaching Depot
1	NR	NR	ANVT
2	WR	WR	ADI
3	ER	NFR	AGTL
4	NR	NCR	ALD
5	NR	NR	ASR
6	ER	ECOR	BBS
7	WR	WR	BCT
8	WR	WR	BDTS
9	WR	WCR	BPL
10	NR	NR	BSB
11	NR	NR	CDG
12	NR	NCR	CNB
13	ER	ECR	DBG
14	ER	NFR	DBRG
15	NR	NR	DEE
16	ER	NFR	GHY
17	ER	SER	HTE
18	ER	ER	HWH
19	SR	SCR	HYB
20	WR	WR	INDB
21	NR	NR	JAT
22	WR	WCR	JBP
23	NR	NWR	JP
24	SR	SR	KCVL
25	ER	ER	KOAA
26	NR	NER	LJN
27	NR	NR	LKO
28	WR	CR	LTT
29	ER	ER	MAO
30	SR	SR	MAS
31	SR	SR	MAS
32	WR	WR	MMCT
33	NR	NR	NDLS
34	WR	CR	NGP

35	ER	NFR	NJP
36	NR	NR	NZM
37	SR	SWR	NZM
38	ER	SER	PDPK
39	ER	ECOR	PUI
40	WR	CR	PUNE
41	ER	ECOR	PURI
42	ER	ECR	RJPB
43	WR	WR	RJT
44	ER	ECR	RNCC
45	SR	SWR	SBC
46	SR	SCR	SC
47	ER	ER	SDAH
48	ER	SER	SRC
49	NR	NR	SVDK
50	ER	ER	SYDL
51	ER	ER	TKPR
52	SR	SWR	YPR

Note:

Above list of Coaches and Depots/Shedis indicative. However, Final list will be shared to the successful bidder at the time of issue of the Purchase Order/LOA.

Annexure-III - Functional Requirement for Bidders during Proof of Concept (POC)

POC by all bidders who have submitted their Bid Documents, will be carried out in two parts {**POC Part-A (General) and POC Part-B (FRS)**} per Clause 4.A.47 of Chapter-4A (Section-I) as per details discussed below. **POC Part-A (General)** will be carried out in standstill coach(s) while **POC Part-B (FRS)** will be carried out simultaneously on running as well as on standstill coach(s).

1. Qualification Criteria for POC

All parameters/specifications mentioned in this document will be verified by Rail-Tel/Indian Railway or its authorized representatives in the presence of authorized representative of the Bidders and OEMs.

In case of any conflict in the Functional requirements mentioned in this document with RDSO specification no. RDSO/SPN/TC/106/2022, Version-2.1 or latest, RDSO specification version-2.1 or latest will prevail.

Bidder is required to meet all functional requirements mentioned in this document for successful completion of POC and in case of failure to demonstrate any of these requirements, POC will be declared unsuccessful by RailTel and bidder's technical bid will be rejected. **However, in case rejection of POC Part-B (FRS) report for bidder(s), RailTel reserves the right to consider bids of the bidder(s), who have successfully demonstrated all parameters of POC Part-A (General) and not to procure FRS related hardware and Software offered under each packages by Bidder(s).**

This is a basic testing of the bidder's offered solution and bidders need to qualify both POC and eligibility conditions mentioned in the tender document for becoming eligible for opening of price bid.

Bidder is required to record complete POC session on Dome cameras installed for POC and should handover two copies of recording on storage device (in CD/DVD/Pen drive/hard-disk) to RailTel, along with required log files and alerts of VMS, Workstation, VA & FRS. Bidder/OEM should delete all type of recordings on Hardware/Software used for POC after keeping one copy for their record.

POC is a preliminary pre-qualification requirement and successful bidders in POC should not be considering themselves as technically qualified. Decision regarding technical qualification of the bidder will be taken by RailTel based on technical bid submitted by bidder and successful completion of POC. Detailed testing of the components of the selected Bidder's CCTV solution will be done by RDSO and CERT-IN empanelled government audit agencies during material inspection as per terms and conditions mentioned in the tender document.

Bidder is required to meet following qualification criteria for successful POC:

Physical Checks: All bidders are required to offer Hardware and Software for POC as per their offered CCTV solution in bid documents as per details given in Table-1 of Para-3 below and submit details of Hardware/Software offered for POC as per Format given in Table-2 of Para-3. No deviation in make and model/version of Hardware/Software will be ac-

cepted. A self-declaration mentioned below to be submitted by the bidder before start of the POC-

An undertaking on letter head stating that

- A. “We have offered same make and model/version of Hardware/Software in Proof of Concept as submitted by us in the technical bid documents on IREPS portal. In case of any deviation found, our POC will be declared unsuccessful and Bid maybe rejected by RailTel.”
- B. An undertaking on letter head (enclosing details of Hardware & Software as per Table-2 of Point-3) in which bidder will clearly mention that Hardware and Software offered for POC are in compliance with technical specification as mentioned in RDSO specification version-2.1 or latest and specification mentioned in the Tender document.

No deviation from RDSO specification of CCTV and specification mentioned in the Tender document shall be allowed during the POC stage. In case of any deviation, bidder will be declared unsuccessful in POC by RailTel.

2. **Functional Requirement:** Bidder will demonstrate all features/ configuration of the offered solution to RailTel or its authorized representative as per points mentioned below in Section-3 for PoC (Technical Evaluation).

Note: Only physical checks and Functional requirements will be done during POC. Required Certificates as per RDSO specifications are required at the time of Factory Acceptance Test (FAT) by RDSO as per clause 3.D.3 of Chapter-3D of Tender document.

Applicable Schematic Diagram:

Network implementation scheme offered by the bidder in its offered solution should be based on RDSO Specification no. RDSO/SPN/TC/106/2022 version-2.1 or latest. Bidders are required to connect Hardware as per above mentioned network implementation scheme.

a) **Physical Check for POC**

Bidder to submit the list of Hardware and Software to be evaluated for compliance to the technical specification and functional requirement as per RDSO Specification within 7 working days from the date of bid opening. No separate correspondence for same will be done.

Table-1: Minimum Hardware/Software to be offered for POC

SN	Required Hardware/Software for POC	Minimum Qty
1	Full HD Fixed Dome Type IP Colour Camera (for coach) - One at entry, one at vestibule side (covering Panic Button) and one at aisle area.	3
2	Video Recorder Unit (VRU) / Mobile NVR (for coach)	1

	with System Software	
3	Video Management System (VMS)- including CMS application: Hardware and Software (for Data centre)	1
4	PC Workstation along with accessories (for a central location: to be decided by RailTel)	2
5	Wireless Access Point (for coach)	1
6	Facial Recognition Server (Database Server) (for Data centre)	1
7	Facial Recognition Server (Matching Server) (for Data centre)	1
8	Storage (minimum 1 TB : required for demonstration) (for Data Centre)	1
9	Panic Button location - as per RDSO specification.	1
10	All necessary software as proposed such as VMS (including CMS with necessary Hardware and Software), FRS should be already installed and configured in the systems. GPS & LTE Antennae and WiFi connection as required in RDSO specification. Note – Active SIM Card (JIO Postpaid or similar) will be handed over by RailTel to Bidder's authorized representative for using it strictly only for VRU/M-NVR during allotted POC period. It will be the responsibility of the bidder to integrate SIM card with its offered solution and RailTel will not be responsible for Bidders failure to integrate SIM. SIM should be handed back to RailTel's representative immediately after completion of POC.	As required

Any additional equipments or material or software and cables that may be required for performing test should be arranged by bidder at the time of POC for successful testing. Such additional Hardware/Software if used, should be as per the technical specification mentioned in tender documents. **Above hardware & software for POC are required to be installed in coach(s) offered by Railways, RailTel's datacenters and a central location decided by RailTel.**

Table-2: Details of the Hardware/Software offered by the Bidder for POC

Sr.	Equipment Type	Qty	Make	Model	Country of Manufacturing	Country(s) where IPR & Source Code is Registered	MAC address of each device and Country where MAC address is registered	Serial Number/Software version of Each Hardware/Software
1	Full HD Fixed Dome Type IP Colour Camera	3						
2	Video Recorder Unit (VRU) / Mobile	1						

	NVR							
3	Central Video Management System (VMS) Hardware and Software	1						
4	PC Workstation along with accessories for creating environment for two RPF Thana Locations.	2						
5	Wireless Access Point	1						
6	Facial Recognition Server (Database Server)	1						
7	Facial Recognition Server (Matching Server)	1						
8	Storage (TB as required for demonstration)	1						
9	Panic Button	1						
10	All necessary software as proposed such as VMS, FRS should be already installed and configured in the systems. GPS & LTE Antennae and WiFi connection as required in RDSO specification.	As required						

b) Compliance to RDSO specification and Tender conditions

CCTV Surveillance System shall be end to end IP based with IP Cameras as per RDSO specification version-2.1 or latest & as per Tender requirement.

In IP based CCTV Surveillance System, all type of Cameras along with Hardware/Software mentioned in Point-3 of Table-1 shall be connected as per specification mentioned in RDSO specification no. RDSO SPN/TC/106/2022, Version-2.1 or latest. Bidder has to create the testing environment consisting of Train Coach, Data-center and RPF Thana/Post for successful demonstration of POC.

c) **Set-up requirement for POC**

Bidder shall arrange all necessary equipments, cables and accessories that may be required to perform POC successfully. The Table below contains minimum tests parameters and RailTel or its authorized representative may demand to test additional parameters from RDSO specification no. RDSO/SPN/ TC/106/2022, Version 2.1 or latest to meet their satisfaction.

Sr.	Set-up Requirement for POC		Remarks (Yes/No)
1.	Setup Connectivity:		
	i.	All Cameras should be configured in the VRU/Mobile NVR in coach and in VMS Server at Datacenter.	
	ii.	Configuration of FRS Application installed in VRU/Mobile NVR in coach & FRS Servers (Matching & DB) in Datacenter.	
	iii.	Checking connectivity of VRU/Mobile NVR in coach with VMS Server and FRS Servers in datacenter.	
	iv.	FRS Database Server with Database to be connected and configured for Alarms.	
	v.	FRS Matching Server to be connected and configured	
	vi.	Connectivity of PC Workstation for VMS Client	
2.	Setup, Configure, Access for CCTV Surveillance System Functions:		
	i.	All Cameras and equipments are configured and accessible over the network.	
	ii.	All cameras are configured as per RDSO specification.	
	iii.	Setup VMS for all cameras live viewing and recording.	
	iv.	Setup Database FRS Server as per RDSO specification.	
	v.	Setup Matching FRS Server as per RDSO specification.	
	vi.	VMS client should be loaded in PC workstation and integrated with VMS Server for Live View & Playback, VA Alarms & FRS Alarms.	
	vii.	In Dead Zone where Wi-Fi & LTE is not available, NVR/Mobile NVR able to store meta data and sent to Data center when network is available, and subsequently alarm may be generated in CMS	
3.	Setup for CMS (Central Management System):		
	i.	Mapping Requirements - CMS shall maintain a mapping of all train coaches and their respective Video Recorder Unit / Mobile NVR associated with coach.	
	ii.	Alert Generation - Once an alert is generated, Central Server shall help in escalating a particular event to RPF	

Sr.	Set-up Requirement for POC	Remarks (Yes/No)
	/ Thana Posts using GPS/Indian Regional Navigation Satellite System (IRNSS) location of the train.	
iii.	Dashboard – Central Management System shall have a dashboard to display status of all requests pertaining to video footage by various RPF Thana/Post. CMS shall also provide a dashboard to respective RPF Thana/Post displaying status (in-progress/completed) of the requests created by that RPF Thana/Post.	
iv.	Incident Management – a. On reception of incident from RPF Thana/Post, Central Server shall create an entry & will be responsible for fetching the recordings related with the incident from the respective Train Coach-Video Recorder Unit / Mobile NVR once it becomes live in the network. Subsequently, system should send an alert and it should change the state from in-process to close state and an acknowledgement to be shared to the RPF Thana /Post. b. Once the RPF Thana / Post sees completed status in the dashboard against a particular request, they should be able to view the required video footage. Client at RPF Thana / Post should also have the facility to flag / mark indicating the duration (time period) for which the video footage need to be retained along with justification / remarks for the same. System shall also display the list of video footage with details e.g. date, duration, video recording unit, train no., video file size) being stored for long term retention as desired by RPF officials.	
v.	The Video data at Data Centre shall be accessible to any other centralized location or other clients through MPLS / IP network as per requirement of purchaser for Viewing and Monitoring.	
vi.	Camera Tempering alarm	

d) Functional Requirement for POC

- (i) **PART-A(General):** All parameters mentioned under this section shall be tested in a **standstill coach** and are **mandatory** to pass for successful POC.

SN	Functional Requirement for POC	Result (Pass / Fail)
----	--------------------------------	-------------------------

1.	Mapping Requirements in CMS	
	CMS including Video Management System (VMS) shall be deployed at Datacenter	
2.	Camera Functional Checks	
	All features of cameras listed below should be demonstrated through CMS.	

3.	System Software	Result (Pass/Fail)
A	System Software shall have following minimum specifications to be provided in VRU or Mobile-NVR:	
(i)	a. Video Recorder Unit / Mobile NVR installed in Coaches are provided with unique digital identification number. b. It shall be possible to change identification number of Video Recorder Unit / Mobile NVR.	a. b.
(ii)	Live display of camerason display of PC Workstation	
(iii)	Recording of Video in VRU or Mobile-NVR	
(iv)	Quality of Playback of archived videoon display of PC Workstation	
(v)	Retrieval of archived videoon USB drive	
(vi)	After power disconnection of 2 minutes, the Video Recorder Unit/ Mobile NVR shall automatically resume recording of connected cameras.	
(vii)	After network disconnection between Video Recorder Unit/ Mobile NVR and Camera for 2 minutes, the Video Recorder Unit/Mobile NVR shall automatically recover when the connection is restored.	
(viii)	The system software shall support recording search by camera, date and time, events etc.	
(ix)	The system software shall maintain system log such as alarms, events and operator log.	
(x)	The system software shall support user management such as authentication of user login, configuration of users and user access rights.	
(xi)	Transfer of recording from Video Recording Unit/ Mobile NVR to Storage in Data Centre.	
(xii)	The Camera Tampering alert shall be sent over network to Datacenter and displayed on VMS Client in PC Workstation: a. Wi-Fi b. LTE	a. b.
(xiii)	Dashboard – Dashboard of CMS shall display status (In-progress/Completed) of request pertaining to video footage by 2 PC Workstations (2 Request from each). a. Wi-Fi b. LTE	a. b.

4	Full HD Dome Camera		Result (Pass / Fail)
			Full HD Fixed Dome Camera
	i.	Streaming Capability: Minimum three (3) streams @ H.265 or higher compression Note: All three streams should be activated in camera	
	ii.	Resolution & Frame Rate: a. Full HD (1920x1080) resolution @ 25 frames per second (FPS) with H.265 or higher compression on one stream. b. FHD / HD / D1@ 25 FPS with H.265 or higher compression on 2nd stream. c. VGA or CIF or QVGA or QCIF @ 15 FPS with H.265 or higher compression on 3rd stream.	a. b. c.
	iii.	Data Rate: a) Shall work on 3 Mbps bit rate or less average for Full HD@ 25 FPS at Variable bit rate (VBR) on individual (Single) stream with H.265 or higher Video Compression. b) The camera shall also support Constant Bit Rate (CBR).	a. b.
	iv.	Activity Controlled Video Recording: During periods of negligible motion, the recording bits rate shall drop and when motion occurs, the recording bit rate shall return to normal without any perceptible delay.	
	v.	MAC Address: a) OEM Undertaking to confirm the MAC addresses of the IP Cameras are registered in the name of OEM supplying the Cameras. b) Use any of the suitable website to check details of MAC address. Note: The MAC address of all cameras should not be registered in the name of any	(i) (ii)

4	Full HD Dome Camera		Result (Pass / Fail)	
			Full HD Fixed Dome Camera	
		OEM/company/entity sharing land border with India until unless specifically allowed by the Government of India. Website references to check MAC owner firm details: https://macaddress.io or any other suitable site.		
	vi.	Once the Panic Button is activated by any person in distress, local buzzer as well as alarm shall appear on the VMS Client in PC Workstation.		

5.	Data Rate for Storage Calculation at VRU/M-NVR:		
	Description		Pass/Fail
	Note-1 The Recording shall be stored at Full HD (1920X1080) @25 FPS with Video Compression of H.265 or higher Video Compression and Audio compression of G.711/G.722/G.726/AAC or similar.		
	Note-2 Storage calculation and estimation duly vetted by VMS Software OEM should be provided by bidder and further be validated by RailTel or its authorized representative as per the following:		
	i.	Set the cameras at required resolutions as per Note-1 for respective cameras	
	ii.	Set the Frame Rate at required frame rate as per Note-1 Note: As per the RDSO Clause “Activity Controlled Video Recording: During periods of negligible motion, the bits rate shall drop and when motion occurs, the bit rate shall return to normal without any perceptible delay”, the frame rate may be dynamic but should not show any frame loss in live and video recording.	
	iii.	Set the video compression as H.265 or higher	
	iv.	Start recording of all connected cameras	
	v.	Check video stream information on Live View	
	vi.	In LIVE Mode, evaluate the data observed during with data provided by OEM in vetted proposal for calculating the storage size (Live stream settings to be stimulated at similar settings as recording settings proposed).	

		<table><tr><th>Parameter</th><th>Full HD Fixed Dome</th></tr><tr><td>Hourly storage based on OEM vetted Storage calculation sheet submitted by the bidder with technical bid.</td><td></td></tr><tr><td>Observed Average Hourly Storage used by camera during PoC (minimum 4 hours recording to be considered for calculation).</td><td></td></tr><tr><td>Observed Video Quality is Acceptable or Not-Acceptable (To be checked in Single Screen in original picture format).</td><td></td></tr><tr><td colspan="2">PASS, if observed data rate in average is equal or less-er than data rate estimated for calculation of storage size.</td></tr><tr><td colspan="2">FAIL, if observed data rate in average is more than data rate estimated for calculation of storage size.</td></tr></table>	Parameter	Full HD Fixed Dome	Hourly storage based on OEM vetted Storage calculation sheet submitted by the bidder with technical bid.		Observed Average Hourly Storage used by camera during PoC (minimum 4 hours recording to be considered for calculation).		Observed Video Quality is Acceptable or Not-Acceptable (To be checked in Single Screen in original picture format).		PASS, if observed data rate in average is equal or less-er than data rate estimated for calculation of storage size.		FAIL, if observed data rate in average is more than data rate estimated for calculation of storage size.		
Parameter	Full HD Fixed Dome														
Hourly storage based on OEM vetted Storage calculation sheet submitted by the bidder with technical bid.															
Observed Average Hourly Storage used by camera during PoC (minimum 4 hours recording to be considered for calculation).															
Observed Video Quality is Acceptable or Not-Acceptable (To be checked in Single Screen in original picture format).															
PASS, if observed data rate in average is equal or less-er than data rate estimated for calculation of storage size.															
FAIL, if observed data rate in average is more than data rate estimated for calculation of storage size.															
	vii.	<table><tr><td colspan="2">Check PLAYBACK of recorded video is same as observed in LIVE session.</td></tr><tr><th></th><th>Dome</th></tr><tr><td>Picture Quality in PLAYBACK is same as LIVE VIEW (Yes / No)</td><td></td></tr><tr><td>Observed Video Quality in Playback mode is a real-time as observed in LIVE Mode (Yes / No)</td><td></td></tr><tr><td>Observed Video Quality is Acceptable or Not-Acceptable (To be checked in Single Screen in original picture format).</td><td></td></tr></table>	Check PLAYBACK of recorded video is same as observed in LIVE session.			Dome	Picture Quality in PLAYBACK is same as LIVE VIEW (Yes / No)		Observed Video Quality in Playback mode is a real-time as observed in LIVE Mode (Yes / No)		Observed Video Quality is Acceptable or Not-Acceptable (To be checked in Single Screen in original picture format).				
Check PLAYBACK of recorded video is same as observed in LIVE session.															
	Dome														
Picture Quality in PLAYBACK is same as LIVE VIEW (Yes / No)															
Observed Video Quality in Playback mode is a real-time as observed in LIVE Mode (Yes / No)															
Observed Video Quality is Acceptable or Not-Acceptable (To be checked in Single Screen in original picture format).															
7.	Handing over of 2 copies of recording of POC session on Full HD Dome Camera in a Storage Device (except CD/DVD) along with required log files and alerts of VMS, VA & FRS to RailTel. Bidder/OEM should delete all type of recordings on Hardware/Software used for POC after keeping one copy for their record.														

- (ii) **Part-B (FRS)**—All parameters mentioned under this section shall be tested in **both standstill & running coach** and are **mandatory to pass** for successful POC (Subject to Clause no.4.A.47.6, Chapter-4):

6.2.1	Functional Requirements for Facial Recognition System (FRS) in standstill condition:		
SN	Description	Requirement	Result (Pass / Fail)
i.	If the system de-	a. Wi-Fi	a.

6.2.1	Functional Requirements for Facial Recognition System (FRS) in standstill condition:		
SN	Description	Requirement	Result (Pass / Fail)
	etects any match, then alerts carrying coach (unique) number, frame of the detected person etc. shall be sent to the Command Control Centre and nearest RPF Thana/Post (on nearest PC Workstations, being used for POC) via shortest route calculation using GPS location of the train through available Wi-Fi and LTE network.	b. LTE Network	b.
ii.	Matching response is available on web-based application on two PC Workstations		
iii.	Face matching without Mask (in Front Profile & Side Profile) –	a. Face matching with various gestures in Front View is successfully demonstrated to the satisfaction of POC Team. b. As far as Face Matching of Side Profile is concerned, correct matching while the Test Case is moving in a way that only the side face is visible (Side Posture) is to be done.	a. b.
iv.	Face Matching with Mask (in Front Profile)	Face matching in Front View should be successfully demonstrated.	
v.	Face Matching when the individual is wearing an accessory like eyeglasses, Scarf, changes in face expressions etc. However, In any case at least 50% face should be visible for recognition.	a. Face matching in Front View should be successfully demonstrated. b. As far as Face Matching of Side Profile is concerned, correct matching while the Test Case is moving in a way that only the side face is visible (Side Posture) is to be done.	a. b
vi.	Face Matching of Pictures of Individual Criminals taken	Since in Real Life Scenario the Criminal Database will have Pictures which would be many years old, hence, while	

6.2.1	Functional Requirements for Facial Recognition System (FRS) in standstill condition:		
SN	Description	Requirement	Result (Pass / Fail)
	in the Distant Past with the Picture captured by the concerned FRS enabled Camera	providing Reference Images to test the FRS based CCTV system in Coaches, it may be ensured that at least 5 to 10 years old Photographs are also used as Reference Images. The matching as per above should also be successfully demonstrated.	
vii.	Matching response shall be available on web-based application which can be configured for individual users at railway stations, central location etc.	Web application User Interface with capabilities of user configuration should be demonstrated at POC site.	
viii.	The system shall be able work on moderate face rotation either horizontal or vertical. It should support a yaw angle of -40 to +40 degrees, a pitch angle of -30 to +30 degrees and a roll angle of -20 to +20 degrees.	Person walking towards camera with his/her moderate face rotation either horizontal or vertical.	
ix.	Automated as well as Manual Data Backup and Archiving Functionality should be an integral part of the Hardware/Software Solution.	Should be demonstrated in User Interface.	
x.	The FRS should have Extensive Search feature based on Name, Date, Range and Criminal ID/ Number.	Should be demonstrated in User Interface.	
xi.	Face Recognition Mobile Application for Android and IOS Mobile a. The FRS system shall have Android and IOS	Should be demonstrated (i) Android and (ii) IOS Mobile.	(i) (ii)

6.2.1	Functional Requirements for Facial Recognition System (FRS) in standstill condition:		
SN	Description	Requirement	Result (Pass / Fail)
	Mobile Application for Facial Recognition Purpose. b. Mobile App API shall be provided for third party app integration.		
xii.	Software has mechanism to accept & process, on real time basis, to add a new image of Criminal from a. Coach b. Central Location	a. Should be demonstrated through mobile app b. Should be demonstrated through PC workstation at Central Location	a. b.

6.2.2	Functional Requirements of Facial Recognition System (FRS) on Coach in running-condition :		
SN	Description	Requirement	Result (Pass / Fail)
i.	If the system detects any match then alerts carrying coach (unique) number, frame of the detected person etc. shall be sent to the Command Control Centre and nearest RPF Thana/Post via shortest route calculation using GPS location of the train through available Wi-Fi or LTE network.	a. WiFi b. LTE Network	a. b.
ii.	Matching response shall be available on web-based application which can be configured for individual users at railway stations, central location etc.		
iii.	Face matching without Mask (in Front	c. Face matching with various gestures in Front View should be	a.

6.2.2	Functional Requirements of Facial Recognition System (FRS) on Coach in running-condition:		
SN	Description	Requirement	Result (Pass / Fail)
	Profile & Side Profile) –	successfully demonstrated. d. As far as Face Matching of Side Profile is concerned, correct matching while the Test Case is moving in a way that only the side face is visible (Side Posture) is to be done.	b.
iv.	Face Matching with Mask (in Front Profile)	Face matching in Front View should be successfully demonstrated.	
v.	Face Matching when the individual is wearing an accessory like eyeglasses, Scarf, changes in face expressions etc. However, In any case at least 50% face should be visible for recognition.	c. Face matching in Front View should be successfully demonstrated. d. As far as Face Matching of Side Profile is concerned, correct matching while the Test Case is moving in a way that only the side face is visible (Side Posture) is to be done.	a. b
vi.	Face Matching of Pictures of Individual Criminals taken in the Distant Past with the Picture captured by the concerned FRS enabled Camera	Since in Real Life Scenario the Criminal Database will have Pictures which would be many years old, hence, while providing Reference Images to test the FRS based CCTV system in Coaches, it may be ensured that at least 5 to 10 years old Photographs are also used as Reference Images. The matching as per above should also be successfully demonstrated.	
vii.	Matching response shall be available on web-based application which can be configured for individual users at railway stations, central location etc.	Web application User Interface with capabilities of user configuration should be demonstrated at POC site.	
viii.	The system shall be able work on moderate face rotation either horizontal or	Person walking towards camera with his/her moderate face rotation either horizontal or vertical.	

6.2.2	Functional Requirements of Facial Recognition System (FRS) on Coach in running-condition :		
SN	Description	Requirement	Result (Pass / Fail)
	vertical. It should support a yaw angle of -40 to +40 degrees, a pitch angle of -30 to +30 degrees and a roll angle of -20 to +20 degrees.		
ix.	Automated as well as Manual Data Backup and Archiving Functionality should be an integral part of the Hardware/Software Solution.	Should be demonstrated in User Interface.	
x.	The FRS should have Extensive Search feature based on Name, Date, Range and Criminal ID/ Number.	Should be demonstrated in User Interface.	
xi.	Face Recognition Mobile Application for Android and IOS Mobile a. The FRS system shall have An-droid and IOS Mobile Application for Facial Recognition Purpose. b. Mobile App API shall be provided for third party app integration.	Should be demonstrated (i) Android and (ii) IOS Mobile.	(i) (ii)
xii.	Software has mechanism to accept & process, on real time basis, to add a new image of Criminal from a. Coach b. Central Location	a. Should be demonstrated through mobile app b. Should be demonstrated through PC workstation at Central Location	a. b.

6.2.3 Note for POC for both Part-A(General) & Part-B(FRS):

6.2.3.1 Briefing to Personnel used as Test Cases during the Proof-of-Concept Demonstration:
The Personnel used as Test Cases must be briefed in advance that they should walk or

move in the Coach where Camera is placed normally as any Passenger would move and not to look directly towards the camera lens in order to simulate a real-life scenario as closely as possible.

- 6.2.3.2 The Percentage of Accuracy in matching an Individual with Mask in all cases of the above matrix should be at least 95%. It should be 99% and above in all cases without mask/face cover during the Proof-of-Concept Demonstration.
- 6.2.3.3 The Demonstration may be allowed for maximum 3 times to fine-tune the Camera Angle and other Technical Necessities, if any.
- 6.2.3.4 The Test Case mentioned above should include Children of different heights as well as Adults (including Turban wearing adults, Burqa Clad adults whose eyes, forehead /Temple Area is visible - at least 50% face should be visible for recognition).

SECTION-I CHAPTER- 8

8.0 TECHNICAL, FUNCTIONAL REQUIREMENTS & SPECIFICATIONS

Note 1: The proposed solution must meet all technical and functional specifications mentioned in the latest Technical specification released by RDSO **Specification no. RDSO/SPN/TC/106/2022, version-2.1 (or latest)** or else otherwise defined the tender document.

In case of any conflict on the solution design parameters, system functional requirements and technical specification of a system/item between RDSO Specifications no. RDSO/SPN/TC/106/2022,Version-2.1 or latest and the tender conditions, RDSO specification version-2.1 or latest will prevail.

Note 2: 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 solution.

Note 3: CCTV, being a turnkey project, any additional hardware, software/license required for integration of the existing CCTV infra with the proposed CCTV infra at coaches (to be supplied under this contract) shall be supplied by the selected bidder without any additional cost to RailTel.

Note 4: The below mentioned technical specifications for the supply items are bare minimum requirements of the purchaser, the supply items quoted by bidder must comply with these technical specifications. However, the bidder can quote the items with higher technical specifications catering to the futuristic requirements of the proposed solution.

8.1 CCTV Surveillance System in Coaches

Broadly, the system functionality, technical requirement and hardware specifications shall be as per RDSO Specification of IP Based CCTV Surveillance System Specification no. RDSO/SPN/TC/106/2022,Version-2.1 or latest with all amendments for IP based CCTV at Coaches.

8.2 Existing Infra already installed at Security Control Rooms of IR

8.2.1 List of RPF Thana/Post/Depot and **List of Divisional and Headquarter Control Offices** covered under present Tender is mentioned in Annexure-I, Chapter-7. Bidder has to use the existing CCTV infra as per the scope of work and to display alerts on PC Workstations and Displays installed at these locations as specified in RDSO Specifications no. RDSO/SPN/TC/106/2022, Version-2.1 or latest.

8.2.2 The selected bidder shall integrate the proposed CCTV infra at Coaches, Datacenter & other locations with the existing VSS infra without any additional cost to RailTel.

8.2.3 **All the Warranty and Long Term Maintenance (AMC) support/obligation of existing VSS Infra installed will be done by the existing vendors only.**

8.3 Technical Specification

The below mentioned technical specifications for the supply items are bare minimum requirements of the purchaser, the supply items quoted by bidder must comply with these technical specifications. However, the bidder can quote the items with higher technical specifications catering to the futuristic requirements of the proposed solution.

The technical specifications for different components/items of IP based CCTV Surveillance System shall be as below:

SN	Components/Items	Specifications
1.	Full HD Fixed Dome type IP Colour Camera	As per Para-4.1 of RDSO/SPN/TC/106/2022, version-2.1 or latest
2.	Video Recorder Unit (VRU) / Mobile Network Video Recorder (M-NVR)	As per Para-4.2/4.5 of RDSO/SPN/TC/106/2022, version-2.1 or latest along with Inbuilt 8 nos. or more 10/100 Base T, IEEE 802.3af/at compliant PoE with M12/M23 connectors. To support connectivity for minimum 8 nos. of cameras and Wireless Access Point.
3.	Wireless Access Point	As per para 4.4 of RDSO/SPN/TC/106/2022 version 2.1 or latest. Controller Software and Hardware provided for access point should support twice the number of Wireless Access Point supplied from day one.
4.	Metal Enclosure	As per Clause 3.16 of RDSO/SPN/TC/106/2022 version 2.1 or latest.
5.	Facial Recognition Software including software module FRS Cropping Tool	As per Para-4.7 & Para-4.6.15 of RDSO/SPN/TC/106/2022, version-2.1 or latest
6.	System Software including video management & recording software for cameras, VA for camera temperingetc.	As per Para 4.6 of RDSO/SPN/TC/106/2022, version-2.1 or latest
7.	Video Management Software {including Software for Central management System (CMS)}	As per Para-3 & Para-4.6 of RDSO/SPN/TC/106/2022, version-2.1 or latest
8.	Server hardware VMS (including CMS) andFRS (matching & Database) at DC & DR in N+1 configuration	As per Para-4.8 of RDSO/SPN/TC/106/2022, version-2.1 or latest. The FRS Data Base Server shall have the capability to have face image data base up to 10,00,000 (or as specified by the purchaser) for 1 : N matching. It should be scalable to upgrade for higher data size as and when required with additional license for data base.

		FRS database Server at Datacentre for Northern Regions, Eastern Region, Western Region and Southern Region shall be in sync with each other and synchronization shall be done atleast once daily.
9.	Storage	As per Para-12.0 of RDSO/SPN/TC/65/2021, version-6.0 or latest
10.	Type-III Switch	As per Para-13.0 of RDSO/SPN/TC/65/2021, version-6.0 or latest (for Core Switch)
11.	STP-CAT-6 or better Cable	As per Para-4.9.1 of RDSO/SPN/TC/106/2022, version-2.1 or latest
12.	Electrical Power Cable	As per Para-4.9.2 of RDSO/SPN/TC/106/2022 version 2.1 or latest.
13.	PC Work Station	As per Para-11.0 of RDSO/SPN/TC/65/2021, version-6.0 or latest or latest
14.	1 KVA UPS	As per Clause no. 8.3.1.2 of Tender document
15.	Command and Control Centre Hardware at DC & DR in N+1 configuration (for Package-5)	As per Para-4.10 of RDSO/SPN/TC/65/2021, version-6 or latest for all Eight Packages.
16.	Command Control Centre Software (for Package-5)	As per Para-4.10 of RDSO/SPN/TC/65/2021, version-6 or latest for all Eight Packages.

Note:

After completing installation at initial allotted coaches, the bidder shall ensure Security Audit of Bidder's CCTV solution at Coaches at one of the selected Coaches (as selected by RailTel) from STQC (Ministry of Electronics & Information Technology) or any other Government Agency from the list of CERT-IN empanelled Information Security Auditing Organization for arranging security audit as per RDSO specification version-2 or latest.

PAC for first cluster Coaches of RPF Thana/Chowki/Depot shall be issued after successful compliance of all critical points (related to network security) by the bidder raised by the testing agency. Critical points related to network security and non-critical points will be as per the advice of the testing agency. All non-critical points raised by testing agency shall be complied by the bidder before issuance of Provisional Acceptance Certificate (PAC) for IT setup at RailTel Datacenters at Gurugram/Secunderabad.

Before issue of FAC, the bidder will offer its complete CCTV work for sample testing of any randomly selected Coaches by STQC (Ministry of Electronics & Information Technology) or any other Government Agency from the list of CERT-IN empanelled Information Security Auditing Organization for arranging security verification certification. FAC (Clause 3.D.11) shall be issued only after submission of security verification certification by the bidder.

8.3.1 SFPs – All SFPs should be bidirectional single Fiber.

8.3.1.1 SFP-BX (10 KM) Single Fiber:

SN	Description
i.	SFP modules should comply with multi-source agreement (MSA), enabling compatibility with other vendors equipment.
ii.	Should support 10 km optical distance on single fiber
iii.	Should have LC type connector.
iv.	Should provide the cost in Pair (BX U & D).
v.	Should have 1 Gigabit Ethernet capacity on single mode fiber.
vi.	Should support DDMI/DOM feature. Option should be available for SFP+/XFP
vii.	OEM should be having valid ISO 9000 & ISO 14000 certification on the date of opening of bid.
viii.	Should have CE and FCC regulatory compliances.
ix.	Operating Temperature of the SFP Should be mini 0 to 65 °C (23 to 149 °F)

Note: All SFPs must support DDMI feature.

8.3.1.2 1KVA UPS

SN	Specification	
(i)	Capacity	1KVA/900 W, better as per actual requirement
(ii)	Technology	IGBT
(iii)	Wave form	Pure Sine wave
(iv)	Display	LCD/LED
(v)	Input power factor correction	0.9
(vi)	Input configuration	1Ph, L-N+PE
(vii)	Output Power factor	0.9 or better
(viii)	frequency (Input)	50Hz frequency
(ix)	frequency (output)	50Hz +/- 0.5Hz frequency
(x)	Voltage Range (Bypass)	230VAC+/-15%
(xi)	V threshold	3% max full linear load, 6% max on Nonlinear load
(xii)	Crest factor	3.0 or better
(xiii)	AC-AC Efficiency	85% or better
(xiv)	Transfer time Main-Battery	0
(xv)	Transfer time Inverter-Bypass	4 m sec
(xvi)	Emergency Power off function	Yes
(xvii)	Monitoring software for	Battery, health of UPS, any critical parameter change

SN	Specification	
(xviii)	Communication	SNMP V1/V2/V3
(xix)	Port	USB
(xx)	Battery Type	SMF
(xxi)	Battery backup	1 Hrs. on full load (Single bank) with 1500 (minimum)VAH battery size (Battery to be installed in separate wall mount cabinet)
(xxii)	Environmental Parameter	
A	Operating Temperature Range	0-55 deg
B	Over Temperature, Load on Battery, Battery on Charge, Battery low, Mains on	Indication required
C	Input AC mains and output power supply surge protection	inbuilt
D	Humidity	0% to 95% non-condensing
E	Noise Level	50 dBA max
F	Size	not more than 2U rack mountable
xxiii.	Protection	IP20
A	Mechanical Parameter	EMI or equivalent BIS/IS standard
B	Safety	EN or equivalent BIS/IS/IEC standard
C	Performance	IEC/EN or equivalent BIS/IS standard
D	Voltage Range	175-280 VAC (1-phase) @ 100% load

8.3.2 Enterprise Management System (EMS) (not considered under the scope of work and will be provided by RailTel)-

The EMS Solution (Hardware & Software) will provide monitoring of all IP based devices (including cameras) included in the Scope of Supplies of each packages. Solution will be open, distributed, scalable, and multi-platform and open to third party integration.

Consolidate IT event management activities into a single operations bridge/dashboard that allows NOC operator quickly identify the cause of the IT incident, reduces duplication of effort and decreases the time it takes to rectify IT issues.

Consolidated dashboard of the proposed EMS solution will be the manager of managers window and capable of receiving events/alerts from multiple monitoring systems including system, network, storage, hardware, and application.

8.3.2.1 Consolidated Dashboard

SN	Features
----	----------

SN	Features
i.	The tool should provide complete cross-domain visibility of IT infrastructure issues
ii.	Integrate events from ALL domain managers
iii.	Automatically relate events to impacted Configuration Items (CIs) like services, servers/workstation etc
iv.	Automated discovery of the infrastructure CIs and relationships
v.	The tool should Classify events based on business impact of CCTV Surveillance System service levels
vi.	Offer relevant tools, run books, graphs in context of a selected event
vii.	Instruction Text (knowledge base) integrated into events /alarms for which incident tickets were created with ability to define trouble shooting steps.
viii.	Guided creation of correlation rules for administrators
ix.	Tool should provide superior view of infrastructure health across system, networks, IT infrastructure and end-user into a consolidated, central console
x.	Tool should allow for customizable operator perspectives
xi.	Powerful correlation capabilities to reduce number of actionable events. Topology based and event streambased correlation should be made available.
xii.	Tool should provide support for maintenance windows and scheduled downtimes
xiii.	End-to-end visibility of infrastructure and alerts by showing relationships of events to CIs and business service SLAs that are impacted
xiv.	Tool should be able to highlight Priority of an event. Priority is based on both the event severity and the business impact. CI Business Impact is calculated based on Business Criticality of all affected business services, applications and business process CIs and eg. SLAs.
xv.	The operator should be able to analyze priority, business impact and affected CIs by selecting each event and checking the automatically updated Health Top View, Business Impact View etc.
xvi.	Tool should allow to browse performance metrics by selecting CIs or events. Tool should allow to compare different performance matrix of a device/CI in GUI/ Model Explorer.
xvii.	Ability to launch in-context to performance graphs or reports.
xviii.	The adaptive threshold capability automatically calculates a baseline from the historic samples to identify previous trends in performance. Based on these trends the threshold values are automatically and dynamically calculated. Once the automatic threshold values are set, comparing the current performance data with the adaptive thresholds indicates if the current infrastructure resource utilization is normal or not. An alert is generated when abnormal behavior is detected. "
xix.	The Event Correlation Engine shall use detailed, comprehensive, and automatically updated discovery and relationship information to analyze alerts and events and ultimately determine the event that is most likely the cause of an incident.
xx.	When many a combination of many events occurs in the monitored environment, the system must be able to automatically categorize them into causes and symptoms. The system needs to provide a single interface to view multiple layers of cause and symptoms.
xxi.	The system must allow modification and enhancement events during event processing.

8.3.2.2 Service Level Reporter

SN	Features
i.	Should provide reporting templates for performance, availability, inventory, operation, virtualization and configuration.
ii.	Should provide reports that can prove IT service quality levels, such as application response times and server/workstation resource consumption.
iii.	Reports should be accessible via web browser.
iv.	Reports can be scheduled to publish automatically or they can be produced on demand.
v.	Reports can be applied to all systems, to a group of systems, to a customer group of systems, or to a single system.
vi.	Reports can be published in HTML, PDF, Microsoft Word, and Microsoft Excel formats.
vii.	Should be possible to send reports via email from the Reporter GUI or from command line.
viii.	Automated report generation and publishing
ix.	Server/workstation reporting tool should be able to collect and collate specific information regarding the resource utilization, relationship of a business service with infrastructure elements and its SLA performance
x.	Tool should be able to report in the context of the business service SLAs that the infrastructure elements support—clearly showing how the infrastructure impacts business service levels
xi.	Tool should be able to deliver comprehensive, long-term, and customizable cross-domain reporting.
xii.	Tool should support long-term data retention and aggregation upto 24 months.
xiii.	Tool should provide a library of predefined reports that can be cross-launched in the context of business services.
xiv.	Tool should provide reports from both Network devices and Servers/workstation from the same console.
xv.	Tool should provide development environment where more Content/Reports can be created and data sources such as — Generic .csv files and — Databases supporting JDBC. Should also be included to pull data and create reports from such data.
xvi.	Tool should allow to configure downtime for Configuration Items and view the configured downtime in the reports

8.3.2.3 Network Automation

SN	Features
i.	Should be able to generate a graphical representation of your network. Identify which devices are inactive or out of compliance. Detecting non-compliance, issuing alerts. The ability to compare configurations is invaluable; system changes must be logged.
ii.	Manage network compliance by comparing devices to defined, best-practice standards. Speed audit processes with network compliance reports for ITIL and more. Validate device operating states in real time to

	stay in compliance.
iii.	In real time, detect configuration and asset information changes made across a multi-vendor device network, regardless of how each change is made and also support configuration deployment/rollback and configuration templates.
iv.	Recording every access to a device including not only scripted and automated access, but a full keystroke log. Who made what change, the reason for the change and associated ticket number must be captured.
v.	Manage dual-stack and pure IPv6 environments. Manage SNMPv3 configurations and communicate over SNMPv3.
vi.	In real time, store a complete audit trail of configuration changes, (hardware, and software,) made to network devices, including critical change information.
vii.	Configure granular, customizable user roles to control permissions on device views, device actions, and system actions. Support common authentication systems, such as TACACS+, Radius, SecurID, Active Directory and LDAP.
viii.	Manage device access and authorization through a centralized control model that is integrated with your standard workflow and approval processes.
ix.	Automate routine configuration tasks for updates, such as password or community string changes, configuration upload and download, compare configs, bulk configurations, config backup.
x.	Deploy and monitor operating system images from a centralized network management system. Create a repository, and synchronize all device software images across your enterprise network.
xi.	Enforce change processes in real time. Model complex approval processes with flexible rules. Force approvals for changes, including changes made by a direct command line interface (CLI) session.
xii.	The system must support heavily NAT environment and environments where network devices may have the same IP address.
xiii.	The system must provide an automated method to configure devices for real-time change detection via syslog (either direct syslog or syslog via a relay).
xiv.	Scalability – The network configuration management solution should be highly scalable with the largest tier capable of supporting devices as mentioned above at Clause 8.3.6.1 and carrying 4 task for each device per day.

8.3.2.4 Service Management (Help Desk) and SLA Management

SN	Features
i.	The proposed Helpdesk tool should be Axelos Gold level/Pink Elephant/ Service certified on at least 2 ITIL 2011 processes and complying at least 11 (undertaking on OEM's letter head to be submitted) of all the ITIL processes that are implemented for at least three IT organizations: Incident management, Problem Management, Change Management, Knowledge Management, Service Level Management, Service Asset and Configuration management, Service Catalogue and Request Fulfillment etc. The certification copy to be submitted.

ii.	Should be able to control access rights to modules and information by user profiles.
iii.	The CMDB should provide visualization (graphical view) as well as support federation (seamlessly federates information from other distributed data sources), reconciliation and synchronization.
iv.	Should provide predefined categorization, as well as routing and escalation workflows that can be triggered based on criteria such as SLA, impact, urgency, CI, location or customer.
v.	The Change Management module should provide a rule-based workflow system for controlling changes throughout their lifecycle: from initial request to approval, to planning and implementation, and to monitoring and evaluation.
vi.	Should include automated impact analysis, calculated risk analysis, collision detection, and unplanned change detection and validation.
vii.	The tool should automatically alert the responsible persons when a maintenance task is due or a scheduling conflict arises.
viii.	If multiple SLAs are triggered, the strictest one must drive the workflow
ix.	The product must monitor SLAs against Service, Problem, and Change Management
x.	The solution should show immediate (real-time) status of tickets
xi.	Should support KCS (Knowledge Centered Support) best practices.
xii.	Provide out of box and customizable reporting and personalized dashboard

8.3.2.5 Network Fault Management

SN	Features
i.	The solution should allow for discovery to be run on a continuous basis which tracks dynamic changes near real-time; in order to keep the topology always up to date. This discovery should run at a low overhead, incrementally discovering devices and interfaces.
ii.	The NMS must allow immediately determining the impact of a component failure and thus helping in prioritizing problem solving efforts.
iii.	The NMS should provide very powerful event correlation engine and thus must filter, correlate & process, the events that are created daily from network devices. It should assist in root cause determination and help prevent flooding of non-relevant console messages.
iv.	Polling intervals should be configurable on a need basis through a GUI tool, to ensure that key systems are monitored as frequently as necessary.
v.	The topology of the entire Network should be available in a single map along with a Network state poller with aggressive/customizable polling intervals.
vi.	The NMS application should provide a Unified Fault, Availability and Performance function from a single Coaches only to reduce network and device loads with unified fault & performance polling.
vii.	The NMS performance system must provide predefined and highly customizable reporting across the network domain.
viii.	The Network performance operator console should provide operators with seamless transitions from fault data to performance reports and back. For example - select a node in NMS fault mgmt system and cross launch it for historical and near real time data.
ix.	Should have MIB browsing, MIB loading, and MIB expression collection features.

x.	NMS should be cloud ready, should have dynamic Root Cause Analysis capability
xi.	NMS should have Global Management capability, where in it can work in distributed environment.
xii.	NMS should support application based failover over the WAN.
xiii.	NMS should have support for SNMPv3 & IPv6, including dual-stack IPv4 & IPv6 to provide flexibility in protocol strategy and implementation.
xiv.	It should be able to correlate multiple occurrences of a specific fault on a device within a specified time frame to enable detection of chronic problems. At any given point in time there may not exist a fault for a chronic issue, but we need to know that the condition continues to happen. For example: Circuit down 20 times in last 24 hour, bandwidth thresholds exceeded 30 times in last month, etc.
xv.	The system should support a variety of discovery protocols. The system should take advantage of available information to aid in discovery of the network. Protocols should include ARP, DNS, SNMP, BGP, EIGRP, OSPF, CDP (Cisco), EDP (Extreme), NDP (SONMP-Nortel), FDP (Foundry), EnDP (Enterasys), and LLDP (link-level discovery protocol).
xvi.	Support for discovering and monitoring router redundancy groups using HSRP (Hot Standby Router Protocol) / VRRP (Virtual Router Redundancy Protocol) & recognizing situations that can result in multi-path conditions.
xvii.	Support for port aggregation protocols like LACP (Link Aggregation Control Protocol) including visual map-based views & automatic impact assessment based on the relationships between physical and virtual links.
xviii.	Scalability – Network Management Tool should be capable of managing upto devices as mentioned in Clause 8.3.6.1 above for a single/multiple instance, should be able to have 10 logical discovered interfaces per device.

8.3.2.6 Network Performance Management

SN	Features
i.	Should establish the status of network devices and interfaces with unified status calculation and visualization of network fault & performance data.
ii.	Should enable efficient workflows using contextual navigation between reports and rich interactive report configuration capabilities.
iii.	Network Performance reporting tool must provide the following capabilities: Data collection and thresholding of network device ports (any that support MIB2 including virtual interfaces): Bytes In, Bytes Out, Discards, Errors, Network Delay Data collection and threshold setting of network devices: CPU, Memory, Buffers, Component statistics A variety of reports summarizing the data including: Home page summary/trend summary, Calendar, Heat chart, Headline, Dashboard, Managed inventory report, Top ten, Most changed/occurring events, Data explorer
iv.	Should honour network fault management tools' secure grouping and multi-tenancy settings Secure reports by group Secure reports by tenant
v.	Should be able to schedule key reports for automated delivery Distribute reports by email in HTML, Excel or pdf formats. Single Coaches scalability up to 2,00,000 performance polled interfaces

	Store as-polled data for up to 12 months
--	--

8.3.2.7 Server/Workstation Monitoring

SN	Features
i.	Should offer service driven operations management of the IT environment to manage distributed, heterogeneous systems - Windows, LINUX from a single management Coaches.
ii.	Centralized view for Agent-based and agent-less monitoring managed from one central console.
iii.	Should provide a centralized point of control with predefined policy-based management intelligence for easy deployment for the servers/workstation, operating systems, applications and services for correlating and managing all the IT infrastructure components of a business service.
iv.	Should support Virtual platforms - Vmware and Microsoft Virtual Server/workstation, Citrix and provide capability to manage both Microsoft .NET and J2EE applications from the same platform.
v.	Should provide in built correlation to reduce the number of messages presented to the operators and to determine the root cause.
vi.	The system must be agent based for managing the nodes and have the capability of storing events / data locally if communication to the management server/workstation is not possible due to some problem. This capability will help to avoid losing critical events.
vii.	Complex dependencies between managed elements must be captured, allowing IT management staff to interpret lower level data in terms of its importance to the higher-level service.
viii.	Alarms with meaningful message text, instruction text, operator / automatic actions / linked graphs, duplicate message suppression.
ix.	Should be configurable to suppress events at the agent or managed node level itself and be configurable to suppress events for key systems/devices that are down for routine maintenance or planned outage.
x.	The system should allow for enriching of messages with incremental information and should allow for customization of message attributes.
xi.	There should be a single agent on the managed node that provides the system performance data, and for event management it should be able to prioritize events, do correlation & duplicate suppression ability to buffer alarms and provide automatic actions with capability to add necessary annotations.
xii.	Should provide console and a web browser interface that can be accessed from anywhere using industry-standard web browsers.
xiii.	Each operator should be provided with user roles that should include operational service views enabling operators to quickly determine impact and root cause associated with events.
xiv.	Highly scalable, and can manage in excess of 1000 managed nodes from a single server/workstation.
xv.	There should be secured communication between Management server/workstation and Managed nodes avoiding the need to open unsecure firewall ports.
xvi.	The system should integrate with Helpdesk / Service desk tool for automated incident logging and also notify alerts or events via e-mail or SMS.
xvii.	The system should have management polices to monitor and manage WMI, Per-

	formance, SNMP, Application, Log Files and Event logs and support automatic action in various forms like running a script to be taken on alerts from managed nodes.
--	---

8.3.2.8 Asset Management

SN	Features
i.	Asset Manager enables IT organizations to manage the physical, financial and contractual aspects of all IT assets—from request and procurement to retirement and disposal—making it easy to optimize costs, mitigate security and compliance risks and drive business decisions. It should automatically discover and inventory enterprise IT assets which reduces compliance risks, enable software license optimization & chargeback & constantly track changing asset configurations.
ii.	AM should provide a built-in workflow to suggest to the software asset managers in user organization that they should request more licenses or remove installed software that is not in use or assign rights to others users rather than procuring more licenses.
iii.	AM will directly alert users whenever a software installation exceeds the purchased volume. AM will also automatically ensure that no additional users are able to subscribe to that software until additional licenses are made available.
iv.	Inventory Management Able to manage inventory as individual or bulk items, set re-order levels and amounts and keep a history of transactions Able to provide ability to account for assets and components in inventory and facilitates maintaining appropriate levels of stock
v.	Asset record detail: Provide a general tab that stores specific information about the device depending on the device type. Provide a Components tab that stores sub-components information of the asset. E.g. ID, Serial Number, Licenses, Version, Status, Category, Type, Item. Provide an Additional Details tab that stores various types of detail for the respective type of asset. E.g. how much memory the printer has which might assist in a Help Desk call. Provide a Contracts tab that stores different types of contracts: Lease, Support, Warranty, Software, Maintenance. Provide a People tab that stores individuals or groups who are owners and users of the asset. Provide a Financials tab that stores associated costs by cost center, budget code, project. Static and incident costs. Provide Straight line depreciation cost calculation. Able to track the total cost of ownership for an asset.
vi.	Software License Management Should manage all types of software license and hence software compliance. Should be able to recover software licenses when hardware is retired, returned (for leases). Should track version, status, and upgrade information for each installed software package. The tool must be able to reconcile the number of installed copies of an application with the number of permitted licenses. Should be able to track the end-user's right to utilize software or hardware assets. Should be able to manage and count software entitlement separately from license counters as software is installed, removed and auto discovered.

	Software Asset Management should be capable of doing license compliance for vendors being offered in the subject work.
vii.	Auto-Discovery Proposed solution should have the auto-discovery tool, which should have tight Integration with the proposed ITAM (IT Asset Management) solution. Should be able to collect information from routers, switches, load balancers, storage, servers/workstation, and firewalls. Should have the ability to verify inventory data changes with current asset details before permanently updating the system of record. Discovery should be automatic and continuous to detect real time changes in the IT infrastructure. Discovery should work without requiring agent installation (that is, agent-less discovery) while discovery Layers 2 through Layers 7 of OSI model. Should use Industry-standard protocols such as WMI, SNMP, JMX, SSH to perform discovery without requiring the installation of an agent. Discovery system should have ability to modify out-of-box discovery scripts, create customized discovery scripts. Discovery system should have the ability to capture configuration files for the purposes of comparison and change tracking. Discovery system should be capable of supporting role-based access to various aspects of CMDB administration.

8.3.2.9 **Service Management (Help Desk) and SLA Management under Enterprise Management System(EMS)**

Auto assignment of tickets to field engineer to cut time to allocate ticket to the respective field engineer. Auto Assignment of Tickets based on availability of engineer; as per shift & as per ongoing repairs for resolution. Auto Assignment of Tickets as per Roster management of Field staff to enable auto allocation of relevant tickets.

Auto Assignment of Tickets as per Supervisors/Territory Manager of respective Territory to be given rights to manage (write/modify) shift duty of field engineers of their respective clusters.

Offered system must have mobile web interface (with screen adaptation and notification) or App for field engineers for Work Order Issuance, ERT & resolution. Solution should provide a Framework to create SLA Templates. Solution should offer collection framework for ease of integration with Alarm Management. Solution should provide Hourly, Daily, Weekly, Monthly and yearly asset wise & Coaches wise failure position along with SLA calculation (as per 4.A.8, Chapter-4, Section-I).

8.3.3 **Command and Control Centre (CCC) Software (to be provided in Package-5)**

Functional Requirement of Command Control Centre (CCC) Software will be as per Clause no. 18.6 of RDSO specification no. RDSO/SPN/TC/2021, version-6

or latest. **Total number of licenses required with concurrent logins is as per details given below:**

S. No.	Description	Number of Licenses	Number of Locations	Total Licenses
1	Depot and RPF Thana Locations	1 at each location	439	439
2	Divisional Head Quarter	2 at each location	68	136
3	Zonal Headquarter	2 at each location	16	32
4	CCC Centre	24 numbers	1	24
5	Railway Board	2 numbers	1	2
	Total			633

SECTION-I
Chapter-9
CHECK LIST (To be filled up & uploaded)

A. List of Documents to be Submitted with Technical Bid

SN	Have you submitted the following documents?	Submitted /complied or Not	Page No./ref No. of Offer
1.	Cost of Tender Document (as per OPEN E-TENDER NOTICE, Page no. 2 of Tender) - to be submitted online through IREPS portal only		
2.	Submission of Earnest Money Deposit (EMD) as mentioned in Offer Letter (Chapter-1) - to be submitted online through IREPS portal and RailTel Bank Account (if applicable).		
3.	Offer Letter as per Chapter-1 (Section-I)		
4.	Schedule of Requirements (SORs) with quantities but with prices blanked out (this will be a replica of price bid with prices blanked out) to be submitted along with the Technical Bid as per Note-VI of Chapter-2 of SOR.		
5.	Breakup of individual itemized BOM but prices blanked out (as per Format given in SOR) as per Note-VI of Chapter-2 (Section-I) of SOR.		
6.	Legal Entity - Constitution of Firm and Power of Attorney as per clause 4.A.14.1 (Point-2) of Chapter-4.		
7.	Financial Capability of Bidder - Contractual Payment Received Certificate and/or Audited balance sheet duly attested by Notary Public as per eligibility Clause no. 4.A.14.1 (Point-3) of Chapter-4.		
8.	Technical Capability – Bidder's Eligibility Documents as mentioned in Clause no. 4.A.14.1 (Point-4) of Chapter-4.		
9.	All Bidders as well as OEM's Eligibility Documents as mentioned in Clause 4.A.14 of Chapter-4.		
10.	Compliance to Technical Requirements as mentioned in Clause 3.A.1.15 (i), (ii) & (iii) of Chapter-3 of Section-I.		
11.	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.		
12.	Technical proposal of tenderer in conformity with system design or alternative proposal of the tenderer, if any as mentioned in Clause 3.A.1.15.3 of Chapter-3.		
13.	Form no. 2 (Chapter-6) - System Performance Guarantee as per Chapter 6, Form no. 2 (Section-I)– to be signed by the Bidder as well as OEM.		
14.	Form no. 3 (Chapter-6) - Long Term Maintenance Support- to be signed by the Bidder as well as OEM.		
15.	Form no. 4 (Chapter-6) – Affidavit – to be submitted by the bidder as per Clause no. 4.A.13.3.3.		
16.	Form no. 5 (Chapter-6) - Integrity Pact - to be submitted by the bidder as per Clause no. 4.A.44.		
17.	Form no. 6 (Chapter-6) - NIL Deviation certificate – to be signed by the Bidder as per Clause no. 4.A.26.		
18.	Form no. 7 (Chapter-6) – OEM’s Undertaking on Letter Head for MAF, Proven Facility, Blacklisting, Malicious Code, IPR & restriction on companies from Land Border sharing Countries with India as per Clause no. 4.A.14.		
19.	Form no. 8 (Chapter-6) - Bidder Undertaking on Letter Head for Blacklisting, IPR, Interoperability, Malicious Code, Site Inspection & Restriction on companies on Land border sharing countries with India as per Clause no. 4.A.14.		
20.	Form no. 9 (Chapter-6) - Certificate by Statutory Auditor/Cost Auditor on their letter head (with UDIN number) as per Clause 4.A.45.3 of Tender document.		
21.	Form no. 10 (Chapter-6) – Annexure Affidavit by EACH Consortium/JV Member		
22.	Form no. 11 (Chapter-6) – JV Agreement / MOA Enclosure – Board resolution of each of the Joint Venture Members authorizing: (i) Execution of the Joint Venture		

	Agreement, and (ii) Appointing the authorized signatory for such purpose		
23.	Form no. 12 (Chapter-6) – Consortium Agreement / MOA		
24.	Form no. 13 (Chapter-6) – Past Experience Form as per Clause no.		
25.	Any other information required to be submitted by the bidder as per technical and eligibility criteria.		
26.	Relaxation to Start-ups as per Eligibility clause 4.A.14 of Chapter-4 (Section-I), if any.		

B. List of Documents to be Submitted with Financial Bid

SN	Have you submitted the following documents	Submitted /complied or Not	Page No./ref No. of Offer
1.	Schedule of Requirements with quantities and priced filled up (this will be a replica of technical bid with prices).		
2.	Breakup of individual itemized BOM (as per Format given in SOR) as per Note-VI of Chapter-2 (Section-I) of SOR.		
3.	For VMS, VA, FRS& CCC applications, the bidder should provide unit license rate in detailed BOM. Bidder may also provide rates for bulk licenses. {as per Note-VI, Point (iii) of SOR, Chapter-2}.		
4.	Any other information required to be submitted by the tenderer as per technical and eligibility criteria.		

DETAILS OF CREDENTIALS SUBMITTED AGAINST ELIGIBILITY CRITERIA OF Bidder as per Clause 4.A.14of Chapter-4 (Section-I)

Clause	Supporting documents	De-tails/Remarks	Page no of the Bid

**DETAILS OF CREDENTIALS SUBMITTED AGAINST ELIGIBILITY CRITERIA
OF OEM as per Clause 4.A.14 of Chapter-4 (Section-I):**

SN	Clause	Supporting documents	Details/Remarks	Page no of the Bid
1				
2				
3				
4				
5				

Note: Non submission/ non-compliance of above documents as deliberated in Check List will make the offer liable to be **REJECTED**.

SECTION – II

TECHNICAL REQUIREMENTS & SUPPLEMENT

INDEX

<u>Chapter No.</u>	<u>Content</u>
1.	Precautions to be taken in 25 KVA A.C Traction Area.

SECTION - II

CHAPTER - 1

Precautions to be Taken in 25 KV A.C. Traction AREA:

II.1.1 GENERAL

Any Telecommunication circuits in the vicinity of AC Traction running parallel to 25 KV lines are liable to be affected by AC induced voltage. Therefore precautions should be taken to eliminate the possibility of induced voltage affecting equipment and humans.

Crossing of track, if any, should be negotiated by underground cables running at right angles to the track as far as practicable.

Special protective measures (viz. provision of G.D tubes, fuses and earthing etc) are required to be taken for telecommunication lines entering 25 KV sub-Coaches /switching posts.

For the human safety considerations the safe working voltages should be 60 V under normal conditions and 150 V with special precautions and 430 V under fault conditions.

Instructions for protection of railway staff/working personals on signaling and telecommunications installations on 25 kV AC traction shall be strictly adhered to. Precautions are required to be taken on account of following,

- (i) Proximity of live conductor.
- (ii) Pressure of return current in Rails.
- (iii) Induction in all metallic bodies situated closed to over head equipment.

...END of Tender Document...