

Name of Work: "Supply, Installation, Testing, Commissioning, Operation and Maintenance of IP based Closed Circuit Television (CCTV) Surveillance System at Stations and in Coaches of Indian Railways for and on behalf of Indian Railways."

SN	Page	Clause	Original/Corrigendum Clause	Amended clause
1	18, 19, 32, 44, 45, 56 & 57	Tender docum. SOR-7&7.1(b), SOR Head-I of Package-I to IV	12 Core metal strengthened outdoor unarmored Optic Fiber Cable (ITU-T G.652.D)	12 Core metal strengthened outdoor unarmored Optic Fiber Cable (ITU-T G.652.D) <b>complying to draft GR No. TEC/GR/OFC-23/01/XXX-2011</b>
2	61	SOR,1(e)&1.1(e)-Package-V	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 coaches. Qty:1440 No.	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 coaches. <b>Qty:14040 No.</b>
3	70	Tender docum. SOR,Note-XII(1)	Successful bidder has to successfully demonstrate the proposed solution within the <b>30 days</b> from the date of Lol (letter of Intent). The Purchaser will not be liable to pay/reimburse any type of cost incurred by the successful bidder pertaining to the PoC.	Successful bidder has to successfully demonstrate the proposed solution within the <b>45 days</b> from the date of Lol (letter of Intent). The Purchaser will not be liable to pay/reimburse any type of cost incurred by the successful bidder pertaining to the PoC.
4	69	SOR,Note-V	Bidder should submit the soft copy (Word/Excel/PDFs format) of offer in DVDs/USB's. Bill of Material (BOM) must be in PDF as well as Excel format (except price bid). Bidder is allowed to quote only for a single Make/Model of the quoted items along with the offer. The above stipulation of single OEM Make/Model applies to items viz. different types of cameras (CCTV Work at Stations), camera (CCTV work in train coaches), servers, Video Recording Unit/Mobile NVR, workstation, storage, large format display monitors, VMS Software, switches (each Type separately), Wireless Access Point and EMS.  DIFFERENT OEM(S) ACROSS PACKAGES IS NOT PERMITTED. HOWEVER, BIDDER MAY QUOTE DIFFERENT CAMERA OEM FOR COACH WORK FROM THAT OF STATION WORK. OFFERS WITHOUT PARTICULARS OF MAKE/MODEL OR MULTIPLE OEMS OF SAME ITEM SHALL BE LIABLE TO SUMMARILY REJECTED.	Bidder should submit the soft copy (Word/Excel/PDFs format) of offer in DVDs/USB's. Bill of Material (BOM) must be in PDF as well as Excel format (except price bid).  Bidder is allowed to quote only a single Make/Model of the quoted items along with the offer in a package. However, the bidder may quote different OEM for different package. The above stipulation of single OEM Make/Model applies to items viz. different types of cameras, servers, Video Recording Unit/Mobile NVR, workstation, storage, large format display monitors, VMS Software, switches (each Type separately), Wireless Access Point, UPS and EMS. <b>However, in case of cameras, different OEM is also permitted for different sensor size in a package.</b>  OFFERS WITHOUT PARTICULARS OF MAKE/MODEL OR MULTIPLE OEMS OF SAME ITEM SHALL BE LIABLE TO SUMMARILY REJECTED.

5	138	4.A.14.1.3,SN-2	The OEM(s) whose products have been offered in the bid should have a minimum cumulative turnover of INR 375crores for OEMs of cameras, INR 165 crores for OEM of UPS, INR 100 crores for OEMs of switches, INR 30 crores for OEMs of Video Management & Recording software, INR 5 crores for Video Analytic software, INR 50 crores for Facial Recognition System software and INR 125 crores for OEMs of IT hardware (server and storage) <b>each</b> in last 3 financial years (i.e. current year and three previous financial years) from the date of opening of tender.	The OEM(s) whose products have been offered in the bid should have a minimum cumulative turnover of INR 375crores for OEMs of cameras, INR 165 crores for OEM of UPS, INR 100 crores for OEMs of switches, INR 30 crores for OEMs of Video Management & Recording software, INR 5 crores for Video Analytic software, INR 50 crores for Facial Recognition System software and INR 125 crores for OEMs of IT hardware (server and storage) in last 3 financial years (i.e. current year and three previous financial years) from the date of opening of tender.
6	139	4.A.14.1.3,SN-6	The Software OEM should have an <b>CMMI Level-5</b> and ISO 9001:2008 (or latest) for its development & manufacturing process. Note:- In case OEM is not CMMI Level-5 certified at the time of submission of bid, then and an undertaking as per form no. 25 of chapter-6 is required to be submitted by SI and OEM both that certificate of CMMI Level-5 will be submitted at the time of delivery.	The Software OEM (Video Management and Recording, Video Analytic and Facial Recognition Software) should have an <b>CMMI Level-3</b> and ISO 9001:2008 (or latest) for its development & manufacturing process. Note:- In case OEM is not <b>CMMI Level-3</b> certified at the time of submission of bid, then an undertaking as per form no. 25 of chapter-6 is required to be submitted by SI and OEM both that certificate of <b>CMMI Level-3</b> will be submitted at the time of delivery. <b>It should be noted by bidder this should not become reason for extension of delivery time.</b>
7		4.A.18.3	New clause	To ensure security of camera and network vulnerabilities & breaches and to discourage false undertaking from OEMs, Security auditing and testing shall be carried out from a reputed CERT-IN empanelled agency like STQC at the time of POC as well as at the time of completion of project.
8		4.A.18.4	New clause	In case any security breach is found in the system at any stage including at POC level, the contract shall be terminated and security deposit shall be forfeited.
9		4.A.18.5	New clause	Source code of software of camera shall have to be supplied to RailTel by supplier/OEM.
10	165	Tender docum. 4.B.10	Submission of pass phrases for Part I –Credential/ Techno commercial Bid and Part II - Price Bid created by the bidder on IREPS Portal in a separate sealed envelope for each phrase	"Deleted." <b>Note:</b> Clause 4.B.10 in corrigendum-III shall remain applicable.

11	238	Note 3, Chapter-8	Note 3: All the IP cameras as quoted by the bidder against SOR Chapter-2 for stations packages must be sourced from the same OEM. However, bidder may quote different camera OEM for CCTV work in train coaches.	<b>Deleted.</b>
12	239	8.2.1 Server for CCTV at Stations	8.2.1 Server for CCTV at Stations As per RDSO Specification of IP Based Video Surveillance System Specification no. RDSO/SPN/TC/65/2019 Revision 5.0 or latest with all amendments and as specified in tender document.	8.2.1 Server for CCTV at Stations As per RDSO Specification of IP Based Video Surveillance System Specification no. RDSO/SPN/TC/65/2019 Revision 5.0 or latest with all amendments and as specified in tender document. Note:- 1. For Facial Recognition system, bidder may also propose server with GPU card, however, GPU card of desired make/model should be supplied through server OEM to ensure warranty of the complete system from server OEM. Further, server configuration quoted by the bidder should be duly vetted by hardware as well as application OEM. 2. Hard Disk Drive: Minimum 1.6 TB usable Hot Pluggable SSD/ SAS HDD (10000 RPM or higher) 3. DVD R/W Drive internal or USB 3.0 Ports.
13	239	8.2.3 Server for CCTV in Train Coaches	8.2.3 Server for CCTV in Train Coaches As per RDSO Specification of IP based Closed Circuit Television (CCTV) Surveillance System in Coaches of Indian Railways (RDSO Specification No. RDSO/SPN /TC/106/2019, Revision 1.0 or latest with all amendments.	8.2.3 Server for CCTV in Train Coaches As per RDSO Specification of IP based Closed Circuit Television (CCTV) Surveillance System in Coaches of Indian Railways (RDSO Specification No. RDSO/SPN /TC/106/2019, Revision 1.0 or latest with all amendments. Note:- For Facial Recognition system, bidder may also propose server with GPU card, however, GPU card of desired make should be supplied through server OEM to ensure warranty of the complete system from server OEM. Further, server configuration quoted by the bidder should be duly vetted by hardware as well as application OEM.
14	244	8.11 Switches Type-IV SN. 8	Switch shall have minimum 100 million packets (64 Byte packets) per second forwarding	Switch shall have minimum <b>70 million</b> packets (64 Byte packets) per second forwarding
15		Tender docum. 8.12 Managed PoE Ethernet Switch	<b>Managed PoE Ethernet Switch (RDSO/SPN/TC/106/109 Rev 1.0, clause no. 4.3)</b> ii. Ethernet Ports : a) 8 nos. or more 10/100 Base T, IEEE 802.3af/at compliant PoE with M12/M23 connector b) 02 No. 10/100/1000 Base T Ethernet interface with M12/M23 connector iv. Operating Temperature: 0°C to +50°C or as specified by the purchaser v. Humidity : 20% to 80% RH, Non-condensing or as specified by the purchaser	<b>Managed PoE Ethernet Switch (RDSO/SPN/TC/106/109 Rev 1.0, clause no. 4.3)</b> ii. Ethernet Ports : a) 8 nos. or more 10/100 Base T, IEEE 802.3 af/at compliant PoE with M12/M23 connector. <b>Switch should have minimum PoE Power Budget to powerup 8 cameras of RDSO specification as defined under para 4.1.</b> b) 02 No. 10/100/1000 Base T Ethernet interface with M12/M23 connector iv. Operating Temperature: <b>As per Regulatory Approvals/Certifications EN50155/IEC 60571 for Rolling Stock application as defined in item (vi).</b> v. Humidity : <b>As per Regulatory Approvals/Certifications EN50155/IEC 60571 for Rolling Stock application as defined in item (vi).</b>
16	248	Tender docum. 8.16.1 UPS-1KVA,SN-1	Capacity-1KVA/800 W, better as per actual requirement	Capacity-1KVA/900 W, better as per actual requirement

17	250	Tender docum. 8.16.2 UPS- 2KVA,SN-1	Capacity-2KVA/1600 W, better as per actual requirement	Capacity-2KVA/1800 W, better as per actual requirement
18	251	Tender docum. 8.16.3 UPS- 2X10 KVA	SN-11: Voltage Adjustability: ±5V SN-13: DC Offset: ±50mV	"Deleted"
19		Tender docum. 8.18 Video Recorder Unit and Mobile Network Video Recorder (Mobile NVR)	<p><b>Video Recorder Unit (RDSO/SPN/TC/106/109 Rev 1.0, clause no. 4.2)</b>  ix. Wi-fi Access Point : Inbuilt Wi-fi Access Point, IEEE 802.11 b/g/n or 802.11 ac with 23 dBm or higher Antenna  or  External Wi-fi Access Point as per Clause no.4.4  x. 10/100 Base T Ethernet Interface: 8 nos. or more 10/100 Base T, IEEE 802.3af/at compliant PoE with M12/M23 connector  or  External Managed PoE Ethernet Switch as per Clause no. 4.3  xiv. Operating Temperature: 0°C to +50°C or as specified by the purchaser  xv. Humidity : 20% to 80% RH, Non-condensing or as specified by the purchaser</p> <p><b>Mobile Network Video Recorder (Mobile NVR)(RDSO/SPN/TC/106/109 Rev 1.0, clause no. 4.5)</b>  xiv. Wi-Fi Access Point : Inbuilt Access Point, IEEE 802.11 b/g/n or 802.11 ac with 23 dBm or higher Antenna  or  External Wi-fi Access Point as per Clause no.4.4  xv. 10/100 Base T Ethernet Interface: Inbuilt 8 nos. or more 10/100 Base T, IEEE 802.3af/at compliant PoE with M12/M23 connector  or  External PoE Ethernet Switch as per Clause no. 4.3  xx. Operating Temperature: 0°C to +50°C or as specified by the purchaser  xxi. Humidity : 20% to 80% RH, Non-condensing or as specified by the purchaser</p>	<p><b>Video Recorder Unit (RDSO/SPN/TC/106/109 Rev 1.0, clause no. 4.2)</b>  ix. Wi-fi Access Point : Inbuilt Wi-fi Access Point, IEEE 802.11 b/g/n and 802.11 ac with 23 dBm or higher Antenna  or  External Wi-fi Access Point as per Clause no.4.4  x. 10/100 Base T Ethernet Interface: 8 nos. or more 10/100 Base T, IEEE 802.3af/at compliant PoE with M12/M23 connector. <b>VRU should have minimum PoE Power Budget to powerup 8 cameras of RDSO specification as defined under para 4.1.</b>  or  External Managed PoE Ethernet Switch as per Clause no. 4.3  xivi. Operating Temperature: <b>As per Regulatory Approvals/Certifications EN50155/IEC 60571 for Rolling Stock application as defined in item (xvi).</b>  xv. Humidity : <b>As per Regulatory Approvals/Certifications EN50155/IEC 60571 for Rolling Stock application as defined in item (xvi).</b></p> <p><b>Mobile Network Video Recorder (Mobile NVR) (RDSO/SPN/TC/106/109 Rev 1.0, clause no. 4.5)</b>  xiv. Wi-Fi Access Point : Inbuilt Access Point, IEEE 802.11 b/g/n and 802.11 ac with 23 dBm or higher Antenna  or  External Wi-fi Access Point as per Clause no.4.4  xv. 10/100 Base T Ethernet Interface: Inbuilt 8 nos. or more 10/100 Base T, IEEE 802.3af/at compliant PoE with M12/M23 connector. <b>Mobile NVR should have minimum PoE Power Budget to powerup 8 cameras of RDSO specification as defined under para 4.1.</b>  or  External PoE Ethernet Switch as per Clause no. 4.3  xx. Operating Temperature: <b>As per Regulatory Approvals/Certifications EN50155/IEC 60571 for Rolling Stock application as defined in item (xxii).</b>  xxi. Humidity : <b>As per Regulatory Approvals/Certifications EN50155/IEC 60571 for Rolling Stock application as defined in item (xxii).</b></p>
20		Tender docum. 8.19.1 Wi-Fi Access Point inside Train Coach	<p><b>Wi-Fi Access Point (RDSO/SPN/TC/106/109 Rev 1.0, clause no. 4.4)</b>  i. Ethernet Port: 10/100/1000 Base T auto sensing  ii. Wi-Fi network: IEEE 802.11 b/g/n or 802.11 ac  vii. Operating Temperature: 0°C to +50°C or as specified by the purchaser  viii. Humidity : 20% to 80% RH, Non-condensing or as specified by the purchaser</p>	<p><b>Wi-Fi Access Point (RDSO/SPN/TC/106/109 Rev 1.0, clause no. 4.4)</b>  i. Ethernet Port: 10/100/1000 Base T auto sensing <b>with M12/M23 connector</b>  ii. Wi-Fi network: IEEE 802.11 b/g/n and 802.11 ac  vii. Operating Temperature: <b>As per Regulatory Approvals/Certifications EN50155/IEC 60571 for Rolling Stock application as defined in item (ix).</b>  viii. Humidity : <b>As per Regulatory Approvals/Certifications EN50155/IEC 60571 for Rolling Stock application as defined in item (ix).</b></p>
21		<b>CMMI Level-5</b> Certification in Form no.25 of Chapter-6 may be read as <b>CMMI Level-3</b> Certification.		
22		RailTel Coporate office has shifted from Gurugram to New Delhi. Therefore, wherever RailTel Gurugram office address is mentioned in the tender document e.g. offline submission, various proforma etc. may be read as "RailTel Corporation of India Ltd., NBCC Building, Office Tower-2, 6th Floor, Plate-A, East Kidwai Nagar, New Delhi-110023".		
23		The last date for bid submission has been extended from 20.09.2019 at 15:00 hrs to 25.09.2019 at 15:00 hrs.		

24		The last date for bid submission has been extended from 20.09.2019 at 15:30 hrs to 25.09.2019 at 15:30 hrs.
		All other terms and conditions will remain unchanged

**(Shaminder Singh)**  
**Executive Director/Project**  
**(For and on behalf of RailTel Corporation of India Ltd.)**