

No. ECoR/S&T/BBS/SNW/ 23

Office of the Principal Chief Signal & Telecom Engineer Ground Floor, North Block Rail Sadan, Bhubaneswar-17 Date: 02.04.2025

CSTE/Project/BBS CSTE/Con-I & II/BBS

Sub : Definition of Similar Nature of Work for minimum eligibility criteria of Signaling

and Telecom Works.(For More than Rs.50 lakhs works)

Ref : (i) Railway Board's letter No. 94/CE-I/CT/4, dt 21.06.2006

(ii) This office letter No. No. ECoR/S&T/BBS/SNM/ Pt. I/107 dated 22.04.2022

(iii) This office letter No. ECoR/S&T/ BBS/SNM/Pt. I/229 dt 26.05.2022.

(iv) This office letter No. ECoR/S&T/BBS/SNM/2116 Dt.27.10.2023

(v) This office letter No. ECoR/S&T/BBS/SNM/2781 Dt.15.04.2024.

(vi) This office letter No. ECoR/S&T/BBS/SNM/KUR/2872 Dt.03.05.2024.

(vii) This office letter No. ECoR/S&T/BBS/SNM/KAVACH/3539 Dt.04.09.2024.

Definition of Similar Nature of works for signaling and telecom works of values more than Rs.50 lakhs as approved by PCSTE is attached herewith for reference please. This supersedes this office earlier letters on signaling and telecom works and will come into force w.e.f. 03.4.2025.

This letter will have no bearing on the tenders approved / floated /opened before 03.04.2025.

If any work proposed to be executed does not fall in the attached approved category, specific approval of PHOD/CHOD for "Similar Nature of work" for inclusion in qualification criteria on case to case basis should be obtained.

Encl: As above in 18 pages

Dy.CSTE/Sig
For PCSTE/ECoR

Copy to:

CSE, CCE, CSTE/Project-II and CSTE/Plg for kind information please.

Dy.CSTE/Con-BBS, KRPU, SBP, Dy.CSTE/P-BBS, SBP, VSKP,

Sr.DSTE/I&II - KUR, SBP & WAT for information and necessary action.

All officers of PCSTE office for information.

Sr.System Manager /IT for information and updating in ECoR Portal.

Dy.CSTE/Sig For PCSTE/ECoR

General Items

Srl No.	Description
1	SITC i.e. Supply, installation, testing and commissioning as mentioned in this document shall mean Supply, installation, testing and commissioning either through works contract or goods contract.
2	For service contracts the corrected copy of 'General Conditions of Contract for services- January 2018' issued by Railway Board vide letter no. 2018/Tran. Cell/Mech/Service contract, dated 20.03.2018 or with latest amendments shall be followed. The definition "For similar service contracts" as necessitated by clause 2.6.1.1 of the said revised GCC for service contract; the similar nature of works approved herewith by competent authority shall be followed.
3	For AMC/ARC of Air Conditioners or any other items pertaining to Electrical and other departments need to be advised well in advance to take care of their assets
4	For any other item of work, not covered herewith, specific approval of PCSTE may be obtained on case to case basis.

Special Conditions of Contract for Signalling Items

	Special Conditions of Contract for Signalling Items		
	Description		
1	Detail Check List issued by RDSO for installation should be strictly complied.		
2	OEM certificate for the installation before commissioning shall be obtained as advised by RDSO/TAN's.		
3	Training of Officers/Supervisors shall be given as per schedule.		
4	All Signalling items are to be procured preferably from RDSO approved vendors. If approved vendors for the same item are not available, Developmental vendors can be considered. In absence of Approved/Developmental vendors, Materials from Other Sources can be considered with the approval from competant authority		
5	The bidder shall offer Warranty from OEM for equipment as per the condition laid in the tender document and RDSO specification for a minimum period of one year from the date of commissioning and Provide the guarantee to supply the spares as per Railway Board/RDSO guidelines		
6	Tenderer should submit Certificate from Original Equipment Manufacturer for complying with all items of RDSO Pre-Commissioning Checklist for modern Signalling Systems like IPS, DAC/UAC, Data Logger, BPAC, UFSBI, AFTC, TPWS etc., before commissioning of the equipment.		
7	Wherever the tendered Signalling work involves installation of new EI and the tenderer is not a RDSC approved Original Equipment Manufacturer for the same, the special condition to be fulfilled are given below [Ref: Railway Board's letter No. 2013/Sig/01/(pt)Dup, dated 19.11.2020 and further revised vide letter of even no dated 17/02/2022]:		
	a. Submission of undertaking by the tenderer that the equipment shall be procured form RDSO approved sources and installation, testing and commissioning of equipment shall also be got done from the same source including after sales support required during the warranty period as well as after completion of warranty period.		
	b. After award of the contract, MOU with RDSO approved source covering supply, installation, testing and commissioning of equipment by the same RDSO approved source including after sales support required during the warranty period and post warranty period before singing of Contract Agreement is undertaken.		
	c. In the MOU , Original Equipment manufacturer shall provide (i) an authorization which is to be submitted before signing of contract agreement or within 90 days of issue of LOA whichever is earlier failing which the LOA will be terminated and EMD submitted by the tenderer will be forefeited. (ii) Offer technical support for supply, installation and commissioning of the euipment from RDSO approved EI OEMs and to confirm compliance to meet contract specific requirement with extant RDSO guidelines, (iii) Undertake certification of Factory Acceptance Test.		
-	Wherever the tendered Signalling work involves alteration to existing EI and the tenderer is not RDSO approved Original Equipment Manufacturer for the existing EI system, the special condition to be fulfilled is given below:		
Ī	 Signing of the Application for Technical System approval by RDSO wherever applicable to ensure that the installation is as per the RDSO stipulations. 		
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उप मु.सं.एवं.दु.सं.अभि. (संकेत) Dy. C.S.T.E. (Signal) पूर्व तट रेलवे, धुबनेश्वर

Srl No.	Description	
8	 The successful bidder shall submit an undertaking from RDSO approved EI OEM to conform compliance with extant RDSO guidelines and to meet contract specific requirement. 	
	c. In the MOU, Original Equipment manufacturer shall provide (i) an authorization which is to submitted before signing of contract agreement or within 90 days of issue of LOA whicheve earlier failing which the LOA will be terminated and EMD submitted by the tenderer will be forefe. (ii) Offer technical support for supply, installation and commissioning of the the euipment for RDSO approved EI OEMs and to confirm compliance to meet contract specific requirement vextant RDSO guidelines, (iii) Undertake certification of Factory Acceptance Test.	
9	Wherever the tendered Signalling work involves MSDAC and the tenderer is not RDSO approved Original Equipment Manufacturer, then tenderer has to submit an MOU with the OEM that the supply, installation, testing and commissioning will be done by the OEM and MOU to be submitted before the signing of Contract agreement or within 90 days of issue of LOA whichever is earlier failing which the LOA will be terminated and EMD submitted by the tenderer will be forefeited.	

Special Conditions of Contract for Telecom Items

	Special Conditions of Contract for Telecom Items		
Srl No.			
1	Where ever the tendered telecom work involves OFC system, ISDN/NGN, Networking, IT and if the tenderer is not RDSO/TEC approved vendor for the same then additionally he shall have an MoU with RDSO/TEC approved vendor (OEM) for the respective items for the supply, installation, testing and commissioning of the same as covered in the tendered work. Such MoU should be signed before signing the contract agreement or within 90 days of issue of LOA whichever is earlier failing which the LOA will be terminated and EMD submitted by the tenderer will be forefeited and covering the entire period of the contract. OEM to certify that all the installation and commissioning has been done as per OEM's quality and installation standards.		
2	All Telecom items are to be procured preferably from RDSO approved vendors for items with RDSO specs. If approved vendors for the same item are not available, Developmental vendors can be considered. In absence of Approved/Developmental vendors, Materials from Other Sources can be considered with the approval of competant authority. Items with FRS issued by RDSO should be procured only after acceptance of POC by the Railways.		
3	Special condition for IPMPLS Work		
	a. While bidding, the bidder should tnke an undertaking that they will procure item from RDSO Approved firm or OEM's.		
	b. After award of tender, the successful bidder shall submit the MOU with the RDSO Approved source or OEM before signing of contract Agreement.		
	c. MOU shall include after sales Support required during warranty period and beyond the warranty period upto the codal life of the item		
	d, Certificate issued by Railway officials indicating successful completion of POC as per the late instructions issued by Railway Board's/ RDSO OR The OEM shall demonstrate the POC within 30da from the date of intimation from railways after opening of the Tender as per latest TAN.		
	e, A Self-Certification declaration regarding compliance of latest TAN for IP-MPLS equipment.		
4	Note for IDS (Intrusion Detection System)		
	a.OEM of OFC based intrusion detection system & system Integrator can participate. If the system Integrator is not the OEM of OFC laser based intrusion detection system, he should produce MOU with the OEM of OFC based Intrusion detection System and submnit the document within 30 days after issue of LOA for technical support in installation, Testing & post commissioning., maintenance problems, failure of equipment and supply of its spares from the OEM of OFC laser based intrusion detection system including after sales support required throughout the life of the equipment		
	b.If the OEM or System Integrator is a foreign OEM/System Integrator or asociated with Foreign OEM or System Integrator he should comply the below para :		
	c.While bidding is open to persons from any country, the following provisions shall apply:		
-	d.Where, on the due date of the bid, not less than 25% (Twenty Five percent) of the agreegate issued, subscribed and paid up equity share capital/capital contribution/partnership contribution in the lowest bidder or its member is held by persons resident outside India or where a bidder or its member is controlled by persons resident outside India, then the eligibility and award of the project to such lowest bidder shall be subject to the approval of competant authority from national security and public interest perspective as per the instructions of the Government of India applicable at such time. The decision of the authority in this behalf shall be final and conclusive and binding on the bidder.		
5	Special Conditions for Item No. 9, 17, 18, 20,30 & 32		
	The tenderer shall submit an undertaking from OEM along with submission of Performance Guarantee.		

उप मु.सं.एनेप्य संशिष्ट (संकेत, Dy. C.S.T.E. (Signal) पूर्व तट रेलवे, भुबनेश्वर East Coast Railway, Bhubaneswar

ABBREVIATIONS USED IN SIGNAL & TELECOM WORKS

Srl	Abbreviations Details		
No.			
1	ABS Automatic Block Signaling		
2	BPAC	Block Proving Axle Counter	
3	LVCD	Last Vehicle Check Device	
4	TLBI	Token Less Block Instrument	
5	SLBI	Single Line Block Instrumetn	
6	TBI	Token Block Instrument	
7	MACLS	Multiple Aspect Colour Light Signalling	
8	EI	Electronic Interlocking	
9	PI	Panel Interlocking	
10	RRI	Route Relay Interlocking	
11	DAC	Digital Axle Counter	
12	UAC	Universal Axle Counter	
13	IPS	Integrated Power Supply	
14	UFSBI	Universal fail safe Block Instrument	
15	SSDAC	Single Section Digital Axle Counter	
16	HASSDAC	High Availability Single Section Digital Axle Counter	
17	MSDAC	Multiple Section Digital Axle Counter	
18	SSBPAC	Single Section Block Proving Axle Counter	
19	SITC	Supply, Installation, Testing and Commissioning through	
		works or goods contract.	
20	OFC	Optical Fibre Cable	
21	SDH	Synchronous Digital Hierarchy	
22	PDMUX	Primary Digital Multiplexer	
23	STM	Synchronous Transport Module	
24	FCBC	Float-cum-Boost Charger	
25	VRLA	Valve regulated Lead Acid	
26	WLL	Wireless Local Loop	
27	PRS	Passenger Reservation System	
28	UTS	Unreserved Ticketing System	
29	FOIS	Freight Operations Information System	
30	COIS	Coach Operations Information System	
31	ICMS	Integrated Coach Management System	
32	CMS	Crew Management System	
33	COA	Control Office Applications	
34	LAN	Local Area Networking	
35	WAN	Wide Area Networking	
36	IT	Information Technology	
37	LED	Light Emitting Diode	
38	GPS 🦱	Global Positioning System	
39	PC Marie	Personal Computer	
40	IVRS	Integrated Voice Response System	
41	CCTV	Close Circuit Television	

Srl	Abbreviations	Details
No.		
42	FOB	Foot Over Bridge
43	VGF	Very High Frequency
44	RDSO	Research, Design and Standards Organisation
45	SPN	Specification
46	TEC	Telecom Engineering Committee
47	LCD	Liquid Crystal Display
48	CRT	Cathode Ray Tube
49	UPS	Un-interrupted Power Supply
50	4Q/6Q	4 Quad / 6 Quad
51	PIJF	Poly Insulated Jelly Filled
52	PVC	Poly Vinyl Chloride
53	TV	Television
54	IP	Internet Protocol
55	ISDN	Integrated Services Digital Network
56	IPIS	Integrated Passenger information System
57	NGN	Next Generation Network
58	OEM	Original Equipment Manufacturer
59	NTES	National Train Enquiry System
60	ISS .	Integrated Security System
61	TCCS	Train Control Communication System
62	VOIP	Voice Over Internet Protocol
63	RDPMS	Remote Dignostics & Preventive maintenance system
64	IDS	Intrusion Detection System

Srl	Nature of Work	Similar Nature of Work		
No.		-		
A) SI	IGNALING			
1	Signalling works for provision of	Any indoor or/and outdoor Electrical Signalling work for provision of RRI/PI/EI/MACLS/Track Circuit/Axle Counter/BPAC/Double Distant/LC Gate Inter Locking/IBH/Automatic Signalling works.		
2	Interlocking of LC gates.(Mechanical or Electrical)	Any indoor or/and outdoor Electrical Signalling work for provision of RRI/PI/EI/MACLS/Track Circuit/Axle Counter/BPAC/Double Distant/LC Gate Inter Locking/IBH/Automatic Signalling works.		
3	Intermediate Block Signalling	Any indoor or/and outdoor Electrical Signalling work for provision of RRI/PI/EI/MACLS/Track Circuit/Axle Counter/BPAC/Double Distant/LC Gate Inter Locking/IBH/Automatic Signalling works.		
4	Automatic Signalling (Indoor & Outdoor)	Any indoor or/and outdoor Electrical Signalling work for provision of RRI/PI/EI/MACLS/Track Circuit/Axle Counter/BPAC/Double Distant/LC Gate Inter Locking/IBH/Automatic Signalling works.		
5	Signalling works for provision of outdoor works of MACLS/ PI/EI/RRI.	Any Indoor or/and Outdoor Electrical Signalling Work for provision of RRI/PI/EI/ MACLS/ Track Circuit/ Axle counter/BPAC/Double Distant / LC gate interlocking/ IBH/ Automatic Signalling works.		
6	indoor works of MACLS/ PI/ RRI/EI	Any Indoor or/and Outdoor Electrical Signalling Work for provision of RRI/PI/EI/ MACLS/ Track Circuit/ Axle counter/BPAC/Double Distant / LC gate interlocking/ IBH/ Automatic Signalling work/Hot standby with provision of dual VDU.		
7	Signalling works for provision of indoor & outdoor works of MACLS/ PI/RRI/EI	Any Indoor or/and Outdoor Electrical Signalling Work for provision of RRI/PI/EI/ MACLS/ Track Circuit/ Axle counter/BPAC/Double Distant / LC gate interlocking/ IBH/ Automatic Signalling work/Hot standby with provision of dual VDU.		
8	Logger/RTU.	Any Data logger Work <u>OR</u> Any Signalling Work including provision of Data logger. Special Condition : If the Tenderer is not OEM of Data Logger/RTU the tenderer should have a letter of authorization from OEM before Signing of Contract Agreement or within 90 days from the date of issue of LOA whichever is earlier		
9	Works for provision of Lightning 8 Surge Protection, Maintenance -free Earth.	Any work of Surge protection & Lightening arrestors OR Any work for Maintenance free Earth/ Conventional Earth OR Any Signalling Work with provision of Surge protection & Lightening arrestors / Maintenance free Earth/ Conventional Earth. It can be an independent work or part of any signalling Indoor/Outdoor Work.		

Sri	Nature of Work	Similar Nature of Work
No.		Similar Nature of Work
10	installation // Replacement/Modification PPTC/ND Fuses/UFSBI/IPS/Diesel	Any Signalling Work with Indoor or/and Outdoor Work. Special Condition : If the Tenderer is not OEM of UFSBI/IPS/Battery Charger then the tenderer should have a letter of authorization from OEM before Signing of Contract Agreement or within 90 days from the date of issue of LOA whichever is earlier
11	Miscellaneous S&T works for installation	Any Signalling Work with Indoor or/and Outdoor Work. Special Condition: If the Tenderer is not OEM of
	Replacement/Modification of Track circuits/Loop line/Bridge Axle	Condition: If the Tenderer is not OEM of MSDAC/HASSDAC/SSDAC then the tenderer should have a letter of authorization from OEM before Signing of Contract Agreement or within 90 days from the date of issue of LOA whichever is earlier
12	Signalling Drawing & Design	Any Signalling Drawing & Design works OR Any Signalling Work of Signalling -Drawing & Design. It can be an independent work or part of any signalling Indoor/Outdoor Work.
13		Any signalling work for provision of Indoor or/and outdoor works of S&T installation.
14	suppression system at Relay room. OFC hut etc.	Any work of Automatic Fire Detection and Alarm System <u>OR</u> Any signalling work with provision of Automatic Fire Detection and Alarm System. Special Condition : If the tenderer is not a OEM of AFDAS System, then the tenderer should have a letter of authorization from Original Equipment Manufacturer to be produced before signing of contract or within 90 days from the date of issue of LOA whichever is earlier.
15	System.	Any Signalling Work for provision of Indoor Work of EI OR Annual Maintenance of EI OR Original Equipment Manufacturer for EI System. Special Condition: If the tenderer is not a manufacturer of EI, then the tenderer should have a letter of authorization from Original Equipment Manufacturer to be produced before signing of contract or within 90 days from the date of issue of LOA whichever is earlier.
	MSDAC/HASSDAC/SSDAC.	Any Signalling Work for provision of MSDAC/HASSDAC/SSDAC <u>OR</u> Annual Maintenance of MSDAC/HASSDAC/SSDAC <u>OR</u> Original Equipment Manufacturer of MSDAC/HASSDAC. Special Condition: If the tenderer is not a manufacturer of MSDAC/HASSDAC/SSDAC, then the tenderer should have a letter of authorization from Original Equipment Manufacturer to undertake AMC for complete period to be produced before signing of contract agreement or within 90 days from the date of issue of LOA whichever is earlier.
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Srl	Nature of Work	
No.	Ivalure of work	Similar Nature of Work
17	AMC/ARC of MSDAC/HASSDAC/ SSDAC cards	Any Works invoving Supply, Installation, Testing & Commissioning or AMC OR ARC of MSDAC/HASSDAC/SSDAC. Special Condition: If the tenderer is not OEM of MSDAC/HASSDAC/SSDAC, then the tenderer should have a letter of authorization from OEM to undertake AMC/ARC for complete period to be produced before signing of contract agreement or within 90 days from the date of issue of LOA whichever is earlier
18	AMC of Fire Alarms	Any Work involving Supply, Installation, Testing & Commissioning OR AMC of Fire Alarm system or any indoor and/or Outdoor EI/RRI work where Fire Alarm is apart of that
		work. Special Condition : Tender specific authorization from OEM to undertake AMC for complete period to be submitted by the firm before signing of Contract agreement or within 90 days from the date of issue of LOA whichever is earlier.
19	Annual Repair Contract (ARC) of Fire Alarm system,	SITC OR AMC OR ARC of Fire Alarm system or any indoor and/or Outdoor El/RRI work where Fire Alarm is apart of that work. Special Condition : Tender specific authorization from OEM to undertake ARC for complete period to be submitted by the firm before signing of Contract agreement or within 90 days from the date of issue of LOA whichever is earlier.
20	Annual Maintenance Contract of IPS.	Any Signalling Work for provision of Indoor Work of IPS <u>OR</u> Annual Maintenance of IPS <u>OR</u> Original Equipment Manufacturer of IPS. Special Condition : If the tenderer is not OEM of IPS, then the tenderer should have a letter of authorization from Original Equipment Manufacturer to undertake AMC for complete period to be produced before signing of contract agreement or within 90 days from the date of issue of LOA whichever is earlier
21	Integrated Power Supply (IPS) system,	SITC <u>OR</u> AMC <u>OR</u> ARC of IPS system <u>OR</u> any signalling work with IPS. Special Condition : If the tenderer is not OEM of IPS, then the tenderer should have a letter of authorization from Original Equipment Manufacturer to undertake AMC for complete period to be produced before signing of contract agreement or within 90 days from the date of issue of LOA whichever is earlier
22	logger/RTU.	Any Signalling Work for provision of Indoor Work of Data logger <u>OR</u> Annual Maintenance of Data logger <u>OR</u> Original Equipment Manufacturer of Data logger. Special Condition: If the tenderer is not OEM of Data logger, then the tenderer should have a letter of authorization/undertaking from Original Equipment Manufacturer to undertake AMC for complete period to be produced before signing of contract agreement or within 90 days from the date of issue of LOA whichever is earlier.

Srl	Nature of Work	Similar Nature of Work
No.		
23	of Universal Failsafe Block Interface (UFSBI) system,	Any Signalling Work for provision of Indoor Work of UFSBI <u>OR</u> Any Annual Maintenance Work of UFSBI <u>OR</u> Original Equipment Manufacturer of UFSBI System. Special Condition: - If the tenderer is not OEM of UFSBI, then the tenderer should have a letter of authorization/undertaking from Original Equipment Manufacturer to undertake AMC for complete period to be produced before signing of contract agreement or within 90 days from the date of issue of LOA whichever is earlier.
24	Universal Failsafe Block Interface (UFSBI) system,	should have a letter of authorization/undertaking from Original Equipment Manufacturer to undertake ARC for complete period to be produced before signing of contract agreement or within 90 days from the date of issue of LOA whichever is earlier.
25	assets (Not covered under AMC)	Any signalling work for provision of Indoor or outdoor works of S&T installation.
26	of Quad cable/OFC.	Any Signal or Telecom work for trenching, laying/jointing of cables.
27	Preventive Maintenance Systems	Any Signaling Work involving work of Remote Dignostics & preventive Maintenance system or Any Signalling work involving EI/PI/IBS/ABS/MSDAC/Data Logger Networking. Special Condition: The bidder shall be an OEM or an authorized representative of an OEM and must submit the authorisation letter along with the offer Since no RDSO-approved firm is available in the RDSO vendor list for RDPMS, the following definition is approved for OEM: "If no RDSO-approved firm is available in the RDSO-approved list for RDPMSat the time of tender opening, the definition of OEM shall be a manufacturer who has successfully completed installationsof RDPMS in at least 10 or more stations covering full yard with outdoor and indoor signalling gear with satisfactory performance."
28	AMC/ARC of RDPMS System or Cards.	Any work of Supply, Installation, Testing & Commissioning OR ARC or AMC of RDPMS system or any indoor and/or Outdoor El/RRI/PI work where RDPMS is a part of that work. Special Condition: If the tenderer is not OEM of RDPMS, then the tenderer should have a letter of authorization/undertaking from Original Equipment Manufacturer to undertake AMC for complete period to be produced before signing of contract agreement or within 90 days from the date of issue of LOA whichever is earlier.

Srl	Nature of Work	Similar Nature of Work
No.		Similar Nature of WORK
29	Provision of Earth Leakage Detector	Any Signalling Work involving " Provision of Earth Leakage Detector" OR Any Signal Interlocking Works invloving El/RRI/Pl/IBS/LC Gate Interlocking/BPAC /Track Circuit in Yard/Axle Counter (MSADC/HASSDAC/SSDAC) /Automatic Block Signalling/Data Logger . Special Condition : If the tenderer is not OEM of ELD , then the tenderer should have a letter of authorization from Original Equipment Manufacturer to be produced before signing of contract agreement or within 90 days from the date of issue of LOA whichever is earlier.
30	Provision of Fuse Monitoring & Indication System with Self Restoring and auto Change Over System	Any Signalling Work involving "Provision of Fuse Monitoring & Indication System with Self Restoring and auto Change Over System" OR Any Signal Works invloving EI/RRI/PI/IBS/LC Gate Interlocking/Yard Modification /BPAC/ Track Circuit in Yard/DAC /Automatic Block Signalling Special Condition: The bidder shall be RDSO approved/conditionally approved OEM or authorized by RDSO approved/conditionally approved OEM to participate in the Tender. If there is no RDSO approved/ conditionally approved firm for fuse monitoring and indication system at the time of Tender opening, then the bidder with an experience of satisfactory completion for 15 or more fuse monitoring and indication system installations in single work or part of any signalling work/works in Railways.
31	Survey, design, supply, installation, testing and commissioning of KAVACH equipment.	Supply, Installation, Testing & Commissioning of KAVACH/TCAS or RRI/PI/EI or Centralized Traffic Control System/Train Management System or Automatic Train Protection System or Automatic Block Signalling or Intermediate Block Signalling. Special Condition: "If the tenderer is not RDSO approved vendor or developmental vendor of KAVACH equipment, the tenderer shall submit an undertaking from RDSO Approved/Developmental KAVACH OEM before signing of contract agreement or within 90 days from the date of issue of LOA whichever is earlier.

Srl	Nature of Work	01.11
No.		Similar Nature of Work
B)T	ELECOM	
1	communication	
2	communication on OFC	
3	cables .	
4	and local lead / OFC with/without power plant.	, and the second
5	power plant.	Any Telecom Supply , Installation , Testing & commissioning of Indoor work of OFC involving STM/PDMUX/Drop Insert Mux/IPMPLS
6	Supply & installation of SDH and local lead/OFC with/without power plant	Any Telecom Supply , Installation , Testing & commissioning of Indoor work of OFC involving STM/PDMUX/Drop Insert Mux/IPMPLS
7	Supply & installation of telecom earthing along with Maintenance free VRLA/Low maintenance batteries of different capacities and /or FCBC chargers of various ratings.	, a
8	Supply & installation of telecom earthing along with lightning/surge protection arrangements including x, y, z protections for various telecom installations.	Any signalling and /or telecom work for supply, installation and commissioning of earthing arrangements.
9	Any Telecom work related with Digital /IP based /WLL Electronic Exchange.	Any Telecom installation work for testing & commissioning of Digital Electronic Exchange
	along with server/s for various data networks like Railnet, PRS, UTS,FOIS, COIS, ICMS, CMS, COA, CCTV, Wi-Fi, data logger etc. along with WAN and /or LAN data integration and /or networking including wiring	Any telecom or IT works involving various data networks like Railnet, PRS, UTS,FOIS, COIS, ICMS, CMS, COA, CCTV, Wi-Fi, data logger etc.
11	Supply & installation of LED based Train display system at platforms and FOBs	Any telecom installation work for provision of integrated Passenger information system as per RDSO spn. RDSO/SPN/TC/61/2007 Rev2.0 or latest <u>OR/and</u> Video conferencing/CCTV/PA systems/LED or LCD <u>OR</u> True color of Plasma displays including computer networking & software for the respective items.

Srl	Nature of Work	Similar Nature of Work
No.	7	
12	based Train display system at platforms and FOBs	Any telecom installation work for provision of integrated Passenger information system as per RDSO spn. RDSO/SPN/TC/61/2007 Rev2.0 or latest <u>OR/and</u> Video conferencing/CCTV/PA systems/LED or LCD <u>OR</u> True color of Plasma displays including computer networking & software for the respective items.
13		Any telecom installation work for provision of integrated Passenger information system as per RDSO spn. RDSO/SPN/TC/61/2007 Rev2.0 or latest <u>OR/and</u> Video conferencing/CCTV/PA systems/LED or LCD <u>OR</u> True color of Plasma displays including computer networking & software for the respective items.
14	with Master / Slave arrangement and /or GPS controlled Master / Slave clocks	Any telecom installation work for provision of integrated Passenger information system as per RDSO spn. RDSO/SPN/TC/61/2007 Rev2.0 or latest OR/and Video conferencing/CCTV/PA systems/LED or LCD OR True color of Plasma displays including computer networking & software for the respective items.
15	Auto Announcement System	Any telecom installation work for provision of integrated Passenger information system as per RDSO spn. RDSO/SPN/TC/61/2007 Rev2.0 or latest <u>OR/and</u> Video conferencing/CCTV/PA systems/LED or LCD <u>OR</u> True color of Plasma displays including computer networking & software for the respective items.
16	Microprocessor based auto announcement system	Any telecom installation work for provision of integrated Passenger information system as per RDSO spn. RDSO/SPN/TC/61/2007 Rev2.0 or latest <u>OR/and</u> Video conferencing/CCTV/PA systems/LED or LCD <u>OR</u> True color of Plasma displays including computer networking & software for the respective items.
17	IVRS and /or Analog IVRS and /or ITES and/or NTES	Any telecom installation work for provision of integrated Passenger information system as per RDSO spn. RDSO/SPN/TC/61/2007 Rev2.0 or latest <u>OR/and</u> Video conferencing/CCTV/PA systems/LED or LCD <u>OR</u> True color of Plasma displays including computer networking & software for the respective items.
18	Enquiry system	Any telecom installation work for provision of integrated Passenger information system as per RDSO spn. RDSO/SPN/TC/61/2007 Rev2.0 or latest <u>OR/and</u> Video conferencing/CCTV/PA systems/LED or LCD <u>OR</u> True color of Plasma displays including computer networking & software for the respective items.
19	Supply & installation of Manua Announcement system	Any telecom installation work for provision of integrated Passenger information system as per RDSO spn. RDSP/SPN/TC/61/2007 Rev2.0 or latest <u>OR</u> /and Video conferencing/CCTV/PA systems/LED or LCD or True color of Plasma displays including computer networking & software for the respective items.

Srl	Nature of Work	Similar Nature of Work
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20	commissioning of IP based CCTV camera and accessories, or	Supply, Installation, testing and commissioning of IP based CCTV camera and accessories, OR IP based video Surveillance system OR IP based Integrated Security system, where CCTV is a part OR any IP based Networking system such as Local Area Networking (LAN) OR IP based telephone exchange networking OR networked video conferencing system. The bidder should have sucessfully completed one of the above in any Govt./PSU/Smart city project.
21	for Security Control Help line No182 (At present -139).	Supply, installation, testing and commissioning of IP telephone exchange <u>OR</u> any IP based networking system or voice/data logger device. OR AMC of IP telephone exchanges. OR AMC of IP based networking equipment including PC and peripherals.OR AMC of Integrated Passenger Information System (IPIS).
22	Annual Repair Contract (ARC) of	SITC OR AMC OR ARC of CCTV systems OR any telecom
	CCTV system	Iwork with CCTV.
23	Contract (CAMC) of 8 channel voice data recording and processing unit (VDRPU).	Comprehensive Annual Maintenance Contract (CAMC) of 8 channel voice data recording and processing unit (VDRPU) OR Any telecom installation work for provision of integrated Passenger information system (IPIS) as per RDSO spn. RDSO/SPN/TC/61/2007 Rev2.0 or latest OR/and Video conferencing/CCTV/PA systems/LED or LCD OR True colour of Plasma displays including computer networking & software for the respective items OR CAMC of integrated Passenger information system (IPIS).
24	Contract (CAMC) of mobile DTH system.	Supply, installation, testing and commissioning (SITC) of mobile DTH system <u>OR</u> Comprehensive Annual Maintenance Contract (CAMC) of mobile DTH system. Note:- Bidders other than OEM to produce MoU with OEM.
25	commissioning (SITC) of integrated Passenger information system (IPIS) as per RDSO spn.	Supply, installation, testing and commissioning (SITC) of integrated Passenger information system (IPIS) as per RDSO spn. RDSO/SPN/TC/61/2007 Rev2.0 or latest <u>OR</u> Supply & installation of LED based Train display system at platforms and FOBs <u>OR</u> Supply & installation of Multiline LED based Train display system at platforms and FOBs <u>OR</u> Supply & installation of LED based Coach Guidance System/ Coach Summary Board.

Srl	Nature of Work	Similar Nature of Work
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26	Contract (CAMC) of integrated Passenger information system (IPIS) as per RDSO spn.	Supply, installation, testing and commissioning (SITC) of integrated Passenger information system (IPIS) as per RDSC spn. RDSO/SPN/TC/61/2007 Rev2.0 or latest OR Comprehensive Annual Maintenance Contract (CAMC) of integrated Passenger information system (IPIS) as per RDSO spn. RDSO/SPN/TC/61/2007 Rev2.0 or latest OR LED based Train display system at platforms and FOBs OR Multiline LED based Train display system at platforms OR LED based Coach Guidance System/ Coach Summary Board. Note:- Bidders other than OEM to produce MoU with OEM before signing of contract agreement or within 90 days of issue of LOA whichever is earlier
27		
28	Annual Maintenance Contract of voice logger system	Any Telecom work for provision of Indoor Work of Voice Logger OR Annual Maintenance of Voice Logger OR Original Equipment Manufacturer of Voice Logger. Special condition : If the tenderer is not a manufacturer of Voice Logger, then the tenderer should have a letter of authorization from Original Equipment Manufacturer to be produced before signing of contract agreement or within 90 days of issue of LOA whichever is earlier
29	Provision of IP MPLS Network	Any work involving provision of I. IPMPLS OR II. VOIP based Train Control Communication System OR III. FOIS OR IV. Data Connectivity OR V. Datacom Equipment OR VI. Video Conferencing including Installation & commissioning of Switches OR VII. Router at multiple locations in a single network.
30	commissioning of integrated Passenger Information System (IPIS) as per RDSO Spn	Supply, Installation, testing and commissioning (SITC) of integrated passenger information system(IPIS) as per RDSO Spn RDSO/SPN/TC/108/ 2019 Rev 0.0 or latest <u>OR</u> LED based Train display system at platforms and FOBs <u>OR</u> Multiline LED based Train display system at platforms <u>OR</u> LED based Coach Guidance System/Coach Summary Board as per RDSO Spn RDSO/SPN/TC/108/ 2019 Rev 0.0 or latest.

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Srl No.	Nature of Work	Similar Nature of Work
31	Contract (CAMC) of integrated Passenger Information System (IPIS) as per RDSO Spn	Supply, Installation, testing and commissioning (SITC) of integrated passenger information system(IPIS) as per RDSO Spn RDSO/SPN/TC/108/ 2019 Rev 0.0 or latest OR Comprehensive Annual Maintenance Contract (CAMC) of integrated passenger information system (IPIS) t OR LED based Train display system at platforms and FOBs OR Multiline LED based Train display system at platforms OR LED based Coach Guidance System/Coach Summary Board as per RDSO Spn RDSO/SPN/TC/108/ 2019 Rev 0.0 or latest
32	Provision of VoIP/IP based exchange	Supply, Installation, testing and commissioning of VoIP based exchange OR IP based Exchange OR Digital Exchange OR WLL Exchange
33	CAMC of VoIP based exchange	SITC OR CAMC of VoIP based exchange
34	CAMC of CCTV	SITC OR CAMC of CCTV IP BASED VIDEO SURVEILLANCE SYSTEM.
35	testing, integration and	Any work of Train Management System/ Train Describer System/ Automatic Train Control system/ Communication based Train Control//Kavach/LTE/ Centralized Traffic Control System/ ETCS level-2 signalling system/ Programmable Logic Controller (PLC)/ Software developer with real time online display systems in transportation sector.
36		Any work of Train Management System/ Train Describer System/ Automatic Train Control system/ Communication based Train Control//Kavach/LTE/ Centralized Traffic Control System/ ETCS level-2 signalling system/ Programmable Logic Controller (PLC)/ Software developer with real time online display systems in transportation sector.
37	Supply, Installation , Testing & Commissioning of "Intrusion Detection System"	Execution of Distributed Optical Fibre Sensing based Rail Fracture/Intrusion Detection System OR Any Indoor and Outdoor Signalling or Telecom Work involving Supply, Installation, Testing & Commissioning. Note for the above is to read which is provided in Special condition of Telecom Work.
38	Telecom Repairing Works of Various Cards and Equipments	Exchange/Networking System/OFC System with satisfactory performance for a minimim period of Six Months
39	Communication System for Tunnels	Any Telecom Work for provision of communication through Leaky Coaxial Cable or OFC or Radio System or Any Work for Provision of Communication inside tunnels
40	Provision of Station VHF Communication Recording Facility	Any Telecom Work involving provision of Wireless/Radio based Communication or Secure communication in any Govt Organization/PSU

Srl	Nature of Work	Similar Nature of Work
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41	testing integration and	Any work of Train Management System/ Train Describer System/ Automatic Train Control system/ Communication
	commissioning of Train Management System/LTE.	based Train Control//Kavach/LTE/ Centralized Traffic Control System/ ETCS level-2 signalling system/ Programmable Logic Controller (PLC)/ Software developer with real time online display systems in transportation sector.
42	erection and commissioning of towers and associated works required for KAVACH, LTE and other applications	,
43	Testing & Commissioning of Towers	Supply, foundation, fabrication, erection and commissioning of telecom/electric/spun concrete/spun electric tower or execution of bridge work consisting of construction and launching of steel girders AND Any Telecom Work related to supply and execution of Optical Fiber Cable
44	Linking of COA with Data Logger	Any Signalling/Telecom/IT Work involving Data Logger/COA. Bidders other than OEM has to submit the MOU/Undertaking/Authorization from OEM.

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C) NO	ON CORE SIGNALLING & TELECOM	WORKS
1		
	Signalling gears	Maintenance of Signalling gears indoor/outdoor or both. And/OR Installation & Commissioning of Signalling work indoor/outdoor or both. And/Or Completed project management consultancy works for Signalling works in Railways/Railway PSUs". And/Or Execution of replacement of Signalling works. Note 1: Candidates provided shall be of ITI with experience /Diploma/Graduate in Engineering. Note 2: If any specialisation required may be specified by the executive for the subject work.
2	Outsourcing for maintenance of Telecom gears	Maintenance of Telecom or Signalling gears indoor/outdoor or both. And/OR Installation & Commissioning of Telecom or Signalling work indoor/outdoor or both. And/Or Completed project management consultancy works for Telecom or Signalling works in Railways/Railway PSUs". And/Or Execution of replacement of Telecom or Signalling works. Note 1: Candidates provided shall be of ITI with experience /Diploma/Graduate in Engineering. Note 2: If any specialisation required may be specified by the executive for the subject work.
3	Out-Sourcing of labour for Day to Day support in maintenance/ installation works in S&T field units.	Supply of skilled / semi-skilled /unskilled Manpower to Government Organizations or Public Sector Units/Execution of any S&T work involving Labours.
4	documentation	Any work in connection with digitization of plan, conversion of manual drawing into CAD drawing. It can be an independent work or part of any signalling/Telecom Work.
	use.	Supply of light passenger carrying motor vehicles along with driver to Government Semi Government, PSUs, Corporations. It can be an independent work or part of any Work.
ľ	Truck including Driver, Diesel Oil, Lubricants etc., for departmental use.	Supply of heavy road vehicle (more than 3.5 tonne capacity or equivalent) along with driver to government, semi government, PSUs, Corporations. It can be an independent work or part of any Work.