

**Corrigendum-3****To,****All Eligible Bidder,**

**Sub:** Expression of Interest (EOI) for RailTel empaneled Business Associates for exclusive PRE-BID TEAMING ARRANGEMENT for “Supply, Installation, Testing and Commissioning of Integrated Tunnel Communication Systems Including VHF Simplex System, CCTV System, PA System and Emergency Call Points etc. In Tunnels T-12 To T-16 for Customer of RailTel (COR) on back-to-back basis”.

EOI Ref No.: RCIL/NR/RO/EOI/MKTG/TNDR/RVNL-3/2025-26 dated 15-11-2025.

This is with reference to the EOI invited on dated 15-11-2025 for the subject as cited above, the revised schedule for bidding process is as under:

S. No.	Event Description	Earlier	Modified
1	Last date for submission of Bids against EOI	04-12-2025 at 17:00 Hours	10-12-2025 at 17:00 Hours
2	Opening of Bids received against EOI	04-12-2025 at 17:30 Hours	10-12-2025 at 17:30 Hours

All other terms, conditions and clauses remain same as mentioned in EOI and Minutes of Pre Bid Meeting held on 14.11.2025 and subsequent clarification issued by RVNL as attached.

Contact Details for this EOI:

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AGM-Marketing  
For RailTel Corporation of India Ltd. /NR

**ADDENDUM AND CORIGENDUM-03**

<b><u>Bid Notification No.</u></b>	:	<b>RVNL/RKSH/SnT(TELE)/4/2025/SnT/RKSH, dated 29/10/2025</b>
<b><u>Name of the Work</u></b>	:	<b>“Supply, installation, testing and commissioning of integrated tunnel communication systems including VHF simplex system, CCTV system, PA system &amp; Emergency call points etc. in tunnels (T-1 to T16) and 12 stations (section length 120.3 km) with provision of integration at seven TCCs and Divisional &amp; Project centralized tunnel control centres (at Moradabad &amp; Rishikesh) in connection with new BG line Rishikesh - Karnaprayag in the state of Uttarakhand, India in 3 (three) packages.”</b>

The following changes are to be incorporated at the appropriate places in the Bid Document.

<b>S. No.</b>	<b>Package</b>	<b>Clause</b>	<b>Page No.</b>	<b>Amendments</b>
1	Package 1	All clauses	All pages	The existing Bid Document Volume-II pkg 1 stands replaced with revised Volume-II pkg 1 (Rev 1.0) enclosed herewith.
2	Package 2	All clauses	All pages	The existing Bid Document Volume-II pkg 2 stands replaced with revised Volume-II pkg 2 (Rev 1.0) enclosed herewith.
3	Package 3	All clauses	All pages	The existing Bid Document Volume-II pkg 3 stands replaced with revised Volume-II pkg 3 (Rev 1.0) enclosed herewith.

Minutes of Pre Bid Meeting

SUBJECT: “Supply, installation, testing and commissioning of integrated tunnel communication systems including VHF simplex system, CCTV system, PA system & Emergency call points etc. in tunnels (T-1 to T16) and 12 stations (section length 120.3 km) with provision of integration at seven TCCs and Divisional & Project centralized tunnel control centres (at Moradabad & Rishikesh) in connection with new BG line Rishikesh - Karnaprayag in the state of Uttarakhand, India in 3 (three) packages”

In reference to the RVNL/RKSH/SnT(TELE)/4/2025/SnT/RKSH dated 29/10/2025, some queries were raised by the bidders during the Pre-Bid Meeting held on 14.11.2025. The replies to the queries raised is as under.

Pre-Bid Meeting Queries and Replies for Multi-Package Tender of Telecom Work in (03) Packages

SN	Description	Tender Reference	Query	Reply																																
Vol-1																																				
1	Volume -1 PREAMBLE Page no. 3 of 11	Page viii Cl. 9(b) of IFB	This clause states, "Once the bidders have selected the bids they are interested in, the bidder can pay the processing fee of Rs. 7500 + 18 % GST-1 (NOT REFUNDABLE) by net-banking I Debit I Credit card and then download the required documents I bid schedules, Bid documents etc. Once processing fee is paid, it will be moved to the respective "requested" Tab." In reference to this clause, may kindly confirm if the processing fee need to be paid once or as per the no of packages intended to be bid.	Bidders shall pay the processing fee one time for participation in the any individual package or combination of packages.																																
2	Volume -1 BDS	ITB 19.1 of BDS of Volume-I	As per this clause, the bid security is to be submitted for the following: Pkg- 1: Rs. 2 crores Pkg- 2 : Rs. 2 crores Pkg- 3 : Rs. 2 crores Pkg- 1 & 2: Rs. 4 crores Pkg- 1 & 3 : Rs. 4 crores Pkg- 2 & 3 : Rs. 4 crores Pkg- 1, 2 & 3 : Rs. 6 crores If the bidder is participating in all individual packages, combination of 2 packages and combination of three packages, then may kindly confirm that the bidder needs to submit a bid security of, 6 crores or as per the oackaaes intended to be participate.	If Bidder intends to participate in all three packages individually or/and three combined, the Bid Security of Rs. 6 crores shall be required for EMD.  If the Bidder intends to participate only in selected two individuals or/and their combined packages, then the Bid Security of Rs. 4 Crores shall be required for EMD.  If the Bidder intends to participate in single package, then the Bid Security of Rs. 2 Crores shall be required for EMD.																																
3	Volume -1 WRQ	Cl. 6 of section-5 of Volume-I	There are few equipment missing after SN (6) in the table provided under minimum number of equipment required for execution of the work under Pkg-1.	Please refer to WRQ Section-5 under Volume-I of the bid document.																																
4	Volume -1 WRQ	(a) Cl. 2.3.1(a) & (b) of Package-1 of Volume-I (b) Cl. 2.3.1(a) & (b) of Package-3 of Volume-I (c) Cl. 2.3.1(a) & (b) of Package-1&3 of Volume-I (d) Cl. 2.3.1(a) & (b) of Package-2&3 of Volume-I (e) Cl. 2.3.1(a) & (>) of Package- 1,2&3 of Volume-I	As per this clause <table><tr><th>Pkg No.</th><th colspan="3">Description</th></tr><tr><td>Pkg 1</td><td>in tunnels of at least 24.56 KM length in railway through single contract.</td><td>in tunnels of at least 14.04 KM length in railway through each contract.</td><td>in tunnels of at least 24.56 KM in railway in last three years.</td></tr><tr><td>Pkg 2</td><td>20.46 km</td><td>11.69 km</td><td>20.46 km</td></tr><tr><td>Pkg 3</td><td>25.47 km</td><td>14.55 km</td><td>25.47 km</td></tr><tr><td>Pkg 1 &amp; 2</td><td>45.02 km</td><td>25.73 km</td><td>45.02 km</td></tr><tr><td>Pkg 1 &amp; 3</td><td>50.02 km</td><td>28.59 km</td><td>50.02 km</td></tr><tr><td>Pkg 2 &amp; 3</td><td>45.92 km</td><td>26.24 km</td><td>45.92 km</td></tr><tr><td>Pkg 1, 2 &amp; 3</td><td>70.48 km</td><td>40.27 km</td><td>70.48 km</td></tr></table> The overall value length in Package 3 is less than Package. May kindly review the same.	Pkg No.	Description			Pkg 1	in tunnels of at least 24.56 KM length in railway through single contract.	in tunnels of at least 14.04 KM length in railway through each contract.	in tunnels of at least 24.56 KM in railway in last three years.	Pkg 2	20.46 km	11.69 km	20.46 km	Pkg 3	25.47 km	14.55 km	25.47 km	Pkg 1 & 2	45.02 km	25.73 km	45.02 km	Pkg 1 & 3	50.02 km	28.59 km	50.02 km	Pkg 2 & 3	45.92 km	26.24 km	45.92 km	Pkg 1, 2 & 3	70.48 km	40.27 km	70.48 km	Kindly refer the Note (1), (ii) & (iii) mentioned under clause 2.3.1 (a) & 2.3.1 (b) of EQC, Section-3. The Quantity (tunnel length) in the EQC has been considered as the combined length of the Main Tunnel and the Escape Tunnel (parallel bypass road tunnel) for the work requirement . The lengths indicated in the table represent only the section length of the Main Tunnel.
Pkg No.	Description																																			
Pkg 1	in tunnels of at least 24.56 KM length in railway through single contract.	in tunnels of at least 14.04 KM length in railway through each contract.	in tunnels of at least 24.56 KM in railway in last three years.																																	
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SN	Description	Tender Reference	Query	Reply
5	Volume -2 BOQ	(a) Bill No. 11 Group C, Schedule C (b) PA System, IP Emergency Call Points, and Unified Platform	The total of Schedule C (PA System, IP Emergency Call Points, and Unified Platform) is given as Rs. 26,99,02,038.94 in summary sheet as well as in schedule bifurcation, but the cumulative of the above-mentioned schedule is coming out to be Rs. 28,25,56,379.83. There is a mathematical error in the schedule. May kindly review the same.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
6	Volume -2 BOQ	ITB 19.1 of BDS of Volume-I	This clause states that, “Supply, Installation, Testing And Commissioning Of Integrated Tunnel Communication Systems Including VHF Simplex System, CCTV System, PA System & Emergency Call Points etc. In Tunnels (T-8 To T-11), 04 nos. Stations (Section Length 36 Km) With Provision of integration at TCCs (Maletha & Srinagar) In Connection with New BG Rail Line Rishikesh Karnaprayag in the State of Uttarakhand, India.”  It has been observed that the name of work of Package 2 has been quoted as name of work of package 3 in clauses under reference. May kindly review the same.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
7	Volume -2 BOQ	CI. 3.0 of technical specifications of Volume-II of Pkg-1, Pkg-2 & Pkg-3	The total section length of the 03 packages is mentioned as 120.3 km (Pkg-1: 42.7 km; Pkg-2: 36 km & Pkg-3: 41.6 km) as per tender document but no details of section length bifurcation of tunnels & adits is provided in the tender document. May kindly provide the same.	Kindly refer Section 5, WRQ clause 2.1.3 "Introduction of contract packages" for each packages.
8	Volume -1 Bidding Forms	Form PS-5	May kindly confirm if a single Form PS-5; Affidavit has to be submitted or as per the number of packages bidder participating.	Yes. A single affidavit has to be submitted for all packages irrespective that the bid intends to individual package or combination of package.
9	ITB 4.1(b)(i)- Not Applicable	Vol-1 Section 2: Bid Data Sheet (BDS)	We request to kindly allow JV/Consortium Partners for the subject tender.	Please refer to the EQC, section- 3 under volume-I of bid document.
10	2.3.1 Specific Construction Experience 2.3.1 ( a ) Contracts of Similar Size and Nature. 2.3.1 (b) Construction Experience in Key Activities (Executed during the last Three years prior to the applications sbmission deadline)	Vol-1 Section 3: Evaluation and Qualification Criteria	Under compliance requirement we request to kindly allow JV/Consortium partner and allow bidder if any member of the JV/Consortium is meeting the eligibility criteria	Please refer to the EQC, section- 3 under volume-I of bid document.
11	2.3.1 Specific Construction Experience 2.3.1 ( a ) Contracts of Similar Size and Nature. 2.3.1 (b) Construction Experience in Key Activities (Executed during the last Three years prior to the applications sbmission deadline)	Vol-1 Section 3: Evaluation and Qualification Criteria	Request to kindly allow Parent company credentials in case Parent company is holding more than 51% stake of Bidder	Please refer to the EQC, section- 3 under volume-I of bid document.
12	All such documents reflect the financial situation of the Bidder or partner to a JV, and not sister or parent companies.	Vol-1 Section 4: Bidding Forms	We understand only the financial statements of Parent company cannot not be used. For 2.3.1 Specific Construction Experience we can use Parent Company credentials. Kindly confirm	Please refer Section-4, Form FIN-1 for the respective package.

SN	Description	Tender Reference	Query	Reply
13	<u>For Package-II</u> (II) Execution as contractor, or subcontractor, at least Two contracts, each that have been successfully or are substantially completed within the last Seven years before the deadline for the submission of the bids, and that are similar to the proposed work. Each similar work here shall be that which includes the key activities mentioned below:  i. Design, Supply, Installation, testing and commissioning of Integrated tunnel communication systems works including CCTV System, PA system & emergency call points and VHF Simplex Communication System with provision of OFC/leaky cable in tunnels of at least 11.69 KM length in railway	Vol-1 Section 3: Evaluation and Qualification Criteria	We request to kindly modify the clause as follows: <i>"(II) Execution as contractor, or subcontractor, at least Two contracts, each that have been successfully or are substantially completed within the last Seven years before the deadline for the submission of the bids, and that are similar to the proposed work. Each similar work here shall be that which includes the key activities mentioned below:</i>  <i>i. Design, Supply, Installation, testing and commissioning of Integrated tunnel communication systems works including CCTV System, PA system &amp; emergency call points and VHF Simplex Communication System with provision of OFC/leaky cable in tunnels of at least <del>11.69</del> 8 KM length in railway/Metro through each contract cumulatively."</i>	Please refer to the EQC, section- 3 under volume-I of bid document.
14	General	Bid Due Date Extension	We respectfully request an extension of the bid submission deadline by at least one month to allow sufficient time for addressing pending clarifications, completing vendor engagements, and finalizing internal approvals, thereby ensuring a fully compliant and comprehensive proposal.	The Bid submission date and opening date have been extended to 10.12.2025.
15	General	Access Dates for S&T Works	Please provide us the tentative key dates for access as per the milestone mentioned in tender document for each and every tunnels and stations.	The tentatative progress tunneling works of underground excavation - approx. 95% Complete breakthrough - 13 Main Tunnels out of 16. Concrete lining - approx 65 % contractor may visit project site for additional information..
16	Design, Supply, Installation, testing and commissioning of Integrated tunnel communication systems works including CCTV System, PA system & emergency call points and VHF Simplex Communication System with provision of OFC/leaky cable in tunnels of at least 24.56 KM length in railway through single contract.	Vol 1 - Section 3: Evaluation and Qualification Criteria	<b>To be amended</b> Design Supply, Installation , testing and commissioning of telecommunication systems works including PA system, emergency call points and VHF vomunication system, SCADA system with provision of OFC & 6 Quad cable in Railway sector of at least 24.56 KM length in through single contract. OR Design, Supply, Installation, testing and commissioning of Integrated tunnel communication systems works including CCTV system, PA system & emergency call points and VHF simplex Communication system with provision of OFC/leaky cable in tunnels or power cable network, DG sets, ventilation & control system lighting , UPS system, firefighting system & SCADA system etc. ans associated works in tunnel for electrical/GIS sub station of at least 24.56 KM length in railway through single contract.	Please refer to the EQC, section- 3 under volume-I of bid document.
17	Vol II	Schedule A (11 Gr C & D) Schedule B (11 Gr D)	We would like to bring to your attention that there appears to be a discrepancy in the total tender value with respect to the bid value calculation mentioned in Schedule A and Schedule B. Kindly review and confirm the correct value.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.

SN	Description	Tender Reference	Query	Reply
18	Vol II	Bill No.: 11 Schedule I Group C	In Schedule II_A (Items 1, 2, 8, 9) of the BOQ, references are made to Annexures A, B, AA & BB. Similarly, Schedule I2_B (Item 1) refers to Annexure C, Schedule I4 (Item 1) refers to Annexure E, and Schedule I5_E (Items 1, 2, 3, 4, 7, 8) refer to Annexures F, G, H, I, K & L. Schedule I6 (Items 1) refer to Annexures Q. Schedule I7 (Items 1,2) refer to Annexures S. However, these annexures are not enclosed in the tender documents. Requesting you to kindly provide the missing annexures for reference.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
19	Vol II	Bill No.: 11 Group D Schedule C	In Schedule C, the Unit of Measurement (UOM) is not mentioned for Item Nos. 8 and 9 under the IP Emergency Call and Service Telephone Solution. Kindly confirm the applicable UOM.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
20	Vol. II	Bill No.: 11 Group D ScheduleG	For Item No. 6 – 12U Rack, the technical specification is not mentioned in the BOQ. Kindly provide the detailed specification.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
21	Vol. II	Bill No.: 11 Group C ScheduleF	In Schedule F, Item No. NS-4, NS-6 refers to annexures; however, these annexures are not available in the tender documents. Kindly share the same for review.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
22	Vol. I	Section 1: Instructions to Bidders_Eligible Bidders_4.1	As per Clause 4, Joint Venture (JV) participation is permitted; however, no formats or documentation templates related to JV participation have been provided in the tender. Kindly confirm whether JV participation is acceptable and share the required format, if applicable	Pleaser refer to clause ITB 4.1(b)(i) indicated in BDS (Section 2).
23	NA	NA	We request clarification on the current status of tunnel readiness — specifically, how many tunnels are completed and the estimated timeframe for completion of the remaining ones.	The tentatative progress tunneling works of underground excavation - approx. 95% Complete breakthrough - 13 Main Tunnels out of 16. Concrete lining - approx 65 % contractor may visit project site for additional information.
24	NA	Cl. 2.3 Experience Note No. 8	The tender is issued under “International Competitive Bidding” (ICB); however, Note 8 under the Experience Clause states that "The experience of Integrated tunnel communication systems works that shall be considered under this qualifying criteria must be a work of Indian Railway Network but excluding LRT, Tramway & Mono Rail." ThE mention of indian railway network in this criteria restricts foreign participatrion as per FIDIC condition of OECD. As most Railway EPC contracts also include the OECD condition, so we request that this clause be incorporated and the above condition be relaxed OECD clause to allow international bidders to participate, thereby encouraging broader and more competitive participation.	Please refer to the EQC, section- 3 under volume-I of bid document.
25	NA	NA	As we are the OEM for most of the signaling items included in this tender and require additional time to compile and submit all technical documentation, we kindly request an extension of the tender submission due date to enable complete and compliant participation.	The Bid submission date and opening date has been extended to 10.12.2025.

SN	Description	Tender Reference	Query	Reply
26	Vol. II	SCHEDULE A: Tunnel Data Transmission System (TDTS) Item NS-1	We request clarification on the clause requiring a “7-slot chassis in 11U or less form factor” for the proposed data centre switch. The other parts of the specification clearly describe the required port densities and future scalability (10G/40G/100G, Base-T and SFP+), which can be met by different OEMs using varying chassis designs such as 4-slot, 6-slot, 8-slot or 10-slot systems, with slightly different rack heights. In current market practice, functionally equivalent modular core/data-centre switches from leading manufacturers often use different numbers of slots and RU heights while still providing the same or even higher port scalability, redundancy and performance. Limiting the requirement to an exact 7-slot chassis and 11U or less may therefore align with a specific hardware design and unnecessarily restrict competition, even though other standard products can fully meet the technical and capacity requirements. We therefore request that this clause be reviewed and modified to a more generic requirement such as “modular chassis-based switch capable of supporting the specified port densities and redundant supervisor/management modules”, without fixing the slot count and exact RU height, so that all technically compliant solutions can participate.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.

SN	Description	Tender Reference	Query	Reply
27	Vol. II	SCHEDULE A: Tunnel Data Transmission System (TDTS) Item NS-2	We would like to seek clarification regarding the port configuration mentioned in the tender document. The specification states “24 × 1/10G/40G SFP+/QSFP ports”, however SFP+ and QSFP are different physical form factors and cannot be combined in the same port. SFP+ ports typically support 1G/10G, whereas QSFP+/QSFP28 ports support 40G/100G uplinks. To avoid ambiguity and ensure market-wide compliance, we request the department to kindly confirm whether the requirement is for 24 × 1/10G SFP+ ports or 24 × 40G QSFP+ ports, or a combination such as 24 × 1/10G SFP+ ports with additional QSFP+/QSFP28 uplink ports. This clarification is essential for accurate bid preparation and to ensure technical compatibility with available enterprise-grade L3 core switches.	Please refer the Revised Volume-II (Rev 1.0) on the e-tender portal.
28	Vol. II	SCHEDULE A: Tunnel Data Transmission System (TDTS) Item NS-4	We request clarification regarding the requirement stating that the industrial PoE switch must support OpenFlow / SD-Access for SDN. As per industry practice, such SDN features are generally available on enterprise or data-center switches, whereas industrial-grade models designed for harsh environments and certified for EMC, Safety and IEC 62439-2 (MRP) typically do not include these protocols. We therefore request the department to kindly review and remove this clause, as it is not applicable to standard industrial switch specifications.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
29	Vol. II	SCHEDULE A: Tunnel Data Transmission System (TDTS) Item NS-24	SITC of DCIM application for Managing & Monitoring of all Datacentres & all the racks in the system through IP based PDU”, we observe that no detailed technical specification has been provided for this item. Kindly provide detailed technical specifications / minimum functional requirements of the DCIM application. These details are essential for proper system design, software licensing, hardware sizing, and maintenance.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
30	Vol. II	SCHEDULE H: Internet Protocol Multi-Protocol Label Switching (IP-MPLS) Item NS-1	We request clarification on the requirement for the “Supply of Core Router with 4×1G, 4×10G, 2×40G or 4×25G (Upgradable to 100G) with 40G/25G optics, as per TS-01.” Since no detailed technical specification has been provided under TS-01, we seek confirmation whether the Core Router is expected to meet the technical requirements as per RDSO TAN Document No. STT/TAN/IP-MPLS/2020 Version 3.0 with Amendment No. 1. If the evaluation and compliance are to be based on the above RDSO TAN document, we request that the department kindly confirm this explicitly. If not, a detailed router technical specification may please be issued so that we can quote a compliant and technically correct solution.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
31	Vol. II	SCHEDULE H: Tunnel Data Transmission System (TDTS) Item NS-2C	“Supply of SFP 1588 grandmaster integrated GNSS receiver, 128 slaves, M/PROT, Cable LMR, GPS antenna PCTEL 40 dB gain with pipe mount adaptor, General antenna mounting hardware kit including pipe adaptor, Lightning arrestor kit integrated low level 500 KV surge protector meeting EN 61000-4-5:2012 & K.21.E with third party test certificate. As per TS-03.” A. Request to clarify whether the 1588 Grandmaster SFP must support PTP Profiles such as: ITU-T G.8265.1, G.8275.1, G.8275.2. B. Request to specify the GNSS constellations required: GPS / GLONASS / GALILEO / BeiDou / QZSS. C. Kindly provide required Time Accuracy (PPS/ToD) and Holdover Performance parameters as 1588 Grandmaster accuracy & holdover vary widely. Clear requirement is essential to select a compliant product. D. Request to specify the required number of PTP slaves supported. Item mentions "128 slaves"; kindly confirm if 128 is minimum or exact requirement as, as per industry standards, SFP-form-factor PTP Grandmasters typically support 16 to 64 slaves. Support for 128 slaves is generally available only in standalone Grandmaster appliances, not SFP modules. Kindly confirm if the requirement is for an SFP Grandmaster or for a standalone Grandmaster Clock E. Request to provide length & type of LMR cable required (LMR-200 / LMR-400) and total cable run length as Cable type & length directly affect GNSS signal quality & antenna installation feasibility.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.



SN	Description	Tender Reference	Query	Reply
32	Supply, Installation, Testing & Commissioning of Data center Switch 7- Slot Chassis with Redundant Supervisor and Management Module having dedicated Network Interface cards for 48 x 10 SFP+ Ports, 48 x 10G Base-T Ports and 20 x40G/100G Ports & 24* 1/2.5/5/10 GigE Base-T PoE in 11U or less form factor, should be expandable to, Up to 288 10/100/1000Base-T triple speed ports as required in future, Up to 288 1000Base-X ports as required in future, Up to 240 SFP+ ports. Capable of 1 GigE/10 GigE as required in future, Up to 240 10 G Base-T ports. Capable of 1 GigE/10 GigE as required in future, Up to 80 1/2.5/5/10G Base-T ports as required in future, Up to 14 QSFP+ ports. Capable of 40 GbE and 10GbE expansion in future. Up to 100	Schedule- A NS-1	1. No technical specification provided against Data centre switch. 2. Requirement and Expansion of Interface is not clear. 3. PoE is not feasible in 10G base-T port.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
33	Supply, Installation, Testing & Commissioning of Enterprise Grade Stackable Layer 3 Core switch having 24x 1/10G/40G FP+/QSFP ports and 12x 1/10G RJ45 ports. Additional 4xQSFP+/QSFP28 Ports. Dual hotswappable power supply. Support HSRP/VRRP. Rack mount. IPv6 Features or IPv6 Ready Logo Certified, Openflow/ SD Access for SDN. It should support stacking with 400Gbps stacking bandwidth. As per attached specification and remaining parameters	Bill No.11 Group-c Schedule- A, NS-2	Clarification required for the interface and Specification of Coreswitch: -  (a) As BOQ, it is mentioned 24x 1/10/40G SFP+/QSFP but 1/10G Port cannot be having 40G QSFP port. It shall be 1/10G SFP+ instead of 1/10G/40G SFP+/QSFP. (b.) As per BoQ, interface details is mentioned as 24x1/10G SFP+ and 12x1/10G RJ45 Ports but as per Technical spec. (Explanatory Notes) it is mentioned that it should be as per RDSO/SPN/TC/83/202 0 Rev.2.0. and in TS (Technical Specification) of tender all the specification is as per RDSP/SPN/TC/65/2023 ver. 6.0  It suggested that pecification of core switch shall be as per RDSO/SPN/TC/83/202 0 Rev.2.0 only.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
34	SITC of Distribution Switch 48 Nos. 48- port/24 PORT 1G/10GBase-T, 4 Nos. 40G QSFP 28 interfaces data center switch, Switch shall be available with minimum 1.76 Tbps Switch Fabric and shall have Hot Standby Router Protocol (HSRP) /VirtualI Router Redundancy Protocol (VRRP) in addition to other features. As per clause 3.0 of specification no. RDSO/SPN/TC/83 /2020, Rev.2 or latest. (NOTE:	Bill No.11 Group-c Schedule- A, NS-3	Clarification required for the interface and Specification for Distribution Switch:-  (a.) As per BoQ, 04 Nos. of 40G port are required but as per technical spec. (Explanatory Notes) of tender it is mentioned that Six number of 40G port is required. (b) As per technical spec. (Explanatory Notes) it is mentioned that it should be as per RDSO/SPN/TC/83/202 0 Rev.2.0. and in TS (Technical Specification) of tender all the specification is as per RDSP/SPN/TC/65/2023 ver. 6.0. It suggested that specification of core switch shall be as per RDSO/SPN/TC/83/202 0 Rev. 2.0 only.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
35	Supply of Industrial 12 port Layer 2 Switch having 8x 10/100/1000 Base-T PoE+ ports and 4x 1G SFP port for Uplink/Downlink. Dual power input. Switching Capacity 24Gbps. With POE budget of 240 Watts Operating temp -20 to +70. Switch should have EMI CERTIFICATE as per BIS/EN/FCC/CE and EN 50121-4. EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000 4-5, EN61000-4-6, EN61000-4-8, EN61000-4-11, RoHS and should have IP30 protection rating, It should be DINRail/Rack mount. Switch should support IEC 862439-2 media redundancy protocol, Modbus/TCP. IPv6 Ready Logo Certified, Openflow/SD Access for SDN. It should support direct connectivity of Modbus based IOT devices.	Bill No.11 Group-C Schedule- A NS-4	Requested to remove IPv6 Ready Logo Certified, Openflow/SD Access for SDN to make generic product.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.

SN	Description	Tender Reference	Query	Reply
36	Supply of Servers for VMS Application with all required accessories for complete system. The item must conform to specification RDSO/SPN/TC/65/2021, rev.6 or latest.	Sch. B NS-6	AS per Technical Specification (Explanatory Notes), it is mentioned that :- A:- FIPS-140-2 compliant mode. The VMS has the ability to operate in a FIPS 140-2 compliant mode. B. GDPR-Ready Certification: The VMS must have a European Privacy Seal from GDPR ready. It is requested the requirement for foreign validations such as FIPS 140-2 and GDPR-Ready Certification is not necessary for Indian deployed VMS solutions that are already STQC certified under MeitY. The Standardisation Testing and Quality Certification (STQC) Directorate of the Government of India provides equivalent or superior assurance for encryption, data privacy, and cybersecurity, fully aligned with the Digital Personal Data Protection Act 2023 and national data-sovereignty principles. STQC certification ensures that all cryptographic modules, data-protection mechanisms, and software-security processes conform to Indian regulations— eliminating the need for validation from foreign security agencies whose frameworks have no legal jurisdiction in India. STQC-certified software already meets or exceeds the intent of these international benchmarks while	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
37	SITC of Workstation with Intel i7 latest generation, 16 GB or Higher DDR4 SDRAM, 2X 500 GB: SATA (5400 RPM or higher)/SSD, 4 GB Graphics card with 17-inch monitor, keyboard, mouse and all required accessories etc all complete. The item should conform to specification RDSO/SPN/TC/65/2021, rev.6 or latest.	Sch. B NS-13	As per BoQ, RAM size is mentioned as 16 GB but as per technical specification (TS) it is mentioned as 8 GB. Clarification required for the same.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
38	SITC of 55-Inch Vido Wall Display as per technical specification with mounting arrangement as per site complete with all accessories etc. The item should conform to specification RDSO/SPN/TC/65/2021, rev.6 or latest	Sch. B NS-15	As per BoQ, display size is mentioned as 55 inch but as per technical specification it is mentioned as 70 inch. Clarification required for the same.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
39	Supply of IP 66 Cabinet for the installation of Emergency Audio call station as mentioned above (for all three types of Call station) with all required accessories	Sch. C Item No.- 5	As Per BoQ, it is mentioned as IP-66 rating is required for the housing of Audio Call Station in Tunnels but as per Technical specification, it is mentioned as IP-67 rating. Clarification is required for the same.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
40	Supply, installation & commissioning of CISCO catalyst Switch: LAN Base layer 2 stackable switch Enclosure type Rack mountable-1 U, Feature set LAN Base Uplink Interfaces 4x 1g SFX, Ports 24x Ethernet 10/100/1000 Gigabit Ports, Maximum stacking number 8, stack bandwidth 80G, Forwarding Bandwidth 108Gbps, switching bandwidth 216Gbps RAM 512 MB. Flash Memory 128MB	Bill No.11 Group-c /B Schedule- G	Switch OEM should be Cisco or similar.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
41	Supply, installation & commissioning of one CISCO 1941 W/2 EHWIC slots 256 MB DRAM IP based Router in server rack, SNTC-8X5XNBD Cisco 1941 w/2 GE 2 with associated accessories and mounting kit or latest.	Bill No.11 Group-c /B Schedule- G	Switch OEM should be Cisco or similar	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.

SN	Description	Tender Reference	Query	Reply
42	Supply and Installation of Central Software licenses for Telecom Asset Management System for Indian Railways with following modules for NCR. GIS based Asset Register, Cable Management , Device Management, Service Management , Inspection Module, Maintenance Module, Design and Drawing , Failure Module, PCDO Module, Schedule Management, User Management , Integration with other application , Various MIS Reports As per Functional Requirement, Specification - As per Annexure C	Sch. 12 B.1	Annexure C is not attached along with this tender	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
43	Supply and Installation of Centralized Spectrum Monitoring Software License - WPC and SACFA Clearance System - Monitoring of Spectrum distribution and charges paid to DOT -Monitoring the payment/billing of Leased line circuits from BSNL, RCIL, other service providers, Monitoring the	Sch. 14 1.0	Annexure D is not attached along with this tender	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
44	Supply of RTU along with sensor for monitoring parameters of Telecom Equipment room. Specification as per Annexure F. (Inspection by RITES)	Sch. 15 1.0	Annexure F is not attached along with this tender	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
45	Supply and Installation of IOT based Remote diagnostics and Predictive Maintenance Software for monitoring Telecom Assets: OFC monitoring, Telecom Equipment Room monitoring like Power Supplies, door status, Fire , Air condition, Temperature and humidity, battery, SCADA, NMS, Telecom devices, etc. Standard Software Interfaces for IP based devices shall be included Specification as per Annexure E. (Inspection	Sch 14 1.0	Annexure E is not attached along with this tender	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
46	Supply of RTU for Monitoring Power Plant. Specification as per Annexure G. (Inspection by RITES).	Sch 15 2.0	Annexure G is not attached along with this tender	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
47	Supply of RTU data gateway/protocol converter for interfacing device diagnostic ports over RS232, RS485, Ethernet, MODBUS and potential free contacts etc for PIS/PIDS /CCTV interfaces. Specification as per Annexure H. (Inspection by RITES).	Sch 15 3.0	Annexure H is not attached along with this tender	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
48	Supply of RTU for Monitoring VHF/UHF Base station Radio for monitoring Power supply and health over data port interface. Specification as per Annexure I (Inspection by RITES)	Sch 15 4.0	Annexure I is not attached along with this tender	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
49	Supply, Testing and commissioning of 1KVA UPS with 1 hour backup of reputed make as per specification of Annexure K . (Inspection by RITES)	Sch 15 7.0	Annexure K is not attached along with this tender	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.

SN	Description	Tender Reference	Query	Reply
50	Supply of RTU for Monitoring Optical fibre minimum 75km along with 8 port of Optical switch and integrate with IOT based remote diagnostics software at central location. Specification As per Annexure Q (Inspection by	Sch 16.0 1.0	Annexure Q is not attached along with this tender	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
51	Supply of RTU along with software for monitoring Quad cable and Emergency Communication network with station unit. Specification As per Annexure S.	Sch 17 1.0	Annexure S is not attached along with this tender	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
52	Supply of Field Interface Unit to be installed in FRP Socket enclosure for monitoring health of emergency communication. Specification As per Annexure S. (Inspection by Consignee)	Sch 17 2.0	Annexure S is not attached along with this tender	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
53	General	-	Defect Liability Period is clearly not mentioned in the tender. It is requested that DL period may please be specified explicitly.	Please refer Section 7 - Special Conditions of Contract, Part A - Contract Data, clause 1.1.3.7.
54	Supply and installation of 4K UHD Fixed Box	Housing and mounting arrangement should be corrosion resistant.	<b>Camera Housing Material:</b> The camera housing should be of corrosion-resistant stainless steel (SS 316L) grade to ensure durability and long-term performance, especially in tunnel or high-humidity environments.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
55	Supply and installation of full HD P/T/Z (Pan/Tilt/Zoom) IP Colour Camer	Accordingly the range of the camera has been enhance to 500 meters.	PTZ Camera IR Range: As per RDSO Specification (Revision 6), the PTZ camera IR range is defined as 250 meters.	Please refer the item description the BoQ for the concerned item of Volume-II of respective package.
56	VMS software and license	A. FIPS 140-2 compliant mode: The VMS has the ability to operate in a FIPS 140-2 compliant mode. B. GDPR-Ready Certification: The VMS must have a European Privacy seal from GDPR ready.	The asked certifications are specific to Specific OEM and restrict the participation of domestic OEMs in the bid. We therefore request you to kindly remove these certification requirements and allow that only the CCTV Camera, VMS, and Video Analytics Software should be from the same OEM, ensuring seamless integration and reliable operation between hardware and software.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
57	New Caluse :-		BIS and MTBF certificates shall be submitted at the time of bidding. The Mean Time Between Failure (MTBF), calculated at 40°C, shall not be less than 1,00,000 hours for each camera type. OEM shall submit detailed test reports issued by Government / NABL Accredited Laboratories, such as the Centre for Reliability (CFR), Chennai, under the STQC Directorate.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
58	New Caluse :-		The CCTV and Software OEM manufacturer must have direct manufacturing facilities in India for at least the last 15 years (not through joint ventures, partnerships, or associations).	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
59	New Caluse :-		The offered products shall comply with OM No. IV-24011/22/2020-Prov-I/270 dated 26.04.2024 (Ministry of Home Affairs), which includes: Gazette Notification dated 06 March 2024, regarding amendments to Public Procurement Order (PPO)-2017 for CCTV/Video Surveillance Systems, issued by MeitY (IPHW Division). Cameras must be Cyber Security Certified by STQC (Eastern Region).	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
60	New Caluse :-		Essential hardware and software components, including Chipsets (SoC) and Firmware, shall not be sourced from China or the Republic of China (Taiwan).	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.



SN	Description	Tender Reference	Query	Reply
66	Clause no 2.3.1 (b) Section-2 & Page no .16 in Multi package document	-	Construction Experience in key Activities ,pls elaborate the meaning of "Construction Work ".	Please follow the Eligibility Criteria in terms of Key Activities as prescribed in Section-I97 Volume-I
67	ITB 4.1.e Section-2	-	Since this is an international competitive tender, we can use our global experience, although it is not mentioned in the tender document. Please confirm.	Please follow the Eligibility criteria as prescribed in Section-3, clause.3.1 (a) & clause.3.1 (b) of Volume I
68	Clause no.2.2 &2.3	-	Pls consider the experience of Smart City ,Airport ,Road Tunnel,Metro & Indsutry PSU Environment .	Please follow the Eligibility criteria as prescribed in Section-3 of Volume-I
69	B.1, Supply,installation & commissioning of CISCO catalyst Switch: LAN Base layer 2 stackable switch Enclosure type Rack mountable-1 U, Feature set LAN Base Uplink Interfaces 4x 1g SFX, Ports 24x Ethernet 10/100/1000 Gigabit Ports, Maximum stacking number 8, stack bandwidth 80G, Forwarding Bandwidth 108Gbps , switching bandwidth 216 Gbps RAM 512 MB, Flash Memory 128MB	Bill No.: 11 Group C, Page 1691	Supply,installation & commissioning of Switch: LAN Base layer 2 stackable switch Enclosure type Rack mountable-1 U, Feature set LAN Base Uplink Interfaces 4x 1g SFX, Ports 24x Ethernet 10/100/1000 Gigabit Ports, Maximum stacking/MCLAG, stack bandwidth 80G, Forwarding Bandwidth 108Gbps , switching bandwidth 216 Gbps RAM 512 MB, Flash Memory 128MB.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
70	B.2, Supply,installation & commissioning of one CISCO 1941 W/2 EHWIC slots 256 MB DRAM IP based Router ins erver rack, SNTC-8X5XNBD Cisco 1941 w/2 GE 2 with	Bill No.: 11 Group C, Page 1691	Request you to kindly make specifications generic for more OEM participation.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
71	9. Supply,installation & commissioning of CISCO catalyst Switch: LAN Base layer 2 stackable switch Enclosure type Rack mountable-1 U, Feature set LAN Base Uplink Interfaces 4x 1g SFX, Ports 24x Ethernet 10/100/1000 Gigabit Ports, Maximum stacking number 8, stack bandwidth 80G, Forwarding Bandwidth 108Gbps , switching bandwidth 216 Gbps RAM 512 MB, Flash Memory 128MB	Schedule G, Provision of PRS/UTS	Request you to kindly make specifications generic for more OEM participation.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
72	10. Supply,installation & commissioning of CISCO catalyst Switch: LAN Base layer 2 stackable switch Enclosure type Rack mountable-1 U, Feature set LAN Base Uplink Interfaces 4x 1g SFX, Ports 24x Ethernet 10/100/1000 Gigabit Ports, Maximum stacking number 8, stack bandwidth 80G, Forwarding Bandwidth 108Gbps , switching bandwidth 216 Gbps RAM 512 MB, Flash Memory 128MB	Schedule G, Provision of PRS/UTS	Request you to kindly make specifications generic for more OEM participation.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
73	B.1, Supply,installation & commissioning of CISCO catalyst Switch: LAN Base layer 2 stackable switch Enclosure type Rack mountable-1 U, Feature set LAN Base Uplink Interfaces 4x 1g SFX, Ports 24x Ethernet 10/100/1000 Gigabit Ports, Maximum stacking number 8, stack bandwidth 80G, Forwarding Bandwidth 108Gbps , switching bandwidth 216 Gbps RAM 512 MB, Flash Memory 128MB	Bill No.: 11 Group C, Page 1692	Supply,installation & commissioning of Switch: LAN Base layer 2 stackable switch Enclosure type Rack mountable-1 U, Feature set LAN Base Uplink Interfaces 4x 1g SFX, Ports 24x Ethernet 10/100/1000 Gigabit Ports, Maximum stacking/MCLAG, stack bandwidth 80G, Forwarding Bandwidth 108Gbps , switching bandwidth 216 Gbps RAM 512 MB, Flash Memory 128MB.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.

SN	Description	Tender Reference	Query	Reply
74	B.2, Supply,installation & commissioning of one CISCO 1941 W/2 EHWIC slots 256 MB DRAM IP based Router ins erver rack, SNTC-8X5XNBD Cisco 1941 w/2 GE 2 with	Bill No.: 11 Group C, Page 1692	Request you to kindly make specifications generic for more OEM participation.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
75	B.1, Supply,installation & commissioning of CISCO catalyst Switch: LAN Base layer 2 stackable switch Enclosure type Rack mountable-1 U, Feature set LAN Base Uplink Interfaces 4x 1g SFX, Ports 24x Ethernet 10/100/1000 Gigabit Ports, Maximum stacking number 8, stack bandwidth 80G, Forwarding Bandwidth 108Gbps , switching bandwidth 216 Gbps RAM 512 MB, Flash Memory 128MB.	Bill No.: 11 Group C	Supply,installation & commissioning of Switch: LAN Base layer 2 stackable switch Enclosure type Rack mountable-1 U, Feature set LAN Base Uplink Interfaces 4x 1g SFX, Ports 24x Ethernet 10/100/1000 Gigabit Ports, Maximum stacking/MCLAG, stack bandwidth 80G, Forwarding Bandwidth 108Gbps , switching bandwidth 216 Gbps RAM 512 MB, Flash Memory 128MB.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
76	B.2, Supply,installation & commissioning of one CISCO 1941 W/2 EHWIC slots 256 MB DRAM IP based Router ins erver rack, SNTC-8X5XNBD Cisco 1941 w/2 GE 2 with	Bill No.: 11 Group C	Request you to kindly make specifications generic for more OEM participation.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
77	The parameters for eligibility under JV are marked as NA	Eligibility	As per our understanding, JV/consortium are not allowed in any of the packages. Kindly confirm.	Please follow the Eligibility criteria as prescribed in Section-3 of Volume-I.
78	Construction Experience in Key Activities (Executed during the <b>last Three years</b> prior to the applications submission deadline). For the contracts as per 2.3.1 (a) above and/or other contracts a minimum construction experience in the following key activities: <b>I. Commissioning (after Installation and testing)</b> of Integrated tunnel communication systems works including CCTV System, PA system & emergency call points and VHF Simplex Communication System with provision of OFC/leaky cable in tunnels of at least 24.56 KM in railway in last three years (as calculated as per note 6 below).	Eligibility, 2.3.1 (b), page 46	As per our understanding, any project/experience which meets 2.3.1(b) mentioned here will automatically meet 2.3.1 (a). In such a scenario we are unable to understand the need of two separate criterion i.e. 2.3.1 (a) and 2.3.1 (b).  Kindly clarify.	Requirement prescribed in clause 2.3.1 (a) is different from the clause 2.3.1 (b)

SN	Description	Tender Reference	Query	Reply
79	<p>Contracts of Similar Size and Nature. (I) Execution as contractor, or subcontractor, at least One contract that has been successfully or is substantially completed within the <b>last Seven years</b> before the deadline for submission of the bids, and that is similar to the proposed work. The similar work here shall be that which includes the key activities mentioned below: (I) Design, Supply, Installation, testing and commissioning of Integrated tunnel communication systems works including CCTV System, PA system &amp; emergency call points and VHF Simplex Communication System with provision of OFC/leaky cable in tunnels of at least <b>24.56 KM length in railway through single contract.</b></p> <p><b>OR</b></p> <p>(II) Execution as contractor, or subcontractor, at least Two contracts, each that have been successfully or are substantially completed within the last Seven years before the deadline for the submission of the bids, and that are similar to the proposed work. Each similar work here shall be that which includes the key activities mentioned below: Design, Supply, Installation, testing and commissioning of Integrated tunnel communication systems works including CCTV System, PA system &amp; emergency call points and VHF Simplex Communication System with provision of OFC/leaky cable in tunnels of at least <b>14.04 KM length in railway through each contract.</b></p>	Eligibility, 2.3.1 (a), page 45	<p>Considering that Railway Tunnel systems are expanding in India in the last 2-3 years and that contracts of lengths such as 24.56 km or 14.04 km are very few, such a criteria will limit participation to a select few.</p> <p>In the interest of wider participation and to bring in expertise of players in various kinds of tunnels, we suggest that the criteria be changed as follows:</p> <p>Execution as contractor, or subcontractor, at least One contract that has been successfully or is substantially completed within the last Ten (10) years before the deadline for submission of the bids, and that is similar to the proposed work. The similar work here shall be that which includes the key activities mentioned below: Design, Supply, Installation, testing and commissioning of Integrated tunnel communication systems works including CCTV System, PA system &amp; emergency call points and VHF Simplex Communication System with provision of OFC/leaky cable in tunnels of</p> <p>(I) at least 24.56 KM length in railway or roads/highways through single contract OR (I) at least 24.56 KM length in railway or roads/highways through two contracts OR (I) at least 24.56 KM length in railway or roads/highways through three contracts.</p> <p>This will enable wider participation and bring expertise to RVNL.</p>	<p>Please follow the EQC, section- 3 under volume-I of bid documet.</p> <p>Note: As per clause 2.3.1 (a), the required Similar Size and Nature should be executed &amp; commissioned in last 7 years. And as per clause 2.3.1 (b), the required key activity should be commissioned in last 3 years.</p>
80	as above	Eligibility, 2.3.1 (a), page 45	We have suggested changes in package 1 in the query above, we suggest that similar changes be introduced in all packages and their combinations to streamline the RFP and help in wider participation.	Please follow the EQC, section- 3 under volume-I of bid document.
81	<p>Construction Experience in Key Activities (Executed during the <b>last Three years</b> prior to the applications submission deadline).</p> <p>For the contracts as per 2.3.1 (a) above and/or other contracts a minimum construction experience in the following key activities: <b>I. Commissioning (after Installation and testing)</b> of Integrated tunnel communication systems works including CCTV System, PA system &amp; emergency call points and VHF Simplex Communication System with provision of OFC/leaky cable in tunnels of at least 24.56 KM in railway in last three years (as calculated as per note 6 below).</p>	Eligibility, 2.3.1 (b), page 46	As mentioned above, the clause 2.3.1(a) itself includes commissioning of the project. As such we suggest that the clause 2.3.1 (b) be removed and only 2.3.1 (a) be considered. The modifications in 2.3.1(a) are provided above.	Please follow the Section-3 under Volume-1 of bid document.
82	The experience of Integrated tunnel communication systems works that shall be considered under this qualifying criteria must be a work of Indian Railway Network but excluding LRT, Tramway & Mono Rail.	Eligibility, Notes (8), page 49	<p>Considering that the RFP allows participation by foreign entities, seeking experience in the Indian Rail network will be restrictive to participation. We suggest that this restriction be relaxed</p> <p>a) experience in foreign countries be acceptable b) experience in Rail and Road networks be acceptable.</p> <p>This will enable participation by expert organizations world wide.</p>	Please follow the Section-3 under Volume-1 of bid document.



SN	Description	Tender Reference	Query	Reply
83	<u>Key Activity 1</u> VHF Simplex system with Leaky/OFC cables: Design, Supply, Installation, testing and commissioning of VHF Simplex Communication System with provision of OFC/leaky cable in tunnels in railway.	2.6 Specialist sub-contractor, page 49	Technology today is rapidly expanding. Limiting the experience to on tunnels in railway for the VHF systems may rule out expert sub-contractors who can carry out the job with quality and precision. As such we suggest that the criteria be changed to:  Design, Supply, Installation, testing and commissioning of VHF Simplex Communication System with provision of OFC/leaky cable in tunnels in railway or roads or highways.	Please follow the Section-3 under Volume-1 of bid document.
84	<u>Key Activity 2</u> Integration of communication system (such as CCTV, PA system, SOS and maintenance phone) at Control Centres. Design, Installation, Integration and commissioning of communication equipment for monitoring and operation at Centralized/Command Control centres.	2.6 Specialist sub-contractor, page 49	As per our understanding sub-contractor's experience of 'Design, Installation, Integration and commissioning of communication equipment for monitoring and operation at Centralized/Command Control centres' for all kinds of infra projects such as rail, highways, smart cities, large infra projects will be acceptable. Kindly confirm.	Please refer to the clause 2.3.1 (a) & 2.3.1 (b) of Section-3 under Volume-1 of bid document.
85	<u>Key Activity 3</u> Integrated Passenger Information system / IP-MPLS at Stations: Supply, Installation, Integration, Testing and commissioning of Integrated Passenger Information system/ IP-MPLS at stations.	2.6 Specialist sub-contractor, page 49	The IP-MPLS technology is domain and infra neutral. Organizations deploying the IP-MPLS tech are doing this for all industrial sectors. As such, we suggest that the criteria be changed to:  Supply, Installation, Integration, Testing and commissioning of Integrated Passenger Information system/ IP-MPLS at stations, highways, smart cities, large highway projects.	Please follow the Section-3 under Volume-1 of bid document.
86	2) There are Seven Nos. of TCC in the overall project, a Project Tunnel control centers (PTCC) and Main Tunnel control center (MTCC) for tunnel communication supervision system. <b>The seven nos. of TCCs are to be provided at Shivpuri, Byasi, Devprayag, Maletha, Srinagar, Tilani &amp; Gauchar stations.</b> and 3) <b>There are three local tunnel Control centres located at station buildings of Shivpuri, Byasi &amp; Devprayag</b> and Centralized Control Centres at <del>Moradabad and Rishikesh</del>	2.1.5 Overview of Tunnels & local TCCs and Centralized Control Centre.	There is ambiguity in total no's of TCC. We understand that there are total 7 TCCs Butas per point 3 it mentions 3 TCCs only. Please confirm.	There are 07 nos. of local TCCs along the alignment which shall be situated at stations and two centralized control centres are there at Division (Moradabad) and at Rishikesh.
87	Earthing arrangement shall be erected for telecom equipment's ( $\leq 1\Omega$ ) in tunnels by providing an earth grid at both ends of the tunnel and running copper (metallic) earth bus bar across the tunnel walls. Erection of earthing Grid is a scope of separate works contract. Grounding for all equipment shall be tapped through the 50 x 6 sq. mm CCS strip running on the walls of tunnel.	Interface to Earthing Works	We understand that the responsibility of running the copper earth bus bar is not of the successful bidder of this project and bidder shall only be responsible for connection/tapping of earths from the end equipment only. Please confirm, if understanding is correct.	Please follow the Section 5, WRQ in Volume-I.
88	e) Cable trays for both E&M and Telecommunication fixtures shall be provided on the tunnel wall. It is to be ensured that they are not electrically shorted anywhere by maintaining physical separation.	NA	We understand that cable trays shall be supplied and installed by E&M contractor and successful bidder of this project shall utilize the same trays only. Please confirm, if understanding is correct.	Telecom Cable tray is the Part of telecom tender. Please refer Schedule A (Gr C) of respective packages in BoQ under Volume-2.
89	f) Air Conditioning requirement for above system shall be made available by the E&M.	NA	We understand that Air conditioning, Fire, access etc. at all TCC, PTCC and MTCC, including viewing and monitoring centres shall be provided by E&M contractor only. Please confirm, if understanding is correct.	Yes, your understanding is correct.

SN	Description	Tender Reference	Query	Reply
90	Firms having Design/Proof check experience of installation and commissioning of tunnel integrated communication system works inclusive of tunnel radio system, VHF Simplex System, CCTV Surveillance System, PA System, Telephone Communication System (Maintenance and Emergency) driven over ring fibre network for at least one single operational Rail/Road/Metro tunnel of minimum length 5km.	Eligibility criteria for independent third party firm:	We understand that Independent design checker firm shall be appointed directly by RVNL to avoid conflict of interests. Please confirm, if understanding is correct.	Please refer to Section 5, WRQ of Volume I.
91	a) 33kV connections for tunnel operations have been taken by RVNL. However, they are not for the use of contractor until and unless the approval of competent authority of RVNL. However, if RVNL approves to let contractor use the electrical connections then all the expenses of any nature like consumption charges, equipment cost, interest payable, any other charges as per relevant policies, etc. will be borne by contractor only. Also, no claim of interruptions, low voltage etc. would be admissible.	Eligibility criteria for independent third party firm:	Considering the area of work on a railway line it shall not be feasible for the successful bidder to arrange it's own power source for the Telecommunication, CCTV, PAS, SOS and other relevant system which are part of this project. Hence we request RVNL to provide raw power source and recurring power charges during DLP period to successful bidders during project tenure.	Please refer to Section 5, SCOPE of Work, WRQ under volume I of bid document.
92	d. Approach to project length is available through access roads of main and escape tunnels, adit tunnels and through revenue land from existing road, at reasonable number of locations. In case, any existing road needs to be widened or bridge needs to be strengthened & there is no alternative road available to the site of work and the authority owning the said road submits demand to RVNL to carry out some specific works, RVNL shall get such works executed through the existing contractor or any other agency. RVNL shall make payment for such work.	vi) Approaches to the project site:	We understand that the Right of Way (ROW) and Reinstatement (RI) shall be under the scope of RVNL, and access to the site, including approach roads for installation, material movement, etc., shall be facilitated by RVNL.  In case access to the site is not available due to any reason, the necessary provisions to enable site access for execution of works shall be arranged by RVNL without any additional cost to the successful bidder as civil construction is not in the current scope of the successful bidder.  Kindly confirm if our understanding is correct.	Access roads for approach to site are already available.
93	Optical Fiber equipment like Splicer, OTDR, Power meter, etc. - 12 Sets	Equipment type and characteristics for S & T	Qty, 12 Nos is too high, considering the stretch length. Hence we request to reduce the quantity to 6 Sets across all packages.	Please refer to Section-5 under volume-I of tender document.
94	Hand Phones – Cell Phones - 15 Sets	Equipment type and characteristics for S & T	We understand that these shall phones and all the tools mentioned here are for use of Successful bidder during implementation period (24 months) and shall not be handed over to RVNL, please confirm.	Please refer to Section-5 under volume-I of tender document.
95	4. In the Bill of Quantities, quantity and unit rates and thereby the amount against each item have been indicated. From this, the estimated price of bill has been worked out and indicated in the summary sheet of BOQ. The Bidder shall quote rates as percentage above/below/at par for the schedule in the summary sheet. If no percentage as above, below or at par is indicated for any particular bill, the same will be indicated as at par.	Volume-II (Price Proposal)	Is there any excel sheet (price Bid) available in which bidder has to mention the prices. Please provide the same, if available.	Attached with the Tender.
96	5. The rates for each bill shall be written in indelible ink or type written in the summary sheet against the bill in words and figures along with mention of whether the percentage quoted is above/below/at par over the estimated rate in three separate columns. Thereby, total price for the bill shall be calculated and written against bill in words and figures. The total contract price, as sum of total price for the bill shall be shown at the bottom of the summary sheet. The total contract price shall also be written in words and figures.	Volume-II (Price Proposal)	We understand that the bidders shall be required to upload the price bid in online mode only. Please confirm if, understanding is correct.	Price bid in online portal is mandatory for financial evaluation. Summary sheet of BoQ is also attached with the tender.

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97	7. Storage of Material: All the material at site will have to be properly stacked & stored so as to facilitate inspection. The material should be properly protected from the detrimental effects of nature, fire, theft etc. The contractor shall be responsible for watch & ward and any loss or deterioration on account of above shall lead to rejection of material and contractor has to replace the same at his own cost.	Volume-II (Price Proposal)	We understand that storage space shall be provided by RVNL to the successful bidder, free of cost. Please confirm, if understanding is correct.	RVNL will not provide storage facility. Only space for storage will be provided.
98	Supply of Single Mode Optical Fibre Patch cords of approved make.	Volume-II (Price Proposal)	Please provide the details of the approved makes, if any for the BOQ items in each package or else we understand that bidder can propose any compliant make as per RFP requirements.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
99	Bidder can supply less range IR (say 250m) & Focal lens camera as per RDSO spec RDSO/SPN/TC/109/2023 dated 29.3.23 however, they have to supply additional no. of cameras, license, cables, switches, storage capacity, servers required for additional no. of cameras free of cost. e.g. for 250 m IR camera, bidder has to supply 2 No. of cameras in lieu of one camera of 500M range along	Volume-II (Price Proposal)	Considering the site geography, PTZ cameras with a 500-meter range will not be suitable, as achieving a clear and unobstructed straight-line view up to 500 meters is practically challenging. Therefore, we request you to kindly revise the PTZ camera specifications and quantities in line with a 250-meter range to align with actual site conditions.  Additionally, 500-meter range PTZ cameras are not commonly available from most reputed manufacturers, and due to STQC restrictions, such models are currently not available in the market. This may lead to procurement challenges and potential project delays.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
100	Supply of camera license in redundant configuration for viewing & recording at station or as per requirement with all required accessories for complete the system etc all complete. The item must conform to specification RDSO/SPN/TC/65/2021, rev.6 or latest.	Volume-II (Price Proposal)	We understand that the quantity mentioned against this item is inclusive redundancy licenses (2 per camera), please confirm.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
101	Supply of Analytics Software cum license at tunnel Portals in redundant configuration for all fixed cameras complete with all required accessories for the system. The item should conform to specification RDSO/SPN/TC/65/2021, rev.6 or latest.	Volume-II (Price Proposal)	We understand that the quantity mentioned against this item is inclusive redundancy licenses (2 per camera), please confirm.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
102	Supply of Analytics Software cum license at tunnel Portals in redundant configuration for all fixed cameras complete with all required accessories for the system. The item should conform to specification RDSO/SPN/TC/65/2021, rev.6 or latest.	Volume-II (Price Proposal)	Sizing (Compute, storage etc.) and budget of analytics license sis based on the type of the analytics licenses desired. In RFP analytics types are not defined. We request RVNL to provide type of analytics to run on fixed cameras (3 per camera max).	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
103	Supply of face recognition Software cum license at stations in redundant configuration for all fixed cameras complete with all required accessories for the system. The item should conform to specification RDSO/SPN/TC/65/2021, rev.6 or latest.	Volume-II (Price Proposal)	FRS licenses quantity shall be equal to the no of FRS cameras. We request to amend the quantity of the FRS licenses as per the no. of FRS cameras envisaged for each package to avoid ambiguity later on.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
104	Supply of Storage Serve 30 Days or more, approx. 240TB raw capacity, RAID 5/6 @ 3TB For 4K UHD cameras & 750 GB for FHD cameras with all required accessories for commissioning of the system. The item should conform to specification RDSO/SPN/TC/65/2021, rev.6 or latest.	Volume-II (Price Proposal)	We understand that the maximum capacity bidder has to propose shall be 240 TB raw only, please confirm if understanding is correct. Or else if bidders are expected to calculate the storage capacity for 30 days' period then we understand that the recording parameters shall be calculated at H.265, 2MP, 25 FPS. Please confirm, if understanding is correct.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
105	[the same to be interfaced with existing audio and video system installed at the station. The software should support all types of display/	Volume-II (Price Proposal)	Is there any existing system which shall be integrated with the proposed system. Please provide details of existing system.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.

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106	Supply of VMware, vSphere and Vcentre perpetual license -VMWare ESXI v Cloud Advance License (CPU Based License) qty16 , vCenter License (CPU Based License) qty 01 with Support License for 3 Years.	Volume-II (Price Proposal)	We understand that the bidder may propose any other virtualization solution (e.g., Microsoft Hyper-V, etc.) as part of the bidder’s proposed solution. Kindly confirm if this understanding is correct, as restricting the solution to a single product would be monopolistic.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
107	<div><div>Supply and installation of Managed Router with ethernet 10/100/1000BASE T LAN ports and WAN port working on 48V DC. 1 Console port, 1USB 2.0 port, 2GE-Comboport, 2GE-TX port, 1 built-in encryption engine, 4 HIC slots, 2HIM slots, Eight 10/100/1000Base-T electrical interface card(RJ45). Supply of 2 Mbps SerialInterface modules for WAN ports of type G.703</div><div>Number5.00</div></div> <div><div>8</div><div>9004</div><div>Providing Computers with software, Printers and other office equipment as given under clause 3.6 of Chapter 3 (Site Facilities for the Employer) of Section 5 (work's Requirement) of Bidding Documents excluding (d) Large Format Plotter.</div><div>L.S Per Site Office</div></div>	Volume-II (Price Proposal)	The content of the item is not fully visible. Please provide the complete description of the item.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
108	Supply of RTU along with sensor for monitoring parameters of Telecom Equipment room Specification as per Annexure F.(Inspection by RITES).	Volume-II (Price Proposal)	We understand that only those items shall be inspected by RITES where below comment is written: <b>(Inspection by RITES)</b> Please confirm, if understanding is correct.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
109	Supply and installation of 19 inch 42U (800x1200mm) telecom rack with standard accessories (Closed type telecom rack) with front door glass type, all doors should be removable type, four exhaust fans, two horizontal tray, one AC multiple ( 8 Nos of 5A sockets) earthing strip (copper)-1no. with fasteners-2 Pac, rack mountable DCDB panel with one common copper strip and 4 MCB 6A+2MCB16A. All fittings for housing Router and other equipment including wiring, MDF using Krone module with integrated protection module of 100 pairs and supply of other accessories The rack should be reputed make.	Volume-II (Price Proposal)	Front glass door is not recommended for data centres as this creates heating issues in racks. Hence we request to allow perforated doors to ensure proper ventilation.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
110	GENERAL INSTRUCTIONS: 1) Current RDSO specifications are mentioned here. However, while procuring only the LATEST RDSO SPECIFICATION will prevail and material to be inspected as per latest RDSO specifications.	Volume-II (Price Proposal)	During budgeting, bidders prepare their quotes based on the specifications available at the bidding stage. Considering the project tenure of 24 months, there is a possibility that specifications may change over time, which could result in significant price variations.  Therefore, we request confirmation that if the specifications are revised during the procurement stage and such changes lead to substantial price variation, RVNL will compensate the successful bidder for the corresponding cost variation. Kindly confirm.	Please refer Clause of Price Variation in Section-7 Special Condition of Contract (Part-B) under Volume-I of bid document.
111	Specification for VHF Simplex System coverage inside tunnels.	Section V of clause 2.2	Requesting clarification on required minimum signal strength and redundancy design inside curved tunnel sections.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
112	CCTV system requirements for tunnel and station areas.	Section V of clause 2.7	1. Confirm if IR-illuminated PTZ cameras are acceptable in long tunnel sections. 2. Request clarification on detailed specification, performance requirement, redundancy, integration, and acceptance criteria for CCTV in context of tunnel and station deployment	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
113	Primary Digital Drop Insert MUX (SDH/PDH Technology	4.1.11	Requesting clarification about SDH/PDH MUX because RFP BOQ is design with fibre optic transmission system / IP MPLS network.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
114	RDSO specification No. RDSO/SPN/TC/109/2023 dated 29.3.23.	SCHEDULE-B: CCTV System	Requesting clarification on STQC certification	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
115	Power backup requirements	Clause 2.4.4	Clarify minimum battery backup duration and UPS type for tunnel telecom equipment.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
116	Environmental specs for enclosures	Clause 1.4	Confirm operating temperature range and IP rating for outdoor telecom cabinets.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.

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117	Fiber cable specifications	Clause 6.4	Clarify fibre type (SM/MM), core count, and sheath material requirements.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
118	Remote monitoring (NMS system)	Clause 7.5	Confirm if centralized NMS is required for all the sub-system and Central NMS system whether SNMP traps or REST APIs are preferred.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
119	IPv6 readiness	Clause 8 ANNEXURE-1	Confirm if IPv6 addressing is mandatory for all telecom nodes and field devices.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
120	Cybersecurity compliance is missing	Clause 2.1, 2.2, 3.1, 3.2, 3.4	Specify required encryption standards and firewall protocols for inter-system communication. Clarify if NGFW (Next-Gen Firewall) and IDS/IPS systems are mandatory.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
121	Supply and installation of Intelligent Unified Platform Software for Integration of CCTV, PA, Emergency Call System and Service Telephone system, Integration with SCADA Solution of above systems, with full	Clause 1	Confirm the redundancy level of all the system are required between telecom and control systems.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
122	Network Redundancy	Clause 2.1.8	Confirm if ring topology or mesh architecture is preferred for redundancy.	
123	All the system clock Synchronization	Clause NS.2	Clarify if GPS-based NTP or IEEE 1588 PTP is mandated for synchronization. Master Clock and Sub-Master clock is missing	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
124	GPS Synchronization	Clause NS.2	Confirm GPS antenna placement and fallback sync method.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
125	Interfacing with Signalling	General	Confirm if Modbus RTU/TCP or IEC 61850 is required for signalling integration.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
126	Factory Acceptance Test (FAT)	General	Confirm FAT scope, location, and witness protocol for OEM equipment.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
127	Interfacing with Tunnel Systems with other PKG	General	Confirm interface protocols and response time requirements.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.
128	Interfacing with VHF Emergency Communication with other Local Bodies like (Police and Fire)	SCHEDULE D: VHF SIMPLEX SYSTEM	Confirm protocol (e.g., SIP, analogy) and priority routing mechanism.	Noted. Please refer to revised volume II (Rev 1.0) of concerned packages as per A&C 3.