



रेलटेल कॉर्पोरेशन ऑफ इंडिया लिमिटेड  
(भारत सरकार का एक उपक्रम)

RAILTEL CORPORATION OF INDIA LIMITED  
(A Govt. of India Undertaking)

**ELECTRONIC TENDER DOCUMENT**

**FOR**

**“रेलटेल के डीसी और डीआर में टेलीप्रेजेंस सेवाओं के लिए केंद्रीय इन्फ्रास्ट्रक्चर की आपूर्ति,  
परीक्षण, परीक्षण और कमीशनिंग हेतु”**

**Supply, Installation, Testing & Commissioning of Central Infrastructure for  
Telepresence Services at DC & DR of RailTel.**

**(Through e-Reverse Auction)**

**E-निविदासंख्या: RAILTEL/TENDER/OT/CO/ITP/2019-20/Central Infra for TPaaS/500**

**OPEN E-TENDER NO. RAILTEL/TENDER/OT/CO/ITP/2019-20/Central Infra for  
TPaaS/500**

**निविदा दस्तावेज की कीमत: रु.5,900/- (टैक्स सहित)  
Cost of Tender Document: Rs. 5,900/- (Including Taxes)**

**Sold to \_\_\_\_\_**



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

**E-Tender Notice No.: RAILTEL/TENDER/OT/CO/ITP/2019-20/Central Infra for TPaaS/500 Dtd. 07.11.2019**

RailTel Corporation of India Ltd. (RailTel) invites E-Tenders through reverse auction in Two Packet (Part I –Credential/ Techno commercial Bid and Part II - Price Bid) System for **“Supply, Installation, Testing & Commissioning of Security Solution and Expansion of Central Infrastructure for Telepresence Services at DC & DR of RailTel”**.

a)	Opening date of Tender downloading	07.11.2019
b)	Submission date of bids	28.11.2019 up-to 15:00 hrs. (Online)
c)	Opening of bids	28.11.2019 at 15:30 hrs (Online)
d)	Approximate cost of Tender	Rs 10.33 Crore approx. (Inclusive All.)
e)	Earnest Money (EMD) #	Rs 6,66,500/- to be made in favor of RailTel Corporation of India Ltd. online through IREPS e-tendering portal
f)	Cost of Tender Document is Rs.5,900/- (Including Tax) online through IREPS portal	

# Small scale Units registered with NSIC and MSME under single point registration scheme are exempted from cost of Tender Documents and EMD.

**Note:** Tender Notice and Tender Document are available on RailTel’s website and can be downloaded from [www.railtelindia.com](http://www.railtelindia.com) or from the e-Tendering portal <https://ireps.gov.in/>. For online bid submission the bidder will have to necessarily download an official online copy of the tender documents from IREPS e-portal. All future Information viz. corrigendum /addendum/ amendments etc. for this Tender shall be posted on the e-Tendering Portal only. Printed copy of Tender document will not be sold from RailTel office.

The bidder shall bear all costs associated with the preparation, submission/participation in the bid. Purchaser in no way will be responsible or liable for these costs regardless of the conduct or outcome of the bidding process.

**Haritama Jaipuriyar)**  
**General Manager/ITP**  
**For & on behalf of**  
**RailTel Corporation of India Ltd.**

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CHAPTER-1

OFFER LETTER

RailTel Corporation of India Ltd.  
Plot No. 143, Institutional Area,  
Opposite-Gold Souk,  
Sector-44, Gurgaon-122003

1. I/We \_\_\_\_\_ have read the various conditions detailed in tender documents attached here to and hereby agree to ABIDE BY THE SAID CONDITIONS. I/We also agree to keep this offer open for acceptance for a period of 60 days from the date of submission and in default thereof. I/We will be liable for forfeiture of my/our Earnest Money. I/We offer to supply various equipment at the rates quoted in the attached schedules and hereby bind myself/ourselves to complete the work of **“Tender document for Supply, Installation, Testing & Commissioning of Central Infrastructure for Telepresence Services at DC & DR of RailTel”** within 90 days from the date of issue of Purchase Order. I/We also hereby agree to abide by the Various Conditions of Contract and to carry out the supplies according to the Specifications for materials and works laid down by the RailTel.

2. Earnest Money of Rs..... has been submitted through IREPS portal with the following transaction details:

The full value of Earnest Money shall stand forfeited without prejudice to any other rights or remedies if, I/We withdraw or modify the offer within validity period or do not deposit the security deposit (Performance Bank Guarantee) within specified days as per tender after issue of Purchase Order/LOA.

SIGNATURE OF SUPPLIER (S)

Date:

CONTRACTOR (S) ADDRESS

SIGNATURE OF WITNESS:

1.

2.

## CHAPTER- 2

## SCHEDULE OF REQUIREMENT

SOR	ITEM DESCRIPTION	UOM	QT Y	Unit Rate (All inclusive) (in Rs.)		Total Cost (in Rs.)	
				In Fig	In word	In Fig	In word
SOR-A	Supply of Multipoint Control Unit Hardware & Software platform as per Technical Specification given in Chapter-3A	Nos	02				
SOR-B	Supply of Gatekeeper for Video end point registration as per Technical Specification given in Chapter-3A	Nos	01				
SOR-C	Supply of Redundant Gatekeeper as per Technical Specification given in Chapter-3A	Nos	01				
SOR-D	Supply of Firewall Traversal for secure calls over the internet as per Technical Specification given in Chapter-3A	Nos	01				
SOR-E	Supply of Redundant Firewall Traversal as per Technical Specification given in Chapter-3A	Nos	01				
SOR-F	Supply of Management System as per Technical Specification given in Chapter-3A	Nos	04				
SOR-G	Supply of Recording System as per Technical Specification given in Chapter-3A.	Nos	02				
SOR-H	Supply of Desktop clients as per Technical Specification given in Chapter-3A.	Nos	01				
SOR-I	Supply of Servers for various software applications as per Technical Specification given in Chapter-3A.	Nos	04				
SOR-J	Supply of Layer-3 Switch as per Technical Specification given in Chapter-3A.	Nos	04				
SOR-K	Supply of Streaming solution (Software) as per Technical Specification given in Chapter-3A.	Nos	05				
SOR-L	Supply of Hardware Required to run Streaming Solutions as per Technical Specification given in Chapter-3A.	Nos	05				
<b>Sub Total</b>							
SOR-M	Incremental% AMC cost in addition to 3.5 % mentioned in clause 3 of Chapter-4	Years	04				
<b>Grand Total</b>							
Grand Total (In Words)							

**RAILTEL/TENDER/OT/CO/ITP/2019-20/Central Infra for TPaaS/500**

Note:	
I.	<p>a) Unit rate quoted against SOR above should be CIP destination inclusive of all duties, taxes, insurance and freight etc (with tax break-up as per Performa attached as Annexure-A). The materials as per SOR are required to be delivered within the delivery period as indicated in Bid Data Sheet (BDS, Chapter 5) to the site /transported to different locations which will be provided by RailTel to the successful bidder.</p> <p>b) It shall be the responsibility of Tenderer to transport the equipment to site for Installation &amp; Commissioning.</p>
II.	Tenderers should submit the detailed configuration of each type of equipment indicating quantities of various modules/sub modules/cards/Licenses/sub racks including the vacant slots in the sub racks/chassis for further expansion. Detail BOM of each equipment supplied under the contract shall be submitted along with the bid and the same shall be duly vetted by the OEM.
III.	The Tenderer shall attach Unit Rate Analysis of Schedule of Requirements (cost of each sub-assembly, card, module, Licenses etc.) in their Price Bid. The quoted Unit Rates should correspond to the referred unit Rate.
IV.	Tenderer must also furnish unit rate of all the supply of items mentioned in the SOR, which will be required for the Solution. These will also form part of the Rate Contract for procurement of items as when required.
V.	<p>The tenderer will be fully responsible Supply of Equipment/cards/interfaces and all related items for installation and commissioning of the network including the following:</p> <p>a) Integration with existing Network as required.</p> <p>b) Spares required for Commissioning, maintenance supervision &amp; warranty period shall be maintained by the Contractor at his own cost.</p> <p>c) All necessary cables and connectors and other accessories required for installation.</p>
VI.	Tenderer should be an Original Equipment Manufacturer (OEM) or Authorized representative of OEM
VII.	The Bidder should have authorization specific to this tender from respective OEM. Bidder has to quote only one OEM against one SOR
VIII.	Bidder has to quote for all SOR and evaluation will be done on totality.
IX.	Bidder will upgrade software/firmware of offered solution free of cost during the contract period (i.e. during warranty and AMC period).

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**Annexure-A**  
**Tax Breakup for SOR**

SOR	Description	Total Qty	Basic Unit Price (exclusive of all levies and charges) (In Rs)	Pkg & Forwarding Charges (In Rs)		Freight & Insurance Charges (In Rs)		CGST/SGST/IGST/UTGST etc. (In Rs)		Price Per Unit (all inclusive) for delivery at destination (In Rs.) (4+6+8+10)	
				%	Amt	%	Amt	%	Amt	In Fig	In Word
1	2	3	4	5	6	7	8	9	10	11	12
SOR-A											
SOR-B											
SOR-C											
SOR-D											
SOR-E											
SOR-F											
SOR-G											
SOR-H											
SOR-I											
SOR-J											
SOR-K											
SOR-L											

**Note:** The rate quoted at IREPS Portal will be final. Bidder may submit the price breakup as per format given above.

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RAILTEL

## Chapter - 2-A

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

**Submission of Bids only through online process is mandatory for this Tender**

E-Tendering is a new methodology for conducting Public Procurement in a transparent and secured manner. Now, the Government of India has made e-tendering mandatory. Suppliers/ Vendors will be the biggest beneficiaries of this new system of procurement. For conducting electronic tendering, RailTel has decided to use the portal <https://www.ireps.gov.in>, Indian Railways E-Procurement system (IREPS).

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

### 1. Tender Bidding Methodology:

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

#### IREPS Helpdesk

Please visit Helpdesk section on IREPS Portal.

#### RailTel Contact-I (for general Information)

RailTel's Contact Person /Designation

Rajeev Kumar, Asst. GM/NTP

Telephone/ Mobile: 9717644419

E-mail ID: [rajeevkumar@railtelindia.com](mailto:rajeevkumar@railtelindia.com)

Shri Chandra, DGM/ITP

Mob. 9717644145

[shrichandra@railtelindia.com](mailto:shrichandra@railtelindia.com)

#### RailTel Contact-II (for general Information)

RailTel's Contact Officer

Haritama Jaipuriyar, GM/ITP

Telephone/ Mobile: 9717644420

E-mail ID: [hjp@railtelindia.com](mailto:hjp@railtelindia.com)

### 2. Bid related Information for this Tender (Sealed Bid)

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

Broad outline of submissions are as follows:

- Submission of Bid Security/ Earnest Money Deposit (EMD)
- Submission of digitally signed copy of Tender Documents/Addenda
- Two Packet (Part I –Credential/ Techno commercial Bid and Part II - Price Bid)
- Online response to Terms & Conditions of Tender.
- (Optional) Online Submission of modification, substitution bids for technical or financial parts, or withdrawal bid.

**NOTE: Bidder must ensure that the bid must be successfully submitted online as per instructions of IREPS Portal.**



**3. Offline Submissions:**

No documents need to be submitted offline. The Bidder has to upload the Scanned copy of all following original documents as Bid-Annexures during Online Bid-Submission.

- a. Power of attorney to be submitted in accordance with Clause-34.5, Chapter-4 of Tender Document.
- b. Specific authorization addressed to RailTel from the OEM (Parent Company) for Indian Subsidiary (Chapter-4, Clause 12.2.9 of Tender Document).
- c. System Performance Guarantee (Form no. 2, Chapter-6) on stamp paper of Rs. 100/-.
- d. Affidavit for credential verification as (Form no. 4, Chapter-6) on stamp paper of Rs. 100/-.

**Format for Affidavit as per Form-4 failing which BID WILL BE SUMMARILY REJECTED.**

**NOTE:.** Nomenclature of uploaded file should be proper and as per submitted documents.

**4. Submission of Eligibility Criteria related documents:**

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

**NOTE: In case of internet related problem at a bidder's end, especially during 'critical events' such as - a short period before bid-submission deadline, during online public tender opening event, during e-auction, it is the bidder's responsibility to have backup internet connections.**

In case there is a problem at the e-procurement/ e-auction service provider's end (in the server, leased line, etc) due to which all the bidders face a problem during critical events, and this is brought to the notice of RailTel by the bidders in time, then RailTel will promptly re-schedule the affected event(s).

**5. Instructions for Tender Document TO THE BIDDERS**

The RailTel Tenders are published on [www.railtelindia.com](http://www.railtelindia.com) and on IREPS Portal <https://www.ireps.gov.in/>.

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

**6. Submission of Offers and Filling of Tender:**

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

**7. Fax Quotations & Late Tenders:**

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

**8. Attendance of Representatives for Tender Opening:**

Representatives of bidders desirous to attend the tender opening can do so on production of a proper letter of authority from the respective firm, failing which they may not be allowed to attend the tender opening. Authorized representatives of those firms who have submitted the tender documents alone shall be allowed to attend the tender opening.

**9. Addenda / Corrigenda:**

Addenda / Corrigenda to the tender documents may be issued by RailTel prior to the date of opening of the tenders, to clarify or reflect modifications in the contract terms and conditions or in the design. Such addendum/corrigendum shall be available on IREPS and RailTel Portal only. Bidders who are unable or unwilling to bring their tenders to conform to the requirements of the RailTel are liable to be rejected.

**10. Ambiguity/ Pre- Bid Clarification Requests:**

If there is any ambiguity or doubt as to the meaning of any of the tender clauses/ conditions or if any additional information required, the matter should immediately be referred to the RailTel in writing through emails to RailTel Contacts defined above.

**11. Bid submission and Opening date**

- a. The bid should be submitted online along with Credential/Techno commercial & Price bid document (all documents).
- b. The bidder's bids will be opened at the time & date of opening of the tender given in the Bid Data Sheet (BDS) online simultaneous in presence of such Bidders/ Representatives who choose to be present online. The Tenders/Representatives can also choose to be physically present in the office of RailTel for the Online Public Tender Opening Event.
- c. **Bidder need to be submitted offline document listed above before due date and time of tender opening.**

**12. e-Reverse Auction:** The procurement in this tender will be done on reverse auction.

- a. In addition to the instructions given in above, the bids shall be processed through Two Stage Reverse Auction method, to be implemented through IREPS portal. Two packets system shall be followed for the 1st stage of reverse auction, which means that Techno-commercial bid will be opened first; and after deciding the suitability or otherwise of the technical bids, the financial bids of only those firms which are found to be suitable shall be opened.  
(For details please refer also user manual for contractors-for Two Stage Reverse Auction (Goods & Services Module) of IREPS available on IREPS portal.)
- b. The financial bid of those firms whose technical bids have been found to be suitable shall be opened on or after scheduled date and time. The financial tabulation statement shall be generated immediately thereafter, and can be viewed by the participating bidders by logging into IREPS account.
- c. After opening the financial bids, the tendering department shall schedule the start of reverse auction. The tenderers who are eligible for the participation in the reverse auction process can view the reverse auction catalogue by logging into their IREPS account.

- d. The lowest Initial Price Offer (L1 offer price) as submitted by the technically qualified bidders during the financial evaluation stage shall constitute the base price for starting the reverse auction. The base price shall be notified to the bidder.
- e. Date and time of start of RA will be informed by IREPS website/RailTel Website.
- f. Selection of vendors for RA shall be as under:  
If the number of tenderers qualified for award of contract is less than 3, No RA shall be conducted and the tender shall be decided on the basis of initial price offer.

If the number of tenderers qualified are 3 to 6, only 3 tenderers shall be eligible for participating in RA.

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

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

Initial Cooling Off period shall be 2 hours.

Auto Extension Period shall be 10 minutes.

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

- g. Once the reverse auction process is closed the lowest rate received in the reverse auction/financial offer will be evaluated. RailTel reserved the right not to consider the lowest bid received in the reverse auction/financial bid process.
- h. In case of no participation in RA process by any bidder, the base value of RA process will be considered for commercial bid assessment.
- i. Technical e-RA training can be opted by the bidder to know the procedure of e-RA (Reverse Auction).
- j. RailTel may discharge the tender at any stage without assigning any reason.
- k. Bidders may please note that Bidding close Date/Time gets extended automatically every time an offer is received against the tender during a time interval equivalent to Cooling Off prior to the closing date and time. For example: If the Closing Time of RA is 13:00 Hrs and the Cooling Off period is 20 Minutes, if two offers are received between 12:30 Hrs and 13:00 Hrs, lets say at 12:40 Hrs and 12:55 Hrs, the Closing Time shall be extended by 30 Minutes from the time of submission of the last bid i.e. up to 13:25 Hrs.

**13. Award of Contracts, Financial Evaluation & Reverse Auction (e-RA):**

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



## CHAPTER-3-A

### Technical Requirement

All the features required in the solution should be available from day one without any extra cost to RailTel.

#### 1. Scope of the work:

- It shall include (but not be limited to) the supply of the required items, equipment at DC-DR location in such a way that the solution at DR should takeover in case the solution at DC fails. The solution should be catered for the following platforms:
  - 250 ports full HD @30fps using H.264 AVC appliance/single chassis based MCU. MCU should support minimum 30 concurrent meetings.
  - Gatekeeper solution with failover to handle 800 concurrent calls, 2500 device registrations,
  - Management, scheduling and monitoring solution for failover with ability to register 1000 Nos.
  - Recording Solution for handling ten concurrent recording sessions.
  - On- Premise Webcasting and Streaming Solution
  - Firewall traversal solution to handle 100 concurrent calls over Internet for soft clients/hardware based endpoints
  - Full HD 1080p soft clients which should be running on multiple devices such as Laptop/PC/Android/iOS/Windows/Mac such that each user can use these clients from minimum 2 devices with a single user credentials. The solution should be catered for 900 licenses.
  - All license of respective system should be perpetual.
- Software should be of genuine OEM license(s), as applicable, including both server and client/ User Access License(s), with all the requisites updates and patches for entire contract period.
- The equipment should have comprehensive onsite OEM warranty, and for a period, starting from go-live. The comprehensive OEM onsite warranty includes the following:
  - Repair of faulty equipment.
  - Replacement of irreparable equipment or parts with equivalent or higher compatible with the solution
  - Providing technical support
  - Software updates and Upgrades.
- The proposed solution to be placed in the Railtel Network needs to be deployed in High Availability 1:1
- The solution when deployed in High Availability should ensure automatic failover for Call Control and Management Capability
- The proposed solution proposed towards Central Infrastructure for Telepresence as a Service should ensure that the MCU's of similar capacities are proposed for both DC and DR and they should be able to work as a single MCU either through the cascading/clustering without any port loss.

- The proposed solution should have the ability for a tighter integration with existing voice and Video conferencing setup available at Railtel, explained in the Integration sections below:

**Integration with the existing SetUp of Railtel**

- Railtel has currently deployed around 350+ Nos. field units at various customer locations. All these Video conferencing endpoints are of Cisco Make. In order to ensure continuity of services to these customers and deliver seamless operations, the proposed Central Infrastructure platform (MCU, gatekeeper, recording, management & scheduling) should:
  - Should enable backup and configuration of the endpoints deployed in the field
  - should be possible to restore configuration to the deployed endpoints
  - should be possible to demonstrate graphical management of these endpoints
  - To apply provisioning templates on these VC devices
  - Should generate an alert when the deployed VC unit goes down
  - Scheduling application should be able to seamlessly schedule conferences with the deployed endpoints
  - The proposed solution should be able to provide seamless device registration to the Video conferencing endpoints already deployed in the field such that if one gatekeeper solution at DC-DR should work on active-active mode.
  - Phonebook should be pushed on the deployed VC Endpoints
  - The complete solution should be both IPV4 and IPV6 compliant day one.
  - The complete Solution should be compatible with any make and model of endpoints on standard protocol SIP, H.323.
  - The complete Solution shall interoperate with multiple vendor's i.e. Cisco, Polycom, Panasonic etc.
- RailTel has existing deployment of VoIP communication system using which VoIP services are being delivered to Division and Zone offices of Indian Railways. Railtel wants to ensure that these on-going services of voice should also get seamlessly integrated with the proposed video as a service network such that Railtel can offer an umbrella of services to their customers. Therefore, the bidder has to ensure that the Central Infrastructure proposed as part of this RFP for Telepresence as a Service should have the below capabilities day one:
  - Completely integrated with VoIP communication and should be fully interoperable
  - It should be possible to completely manage and monitor both Video and Voice services from a single dashboard
  - It should be possible to create user profiles for both voice and video services for a customer from a single dashboard
  - It should be possible to create multi-tenant clusters for RailTel's customers in case if required.
- Bidder has to provide all type of optics (SFP/ SFP+/XFP/QSFP28 etc.) of same OEM offered against SOR and Passive component (Patch Cords & other items) required for Installation and Commissioning of complete solution should be from reputed OEM.
- All required licenses in the solution such as VM, Operating System, DB, DNS, NTP and active directory are in the bidder scope.



## BACKEND INFRASTRUCTURE

**2. SOR-A: Multipoint Control Unit in high availability:**

SN	Minimum Technical Specification
1	The MCU shall be at least 1U or more provided with all the necessary accessories to integrate into 19 inches. The MCU should have redundant power supply from day 1
2	The MCU shall operate on a non-Windows based operating system.
3	The MCU shall have 2x10/100/1000 Mbps Ethernet interface and 1*10G with multimode optics for IP communication and dedicated serial/USB/Ethernet connection for maintenance/upgrade.
4	The MCU should support 250 ports at HD1080p 30fps (transmit and receive) or 500 Ports HD 720p up to 4Mbps on IP in continuous presence mode with 30fps and H.264 AVC resolution and AES encryption on single chassis/appliance. The MCU should be scalable to minimum 3000 ports full HD 1080p / 6000 Ports HD through clustering without any feature/functionality loss in future. There should not be any port and functionality loss on clustering.
5	The MCU if operated in HD720p mode should have 500 Ports
6	The MCU should support H.323, SIP standards for communications.
7	The MCU should support H.263, H.264 AVC
8	The MCU should support 1080p60fps, 1080p 30 fps, 720p 60 fps and 720p 30fps and 4CIF30
9	The MCU should support content sharing using standard based H.239 /BFCP over SIP with HD 1080p30p resolution
10	The MCU should support H.239 and encryption in SIP & H.323 modes
11	It should support G.711, G.722, G.722.1, AAC LC /AAC-LD or better
12	It should support 20kHz bandwidth with crystal clear audio and stereo sound.
13	It should support Automatic Gain Control and Automatic Noise Suppression
14	The MCU shall support aspect ratio of 16:9 and 4:3.
15	The MCU shall support a mix of resolutions in both Voice Activated mode and Continuous Presence.
16	Each endpoint shall receive at the maximum of its capacity without reducing the capacity of another.
17	Dynamic CP layout adjustment (MCU will choose the best video layout according to the number of participants in the conference). Must support embedded site naming, Active speaker with border highlight video participant. The MCU must also support the ability to view at least 20 sites minimum simultaneously on the screen.
18	The MCU should support distributed architecture with intelligent and automatic call routing. The MCU should be able to register and authenticate with H.323 gatekeeper / SIP registrar.
19	The MCU shall support conferences that permanently exist but use no resources if no participants are in the conference.
20	The MCU shall support an inbuilt/external reservation plug-in for scheduling calls.
21	The MCU should support User and managed mute control, DTMF support.
22	The MCU should support dial in, dial out, adhoc and scheduled conferences.
23	The MCU must support minimum 8 or more conference layouts.
24	The MCU must support scheduled, on demand calls and hybrid calls in any combination across Port capacity and it should be possible to schedule/support multiple multiparty conferences on the MCU from day one.

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25	The MCU shall support AES encryption using H.235 V3 for every participant without affecting any other feature, functionality or port count.
26	The MCU must support TLS / QoS. The MCU must provide standards based on method of compensating and correcting for packet loss of media streams.
27	The MCU shall interoperate with multiple vendors' endpoints. The supported mediums should be IP v4 and IP v6.
28	The solution should be supplied with 900 or more desktop clients which could work from laptops/computer, iphone, ios, and android with presence and chat capability.
29	The resolution offered for the desktop clients should be minimum high resolution
20	All software updates and upgrades should be pushed on the client from the central server
31	The user should be able to join the video meeting with an internet user by sending a guest link to the remote user
32	The guest user should be able to join the meeting from the IE / equivalent browser without having to install any plugin/software on the computer
33	Each personal VC endpoint user should be provided with a unique meeting room ID and a Unique PIN to ensure adhoc meetings without much dependency on the IT teams
34	Both room based VC users and internet mobile users should be able to seamlessly join into these adhoc meetings by dialing the unique meeting room ID from their devices.
35	MCU must be in High Availability (HA) so that these MCU's can work in hot standby mode as well as load balancing modes. The MCU's should be provision for 250 ports each at DC and DR.
36	The MCU should support load-balancing of MCU resources across chassis in such a way that incase one MCU does not have sufficient resources, then the conference should get scheduled on the other MCU.
37	The MCU should allow creation of dedicated meeting rooms for all Sr. officials so that they can initiate multiparty calls as and when required without the administrator.
38	The solution should be accompanied with an IP based recording solution which should be able to record 10 concurrent sessions simultaneously at HD1080p resolution.

**3. SOR-B to F (Gatekeeper, Firewall Traversal and Management system)**

SN	Minimum Technical Specification	
1	Call Control, Scheduling, Management and Firewall Traversal in 1:1 redundancy- The call control server, management and firewall traversal should be installed in HA to prevent single point of failure. Call control server must provide call control capabilities on H.323/SIP protocol.	
2	The Call control server must be able to provide Gatekeeper services using H323 protocol. It should be able to integrate with other Gatekeepers using H323 trunks or Neighboring Trunk. The Call control server must also provide SIP registrar and SIP proxy service. The unit should be supplied with high availability, redundancy and failover.	
3	H323 registration:	The video conferencing endpoints and MCU must be able to register with the H323 Gatekeeper.
4	SIP registration:	The video conferencing endpoints and MCU must be able to register with the SIP Server.
5	H.323-SIP interworking	The Call control device should be able to connect calls between "H323 only device" and "SIP only device".
6	IPV4-IPV6 Interworking	The Call control device should be able to interwork between IPV4-IPV6 networks.



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7	Capacity	Should allow at least 2500 device registrations and minimum 800 concurrent calls from day one.
		The H323 registration over TCP/UDP should support H323 ID.
		The SIP registration over TCP/UDP should support SIP URI.
8	Call Control	Should provide flexibility such as creation of dialing pattern, Setting Search policies, Transform dial patterns or modifying the dial plan.
9	Security	Security and authentication for registration of HD VC Endpoints. This should support at least authentication using login ID and password
10	Bandwidth management	Should allow restricting the bandwidth at the server level so that calls cannot exceed the defined bandwidth.
11	Authentication and Registration	Registration to the server should be restricted by creation of either an allow list or deny list.
		Ability to allow registration to the server only upon authentication of the device.
		Creation of local authentication database or pulling of authentication credentials from an LDAP or AD server.
12	Redundancy/ Clustering	The Call control platform should be provided in redundant configuration
		Firewall Traversal Solution to allow Video calls to be made from the intranet network to the Internet and vice versa. The calls should be H323 and SIP and must be able to support HD resolutions.
13	Standards	Should support firewall traversal solution using the H.460.18 and H.460.19 protocol.
14	Dial plan and call connectivity	The solution should support ability to call to public IP addresses.
		Should support the ability for devices on the internet to be reached using a H323 ID or E.164 alias.
15	Integration with DNS	The Firewall Traversal Solution must have integration with DNS using SRV records or AAA records so as to have domain name based calling.
16	Capacity	Should support at least 100 concurrent calls over the Internet with H.264 video compression from day one and must have the scalability to upgrade to 500 concurrent calls traffic with H.264 video compression in future on the same hardware. The solution should be IPV4 and IPV6 enabled day one.
17	Protocols	Should support all the H323 and SIP functionalities such as: H.239, BFCP, AES encryption, H.235
18	Authentication and Registration	The solution must support the ability to create authentication credentials for a VC device to be registered and make calls.
19	Management	Management of recommended Video Conferencing devices and Infrastructure shall be deployed centrally
		The Management application should provide system management capabilities of all the proposed full high definition solution comprising of video conferencing endpoints, MCU, Gate keepers, firewall traversal. It should be possible to get detailed configuration of these devices.
		It should allow monitoring of conferences and participant
		The system must be able to manage minimum 1000 devices including endpoints and call control from day one and should be scalable to 2000 devices in future.
20	Scheduling	The Application should Schedule multi-point conferences

		MCU meetings that will have Dial in and dial out participants from the MCU.
		Lock conference, preventing new participants from joining.
		Should be able to book recurring meetings and video resources
		Should show overview of scheduled meetings, resources and participants.
		Supports hierarchical phonebook structure.
21	Templates / Provisioning	The application should have provision for custom template creation for management and provisioning.
		It must be possible to monitor live ongoing conferences. Both Scheduled as well as ad-hoc conferences must be manageable.
		Functionalities such a mute/unmute of individual sites, connect/disconnect of individual sites, view bandwidth of each sites, audio and video protocol of each site, snapshot if needed must also be possible.

#### 4. SOR-G, Recording system

- The solution should be accompanied with an IP based recording solution which should be able to record 10 concurrent sessions simultaneously at HD1080p resolution.
- The solution should have H.264 compliant.
- The solution should be supplied with minimum 1 TB of storage
- The solution should be interoperable with the proposed Video conferencing infrastructure
- All the recordings should be stored in Central NFS/Windows Server.
- Hardware should have 2\*10/100/1000 Mbps BaseT Ethernet Interface.

#### 5. SOR-H, Desktop clients:

SN	Soft Client with Presence Services
1.	Solution should provide a "presence" application for users, so that they can see the availability status of their contacts in their contact list. The solution should be IPV4 and IPV6 complaint day one.
2.	The common supported status for this application should be available, busy, idle, away etc.
3.	The instant messaging application should support manual setting of user status to: Available, Away, Do Not Disturb (DND) etc.
4.	Shall provide support for open protocols like XMPP.
5.	Presence based IM client should be available for Desktops (Windows & Mac), as well as for Mobile phones (Android / iPhone)
6.	Should support management of contact list and personal settings from Presence based desktop application
7.	The solution should support one to one chat, desktop/screen sharing.
8.	The solution should have the ability to support video calling from the PC/Laptop and Mobile device with the same user name
9.	The solution should be HD720p resolution and should be enabled with 900 clients day one
10.	The solution should support ensure that all software updates and upgrades should be pushed centrally by the servers available in DC and DR

11.	The solution should be deployed in 1+1 redundancy in DC and DR
12.	The solution should be enabled for all 900 desktop clients to have the ability to join over both Internet and Intranet. The licenses should be such that the user should be able into the software client from minimum 2 devices using the same credentials (username and password) All hardware /software required for calling for Internet should be supplied as part of the solution.

#### 6. SOR-I : Server Specifications:

SN	Minimum Specification	
1	Processors	Each Server shall have a minimum of two (2) Intel 2.6GHz 12Cores each with 18MB cache supporting DDR4 2666 MHz or higher
2	Storage	The server should have up to 24 Small form Factor drives plus optional two drives Server should be configured with 2 nos. of 1 TB 12G SAS 7.2K RPM SFF HDD
		The server should have RAID controller and should have 4GB Cache Module
		The proposed server should be of max. 2RU form factor.
		The proposed server should be Rack mountable in standard rack server.
3	Memory	Should have at least 24 DIMM slots per blade and The Server should be configured with 4 nos. of 32GB DDR4 2400 MHz dual rank RDIMM
		Support for advanced memory redundant technologies like Advanced error-correcting code (ECC) and memory mirroring
4	Network	Should have 2 * 10/100/1000 Mbps BaseT Ethernet interface embedded LAN on Motherboard for network connectivity and additional 1 no of 10G SFP+ Ports populated with multimode optics.
5	PCIe Slots	Each server should offer 4 PCI Express (PCIe) 3.0 slots
		The server should support Intelligent Platform Management Interface (IPMI) 2.0 support for out-of-band management through third-party enterprise management systems
		The server should support Command-line interface (CLI) for server management
6	Ports	Should have the following ports for server connectivity <ul style="list-style-type: none"> <li>• 1 serial port</li> <li>• 2 USB 3.0 ports rear and 2 USB 2.0 Ports Front</li> <li>• 1 VGA video port Rear and Front</li> </ul>
7	Others	Supports hot swappable redundant fans
		Supports redundant power supplies from day 1

#### 7. SOR-J, Layer-3 Switch:

SN	Feature Set
1	<b>Solution Requirement</b>
1.1	The Switch should support non-blocking architecture, wire speed line rate performance
1.2	The switch quoted should be part of latest Gartner's Leader Quadrant for Data Center networking.
2	<b>Hardware and Interface Requirement</b>

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2.1	Switch should have the following interfaces: 48 x 1G/10G/25G and 6 x 100G Interfaces populated with 12*1G BaseT SFP Module, 12*1G SFP Multimode Optical Ports, 24*10G multimode interfaces and 2 x 100G ports fully populated using multimode 100G Transceivers for uplink connectivity.
2.2	Switch should have console port
2.3	Switch should have management interface for Out of Band Management
2.4	Switch should have a minimum 30MB buffer of more.
2.5	Switch should support config rollback and checkpoint.
2.6	Should support IP SLA or equivalent functionality.
<b>3</b>	<b>Performance Requirement</b>
3.1	Switch should support minimum 512 VRF instances
3.2	The switch should support hardware based load balancing at wire speed using LACP and multi chassis etherchannel/LAG etherchannel/LAG
3.3	Switch should support minimum 3.6 Tbps of non blocking Switching bandwidth
<b>4</b>	<b>Virtualization Features</b>
4.1	Switch should support Network Virtualisation using Virtual Over Lay Network using VXLAN (RFC 7348)/NVGRE as per RFC 2890
4.2	Switch should support VXLAN (RFC7348) and EVPN for supporting Spine - Leaf architecture to optimise the east - west traffic flow inside the data center
4.3	Switch should support Open Flow/Open Day light/Open Stack controller
4.4	Switch should support multi OEM hypervisor environment and should be able to sense movement of VM and configure network automatically
<b>5</b>	<b>Layer2 Features</b>
5.1	Switch should support VLAN Trunking (802.1q) and should support 3000 VLAN
5.2	Switch should support minimum 64K no. of MAC addresses
5.3	Switch should support 8 Nos. of link or more per Port channel (using LACP) and support 16 port channels or more per switch
5.4	Switch platform should support MACSec in hardware
5.5	Switch should support Jambo frame upto 9K bytes on all available ports.
<b>6</b>	<b>Layer3 Features</b>
6.1	Switch should support static routing, OSPFv2, OSPFv3, ISIS, BGPv4, MP-BGP, EVPN
6.2	Switch should provide multicast routing like PIM, MSDP
<b>7</b>	<b>Availability</b>
7.1	Switch should have provisioning for connecting to 1:1/N+1 power supply for usage and redundancy
7.2	Switch should provide gateway level of redundancy in IPv4 and IPv6 using HSRP/VRRP
7.3	Switch should support for BFD For Fast Failure Detection
<b>8</b>	<b>Quality of Service</b>
8.1	Switch system should support 802.1P classification
<b>9</b>	<b>Security</b>
9.1	Switch should support control plane i.e. processor and memory protection from unnecessary or DoS traffic by control plane protection policy
9.2	Switch should support for external database for AAA using: TACACS+ and RADIUS
10	Manageability

10.1	Switch should support for sending logs to multiple centralised syslog server for monitoring and audit trail
10.2	Switch should provide remote login for administration using: Telnet, SSHv2
10.3	Switch should support for basic administrative tools like PING, TRACEROUTE
10.4	Switch should support central time server synchronisation using Network Time Protocol NTP v4
10.5	Switch should provide different privilege for login in to the system for monitoring and management

#### 8. SOR K & L (Streaming Solution):

- a. The system should be an on-premise solution and should be able to transform the input stream to be delivered onto any device – which could be a PC/ Mobile/TV/ tablet etc.
- b. The system should support multi-protocol and multi-client platform for delivering the stream. The system should support players such as Flash/Adobe/QuickTime/Silverlight players.
- c. The system should support live streaming protocols like RTMP/RTSP/RTP/MPEG etc.
- d. The system should support following Video encoding inputs for live streaming – H.264/H.265/VP8/VP9/VP6.
- e. The system should support following audio encoding inputs for live streaming – AAC/AAC-LC/MP3/OPUS/SPEEX.
- f. The system should work on the following Operating Systems – Windows/Linux/Mac.
- g. Required OS license is part of solution.
- h. Hardware should be rack mountable.
- i. Hardware should have 2\*10/100/1000 Mbps BaseT interface.
- j. Hardware should have Intel Quad Core i7, 3.4 Ghz and above, minimum 16 GB memory and minimum 1 TB drives in Raid 0.

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## CHAPTER-3-B

### INSPECTION AND INSTALLATION, TESTING & COMMISSIONING

#### 1. TESTS AND MEASUREMENTS

All equipment's shall be subjected to tests as per technical specification and requirement specified in Chapter-3, Part-A, at manufacturer facility/premises and a test report for each equipment duly signed by the testing authority and accepted by suitable authority shall be submitted along with the equipment.

##### 1.1 TEST CATEGORIES

1.1.1 The following tests shall be conducted for acceptance of the equipment and the system before final acceptance of the system.

- i) Factory Acceptance Testing (FAT)
- ii) Pre-commissioning test (after installation) for total integrated system.
- iii) Site Acceptance Testing (SAT)
- i) Trial Run / Field Trials.

Under exceptional circumstance, if it is not feasible to conduct Factory Acceptance Testing (FAT) at manufacturing facility, the equipment shall be accepted on the basis of certified manufacturer test report. In that case preliminary inspection of the equipment shall be arranged by the vendor at a suitable facility within India and detail inspection at site as per mutually agreed testing procedure. Exemption of inspection at factory premises (FAT) will be at the sole discretion of RailTel.

1.1.2 These tests shall be carried out on all equipment supplied by tenderer including those supplied by sub-vendors, if any. Tenderer shall arrange all necessary test instruments, manpower, test-gear, accessories etc.

1.1.3 All technical personnel assigned by Tenderer shall be fully conversant with the system specifications and requirements. They shall have the specific capability to make the system operative quickly and efficiently and shall not interfere or be interfered by other concurrent testing, construction and commissioning activities in progress. They shall also have the capability to incorporate any minor modifications/suggestions put forward by Purchaser/Engineer.

1.1.4 Test Plan: The Contractor shall submit to Purchaser 'Test Plans' well in advance of commencement of actual testing in each of the above mentioned test categories.

The plans shall include:

1.1.4.1 System/Equipment functional and performance description (in short) and Tests to be conducted and purpose of test.

1.1.4.2 Test procedures (including time schedule for the tests) and identification of test inputs details and desired/expected test results

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



**1.1.5.1 Test results**

**1.1.5.2** Comparison of test results and anticipated/expected (as per specifications) test result as given in test plans and reasons for deviations, if any.

**1.1.5.3** The data furnished shall prove convincingly that:

- a. The system meets the Guaranteed Performance objectives
- b. Mechanical and Electrical limits were not exceeded.
- c. Failure profile of the equipment during the tests are well within the specified limits.

**1.1.6 Failure of Cards/Components:**

Till the system is accepted by the Purchaser, a log of each and every failure of cards/components shall be maintained. It shall give the date and time of failure, description of failed component/ card with serial no., lot no. etc, circuit, module, component designation, effect of failure of component on the system/ equipment, cause of failure, date and time of repair, mean time to repair etc. Repair/modification done at any point of time at one site shall be carried out by Tenderer at all the sites. Detailed documentation for the same shall be submitted to Purchaser for future reference.

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

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

**1.1.7 Re-adjustments**

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

**1.2 FACTORY ACCEPTANCE TESTING (FAT)**

Factory acceptance tests shall be carried out after review and approval of FAT procedure/documents as per bid requirements and review of Pre-Factory acceptance results & shall be conducted at the manufacturing facilities from where the respective equipment/subsystems are offered. The factory acceptance testing shall be conducted in the presence of the Purchaser/Engineer. The tests shall be carried out on all equipment/items including those supplied by Sub-vendors and factory acceptance certificates shall be issued. The factory tests shall include but not be limited to:

**1.2.1 Equipment Testing:**

- 1.2.1.1 Mechanical checks to the equipment for dimensions, inner and outer supports, finishing, welds, hinges, terminal boards, connectors, cables, painting etc.
- 1.2.1.2 Electrical checks including internal wiring, external connections to other equipment etc.
- 1.2.1.3 Check for assuring compliance with standards mentioned in the specifications.
- 1.2.1.4 Individual check on each/module/sub-assembly in accordance with the modes and diagnostics programs of the Tenderer
- 1.2.1.5 Checks on power consumption and heat dissipation characteristics of various equipment.
- 1.2.1.6 Environment testing and other laid down tests in Type Tests plan of the specification of the equipment.
- 1.2.1.7 Functional testing
- 1.2.1.8 Any other test not included in FAT document but relevant to the project as desired by the Purchaser/Engineer at the time of factory acceptance testing.

All equipment's materials fittings and components will be subject to inspection by the purchaser or his representative at the manufacturer's factory/tenderer works before dispatch and no materials shall be dispatched until these are inspected and/or approved.

Under exceptional circumstance, if it is not feasible to conduct Factory Acceptance Testing (FAT) at manufacturing facility, the equipment shall be accepted on the basis of certified manufacturer test report. In that case preliminary inspection of the equipment shall be arranged by the vendor at a suitable facility within India and detail inspection at site as per mutually agreed testing procedure. Exemption of inspection at factory premises (FAT) will be at the sole discretion of RailTel.

#### 1.2.2 System Integration Testing

Functional and performance test should be conducted for the complete system/ all major equipment constituting the system (including the equipment supplied by sub-vendors, as applicable) simulating the complete network with appropriate network elements. All equipment shall be connected using the same cables (interfaces/components) as will be used during final installation so that the system can be tested in its final configuration. This testing shall be conducted at the manufacturing facility of the main equipment.

#### 1.3 INSTALLATION:

After successful completion of Factory Acceptance Test or acceptance report of equipment on the basis of certified manufacturer test report, equipment shall be sent to site for installation.

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

The contractor shall be responsible for ensuring that the work throughout are executed in the most substantial, proper and workmanlike manner with the quality of material and workmanship in strict accordance with the specifications and as per sound industrial practices and to the entire satisfaction of the RailTel.

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

Tenderer shall supply all installation materials required for proper installation of the equipment. These shall include but not be limited to, all connectors, inter-bay and inter-equipment cables, power/earthing cables, connectors, anchoring bolts, nuts, screws, washers etc. as needed.



The bidder has to ensure that installation of equipment shall be done as to present neat and clean appearance in accordance with approved installation document drawings. All inter bay, power supply and other cables shall be routed through wall mounted cable trays. No cable shall be visible. Equipment installed at one of the site shall be made as model site and Tenderer shall take approval from Purchaser/engineer on various aspects etc.

#### **1.4 PRE-COMMISSIONING**

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

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

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

Tenderer shall ensure that the spares meant for operation and maintenance are not used during installation and commissioning.

#### **1.5 SITE ACCEPTANCE TESTING (SAT)**

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

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

- 1.5.1 Checks for proper installation as per the approved installation drawings for each equipment/item and system as a whole.
- 1.5.2 Guaranteed performance specifications of individual equipment/item.
- 1.5.3 Self diagnostics test on individual equipment
- 1.5.4 Tests on metering and alarm panels
- 1.5.5 Tests on remote alarm transmission and reception
- 1.5.6 System tests on per hop basis and END TO END for the ring/link, all complete.

#### **1.6 PROVISIONAL ACCEPTANCE CERTIFICATE (PAC)**

On installation of the equipment, the contractor shall certify and advise Railtel Supervisor where equipment has been installed, in writing that the installation is (i) completed (ii) ready for satisfactory commercial service and (iii) ready to be handed over. After successful completion of Site Acceptance Testing, a report (SAT) shall be forwarded to GM/ITP. Provisional Acceptance Certificate (PAC) will be issued by GM/ITP. PAC will not be held back for want of minor deficiencies not affecting the functioning of the equipment. Deficiencies, if any, pointed at the time of issuance of PAC, will be rectified by the contractor within one month.

#### **1.7 TRIAL RUN/FIELD TRIALS**

Upon conclusion of the site acceptance testing, the Tenderer shall keep the facilities commissioned for one month for 'TRIAL RUN/FIELD TRIALS'. During this period Tenderer

shall provide all specialist Engineers & Technicians including experts at the NMS to maintain the total log, incidents, failures & for assisting site engineer & for total co-ordination. However, the normal operation and maintenance of the system shall be performed by the personnel of the Purchaser trained for the purpose.

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

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

Ideally, during the 'TRIAL RUN / FIELD TRIALS', no shutdown of the system due to failure of equipment, power supply etc. should happen. A record of all failures shall be kept for each manned/unmanned station and the availability of the system on per hop and end to End basis shall be calculated, accordingly and results submitted to Purchaser/engineer. If the system fails to come up to the guaranteed performance, the Tenderer, within a period of thirty (30) days shall take any and all corrective measures and resubmit the system for another 'Trial Run' of trial period. All modifications, changes, corrective measures, labour etc. shall be at the cost of the Tenderer. In case the date of completion for the second trial run exceeds the time schedule for the project, he shall be liable to pay liquidated damages. If the system fails to reach the guaranteed performance even after the second trial run, the Purchaser shall be free to take any action as he deems fit against the Tenderer and to bring the system to the guaranteed performance with the help of third party at the expense of the Tenderer.

#### **1.8 FINAL ACCEPTANCE CERTIFICATE (FAC)**

The final acceptance of the works completed shall take effect from the date of successful completion of 12 months after issue of PAC provided in any case that the contractor has complied fully with his obligations in respect of each item under the contract. The Final Acceptance Certificate of all regions against the contract shall be issued by GM/ITP. Notwithstanding the issue of Final Acceptance Certificate, the contractor and the purchaser shall remain liable for fulfillment of any obligation incurred under the provision of the contract prior to the issue of Final Acceptance Certificate which remains unperformed at the time such certificate is issued and for determining the nature and extent of such obligation the contract shall be deemed to remain in force between the parties hereto.

#### **1.9 QUALITY ASSURANCE**

- 1.9.1 Tenderer shall submit the details of Quality Assurance program followed by them beginning with raw materials, active, passive and fabricated components, units, sub-assemblies, assemblies, wiring, interconnections, structures etc. to finished product. Tenderer shall obtain and forward the Quality Assurance Program for equipment supplied by Sub-vendor, if any.
- 1.9.2 The Purchaser/engineer reserves the right to inspect and test each equipment at all stages of production and commissioning of the system. The inspection and testing shall include but not be limited to raw materials. Components, sub-assemblies, prototypes, production units, guaranteed performance specifications etc.
- 1.9.3 For inspection and testing, Tenderer shall arrange all that is required e.g. quality assurance personnel, space, test instruments etc. for successful carrying out of the testing by the Purchaser/Engineer, at Tenderer cost, at the Manufacturer's works/tenderer premises/site.

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- 1.9.4 Purchaser/Engineer shall have free entry and access to any and all parts of the Manufacturer's facilities associated with manufacturing and testing of the system at any given time.
- 1.9.5 It shall be explicitly understood that under no circumstances shall any approval of the Purchaser/Engineer relieve the Tenderer of his responsibility for material, design, quality assurance and the guaranteed performance of the system and its constituents.
- 1.9.6 Tenderer shall invite the Purchaser/Engineer, at least 7 days in advance, of the date at which system shall be ready for Inspection and Testing. All relevant documents and manuals approved Engineering drawings etc. shall be available with the Purchaser/Engineer well in advance of the start of Inspection and Testing.
- 1.9.7 Purchaser or his representative shall, after completion of inspection and testing to their satisfaction, issue factory acceptance certificates to release the equipment for shipment. No equipment shall be shipped under any circumstances unless a factory acceptance certificate has been issued for it, unless agreed otherwise by Purchaser/Engineer.

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**CHAPTER-3-C**

**TRAINING, VENDOR DATA REQUIREMENT, DOCUMENTATION, AND DESIGN GUIDELINES**

**1. TRAINING**

Tenderer shall train personnel of Purchaser/engineer in all aspects of offered system.

The training course shall be conducted at the manufacturing facilities from where the respective equipment/subsystems are manufactured/ offered or in India if the firm can arrange full fledged training facilities in case their manufacturing facilities are located outside India.

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

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

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

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

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

**2. VENDOR DATA REQUIREMENT AND DOCUMENTATION**

One set of Documentation shall be supplied with each system. In addition, 12 more sets of full documents shall be supplied. All documents and manuals shall be in English language only.

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

- a. System description, System configuration diagram & Connectivity diagram
- b. Detail technical manual of each type of equipment
- c. Equipment interconnection diagram including details of various interfaces, signaling protocols used at each stage.
- d. Layout of equipment and space requirements for each station.
- e. Installation manual including installation procedure and commissioning.
- f. Supervisory configuration, alarm list, operator interface etc.
- g. Maintenance manual of each type of equipment containing:
  - i. Preventive maintenance procedures.

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

### **3. DESIGN GUIDELINES**

- i) Equipment shall conform to the similar housing standards and shall preferably be integrated in one 19"/21" rack.
- ii) All equipment shall have sufficient number of alarms and supervisory indications and shall be provided with self-diagnostic facilities. All alarms and monitoring & diagnostic facilities shall be built-in & shall be displayed on the front panel of the equipment for ease of maintenance. It shall be possible to transmit these indications, parameters to the control station /NMS on real time basis.
- iii) The healthy/unhealthy condition of the units shall be displayed by different color LEDs/Lamps.
- iv) For important switches, the maintenance personnel shall provide controls on the front panel with suitable safeguard to avoid accidental operation. Manual changeover should be performed by more than one sequential operating procedure to avoid accidental operation.
- v) All equipment shall be immune to EMI; RFI interference generated by any nearby source & shall meet the latest international standards in this regard.
- vi) The equipment shall be capable of functioning with minimum maintenance and shall be preferred to have no requirement of any preventive maintenance.
- vii) All patch cords shall be provided with connectors matching to the cable used and shall have identification markings.
- viii) All sub-assemblies or modules, switches and controls and the circuit components shall be so mounted as to permit their replacement without appreciable disturbance to other components.
- ix) If the vendor is not using distributed power supply system on individual module basis then the Power supply cards shall be duplicated (1+1). However one standalone power supply card shall be able to run the system for its entire lifetime.
- x) All equipment sub racks, housings shall be provided with antistatic wristbands, if required for safe handling of Cards.
- xi) The equipment should have modular design and should be configurable in number of operational modes to perform complex and different network functions without need of any additional software.

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## CHAPTER 4

### COMMERCIAL TERMS & CONDITIONS

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

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

#### 2. Warranty

- 2.1. The warranty would be valid for a period as indicated in Bid Data Sheet (BDS) Chapter 5. The supplier shall warrant that stores to be supplied shall be new and free from all defects and faults in material, workmanship and manufacture and shall be of the highest grade and consistent with the established and generally accepted standards of materials of the type ordered and shall perform in full conformity with the specifications and drawings. The supplier shall be responsible for any defects that may develop under the conditions provided by the contract and under proper use, arising from faulty materials, design or workmanship such as corrosion, inadequate quantity of material to meet equipment requirements, inadequate contact protection, deficiencies in design and/ or otherwise and shall remedy such defects at his own cost when called upon to do so by the Purchaser who shall state in writing in what respect the stores are faulty.
- 2.2. If it becomes necessary for the contractor to replace or renew any defective portion/portions of the supplies under this clause, the provisions of the clause shall apply to the portion/portions of the equipment so replaced or renewed or until the end of the above-mentioned period or twelve months, whichever may be later. If any defect is not remedied within a reasonable time of 30 days, the Purchaser may proceed to do the work at the contractor's cost, but without prejudice to any other rights which the Purchaser may have against the contractor in respect of such defects
- 2.3. Replacement under warranty clause shall be made by the contractor free of all charges at site including freight, insurance and other incidental charges.

#### 2.4. Warranty Support

- 2.4.1. Material for repair during Warranty Period shall be handed over /taken over to contractors engineer at RailTel Data Center Gurgaon/Secunderabad or nearest RailTel PoP.
- 2.4.2. During the warranty period, the contractor shall be responsible to the extent expressed in this clause for any defects that may develop under the conditions provided for by the contract and under proper use, arising from faulty materials, design or workmanship in the plant, or from faulty execution of the plant by the contractor but not otherwise and shall remedy such defects at his own cost when called upon to do so by the Purchaser Engineer who shall state in writing in what respect the portion is faulty.
- 2.4.3. During the free warranty maintenance period contractor should stabilize the working of the system. Purchaser has the right to extend the period of supervision of the maintenance free of cost till the system stabilizes and works satisfactorily for a reasonable period of time. If during the time any equipment etc. is to be added or

deficiencies are to be rectified to make the system work trouble free the same also will have to be done by the contractor at no cost to RailTel as to make good all the deficiencies.

- 2.4.4. In case of hardware failure, the replacement must be given in **next business day** If the Bidder fail to replace as per below mentioned duration, the following penalties will be imposed. It will be calculated on quarterly (3 month) basis and maximum penalties will be 10 % of the cost of Equipment per year.

2.4.5. Replacement Services

During warranty and AMC period, if the Bidder fails to replace /Equipment card/Part in next business day, the following penalties will be imposed.

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

**Note:**

- In event of that bidder fails on both service SLA and replacement services the maximum aggregate penalties would be limited to equipment cost.
- OEM should provide facility to RailTel for direct fault case open on TAC Support in case emergency.

**2.5. Maintenance Supervision**

- 2.5.1. After the proposed network is commissioned and placed in service and after Provisional Acceptance Certificate (PAC) is issued, the contractor shall be responsible for proper maintenance supervision of the network free of cost for a period of twelve months from the Successful commissioning of the solution.
- 2.5.2. To summarize, the total period of warranty as per BDS in Chapter-5, will comprise of first 12 months of Maintenance Supervision (after issue of PAC) extendable by RailTel for reasons as explained, as per para 2.5 above, posts which FAC will stand issued.

**3. Long Term Maintenance Support**

- 3.1 Tenderer (OEM) shall provide maintenance support after successful completion of the warranty obligations for a minimum period of 3 years. The long term maintenance support shall be comprehensive and include all hardware and software of equipment supplied against this contract. RailTel should be extended the benefits of periodical software patches/updates made by OEM on the system from time to time for equipment security/performance without any additional cost to RailTel.
- 3.2 Tenderer/OEM(through its Indian subsidiary), shall be paid @ 3.5% of supply cost per annum towards Long Term Maintenance Support after completion of warranty period, to undertake repairs/replacements of all type of module/ card/assembly/ subassembly and update/upgrade of software released during this period and /or which may fail in the network after the warranty. Only incremental cost in % over and above this, if perceived

by the OEM and Tenderer, may be indicated in Schedule of Requirement and shall be added to the equipment cost towards evaluation of tender. If however the tenderer feels that his AMC Cost is less than 3.5% per annum, he should give suitable discount in equipment pricing. For AMC he will be paid @ 3.5% per annum only. If the Tenderer quotes a higher base rate for AMC, he will be paid at his quoted rate per annum and five years differential cost shall be added to offered cost for evaluation. AMC would have to be valid for minimum period of 3 years after the warranty.

In case tenderer quotes AMC rates lower than 3.5%, no advantage will be given to him for evaluation purposes. In case the tenderer wins the contract, his cost will be reduced by differential (w.r.t. 3.5%) AMC rates & he will be paid accordingly. AMC charges to him, however be paid only @ 3.5% per annum.

- 3.3 Separate agreement for AMC (Long term Maintenance Support) before expiry of warranty period shall be entered with OEM/the authorized partner of OEM by RailTel. A fresh Bank Guarantee @10% of issued LOA/PO value valid for 40 months (4 months beyond the AMC period of 3 years) from the date of issue of LOA shall be required to be submitted by OEM/ Tenderer for due fulfillment of long term maintenance support obligation.
- 3.4 Quarterly payment for AMC Charges would be made by RailTel after successful completion of AMC Services of that quarter and on the certificate furnished by concerned RailTel representative of the CNOC.

Note: The acceptance of the above clause is mandatory and specific acceptance from OEM is required to be enclosed as per Form no.3. Any deviation / non acceptance will lead to rejection of the bid summarily

#### **4. Delivery Period**

The materials as per SOR are required to be delivered within period as indicated in Bid Data Sheet (BDS, Chapter 5) to the site /transported to different locations which will be provided by RailTel to the successful bidder.

#### **5. Payment Terms**

- 5.1 Payment shall be made in Indian Currency (Rs) 75% payment of the value of the supply items would be made on receipt of material by the consignee(at site / the stores) duly inspected and on submission of the following documents subject to any deductions or recovery which RailTel may be entitled to make under the contract:
- Invoice (GST)
  - Delivery Challan/e-way bill.
  - Packing list.
  - Factory Test Report/Certified manufacturer Test Report
  - Purchaser's Inspection certificate
  - Consignee receipt
  - Warranty certificate of OEM
  - Insurance certificate
  - Certificates duly signed by the firm certifying that equipment/ materials being delivered are new and conform to technical specification.
- 5.2 15% payment of the value of Supply items of the PO shall be made by RailTel on successfully Installation & Commissioning at site, 5% payment of value of Supply items of the PO on issue of Provisional Acceptance Certificate (PAC) and the last 5% payment of the value of Supply items of the PO shall be made by RailTel on issue of Final Acceptance Certificate (FAC) which will be issued by GM/ITP.



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- 5.3 15% payment of value of supply items of the PO which could not be installed within 90 days due to site readiness or other reason on account of RailTel will be made with approval of GM/ITP and remaining (5% + 5%) on issue of PAC and FAC.
- 5.4 RailTel shall make payments after the submission of invoice with required documents as per contract. Accounting /Bill passing unit for SOR for supplies is Corporate Office. All Bills shall be submitted to the GM/ITP for certifying and verification and onwards submission to Finance of RailTel Corporate Office for releasing the payment.
- 5.5 Deleted.
- 5.6 The breakup of taxes has to be furnished and same should be reflected in the bills so that any CENVAT/input credit can be availed by RailTel.
- 5.7 Payment of Services Items
  - 5.7.1 Payment of service items shall be made in Indian Currency (INR) only. 90% payment of SOR item towards "Installation, Testing & Commissioning" shall be made by Corporate Office on successful Installation, testing & commissioning, 5% on issue of PAC and final 5% on issue of Final Acceptance Certificate.
  - 5.7.2 Payments for Resident Engineer will be paid on quarterly basis after satisfactory go ahead from competent authority, if required.
  - 5.7.3 Payment of SOR item towards "AMC" would be paid quarterly by the Corporate Office after satisfactory completion of AMC Services of that quarter and on certificate furnished by TP Team.

### **6. Performance Bank Guarantee (Security Deposit)**

- 6.1 The successful bidder has to furnish security deposit in the form of Performance Bank guarantee @ 10% of issued PO/ LOA value, the same should be submitted within 30 days of issue of LOA/PO, failing which a penal interest of 15% per annum shall be charged for the delay period i.e. beyond 30 (thirty) days from the date of issue of LOA/PO. This PBG should be from a Scheduled Bank and should cover warranty period plus three months for lodging the claim. The performance Bank Guarantee will be discharged by the Purchaser after completion of the supplier's performance obligations including any warranty obligations under the contract.
- 6.2 The earnest money shall be released on submission of PBG. The Performa for PBG is given in Chapter 6 Form No. 1. If the delivery period gets extended, the PBG should also be extended appropriately.
- 6.3 The Performance Bank Guarantee (security deposit) will bear no interest.
- 6.4 This PBG would be released after satisfactory completion of contract including warranty period and only after submission of 10 % PBG towards AMC.
- 6.5 A separate advice of the BG will invariably be sent by the BG issuing bank to the RailTel's Bank through SFMS and only after this the BG will become acceptable to RailTel. It is therefore in interest of bidder to obtain RailTel's Bank IFSC code, Its branch and address and advise these particulars to the BG Issuing bank and request them to send advice of BG through SFMS to the RailTel's Bank.

**7. Taxes & Duties**

- 7.1 The price quoted in the offer should be firm, fixed indicating the break up and inclusive of all taxes and duties like import, custom, anti-dumping, CGST, IGST, SGST, UTGST etc. The offer should be inclusive of packing, forwarding, freight up to destination, insurance charges.
- 7.2 Bidder shall issue valid tax invoice to RailTel for availing proper credit of CGST/SGST/IGST/UTGST in case of award of contract. GST will not be reimbursed in the absence of valid tax invoice.
- 7.3 For all the taxable supplies made by the vendor, the vendor shall furnish all the details of such taxable supplies in the relevant returns to be filled under GST act.
- 7.4 If the vendor fails to comply with any of the above, the vendor shall pay to purchaser any expense, interest, penalty as applicable under the GST act.
- 7.5 In case of incorrect reporting of the supply made by the vendor in the relevant return, leading to disallowance of input credit to purchaser, the vendor shall be liable to pay applicable interest under the GST act to the credit of purchaser. The same provisions shall be applicable in case of debit/credit notes.
- 7.6 Tenderer shall quote all-inclusive rates, but there shall be break up of basic price and all type of applicable taxes such as SGST/CGST/IGST/UTGST along with respective HSN/SAC code under GST law(Including tax under reverse charges payable by the recipient).
- 7.7 Wherever the law makes it statutory for the purchaser do deduct any amount towards GST at sources, the same will be deducted and remitted to the concerned authority.
- 7.8 The imposition of any new tax and/or increase/ in the aforesaid taxes, duties, levies, after the last stipulated date for the receipt of tender including extensions if any and the bidder there upon necessarily and properly pays such taxes/levies/cess, the bidder shall be reimbursed the amount so paid, provided such payments, if any, is not, in the opinion of RailTel attributable to delay in execution of work within the control of bidder. The bidder shall within a period of 30 days of the imposition of any such tax or levy or cess, give a written notice thereof to RailTel that the same is given pursuant to this condition, together with all necessary information including details of input credit relating thereto. In the event of no payment/default payment of any of the above taxes, RailTel reserves the right to withhold the dues/payments of bidder and make payment to states/central government authorities as may be applicable. However, if the rates are reduced after the last stipulated date for receipt of tender, bidder has to pass on the benefits to RailTel.
- 7.9 In case of imported equipment:  
Anti-Dumping duty if applicable on the equipment proposed to be supplied by OEM/Tenderer as per extant instructions of Ministry of Commerce/Finance Government of India, has to be borne by the tenderer and shall be deducted from the amount payable to the bidder at the time of making payment to the firm, if this duty amount is paid to custom Authority by RailTel.
- 7.10 Inter se position of the offers will be determined on total unit rate on CIP destination basis which will include basic rate, custom duty, CGST, SGST, IGST, UTGST, freight, Insurance and any other charges or cost quoted by the tenderer, including GST payable on reverse charge by RailTel, whenever applicable.

- 7.11 In regards to works contract, the tenderer should have registration no. for GST in respective state where work is to be executed and shall furnish GST registration certificate on award of LOA.

**8. Insurance**

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

**9. Liquidated Damages**

The timely delivery is the essence of this tender. Liquidated damages will be applicable at the rate of half percent per week or part thereof for undelivered portion of SOR subject to a maximum of 10% of the cost of Purchase order for any reason whatsoever attributed to failure of tenderer. RailTel will have the right to cancel the order, place order on alternative source besides levying the liquidated damages as above.

**10. Transportation**

The rates quoted should be CIP destination. The destination sites will be provided by RailTel to the successful bidder.

**11. Statutory Deduction**

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

**12. Qualification Criteria**

Qualifying criteria under this clause lays down minimum acceptable qualifications in various areas to ensure that qualified tenderer has necessary experience, technical expertise, equipment and financial and human resources to successfully complete the project. Bids from bidder not meeting these qualification criteria shall be summarily rejected.

**12.1 Technical Capability**

- 12.1.1 The Tenderer/bidder should be an Original Equipment Manufacturer (OEM) or Authorized partner of OEM specifically authorized by OEM for bidding in this tender (as indicated in Bid Data Sheet (BDS) Chapter 5). The OEM should have proven facilities for Engineering, manufacture, assembly, integration and testing of offered system and basic facilities with respect to space, Engineering, Personnel, Test equipment,

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Manufacture, Training, Logistic Supports for at least past three years in the country from where the proposed equipment are planned to be supplied.

- 12.1.2 The Tenderer/bidder should have supplied and provision of similar offered equipment's of Telepresence Solution/ Voice/ Video Conferencing Solution commercially with satisfactory working as indicated in Bid Data Sheet (BDS) Chapter 5 to Government/PSUs/Telecom Service Providers/Public Listed Company during the last three years from the date of opening of tender.
- 12.1.3 The Bidder should have registered office in India for a minimum period of 3 years as on originally scheduled date of bid opening.
- 12.1.4 The Bidder should have authorization from respective OEMs and should submit the vetted BOM from their respective OEMs.
- 12.1.5 Each OEM can authorize up to a maximum of three (3) authorized partners to bid the tender. as per Technical Specification given in Chapter-3A.
- 12.1.6 The Bidder or their promoters having equity stake or operating partnership in bidder, should not be holding valid License for Telecom service provider/ISP/NLD, Services License of Government of India for Telecom Operation.
- 12.1.7 RailTel reserves the right: -
  - a) To verify, if so desired, the correctness of documentary evidence furnished by the tenderer.
  - b) To verify the successful operation and performance of qualifying projects and tenderer shall arrange permission for the same.
  - c) To carry out capability assessment of the bidder(s) including referral to in-house information.
  - d) RailTel shall not be responsible for any delay in the receipt of tenders and reserves the right to accept/reject any or all tenders without assigning any reason.
- 12.1.8 The bidder shall furnish documentary proof of backend support including software upgrades and availability of spares for a period of 5 years from the respective OEMs of the products offered.
- 12.1.9 The tenderer/OEM should submit the details of supply of offered equipment executed as indicated in Bid Data Sheet (BDS) Chapter 5, along with certificates from the original user for whom the project was undertaken certifying the date of award of contract, date of completion, and the present working state of the system which should clearly bring out performance of the equipment. The certificates are to be submitted in original or their true copies duly signed by the tenderer.

### **12.2 Financial Criteria**

- 12.2.1 The bidder should be a company registered under the Companies Act, 1956/2013 or a partnership firm registered under Indian Partnership Act 1932 or Limited Liability Partnership Act 2008 with registered office in India and in operation for at least 3 years from the date of opening of tender and should have their registered offices in India.

Valid documentary proof of:

- Certificate of Incorporation
- Certificate of Commencement of Business.
- Certificate consequent to change of name, if applicable
- Copy of Memorandum of Association.

- 12.2.2 The company must be registered with appropriate authorities for all applicable statutory duties/taxes.
- 12.2.3 Valid documentary proof of:
- a) Income Tax registration/PAN number
  - b) GSTIN Number
- 12.2.4 Income Tax returns for the last three years.
- 12.2.5 The tenderer should have executed order of Supply, installation, testing, commissioning, and maintenance of TP Infrastructure Solution/ Video Conferencing Solutions commercially in India during last preceding 3 financial years (i.e. current year plus three previous financial years)
- (A) Single order of atleast 35% of tendered value.
  - OR
  - (B) Two orders of atleast 20% each of tendered value.
  - OR
  - (C) Three orders of atleast 15% each of tendered value.
- Copy of work orders supported with relevant documentary evidences for the same and the completion certificates by the client. Documentary evidence should clearly indicate the nature of systems implemented for each project
- 12.2.6 The sum total of the turnover (i.e. revenue from operations) during the last preceding 3 financial years (i.e. current year and three previous financial years) from the date of opening of tender should be a minimum of the value as indicated in Bid Data Sheet (BDS) Chapter 5.
- 12.2.7 Tenderer should produce Audited Balance Sheet and Income statement of all the preceding three financial years.
- 12.2.8 The tenderer shall furnish such documents as to establish the financial soundness of their company. The latest balance sheet audited or certified by a neutral agency shall be furnished.
- 12.2.9 In the event of foreign Original Equipment Manufacturer (OEM), Indian Subsidiary is allowed to participate with the experience and financial credential of parent company with specific authorization for doing so from the OEM. The specific authorization addressed to RailTel should be submitted by the tenderer.

### **13. System Performance Guarantee**

- 13.1 The tenderer shall give unqualified and unconditional guarantee that when the equipment / material supplied by him is installed and commissioned at site, it shall achieve the desired objective and that in the event of performance of the system when installed not complying with the end objective or with the specifications, he shall provide further inputs to enable the RailTel to realize the end objectives with full compliance of the specifications contained in these documents. No additional payment will be made to the contractor for supply of any additional goods and service required in this regard.
- 13.2 This certificate in the Proforma given in Chapter 6 Form No. 2, shall accompany the final offer. Absence of this certificate which will form part of the agreement shall disqualify the tenderer automatically.



**14. Evaluation of Offer**

- 14.1 For the purpose of relative ranking of offers, all-inclusive value for entire supply, supervision of installation, testing & commissioning and warranty period support, training, AMC shall be taken into account.
- 14.2 Additional features offered by the bidder, over and above the ones asked for in the tender documents, shall not be considered for evaluation of bids.
- 14.3 The tenderer should make available the offered products, if desired during technical evaluation of offered equipment for testing and benchmarking at any testing facility approved by RailTel.
- 14.4 The bidders should quote for all items & the offer will be evaluated in totality. The bidders should indicate brand name, type/model number of the products offered. Optional items will be considered for evaluation of offers. The equipment should be supplied as per Technical Specifications given in Chapter-3.

**15. Security Considerations & Security Agreement**

- 15.1 While evaluating the tender, regards would be paid to National Defense and Security considerations.
- 15.2 The directives issued from time to time by the Department of Telecommunications (DoT), Ministry of Communications and IT or any other Ministry of Govt. of India on security considerations shall be applicable to the present tender. Accordingly, as per the extent amendment of the National Long Distance (NLD) Service License Agreement for Security related concerns for expansion of Telecom Services in various zones of the country issued vide Department of Telecommunication, Ministry of Communication and IT, Govt. of India's letter no. 10-54/2010-CS-III (NLD) dated: 31.05.2011, the successful tenderer/OEM shall comply with the provisions stated in the above mentioned directive of DoT and shall have to enter into an agreement with RailTel as per the template agreement between Telecom Service Provider and the vendor of equipment, product and services (available on DoT website). The tenderer must submit a declaration along with their bid.
- 15.3 The Network is being provided primarily to meet the requirement of Indian Railways. Accordingly, the network shall take into consideration the National Security requirement and National Security aspects indicated by the Indian Railways:-

**16. Purchaser's Right to Vary Quantities**

- 16.1 The purchaser shall be at liberty to enhance or reduce the quantity mentioned in the purchase order as indicated in Bid Data Sheet (BDS) Chapter 5 without assigning any reasons. The bidder shall comply with such modifications unconditionally provided these are made before completion of the deliveries under the purchase order. Any such change in quantity shall have no impact on the rates mentioned in the purchase order for any such item.
- 16.2 RailTel would also enter into Rate Contract with the firm to whom the contract is awarded for catering to additional requirement of Equipment & Cards as and when arise in future. Rate Contract on the successful tenderer would be placed separately and would be operative from the date of PAC and would be valid for a period of 12 months. This Rate Contract would be at the same rates as finalized in main contract. During the validity of Rate Contract, RailTel will place Sub Purchase Orders for Equipment & Cards detailed in SOR, as per requirement. The total value of all the Sub Purchase Orders under Rate Contract shall be restricted to 50% of the contract value for these SOR items, however, there is no guaranteed off take against this Rate Contract. The supplier shall have to supply the

equipment & cards against these Sub Purchase Orders within 90 days from the date of issue of such Sub Purchase Orders and should submit a Performance Bank Guarantee (PBG) within 30 days of the issue of such Sub Purchase orders @ 10% of the value of the Sub PO as per Performa given in the tender. A standing Performance Bank Guarantee of Rs. 02 Lakh for due fulfillment of the rate contract with validity of four months beyond contract period will be submitted by the tenderer within 30 days of issue of LOA for Rate Contract. Terms & conditions of this tender document will be applicable for the Sub POs issued against rate Contract, if any. The validity of rate contract may be extended one more year with mutual consent without any price variation.

**17. Purchaser's Right to accept any offer / Bid and to reject any or all offer/ Bid**

The Purchaser reserves the right to accept or reject any offer / bid, and to annul the bidding process and reject all offers / bids, at any time prior to award of order without assigning any reason whatsoever and without thereby incurring any liability to the affected bidder or bidders on the grounds for the Purchaser's action.

**18. Execution of Purchase Order**

- 18.1 The successful bidder has to submit the copy of the Purchase order duly signed on each page including Annexures & will submit the Performance Bank Guarantee as per Clause no. 6 for due fulfillment of the PO.
- 18.2 If the successful bidder fails to submit the accepted copy of PO and required PBG within 30 days from the date of issue, it shall constitute a breach of the agreement affected by the acceptance of the tender in which case the full value of the earnest money accompanying the tender shall stand forfeited without prejudice to any other rights or remedies. The Tenderer shall also submit the inspection plan, Implementation plan etc, within 30 days period.
- 18.3 In the event of any tenderer, whose tender is accepted, refuses to execute the PO as herein before provided, RailTel may determine that such tenderer has abandoned the Purchase Order and thereupon his tender and acceptance thereof shall be treated as cancelled and RailTel shall be entitled to forfeit the full amount of the Earnest Money and to recover the damages for such default.

**19. Annulment of Award**

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

**20. Earnest Money Deposit (EMD)/ Bid Security**

- 20.1 The tenderer shall furnish a sum as given in Bid Data Sheet (BDS) Chapter 5 as Earnest Money through IREPS Portal.]
- 20.2 The EMD may be forfeited if a bidder withdraws his offer or modifies the terms and conditions of the offer during validity period and in the case of a successful bidder, if the bidder fails to accept the Purchase order and fails to furnish performance bank guarantee (security deposit) in accordance with clause 6.
- 20.3 Offers not accompanied with Earnest Money shall be summarily rejected.

- 20.4 Earnest Money of the unsuccessful bidder will be discharged / returned as promptly as possible but not later than 30 days after the expiry of the period of offer / bid validity prescribed by the Purchaser.
- 20.5 The successful bidder's EMD will be discharged upon the bidder's acceptance of the purchase order satisfactorily and furnishing the performance bank guarantee in accordance with clause 6.
- 20.6 Earnest Money will bear no interest.

**21. Preference to make in India**

Preference to make in India will be applicable as per (i) Ministry of Commerce and Industry / Department of Industrial Policy and Promotion (Public procurement Section) notification No. P-45021/2/2017-PP (BE-II) dt. 28.05.2018 and (ii) Ministry of Communication/ Department of telecommunications notification number 18-10/2017-IP dt. 29.08.2018 or any latest notification issued by Government of India.

**22. Offer/ Bid Prices**

- 22.1 The bidder shall give the prices indicating all levies and taxes, packing forwarding, freight and insurance etc. The basic unit price and all other components of the price need to be individually indicated against the goods it proposes to supply under the tender document as per schedule given in Chapter 2. The price shall be quoted in Indian Rupees or in any major foreign currency for the imported items (FOR/CIP destination).
- 22.2 The breakup of price of each item of SOR in terms of basic Unit price, Excise duty, Sales Tax, Freight, Custom Duty, Forwarding, Packing, Insurance and any other Levies/charges already paid or payable by the tenderer shall be quoted in the SOR Chapter 2. Any changes in statutory duties/taxes after opening of technical bid will be to RailTel's account within the contracted delivery period.
- 22.3 All prices and other information like discounts etc. having a bearing on the price shall be written both in figures and in words in the prescribed offer form (SOR). In case of difference in words and figures, the amount written in words will be taken into consideration. In the event of any discrepancy between total unit cost and total cost, the value shown in total unit cost will be taken for evaluation purpose.
- 22.4 Fall Clause: - The tenderer shall undertake that in case the tenderer offers same type of material at a lower price to any other purchaser including Central/State/ Government Organization or Public Sector Undertaking, during the validity of purchase order, the equal benefit of lower prices will be passed on to RailTel. The tenderer will submit an undertaking to this effect while claiming the payment.

**23. Clause wise Compliance**

Clause wise compliance statement of the Technical Specifications (Chapter 3) and Commercial Terms & Conditions (Chapter 4) shall be enclosed with the offer along with the technical literature of the material and other documents in support of relevant clauses.

**24. Inspection**

- 24.1 Pre-shipment / pre-dispatch inspection shall be carried out at manufacturer's / tenderer's works/site by RailTel's authorized representative. At least part of the material should be offered for inspection within 60 days of issue of confirmed Purchase Order. Traveling,



lodging & boarding expenses of RailTel's representative and charges for 3<sup>rd</sup> party inspection if any shall be borne by RailTel but necessary facilities to carry out tests/witness inspection shall be provided by the manufacturer/ tenderer, free of cost. Under exceptional circumstance, if it is not possible to carry out pre-dispatch inspection at manufacturer's premises, Exemption for the same shall be obtained from competent authority.

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

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

## **25. Force Majeure**

25.1 If during the Agreement, the performance in whole or in part, by either party, of any obligation under this is prevented or delayed, by reason beyond the control of the parties including war, hostility, acts of the public enemy, civic commotion, sabotage, Act of State or direction from Statutory Authority, explosion, epidemic, quarantine restriction, strikes and lockouts (as are not limited to the establishments and facilities of the parties), fire, floods, earthquakes, natural calamities or any act of GOD (hereinafter referred to as EVENTS), provided notice of happenings of any such EVENT is given by the affected party to the other, within twenty one (21) days from date of occurrence thereof, neither party shall have any such claims for damages against the other, in respect of such non-performance or delay in performance. Provided service under this Agreement shall be resumed as soon as practicable, after such EVENT comes to an end or ceases to exist.

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

## **26. Settlement of Disputes**

26.1 Any dispute or difference whatsoever arising between the parties out of or relating to the construction, meaning, scope, operation or effect of this contract or the validity or the breach thereof shall be settled by arbitration in accordance with the Arbitration and Conciliation Act, 1996 as amended and the award made in pursuance thereof shall be binding on the parties. The venue of such arbitration or proceedings thereof shall be New Delhi.

26.2 All arbitration proceedings shall be conducted in English. Recourse against any Arbitral award so rendered may be entered into court having jurisdiction or application may be made to such court for the order of enforcement as the case may be.

26.3 The Arbitral Tribunal shall consist of the sole Arbitrator appointed by mutual agreement of the parties.

26.4 Each of the parties agree that notwithstanding that the matter may be referred to Arbitrator as provided herein, the parties shall nevertheless pending the resolution of the controversy

or disagreement continue to fulfill their obligation under this Agreement so far as they are reasonably able to do so.

**27. Governing Laws**

The Purchase Order shall be interpreted in accordance with the laws of India. The courts at New Delhi shall have exclusive jurisdiction to entertain and try all matters arising out of this contract.

**28. Termination for Default**

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

- 28.1 If the tenderer fails to deliver any or all of the goods within the time period(s) specified in the contract.
- 28.2 If the tenderer fails to perform any other obligation(s) under the contract; and
- 28.3 If the tenderer, in either of the above circumstance(s) does not remedy his failure within a period of 30 days (or such longer period as the Purchaser may authorize in writing) after receipt of the default notice from the Purchaser.
- 28.4 In case of any of the above circumstances the RailTel shall pay the supplier for all products and services delivered till point of termination as per terms and conditions of the contract. However, any recovery and losses occurred to RailTel will be recovered from Contractor up to the value of contract.

**29. Risk & Cost**

If the contractor fails to deliver the equipment or honor the contractual commitment within the period fixed for such delivery in the contract, the Purchaser may terminate the Purchase contract in whole or in part, the Purchaser may proceed to purchase, upon such terms and in such manner as it deems appropriate, goods similar to those undelivered at no risk and cost to contractor. However, the security deposit of tenderer shall be forfeited/ Performance Bank Guarantee shall be encashed. The failed tenderer shall not be permitted to take part in the tender for balance work.

**30. Termination for Insolvency**

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

**31. Rates during Negotiation**

The tenderer/s shall not increase his/their quoted rates including payment terms in case the RailTel Administration negotiates for reduction of rates. Such negotiations shall not amount to cancellation or withdrawal of the original offer and the rates originally quoted will be binding on the tenderer/s.

### 32. Clarification Requests

It is solicited that the written queries/ clarifications may be sent to the RailTel's office latest by date as indicated in the Bid Data sheet (BDS) through e-mail to [rajeevkumar@railtelindia.com](mailto:rajeevkumar@railtelindia.com) with copy to [shrichandra@railtelindia.com](mailto:shrichandra@railtelindia.com) and [hjp@railtelindia.com](mailto:hjp@railtelindia.com) (in word format) & hard copy by post. All relevant clarifications sought will be addressed during the pre-bid meeting scheduled as per BDS.

### 33. Submission of Offers

- 33.1 All offers in the prescribed forms should be submitted before the time and date fixed for the receipt of the offers.
- 33.2 In case the schedule of requirement quoted by tenderer is incomplete with reference to tender document, the offer is liable to be rejected.
- 33.3 ATTESTATION OF ALTERATION: No scribbles permissible in the tender documents. Tender containing erasures and alterations in the tender documents are liable to be rejected. Any correction made by the tenderer/ tenderers in his/their entries must be signed (not initialed) by him/them.
- 33.4 The tenderer shall submit his tender in sealed cover on specified date & time as mentioned in BDS Chapter 5. Each copy of the tender shall be complete in all respects. The copies should be marked "tender name & no". The original tender paper purchased from this office or down loaded from the RailTel web site shall be returned duly signed on each page along with the original offer.
- 33.5 The offer shall be submitted in two packets. Both Bids Credential Bid (Techno-Commercial Bid) & Price Bid shall be submitted online. The bid shall consist of following documents:-
  - 33.5.1 Offer Letter complete.
  - 33.5.2 Schedule of Requirements with quantities but with prices blanked out (this will be a replica of price bid with prices blanked out).
  - 33.5.3 Earnest Money in prescribed form.
  - 33.5.4 Audited balance sheet duly attested by Notary Public.
  - 33.5.5 Constitution of Firm and Power of Attorney.
  - 33.5.6 Clause wise compliance to tender conditions.
  - 33.5.7 Copies of purchase orders and other documents in support of meeting qualifying criteria.
  - 33.5.8 Complete technical data and particulars of the equipment offered, as specified in the Tender papers together with descriptive literature, leaflets, Drawings, if any, complete with list etc.
  - 33.5.9 Documentary proof of equipment being proven and working for more than 6 months in India or outside India along with user certificate and Contact Details of user/firm.
  - 33.5.10 Technical proposal of tenderer in conformity with system design or alternative proposal of the tenderer, if any.
  - 33.5.11 System Performance Guarantee as per Chapter 6 Form no. 2
  - 33.5.12 The manufacturer claiming to qualify under the scope of rules for PMA (Preferential Market Access) must submit the declaration of VA (Value Addition) as required under the issued notification for the specified period (2016-17, 2017-18 & 2018-19).
  - 33.5.13 Any other information desired to be submitted by the tenderer.
  - 33.5.14 NIL Deviation certificate.

**34. Constitution of Firm and power of Attorney**

34.1 Any individual(s) signing the tender or other documents connected therewith should specify whether he is signing:-

34.1.1 As sole proprietor of the concern or as attorney of the sole Proprietor.

34.1.2 As a partner or partners of the firm.

34.1.3 As a Director, Manager or Secretary in the case of Limited Company duly authorized by a resolution passed by the Board of Directors or in pursuance of the authority conferred by Memorandum of Association.

34.2 In the case of a firm not registered under the Indian Partnership Act, all the partners or the attorney duly authorized by all of them should sign the tender and all other connected documents. The original Power of Attorney or other documents empowering the individual or individuals to sign should be furnished to the Purchaser for verification, if required.

34.3 The RailTel will not be bound by Power of Attorney granted by the tenderer or by the changes in the composition of the firm made subsequent to the execution of the contract agreement.

34.4 In case where the Power of Attorney partnership deed has not been executed in English, the true and authenticated copies of the translation of the same by Advocate, authorized translators of Courts and Licensed Petition Writers should be supplied by the Contractor(s) while tendering for the work.

34.5 The duly notarised Power of Attorney shall be submitted in original or duly signed.

**35. Opening of Bids:**

35.1 Bids received from the Bidders shall be opened on due date and time. The opening of the Bids shall be carried out in the physical presence of the designated representatives of RailTel and the Bidders. However, this RFP does not mandate the physical presence of the Bidders. The absence of the physical presence of the Bidders shall in no way affect the outcome of the evaluation of the Bids. During bid opening, only two authorized representatives of each bidder shall be allowed to be present.

35.2 RailTel shall subsequently examine and evaluate the Bids in accordance with the provisions set out in this Chapter.

35.3 To facilitate evaluation of Bids, RailTel may, at its sole discretion, seek clarifications in writing from any Bidder regarding its Bid.

**36. Non-Transferability & Non-Refund ability**

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

**37. Errors, Omissions & Discrepancies**

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

**38. Wrong Information by Tenderer**

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

**39. The envelope shall be addressed to the Purchaser at the following address:**

Deleted

**40. Offer / Bid should be submitted online before due date and time.**

In case the date of opening happens to be a holiday, the tender will be received and opened at the same time on the next working day.

**41. Limitation of Liability**

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

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

**42. Credential Verification**

- 42.1 The tenderer shall submit along with the tender document, documents in support of his/their claim to fulfill the eligibility criteria as mentioned in the tender document. Each page of the copy of documents/ certificates in support of credentials, submitted by the tenderer, shall be self-attested/digitally signed by the tenderer or authorized representative of the tendering firm. Self-attestation shall include signature, stamp and date (on each page). Only those documents which are declared explicitly by the tenderer as “documents supporting the claim of qualifying the laid down eligibility criteria”, will be considered for evaluating his/their tender.
- 42.2 The tenderer shall submit a notarized affidavit on a non-judicial stamp paper stating that they are not liable to the disqualified and all their statements/documents submitted along with bid are true and factual. Standard format of the affidavit to be submitted by the bidder is available in Chapter-6 of this tender document (Form No. 4). Non-submission of an affidavit by the bidder shall result in summary rejection of his/their bid and it shall be mandatory incumbents upon the tenderer to identify, state and submit the supporting documents duly self-attested by which they/he is qualifying the Qualification Criteria mentioned in the tender document. It will not be obligatory on the part of the RailTel to scrutinize beyond the submitted document of tenderer as far as his qualification for the tender is concerned.
  - a. The RailTel reserves the right to verify all statements, information and documents submitted by the bidder in his tender offer, and the bidder shall, when so required by the RailTel, make available all such information, evidence and documents as may be necessary for such verification. Any such verification or lack of such verification, by the RailTel shall not relieve the bidder of its obligations or liabilities here under nor will it affect any rights of the RailTel thereunder.



- b. In case of any wrong information submitted by the tenderer, the contract shall be terminated, Earnest Money Deposit (EMD), Performance Guarantee (PG) and Security Deposit (SD) of contract forfeited and agency barred for doing business on entire RailTel for 5 (five) years.

**43. Mandatory updation of Labour Data on Railway's shramikkalyan portal:**

43.1 Contractor is to abide by the provisions of Payment of Wages Act & Minimum Wages act in terms of clause 54 and 55 of Indian Railways General Condition of Contract. In order to ensure the same, an application has been developed and hosted on website 'www.shramikkalyam.indianrailways.gov.in'. Contractor shall register his firm/company etc. and upload requisite details of labour and their payment in this portal. These details shall be available in public domain. The Registration/updation of Portal shall be done as under:

- (a) Contractor shall apply for onetime registration of his company/firm etc. in the Shramikkalyam portal with requisite details subsequent to issue of Letter of Acceptance. Engineer shall approve the contractor's registration on the portal within 7 days of receipt of such request.
- (b) Contractor once approved by any Engineer, can create password with login ID (PAN No.) for subsequent use of portal for all LoAs issued in his favour.
- (c) The contractor once registered on the portal, shall provide details of his Letter of Acceptance (LoA)/Contract Agreements on shramikkalyan portal within 15 days of issue of any LoA for approval of concerned engineer. Engineer shall update (if required) and approve the details of LoA filled by contractor within 7 days of receipt of such request.
- (d) After approval of LoA by Engineer, contractor shall fill the salient details of contract labours engaged in the contract and ensure updating of each wage payment to them on shramikkalyam portal on monthly basis.
- (e) It shall be mandatory upon the contractor to ensure correct and prompt uploading of all salient of engaged contractual labour & payments made thereof after each wage period.

43.2 While processing payment of any 'On Account bill' or 'Final bill' or release of 'Advances' or Performance Guarantee/Security deposit', contractor shall submit a certificate to the Engineer or Engineer's representatives that "I have uploaded the correct details of contract labours engaged in connection with this contract and payments made to them during the wage period in Railway's Shramikkalyam portal at 'shramikkalyam.indianrailways.gov.in' till \_\_\_\_\_ Month \_\_\_\_\_ Year."

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## CHAPTER-5

## BID DATA SHEET (BDS)

The section consists of provisions that are specific to various Clauses of the tender document COMMERCIAL TERMS & CONDITIONS Chapter 4.

Clause	Description
Clause1.2	Validity of offer 60 days.
Clause2	Warranty  60 months from the Date of System Commissioning (PAC) or 63 months from the date of delivery (Only in case the delay in system commissioning is on the part of consignee) whichever is earlier.
Clause 4	Delivery Period  Delivery and supervision of installation & commissioning within 90 days of issue of LOA/PO.
Clause 12.1.1	<b>Technical Capability</b>  The Tenderer/bidder should be an Original Equipment Manufacturer (OEM) or Authorized partner of OEM specifically authorized by OEM for bidding in this tender. The OEM should have proven facilities for Engineering, manufacture, assembly, integration and testing of offered system and basic facilities with respect to space, Engineering, Personnel, Test equipment, Manufacture, Training, Logistic Supports for at least past three years in the country from where the proposed equipment are planned to be supplied.
Clause 12.1.2	The Tenderer/bidder should have supplied and provision of similar offered TP Infrastructure Solution/ Video Conferencing Solution with satisfactory working as to Government/PSUs/Telecom Service Providers/Public Listed Company during the last three years from the date of opening of tender.
Clause 12.2.1	<b>Financial Criteria</b>  i) The tenderer should have executed order of Supply, installation, testing, commissioning, and maintenance of TP Infrastructure Solution/ Voice/ Video Conferencing Solutions commercially in India during last preceding 3 financial years (i.e. current year plus three previous financial years)  (A) Single order of atleast 35% of tendered value. OR (B) Two orders of atleast 20% each of tendered value. OR (C) Three orders of atleast 15% each of tendered value.  Copy of work orders supported with relevant documentary evidences for the same and the completion certificates by the client. Documentary evidence should clearly indicate the nature of systems implemented for each project.

**RAILTEL/TENDER/OT/CO/ITP/2019-20/Central Infra for TPaaS/500**

Clause	Description
	ii) The sum total of the turnover (i.e. revenue from operations) during the last preceding 3 financial years from the date of opening of tender should be Minimum of Rs. 15.30 Cr.
Clause 16	Purchaser's Right to Vary Quantities  Up to a maximum extent of +/- 30% of SOR quantity.
Clause 20	Earnest Money Deposit (EMD)/ Bid Security  Rs. 6,66,500/- (Rs. Six Lakh Sixty Six Thousand Five Hundred only)
Clause 32	Clarification Requests  Last date of Submission of Clarification Date: 13.11.2019  (Query should be submitted as per format given as Appendix-A. No query received after mentioned date will be entertained)
Clause 32	Pre Bid Meeting  Scheduled on Date: 15.11.2019 at 15:00 Hrs at RailTel Corporate Office East Kidwai Nagar, New Delhi.
Clause 33	Last Date of Submission of Offer  Date: 28.11.2019 Time: 15:00 hours Venue: same as above
Clause 35	Date of Opening of Tender  Date: 28.11.2019 Time: 15:30 hours Venue: same as above

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CHAPTER-6

**Form No. 1**  
**PROFORMA FOR PERFORMANCE BANK GUARANTEE BOND**  
**(On Stamp Paper of Rs one hundred)**

**(To be used by approved Scheduled Banks)**

1. In consideration of the RailTel Corporation of India Limited, having its registered office at 6th Floor, IIIrd Block, Delhi Technology Park, Shastri Park, Delhi-110053 (Herein after called RailTel) having agreed to exempt .....(Hereinafter called “the said Contractor(s)”) from the demand, under the terms and conditions of an Purchase Order No.....dated.....made between.....and..... for (hereinafter called “ the said Agreement”) of security deposit for the due fulfillment by the said Contractor (s) of the terms and conditions contained in the said Agreement, on production of a Bank Guarantee for Rs. ....(Rs ..... only). We ..... (indicate the name of the Bank) hereinafter referred to as “the Bank”) at the request of ..... Contractor(s) do hereby undertake to pay the RailTel an amount not exceeding Rs. .... against any loss or damage caused to or suffered or would be caused to or suffered by the RailTel by reason of any breach by the said Contractor(s) of any of the terms or conditions contained in the said Agreement.
2. We, ..... Bank do hereby undertake to pay the amounts due and payable under this Guarantee without any demur, merely on demand from the RailTel stating that the amount is claimed is due by way of loss or damage caused to or would be caused to or suffered by the RailTel by reason of breach by the said Contractor(s) of any of terms or conditions contained in the said Agreement or by reason of the Contractor(s) failure to perform the said Agreement. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs .....
3. We, ..... bank undertake to pay to the RailTel any money so demanded notwithstanding any dispute or disputes raised by the Contractor(s) / Tenderer(s) in any suit or proceedings pending before any court or Tribunal relating thereto our liability under this present being, absolute and unequivocal. The payment so made by us under this Bond shall be a valid discharge of our liability for payment there under and the Contractor(s) / Tenderer(s) shall have no claim against us for making such payment.
4. We, ..... Bank further agree that the Guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Agreement and that it shall continue to be enforceable till all the dues of the RailTel under or by virtue of the said Agreement have been fully paid and its claims satisfied or discharged or till RailTel certifies that the terms and conditions of the said Agreement have been fully and properly carried out by the said Contractor(s) and accordingly discharges this Guarantee. Unless a demand or claim under the Guarantee is made on us in writing on or before the ..... We shall be discharged from all liability under this Guarantee thereafter.

5. We,..... (indicate the name of Bank) further agree with the RailTel that the RailTel shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the Agreement or to extend time of to postpone for any time or from time to time any of the powers exercisable by the RailTel against the said contractor(s) and to forbear or enforce any of the terms and conditions relating to the said Agreement and we shall not be relieved from our liability by reason of any such variation, or extension to the said Contractor(s) or for any forbearance, act or omission on the part of RailTel or any indulgence by the RailTel to the said Contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have affect of so relieving us.

This Guarantee will not be discharged due to the change in the Constitution of the Bank or the Contractor(s) / Tenderer(s).

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

**Dated the                      day of                      2019**

for .....

(indicate the name of the Bank)

Witness

1.      Signature  
         Name
2.      Signature  
         Name

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Form No. 2  
PROFORMA FOR THE SYSTEM PERFORMANCE GUARANTEE  
(On Stamp Paper of Rs.One hundred)

The Director,  
RailTel Corporation of India Limited

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

(Signature of Firm's Authorized Officer)

Seal

Signature of witness:

1. ....

2. ....

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Form No. 3

PROFORMA FOR THE LONG TERM MAINTENANCE SUPPORT  
(To be signed by the O.E.M.)

To

The Director,  
RailTel Corporation of India Limited

I / We ..... hereby confirm and accept that against RailTel Tender No. ...., there is a requirement of Long Term Maintenance Support as per Clause 3. We confirm that Long Term Maintenance Support shall be met by us directly or through Authorized partner, as the case may be based on contracts. I / We have gone through the requirement mentioned in the Tender document and shall provide services for the offered supply items.

(Signature of Firm's Authorized Officer)  
Seal

Signature of witness:

1. ....
2. ....

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Form No. 4

FORMAT FOR AFFIDAVIT TO BE UPLOADED BY TENDERER ALONG WITH THE TENDER DOCUMENTS

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

I..... (Name and designation)\*\* appointed as the attorney/authorized signatory of the tenderer (including its constituents),  
M/s \_\_\_\_\_ (hereinafter called the tenderer) for the purpose of the Tender documents for the work of \_\_\_\_\_ as per the tender No. \_\_\_\_\_ of (RailTel Corporation of India Ltd.), do hereby solemnly affirm and state on the behalf of the tenderer including its constituents as under:

1. I/we the tenderer (s), am/are signing this document after carefully reading the contents.
2. I/we the tenderer(s) also accept all the conditions of the tender and have signed all the pages in confirmation thereof.
3. I/we hereby declare that I/we have downloaded the tender documents from RailTel/TCIL website [www.railtelindia.com/www.tcil-india-electronictender.com](http://www.railtelindia.com/www.tcil-india-electronictender.com). I/we have verified the content of the document from the website and there is no addition, no deletion or no alternation to be content of the tender document. In case of any discrepancy noticed at any stage i.e. evaluation of tenders, execution of work or final payment of the contract, the master copy available with the RailTel Administration shall be final and binding upon me/us.
4. I/we declare and certify that I/we have not made any misleading or false representation in the forms, statements and attachments in proof of the qualification requirements.
5. I/we also understand that my/our offer will be evaluated based on the documents/credentials submitted along with the offer and same shall be binding upon me/us.
6. I/we declare that the information and documents submitted along with the tender by me/us are correct and I/we are fully responsible for the correctness of the information and documents, submitted by us.
7. I/we undersigned that if the certificates regarding eligibility criteria submitted by us are found to be forged/false or incorrect at any time during process for evaluation of tenders, it shall lead to forfeiture of the tender EMD besides banning of business for five years on entire RailTel. Further, I/we (insert name of the tenderer)\*\* \_\_\_\_\_ and all my/our constituents understand that my/our constituents understand that my/our offer shall be summarily rejected.
8. I/we also understand that if the certificates submitted by us are found to be false/forged or incorrect at any time after the award of the contract, it will lead to termination of the contract, along with forfeiture of EMD/SD and Performance guarantee besides any other action provided in the contract including banning of business for five years on entire RailTel.

DEPONENT  
SEAL AND SIGNATURE

VERIFICATION

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

DEPONENT

SEAL AND SIGNATURE  
OF THE TENDERER

Place:

Dated:

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

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## Appendix-A

## Format for submission of query

SN	Page	Clause no./ Point no.	Original Clause	Query /Requested Changes/ New clause	Reason/Justification

END of Tender Document

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