

### RA Document

RA Details	
RA Technical End Date/Time	29-04-2020 15:00:00
RA Life Cycle (From Publish Date)	90 (Days)
RA Offer Validity (From End Date)	70 (Days)
Ministry/State Name	Ministry Of Railways
Department Name	Na
Organisation Name	N/a
Office Name	Southern Region
Total Quantity	72
Item Category	Layer-3 Distribution Switch,Server
Average Turnover (Last 3 Years)	1182 Lakh (s)
OEM Average Turnover (Last 3 Years)	9454 Lakh (s)
Experience Criteria	1 Year (s)
MSE Exemption For Years Of Experience And Turnover	No
Startup Exemption For Years Of Experience And Turnover	No
Document required from seller	Experience Criteria,Past Performance,Bidder Turnover,Certificate (Requested in ATC),OEM Authorization Certificate,OEM Annual Turnover *In case any bidder is seeking exemption from Experience / Turnover Criteria, the supporting documents to prove his eligibility for exemption must be uploaded for evaluation by the buyer
Primary Product	Server
Past Performance	30 %

### EMD Detail

Advisory Bank	State Bank of India
EMD Percentage(%)	2.00
EMD Amount	4726920

### ePBG Detail

Advisory Bank	State Bank of India
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ePBG Percentage(%)	10.00
Duration of ePBG required (Months).	38

(a). EMD EXEMPTION: The bidder seeking EMD exemption, must submit the valid supporting document for the relevant category as per GeM GTC with the bid. Under MSE category, only manufacturers for goods and Service Providers for Services are eligible for exemption from EMD. Traders are excluded from the purview of this Policy.

(b). EMD & Performance security should be in favour of Beneficiary, wherever it is applicable.

**Beneficiary:**

DGM/DC &TP

RailTel Corporation of India Ltd B-Block , II floor Rail Nilayam , Secunderabad Southern Region, NA, N/A, Ministry of Railways  
(Sanjeeva Kumar)

**Splitting**

RA splitting not applied.

1. Experience Criteria: In respect of the filter applied for experience criteria, the Bidder or its OEM {themselves or through reseller(s)} should have regularly, manufactured and supplied same or similar Category Products to any Central / State Govt Organization / PSU / Public Listed Company for number of years as indicated in the bid document before the bid opening date. Copies of relevant contracts to be submitted along with bid in support of having supplied some quantity during each of the year. In case of bunch bids, the category of primary product having highest value should meet this criterion.

2. OEM Turn Over Criteria: The minimum average annual financial turnover of the OEM of the offered product during the last three years, ending on 31st March of the previous financial year, should be as indicated in the bid document. Documentary evidence in the form of certified Audited Balance Sheets of relevant periods or a certificate from the Chartered Accountant / Cost Accountant indicating the turnover details for the relevant period shall be uploaded with the bid. In case the date of constitution / incorporation of the OEM is less than 3 year old, the average turnover in respect of the completed financial years after the date of constitution shall be taken into account for this criteria.

3. Past Performance: The Bidder or its OEM {themselves or through re-seller(s)} should have supplied same or similar Category Products for 30% of bid quantity, in at least one of the last three years before the bid opening date to any Central / State Govt Organization / PSU / Public Listed Company. Copies of relevant contracts (proving supply of cumulative order quantity in any one year) to be submitted along with bid in support of quantity supplied in the relevant year. In case of bunch bids, the category related to primary product having highest bid value should meet this criterion.

**Layer-3 Distribution Switch ( 12 pieces )**

**Technical Specifications**

[\\* As per GeM Category Specification](#)

Specification	Specification Name	Values	Bid Requirement (Allowed Values)
Generic	<b>No of SFP/SFP+ Ports</b>	48	48
	<b>Type of SFP Port</b>	10G	10G
	<b>Support for 10 G SFP+ Port (Uplink)</b>	Yes	Yes
	<b>Number of 10G SFP+ Port (Uplink)</b>	0	0
	<b>Support for 40G (QSFP+)(Uplink)</b>	Yes	Yes
	<b>No. of 40 G QSFP+ Port (Uplink)</b>	2	2
	<b>Support for 100 G QSFP+ Port (Uplink)</b>	Yes	Yes
	<b>No. of 100 G QSFP+ Port</b>	4	4
	<b>Support for Active Active High Availability</b>	Yes	Yes
	Redundant Power supply	available	*
	Console Port	available	*
	Management Port (RJ 45)	available	*
	No. of FAN Tray	4	*
	No. of Open slot for additional Interface Card	0	*
	Operating System	Available	*
	Stacking Port/Slot from day one	No	*
	Switching Capacity (Non Blocking)(Gbps)	1760	*
	Throughput (MPPS)	1320	*
	Advance Layer-3 Protocol	-	*
	Security Feature	-	*
	Management Protocol	-	*
	QoS	-	*
	Wattage (Watt)	370	*
	Dimension / Form Factor(RU)	1	*
	Operating Temperature	-	*

	Range (Degree C)		
	Operating Humidity (RH) (%)	-	*
	IPv6 Ready from day one and dully certified	Yes	*
	<b>On Site OEM Warranty (Year)</b>	3	3

\* Specifications highlighted in bold are the Golden Parameters.

\* Bidders may note that In respect of non-golden Parameters, the specifications 'Values' chosen by Buyer will generally be preferred over 'Bid requirement ( allowed Values) by the Buyer.

### Additional Specification Documents

#### Consignee/Reporting Officer and Quantity

S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days	
1	Ravi Kumar	500071,2nd Floor, B-Block, RailNilayam, Secunderabad-500071, Telangana.	12	45	N/A

### Server ( 60 pieces )

#### Technical Specifications

[\\* As per GeM Category Specification](#)

Specification	Specification Name	Values	Bid Requirement (Allowed Values)
Chassis	Form Factor	Rack	*
	Size (RU)	2	*
Processor	Processor Architecture	CISC(X86)	*
	<b>Processor Make</b>	Intel	Intel
	<b>Number of Cores per Processor</b>	24	24, 26, 28, 30, 32, 34, 36, 38, 40, 64 Or higher
	<b>Processor Base Frequency (GHz)</b>	2.1	2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9, 3, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 4 Or higher
	Processor Turbo Frequency (GHz)	3.7	*
	<b>Total Cache (L1+L2+L3)(MB)</b>	35.75	35.75 - 64.0 Or higher
	Processor Description/	Intel Xeon Gold 6252	*

	Number		
Motherboard	Chipset compatible with CPU	Intel C621	*
	Expansion Slots Gen 3 (PCIe x1)	0	*
	Expansion Slots Gen 3 (PCIe x4)	0	*
	Expansion Slots Gen 3 (PCIe x8)	5	*
	Expansion Slots Gen 3 (PCIe x16)	2	*
	<b>Maximum number of Sockets available on Server</b>	2	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16 Or higher
	<b>Maximum number of Sockets populated with Processors available on Server</b>	2	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16 Or higher
Co Processor / GPU	<b>Availability of Co Processor /GPU</b>	No	Yes, No Or higher
	If Yes, Maximum Number of Slots available for Co-Processor/GPU	0	*
	If Yes, Maximum Number of slots populated with Co processor/GPU	0	*
	If Yes, Co Processor /GPU Description	NA	*
Memory	<b>Type of RAM</b>	DDR4 SDRAM with ECC	DDR4 SDRAM with ECC
	Total Number of DIMM Slots available	24	*
	Number of DIMM Slots populated with DDR SDRAM	16	*
	Number of DIMM Slots populated with DDR NVRAM	0	*
	<b>DDR SDRAM Size(GB)</b>	1024	1024.0 - 6144.0 Or higher
	<b>DDR NVRAM Size (GB)</b>	0	0.0 - 1600.0 Or higher
	DDR SDRAM upgradable upto using spare DIMM Slots (GB)	512	*
	DDR NVRAM	0	*

	upgradable upto using spare DIMM Slots (GB)		
SSD Storage	<b>Type of Interface for SSD</b>	SAS,M.2/mSATA	SAS, M.2/mSATA
	Type of SATA SSD	Read Intensive	*
	SATA SSD Hot Swappable	No	*
	Endurance for SATA SSD (DWPD - Drive Writes Per Day) (X)	0	*
	Total Number of Slots available for SATA SSD	2	*
	Number of Slot Populated with SATA SSD	2	*
	Capacity offered per SATA SSD (GB)	240	*
	<b>Total Capacity Offered with SATA SSD (GB)</b>	480	More than 480.0 Or higher
	Type of SAS SSD	Mixed Use	*
	SAS SSD Hot Swappable	Yes	*
	Endurance for SAS SSD (DWPD - Drive Writes Per Day) (X)	3	*
	Total Number of Slots available for SAS SSD	2	*
	Number of Slots populated with SAS SSD	2	*
	Capacity Offered per SAS SSD (GB)	3840	*
	<b>Total Capacity Offered with SAS SSD (GB)</b>	7680	More than 7680.0 Or higher
	Type of NVMe SSD	NA	*
	NVMe SSD Hot Swappable	NA	*
	Endurance for NVMe SSD (DWPD - Drive Writes Per Day) (X)	0	*
	Total Number of Slots available for NVMe SSD	0	*
	Number of Slots populated with NVMe SSD	0	*

HDD Storage	Capacity Offered per NVMe SSD (GB)	0	*
	<b>Total Capacity Offered with NVMe SSD (GB)</b>	0	Any applicable numeric value
	<b>Type of Interface for Hard Disk Drive</b>	NL SAS	NL SAS
	Total number of Slots available for SATA Drive	0	*
	Number of Slots populated with SATA Drive	0	*
	Capacity offered per SATA Drive (GB)	0	*
	SATA drive speed (hot plug or better) (RPM)	NA	*
	<b>Total Storage Capacity offered with SATA Drive (GB)</b>	0	More than 0.0 Or higher
	Total number of slots available for SAS drive	0	*
	Number of Slots populated with SAS Drive	0	*
	Capacity offered per SAS Drive (GB)	0	*
	SAS drive Speed (Hot plug or better) (RPM)	NA	*
	<b>Total Storage Capacity offered with SAS Drive (GB)</b>	0	More than 0.0 Or higher
	Total number of slots available for NL SAS drive	10	*
	Number of Slots populated with NL SAS Drive	10	*
	Capacity offered per NL SAS Drive	8000	*
	NL SAS drive speed (hot plug or better) (RPM)	7200	*
	<b>Total Storage Capacity offered with NL SAS Drive (GB)</b>	80000	More than 80000.0 Or higher

RAID	RAID level	1	*
	<b>No of RAID Controller Ports</b>	2	2, 3, 4, 5, 6, 7, 8 Or higher
	<b>Speed of RAID Controller Ports (Gbps)</b>	12	12 Or higher
	RAID Controller Cache (GB)	0	*
Ports & Interfaces	Network Card Supported	1G,10G	*
	<b>Number of Networking Interface Cards (LAN)</b>	3	3, 4, 5, 6, 7, 8 Or higher
	Whether Network Interface Card Embedded	Yes	*
	<b>Number of Ports Per Network Interface Card</b>	2x1G,2x10G RJ 45,4x10G with SFP+	2x10G RJ 45, 2x1G, 4x10G with SFP+
	Networking Interface Card Features	Asset Feature Tracking,Security Management	*
	Server Network Ports should Support SR-IOV Feature	No	*
	Server network ports should support DPDK and it should deliver zero packet loss as per RFC 2544 and deliver 100% line rate for all the packet sizes over 64 Bytes, Vendor to submit latest DPDK test report for the same	No	*
	<b>Number of Single port FC HBA card</b>	2	2, 3, 4 Or higher
	<b>Number of Dual port FC HBA card</b>	0	0, 1, 2, 3, 4 Or higher
	<b>Number of Quad port FC HBA card</b>	0	0, 1, 2, 3, 4 Or higher
	<b>FC HBA Speed (Gbps)</b>	16	16, 32 Or higher
	vHBA Card Features Supported	No	*
	<b>Number of Converged Network Adaptor (CNA)</b>	0	0, 1, 2, 3, 4 Or higher



	<b>Number of Ports per CNA card</b>	NA	Dual Port, Quad Port, NA Or higher
	<b>CNA Port Speed (Gbps)</b>	0	10, 25, 40, 50, 100, 200, 0 Or higher
	<b>Length of LC-LC Cable per SFP+ Port (meter)</b>	10	10, 15 Or higher
	<b>Length of LC-LC Cable per HBA Port (meter)</b>	10	10, 15 Or higher
	<b>Length of LC-LC Cable per CNA Port (meter)</b>	0	5, 10, 15, 0 Or higher
	Length of Twinax Breakout Cables per Port (meter)	0	*
	Video Controller (support VGA or above resolution)	Yes	*
	Keyboard Port	No	*
	Mouse Port	No	*
	DVD ROM (Internal/Exrternal)	Yes	*
	USB Ports (version 2point0/3point0)	4	*
	Total number of Spare Bays Available for Future Upgradation (Internal)	0	*
	Total number of Spare Bays Available for Future Upgradation (Hot Pluggable)	0	*
Certifications	<b>Certifications/Compliance (OS)</b>	Windows,Red Hat Linux,Suse Linux,Ubuntu	Windows, Red Hat Linux, Suse Linux, Ubuntu
	Certification/Compliance (Virtualization/Cloud Platform)	VM ware	*
Features	<b>Management Features-1</b>	Remoter power On/ Shutdown of server,,Remote Management of Server over LAN & WAN with SSL encryption through gigabit management port,,Should have virtual Media support with all required	Remoter power On/ Shutdown of server,, Remote Management of Server over LAN & WAN with SSL encryption through gigabit management port,, Should have virtual Media support with all required

	licenses.,Remote KVM,Server Health Logging,Out of Band Management	licenses., Remote KVM, Server Health Logging, Out of Band Management
Management Features-2	<p>Management of multiple Servers from single console with single source of truth for multiple sites.,Automated infrastructure management for patch upgrades, version upgrades ,etc.,Simplified management with analytics driven actionable intelligence.,System tagging giving admin flexibility to provide metadata tags to each System to enable users to filter and sort systems based on user-assigned attributes,Hardware Profile based deployment to multiple Servers simultaneously,Policy template for deployment of single policy to multiple Servers simultaneously,Platform inventory and health status,Server utilization statistics collection (including firmware updates and diagnostic tools),Should provide an alert in case the system is not part of OEM hardware compatibility test,Solution should be open and programmable providing Rest API, SDK for programming languages like Python , power shell scripts etc.,Should have customizable dashboard to show overall</p>	*

	faults/health/inventory for all managed infrastructure the solution should provide option to create unique dashboards for individual users.the user should be flexibility to select name for dshasboards and widgets (viz. health, utilization etc),Single pane of glass for auto Provisioning across Multi vendor & multi hypervisor platform,Self service portal deployment for automated provisioning,Real-time out-of-band hardware performance monitoring & alerting	
<b>Security Features-1</b>	Secure Boot(Firmware and Bios Level Security),Provision to lock the system on breach,Hardware root of trust/Dual Root of Trust,Server should provide policy based security,Server should provide server intrusion detection,	Secure Boot(Firmware and Bios Level Security), Provision to lock the system on breach, Hardware root of trust/Dual Root of Trust, Server should provide policy based security, Server should provide server intrusion detection,
Security Features-2	Provision for Cryptographic firmware updates,Capability to stop execution of Application/Hyperviser/ Operating System on predefined security breach,Secure /Automatic BIOS recovery,Network Card secure firmware boot,In case of any security breach system should provide the lock down feature	*
Server scalability to be achived within the box & without adding nodes	Yes	*
support for high availability clustering	Yes	*

	and virtualization		
Generic	Redundant Power Supply	Yes	*
	Hot Swappable (Redundant Power Supply)	Yes	*
	<b>Power Supply Efficiency</b>	Platinum	Platinum, Titanium Or higher
	Redundant Fan	Yes	*
	Hot Swappable (Redundant Fan)	Yes	*
	Server Main Supply	230 +/- 10%Vac	*
Benchmark	<b>SPEC int_rate_base 2017 for the product (must be available on SPEC dot ORG before evaluation)</b>	265	More than 265.0 Or higher
	<b>SPEC fp_rate_2017 for the product (must be available on SPEC dot ORG before evaluation)</b>	235	More than 235.0 Or higher
	SPEC int_speed_base 2017 for the product (must be available on SPEC dot ORG before evaluation)	0	*
	SPEC fp_speed_2017 for the product (must be available on SPEC dot ORG before evaluation)	0	*
Miscellaneous	Maximum power consumption of the system (Watts)	1100	*
	BIS Registration under CRS of MeitY	Yes	*
	BIS Registration Number Under CRS of MeitY and its validity	-	*
	Other Certifications Available	UL	*
	RoHS Compliance	Yes	*
	Availability of the type test report from Central Government / NABL / ILAC accredited laboratory covering verification of all	No	*

	features & functional parameters & environmental tests sequence		
	a) Dry heat:test - for 16 hrs at 45 deg C as per IS: 9000/pt-3/sec-5/1977 b) Cold test - for 4 hrs at 0 deg C as per IS: 9000/pt-2/sec-4/1977 c) Damp Heat Cyclic Test - for 2 cycles of 24 hrs at 40 deg C & 95% RH as per IS: 9000/pt-5/sec-1/1981	NA	*
	The server has been checked for all the parameters before conditioning, After completion of the environmental tests sequence, with a recovery period of 1 to 2 hrs, the server found to be functional	NA	*
	Test Report Number & date	-	*
	Name & Address of Lab	-	*
Scope of Supply	Installation and Commissioning shall be included in the scope of supply	Yes	*
Warranty	<b>On Site OEM Warranty (Year)</b>	3	3, 4, 5, 7 Or higher

\* Specifications highlighted in bold are the Golden Parameters.

\* Bidders may note that In respect of non-golden Parameters, the specifications 'Values' chosen by Buyer will generally be preferred over 'Bid requirement ( allowed Values) by the Buyer.

### Additional Specification Documents

### Consignee/Reporting Officer and Quantity

S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days	
1	Ravi Kumar	500071,2nd Floor, B-Block, RailNilayam, Secunderabad-500071, Telangana.	60	45	N/A

## **Bid Specific Additional Terms and Conditions**

1. Availability of Service Centres: Bidder/OEM must have a Functional Service Centre in the State of each Consignee's Location in case of carry-in warranty. (Not applicable in case of goods having on-site warranty). If service center is not already there at the time of bidding, successful bidder / OEM shall have to establish one within 30 days of award of contract. Payment shall be released only after submission of documentary evidence of having Functional Service Centre.
2. Bidder Turn Over Criteria: The minimum average annual financial turnover of the bidder during the last three years, ending on 31st March of the previous financial year, should be as indicated in the bid document. Documentary evidence in the form of certified Audited Balance Sheets of relevant periods or a certificate from the Chartered Accountant / Cost Accountant indicating the turnover details for the relevant period shall be uploaded with the bid. In case the date of constitution / incorporation of the bidder is less than 3 year old, the average turnover in respect of the completed financial years after the date of constitution shall be taken into account for this criteria.
3. Dedicated /toll Free Telephone No. for Service Support : BIDDER/OEM must have Dedicated/toll Free Telephone No. for Service Support.
4. Escalation Matrix For Service Support : Bidder/OEM must provide Escalation Matrix of Telephone Numbers for Service Support.
5. Experience Criteria: The Bidder or its OEM {themselves or through reseller(s)} should have regularly, manufactured and supplied same or similar Category Products to any Central / State Govt Organization / PSU / Public Listed Company for 1 year before the bid opening date. Copies of relevant contracts to be submitted along with bid in support of having supplied some quantity during each of the year. In case of bunch bids, the primary product having highest value should meet this criterion.
6. IMPORTED PRODUCTS: In case of imported products, OEM or Authorized Seller of OEM should have a registered office in India to provide after sales service support in India. The certificate to this effect should be submitted.

### **7. Malicious Code Certificate:**

The seller should upload following certificate in the bid:-

(a) This is to certify that the Hardware and the Software being offered, as part of the contract, does not contain Embedded Malicious code that would activate procedures to :-

- (i) Inhibit the desires and designed function of the equipment.
- (ii) Cause physical damage to the user or equipment during the exploitation.
- (iii) Tap information resident or transient in the equipment/network.

(b) The firm will be considered to be in breach of the procurement contract, in case physical damage, loss of information or infringements related to copyright and Intellectual Property Right (IPRs) are caused due to activation of any such malicious code in embedded software.

8. OPTION CLAUSE: The Purchaser reserves the right to increase or decrease the quantity to be ordered up to 25 percent at the time of placement of contract. The purchaser also reserves the right to increase the ordered quantity by up to 25% of the contracted quantity during the currency of the contract at the contracted rates. Bidders are bound to accept the orders accordingly.
9. OEM Turn Over Criteria: The minimum average annual financial turnover of the OEM of the offered product during the last three years, ending on 31st March of the previous financial year, should be as indicated in the bid document. Documentary evidence in the form of certified Audited Balance Sheets of relevant periods or a certificate from the Chartered Accountant / Cost Accountant indicating the turnover details for the relevant period shall be uploaded with the bid. In case the date of constitution / incorporation of the OEM is less than 3 year old, the average turnover in respect of the completed financial years after the date of constitution shall be taken into account for this criteria. In case of bunch bids, the OEM of CATEGORY RELATED TO primary product having highest bid value should meet this criterion.

10. Pre-dispatch inspection at Seller premises (Fee/Charges to be borne by the BUYER): Before dispatch, the goods will be inspected by Buyer / Consignee or their Authorized Representative or by Nominated External Inspection Agency (independently or jointly with Buyer or Consignee as decided by the Buyer) at Seller premises for their compliance to the contract specifications. Fee/Charges taken by the External inspection Agency and any external laboratories testing charges shall be borne by the Buyer. For in-house testing, the Sellers will provide necessary facilities free of cost. Seller shall notify the Buyer through e-mail about readiness of goods for pre-dispatch inspection and Buyer will notify the Seller about the Authorized Representative/ Nominated External Inspection Agency and the date for testing. The goods would be dispatched to consignee only after clearance in pre-dispatch inspection. Consignee's right of rejection as per GTC in respect of the goods finally received at his location shall in no way be limited or waived by reason of the goods having previously been inspected, tested and passed by Buyer/ Consignee or its Nominated External Inspection Agency prior to the goods' shipment. While bidding, the sellers should take into account 7 days for inspection from the date of email offering the goods for inspection. Any delay in inspection beyond 7 days shall be on the part of the buyer and shall be regularised without Liquidated Damages.
11. Scope of supply (Bid price to include all cost components) : Supply Installation Testing Commissioning of Goods and Training of operators and providing Statutory Clearances required (if any)
12. The Bidder / OEM {themselves or through reseller(s)}, should have executed project for supply and installation / commissioning of same or similar Category Products during preceding 3 financial years (i.e. current year and three previous financial years) as on opening of bid, as per following criteria:
- (i) Single order of at least 35% of estimated bid value; or
  - (ii) Two orders of at least 20% each of estimated bid value; or
  - (iii) Three orders of at least 15% each of estimated bid value.
- Satisfactory Performance certificate issued by respective Buyer Organization for the above Orders should be uploaded with bid. In case of bunch bids, the Category related to primary product having highest bid value should meet this criterion

[This RA is also governed by the General Terms and Conditions](#)

**---Thank You---**