

Annexure-I

SN	Clause no. & Chapter no.	Page No.	Content of the tender Clause	Change asked by firm	Justification by Firm	RailTels Response / Clarification
1	SOR-2 Backup Solution	20	The proposed backup appliance should be provided with dual processors each with a minimum of 24 cores.	The proposed appliance should be provided with 64 cores with dual controllers (minimum).	Asked 24 cores is an entry level device with the ask of a certain amount of memory the CPU requirement should be min 64 Cores so that it can offer best performance as per Memory ask.	Please see Corrigendum-III
2	SOR-2 Backup Solution	20	The appliance should be provided with dual, hot-plug, redundant power supplies.	The appliance should be provided with No single point of failure. It should include dual, hot-plug, redundant power supply, dual controller, colling fans, network ports etc.	No Single point of failure solution should be complete in all aspect and should not be limited to only few parameters.	Please see Corrigendum-III
3	SOR-2 Backup Solution	20	The appliance should be proposed with dual RAID controllers	The appliance should be proposed with No single point of failure. It should have dual power supply, dual RAID controllers, cooling fans, dual controller and multiple network ports etc.	Backup is critical and we recommend appliance/disk storage should not have single point of failure to achieve continuous backup & recovery.	As per tender
4	SOR-2 Backup Solution	20	The proposed backup appliance should offer a cybersecurity solution that include (a) Signature-based and signatureless next-gen machine-learning AV engine. (b) behaviour analysis for ransomware detection and protection with encryption rollback. (c) Category-based application control and whitelisting (d) Peripheral device control and much more	Please explain, what is expected through backup in point (a) and (d).		Please see Corrigendum-III
5	SOR-2 Backup Solution	21	Installation configuration and Management training to be provided by the OEM of supplied product, Solution has to be implemented with HA.	Installation configuration and Management training to be provided by the OEM/bidder of supplied product, Solution has to be implemented with HA.	Request to amend OEM/bidder. Else we recommend to specify number of days and people for OEM training to add up the training units.	As per tender
6	Design Considerations	15	Veeam is the existing incumbent in the Backup Space. It would be recommended to have Backup Solution co-exist with incumbent solution and enhance the backup capacity. However, bidder may propose any other backup solution which needs to be integrated with existing backup solution i.e. Veeam Backup Solution or propose entirely a new backup solution comprising existing and proposed solution capacity	Please help us with current license details and data size for backup		Please see Corrigendum-III
7	5. Data Center Service Requirements:	45	i. Supply, Installation, Configuration, performance Tuning & Integration, Performance Testing, Acceptance Testing, Commissioning and Training of the supplied hardware, Software, network equipment and network software as per Schedule of Requirements.	Kindly Clarify if site readiness for commissioning the components as per Schedule of requirements is out of scope of bidder and will be the sole responsibility of Railtel	This will help us to better assess the cost estimates	As per tender

8	1.1 TEST CATEGORIES	46	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.	Kindly clarify What are the exceptional circumstances in which no need to perform FAT?	This will provide us better clarity	As per tender
9	CHAPTER- 5	76	Clause 4 Delivery Period Supply, installation and commissioning within 180 days of issue of LOA/PO.	Request to please amend the clause as: Delivery within 180 days of issue of LOA/PO, Installation and Commissioning within 60 days of delivery of all SOR items	This will safeguard bidder from any penalties in case of delay in delivery from OEMs due to global chip shortage	As per tender
10	7 - Taxes and Duties - 7.8	57	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 non-payment/default in payment of any of the above taxes, RailTel reserves the right to with-hold the dues/payments of bidder and make payment to state/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	Request to kindly exclude GST from the taxes mentioned in it.	In case of increase in rate of GST due to delay in execution of work by bidder, Railtel would still be eligible to claim ITC of the amount of tax charged by bidder (given all other conditions are satisfied). Thus there would be no GST loss to Railtel in case of delay in execution of work attributable to conditions under the control of bidder. Therefore, the clause should exclude GST from the taxes mentioned in it.	As per tender

11	7 - Taxes and Duties - 7.4	57	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.	If input tax credit is not available to Contractee due to any default attributable to the Bidder/Contractor, the Contractee would intimate the Bidder/Contractor not later than 31st august from the end of FY in which invoice was raised, any discrepancy in respect of input credit and allow Bidder/Contractor to make necessary possible corrections in order to enable Contractee to take the credit. In absence of above intimation, Bidder/Contractor would not be liable for any credit loss to the Contractee and without the above intimation and giving chance for necessary correction, the Bidder/Contractor shall not be liable to indemnify for the same to Contractee.	This will help us in better coordination between Bidder and Contractee	As per tender
12	7 - Taxes and Duties - 7.5	57	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.	If input tax credit is not available to Contractee due to any default attributable to the Bidder/Contractor, the Contractee would intimate the Bidder/Contractor not later than 31st august from the end of FY in which invoice was raised, any discrepancy in respect of input credit and allow Bidder/Contractor to make necessary possible corrections in order to enable Contractee to take the credit. In absence of above intimation, Bidder/Contractor would not be liable for any credit loss to the Contractee and without the above intimation and giving chance for necessary correction, the Bidder/Contractor shall not be liable to indemnify for the same to Contractee.	This will help us in better coordination between Bidder and Contractee	As per tender
13	General - New Clause		Inclusion of Exchange Rate Variation Clause	Request to kindly incorporate foreign exchange variation clause. If there is any variation more than 5% then the likely financial implication has to be borne by procuring entity	This will help safeguard bidder from any unforeseen foreign exchange variation	As per tender

14	9. Liquidated Damages	58	The timely delivery is the essence of this tender. Liquidated damages will be applicable at the rate of half percent (including elements of taxes, duties, freight, etc.) 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.	We would request you kindly limit the maximum LD to the cost of delayed deliverable instead of the total contract value. Amended Clause is as under: The timely delivery is the essence of this tender. Liquidated damages will be applicable at the rate of half percent (including elements of taxes, duties, freight, etc.) per week or part thereof for undelivered portion of SOR subject to a maximum of 10% of the cost of delayed deliverables 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	This will help bidders to limit the risk associated with Liquidated Damages	As per tender
15	25. Force Majeure	69	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.	We would request you to kindly amend the clause as mentioned below: 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. However, RailTel shall pay all the outstanding amount due which have been incurred by the Bidder during the performance of the Contract.	In event of termination of Contract due to occurrence of FM event, Supplier should be entitled to receive all the outstanding payments keeping the Financial interest of the organization in mind.	As per tender

16	26. Settlement of Disputes	69	26.3. The Arbitral Tribunal shall consist of the Sole Arbitrator appointed by CMD/RailTel Corporation of India Limited, if the value of claim is up to Rs. 10 lakhs. If the value of the claim or amount under dispute is more than Rs. 10 Lakhs, the matter shall be referred to the adjudication of arbitral council. Chairman Managing Director (CMD) of RailTel Corporation shall furnish a panel of three names to the contractor, out of which, contractor will recommend one name to be his nominee and then CMD/RailTel shall appoint one name as RailTel's nominee and these two arbitrators with mutual consent shall appoint a third arbitrator who shall act as the deciding arbitrator in terms of Arbitration and Conciliation Act. The award of the sole arbitrator or the Arbitral council, as the case may be, shall be final and binding on both the parties. 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 fulfil their obligation under this Agreement so far as they are reasonably able to do so.	26.3. The Arbitral Tribunal shall consist of the Sole Arbitrator appointed mutually by both the parties CMD/RailTel Corporation of India Limited, if the value of claim is up to Rs. 10 lakhs. If the value of the claim or amount under dispute is more than Rs. 10 Lakhs, the matter shall be referred to the adjudication of arbitral council. Chairman Managing Director (CMD) of RailTel Corporation shall furnish a panel of three names to the contractor, out of which, contractor will recommend one name to be his nominee and then CMD/RailTel shall appoint one name as RailTel's nominee and these two arbitrators with mutual consent shall appoint a third arbitrator who shall act as the deciding arbitrator in terms of Arbitration and Conciliation Act. The award of the sole arbitrator or the Arbitral council, as the case may be, shall be final and binding on both the parties. 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 fulfil their obligation under this Agreement so far as they are reasonably able to do so.	We note that the procedure mentioned for appointment of arbitrator in this clause is not valid as per the current legal position and judgments of the Hon'ble Supreme Court of India as per the Arbitration and Conciliation Act, 1996. We also request you to change the place of arbitration to Delhi. We therefore request you to modify the existing provisions and replace it with suggested changes.	As per tender
17	41. Limitation of Liability:	73	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.	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 applicable purchase order/invoice/scope of work giving rise to such liability. 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.	In order to capture the liabilities of the parties we have modified the said clause as the same is critical from financial as well as legal perspective.	As per tender

18	41.4. (** <i>Incorporation of Confidentiality Clause</i>)		—	Confidentiality: “Confidential Information” for the Purpose of this Contract shall mean any and all proprietary information in written or oral (to be reduced in writing within 14 days of such disclosure) regardless of whether or not the information is expressly stated as ‘confidential’ or the same is implied by the context thereof and/or may be recorded in documentary or digitized form, including but not limited to price sensitive information, information that has commercial value, intellectual property, patents, patents filed, ideas, background information and inventions, procedures, technology, techniques, methods, records, documents, proposals, concepts, ideas, data, know-how, processes, specifications and statistics travel and demonstration schedules and venues and other information and/or any other material so identified or not as confidential by the Disclosing Party disclosing such material to the Recipient Party. All references to Confidential Information in this Contract shall include any part thereof. Notwithstanding the foregoing, a party may disclose the Confidential Information to the	The said clause outlines the terms under which sensitive information will remain privileged and private. It is helpful to ensure that you can hold another party legally responsible if they reveal confidential information to unauthorised individuals.	As per tender
19	SOR -6 - Rack Server S.No. 9 - Disks configured	39	At least 2 nos. of 480 GB flash drive/Read intensive SSD-SATA in mirrored configuration for OS	Request to change the clause as "At least 2 nos. of 480 GB flash drive/Read intensive SSD-SATA / M.2 drives in mirrored configuration for OS"	M.2 Drives are widely used for OS purposes. Hence request to add as an option.	Please see Corrigendum-III
20	SOR -6 - Rack Server S.No. 17 - Configuration & Management	39	Zero-touch repository manager and self-updating firmware system using AI/ML	Request to change the clause as "Zero-touch repository and self-updating firmware"	The Management layer sitting on top of the server ensures zero touch deployment and configuration which also has a auto update feature. Hence request the change.	Please see Corrigendum-III
21	SOR -6 - Rack Server S.No. 17 - Configuration & Management	39	Server management system should provide an alert in case the system is not part of OEM Hardware Compatibility list & should provide anti counterfeit and Server warranty status	Request to change the clause as "Server management system should provide an alert in case the system is not part of OEM Hardware Compatibility list"	Anti Counterfeit is a term which is proprietary to a particular OEM, while the functionality is met by all major OEMs. Hence request the change.	Please see Corrigendum-III

22	SOR 7- SAN Storage-1.	40	The offered storage should be configured with 2 controllers as true symmetric active-active controllers in HA with capability to scale out in future to min 8 controllers (Provisioning of SAN & NAS configuration from day1.) Additional NAS Specs. a. For additional NAS option, solution should have capabilities to add NAS/Gateway/File serving node in active-active architecture for CIFS and NFS connections. b. The NAS/Gateway/File serving node should be purpose-built appliance and should not be a host based or running on general purpose OS or a simple SMB/NFS configured file server. c. Proposed NAS system should have purpose-built hardware acceleration through specialized hardware such as FPGA for superior performance. d. Proposed NAS system should have the capability to tier data to an Object Storage or Cloud natively	The offered storage should be configured with 2 controllers as asymmetric active-active controllers in HA with capability to scale up to 2 PB Usable Capacity. Additional NAS Specs. a. For additional NAS option, solution should have capabilities to add NAS/Gateway/File serving node in active-active architecture for CIFS and NFS connections. b. The NAS/Gateway/File serving node should be purpose-built appliance and should not be a host based or running on general purpose OS or a simple SMB/NFS configured file server. c. Proposed NAS system should have the capability to tier data to an Object Storage or Cloud . d. Proposed NAS gateway should have minimum 128 GB cache.	1. Asymmetric active-active controller is designed to optimize the performance, density, and cost of the storage to deliver all-flash or hybrid configurations. Asymmetric Logical Unit Access (ALUA) implementation allows the system balance the load on controllers as per the application requirement and can redirect IO to the correct SP in the case of a host path failure. 2. Dual controllers on Modern storage are capable of providing asked performance and scalability without addition/upgrade of the controllers. Requesting RailTel to modify the specification to wider participation. 3. FPGA on NAS gateway/controllers are propriety to single OEM. Requesting Railtel to remove clause related to FPGA to enable participation of all leading OEMs. 4. In case Additional gateway/device/appliance is provided for NAS capability, to ensure optimal performance for NAS workload, DRAM Cache requirement must be specified in the	As per tender
23	SOR 7- SAN Storage-8.	41	Storage should be equipped with 32*32 Gbps FC ports, 4*10Gbe port for host connectivity. Required SFPs/Optical Module to be populated from day one. System should have capability to configure 64 FC ports with initial configuration.	Storage should be equipped with 8*32 Gbps FC ports, 8*10Gbe port for host connectivity. Required SFPs/Optical Module to be populated from day one. System should have capability to scale up to 16 x 32Gbps FC ports.	Please modify the requirement to 8 x 32Gbps and 8 x 10GbE ports . it will provide a front end throughput of 336 Gbps which is more than 10 times the throughput required to deliver 4 Lakh IOPS of 8KB Block size.	As per tender
24	SOR 7- SAN Storage-9.	41	The storage system should have minimum 1 TB global cache on the same set of proposed controllers for both reads & writes. Cache memory should be delivered on DRAM, any other device or HDD should not be considered as cache. Cache shall be completely dynamic for read and write operations. System should have capability to scale out to 4 TB.	The storage system should have minimum 768 GB DRAM cache on the same set of proposed controllers for both reads & writes. Cache memory should be delivered on DRAM, any other device or HDD should not be considered as cache. Cache shall be completely dynamic for read and write operations. System should have capability to scale up to 6 TB using flash cache for both read and write operations.	For the asked capacity of 620TB, 768 GB cache is more than enough. Hence, requesting you to modify this requirement. Also, allow the use of flash cache capable to handle both read and write operations for future requirement	As per tender
25	SOR 7- SAN Storage-17.	41	The proposed storage system should support at least 64000 LUNs or volumes.	The proposed storage system should support at least 6000 LUNs or volumes.	It is OEM specific. Requesting you to modify this point. So, that all leading OEMs can participate and offer a standardized solution.	Please see Corrigendum-III

26	SAN Storage		Additional Suggestion	The proposed Storage array should come bundled with FC,iSCSI, NFS, CIFS, SMB, FTP, NDMP Protocols from Day one.	for unified storage requirement, mention of protocols support will ensure that true unified storage is offered to Railtel as per the requirement	As per tender
27	SAN Storage		Additional Suggestion	The proposed storage shall have dual socket CPUs based upon latest generation of Intel family, Minimum Skylake series and shall be supplied with at-least 64 numbers of CPU cores.	Storage performance is highly dependant on the CPU cores and mention of CPU cores ensure that all OEMs will provide the latest and capable storage to Railtel for Cloud setup	As per tender
28	SAN Storage		Additional Suggestion	The Proposed Storage shall include capability with required licenses for protecting files from modification or deletion until a specified retention date to allows customers to create a permanent, unalterable set of files and directories and ensure the integrity of data.	Data security is utmost important currently and capability to protect file workload from modification must be in the proposed storage.	Please see Corrigendum-III
29	SOR-8 - NAS Storage-1-Physical Identification	42	Hardware Form Factor of Storage System (RU)	Request to remove this point.	Requesting you to remove this point.So,that all leading OEMs can participate and offer a standardized solution.	As per tender
30	SOR-8 - NAS Storage-4-Disks	42	Number of Drive Slots Populated with drives of different type in the Storage System-12	Number of Drive Slots Populated with drives of different type in the Storage System-10	For the asked capacity of 64TB, 10 drives of 12 TB are enough in RAID 6 configuration.	As per tender
31	SOR-8 - NAS Storage-4-Disks	42	Total no of drive slot populated with NLSAS-12	Total no of drive slot populated with NLSAS-10	For the asked capacity of 64TB, 10 drives of 12 TB are enough in RAID 6 configuration.	As per tender
32	SOR-8 - NAS Storage-4-Disks	42	Drive Type Wise Storage Capacity of System in GB-10000	Drive Type Wise Storage Capacity of System in GB-12000	10TB drives are not available ,hence requesting you to modify this specification to 12 TB.	Clarification- Bidder may propose higher capacity drive which should not be less than capacity asked in
33	SOR-8 - NAS Storage-7-System Cache	42	Total Configurable Cache (GB)-64	Total Configurable Cache (GB)-128	Since ,Unified storage has been asked with FC, iSCSI, NFS, CIFS protocols.To ensure optimum performance atleast 128GB cache should be asked from Day 1.	Clarification- Bidder may propose higher capacity which should not be less than the capacity asked in tender.
34	SOR-8 - NAS Storage-17- Environmental Parameters	43	Operating Temperature Range- 5 to 40 Storage Temperature Range- 5 to 40 Operating Humidity (Rh)- 8 to 90 Storage Humidity (Rh)- 8 to 90	Operating Temperature Range- 5 to 35 Storage Temperature Range- 5 to 35 Operating Humidity (Rh)- 20 to 80 Storage Humidity (Rh)- 20 to 80	The mentioened range is much beyond the optimal Temperature range for any data centre equipment. Requesting you to modify this point.So, that all leading OEMs can participate and offer a standardized solution.	As per tender
35	SOR-8 - NAS Storage-25.	44	Proposed NAS system should have purpose built hardware acceleration through specialized hardware such as FPGA for superior performance	Request to remove this point.	It is OEM specific.So,that all leading OEMs can participate and offer a standardized solution.	As per tender
36	SOR-8 - NAS Storage-26.	44	Proposed NAS system should have the capability to tier data to an Object Storage or Cloud natively.	Proposed NAS system should have the capability to tier data to an Object Storage or Cloud natively/software-defined solution.	Every storage OEMs provide different ways enable tiering of data to cloud. So requesting you to modify this point so that, that all leading OEMs can participate and offer a standardized solution.	As per tender

37	NAS Storage		Additional Suggestion	The proposed Storage array should come bundled with FC,iSCSI, NFS, CIFS, SMB, FTP, NDMP Protocols from Day one.	For NAS storage requirement, mention of protocols support will ensure that true unified storage is offered to Railtel as per the requirement	As per tender
38	NAS Storage		Additional Suggestion	The Proposed Storage shall include capability with required licenses for protecting files from modification or deletion until a specified retention date to allows customers to create a permanent, unalterable set of files and directories and ensure the integrity of data.	Data security is utmost important currently and capability to protect file workload from modification must be in the proposed storage.	Please see Corrigendum-III
39	Scope of work	16	Bidder has to provision infrastructure e.g., network, security, backup, storage, BCP etc. as per requirement. Configuration and implementation related inputs of DC /DR infrastructure shall be shared with selected bidder.	Need Complete scope of work componentwise and integration scope.(server, storage, Network)	This will help to get the compatibility and right commercial	As per tender
40	Scope of work	16	Vi.Bidder has to ensure that proposed backup Software shall be able to integrate seamlessly with existing Backup solution for a wholistic view and Management. However, bidder may propose the new to backup solution, in case of new backup solution bidder needs to integrate the same with existing backup solution or propose entirely a new backup solution comprising existing and proposed solution capacity.	Pls share the Scope for integrating existing backup Environment	This will help to get the compatibility and right commercial	Please see Corrigendum-III
41	1.1 TEST CATEGORIES	46	Site Acceptance Testing (SAT)	Pls share the Parameters & Pre commissioned Test to be carried out	This will help to build the scope of work and right commercial	As per tender
42	1.1 TEST CATEGORIES	46	Trial Run / Field Trials.	Pls share the Parameters & Pre commissioned Test to be carried out	This will help to build the scope of work and right commercial	As per tender
43	1.1 TEST CATEGORIES	46	Pre-commissioning test (after installation) for total integrated system	Pls share the Parameters & Pre commissioned Test to be carried out	This will help to build the scope of work and right commercial	As per tender
44	FINAL ACCEPTANCE CERTIFICATE	50	FINAL ACCEPTANCE CERTIFICATE (	Pls share the Parameters & Pre commissioned Test to be carried out	This will help to build the scope of work and right commercial	As per tender
45	Training	44	OEM Training	Pls share the Topics, No of people, location & no of days training required. Any certifications is required?	This will help to build the scope of work and right commercial	As per tender
46	SOR-2 Backup Solution; S/N 2	19	The proposed appliance should be provided with a minimum of 1 TB RAM.	Pls remove	Different OEMs have different Architecture & way of representation, we do not show RAM provided in backup appliance but meet all performance requirement, hence request you to pls remove this point for larger participation.	As per tender

47	SOR-2 Backup Solution; S/N 3	20	The proposed backup appliance should be provided with dual processors each with a minimum of 24 cores.	The proposed backup appliance should be provided with dual processors each with a minimum of 24 cores or required cores to meet the backup windows and required performance.	Different OEMs have different Architecture & way of representation, we do not show cores offered in backup appliance but meet all performance requirement, hence request you to pls remove this point for larger participation.	Please see Corrigendum-III
48	SOR-2 Backup Solution; S/N 5	20	The proposed appliance should be provided with a mix of NVMe SSD and SAS Disks	The proposed appliance should be provided with NVMe SSD /SAS/NL-SAS Disks	As this is a Backup requirement, required backup window can be achieved by using NL-SAS also. Request you to pls remove this point for larger participation.	As per tender
49	SOR-2 Backup Solution; S/N 7	20	On-site Hardware support in as little as 4 hours	On-site Hardware support in as little as 6 hours to resolve issue	Pls specify time to resolve the issue.	As per tender
50	SOR-2 Backup Solution; S/N 43	21	The Appliance should provide minimum 16Gb FC connectivity to either connect it to a SAN Switch or connect it with a tape library to provide tape-out features.	The Appliance should provide minimum 32Gb FC connectivity to either connect it to a SAN Switch or connect it with a tape library to provide tape-out features.	32Gb is latest technology available with all OEMs.	As per tender
51	SOR-6 - Rack Server	39	RAID Controller 12 Gbps PCIe 3.0 with RAID 1, 5, 6,10, 50 with at least 8 GB cache	Modify clause as "RAID Controller 12Gbps PCIe 3.0 with RAID 1, 5, 6,10, 50 with at least 4 GB cache"	RAID card with 8 GB cache is not offered by all server OEMs. Request you to pls modify this point for larger participation.	Please see Corrigendum-III
52	SOR-2 Backup Solution	19	The proposed appliance should be provided with a minimum of 1 TB RAM.	The proposed appliance should be provided with a minimum of 700 GB RAM.	Considering the backup solution environment 700 GB RAM is good enough to meet the solution demand	As per tender
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59	NEW		NEW	Proposed solution should have feature to migrate VMware VM to OVM, Hyper-V, Nutanix.	Migration/conversion helps to bring up the business quickly in available environment.	As per tender
60	7.2.2 Firewall-Type-1	140	Must support at least 7,000,000 or more concurrent connections	Request to change clause as "Must support at least 32,000,000 or more concurrent connections"	Compare to Connection per sec Concurrent connection is very lower sized, it may lead to the performance issue. Hence request to chan	As per tender
61	7.2.2 Firewall-Type-2	142	Must support at least 7,000,000 or more concurrent connections	Request to change clause as "Must support at least 32,000,000 or more concurrent connections"	Compare to Connection per sec Concurrent connection is very lower sized, it may lead to the performance issue. Hence request to chan	As per tender
62	7.2.2 Firewall-Type-2	145	Should support 12 or more gigabit RJ45 interfaces	Request to change clause as "Should support 8 or more gigabit RJ45 interfaces"	This clause is favoring single OEM and providing undue commercial advantage to single OEM. Hence request to amend this clause for maximum OEM participation	As per tender
63	SOR-2 Backup Solution	19	The proposed appliance should be provided with a minimum of 1 TB RAM.	The proposed appliance should be provided with a minimum of 700 GB RAM.	Considering the backup solution environment 700 GB RAM is good enough to meet the solution demand	As per tender
64	SOR-2 Backup Solution	20	The proposed backup appliance should be provided with dual processors each with a minimum of 24 cores.	The proposed appliance should be provided with 64 cores with dual controllers (minimum).	Asked 24 cores is an entry level device with the ask of a certain amount of memory the CPU requirement should be min 64 Cores so that it can offer best performance as per Memory ask.	Please see Corrigendum-III
65	SOR-2 Backup Solution	20	The appliance should be provided with dual, hot-plug, redundant power supplies.	The appliance should be provided with No single point of failure. It should include dual, hot-plug, redundant power supply, dual controller, cooling fans, network ports etc.	No Single point of failure solution should be complete in all aspect and should not be limited to only few parameters.	Please see Corrigendum-III
66	SOR-2 Backup Solution	20	The appliance should be proposed with dual RAID controllers	The appliance should be proposed with No single point of failure. It should have dual power supply, dual RAID controllers, cooling fans, dual controller and multiple network ports etc.	Backup is critical and we recommend appliance/disk storage should not have single point of failure to achieve continuous backup & recovery.	As per tender

67	SOR-2 Backup Solution	20	The proposed backup appliance should offer a cybersecurity solution that include (a) Signature-based and signatureless next-gen machine-learning AV engine. (b) behaviour analysis for ransomware detection and protection with encryption rollback. (c) Category-based application control and whitelisting (d) Peripheral device control and	Please explain, what is expected through backup in point (a) and (d).		Please see Corrigendum-III
68	SOR-2 Backup Solution	21	Installation configuration and Management training to be provided by the OEM of supplied product, Solution has to be implemented with HA.	Installation configuration and Management training to be provided by the OEM/bidder of supplied product, Solution has to be implemented with HA.	Request to amend OEM/bidder. Else we recommend to specify number of days and people for OEM training to add up the training units.	As per tender
69	Design Considerations	15	Veeam is the existing incumbent in the Backup Space. It would be recommended to have Backup Solution co-exist with incumbent solution and enhance the backup capacity. However, bidder may propose any other backup solution which needs to be integrated with existing backup solution i.e. Veeam Backup Solution or propose entirely a new backup solution comprising existing and proposed solution capacity	Please help us with current license details and data size for backup		Corrigendum-Deleted
70	NEW		NEW	Proposed solution should have feature to migrate VMware VM to OVM, Hyper-V, Nutanix.	Migration/conversion helps to bring up the business quickly in available environment.	As per tender
71	SOR-2 Backup Solution	19	The proposed appliance should be provided with a minimum of 1 TB RAM.	The proposed appliance should be provided with a minimum of 700 GB RAM.	Considering the backup solution environment 700 GB RAM is good enough the meet the solution demand	As per tender
72	SOR-2 Backup Solution	20	The proposed backup appliance should be provided with dual processors each with a minimum of 24 cores.	The proposed appliance should be provided with 64 cores with dual controllers (minimum).	Asked 24 cores is an entry level device with the ask of a certain amount of memory the CPU requirement should be min 64 Cores so that it can offer best performance as per Memory ask.	Corrigendum The proposed backup appliance should be provided with dual processors each with a minimum of 64 cores.
73	SOR-2 Backup Solution	20	The appliance should be provided with dual, hot-plug, redundant power supplies.	The appliance should be provided with No single point of failure. It should include dual, hot-plug, redundant power supply, dual controller, colling fans, network ports etc.	No Single point of failure solution should be complete in all aspect and should not be limited to only few parameters.	Corrigendum- The appliance should be provided with dual, hot-plug, redundant power supplies and dual controller etc. There should be no single point of failue in the proposed solution.
74	SOR-2 Backup Solution	20	The appliance should be proposed with dual RAID controllers	The appliance should be proposed with No single point of failure. It should have dual power supply, dual RAID controllers, cooling fans, dual controller and multiple network ports etc.	Backup is critical and we recommend appliance/disk storage should not have single point of failure to achieve continuous backup & recovery.	As per tender

75	SOR-2 Backup Solution	20	The proposed backup appliance should offer a cybersecurity solution that include (a) Signature-based and signatureless next-gen machine-learning AV engine. (b) behaviour analysis for ransomware detection and protection with encryption rollback. (c) Category-based application control and whitelisting (d) <u>Peripheral device control and much more</u>	Please explain, what is expected through backup in point (a) and (d).		Corrigendum- The proposed backup appliance should offer a cybersecurity solution that include behaviour analysis for ransomware detection and protection with encryption rollback and integration with all major antivirus engions.
76	SOR-2 Backup Solution	21	Installation configuration and Management training to be provided by the OEM of supplied product, Solution has to be implemented with HA.	Installation configuration and Management training to be provided by the OEM/bidder of supplied product, Solution has to be implemented with HA.	Request to amend OEM/bidder. Else we recommend to specify number of days and people for OEM training to add up the training units.	As per tender
77	Design Considerations	15	Veeam is the existing incumbent in the Backup Space. It would be recommended to have Backup Solution co-exist with incumbent solution and enhance the backup capacity. However, bidder may propose any other backup solution which needs to be integrated with existing backup solution i.e. Veeam Backup Solution or propose entirely a new backup solution comprising existing and proposed solution capacity	Please help us with current license details and data size for backup		Please see Corrigendum-III
78	NEW		NEW	Proposed solution should have feature to migrate VMware VM to OVM, Hyper-V, Nutanix.	Migration/conversion helps to bring up the business quickly in available environment.	As per tender
79	Rack Server, SOR-6	38	S/N 1. General Requirement, Pt. 3. Server should be SAP HANA certified	We request Railtel to amend this clause to - Pt. 3. Server should be support SAP HANA	The bid is reserved for Make in India, the given Clause restrict Make in India OEM to participate, hence requested to amend this clause	As per tender
80	Rack Server, SOR-6	38	S/N 1. General Requirement, Pt. 4. erver Vendor should be under Gartner leaders Magic quadrant in last available report	We request Railtel to remove this clause	The given clause is restructive condition as per Make in India Policy hence requested to remove this clause	As per tender
81	Rack Server, SOR-6	39	S/N 7. Configuration ad Management, Pt. 4(iii). Server management system should provide an alert in case the system is not part of OEM Hardware Compatibility list & should provide anti counterfeit and Server warranty status	We request Railtel to remove this clause	The feature is available with only few foreign OEM's and will restrict the participation defeating purpose of Open Tender,	As per tender
82	12.1. Eligibility Criteria for Bidder: 5. Bidder Type	61	The Bidder or their promoters having equity stake or operating partnership in D127bidder, should not be holding valid License for Telecom service provider/ISP/ NLD, Services License of Government of India for Telecom Operation.	This clause may be deleted	The clause is resterective to bidders. Thus, for wider participation and competetive bidding the clause may be deleted.	As per tender
83	SOR-6 - Rack Server					

84	General Requirement		Proposed Server should support Software Defined Storage, Virtual SAN for all major cloud technologies like VMware Cloud, RedHat Cloud, Nutanix cloud etc.	Proposed Server should support Software Defined Storage, using Virtual SAN.	Please modify as most of the vendors are not supported for Nutanix cloud etc.	As per tender
85			Security: Server should support Hardware (Silicon) root of trust, cryptographically signed firmware, Secure Boot, Secure Erase and System Lockdown features bundled from Day 1.			As per tender
86			SAP Certification: Server should be SAP HANA certified	Please delete this clause	For SAP HANA, there are multiple criterias which needs to be fulfilled. Requesting to remove this and mention CPU benchmarking instead.	As per tender
87			Server Vendor should be under Gartner leaders Magic quadrant in last available report.	Please delete this clause	This is required for wider participation	As per tender
88	Chipset		Intel C620 series or higher			As per tender
89	Form Factor		Max. 2U rack mounted with sliding rails. (As per RailTel Rack design)	Max. 2U rack mounted with sliding rails.	Existing Railtel design is not sure as it may be specific to certain OEM's. Please mention to factor servers with required sliding rails.	As per tender
90	CPU		Configured CPU Should be populated with 2 Nos. of Intel Xeon GOLD CPU architecture or latest, each CPU should be 24 core and 2.4GHz or better.	Configured CPU Should be populated with 2 Nos. of latest generation Intel Xeon GOLD CPU, each CPU should be 24 core and 2.4GHz or better.	Its been approx. 2 years since Intel has released 3rd generation ICELAKE processors. Requesting to modify so that each OEM, proposes the server with latest generation processor.	Please see Corrigendum-III
91	RAID Controller		12Gbps PCIe 3.0 with RAID 1, 5, 6,10, 50 with at least 8 GB cache	12Gbps PCIe 3.0 with RAID 1, 5, 6,10, 50 with at least 4 GB cache	Current specs are specific to one OEM, Please change this for wider participation.	Please see Corrigendum-III
92	HTML5 support		HTML5 support for virtual console & virtual media without using Java or ActiveX plugins	HTML5 support for virtual console & virtual media	Please remove "without using Java or ActiveX plugins" for wider participation	As per tender
93			Installation configuration and Management training to be provided by the OEM of supplied product.	Installation configuration and Management training to be provided by the OEM/Bidder of supplied product.	Please add Bidder also.	As per tender
94						
95	SOR-09-SAN Switch		The switch should have USB port for firmware download, support save, and configuration upload/download. Switch should support bi-directional airflow	The switch should have USB port for firmware download, support save, and configuration upload/download.	Please remove " Switch should support bi-directional airflow " for wider participation	As per tender
96						
97	SOR-1-Secure Remote Access VPN		<u>Original Clause</u>	Changed Clause	Justification	
98	SOR-1-Secure Remote Access VPN		The appliance should have multicore CPU, 64GB RAM, minimum 4TB HDD and dual power supply.	The appliance should have multicore CPU, 128GB RAM, minimum 800 HDD and dual power supply.	Current clause is favouring a particular OEM and hence requesting change for wider participation	As per tender
99	SOR-1-Secure Remote Access VPN		The appliance should support 40 K RSA SSL TPS for 2048 key and 25K ECC SSL TPS	Remove this	Current clause is favouring a particular OEM and hence requesting change for wider participation	As per tender

100	SOR-1-Secure Remote Access VPN		The solution must Support 5000 concurrent users from day1 and scalable up to 25000 concurrent users on same appliance.	The solution must Support 5000 concurrent users from day1 and scalable up to 20,000 concurrent users on same appliance.	Current clause is favouring a particular OEM and hence requesting change for wider participation	As per tender
101	SOR-1-Secure Remote Access VPN		The solution must be in high availability mode with Active-Active and Active- Standby clustering feature. It should support standard VRRP for high availability.	The solution must be in high availability mode with Active-Active and Active- Standby clustering feature. It should support standard VRRP or equivalent for high availability.	Current clause is favouring a particular OEM and hence requesting change for wider participation	Please see Corrigendum-III
102	SOR-1-Secure Remote Access VPN		The solution should be 100% client less for web-based applications	The solution should be client less or client for web-based applications	Current clause is favouring a particular OEM and hence requesting change for wider participation	As per tender
103	SOR-1-Secure Remote Access VPN		The solution should support on demand provisioning of L3 VPN client using ActiveX or JAVA applet, standalone and command line L3 VPN client support	The solution should support on demand provisioning of L3 VPN client	Current clause is favouring a particular OEM and hence requesting change for wider participation	As per tender
104	SOR-1-Secure Remote Access VPN		The solution should be able to enforce data leakage protection policies for secure VDI to allow/deny copy-paste, clipboard, drive, port and print redirection	Remove this	Current clause is favouring a particular OEM and hence requesting change for wider participation	As per tender
105	SOR-1-Secure Remote Access VPN		The solution should have provision to define L4 tunnel policies based on destination ip address, destination subnet and application executable.	The solution should have provision to define L4 tunnel policies based on destination ip address, destination subnet and application	Current clause is favouring a particular OEM and hence requesting change for wider participation	As per tender
106	SOR-1-Secure Remote Access VPN		The solution should support desktop publishing on IOS and Android phones along with device ID based authorization	The solution should support desktop publishing on IOS and Android phones	Current clause is favouring a particular OEM and hence requesting change for wider participation	As per tender
107	SOR-1-Secure Remote Access VPN		The solution should support enterprise Appstore for android and IOS phones	The solution should support enterprise Appstore for android and IOS phones	Current clause is favouring a particular OEM and hence requesting change for wider participation	As per tender
108	SOR-1-Secure Remote Access VPN		The solution should support SDK for IOT devices	The solution should support SDK/API for IOT devices	Current clause is favouring a particular OEM and hence requesting change for wider participation	Please see Corrigendum-III
109	SOR-1-Secure Remote Access VPN	3	The solution should be able to restrict the users logins based on Hard disk ID, MAC address, CPU ID and OS ID combinations and custom checks.	Remove this	Current clause is favouring a particular OEM and hence requesting change for wider participation	As per tender
110	SOR-1-Secure Remote Access VPN	5	The solution must provide machine authentication based on combination of HDD ID, CPU info and OS related parameters i.e., mac address to provide secure access to corporate resources.	Remove this	Current clause is favouring a particular OEM and hence requesting change for wider participation	As per tender
111	SOR-1-Secure Remote Access VPN	9	The solution should provide provision for auto collect, auto approve functions for automated collection and approval of hardware ID's without any manual intervention.	Remove this	Current clause is favouring a particular OEM and hence requesting change for wider participation	As per tender

112	SOR-1- Secure Remote Access VPN	10	The solution must support workflow functionality that should allow security administrators to approve end user hardware machine before users can access the published resources.	Remove this	Current clause is favouring a particular OEM and hence requesting change for wider participation	As per tender
113	SOR-1- Secure Remote Access VPN		The solution should provide option bind hardware ID's with group In addition to hardware ID mapping with users,	Remove this	Current clause is favouring a particular OEM and hence requesting change for wider participation	As per tender
114	SOR-1- Secure Remote Access VPN	11	The solution should have support SSH CLI, Direct Console CLI, SNMP, single console connection for Cluster, Web GUI, XML RPC for management	The solution should have support SSH CLI, Direct Console CLI, SNMP, single console connection for Cluster	Current clause is favouring a particular OEM and hence requesting change for wider participation	As per tender
115	SOR-1- Secure Remote Access VPN		Forgot Password Option: The solution should allow users to change their password (1st Level), in case they forgot it or want to make new, through option of 'Forgot Password' or through publishing the external link on login page.	Remove this	Current clause is favouring a particular OEM and hence requesting change for wider participation	As per tender
116	SOR-1- Secure Remote Access VPN		Seamless Experience while switching from Client to Browser or vice versa : The user should not face any difference in experience while using VPN through client or browser. e.g. if DSC or any third party services are seamlessly allowed over client, same should be the case for Browser based access also and vice-versa.	Remove this	Current clause is favouring a particular OEM and hence requesting change for wider participation	As per tender
117	SOR-1- Secure Remote Access VPN		End Point Control : Should allow to set policy for access e.g. MAC binding, Mother Board ID/ CPU ID/IMEI No. or any other unique IDs of an electronic device and universally accepted. The solution should also to enable access from a defined geography (location), traffic from a mentioned Public IP and push alert to End User if logging is happening from outside of defined parameters. Solution should also allow to define 'Session Time' and accordingly forceful logout due to long idle session	Remove this	Current clause is favouring a particular OEM and hence requesting change for wider participation	As per tender
118	SOR-1- Secure Remote Access VPN		End Point Hygiene Status : Solution should allow to place policy for conditional access, in case end point has not benchmark cyber-hygiene i.e. Anti-virus / Anti- malware installed and operational.	Remove this	Current clause is favouring a particular OEM and hence requesting change for wider participation	As per tender
119	SOR-1- Secure Remote Access VPN	14	Self-Service Portal: The solution should allow RailTel as well as Admin of End User Organization to add / delete / ration end users basis on parameters as mutually agreed between RailTel and End User Organization.	Remove this	Current clause is favouring a particular OEM and hence requesting change for wider participation	As per tender

120	SOR-1- Secure Remote Access VPN		Time based access for Users: Solution should auto-deactivate an end user or set of end users after expiry of time period as set by central Admin i.e. by RailTel. Further, the solution should allow to increase the expiry period at any point of time or even after the account is auto deactivated, to restore the access for the respective end users.	Remove this	Current clause is favouring a particular OEM and hence requesting change for wider participation	As per tender
121	SOR-1- Secure Remote Access VPN	15	End Point binding through MAC Address, Device ID or other parameters.	Remove this	Current clause is favouring a particular OEM and hence requesting change for wider participation	As per tender
122		17				
123		17	Features	Specification	Change Clause	
124	SOR-4 - Firewall		Architecture	Licensed features must be enabled for chassis and not for blade/module. We will only procure the hardware modules for scalability if required in future and not the license/subscription. The newly procured module must sync/consume the same license i.e license provided at day 1 during the solution proposition. In case of module-based licensing the bidder must propose license with fully populated chassis and propose hardware modules only to match the current throughput ask.	Licenses should be provided for a fully loaded chassis from Day 1	As per tender
125	SOR-4 - Firewall	18	3rd Party Test Certification	The proposed vendor must be in the Leader's quadrant of the Enterprise Next Generation Firewalls Gartner Magic Quadrant.	The proposed vendor must be in the Leader's or Challenger quadrant of the Enterprise Next Generation Firewalls Gartner Magic Quadrant.	As per tender
126	SOR-4 - Firewall	21	Storage	Min 200+ GB SSD in Raid 1 for system and at least 3 TB for Logging capability.	Min 800+ GB SSD in Raid 1 for system and logging	As per tender
127	SOR-4 - Firewall		Interface Requirement	NGFW must offer 10 x 10Gig SFP/SFP+ ports with respective SR transceivers from day one & minimum of 4 x 40G/100G QSFP ports populated from day one.	NGFW must offer 8 x 10Gig SFP/SFP+ ports with respective SR transceivers from day one & minimum of 4 x 40G/100G QSFP ports populated from day one.	As per tender
128	SOR-4 - Firewall	23		NGFW must have dedicated 2 x HA ports (in addition to requested data ports). Should have separate OOB, Console Management and USB Port	NGFW must have dedicated OOB, Console Management and USB Port	As per tender

129	SOR-4 - Firewall		Performance Capacity	Minimum Threat prevention throughput in real world/production/Application Mix environment (by enabling and measured with Application-ID/AVC, User-ID/Agent-ID, NGIPS, Anti-Virus, Anti-Spyware, zero day attack prevention and file blocking security threat prevention features and logging enabled should be 32 Gbps considering 64 KB transaction size. The bidder shall submit the public data sheet/performance test report reference from public documents or from Global Product Engineering department / Global Testing Department/ Global POC team of OEM certifying the mentioned performance.	Minimum Threat prevention throughput in real world/production/Application Mix environment (by enabling and measured with Application-ID/AVC, User-ID/Agent-ID, NGIPS, Anti-Virus, Anti-Spyware, zero day attack prevention and file blocking security threat prevention features and logging enabled should be 30 Gbps considering 1024B TCP size. The bidder shall submit the public data sheet/performance test report reference from public documents or from Global Product Engineering department / Global Testing Department/ Global POC team of OEM certifying the mentioned performance.	As per tender
130	SOR-4 - Firewall			Should support minimum of 12000 IPSEC VPN from Day 1.	Should support minimum of 20000 IPSEC VPN from Day 1.	As per tender
131	SOR-4 - Firewall			IPsec VPN throughput – 25 Gbps considering 64KB transaction size.	IPsec VPN throughput – 15 Gbps	As per tender
132	SOR-4 - Firewall			New Layer 7 sessions per second – Minimum 350,000 from day 1.	New Layer 7 sessions per second – Minimum 150,000 from day 1.	As per tender
133	SOR-4 - Firewall			Concurrent sessions – Min 5 Million layer 7 sessions from day1.	Concurrent sessions – Min 5 Million layer 7 sessions from day1.	As per tender
134	SOR-4 - Firewall		Next Generation Firewall Features	Next Generation Firewall must have inbuilt Automatic policy optimization to identify port-protocol based policies and convert the same into true application based policies. For example- Next Generation Firewall is configured with Security policy to allow port 80/443 and multiple applications traffic going through the same policy, then the Next Generation Firewall should automatically identify those risky applications and help to add more application specific security policies which might be using the same ports (80/443). This will help to tighten the application flow control and reduce the attack surface area.	Remove this	As per tender
135	SOR-4 - Firewall			Solution must offer the ability to manage Next Generation Firewall security policy even if centralized management server is unavailable/down.	Solution must not degrade network performance and create traffic interruption if centralized management server is unavailable/down.	As per tender

136	SOR-4 - Firewall		Threat Protection	Proposed NGFW Firewall to have integrated IPS & Threat Prevention capabilities with minimum 20000+ signature database. It should support importing signatures from Third party tools, customing IPS signature and creation of multiple IPS policy for different segments and zones	Proposed NGFW Firewall to have integrated IPS & Threat Prevention capabilities with minimum 40000+ signature database available from day 1 (excluding custom signatures) It should support importing signatures from Third party tools, customing IPS signature and creation of multiple IPS policy for different segments and zones	As per tender
137	SOR-4 - Firewall		Advanced Persistent Threat (APT) Protection	Requirement for APT solution from day-1 with following features. There should be option (if required) for both on premise and public cloud base unknown malware analysis service with guaranteed protection signature delivery time not more than 5 minutes and solution should be supplied with public cloud based solution from Day 1.	Requirement for APT solution from day-1 with following features. There should be option (if required) for both on premise and public cloud base unknown malware analysis service with guaranteed protection signature delivery time not more than 5 minutes and solution should be supplied with public cloud based solution from Day 1.	As per tender
138	SOR-4 - Firewall		Advanced Persistent Threat (APT) Protection	The solution must be able to use AV and zero day signatures based on payload and not just by hash values. The advanced malware analysis (malware sandboxing) solution must have MacOS and Linux executable scanning by default.	Remove this	As per tender
139	SOR-4 - Firewall			The protection signatures created base unknown malware emulation should be payload or content base signatures that could block multiple unknown malware that use different hash but the same malicious payload.	Remove this	As per tender
140	SOR-4 - Firewall		Decryption	The proposed Next Generation Firewall shall be able to identify, decrypt and evaluate SSH Tunnel traffic in an inbound and outbound connections	Remove this	As per tender
141	SOR-4 - Firewall		Routing and Multicast support	The proposed Next Generation Firewall must have support for mobile protocols like GTP, SCTP and support for termination of GRE Tunnels	Remove this	As per tender
142	SOR-4 - Firewall			Proposed solution must support VPN Tunnel Interfaces as well as GRE tunnels.	Remove this	As per tender
143	SOR-4 - Firewall		Monitoring, Management and Reporting	It should be able to configure, manage and monitor NGFW using CLI and GUI both without central management solution. Should have full feature parity of centralized management tool on the Next Generation Firewall itself, in case there is any connectivity issues between Next Generation Firewall and central management tool or failure in central management tool	Remove this	As per tender

144	SOR-4 - Firewall			The proposed solution must allow single policy rule creation for application control, user-based control, host profile, threat prevention, Anti-virus, file filtering, content filtering, QoS and scheduling at single place within a single rule and not at multiple locations. There must not be different places and options to define policy rules based on these parameters.	The proposed solution must allow policy rule creation for application control, user-based control, host profile, threat prevention, Anti-virus, file filtering, content filtering, QoS and scheduling at single place within a single rule and not at multiple locations.	As per tender
145	SOR-4 - Firewall			There should be provision to permanently block the export of private keys for certificates that have been generated or imported to harden the security posture in order to prevent rogue administrators from misusing keys.	Remove this	As per tender
146	SOR-4 - Firewall			Solution must have capabilities: i. Unused Rules Calculation for specific time period based on Firewall Traffic Logs. ii. Analysis on Covered/Shadow/Hidden Rules iii. Analysis on Rules Consolidation (Merging of similar kind of rules) iv. Analysis on Redundant Rules v. Tightening of Overly Permissive Rules (Any-Any) vi. Analysis on Unattached/Unused Objects to simplify objects management vii. Analysis on Rule-Reordering to improve the performance of the Firewall viii. Analysis on Disabled/Expired Rules for enhanced visibility on the Firewall Rules sets	Remove this	As per tender
147	SOR-4 - Firewall			The Proposed NGFW solution must have policy lock option in case of multiple admins working and logging at the same time. Next Generation Firewall must allow multiple session from the same user ID without disconnecting the existing session. This is required to ensure integration with privileged identity management solutions.	The Proposed NGFW solution must have allow multiple admins working and logging at the same time.	As per tender
148	SOR-5:		Antivirus as per Technical Specification given in Chapter-3A.	This specification is aligned to one OEM.	Moreover Railtel is already using EDR solution, which is contradictory to use Antivirus . Our recommendation to use EDR solution compared to Antivirus and expand with EDR solution.	As per tender