

RA Document

RA Details	
RA Technical End Date/Time	24-01-2020 17:00:00
RA Life Cycle (From Publish Date)	90 (Days)
RA Offer Validity (From End Date)	50 (Days)
Ministry/State Name	Ministry Of Information And Broadcasting
Department Name	Na
Organisation Name	Prasar Bharati Broadcasting Corporation Of India
Office Name	Office Of Adg(e) North Zone All India Radio And Doordarshan
Total Quantity	24
Item Category	Firewall - NGFW,Layer-3 Core Switch,Router,web application firewall,Storage System,SAN Switch,Server
Experience Criteria	3 Year (s)
MSE Exemption For Years Of Experience And Turnover	Yes
Startup Exemption For Years Of Experience And Turnover	No
Document required from seller	Experience Criteria,OEM Authorization Certificate *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	Storage System

EMD Detail

Advisory Bank	State Bank of India
EMD Percentage(%)	2.00
EMD Amount	1110758

ePBG Detail

Advisory Bank	State Bank of India
ePBG Percentage(%)	10.00
Duration of ePBG required (Months).	62

(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:

Assistant Engineer

O/o ADG(E-NZ) All India Radio And Doordarshan, Jamnagar House, Prasar Bharati Broadcasting Corporation of India, Ministry of Information and Broadcasting, New Delhi-110011
(Bhuwan Chandra Belwal)

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.

Firewall - NGFW (2 pieces)

Technical Specifications

[* As per GeM Category Specification](#)

Specification	Specification Name	Values	Bid Requirement (Allowed Values)
Specification	Type	NGFW	NGFW Or higher
	Form Factor (RU)	1	1
	Features	Layer 3 - Layer 4,NAT,VPN,Application Visibility and Control (AVC),User Identity,Next Generation Intrusion Prevention System (IPS),Zero Day Protection / Advance Malware protection,Web	Layer 3 - Layer 4, NAT, VPN, Application Visibility and Control (AVC), User Identity, Next Generation Intrusion Prevention System (IPS), Zero Day Protection / Advance Malware protection, Web Security Essentials / URL Filtering

	Security Essentials / URL Filtering	
Traffic handled	TCP,UDP,HTTP/TCP,TCP /UDP	*
Packet Size (KB)	1024	*
Throughput with all features enabled(Under Test Condition) (Mbps)	2200	2000, 2200, 2300, 3000, 3500, 4000, 4750, 5000, 6000, 7000, 8500, 9000, 10000, 11000, 12000, 13000, 15000, 19000, 20000, 22000, 25000, 26000, 27000, 29000, 30000, 32000, 34000, 35000, 39000, 40000, 42000, 43000, 44000, 45000, 48000, 50000, 52000, 54000, 55000, 60000, 64000, 69000, 70000, 75000, 80000, 95000, 120000, 130000, 132000, 148000, 153000, 168000, 234000, 260000, 285000, 570000, 1200000 Or higher
Throughput (Real World/Prod Performance)(Under Test Condition) (Mbps)	2600	2600, 3000, 4600, 4700, 4750, 5000, 6000, 7000, 8500, 9000, 9216, 10000, 11000, 12000, 13000, 15000, 19000, 20000, 21000, 22000, 23000, 25000, 26000, 27000, 29000, 30000, 32000, 33500, 34000, 35000, 39000, 40000, 42000, 43000, 45000, 48000, 50000, 53000, 54000, 55000, 60000, 64000, 65000, 69000, 70000, 75000, 120000, 130000, 132000, 135000, 148000, 153000, 168000, 234000, 260000, 320000 Or higher
Concurrent Session/Concurrent Connection	20M	15M, 20M, 25M, 30M, 32M, 35M, 39.5M, 40M, 55M, 60M, 63M, 64M Or higher
New session/Connection	200K	185K, 200K, 250K, 263K, 265K, 284K,

per second		295K, 300K, 350K, 380K, 390K, 450K, 490K, 500K, 800K, 848K, 850K, 900K, 1.1M, 1.75M, 3.5M, 7.5M, 225K, 425K Or higher
Type of Interface Supported Multiselect	GE Copper	*
Number of GE Copper interface	8	*
Number of 10G SFP+ interface	2	*
Number of QSFP+ 40 G interface	0	*
Number of GE Small Form-Factor Pluggable (SFP) interface	0	*
Number of QSFP28 100 G interface	0	*
Number of col /WAN Ports	8	*
Number of Ipsec VPN Peers supported (Site to Site)	3000	*
Number of Ipsec VPN Peers supported (Client to Site)	3000	*
Number of SSL VPN Peers supported (Client to Site)	350	*
Type of Storage Disk	SSD	*
Storage Capacity (GB)	240	*
Power Supplies	Single	*
Hot Swappable Power Supply	No	*
Redundant Fan	No	*
Hot Swappable (Redundant Fan)	No	*
Type of Processor	x86	*
High Availability Support	Yes	*
If Yes, High Availability from day 1	NA	active-active, active-passive, NA Or higher
Interface Expansion slots supported	2	*

Firewall Policies - License	Yes	*
Details of the Firewall Policies for the Firewall provided with the License	Web Security Essentials / URL Filtering,IPS License,Application Visibility License,APT (Advance Persistent Threat) License (Anti Malware Protection , C& C attacks, Geo IP Protection, Zero Day Threat Protection),Gateway Anti virus,Gateway Anti spam	*
NGIPS Signature supported	5000	*
Security Intelligence	URL,IP,Domain	*
Certification	Common Criteria /NDPP/NSS	*
Minimum Operating Temperature (Degree C)	0	*
Maximum Operating Temperature (Degree C)	40	*
Minimum Operating Humidity (%RH)	10	*
Maximum Operating Humidity (%RH)	75	*
IPv6 Ready from day 1	Yes	*
On Site OEM Warranty (Year)	5	5 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	Bhuwan Chandra Belwal	110011,office of adge nz, air and doordarshan, jamnagar house, shahjahan road, new delhi	2	30	N/A

Layer-3 Core Switch (2 pieces)

Technical Specifications

[* As per GeM Category Specification](#)

Specification	Specification Name	Values	Bid Requirement (Allowed Values)
Generic	Type Of Core Switch	Non Chassis Based	Non Chassis Based
	No. of Interface Slots	0	More than 0.0 Or higher
	No. of MPU/SUP/Fabric Slots (with redundancy)	0	More than 0.0 Or higher
	No. of Power supply (with redundancy)	1	More than 1.0 Or higher
	No. of FAN Tray	1	More than 1.0 Or higher
	No. of 1G/10G SFP+ Port	4	More than 4.0 Or higher
	No. of 1000 base-T Ports	24	24
	Support for 40G QSFP+ Port	No	No
	Number of 40G Q SFP+ Porta	0	More than 0.0 Or higher
	Support for 100G QSFP+ Port	No	No
	Number of 100 G QSFP+ Port	0	More than 0.0 Or higher
	Console Port	Available	*
	Modular OS	Available	*
	Support for virtual Chassis	No	No
	Switching Capacity (Gbps)	128	More than 128.0 Or higher
	Throughput (MPPS)	95.23	More than 95.23 Or higher
	Advance Layer-3 Protocol	-	*
	Security Feature	-	*
	Management Protocol	-	*
	QoS	-	*
	Dimension/ Form Factor(RU)	-	*

Wattege (Watt)	107	*
Operating Temperature (Degree C)	-	*
Operating Humidity (RH)(%)	-	*
IPv6 Ready	Yes	*
On Site OEM Warranty(Year)	5	5

* Specifications highlighted in bold are the Golden Parameters.

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Additional Specification Documents

Consignee/Reporting Officer and Quantity

S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days	
1	Bhuwan Chandra Belwal	110011,office of adge nz, air and doordarshan, jamnagar house, shahjahan road, new delhi	2	30	N/A

Router (2 pieces)

Technical Specifications

[* As per GeM Category Specification](#)

Specification	Specification Name	Values	Bid Requirement (Allowed Values)
Ungrouped	Type of Router	WAN	WAN
	No. of Gigabit Ethernet (10/100/1000 Base-T) Interface Ports	8	More than 8.0 Or higher
	No. Of Serial WAN Port	0	*
	No. 1G SFP Slot (Fiber / Copper)	2	More than 2.0 Or higher
	No. of 10G SFP+ Slot (Fiber / Copper)	0	More than 0.0 Or higher
	No. of v.35 WAN Interface	0	*
	No. of E1 (G.703) WAN Interface	0	*
	Number of Gigabit Ethernet (10/100/1000	4	*

Base-T) LAN Ports		
Ethernet LAN PORT	Non PoE	*
Packet forwarding rate (MPPS)	3.5	More than 3.5 Or higher
Aggregated Throughput (Mbps)	0	*
Support for Redundant Power Supply	Internal	*
No. of 3G/4G Interface Card	0	*
No. of Free Slots (Low density)	3	*
No. of Free Slots (High density)	3	More than 3.0 Or higher
Routing Protocols from day-1	-	*
Network Management Protocols	-	*
IPsec Throughput (Mbps)	1800	More than 1800.0 Or higher
IPsec Encryption	-	*
Security Protocol	-	*
Support for QoS	Available	*
Wattage (Watt)	12.45	*
Dimension / Form Factor(RU)	2	*
Operating Temperature Range(Degree C)	-	*
Operating Humidity (RH) (%)e	-	*
IPv6 Ready	Yes	*
On Site OEM Warranty (Year)	5	5

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Additional Specification Documents

Consignee/Reporting Officer and Quantity

S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days	
1	Bhuwan Chandra	110011,office of adge nz, air	2	30	N/A

	Belwal	and doordarshan, jamnagar house, shahjahan road, new delhi		
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Web Application Firewall (2 pieces)

Technical Specifications

[* As per GeM Category Specification](#)

Specification	Specification Name	Values	Bid Requirement (Allowed Values)
Specification	Deployment modes	Bridge mode, Transparent Proxy mode, Reverse proxy and Full Proxy Mode	bridgemodetransparentproxymodereverseprox yandfullproxymode
	Web Application Security	Solution must distinguish between browsers & bot's by tech. as browser capability & CAPTCHA challenge	solutionmustdistinguish betweenbrowsersbotsb ytech.asbrowsercapabil itycaptchachallenge
	Concurrent Connection (Maximum) (Numbers)	28000000	28000000
	HTTP Connections/Sec (Maximum) (Numbers)	250000	250000
	System Throughput (Maximum) (Gbps)	20	20
	Request Latency	Sub-ms	*
	Network Interface Ports	-	*
	Bypass ports for fail safe	No	*
	Attack Protection	-	*
	Detect and prevent attackers from finding hidden directories Features	Available	*
	Processor	-	*
	Storage (GB)	500	*
	Authentication and Authorization	-	*
	Integrated scanner	No	*
	Logging, Reporting and Monitoring	-	*

Input-Output Port	-	*
Power Supply	Dual	*
Power Consumption (Watt)	130	*
Operating Temperature Range (Degree C)	-	*
Storage Temperature Range (Degree C)	-	*
Operating Humidity (%RH)	85	*
Compliance Certificates	-	*
Dimensions (H x W x D) (cm x cm x cm)	-	*
Weight (Kg)	9.07	*
Availability of test reports from Central Govt /NABL / ILAC accredited Lab covering all the parameters	Not-Available	*
If yes , Name of the Lab	-	*
If yes, Address of the Lab	-	*
If yes,Test Report Number and Date	-	*
If yes, Test Report to be furnished to the buyer on demand	NA	*
On Site OEM Warranty (Year)	5	5.0

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Additional Specification Documents

Consignee/Reporting Officer and Quantity

S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days	
1	Bhuwan Chandra Belwal	110011,office of adge nz, air and doordarshan, jamnagar house, shahjahan road, new delhi	2	30	N/A

Storage System (1 pieces)

Technical Specifications

[* As per GeM Category Specification](#)

Specification	Specification Name	Values	Bid Requirement (Allowed Values)
Specification	Storage System Type	Unified Storage	Unified Storage
Group2	Storage Capacity (TB)	1000	1000.0 - 5000.0 Or higher
Group3	Hardware Form Factor of Storage System (RU)	40	*
Disk	Disk Type	SSD,NL-SAS	SSD, NL-SAS
	Speed of dual ported disk drive in Gbps	12	*
	Total Numbers of Drive Slots	512	*
	Number of Drive Slots Populated with drives of different type in the Storage System	204	204
	Total no of drive slot populated with SSD	24	*
	Total no of drive slot populated with Flash Drive	0	*
	Total no of drive slot populated with SAS	0	*
	Total no of drive slot populated with NL-SAS	180	*
	Drive Type Wise Storage Capacity of System in GB	-	*
	Automated Storage tiering feature across the populated Drives types(in case of multiple drive system)	Yes	Yes
	Automated Storage tiering Software License Included	Yes	*
	Hot Spares	Yes	*
	Number of Populated Disks per Hot Spare	30	*
	Provision for additional	Yes	*

	Capacity		
	If Yes, Number of Drive Slots available to achieve additional capacity	-	*
Connectivity/Port	Type of Front end Ports	-	*
	Number of Front end Ports	24	24
	Speed of front end Ports in Gbps	16	More than 16.0 Or higher
	Type of Back end Ports	-	*
	Number of Back end Ports	8	More than 8.0 Or higher
	Speed of Back end ports in Gbps	12	More than 12.0 Or higher
	Number of Remote Replication Ports(FC/Ethernet)	4	*
Controllers	Number of Controllers/VSD/ Node available in the storage System on common back plane without using external switch/device OR without common backplane using switches	4	More than 4.0 Or higher
	RAID Level Support	0,1,5,6	*
	Active-Active Controllers Configured in HA	Yes	*
	Active Stand by Controller Configured in HA	No	*
System Cache	Cache Availability Type	Global	Global
	Total Configurable Cache (GB)	128	128
Group4	Wide Stripping or equivalent feature	Yes	*
Group5	No of Snapshot Copies Per Volume	255	*
	License for Snapshot included	Yes	*
Data Replication	Remote Replication	Yes	*

	Remote Replication license included	No	*
	Synchronized Replication Support	Yes	*
	Synchronous Replication license included	No	*
	Asynchronous Replication Support	Yes	*
	Asynchronous Replication license included	No	*
	3-DC Zero Data Loss Support	No	*
	If Yes, Supported Replication Topology for 3-DC Zero Data Loss	-	*
Group6	Type of Data Compression	NA	*
	Type of Data Deduplication	NA	*
	No Single point of Failure with Non-Disruptive replacement of Hardware	Yes	*
	The Storage provide Non disruptive Firmware /Microcode upgrade	Yes	*
	Firmware upgrade without any controller reboot	No	*
Encryption Mode	Encryption Required	No	*
	Type of Data at Rest Encryption	NA	*
Group7	Storage management software for configuration and multi-pathing(part of the supply).	YES	*
Group8	Multi-pathing and load balancing and fail over software (part of supply) with license for windows/Linux servers or shall support native multipathing of OS.	YES	*

Group 9	Protocols Supported by the storage system from day one	-	*
Group 10	Operating System Platform and Clustering Supported by the Storage from day one	-	*
Group11	Operating Temp Range	-	*
Group12	Storage Temp Range	-	*
Group13	Operating Humidity (Rh)	-	*
Group14	Storage Humidity (Rh)	-	*
Group15	BIS Registration under CRS of MeiTY	Yes	*
	If Yes, BIS Registration No under CRS of MeiTY otherwise indicate N/A	-	*
	BIS Registration Certificate shall be furnished when demanded by the buyer	Yes	*
Group16	Storage System is compliant with IPv6	Yes	*
Group17	Standby power consumption of System in Watt	-	*
Group18	Scope of Supply	It includes installation, commissioning & integration together with all necessary software to make the system fully functional as intended.	*
Group19	On Site OEM Warranty	5	5

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Additional Specification Documents

Consignee/Reporting Officer and Quantity

S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days	
1	Bhuwan Chandra Belwal	110011,office of adge nz, air and doordarshan, jamnagar	1	30	N/A

house, shahjahan road, new delhi

SAN Switch (2 pieces)

Technical Specifications

[* As per GeM Category Specification](#)

Specification	Specification Name	Values	Bid Requirement (Allowed Values)
General Specification	Fibre Channel Generation	16Gbps	16Gbps
	Switch Type	Fixed	Fixed
	Fibre Channel base ports	24	24
	POD License	NA	NA
	POD License Quantity	NA	NA
	Scalability (Ports)	48	48
	Fibre Channel Port Speed (Gbps)	16	16
	QSFP (FCoE)port	NA	*
	Media Type Fibre Channel	SWL	*
	Autosensing (Gbps)	4/8/16	*
	FCIP ports	0	0
	IP Port speed (Gbps)	NA	NA
	Media Type, IP	NA	*
	FCIP performance (GbE)	NA	NA
	Aggregate Switch Bandwidth FC (end to end full duplex)	384 Gbps	384 Gbps
	Aggregate Switch Bandwidth IP (end to end full duplex) (Gbps)	NA	NA
	Maximum Fabric Latency (nano second) / Locally switched port latency (nano second)	700	*
	Blade-to Blade Latency (microsecond)	NA	*
	Maximum Frame Size	2112-byte payload	*
	Maximum IP MTU size	NA	*

Frame Buffers	NA	*
Class of service	Class F	*
Port Types	F/E/EX/M/VE	F/E/EX/M/VE
Access Gateway Mode Support / NPIV support	NA	*
Form factor (U)	1U	1U
AC Power Supply	Dual Redundant Hot Swappable AC Power Supply	*
Support for DC Power Supply	Yes	*
Airflow	Front-to-back airflow	*
Non Blocking Architecture	NA	*
Redundant Control Processors/Data Processor	No	*
Redundant active/active core switching blades	NA	*
Redundant WWN cards	NA	*
Total slots per chassis	NA	*
Number of Blade Modules Required	NA	*
Blade Module - 32 port with 16Gbps SWL SFP+ Blade Module	0	0
Blade Module - 48 port with 16Gbps SWL SFP+ Blade Module	0	0
Blade Module - 64 port with 16Gbps QSFP+ Blade Module	0	0
Blade Module - 48 port with 32Gbps SWL SFP+ Blade Module	0	0
FCIP Blade Module	0	*
FCIP Blade Connectivity Option (Gbps)	NA	*
License Required	ISL Trunking	No
	Real time Monitoring & Threshold alerts	No

Extended Fabric	No	*
Integrated Optional 10Gbps Fibre Channel for DWDM Connectivity	No	*
Enterprise License (Trunking, Real Time Threshold alerts,Extended Fabric)	No	*
Centralized Management Software to manage and monitor multiple Fabrics within/across multiple sites from single window	NA	*
Bandwidth (Gbps/Tbps) for Interchassis connectivity	NA	NA
FCIP Trunking and Adaptive Rate Limiting	NA	*
FICON Management Server	NA	*
Advanced Accelerator for FICON	NA	*
WAN Rate Upgrade License (Enables additional WAN-side throughput to 10 Gbps and unlimited with enablement of 40 GbE ports)	NA	*
Supported Fabric Services	ISL trunking	NA
	In-flight compression	NA
	In-flight encryption/IP Sec encryption	NA
	Integrated optional 10 Gbps Fibre Channel connectivity	NA
	VM Insight	NA
	IO Insight	NA
	Adaptive Networking with QoS	NA
	Virtual Fabrics	NA
	Extension Trunking	NA
	Adaptive Rate Limiting	NA
	FCIP Trunking	NA

	Optional Fabric Services include: Integrated Routing (FCR), FICON CUP, FICON Management Server, and Advanced Accelerator for FICON	NA	*
Supported Security Features	IPsec	NA	*
Miscellaneous	Operating Temperature Range (Degree C)	-	*
	Operating Humidity (RH%)	85	*
	Maximum Power Consumption (Watt)	110	*
	BIS Registration Under CRS of Meity	Yes	*
	BIS Registration Number	-	*
	On Site OEM Warranty (Year)	5	5

* Specifications highlighted in bold are the Golden Parameters.

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Additional Specification Documents

Consignee/Reporting Officer and Quantity

S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days	
1	Bhuwan Chandra Belwal	110011,office of adge nz, air and doordarshan, jamnagar house, shahjahan road, new delhi	2	30	N/A

Server (4 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)	*
	Processor Make	Intel	Intel

	Number of Cores per Processor	22	22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 64 Or higher
	Processor Base Frequency (GHz)	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	*
	Total Cache (L1+L2+L3)(MB)	30	30.0 - 64.0 Or higher
	Processor Description/ Number	Intel Xeon Gold 6152	*
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)	2	*
	Expansion Slots Gen 3 (PCIe x16)	1	*
	Maximum number of Sockets available on Server	2	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16 Or higher
	Maximum number of Sockets populated with Processors available on Server	2	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16 Or higher
Co Processor / GPU	Availability of Co Processor /GPU	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	Type of RAM	DDR4 SDRAM with ECC	DDR4 SDRAM with ECC
	Total Number of DIMM Slots available	24	*
	Number of DIMM Slots populated with DDR	4	*

SSD Storage	SDRAM		
	Number of DIMM Slots populated with DDR NVRAM	0	*
	DDR SDRAM Size(GB)	128	128.0 - 6144.0 Or higher
	DDR NVRAM Size (GB)	0	0.0 - 1600.0 Or higher
	DDR SDRAM upgradable upto using spare DIMM Slots (GB)	2048	*
	DDR NVRAM upgradable upto using spare DIMM Slots (GB)	0	*
	Type of Interface for SSD	NA	NA
	Type of SATA SSD	NA	*
	SATA SSD Hot Swappable	NA	*
	Endurance for SATA SSD (DWPD - Drive Writes Per Day) (X)	0	*
	Total Number of Slots available for SATA SSD	0	*
	Number of Slot Populated with SATA SSD	0	*
	Capacity offered per SATA SSD (GB)	0	*
	Total Capacity Offered with SATA SSD (GB)	0	More than 0.0 Or higher
	Type of SAS SSD	NA	*
	SAS SSD Hot Swappable	NA	*
	Endurance for SAS SSD (DWPD - Drive Writes Per Day) (X)	0	*
	Total Number of Slots available for SAS SSD	0	*
	Number of Slots populated with SAS SSD	0	*
	Capacity Offered per SAS SSD (GB)	0	*
	Total Capacity Offered with SAS	0	More than 0.0 Or higher

HDD Storage	SSD (GB)		
	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	*
	Capacity Offered per NVMe SSD (GB)	0	*
	Total Capacity Offered with NVMe SSD (GB)	0	More than 0.0 Or higher
	Type of Interface for Hard Disk Drive	SAS	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	*
	Total Storage Capacity offered with SATA Drive (GB)	0	More than 0.0 Or higher
	Total number of slots available for SAS drive	8	*
	Number of Slots populated with SAS Drive	3	*
	Capacity offered per SAS Drive (GB)	300	*
	SAS drive Speed (Hot plug or better) (RPM)	10K	*
	Total Storage Capacity offered with SAS Drive (GB)	900	More than 900.0 Or higher
	Total number of slots available for NL SAS drive	0	*

	Number of Slots populated with NL SAS Drive	0	*
	Capacity offered per NL SAS Drive	0	*
	NL SAS drive speed (hot plug or better) (RPM)	NA	*
	Total Storage Capacity offered with NL SAS Drive (GB)	0	More than 0.0 Or higher
RAID	RAID level	1,5	*
	No of RAID Controller Ports	8	8 Or higher
	Speed of RAID Controller Ports (Gbps)	12	12 Or higher
	RAID Controller Cache (GB)	2	*
Ports & Interfaces	Network Card Supported	10G,1G	*
	Number of Networking Interface Cards (LAN)	1	2, 3, 4, 5, 6, 7, 8, 1 Or higher
	Whether Network Interface Card Embedded	Yes	*
	Number of Ports Per Network Interface Card	4x1G	4x1G
	Networking Interface Card Features	Asset Feature Tracking,Security Management,Remote Wake up	*
	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	*
	Number of Single	0	0, 1, 2, 3, 4 Or higher

	port FC HBA card		
	Number of Dual port FC HBA card	1	1, 2, 3, 4 Or higher
	Number of Quad port FC HBA card	0	0, 1, 2, 3, 4 Or higher
	FC HBA Speed (Gbps)	16	16, 32 Or higher
	vHBA Card Features Supported	No	*
	Number of Converged Network Adaptor (CNA)	0	0, 1, 2, 3, 4 Or higher
	Number of Ports per CNA card	NA	Dual Port, Quad Port, NA Or higher
	CNA Port Speed (Gbps)	0	10, 25, 40, 50, 100, 200, 0 Or higher
	Length of LC-LC Cable per SFP+ Port (meter)	0	5, 10, 15, 0 Or higher
	Length of LC-LC Cable per HBA Port (meter)	0	5, 10, 15, 0 Or higher
	Length of LC-LC Cable per CNA Port (meter)	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)	5	*
	Total number of Spare Bays Available for Future Upgradation (Hot Plugable)	0	*
Certifications	Certifications/Compliance (OS)	Windows,Red Hat Linux,Suse	Windows, Red Hat Linux, Suse Linux,

		Linux,Ubuntu	Ubuntu
	Certification/Compliance (Virtualization/Cloud Platform)	VM ware,HyperV,Oracle Virtualization,Red Hat Virtualization,OpenStack	*
Features	Management Features-1	Remoter power On/Shutdown of server,,Remote Management of Server over LAN & WAN with SSL encryption through gigabit management port,	Remoter power On/Shutdown of server,, Remote Management of Server over LAN & WAN with SSL encryption through gigabit management port,
	Management Features-2	Management of multiple Servers from single console with single source of truth for multiple sites.,Automated infrastructure management for patch upgrades, version upgrades ,etc.	*
	Security Features-1	Secure Boot(Firmware and Bios Level Security),Hardware root of trust/Dual Root of Trust	Secure Boot(Firmware and Bios Level Security), Hardware root of trust/Dual Root of Trust
	Security Features-2	Provision for Cryptographic firmware updates,Secure /Automatic BIOS recovery	*
	Server scalability to be achived within the box & without adding nodes	Yes	*
	support for high availability clustering and virtualization	Yes	*
Generic	Redundant Power Supply	Yes	*
	Hot Swappable (Redundant Power Supply)	Yes	*
	Power Supply Efficiency	Platinum	Platinum, Titanium Or higher
	Redundant Fan	Yes	*
	Hot Swappable (Redundant Fan)	Yes	*
	Server Main Supply	230 +/- 10%Vac	*
Benchmark	SPEC int_rate_base	213	More than 213.0 Or

	2017 for the product (must be available on SPEC dot ORG before evaluation)		higher
	SPEC fp_rate_2017 for the product (must be available on SPEC dot ORG before evaluation)	200	More than 200.0 Or higher
	SPEC int_speed_base 2017 for the product (must be available on SPEC dot ORG before evaluation)	213	*
	SPEC fp_speed_2017 for the product (must be available on SPEC dot ORG before evaluation)	200	*
Miscellaneous	Maximum power consumption of the system (Watts)	500	*
	BIS Registration under CRS of MeitY	Yes	*
	BIS Registration Number Under CRS of MeitY and its validity	-	*
	Other Certifications Available	UL,CE	*
	RoHS Compliance	Yes	*
	Availability of the type test report from Central Government / NABL / ILAC accredited laboratory covering verification of all features & functional parameters & environmental tests sequence	No	*
	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	On Site OEM Warranty (Year)	5	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	Bhuwan Chandra Belwal	110011,office of adge nz, air and doordarshan, jamnagar house, shahjahan road, new delhi	4	30	N/A

Small Form-factor Pluggable Transceiver (8 pieces)

Technical Specifications

[* As per GeM Category Specification](#)

Specification	Specification Name	Values	Bid Requirement (Allowed Values)
Specification	Type of Transceiver	SFP+	SFP+
	SFP Mode	Single	*
	Supported Protocols	-	*
	Compatability with OEMs Products	-	*
	Wavelength(nm)	1310	*

Fibre Cable Type	-	*
Core Size (Micron)	125	*
Maximum Data Rate	10.31	*
Modal Bandwidth (MHz/Km)	0	*
Max.Cable Distance	10	*
Optical Component (nm)	1310	*
Digital Optical Monitoring (DOM) Support	Yes	*
Interface	-	*
Tx Power (dBm)	-8.2	*
Receiver Sensitivity (dBm)	-14.4	*
Operating Temperature Range(Degree C)	-	*
Operating Humidity (RH) (%)	-	*
On Site OEM Warranty (Year)	5	5

* 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	Bhuwan Chandra Belwal	110011,office of adge nz, air and doordarshan, jamnagar house, shahjahan road, new delhi	8	30	N/A

Smart Rack (1 pieces)

Technical Specifications

[* As per GeM Category Specification](#)

Specification	Specification Name	Values	Bid Requirement (Allowed Values)
Specifications	Type of rack	Smart Rack	Smart Rack
	Size of Rack	42U	42U

Enclosure		
Mount Type	Free-Standing	*
If Seismic Racks, Earthquake zones	Zone 4	Zone 4
Front glass Door	Yes	*
Type of glass used in front door	-	*
Material used for rear door	-	*
Rear split door design	Yes	*
Doors with Perforation	Rear	*
Side Panels With Key Locks and Slam Latch	No	*
Dust or water resistant	Yes	*
Sound proof	No	*
Keyboard Tray Sliding and Rotary	Yes	*
Shelf For Display	Yes	*
Touch screen	Not-Available	Not-Available
Cable channel in rear side for cable management	Yes	*
Support cable entry from top or bottom	Yes	*
Vertical & Horizontal managers	Yes	*
Number of Rack trays	1	*
Number of cooling Fan For Heat dissipation	8	*
Number of fan trays	0	*
Heavy Duty Caster Wheels	No	*
If yes, then Front Break Options	Not Available	*
Load Bearing Capacity (Kgs)	1400	*
Secure Locks	Available	*
Power of Cooling Unit (kW)	-	*
Climate control	Available	Available
Fire suppression	Piping ready	*
Hooter for fire	Yes	Yes

Auto emergency Door Open	Yes	Yes
Humidity Control	Yes	Yes
Biometric Access Front Door	Yes	Yes
Rear Door Biometric	Yes	*
Rodent Control	Yes	Yes
Completely Insulated Cabinet	Yes	Yes
Water Leak Detection	Yes	*
UPS Power Backup	Yes	*
If available ,UPS rating (KVA)	10	*
If available ,UPS Back up time (Mins)	upto 30	upto 30
PDU Power Strips	Available	*
If Available, number of power Strips	4	*
Cabinet Lights	No	*
Dimensions (H x W x D) (mm)	-	*
Weight (Kgs)	600	*
On Site OEM Warranty (years)	5	5

* 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	Bhuwan Chandra Belwal	110011,office of adge nz, air and doordarshan, jamnagar house, shahjahan road, new delhi	1	30	N/A

Bid Specific Additional Terms and Conditions

1. Scope of supply (Bid price to include all cost components) : Supply Installation Testing and Commissioning of Goods
2. 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.

3. 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.
4. Escalation Matrix For Service Support : Bidder/OEM must provide Escalation Matrix of Telephone Numbers for Service Support.

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

---Thank You---