## **NOTICE INVITING e-TENDER**

e-Tender are invited for Selection of System Integrator for Capacity Enhancement of West Bengal State Data Centre (WB-SDC) and setting up its DR Site at Remote Location

Reputed System Integrators having sufficient experience and credentials for successful completion of "Similar Nature" of work in a Government Department/PSU/Autonomous Body or any reputed organization. Bidder must have adequate Service Engineer for providing on-site warranty service within the stipulated time.

1	Tender No. & Date	WTL/WBSDC/CE/21-22/031 dated 24-02-2022 (2nd Call)		
2	Tender Version No.	1.0		
3	Brief description of Job	Selection of System Integrator for Capacity Enhancement of West Bengal State Data Centre (WB-SDC) and setting up its DR Site at Remote Location		
4	Tender Fee	Rs. 10000.00 (Rupees ten thousand only). The amount to be Transferred online through e-tender portal.		
5	Earnest Money Deposit	Rs.12000000.00 (Rupees One Crore Twenty Lakh only). The EMD / BID SECURITY should be denominated in Indian Rupees and should be in the form of Bank Guarantee valid for 6 months from the date of bid submission.		
6	Date of Downloading			
7	Pre-Bid Meeting date & time	O3.03.2022 at 11.00 Hrs.(On-Line Meeting)  Pre-Bid meeting will be organizing online platform only. Only queries as per format (Section - N) reaching WTL by  02.03.2022 at 15.00 Hrs. will be taken for decision.  Interest bidders are requested to send mail to purchase@wtl.co.in for participation of online pre-bid meeting. Based on request WTL will share meeting id / links for meeting. If there is any change in date and time then will inform.  Queries will be sent to Manager (Purchase) (purchase@wtl.co.in)		
8	Bid Submission Start date & time	10.03.2022 at 11.00 Hrs.		
9	Last date & time of EMD / BID SECURITY & Tender Fee submission	17.03.2022 at 12.00 Hrs.		
10	Last date & time of Bid Submission	17.03.2022 at 14.00 Hrs.		
11	Date & time of Technical Bid Opening	21.03.2022 at 11.00 Hrs.		
12	Venue of Pre-Bid Meeting	WEBEL TECHNOLOGY LIMITED  (A Govt. of West Bengal Undertaking)  Plot - 5, Block – BP, Sector – V, Salt Lake City,  Kolkata – 700091.		
13	Contact person	033-23673403-06		

- Intending bidder bidder may download the tender documents from the website
  https://wbtenders.gov.indirectly with the help of Digital Signature Certificate. Necessary Tender
  fee may be remitted online through e-tender portal in favour of "Webel Technology Limited" and
  also to be documented through e-filling. Necessary Earnest Money Deposit (EMD / BID SECURITY)
  may be remitted online through e-tender portal in favour of "Webel Technology Limited" and also
  to be documented through e-filling.
- 2. Both Techno Commercial Bid and Financial Bidare to be submitted concurrently duly digitally signed in the website https://wbtenders.gov.in
- 3. Tender documents may be downloaded from website and submission of Techno Commercial Bid and Financial Bid will be done as per Time Schedule stated in Section C of this Tender Document.
- 4. The Financial Bid of the prospective Bidder will be considered only if the Techno Commercial Bid of the bidder is found qualified by the Tender Committee. The decision of the 'Tender Committee' will be final and absolute in this respect. The list of Qualified Bidders will be displayed in the website.

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#### SECTION - A

#### SCOPE OF WORK &RESPONSIBILITY

# Capacity Enhancement of West Bengal State Data Centre (WB-SDC) and setting up its DR Site at Remote Location

West Bengal State Data Centre (WBSDC) is a critical IT infrastructure of the State of West Bengal, which has been performing as Shared, Secure and Reliable Infrastructure Services-centre for hosting and managing various e-Governance Applications of the State and her constituent departments.

SDC is a centrally-managed secure data centre facility with  $24 \times 7$  support facilities for hosting webapplications backed with uninterrupted power supply & fail-safe internet connectivity.

SDC facilitates consolidation of services, applications and infrastructure. Among its many services, some of the key functionalities are Central Data Repository, Secure Data Storage, Online Delivery of Services, Citizen Information/Services Portal, State Intranet Portal, Remote Management and Service Integration. Since SDC is the one and only repository of data and applications pertaining to the State e-Governance applications, the goal of SDC is to secure the Line Departments data and applications, which is one of the major challenges in these days, and to improve the quality of delivery of services to Business, Government and citizen in particular which can only be delivered through appropriate management of internal operations and back office.

The WBSDC complied with a world class Tier II data centre (having redundant capacity components and distribution path serving business continuity) as per TIA 942 standards with a guaranteed service level of 99.749% has a safe, secure, monitored, highly available power and cooling arrangements that is capable of accommodating several racks for network components and servers under centralized and simplified management.

SDC has achieved ISO/IEC 20000:2018 that applies to IT Service Management System for maintaining desired quality of services and ISO/IEC 27001:2013 that applies to security of infrastructure, data and applications of the state. SDC has been regularly assessed and peer-reviewed by the National Data Centre (NDC), New Delhi.

At present WBSDC is hosting 157important Government applications, which includes 50+ mission critical applications (e.g. eOffice, IFMS, eDistrict, eBhuchitra, eNathikaran, WBPDS Portal, Digital Ration Card System, Aadhaar seeding, Commercial Tax, Excise Portals, Egiye Bangla, CMO Portals, CMO Grievance, CMO Relief Fund, Jai Bangla, P&RD, Caste Certificate (BCWD), Directorate of Securities, Home & Hill Affairs, Public Service Commission, WB Tourism, School Management Systems, e-Pension, EODB, BMSSY, CCTNS, Duare Sarkar, Student Credit Card, Paschim Banga ReshamSilpiSamabai, State Archives, Parliamentary Affairs, New Town Green City, HIDCO SAP application, NKDA Block Chain, Polution Control Board, WB Transport, IOSMS (School Education, UDMA, GTA), Nirmal Vidyalaya (Unicef), BanglarSiksha, Directorate of Securities, Directorate of Economic Offence, WBERC, Polution Control Board, WBPHIDCL, eParimap, UDMA Common Application Form, Karma SathiProkalpa, Fire & Emergency Service, WB HIRA, WB Finance Corporation, SNLTR, eAnumati, Police Commissioner Portals (Siliguri, Malda, Chandannagar), I&W Directorate Portal, Paschim Banga Sarad Samman, Child Rights & Tracking, LakshmirBhandar, etc. These applications are hosted at WBSDC using 500+ Virtual Machines (Servers) under Cloud Platform alongside co-located hosting and Common hosting infrastructure (shared infrastructure).

Following are some of the major upcoming SDC expansion projects.

- 1. KMC web hosting infrastructure with disaster recovery facility (revamping of KMC existing infrastructure)
- 2. Creation of hosting infrastructure for revamped EODB (SilpaSathi) application
- 3. Labour Department BMSSY hosting infrastructure (migration from private cloud to SDC cloud infrastructure)
- 4. UDMA Single Window System
- 5. Hosting infrastructure for revamped eDistrict application
- 6. Migration of CCTNS application from collocated to SDC Cloud infrastructure
- 7. Hosting infrastructure for eBhuchitra and eNathikaran applications
- 8. Augmentation of hosting infrastructure for Jai Bangla portal
- 9. Public Health Engineering Hosting Infrastructure
- 10. Irrigation & Waterways DC infrastructure creation including BCP
- 11. MSME&T Hosting Infrastructure creation
- 12. Calcutta High Court DC infrastructure creation including BCP
- 13. WCD&SW Department Hosting Infrastructure (LakshmirBhandar)
- 14. School & Higher Education Web Hosting Infrastructure

The current State Data Centre (SDC) design has facilitated consolidation of services, applications and infrastructure. SDC centralized cloud environment is being used to host multiple e-governance, citizen centric applications with simplified operations and increased application responsiveness. However, in absence of Business Continuity Plan (BCP), the availability of applications is not 100%. Because, currently there is no dedicated Disaster Recovery (DR) centre available for any of the applications hosted inside the SDC located at seismologically safe zone within the State or outside the State.

Once DR Centre is made available, WB-SDC will be able to deliver services to the citizens with greater reliability, availability and serviceability backed by business continuity. Thus, initially, it is proposed to have 100% data mirroring along with few selected critical application replica of the existing SDC cloud infrastructure at Webel IT Park situated in Purulia District Head Quarter, around 300Km away from the existing SDC in Kolkata. Purulia is located in seismological Green Zone. In the 1st phase/year, the DR site will set up with 100% data replication and few BCP replication of critical applications and remaining augmentation has been proposed in the second phase/year to make upto 30% BCP for SDC i.e. covering all critical applications at DR site.

The DR solution will be designed to equip the premises to host / co-locate systems (e.g., Web Servers, Application Servers, Database Servers etc.) via internal applications providing consistent experience across SDC infrastructure. The objective is to provide logically unified and shared infrastructure flexible enough to rapidly respond to Infrastructure requirements and accommodate future technology enhancements in case of unavailability of the SDC.

Some of the benchmarked guiding principles to drive the DR Centre strategy and architecture will be:

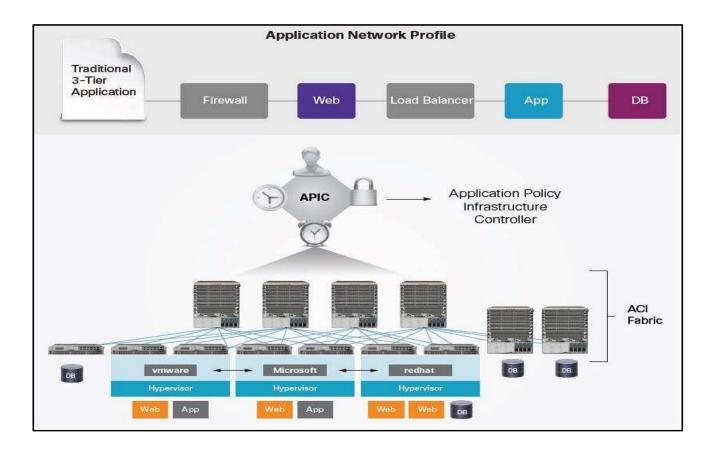
- $\checkmark$  To be able to deliver IT as a service starting with IaaS and to PaaS and SaaS
- ✓ Deliver responsive IT based services to internal customers/ departments on demand at scale and anywhere.
- ✓ Deliver Consistent User Experience.

The strategy would ultimately encompass 3 broad aspects of the IT environment:

- ✓ The Data Centre (Physical & Virtual)
- ✓ Business Continuity
- ✓ Seamless movement and availability of applications between DC and DR with 100% data replication across all applications

At the foundation of the proposed DR Centre, the cloud platform will form the centre of the technology architecture consisting of the three basic blocks of:

- Services
- Orchestration
- Underlying infrastructure



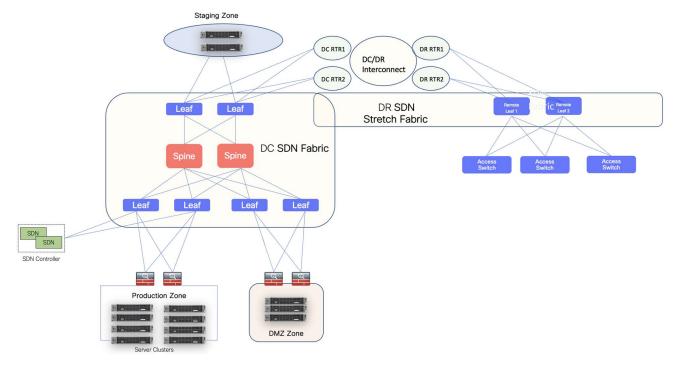
The proposed design of the architecture is focused on keeping the captive private cloud Infrastructure with Cross-cloud capability. This architecture has been envisioned such that it meets SDC's current requirements of adoption of virtualization and automation technologies means that resources can be dynamically assigned and re-assigned, scaling up or down in response to workload fluctuations. It also means that new applications can be provisioned rapidly, SDC users & administrators do not have to go through evaluation and procurement cycles and incorporates their future requirements to support for cross cloud infrastructure which might occur at later stage. WTL intent to providing a network that is deployed, monitored, and managed in a way that supports rapid application change. Current running

network infrastructure does this through the reduction of complexity and a common policy framework that can automate provisioning and managing resources. Even the currently running network infrastructure SDN solution will be expanded in future all the way up to the proposed DR centre, so that the available constructs and VM or container-based workloads can be monitored and administered from the centralized SDN controller as well in a seamless manner. The infrastructure SDN is a highly recommended solution as it provides a policy driven approach towards the DC/DR workload management, administration and security. It also provides the below capabilities to the DC/DR offerings:

- Centralized automation for all workloads, (i.e., Integrating security into service chains, Service Graphs, security policy implementation, etc. are already fully automated)
- Security policy using a whitelist model
- o Micro-segmentation

The proposed architecture will deliver best-in-class infrastructure by combining hardware, software, and application-specific integrated circuit (ASIC) innovations into a blended system. It's optimized to run INDIAFIRST's physical and virtual applications today—and the emerging "application anywhere" models tomorrow.

A state-of-the-art replication solution shall also be proposed which will realize the full potential of virtualization and the converged infrastructure by minimizing risk, decreasing downtime, and easily adapting to business changes. The proposed platform shall provide a differentiating solution that offers more than just backup. Using virtualization, storage, and cloud technologies, the solution shall deliver a high-speed recovery, data-loss avoidance, and verified protection. It will also offer complete visibility on the existing server platform for applications requiring high availability and scalability. The virtualization platforms mentioned above are examples; actual deployment will depend on technical requirement. Proposed DC-DR network architecture is provided below:



#### Present Scope of Work for DC capacity augmentation and DR Site implementation:

A state-of-the-art DC infrastructure has been already implemented in 2018 at Moni Bhandar, Webel Bhavan Complex, Salt Lake City, Sector – V, Kolkata-700091. The existing cloud + virtual systems have 34 blade servers and 500 TB storage systems for catering to about 200 applications hosted over 500 virtual machines (servers). The existing cloud infrastructure has been implemented using Cisco Blade servers, SAN Switch, NetApp & HP Storage systems, Redhat OpenStack Software suite, VMware cloud software, etc. For expansion of existing cloud capacity, the existing Compute & Storage hardware and RedHat OpenStack / VMware cloud software suite have been considered for cost optimization as well as smooth integration, operation and management. The up-to-date utilisation of WB-SDC resources is given below.

**Note:** Multi-POD ACI not implemented yet, it is to be implemented in near future. At present L3 & L2 switches to be installed at DR site should have SDN feature and to be integrated with DC SDN infrastructure in future Phase- II and should be able to support future ACI implementation at DC & DR as well.

#### **WBSDC** Compute Capacity Utilization Status as in December 2021:

WB-SDC C	OMPUTE CAPACITY	AUGMENTATIO	N - UTILISATIO	N REPOR'	r as in decen	/IBER 2021
	Before lst Augmentation Augmentation (Operational)		2nd Augmentati on (proposed)	After 2nd Augment ation		
Zone		Total Count	Total Count (Compute)	Total Count (RAM)	Total Count (Compute)	Grand Total
	Server	2	1	3	1	4
DDOD M7	Core (Total no. of Core X number of computes)	(14*2*2)56	(22*2*1)44		(28 *2*1)56	156
PROD_MZ _WIN	vCPU [Total no. of Core X no. of computesXHypert hread(2)]	(14*2*2*2)112	(22*2*1*2)88		(28 *2*1*2)112	312
	RAM	(768*2)1536	(768*1)768	2304	1536	3840
	Server	1	0	1	2	3
Staging	Core(Total no. of Core X number of computes)	(14*2*1)28			(28 *2*2)112	140
Staging	vCPU [Total no. of Core X number of computesXHypert hread(2)]	(14*2*1*2)56			(28 *2*2*2)224	280

	RAM	512	256	768	3072	3840
	Server	6	3	9	9	18
	Core(Total no. of Core X number of computes)	(14*2*6)168	(22*2*3)132		(28*2*9)504	804
DMZ	vCPU [Total no. of Core X number of computesXHypert hread(2)]	(14*2*6*2)336	(22*2*3*2) 264		(28 *2*9*2) 1008	1608
	RAM	(768*5)3840+ (896x1)896	(1408*3)4224	8960	(1536*9)138 24	22784
	Server	5	2	7	6	13
	Core	(14*2*5)140	(22*2*2)88	228	(28*2*6)336	564
MZ	vCPU	(14*2*5*2)280	(22*2*2*2) 176	456	(28*2*6*2)6 72	1028
	RAM	(768*4)3072+ (896*1)896	(1408*2)2816	6784	(1536*6)921 6	16000

## Demand for New/Additional Web Hosting capacity at WBSDC:

Following are some of the new/additional web hosting capacity requirements from various Government institutions, departments and directorates:

Department / Directorate	vCPU	RAM (GB)	Storage (GB)
Kolkata Municipal Corporation	800	3200	20000
Labour Department	160	640	50000
Irrigation & Waterways	112	448	20000
Education Department	172	1088	22500
WCD&SW Department	256	1024	80000
LR & GIS	256	6144	23632
Registration	232	3500	127659
Excise	112	2048	10534
Common Infra	112	1024	5425
H&FW Department	320	2560	500000
UDMA Dept (AMRUT)	160	640	300000
ICE Silpasathi (WBIDC)	1100	5500	20000
Food& Supply	120	512	3000
WB Police	256	1024	100000
Kolkata & WB Police	256	1024	500000
e-District	192	768	10000
e-Mail	400	1600	10000
DR-Site Creation at Purulia IT Park	112	2048	1000000
TOTAL =	5228	34792	2802750

Note: Above CPU and RAM requirement will utilize about 80-90% of the proposed phase1 augmented capacity within next 2 years' time.

#### DC Capacity Augmentation - Phasel:

Considering existing demand for Government application hosting and data storage of various departments and directorates at WBSDC as well as steady increase in demand for compute and storage space during next 2-3 years along with implementation of DR Site at remote location, DC expansion projection has been arrived at 5 times the current capacity (in 2 phases). Following is the summary of DC expansion requirement in Phase1 with target capacity augmentation of 2.5 times the existing capacity. Following is a summary bill of materials:

Sl.No.	Description	UOM	Qty
1	Storagel Upgrade from 450 TB to 650 TB	Lot	1
2	Storage2 Upgrade from 220 TB to 430 TB	Lot	1
3	IT Hardware	Lot	1
4	IT Software	Lot	1
5	DDOS 10Gbps with 2 Years subscription	Nos	2
6	SOAR First 2 Years - BOQ (Security Orchestration Automation Response)	Lot	1
7	Deep Security Enterprise - per Server (VM) - 150 Licenses with DDAN-Deep Discovery Analyzer for 3 years	Lot	1
8	VTL AMC & UPGRADE (75TB) with 3 years warranty & integration with Commvault	Lot	1
9	UPS 80 KVA with 30 mins battery backup for redundant backup power supply to active tiles necessary electrical wiring	Nos	1
10	LTO 7 Tapes for Data Backup	Lot	100
11	Rack Containment Zone with 14 no racks & 28 nos. PDUs with passive cabling	Nos	1
12	Installation & Commissioning	Lot	1

#### Creation of DR Site at Remote Location:

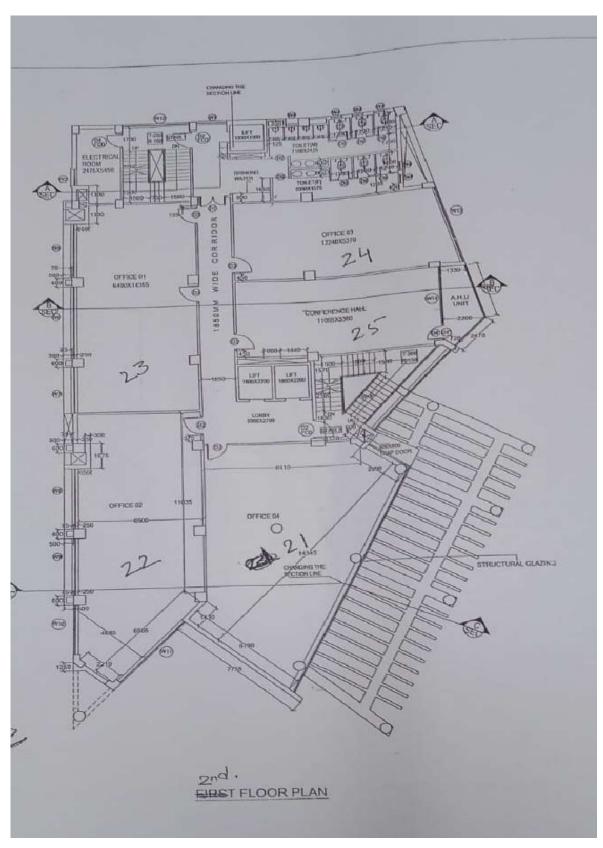
The proposed DR site will be smaller in size physically 600 SqFt server room (1200 SqFt Super Built-up area) but will have similar features in future with at least 30% compute and 100% storage capacity of the existing DC installed capacity (including expansion) as referred above. Under the present scope only storage replication (100% DC storage capacity) will be implemented. In future 30% compute capacity will be added for running critical applications in BCP mode (phase2). Following are techno-commercial details for proposed DR Site under present scope for 100% data storage replication:

Sl.No.	Description
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1	Site preparation
2	Electrical & UPS
3	PAC & CAC
4	IT Hardware
5	IT Software
6	EMS & Security Software
7	SAN Storage: (1.HPE - 650TB NLSAS + 50TB SSD & 2. Netapp - 430TB NLSAS + 100TB SSD)
8	Firewall & AV
9	BMS
10	Passive Cabling& Server racks
11	Manpower (24x7) for 5 years
13	DC-DR LC & ILL with ARC for 1 year
14	Installation & Commissioning

### Floor Plan of Proposed DR Site:

- 1. Site survey may be allowed to ascertain detailed site specific requirements. Please contact WBSDC S@033-4087-4310 / 033-4087-4311 for DC/DR site visit / survey purpose. Only one visit will be allowed per bidder who will participate in pre-bid meeting.
- 2. All technical resources deployed at DC / DR site must be on the payrolls of the bidder (prime / consortium)



#### **DC Capacity Augmentation – Phase 2:**

Demand for new/additional web hosting capacity is continuously increasing due to requisition from large number of Government Departments/Directorates/Institutions. It has been estimated that augmented capacity in Phase1 [2.5x] will be completely exhausted within next 2 years. Moreover 40% of the compute and storage infrastructure will become obsolete after 2 years (within FY:2023-24). Therefore, for maintaining 5 times augmented capacity for another 5 years, the existing infrastructure should be augmented by 500% (6 times) with further capacity expansion and technology upgrade within FY:2023-24. Another tender for phase2 augmentation will be floated separately in due course.

#### Operation & Maintenance of WBSDC for next 5 Years upto August 2026

WBSDC is a centralized shared critical infrastructure, which is monitored and maintained by dedicated management team of State Implementing Agency [WTL] with the help of technical staff deployed by the System Integrator / Data Centre Operator, selected for 5 years through open tender process upto August 2023. Cost of technical resources, FMS, professional support services, cost of AMC of IT & Non-IT Infrastructure items, Software License Renewals, Support Renewals, ILL Bandwidth charges, conservancy and other support services have been included in the BoQ of this tender for Operation & Maintenance charges of WBSDC for 3 more years i.e. coverage upto August 2026. Rental charges for office space, cost of electricity consumption, diesel consumption for DG Power backup, Third Party Audit services, Transport, Courier, SIA Manpower reimbursement, etc will be reimbursed at actual, hence excluded from the scope of this tender.

#### **WBSDC Operation & Maintenance Cost for 5 Years**

Year 1	Year 2	Year 3	Year 4	Year 5

Cost of technical resources, FMS, professional support services (OS, DB, Web/App server, storage, network, security, etc - installation, administration, configuration, fine tuning, etc), physical security guards for 2nd floor, conservancy, etc and other manpower support services have been included here under Operation & Maintenance charges of WBSDC for 3 more years i.e. for coverage upto September 2026 after expiry of the existing SI / DCO coverage period upto August 2023.

The bidder will supply and install all the components as per BoQ (as per detailed specifications/descriptions attached with this tender) and do necessary integration with the existing cloud infrastructure so that the existing DC capacity is augmented by 2.5 times. Please refer chart "WB-SDC COMPUTE CAPACITY AUGMENTATION - UTILISATION REPORT AS IN DECEMBER 2021" furnished above for details of existing cloud capacity.

After completion of above DC augmentation, the integrated and combined capacity will be allocated to serve all the pending requisitions from various departments / directorates. The bidder will provide warranty, software assurance, operation and maintenance for the augmented DC infrastructure and newly created DR infrastructure as per terms and conditions mentioned in this tender.

After completion of installation and commissioning of DR Site, storage based replication of all DC storage volumes will be implemented by the bidder. Storage replication will be done over 500 Mbps dedicated leased circuit. After initial full replication during off peak hours, incremental data synchronization will be implemented at frequent intervals on 24x7 basis.

The DR site will be operated and maintained by the bidder on 24x7 basis for a total period of 5 years from the date of commissioning and "GO LIVE".

Accuracy and effectiveness of volume replication will be tested by the bidder for all applications / volumes and daily / weekly reports will be submitted for the same.

Bidder will supply and implement Security Orchestration Automation Response system (SOAR) for strengthening existing WBSDC Security Operations Centre (SOC). Upgrade of existing SIEM system and integration with SOAR system will be bidder's responsibility. For 24x7 operation and maintenance of SOC, bidder need to allocate additional technical resources for next 5 years.

Bidder to supply and implement Version Control Software with Functional test automation - 10 Concurrent User, Load runner professional foundation - qty 1 (500 virtual users) and Application Life Cycle Manager - 10 concurrent user license to use with support for 2 years. Necessary training and handholding support to be provided to SDC testing team.

#### QUALIFICATION OF MANPOWER SUPPORT

Role Description	Number of Manpower	Shift Indicator	Qualification
Project Manager	1	8x6	B.Tech/ B.E. / MBA & minimum 7 years' experience
Network Expert (L3)	1	8x6	B.Tech/ B.E with CCNP or CISSP or equivalent with 5+ years exp.
Network Expert (L2)	2	16 Hours Per day X 6 days	B.Tech/ B.E with CCNP or CISSP or equivalent with 3+ years exp. B.Tech/ B.E with CCNP or CISSP or equivalent with 3+ years exp.
Server and Cloud Expert (L3)	2	16 Hours Per day X 6 days	1. B.Tech/ B.E / MCA with MCSE/RHCE/MCP server certification with 5+ years exp. 1 person.  2. B.Tech/ B.E / MCA with server certification and web app certification or relevant certification with 5+ years exp. 1 person.
Server and Cloud Expert (L2 / L3)	6	16 Hours Per day X 6 days	B.Tech/ B.E / MCA     with     MCSE/RHCE/MCP or     server certification

			with 3+ years exp. – 4 persons
			2. B.Tech/ B.E / MCA with MCSE or Server Web & App certification with 3+ years exp. – 2 persons
Database Administrator	3	16 hours per day X 6 days	B.Tech/ B. E / MCA with 5+years exp with Posgres/Mysql/MSSQL database certification
Storage Administrator	2	16 hours per day X 6	B.Tech / B. E with 5+years exp with storage certification
Storage Administrator		days	B.Tech/B. E with 5+years exp with storage certification
Security Expert (L3)	1	8x6	B.Tech/ B.E with 5+ years with Security Certifications, ISMS,CISA/CISM/CCNP security
	2 16	16 Hours Per day X 6	B.Tech/ B.E with 3+ years with Security certifications, ISMS, CISA / CISM
Security Expert (L2)		days	B.Tech/ B.E with 3+ years with Security Certifications, ISMS, CISA / CISM
Technical Specialist –physical infrastructure, BMS & Electrical equipment etc.	5	24 hours per day X 6 days	Data Center Operation with 3+ years
Backup administrator	3	24 hours per day X 6 days	Experience on Backup and Storage with 3+ years
Help Desk Support executive	3	24 hours per day X 7 days	Graduate/ Diploma,2 years, Relevant ,ITIL knowledge
EMS Expert	1	8 hrs	Experience on EMS
Physical Security for 2 floors	6	24 hours	Experience
Housekeeping	2	8x6	Experience

Position	Responsibilites
Project Manager	Complete Ownership of the project. Customer interfacing, Review meetings interactions, Reporting to customer
Network Expert (L3)	• In charge of actual Configuration and maintenance of network equipment in DC • Good working knowledge of latest Leaf and spine architecture and SDN /NFV networking, with the latest breed of Networking equipment available .• Responsible for maintaining all configuration templates for respective equipment• Should have adequate experience of configuring Firewall, IPS, APT, Deep Security Appliances, Network and Server Load balancers.• Perform periodic proactive tests on the equipment and systems under their command to ensure compliance to State IT and Security Policy and user satisfaction • Would be monitoring independent of NMS tools to ensure better network uptime and performance• Would be responsible for preparing the change management document for approval • Would be responsible for backing up all network related configurations on a regular basis• Would be upgrading the necessary and recommended IOS on all crucial Network equipment in the DC
Network Expert (L2)	· Install and support LANs, Wans, network segments, Internet, and intranet systems· Install and maintain network hardware and software·Analyse and isolate issues· Monitor networks to ensure security and availability to specific users. · Evaluate and modify system's performance · Identify user needs · Determine network and system requirements · Maintain integrity of the network, server deployment, and security · Ensure network connectivity throughout a SDC's LAN/WAN infrastructure is on par with technical considerations. · Design and deploy networks· Perform network address assignment · Assign routing protocols and routing table configuration· Assign configuration of authentication and authorization of directory services.
Server and Cloud Expert (L3)	•Microsoft Windows Server 2012 Data centre Edition • RHEL — configuration, administration, monitoring and rollout in Blade Chassis environment. • OS Patch management using WSUS/SCCM/ CA Client Automation • Antivirus and Security compliance, Host IPS, MS Proxy, ISA, DHCP, AD, Windows Cluster, Group Domain Policies • Knowledge of MS Virtualization (Hyper- V) or VMWare and Virtualization management software • Basic Windows scripting • Basic configuration of Firewall, Routers, Core and Edge switches. • Knowledge of mailing systems and SMTP and SMS gateway administration • Knowledge of backup Software e.g. EMC Networker, HP NetBackup etc. • Will be responsible for OEM interaction for service and spare availability as per SLA • Troubleshooting and root cause analysis of server hardware and OS • Monitoring the server logs and critical errors for proactive support • Will be responsible for tuning various parameters of OS and application platform

Server and Cloud Expert ( L2)	• Ensures server performance and maintains applications on servers • Problem solving and documentation of current and new servers in both physical and virtual environments; • Performs and oversees continuous system health checks, user administration, and application of patches and upgrades • Performs data management services, server tuning, and directory services maintenance • Delivers anti-virus software updates and virus protection • Ensures compliance to security standards, policies and guidelines • Provides business continuity through thorough back-up and restore procedures, and periodic testing of outage scenarios; •Administers and maintains a Windows of Linux -based server network, with a combination of physical and virtualservers, OS and application platform software.		
Storage Administrator	• Manage the Storage Networks • Configuration of the Storage · Creation of Storage Partition		
Database Administrator	• Manage the Database • Configure the Database • Performance Tuning, Troubleshoot of Database whenever required •Implementation, Support and manage		
Security Expert (L3)	•Would be responsible for the information security of the network, and server operating systems, upgrades and patch management • Would be conducting periodic audit on the network equipment, and server operating systems for identifying vulnerabilities using VA/PT tools • Would be monitoring the security reports generated by SIEM and Deep security for immediate mitigation as required • Would be checking the OEMs security alerts and cross verify with the current posture of equipment at DC• Would be responsible for conducting the test run of critical security updates and patches meant for the DC components.• Would be accountable for the roll-out of security updates and patches in the DC • Would be providing necessary security guidelines to other team members on their respective area • Would be reporting and follow-up with OEMs for any security related incidents		
Security Expert (L2)	Monitor the infrastructure and maintain the security standards • Would be monitoring the security reports generated by SIEM and Deep security     • checking the OEMs security alerts • Monitor and alert the owner for security updates and patches meant for the DC components     Investigate All Suspicious Activities     Maintain Secure Monitoring Tools     Liaise With And Delegate To The Rest Of The SOC Team     Review And Report On All Cybersecurity Processes     Keep All Security Programs And Resources Up To Date.     Review, report, take corrective measures for all security incidents		
Technical Specialist – physical infrastructure, BMS & Electrical equipment etc.	Responsible for the complete maintenance of the non-IT Physical part of the SDC including the physical security, BMS infrastructure, Power and HVAC systems		
Backup administrator	Backup of Data Center Applications       Backup of day to day transactions(Hot and Cold Back)		

Help Desk Support executive	• Receive incident related communication on phone, mail, and web interface • Validate the incident with relevant details and generate trouble ticket • Assign the trouble tickets to relevant engineer or specialist for resolution • respond to requests for technical assistance in person, via phone, electronically • diagnose and resolve technical hardware and software issues • research questions using available information resources • advise user on appropriate action • follow standard help desk procedures, log all help desk interactions
EMS Expert	• Receive incident related communication on phone, mail, and web interface • Validate the incident with relevant details and generate trouble ticket • Assign the trouble tickets to relevant engineer or specialist for resolution • respond to requests for technical assistance in person, via phone, electronically • diagnose and resolve technical hardware and software issues • research questions using available information resources • advise user on appropriate action • follow standard help desk procedures, log all help desk interactions

Following AMC supports to be provided by the bidder for a period of 4 years upto August 2026:

1	AMC/Support for lT (software and hardware) equipment		
2	AMC/Support for Non-IT Equipment (2nd Floor)		
3	AMC/Support for BMS Equipment. (1st Floor)		
4	AMC/Support for PAC, UPS, Panel & DG. (1st Floor)		

5	Cost of dedicated Operation and AMC Support for RSA SIEM through L2 Level Engineer		
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6	AMC/Support for UPS batteries upto August 2026
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EQUIPMENTS DETAILS for AMC are given separately.

Professional Support Services for System Administration, Database & Application Platform:

7	Professional Support Services for Database, Application and System Administration for 4 years upto August 2026	Details as per below table

SL. No.	Type of technical resource requirement	No of resources
1	FMS resource for Database Management (Postgres SQL, MS SQL) - L2 & L3 ( with 4-5 yrs. experience)	2
2	System Administrator with 5-6 years' Experience (L2 & L3)	2

3	FMS resource for Platform support for – Apache, php, tomcat, etc, along with patch management & system configuration - L2 & L3 (with 4-5 yrs. experience)	2
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8	AMC & UPGRADE of Commvault Backup System from 2023
8	ANIC & UPGRADE of Commvault Backup System from 2023

## Details:

9	AMC & UPGRADE of WBSDC new cloud (blade) servers - lot one	
10	AMC & UPGRADE of Netapp SAN storage (450 TB) for the period from 2023	
11	AMC & UPGRADE of WBSDC new network (SDN) infrastructure	
12	AMC & UPGRADE of RedhatOpenstack Cloud Software License SA after initial	

## Details:

13	Renewal of RSA Software Product Licenses with OEM support for 3 years
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## Details for RSA AMC required :

Description	Qty	Start Dt	End date
Issues Management Perp EnhMaint /100	1	01-Apr-22	31-Mar-26
On-Demand App Perp EnhMaint /100	5	01-Apr-22	31-Mar-26
CYBINBR PERP <5K ENH /100EMP/MO	1	01-Apr-22	31-Mar-26
NW S5 Hybrid for Pkts EnhMnt1M	1	01-Apr-22	31-Mar-26
NW S5S HeadUnit Archiver EnhMnt 1M	1	01-Apr-22	31-Mar-26
NW S5SHeadUnit EvntStrmAnalysis EnhMnt1M	1	01-Apr-22	31-Mar-26
NW S5 Hybrid for Logs EnhMnt1M	1	01-Apr-22	31-Mar-26
NW S5 AnlyticsSvr 10U EnhMnt1M	1	01-Apr-22	31-Mar-26
Tier1 RNWE EnhMnt p/Host 1-250 1Mo	1	01-Apr-22	31-Mar-26
EMULEX 2 PORT 8GB SAN HBA EnhMntlMo	1	01-Apr-22	31-Mar-26
Extended Support	1	01-Apr-22	31-Mar-26
Extended Support	1	01-Apr-22	31-Mar-26
Extended Support	1	01-Apr-22	31-Mar-26
Extended Support	1	01-Apr-22	31-Mar-26
Extended Support	1	01-Apr-22	31-Mar-26

SOAR (Security Orchestration Automation Response) So License	oftware
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15	DDOS 10Gbps with additional 2 Years subscription
16	Deep Security Enterprise Software License - additional 150 VMs for 2 years & License renewal for all existing licenses from 3rd year
17	EDB Postgres Enterprise License CPU Core support renewal / upgrade - Production Support (including Replica DB servers)
18	VMware vCloud Suite Subscription per CPU 20 CPUs Commitment Plan - 12 month Prepaid with support

NOTE: DETAILED TECHNICAL SPECIFICATIONS OF ALL EXISTING AND NEW SYSTEMS ARE ENCLOSED SEPARATELY

#### SECTION - B

#### **ELIGIBILITY CRITERIA**

- The bidder must be a company registered under Companies Act, 1956/2013 or Partnership or LLP or OPC or Proprietary Firm. Documentary (Certificate of incorporation/Relevant document) evidence to be submitted.
- 2. The bidder should have their presence in Kolkata with own office. Valid proof should be submitted along with the bid.
- 3. The bidder should have valid GST Registration Certificate& PAN. Bidder shall have to submit photocopy of the documents.
- 4. The bidder/group company shall have executed "Similar Nature" of three (03) orders of an amount not less than Rs.10 Crore each in total in last five financial years (considering FY 2016-17, 2017-18, 2018-19, 2019- 2020 & 2020-2021) in Government Department /PSU/Autonomous Body /any reputed organization. Reference order copy for the project with completion certificate to be provided.
- 5. Bidder should have call center number. Call Center details for Bidder with number & detailed to be submitted.
- 6. The bidder should have an average annual turnover of not less than Rs. 200 Crore in the last three financial years (FY 2018-19, 2019-2020&2020-2021). Bidder shall have to submit Audited Accounts / Auditor Certificate in support of their claim.
- 7. The Bidder should have positive net worth in last three financial years (FY 2018-19, 2019-2020&2020-2021). Auditor Certificate in support of their claim to be submitted.
- 8. Bidder should submit Earnest Money Deposit (EMD / BID SECURITY) of Rs.1.2 Crore (Rupees One Crore Twenty Lakh only) electronically to Webel Technology Limited as per the details given in Clause 9, Section D.
- 9. Bidder should submit Tender Fee of Rs. 10,000.00 (Rupees Ten Thousand only) electronically to Webel Technology Limited as per the details given in Clause 9, Section D.
- 10. The bidder (prime) /consortium partner / Group Company should submit Manufacturer's Tender Specific Authorization of OEMs related to the assignment (Network Equipments (Active and Passive components), UPS Battery. Authorization to be submitted on OEM's letter head and signed by authorized signatory.
- 11. The Bidder (prime) must have certification for the following standards:ISO9001:2015, ISO / IEC 27001:2013, ISO / IEC 20000-1:2018. Copy of valid Certificate to be submitted.
- 12. The Bidder must have Support Service Centre with Manpower in Kolkata so that any call reported is attended within the response time. The detailed Support Service with manpower for the bidder should be submitted as per format (Section M)
- 13. The bidder shall submit Bid Form (Section E) duly signed by the authorized signatory of the company as per the format enclosed. Deviation in format may not be accepted.

14. The bidder shall not have been blacklisted by any State/Central Government or PSU Organization or bilateral/multilateral funding agencies for breach of ethical conduct or fraudulent practices as on date of submission of the proposal (as per DIT guidance note issued on 26-Dec-2011). Declaration on bidder's letter head to be submitted.

### 15. Additional eligibility criteria:

S. No.	Clause	Documents required
1.	The bidder (prime) should furnish, as part of its bid, an Earnest Money Deposit (EMD / BID SECURITY) of Rs. 12000000.00.	The EMD / BID SECURITY should be denominated in Indian Rupees and should be in the form of Bank Guarantee valid for 6 months from the date of bid submission.
2.	The Bid can be submitted by an individual company or a consortium.  In case of consortium applicant, consortia shall submit a valid Memorandum of Understanding (MOU)/agreement.	"Consortium" shall mean more than one company which joins with other companies of complementing skills to undertake the scope of work defined in this RFP. In case of consortium the same shall not consist of more than three companies/ corporations, including the prime bidder.  1. Memorandum of Understanding (MOU)/agreement among the members signed by the Authorized Signatories of the companies dated prior to the submission of the bid to be submitted in original.  2. The MoU/agreement shall clearly specify the prime bidder, stake of each member and outline the roles and responsibilities of each member.
3.	The bidder (all companies in case of a Consortium) should be a company registered in India under the Companies Act.	Certificate of incorporation

4.	Bidder (prime)/Group Company should have experience of IT System Integration/ Information Technology Infrastructure projects including implementation/ operations and should have been in the business for a period exceeding five years.  Bidder (prime) who has acquired a company/ division of a company having experience as mentioned above shall also be considered.  In case the Bidder is a wholly owned subsidiary, the experience of the parent company would be considered for compliance.	<ul> <li>A. Work Orders confirming year and area of activity.</li> <li>B. Memorandum and Articles of Associations.</li> <li>C. Relevant legal documentation confirming the acquisition/merger.</li> </ul>
5.	Bidder (prime) must have at least 2 out of 3 certification for the following standards:  • ISO 9001:2015  • ISO / IEC 27001:2013  • ISO / IEC 20000-1:2018	Valid Copy of Certificates

The bidder (prime) / Group company should have commissioned and installed at least one Data center project that meets all the below mentioned requirements during the last ten (10) years.

- a. An Order Value (including IT and Non-IT but excluding basic building structure cost) of not less than Rs. 15 crores.
- 6. b. Valid BS 7799 / ISO certification

#### Note:

- Bidder's in house data centers shall not be considered.
- Bidders who have built their own Internet Data Center (IDC), for commercial use will be considered.
- In case the Bidder is a wholly owned subsidiary, the experience of the parent company would be considered for compliance.

- a. Copy of work order / client certificates.
   For IDC bidder, Notarized Certificate from Company Secretary confirming the order value/cost.
- b. Valid Certification

(IDC bidder shall also submit customer work orders)

7.	The bidder (prime) should have experience in providing Facility Management Services (FMS) to at least one data center, during the last five years. The FMS shall include IT infrastructure related (e.g. Servers, storage, networks, system/database administration, application platform support, etc.) and non IT related services (Power, cooling, physical security etc.)  Note:  Bidder's in house data centers shall not be considered.  Bidders who have built their own Internet Data Center (IDC), for commercial use will be considered.  In case the Bidder is a wholly owned subsidiary, then the experience of the parent company would be considered for compliance.	Copy of work order / client certificates.
8.	The bidder (Prime) / Consortium Partner/ Group Company should have a CMMi level 3 Certificate. In case of transition period necessary documentation should be submitted. In case the Bidder is a wholly owned subsidiary, then the CMMi certification of the	Valid CMMi Level -3 or above certificate.
9.	The bidder (prime) should be a profit making company having positive net worth and having an annual turnover of more than Rs. 200 Crores in FY 2020-21.	Copy of the audited financial statements of the company along with a CA certificate.

10.	7	Certificate from bidders HR Department for number of Technically qualified professionals employed by the company.
11.	The Bidder and/or all/any consortium partners shall not be under a Declaration of Ineligibility for corrupt or fraudulent practices or blacklisted with any of the Government agencies, as on Bid Submission date.	Declaration in this regard by the authorized signatory of the prime bidder
12.	The bidder (prime) should submit valid letter from the OEMs confirming following:  • The bidder should submit valid letter from the OEMs confirming following:  • Authorization for bidder / consortium partners from OEMs  • Confirm that the products quoted are not reaching EOL within two years &EOS within 5 years Otherwise the same will be changed with the superior product at no extra cost.  • Undertake that the support including spares, patches, and upgrades for the quoted products shall be available for the period of the project upto 7 years.  • In case the bidder is wholly owned subsidiary the MAF of the parent company would also be considered for compliance.	OEMs include but not limited to:      Compute Infrastructure     Networking Infrastructure     Storage Infrastructure     UPS     HVAC     Fire Detection &Suppression     Surveillance     Security Components

Each Server and Software OEM is required to submit an undertaking on the horizontal support of its product across various platforms/processors, as follows:

#### Server

Each Server OEM is required to submit an undertaking, certifying its product to be supported on Operating Systems (OS), and Databases, with names and version details of the supported OS and Databases, for a period of 6 years, applicable from the date of completion of FAT. In case the said support is terminated for any reason within the required support period for DC, the OEM shall provide a better suitable server with no additional cost.

Declaration letter, along with relevant supporting documents

#### Software

13.

Each Software OEM is required to submit an undertaking, certifying its product to be supported on the Server and Databases/OS, with names and version details of the supported Server and Databases/OS, for a period of 6 years from the date of completion of FAT. In case the said support is terminated for any reason within the required support period for DC, the OEM shall provide a new version of software as applicable, with no additional cost.

OEM of each equipment/system is required to submit an undertaking on support of its product for a period of 6 years, applicable from the date of completion of FAT. In case the said support is terminated for any reason within the required support period for DC, the OEM shall provide a better equipment/system with no additional cost.

14.	The bidder (prime) or it's parent company should have an office in the State of West Bengal. The local office should be equipped with the adequate resource to provide support as and when would be required.	Relevant Documents or Undertaking signed by the Authorized Signatory
15.	The bidder should submit an acceptance of Terms and Conditions contained in the RFP document.	Declaration in this regard by the authorized signatory of the prime bidder should be attached.
16.	The bidder should submit valid GST registration certificate and Permanent Account Number (PAN) issued by income Tax Department.	Copy of each registration should be provided.
17.	The bidder should submit a copy of the entire RFP document with every page signed by an authorized signatory of the Bidder	Signed RFP copies and must have court fee stamps of value Rs. 10/- affixed on the tender issue page
18.	The bidder should submit power of attorney certifying the authorized signatory.	Power of Attorney executed by the Bidder in favor of the Principal Officer or the duly Authorized Representative, certifying him as an authorized signatory for the purpose of this Tender.

<sup>16.</sup> Note: In the event of a consortium, one of the partners shall be designated as a "Prime Bidder". The bidder (prime) of the consortium shall be an Information Technology Company/ IT System Integrator. Every member of the consortium shall be equally responsible and jointly liable for the successful completion of the entire project.

- 17. In Consortium all the members shall be equally responsible to complete the project; however prime bidder shall give an undertaking for successful completion of the project. In case of any issues, prime bidder would be responsible for all the penalties.
- 18. A bidding company/ corporation cannot be a part of more than one Consortium. Any Member of consortium cannot bid separately as a sole bidder. The bidder (all consortium partners) must have Company registration certificate, Registration under labor laws & contract act, valid VAT/ Sales Tax Registration Certificate, valid
- 19. In case the Bidder is a wholly owned subsidiary, then the documentary evidence of the parent company would be considered for tender compliance.

#### **Criteria for Evaluation of Bids**

- A three-stage procedure will be adopted for evaluation of proposals, with the pre-qualification being completed before the technical evaluation and thereafter financial proposals being opened and compared. Pursuant to the pre-qualification criterion Bidders will be short-listed for technical bid. Technical bids will be opened only for the Bidders who succeed the prequalification criterion. The technical bids for the disqualified Bidders will be returned unopened at the address mentioned on the envelopes containing the technical bid.
- SIA will review the technical bids of the short-listed Bidders to determine whether the technical bids are substantially responsive. Bids that are not substantially responsive are liable to be disqualified.
- SIA will assign points (quality of services score) to the technically qualified Bidders based
  on the technical evaluation criterion as mentioned in section 6.18.2. The commercial bids for
  the technically qualified Bidders will then be opened and reviewed to determine whether
  the commercial bids are substantially responsive.
- The evaluation will be made on the basis of least cost.
- Conditional bids are liable to be rejected.

#### Criteria for Evaluation and Comparison of Pre-qualification Bids

The Bidder shall be liable for adherence to all provisions of this Agreement.

The Pre-Qualification proposal will be evaluated using the checklist given in Section 2

#### Criteria for Evaluation and Comparison of Technical Bids

- Technical proposal of only those bidders will be opened and evaluated who meet all the prequalification criteria.
- The evaluation committee will evaluate the Technical Proposals on the basis of the technical evaluation criterion as provided below.
- Qualifying marks for opening Financial bid is 28 under the category "Organizational strength" out of 40 (70%) and 42 under the category "Technical Solution offered" out of 60 (70%). Firms, scoring less than 70% marks in any one of the category between "Organizational Strength" and "Technical Solution Offered", will not be eligible for opening financial bid.
- Technical bids will be reviewed for determining the technical capability of the Bidder for the Project and to ascertain Compliance of the Technical bids with the RFP terms and conditions, technical requirements and scope of work as defined in this RFP.

## Scoring Criteria and evaluation parameters:

Table 4: Evaluation Parameters

Sr	Technical Score Marks			
A	Organizational Strength	40		
В	Technical Solution Offered	60		
	Total (A + B)	100		

Sr	Evaluati	on Parameter	Breakup of Marks	Total Marks			
A) Or	Organizational strength (40 marks)						
A.1	projects	dder's experience in implementation of Data Center or Large Scale implementation of IT project in India lue of Rs. 10 Crore or above;		10			
	Slab l	3 Projects executed	5				
	Slab 2	4-5 Projects executed	7				
	Slab 3	6 Projects or more executed	10				
A.2	Prime Bi quantifie project of more that		10				
	Slab l	Projects experience of more than 3 years	5				
	Slab 2	Projects experience of more than 4 to 5 years	7				
	Slab 3	Projects experience of more than 6 or more years	10				
A.3	quantifie project	dder's experience in providing facility management d in terms of number of projects will be evaluated; considered for evaluation should have project cost in Rs. 4 Crore.		10			
	Slab l	l Project under maintenance	3				
	Slab 2	2 Projects executed under maintenance	5				

	Slab 3	3 Projects under maintenance	7	
	Slab 4	4 Projects or more under maintenance	10	
		Furnover of the bidder from Indian Operations in 21 (In Crores):		5
	Slab 1	Annual turnover > Rs 400 Cr	5	
A.4	Slab 2	Annual turnover > Rs 350 Cr ≤ Rs 400 Cr	4.5	
	Slab 3	Annual turnover > Rs 300 Cr ≤ 350 Rs Cr	4	
	Slab 4	Annual turnover > Rs 250 Cr ≤ Rs 300 Cr	3.5	
	Slab 5	Annual turnover > Rs 200 Cr ≤ 250 Cr	3	
	Prime Bio	dder's Manpower strength on own payroll		5
	Slab l	Manpower strength of >100 but <= 150	2	
	Slab 2	Manpower strength of >150 but <= 200	2.5	
A.5	Slab 3	Manpower strength of >200 but <= 300	3	
	Slab 4	Manpower strength of >300 but <= 400	4	
	Slab 5	Manpower strength of >400	5	

**Note:** In case the Bidder is a wholly owned subsidiary, then the documentary evidence for the experience & expertise of the parent company would also be considered for tender compliance and scoring.

	Design	& Architecture:		15
B.1	Slab 1	Understanding of the scope of work, the design and technical solution, professional support services and various components including design diagrams and elaboration of components.	5	
i B. I	Slab 2	Extent of compliance to technical requirements as per given specifications of RFP & for quoting all the products. For mismatch of product specification 1 (one) marks will be deducted for each product. Mismatch of specifications for more than 5 products will be treated as disqualification of the bid. Selected bidder needs to comply with product specification as per RFP and products needs to be replaced by the bidder where technical specification mismatch identified.	5	
	Slab 3	Commissioning of data center augmentation and DR site infrastructure with adherence to best practices like ISO, ITIL, IPv6 etc	5	
	Solutio includi	n document with detailed understanding of the project ng:		20

B.2	Slab 1	Approach & Methodology for Installation, Configuration (3 marks maximum on pro-rata basis) & Migration and integration of IT Components with minimal downtime (2 marks maximum on pro-rata basis)	5	
	Slab 2	Approach & Methodology for Installation, Configuration (3 marks maximum on pro-rata basis) & Migration / integration of non-IT Components with minimal downtime (2 marks maximum on pro-rata basis)	5	
	Slab 3	Approach & Methodology – presentation	10	
B.3	Project	t Plan with timeline and milestones		5
B.4	Resour	ce planning and allocation		20
B.4.1	SI Proj	ect Manager – 1 no. (3 marks)		
B.4.1.1	Slab 1	Education: (B.E. / B.Tech) or MBA or its equivalent with PMP certification (1 Marks)	1	
	Slab 2	Education: B.E. / B.Tech or MBA or its equivalent without PMP certification (0.5 mark)		
B.4.1.2	Slab 1	Overall Experience: 10+ years of experience (1 marks)	1	
<u> </u>	Slab 2	Overall Experience: 8 + years of experience (0.5 mark)		
B.4.1	Slab 1	Data Center implementation & operations experience: With 5+ years (1 marks)	1	
	Slab 2	Data Center implementation & operations experience: With 3+ years (0.5 mark)		
B.4. 2	DC De	esign and IT Expert -1 no. (2 Marks)		
B.4. 2.1	Slab 1	Education: B.E. / B.Tech with ISO 27001:2013 lead implementer / auditor certification( 1 marks)	1	
	Slab 2	Education: B.E./B.Tech without ISO 27001:2013 lead implementer/auditor certification (0.5 mark)		
B.4. 2.2	Slab 1	Overall Experience: More than 7 years' experience with 5+ year Data Center implementation with execution of two similar projects (1 marks)	1	
	Slab 2	Overall Experience: More than 7 years' experience with 3+ years, Data Center implementation with execution of two similar projects (0.5 mark)		
B.4. 3	Non IT	Solution Expert – 1 nos. (1 marks)		

B.4. 3.1	Slab 1	Education: B.E. / B.Tech with relevant Data Center Non IT Infrastructure implementation experience. With overall 7 years' experience 1 mark. Experience 3-7 years (0.5 Mark)		
B.4. 4	Infrastructure Implementation team – 2 no's (6 marks)			
B.4. 4.1	Slab 1 5 + Experience in DC implementation but not limited to Storage, Network & Security (2 persons 1 marks for each)		2	
Slab 2		3 + Experience in DC implementation but not limited to Storage, Network & Security (2 persons 0.5 marks for each)		
	Slab 3	Certification – ITIL / CCNA with security certification (2 persons 1 marks for each)	2	
	Slab 4	Certification – ITIL / CCNA without security certification 2 persons 0.5 marks for each)		
B.4.4.2	Slab 1	5 + Experience in DC implementation but not limited to Server, Storage, Network etc. with ITIL and RHCE/MCSE certifications (2 persons 1 marks each)		
	Slab 2	5 + Experience in DC implementation but not limited to Server, Storage, Network etc. without ITIL and RHCE/MCSE certifications (2 persons 0.5 marks each)		
B. 4.5		Technical support team – 8 no's (8 marks)	8	
Slab 1		5 + Experience in DC support but not limited to Server, Storage, Network etc. with relevant certificate - 2 persons (1 marks per person)	2	
		5 + Experience in DC support but not limited to Server, Storage, Network etc. without relevant certificate - 2 persons (0.5 mark per person)		
	Slab 3	5 + Experience in SYS admin & DBA but not limited to Redhat, Windows, MySQL, MSSQL, PostGreSQL etc. with relevant certificate – 2 persons (1 marks per person)	2	
B.4. 5.1	Slab 4	5 + Experience in SYS admin & DBA but not limited to Redhat, Windows, MySQL, MSSQL, PostGreSQL etc. without relevant certificate – 2 persons (0.5 marks per person)		
	Slab 5	5 + Experience in SYS admin & Application Support but not limited to Redhat, Windows, Apache, Tomcat, IIS, PHP, etc. with relevant certifications – 2 person (1marks per person)	2	

Slab 6	5 + Experience in SYS admin & Application Support but not limited to Redhat, Windows, MySQL, Apache, Tomcat, IIS, PHP, without relevant certificate – 2 persons (0.5 marks per person)		
Slab 7	5 + Experience in SYS admin & backup domain Support with relevant certificate – 2 persons (1 Marks per person).	2	
Slab 8	5 + Experience in SYS admin and backup domain Support without relevant certificate. – 2 persons (0.5 marks per person)		

**Note:** In case the Bidder is a wholly owned subsidiary, then the documentary evidence for the experience & expertise of the parent company would also be considered for tender compliance and scoring.

#### Financial Bid Evaluation

- The Financial Bids of technically qualified bidders (i.e. above 70 marks) will be opened on the prescribed date in the presence of bidder representatives.
- Only fixed price financial bids indicating total price for all the deliverables and services specified in this bid document will be considered.
- The bid price will include all taxes and levies and shall be in Indian Rupees and mentioned separately.
- Any conditional bid would be rejected.
- Errors & Rectification: Arithmetical errors will be rectified on the following basis: "If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected. If there is a discrepancy between words and figures, the amount in words will prevail".
- If there is no price quoted for certain material or service, the bid shall be declared as disqualified.
- The lowest quoted price of the financial bid amongst the technically qualified bidders will be declared Ll bid.
- In the event that there are 2 or more bidders having the same value in the financial bid, the bidder securing the highest technical score will be adjudicated as the "Best responsive bid" for award of the Project.

#### **Appointment of System Integrator:**

#### Award Criteria

WTL will award the Contract to the successful bidder whose financial proposal is the lowest and would consider it as substantially responsive as per the process outlined above.

## SECTION - C

## DATE AND TIME SCHEDULE

Sl. No.	Particulars	Date & Time
1	Date of uploading of N.I.T. & other Documents (online) (Publishing Date)	24.02.2022
2	Documents download/sale start date (Online)	24.02.2022
3	Last Date and time of sending the queries (Offline / e-mail)	02.03.2022 at 15.00 hrs.
4	Pre Bid Meeting (On Line)	03.03.2022 at 11.00 hrs.
5	Corrigendum, if any will be published (On Line)	-
6	Bid Submission start date & time (On line)	10.03.2022 at 11.00 Hrs.
7	Last Date & time of submission of Earnest Money Deposit & submission of remittance details	17.03.2022 at 12.00 Hrs
8	Last Date & time of submission of Tender Fee & submission of remittance details	17.03.2022 at 12.00 Hrs.
9	Bid Submission closing date & time (On line)	17.03.2022 at 14.00 Hrs.
10	Bid opening date & time for Technical Proposals (Online)	21.03.2022 at 11.00 Hrs.
11	Date of uploading the final list of Technically Qualified Bidder (online) after disposal of appeals, if any	-
12	Date for opening of Financial Bid (Online)	-

#### SECTION - D

#### INSTRUCTION TO BIDDER

#### 1. **DEFINITIONS**

In this document, the following terms shall have following respective meanings:

- "Acceptance Test Document" means a document, which defines procedures for testing the functioning of installed system. The document will be finalized with the contractor within 7 days of issuance of the Letter of Award.
- "Bidder" means any firm offering the solution(s), service(s) and /or materials required in the RFP. The word Bidder when used in the pre award period shall be synonymous with Bidder, and when used after award of the Contract shall mean the successful Bidder.
- "Contract" is used synonymously with Agreement.
- "Contract Price" means the price to be paid to the Contractor for providing the Solution, in accordance with the payment terms.
- "Contractor" means the Bidder whose bid to perform the Contract has been accepted by Tender Committee and is named as such in the Letter of Award.
- "Default Notice" mean the written notice of Default of the Agreement issued by one Party to the other.
- "Fraudulent Practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a Contract and includes collusive practice among Bidders (prior to or after Bid submission) designed to establish Bid prices at artificial noncompetitive levels and to deprive the Directorate of Commercial Taxes and eventually Gov. of W. Bengal of the benefits of free and open competition.
- "GoI" shall stand for the Government of India.
- "GoWB" means Government of West Bengal.
- "Personnel" means persons hired by the Bidder as employees and assigned to the performance of the Infrastructure Solution or any part thereof.
- "Similar Nature of Work" means "Supply, Installation, Commissioning, Testing, AMC, Operation & Maintenance of IT Hardware, Software and Networking items."
- "Project" Project" AMC support of Hardware items and Networking Components installed at the SDC and the DR site at Webel IT Part in Purulia District, West Bengal.
- "AMC" means Annual Maintenance Contract.
- "Services" means the work to be performed by the Bidder pursuant to this Contract, as described in the detailed Scope of Work.
- "Interest rate" means "364 days Government of India (GoI) Treasury Bills" rate.

"Law" shall mean any Act, notification, bye law, rules and regulations, directive, ordinance, order or instruction having the force of law enacted or issued by the Central Government and/or the Government of West Bengal or any other Government or regulatory authority or political subdivision of government agency.

**"LOI"** means issuing of Letter of Intent shall constitute the intention of the WTL to place the Purchase Order with the successful bidder.

"Requirements" shall mean and include schedules, details, description, statement of technical data, performance

characteristics, standards (Indian as well as International) as applicable and specified in the Contract.

"Service" means provision of Contracted service viz., operation, maintenance and associated services for DEPLOYED SYSTEMS as per Section titled "Scope of Work".

"Termination Notice" means the written notice of termination of the Agreement issued by WTL.

"**Uptime**" means the time period when specified services are available with specified technical and service standards as mentioned in section titled WARRANTY SUPPORT" "%**Uptime**" means ratio of 'up time' (in minutes) as mentioned in section titled "Warranty support".

"Service Down Time" (SDT) means the time period when specified services with specified technical and operational requirements as mentioned in section titled "WARRANTY SUPPORT"" are not available to Gov. of W. Bengal and its user departments and organizations.

"WTL" means Webel Technology Limited a Govt. of W. Bengal undertaking.

### 2. PRE BID MEETING

Pre Bid Meeting will be held on 03.03.2022 at 11.00 hrs. (On-Line Meeting). Bidder can send their queries as per format (Section - N) to Manager (Purchase) (purchase@wtl.co.in). Only the queries received within the stipulated date prior to the Pre Bid Meeting will be answered. Interest bidders are requested to send mail to (purchase@wtl.co.in) for participation of online pre-bid meeting. Based on request WTL will share meeting id / links for meeting. If there is any change in date and time then will inform.

## 3. COST OF BIDDING

The bidder shall bear all costs associated with the preparation and submission of the bid and WTL will no case be responsible for those costs regardless of the conduct or outcome of the bidding process.

## 4. BID DOCUMENT

Bidder is expected to examine all instructions, forms, terms and requirement in the bid document. The invitation to bid together with all its attachment thereto shall be considered to be read, understood and accepted by the bidder unless deviations are specifically stated in the seriatim by the bidder. Failure to furnish all information required by the bid document or a bid not substantially responsive to the bid document in every respect may result of the bid.

## 5. AMENDMENT OF BID DOCUMENT

At any time prior to the deadline for submission of proposals, WTL reserves the right to add/modify/delete any portion of this document by issuance of an Corrigendum, which would be published on the website and will also be made available to the all the Bidder who have been issued the tender document. The Corrigendum shall be binding on all bidders and will form part of the bid documents.

#### 6. MODIFICATION AND WITHDRAWAL OF BIDS

As per the bidding process available in the tender.

#### 7. LANGUAGE OF BID & CORRESPONDENCE

The proposal will be prepared by the Bidder in English language only. All the documents relating to the proposal (including brochures) supplied by the firm should also be in English, and the correspondence between the Bidder & WTL will be in English language only. The correspondence by fax/E-mail must be subsequently confirmed by a duly signed formal copy.

### 8. BIDDER'S SOLUTION

The bidders are requested to study the Bill of Material supplied with this document carefully. While working out the solution the bidder has to work with the broad minimum specification provided in the tender documents, conforming to the model, make and Part number (wherever provided). While submitting the bid the bidder has to detail out all components needed to complete the system BOM. The bidder is required quote for each item retaining all major components/sub system detailed and specified. As the contractor will be responsible for smooth functioning of the system, availability of spares during the tenure of the warranty period have to be take care by the contractor to maintain the guaranteed uptime.

## 9. EARNEST MONEY DEPOSIT (EMD / BID SECURITY) / TENDER FEE

The bidder shall furnish Online Receipt against payment of Tender Fees and Earnest Money Deposit.

#### 10. REFUND OF EMD / BID SECURITY

EMD / BID SECURITY will be refunded to the unsuccessful bidders without interest by following guidelines of circular

3975-F(Y) dated 28/07/2016 on final selection of Successful Bidders.

## 11. FORFEITURE OF EMD / BID SECURITY

EMD / BID SECURITY made by Bidder may be forfeited under the following conditions:

If Bidder withdraws the proposal before the expiry of validity period.

During the evaluation process, if a Bidder indulges in any such activity as would jeopardize the process, the decision of WTL regarding forfeiture of EMD / BID SECURITY shall be final and shall not be called upon question under any circumstances.

If Bidder violates any of the provisions of the terms and conditions of the proposal.

In the case of a successful Bidder, if Bidder fails to:

- a) Accept the work order along with the terms and conditions.
- b) Furnish performance security.
- c) Violates any of the work conditions of this proposal or indulges in any such activities as would jeopardize the work.
- d) Submitting false/misleading information/declaration/documents/proof/etc.

The decision of WTL regarding forfeiture of EMD / BID SECURITY shall be final and shall not be called upon to question under any circumstances, besides, forfeiture of EMD / BID SECURITY even the Bidder will be deferred from participating in any job for a period of one year.

#### 12. FORMS AND FORMATS

The various inputs for the Techno Commercial as Financial Bids are to be submitted in the format specified. The bidder shall use the form, wherever specified, to provide relevant information. If form

does not provide space for any required information, space at the end of the form or additional sheets shall be used to convey the said information. For all other cases, the bidder shall design a form to hold the required information.

#### 13. LACK OF INFORMATION TO BIDDER

The bidder shall be deemed to have carefully examined the Bid document to his entire satisfaction. Any lack of information shall not relieve the bidder of his responsibility to fulfill his obligation under the bid. If bidder has any queries relating to bid document, then he can send the queries before the Pre Bid Meeting.

#### 14. CONTRACT EXECUTION

On receipt of the Letter of Award/Purchase Order the contractor should submit a Performance Bank Guarantee (PBG) equivalent to 3% of the total contract value within three weeks from the date of receipt of Letter of Award/Purchase Order. The PBG should be valid for six months more than the AMC period. All delivery of the material will have to be completed within 12 weeks from the date of acceptance of contract and the contractor has to ensure all activities leading to the commissioning of the contract to be completed within 18 weeks from the date of award. Subsequent to the award of contract, the contractor will have to arrange for the requisite material as per BOM.

#### 15. TIME SCHEDULE FOR DELIVERY BACK-TO-BACK AMC SUPPORT

Back-to-Back AMC document from OEM will be provided.

### 16. LIQUIDATED DAMAGE / PENALTY

The job includes the supply and installation of materials mentioned in the tender document. In the event of failure to meet the job completion in stipulated date/time liquidated damage may be imposed on the contractor for sum not less than 0.5% of the contract value for that item/job for each week or part thereof, subject to a ceiling of 10% of the total contract value (excluding all taxes & duties and other charges). In the event of LD exceeds 10% of the order value, WTL reserves the right to terminate the contract and WTL will get the job completed by any other competent party. The difference of cost incurred by WTL will be recovered from the contractor and PBC will be invoked.

#### 17. LIABILITY

In case of a default on bidder's part or other liability, WTL shall be entitled to recover damages from the Contractor. In each such instance, regardless of the basis on which WTL is entitled to claim damages from the Contractor (including fundamental breach, negligence, misrepresentation, or other contract or tort claim), Contractor shall be liable for no more than:

- Payment referred to in the Patents and Copyrights clause.
- Liability for bodily injury (including death) or damage to real property and tangible personal property limited to that cause by the Contractor's negligence.
- As to any other actual damage arising in any situation involving non-performance by Contractor
  pursuant to or in any way related to the subject of this Agreement, the charge paid by WTL for the
  individual product or Service that is the subject of the Claim. However, the contractor shall not be
  liable for
- For any indirect, consequential loss or damage, lost profits, third party loss or damage to property or loss of or damage to data.

For any direct loss or damage that exceeds the total payment for Contract Price made or expected to be made tothe Contractor hereunder.

### 18. PATENTS & COPYRIGHT

If a third party claims that a product delivered by the Contractor to WTL infringes that party's patent or copyright, the Contractor shall defend WTL against that claim at Contractor's expense and pay all costs,

damages, and attorney's fees that a court finally awards or that are included in a settlement approved by the Contractor, provided that WTL.

- Promptly notifies Contractor in writing of the claim
- Allows Contractor to control and co-operate with Contractor in the defense and any related settlement negotiations.

Remedies: If such a claim is made or appears likely to be made, WTL would permit Contractor to enable WTL to continue to use the product, or to modify it, or replace it with one that is at least functionally equivalent. If Contractor determines that none of these alternatives is reasonably available, WTL agrees to return the product to Contractor on Contractor's written request. Contractor will then give WTL a credit equal to for a machine. WTL's net book value (provided WTL has followed generally accepted accounting principles for a generally available software product produced by Contractor (Program) the amount paid by WTL or 12 months charges (which ever is lesser) and for materials the amount paid by WTL for the materials. These will be Contractor's entire obligation regarding any claim of infringement.

#### 19. SUSPENSION OF WORK

WTL shall have the power at any time and from time to time by notice to the Contractor to delay or suspend the progress of the work or any part of the work due to any other adequate reasons and on receipt of such notice the contractor shall forthwith suspend further progress of the work until further notice from WTL. The Contractor shall recommence work immediately after receiving a notice to do so from WTL. The whole or any part of the time lost for such delay or suspension shall, if WTL in its absolute discretion thinks fit, but not otherwise, be added to the time allowed for completion.

#### 20. TERMS OF PAYMENT

Sl. No.	Payment Schedule	Fee Payable	Remarks
1.	Mobilization Advance	10% of the total CAPEX	Payable against submission of Performance Bank Guarantee foranamountequalto3%ofth eContractvalueonor before10days of signing of Contract.
2.	On Delivery of all the IT &Non-IT equipment	60% of the CAPEX value of the delivered IT/non-IT equipment	Payable on successful check of all/part of the delivered equipment by WTL appointed Nodal Officer.

3.	PAT / Installation & Commissioning of IT &Non-IT components	15% of The CAPEX value of the installed IT/ non-IT equipment	Payable on successful PAT / Installation & Commissioning of all the installed equipment WTL appointed Nodal Officer, post PAT / Installation & Commissioning Certification by Consultant
4.	On successful Final acceptance test	15% of the CAPEX & One Time Installation & Commissioning Charges	Payable on Successful implementation of FAT, in accordance with WTL.
5.	Hardware AMC for existing equipments /Software ATS or License cost subsequent to initial supply periods	Payable yearly advance against invoice raising	All OEM equipment AMC should be back- lined with OEMs
6.	Operations and Management for 5 years payable quarterly (as QGR) against invoice raised.	5%(per quarter)of the OPEX	Payment release subject to Performance / FMS Resource attendance

## 21. GOVERNING LAWS

This contract should be governed by and interpreted by Arbitration clause in accordance with Laws in force in India. The courts at Kolkata shall have exclusive jurisdiction in all matters arising under the contract. The selected vendor shall keep himself fully informed of all current national, state and municipal law and ordinances. The selected vendor shall at their own expense, obtain all necessary permits and license and pay all fees and taxes required by law. These will be selected vendor's entire obligation regarding any claim of infringement. The selected vendor hereto agrees that it shall comply with all applicable union, state and local laws, ordinances, regulations and codes in performing its obligations hereunder, including the procurement of licenses, permits certificates and payment of taxes where required. The selected vendor shall establish and maintain all proper records (particularly, but without limitation, accounting records) required by any law, code/practice of corporate policy applicable to it from time to time including records and returns as applicable under labor legislation.

## 22. CORRUPT OR FRAUDULENT

The Tender Committee requires that the bidders under this Tender observe the highest standards of ethics during the procurement and execution of such contracts. For this purpose the definition of corrupt and fraudulent practices will follow the provisions of the relevant laws in force. The Tender Committee will reject a proposal for award if it detects that the bidder has engaged in corrupt or fraudulent practices in competing for the contract in question. The Tender Committee will declare a firm ineligible, either indefinitely or for a stated period of time, if it at any time determines that the firm has engaged in corrupt and fraudulent practices in competing for, or in executing, a contract.

### 23. BIDING CLAUSE

All decisions taken by the Tender Committee regarding the processing of this tender and award of contract shall be final and binding on all parties concerned.

The Tender Committee reserves the right:

- To vary, modify, revise, amend or change any of the terms and conditions mentioned above and.
- To reject any or all the Tender/s without assigning any reason whatsoever thereof or to annul
  the bidding process and reject all bids at any time prior to award of contract, without thereby
  incurring any liability to the affected bidder(s) or any obligation to inform the affected bidder(s)
  of the grounds for such decision.

#### 24. WORKMEN'S COMPENSATION

In every case in which by virtue of the provision of the workmen's compensation Act 1923 or any other relevant acts and rules, compensation to a workman employed by the contractor, is payable, then this should be done by the Contractor. If WTL is obliged to make any compensation under the said rules and acts, then the amount shall be recovered without prejudice, from the bills and due of the Contractor. WTL shall not be bound to contest any claim made against the Contractor in respect of workmen's compensation.

## 25. CONTRACTOR'S EMPLOYEES

The Contractor shall comply with the provision of all labour legislation including the requirement of the payment of Wage Act 1936 and the rules framed there under and modifications thereof in respect of men employed by him in carrying out the contract. The Contractor must ensure that he complies with PF, ESI regulation for all his deployed employees. The Contractor shall see that all authorized Sub Contractors under him similarly complied with the above requirement.

### **26. SAFETY MEASURES**

The Contractor shall in the course of execution of the work take all necessary precaution for the protection of all persons and property. The Contractor shall take adequate measures to protect the work and present accident during the work. In the event of any accident to any person or persons or damage or injury of any description to any person or property due to failure on the part of the contractor in taking proper precautionary measures the contractor shall be responsible for and must make good the loss the damage at his own cost to the satisfaction of the department and employees of the department shall be indemnified from all claims or liabilities arising there from or any expenses incurred on account thereof.

# 27. EQUIPMENT

All tools & tackles necessary for the work shall have to be procured by the contractor unless otherwise specified elsewhere in these tender documents. The equipment used by the contractor for a particular work must be appropriate for the type of work. The contractor shall maintain the equipment used on the work properly so that they are in good working condition. In no case shall the contractor use defective or imperfect equipment in the work. The contractor shall arrange to replace or repair all defective equipment so that the progress of the work is not hampered. No defective equipment should be left at

the site of work and the department shall not be responsible for any loss or damage to any of this equipment during the course of the execution of the work.

#### 28. SUB-CONTRACT

The purchaser (WTL) does not recognize the existence of Sub-Contractors. The Contractor's responsibility is not transferable.

### 29. TERMINATION FOR DEFAULT

WTL may without prejudice to any other remedy or right of claim for breach of contract by giving not less than 30 days written notice of default sent to the contractor, terminate the order in whole or in part. If the contractor materially fails to render any or all the services within the time period specified in the contract or any extension thereof granted by WTL in writing and fails to remedy its failure within a period of thirty days after receipt of default notice from WTL. If the project (delivery, commissioning as well as warranty maintenance support is not carried out according to specification due to deficiency in service as per terms of the contract. In such case WTL will invoke the amount held back from the contractor as PBG.

### 30. BANKRUPTCY

If the contractor becomes bankrupt or have a receiving order made against him or compound with his creditors or being a corporation commence to be wound up, not being a voluntary winding up for the purpose only or amalgamation or reconstruction, or carry on their business under a receiver for the benefit of their creditors or any of them, WTL shall be at liberty to terminate the engagement forthwith without any notice in writing to the contractor or to the liquidator or receiver or to any person in whom the contractor may become vested and without any compensation to give such liquidator or receiver or other person the option of carrying out the engagement subject to their providing a guarantee for the due and faithful performance of the engagement up to an amount to be determined by WTL.

## 31. FORCE MAJEURE

It is hereby defined as any cause, which is beyond the control of the Contractor or WTL as the case may be, which such party could not foresee or with a reasonable amount of diligence could not have foreseen and which substantially affect the performance of the contract, such as

- War, Hostilities or warlike operations (whether a state of war be declared or not), invasion, act of foreign enemy and civil war.
- Rebellion, revolution, insurrection, mutiny, usurpation of civil or military, government, conspiracy, riot, civil commotion and terrorist area.
- Confiscation, nationalization, mobilization, commandeering or requisition by or under the order
  of any government or de facto authority or ruler, or any other act or failure to act of any local
  state or national government authority.
- Strike, sabotage, lockout, embargo, import restriction, port congestion, lack of usual means of
  public transportation and communication, industrial dispute, shipwreck, shortage of power
  supply epidemics, quarantine and plague.
- Earthquake, landslide, volcanic activity, fire flood or inundation, tidal wave, typhoon or cyclone, hurricane, nuclear and pressure waves or other natural or physical disaster.

If either party is prevented, hindered or delayed from or in performing any of its obligations under the Contract by an event of Force Majeure, then it shall notify the other in writing of the occurrence of such event and the circumstances of the event of Force Majeure within fourteen days after the occurrence of such event. The party who has given such notice shall be excused from the performance or punctual performance of its obligations under the Contract for so long as the relevant event of Force Majeure continues and to the extent that such party's performance is prevented, hindered or delayed.

The party or parties affected by the event of Force Majeure shall use reasonable efforts to mitigate the effect of the event of Force Majeure upto its or their performance of the Contract and to fulfill its or their obligation under the Contract but without prejudice to either party's right to terminate the Contract.

No delay or nonperformance by either party to this Contract caused by the occurrence of any event of Force Majeure shall.

- Constitute a default or breach of the contract.
- Give rise to any claim from damages or additional cost or expense occurred by the delay or nonperformance. If, and to the extent, that such delay or nonperformance is caused by the occurrence of an event of Force Majeure.

## 32. SERVICE LEVEL AGREEMENT (SLA)

### Licenses/Subscriptions

The system software licenses/subscriptions mentioned in the Bill of Materials shall be genuine, perpetual, full use and should provide upgrades, patches, fixes, security patches and updates directly from the OEM. All the licenses and support (updates, patches, bug fixes, etc.) should be in the name of Webel Technology Limited

All the licenses and support (updates, patches, bug fixes, etc.) should be in the name of WTL. SI shall provide a comprehensive warranty that covers all components after the issuance of the final acceptance by WTL. The warranty should cover all materials (if applicable), licenses, services, and support for both hardware (if applicable) and software. SI shall administer warranties with serial number and warranty period. SI shall transfer all the warranties to WTL at no additional charge at the time of termination of the project. All warranty documentation (no expiry) will be delivered to WTL.

SI shall review the licenses requirements/subscription support with the Department.

# Network Connectivity

The network connectivity for the project need to be established under this project for the office and between the DC & DR under this project. The SI would be responsible to design the network solution with adequate capacity and redundancy and all the connectivity provided under this project should be secure and reliable. The Network shall be designed to meet the minimum SLA prescribed in this tender. SI shall be responsible for coordinating the respective stakeholders for the network connectivity. There will be about 50-100 users at DC location (LAN already exists) and 10-20 users at DR location (new LAN required). For link commissioning purpose, following addresses are provided: DC Address: WBSDC, 2nd Floor Monibhandar, Webel Bhavan Complex, Block-EP&GP, Sector-V, Salt Lake City, Kolkata - 700091. DR Site Address: Webel IT Park, North Lake Road, Saheb Bandh, Purulia -- 723101, West Bengal

# Capacity Building / Training

### Overview

The SI would be required to provide training on various aspects to enable effective use of the new system to achieve the envisaged outcomes. The scope of work of the SI related to Capacity Building & Change Management is described in this section. Capacity building will include the following:

## Preparation of Training material

a) Training Materials: The following minimum training materials will be required to be prepared by the SI to facilitate the training of users:

### FAT & Go-Live

SI will assist in successful completion of Final Acceptance Testing (FAT) and audit of the system on the completion of the roll-out of each phase and will submit a Go-Live Report for each phase. The Final Acceptance Testing (FAT) for rolled-out application shall be tested for both remotely & onsite basis.

The application tested for acceptance testing & Final Acceptance Testing is observed over one month for Stabilization, Reliability & Consistency of the solution. On being consistent, reliable and efficient over a period of time the solution is said to be declared Go-Live. The application & resources should be well equipped such that SI is able to comprehensively meet the SLA / performance requirements.

#### Go-Live

Go-Live is declared by WTL when the proposed solution becomes operational after successful conclusion of all acceptance tests to the satisfaction of the Department

### Sign-off Deliverables

FAT Report signed off from the concerned department Go-Live report

Scope of Services - Operation and Maintenance Phase This phase starts from the successful completion of "Go-Live".

The SI is responsible for the Comprehensive maintenance of all components of the project for the Contract period of 5 years from the date of Go-Live.

Success of the Project would rely on how professionally and methodically the entire Project is managed once the implementation is completed. From the Systems Integrator perspective, this is a critical phase since the quarterly payments are linked to the SLA's in the post implementation phases. System Integrator, thus, is required to depute a dedicated team of professionals to manage the Project and ensure adherence to the required SLAs.

### Overview of Post Implementation Services

An indicative list of activities and nature of support to be provided is mentioned below:

#### System Administration and Trouble Shooting

- A. Overall monitoring and management of all IT infrastructure deployed by the SI
- B.Repair or replace infrastructure deployed for this Project.
- C. Replace component due to technical, functional, manufacturing or any other problem with a component of the same make and configuration. In case the component of same make and configuration is not available, the replacement shall conform to open standards and shall be of a higher configuration and shall be approved by the Department

- D. Perform system administration tasks such as managing the user access, creating and managing users, taking backups etc.
- E. Performance tuning of the system to ensure adherence to SLAs and performance requirements as indicated in the RFP.

## **Database Administration and Trouble Shooting**

A. Undertake end-to-end management of database on an on-going basis to facilitate smooth functioning and optimum utilization including regular database backup and periodical testing of backup data, conducting configuration review to tune database, maintaining the necessary documentation and managing database schema, disk space, user roles, and storage.

#### **Overall**

- A. Undertake preventive maintenance (any maintenance activity that is required before the occurrence of an incident with an attempt to prevent any incidents) and carry out the necessary repairs and replacement of parts wherever needed to keep the performance levels of the hardware and equipment in tune with the requirements of the SLA. Such preventive maintenance shall not be attended during working hours of the State Departments, unless inevitable and approved by WTL / respective Departments.
- B. Undertake reactive maintenance (any corrective action, maintenance activity that is required post the occurrence of an incident) that is intended to troubleshoot the system with sufficient teams
- C. Escalate and co-ordinate with its OEMs for problem resolution wherever required
- D. The SI shall be required to comply with various policies relating to monitoring and management of infrastructure such as IS Policy, backup and archival policy, system software update policy etc. of the State.
- E. Provide a centralized Helpdesk and Incident Management Support till the end of contractual period
- F. Recurring refresher trainings for the users, training to new users and Change Management activities

### Warranty Support - IT compute Infrastructure (for additional system software)

## As part of the warranty services SI shall provide:

SI shall provide a comprehensive warranty and on-site free service warranty for 3 years from the date of Go Live for all equipments& project components.

SI shall provide the performance warranty in respect of performance of the installed software developed by the SI to meet the performance requirements and service levels in the RFP.

SI is responsible for sizing and procuring the necessary IT compute Infrastructure and software licenses as per the performance requirements provided in the RFP. During the warranty period SI shall replace or augment or procure higher-level new equipment or additional licenses at no additional cost to the State in case the procured hardware or software is not adequate to meet the service levels.

During the warranty period SI shall maintain the systems and repair / replace at the installed site, at no charge

The SI shall ensure that the warranty complies with the agreed Technical Standards, Security Requirements, Operating Procedures, and Recovery Procedures.

Any component that is reported to be down on a given date should be either fully repaired or replaced by temporary substitute (of equivalent configuration) within the time frame indicated in the Service Level Agreement (SLA)

## **Monitoring and Management Services**

The system integrator shall provide the following monitoring and management services for the DC/DR and for the help desk.

- ✓ Server Monitoring, Administration & Management Services
- ✓ Database Administration & Management Services
- √ Storage Administration & Management Services
- √ Backup & Restore Services
- ✓ Security Administration Services.

## Server Monitoring, Administration & Management Services

The activities shall include but not limited to:

- ✓ Configuration of server parameters, operating systems administration and tuning.
- ✓ Operating system administration, including but not limited to management of users, processes, resource contention, preventive maintenance and management of updates & patches to ensure that the system is properly updated.
- ✓ Re-installation in the event of system crash/failures.
- ✓ Maintenance of a log of the performance monitoring of servers including but not limited to monitoring CPU, disk space, memory utilization, I/O utilization, etc.
- Event log analysis generated in all the sub systems including but not limited to servers, operating systems, databases, applications, security devices, messaging, etc.
- ✓ Ensuring that the logs are backed up and truncated at regular intervals.
- ✓ Periodic health check of the systems, troubleshooting problems, analysing and implementing rectification measures.
- ✓ Identification, diagnosis and resolution of problem areas and maintenance of assured SLA levels.
- Implementation and maintenance of standard operating procedures for maintenance of the infrastructure.
- ✓ Management of the user names, roles and passwords of all the relevant subsystems, including, but not limited to servers, applications, devices, etc.
- ✓ System administration activities shall include tasks including but not limited to setting up the servers, executing hardware and software updates when necessary., OS and application software platform installation, performance monitoring, fine tuning as per application requirement, coordination with software development team, etc.

## **Database Administration & Management Services**

The activities shall include but not limited to:

✓ End-to-end management of database on an ongoing basis to ensure smooth functioning of the same.

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- ✓ Management of changes to database schema, disk space, storage and user roles.
- ✓ Conduct code and configuration reviews to provide tuning inputs to relevant stakeholders for improving the application performance or resolve bottlenecks, if any.
- ✓ Performance monitoring and tuning of the databases on a regular basis including, preventive maintenance of the database as required.
- ✓ Management of database upgrade or patch upgrade as and when required with minimal downtime.
- Regular backups for all databases in accordance with the backup and archive policies and conduct recovery whenever required with appropriate permissions
- ✓ DBA activities shall include tasks but not limited to database installation, configuration, replication, data protection services, performance monitoring, fine tuning, backup and restoration, etc

✓

### **Backup and Restore Services**

The activities shall include but not limited to:

- √ Backup of operating system, database and application as per stipulated policies.
- ✓ Monitoring and enhancement of the performance of scheduled backups, schedule regular testing of backups and ensure adherence to related retention policies.
- ✓ Ensuring prompt execution of on-demand backups of volumes, files and database applications whenever required by department or in case of upgrades and configuration changes to the system.
- ✓ Real-time monitoring, log maintenance and reporting of backup status on a regular basis. Prompt problem resolution in case of failures in the backup processes.
- ✓ Media management including, but not limited to, tagging, cross-referencing, storing, logging, testing, and vaulting in fire proof cabinets.
- ✓ Ongoing support for file and volume restoration requests.
- ✓ A backup of all transactions shall be done so that in case of any disaster / emergency at the Data Centre, the DR will have all the data.
- ✓ SI shall be responsible for supply, install, test & commission of the backup storage of the archival of data.

#### **Security Administration Services**

The activities to be carried out under security administration shall include, but not limited to:

- ✓ Addressing the ongoing needs of security management including, but not limited to, monitoring of various devices / tools such as firewall, intrusion detection, content filtering and blocking, virus protection, and vulnerability protection through implementation of proper patches and rules.
- ✓ Root domain administration by creating the root and sub-domains and setting the root level security policies such as authentication mechanisms (single/multi factor),
- ✓ Password policies such as password length, password complexity, password expiry, account lockout policy, certificate policies, IPSEC policies, etc.
- ✓ Maintaining an updated knowledge base of all the published security vulnerabilities and virus threats for related software and microcode, etc.
- ✓ Ensuring that patches / workarounds for identified vulnerabilities are patched / blocked immediately.

- Respond to security breaches or other security incidents and coordinate with respective OEMs in case of a new threat is observed to ensure that workaround / patch is made available for the same.
- ✓ Provide a well-designed access management system, security of physical and digital assets, data and network security, backup and recovery etc.
- ✓ Maintenance and management of security devices, including, but not limited to maintaining firewall services to restrict network protocols and traffic, detecting intrusions or unauthorized access to networks, systems, services, applications or data, protecting email gateways, firewalls, servers, from viruses.
- Ensuring that the security policy is maintained and updates to the same are made regularly as per ISO 270001, ISO 20000 and BS 15000 guidelines.
- ✓ Investigate All Suspicious Activities. ...
- ✓ Maintain Secure Monitoring Tools. ...
- ✓ Liaise With And Delegate To The Rest Of The SOC Team. ...
- ✓ Review And Report On All Cybersecurity Processes. ...
- ✓ Keep All Security Programs And Resources Up To Date.
- √ Review, report, take corrective measures for all security incidents

✓

#### Liaison with stakeholders

The SI shall coordinate and liaise with the key stakeholders of the project such as Silpasathi Single Window authority, respective departments, Third party vendors engaged by the line departments for developing services covered under the Ease of doing business framework. Such coordination and liaison is highly critical to the success of the project.

# **Warranty and Support**

The SI shall warrant that the IT Computing Infrastructure supplied for this Project shall have no defects arising from design or workmanship or any act or omission of the SI. The warranty shall remain valid for the Contract period on all the items supplied as per the Contract.

The SI shall replace any parts/ components of the IT infrastructure supplied for the Project if the components are defective and during the entire warranty period the SI shall apply latest upgrades for all the hardware components after appropriate testing. WTL will not pay any additional costs separately for warranty and the overall IT infrastructure cost quoted by the SI shall include the same.

The SI shall be held solely responsible for performance and service levels of any infrastructure deployed by the SI as part of this Contract.

## **Knowledge Transfer**

At the end of the Contract period, the SI will be required to provide necessary handholding and transition support to designated staff or any other agency that is selected for maintaining the system post the Contract with the SI. The handholding support will include but not be limited to, conducting detailed walkthrough and demonstrations for the IT Applications, handing over all relevant documentation, addressing the queries/clarifications of the new agency with respect to the working / performance levels of the infrastructure, conducting training sessions etc.

Knowledge Transfer is an integral part of the scope of work of the SI. This will have to be done even in case the Contract with the Bidder ends or is terminated before the planned timelines.

Please note that the above requirements are only indicative but not exhaustive. If any other work involved in the assignment for the purpose of meeting the project objectives would be the responsibility of the SI.

# 33. PERFORMANCE BANK GUARANTEE (PBG)

As a guarantee for timely delivery, installation and commissioning of equipment as well as performance of on-site warranty support, as mentioned in Bill of Material, from the date of final acceptance of systems and pertaining to proper running of the systems, the bidder will have to submit 3% of the contract value as security in the form of Performance Bank Guarantee from any nationalized bank as per format enclosed (Section – P).

### 34. SI/BIDDER/CONTRACTOR'S RESPONSIBILITIES

Refer Section –A (Scope of Work & Responsibility)

#### 35. NO WAIVER OF RIGHTS

Neither the inspection by WTL or any of their agents nor any order by WTL for payment of money or any payment for or acceptance of the whole or any part of the works by WTL, nor any extension of time, nor any possession taken by WTL shall operate as a waiver of any provision of the contract or of any power reserved to WTL, or any right to damages here in provided, nor shall any waiver of any breach in the contract be held to be a waiver of any other subsequent breach.

## 36. GRAFTS, COMMISSIONS, GIFTS, ETC.

It is the Purchaser's policy to require that bidders, suppliers, contractors and consultants under contracts, observe the highest standard of ethics during the procurement and execution of such contracts. Any graft, commission, gift or advantage given, promised or offered by or on behalf of the contractor or his partner, agent, officers, director, employee or servant or any one on his or their behalf in relation to the obtaining or to the execution of this or any other contract with WTL shall in addition to any criminal liability which it may incur, subject the contractor to the cancellation of this and all other contracts and also to payment of any loss or damage to WTL resulting from any cancellation. WTL shall then be entitled to deduct the amount so payable from any monies otherwise due to the contractor under contract.

## **37. ENFORCEMENT OF TERMS**

The failure of either party to enforce at any time any of the provision of this contract or any rights in respect thereto or to exercise any option here in provided shall in no way be construed to be a waiver to such provisions, rights or options or in any way to affect the validity of the contract. The exercise by either party of any of its rights herein shall not preclude or prejudice either party from exercising the same or any other right it may have hereunder.

### 38. PERIOD OF VALIDITY OF OFFER

For the purpose of placing the order, the proposals shall remain valid till 180 days. During the period of validity of proposals, the rates quoted shall not change. In exceptional circumstances, WTL may ask for extension of the period of validity and such a request shall be binding on Bidders. WTL's request and the response to such a request by various Bidders shall be in writing. A Bidder agreeing to such an extension will not be permitted to increase its rates.

## 39. TAXES & DUTIES

- The prices shall be inclusive of all taxes & levies including GST and other statutory duties as applicable. Rate of taxes should be indicated separately in the Price Bid.
- Contract Price specified in Price Bid should be based on the taxes & duties and charges prevailing at the date one day prior to the last date of Bid submission.

- Statutory deduction, wherever applicable, shall be made from invoice as per government rules. Necessary certificate will be issued for such deductions.
- Bidder submitting a bid shall produce valid statutory documents / certificates with respect to GST, Income Tax, ROC, Prof. Tax, Trade License, etc. All such documents / certificates shall remain valid on the last date of tender submission.
- In case of inter-state transaction, WTL will provide "Waybill". However, statutory charges, if any will be borne by the bidder.
- GST component of the invoice of the bidder may be kept on hold in case there ia any mismatch / irregularity in GST return filling on the part of the bidder.

### 40. DISCREPANCIES IN BID

- Discrepancy between description in words and figures, the rate which corresponds to the words quoted by the bidder shall be taken as correct.
- Discrepancy in the amount quoted by the bidder due to calculation mistake of the unit rate then the unit rate shall be regarded as firm.
- Discrepancy in totaling or carry forward in the amount quoted by the bidder shall be corrected.

### 41. BID DUE DATE

The online tender has to submitted not later than the due date and time specified in the Important Dates Sheet. WTL may as its discretion on giving reasonable notice by fax, or any other written communication to all prospective bidders who have been issued the bid documents, extend the bid due date, in which case all rights and obligations of the WTL and the bidders, previously subject to the bid due date, shall thereafter be subject to the new bid due date as extended.

### 42. LATE BID

Any proposal received by WTL after the deadline for submission of proposals may not be accepted.

## 43. OPENING OF BID BY WTL

Bids shall be opened and downloaded electronically through operation of the process in the e-Tender portal in presence of Tender Committee. Bidders interested to remain present during electronic bid opening may attend the bid opening session at WTL premises at scheduled date & time.

# 44. CONTACTING WTL

Bidder shall not approach WTL officers beyond office hours and/or outside WTL office premises from the time of the Bid opening to the time of finalization of successful bidder. Any effort by bidder to influence WTL office in the decision on Bid evaluation, Bid comparison or finalization may result in rejection of the Bidder's offer. If the bidder wishes to bring additional information to the notice of WTL, it should be in writing following the procedure mentioned hereinabove.

## 45. WTL'S RIGHT TO REJECT ANY OR ALL BIDS

WTL reserves the right to reject any bid and to annul the bidding process and reject all bids at any time prior to award of Contract, without thereby incurring any liability to the affected bidder(s) or any obligation to inform the affected bidder(s) of the grounds for such decision.

## **46. BID CURRENCIES**

Prices shall be quoted in Indian Rupees, inclusive of all prevailing taxes, levies, duties, cess etc.

#### 47. PRICE

- Price should be quoted in the BOQ format only. No deviation is acceptable.
- Price quoted should be firm, inclusive of packing, forwarding, insurance and freight charges.
- Percentage/specified amount of taxes & duties should be clearly mentioned otherwise WTL reserves the right to reject such vaque offer.

- The percentage of the operational expenditure (OPEX) should not be less than 50% of the total quoted value.
- CAPEX may include the cost of Non-IT, IT equipment active and passive components, one time
  installation charges, etc. OPEX may include operational expenditure as Manpower cost, and
  Annual maintenance cost of all the equipment's for 05 (Five) years (Year 1+ Year 2+ Year 3+
  Year 4+ Year 5) etc. to be incurred by the bidder for operation and maintenance for 5 years
  after Go-Live.
- Price to be quoted inclusive of supply, installation & commissioning charges.

#### 48. CANVASSING

Canvassing or support in any form for the acceptance of any tender is strictly prohibited. Any bidder doing so will render him liable to penalties, which may include removal of this name from the register of approved Contractors.

#### 49. NON-TRANSFERABILITY OF TENDER

This tender document is not transferable.

### **50. FORMATS AND SIGNING OF BID**

The original and all copies of the proposals shall be neatly typed and shall be signed by an authorized signatory(ies) on behalf of the Bidder. The authorization shall be provided by written Power of Attorney accompanying the proposal. All pages of the proposal, except for un-amended printed literature, shall be initialed by the person or persons signing the proposal. The proposal shall contain no interlineations, erase or overwriting. In order to correct errors made by the Bidder, all corrections shall be done & initialed with date by the authorized signatory after striking out the original words/figures completely.

#### 51. WITHDRAWAL OF BID

Bid cannot be withdrawn during the interval between their submission and expiry of Bid's validity period. Fresh Bid may be called from eligible bidders for any additional item(s) of work not mentioned herein, if so required.

## **52. INTERPRETATION OF DOCUMENTS**

If any bidder should find discrepancies or omission in the specifications or other tender documents, or if he should be in doubt as to the true meaning of any part thereof, he shall make a written request to the tender inviting authority for correction/clarification or interpretation or can put in a separate sheet along with his technical bid document.

## 53. PREPARATION OF TENDER

Tender shall be submitted in accordance with the following instructions:

- a) Tenders shall be submitted in the prescribed forms. Digital signatures shall be used. Where there is conflict between the words and the figures, the words shall govern.
- b) All notations must be in ink or type written. No erasing or overwriting will be permitted. Mistakes may be crossed out and corrections typed or written with ink adjacent thereto and must be initialed in ink by the person or persons signing the tender.
- c) Tenders shall not contain any recapitulation of the work to be done. Alternative proposals will not be considered unless called for. No written, oral, telegraphic or telephonic proposals for modifications will be acceptable.
- d) Tenders shall be uploaded as notified on or before the date and time set for the opening of tenders in the Notice Inviting Tenders.
- e) Tenders subject to any conditions or stipulations imposed by the bidder are liable to be rejected.
- f) Each and every page of the tender document must be signed with company seal by the bidder.

g) Any bidder may withdraw his tender by written request at any time prior to the scheduled closing time for receipt of tenders and not thereafter.

### 54. SPLITTING OF THE CONTRACT AND CURTAILMENT OF WORK

WTL reserve the right to split up and distribute the work among the successful bidders and to curtail any item of work in the schedule partly or fully.

#### 55. FINAL INSPECTION

Final inspection will be carried by the authorized representative from WTL./ Department.

#### **56. SITE INSPECTION**

Bidder can inspect (at their own cost) the sites if required, for which they have to take necessary permission from WTL in writing.

### **57. ERASURES OR ALTERNATIONS**

The offers with overwriting and erasures may make the tender liable for rejection if each of such overwriting/erasures/manuscript ions is not only signed by the authorized signatory of the bidder. There should be no hand-written material, corrections or alterations in the offer. Technical details must be completely filled up. Correct technical information of the product being offered must be filled in. Filling up of the information using terms such as "OK", "accepted", "noted", "as given in brochure/manual" is not acceptable. The Customer may treat offers not adhering to these guidelines as unacceptable. The Customer may, at its discretion, waive any minor non-conformity or any minor irregularity in the offer. This shall be binding on all bidders and the Tender Committee reserves the right for such waivers.

### 58. COMPLIANCE WITH LAW

The contractor hereto agrees that it shall comply with all applicable union, state and local laws, ordinances, regulations and codes in performing its obligations hereunder, including the procurement of licenses, permits certificates and payment of taxes where required. The contractor shall establish and maintain all proper records (particularly, but without limitation, accounting records) required by any law, code/practice of corporate policy applicable to it from time to time including records and returns as applicable under labor legislation.

#### 59. CLARIFICATION OF BIDS

During evaluation of the bids, the Customer/Tender Committee, at its discretion may ask the bidder for clarification of its bid. The request for the clarification and the response shall be in writing (fax/email) and no change in the substance of the bid shall seek offered or permitted.

## **60. DEEMED ACCEPTANCE**

Deliverables will be deemed to be fully and finally accepted by the Department in the event Department has not submitted such Deliverable/Service Review Statement to Bidder/Implementation Partner before the expiration of the review period, or when Department uses the Deliverable in its business, whichever occurs earlier ("Deemed Acceptance").

## **61. QUALITY CONTROL**

- The contractor is obliged to work closely with WTL and/or Department, act within its authority
  and abide by directive issued by them on implementation activities.
- The contractor will abide by the safety measures and free WTL and the concerned Department from all demands or responsibilities arising from accident/loss of life, the cause of which is due to their negligence. The bidder will pay all indemnities arising from such incidents and will not hold WTL and Department responsible.

- The contractor will treat as confidential all data and information about the system, obtained in the execution of its responsibilities in strict confidence and will not reveal such information to any party without the prior written approval of WTL/Department.
- WTL reserves the right to inspect all phases of contractor's operation to ensure conformity to
  the specifications. WTL shall have engineers, inspectors or other duly authorized
  representatives made known to the contractor, present during the progress of the work and
  such representatives shall have free access to the work at all times. The presence or absence of
  representatives of WTL does not relieve the contractor of the responsibility for quality control
  in all phases.
- The Court of Kolkata only will have the jurisdiction to deal with and decide any legal matters or dispute whatsoever arising out of the contract.

### 62. GENERAL TERMS

- a) All the pages of the bid document including documents submitted therein must be duly signed and stamped failing which the offer shall be liable to be rejected.
- b) All the documents to be submitted by the bidder along with their offer should be duly authenticated by the person signing the offer and if at any point of time during procurement process or subsequently it is detected that documents submitted are forged/tampered/manipulated in any way, the total responsibility lies with the bidder and WTL reserves the full right to take action as may be deemed fit including rejection of the offer and such case is to be kept recorded for any future dealing with them.
- c) No Technical/Commercial clarification will be entertained after opening of the tender.
- d) Overwriting and erasures may make the tender liable for rejection if each of such overwriting/erasures/manuscription is not only signed by the authorized signatory of the bidder. All overwriting should be separately written and signed by the authorized signatory of the bidder.
- e) Quantity mentioned in the tender document is indicative only and orders shall be placed subject
  to actual requirement. WTL reserve the right to increase or decrease the quantity specified in
  the tender.
- f) WTL reserve the right to reject or accept or withdraw the tender in full or part as the case may be without assigning the reasons thereof. No dispute of any kind can be raised the right of buyer in any court of law or elsewhere.
- g) WTL reserve the right to ask for clarification in the bid documents submitted by the bidder. Documents may be taken if decided by the committee.
- h) Supporting technical brochures/catalogues indicating each feature in respect of offered model and make must be submitted along with the offer, in absence of which the offer is liable to be ignored.
- i) No dispute by the bidders in regard to Technical/Commercial points will be entertained by WTL and decision taken by the Tender Committee will be final.
- j) Discrepancy in the amount quoted by the bidder due to calculation mistake, the unit rate shall be regarded as firm and the totaling or carry in the amount quoted by the bidder shall be corrected accordingly.
- k) The price offers shall remain firm within the currency of contract and no escalation of price will be allowed.
- The acceptance of the tender will rest with the accepting authority who is not bound to accept the lowest or any tender and reserves the right to reject in part or in full any or all tender(s) received and to split up the work among participants without assigning any reason thereof.
- m) The customer/WTL at its discretion may extend the deadline for the submission of Bids.
- n) The Court of Kolkata only will have the jurisdiction to deal with and decide any legal matters or dispute whatsoever arising out of the contract.

#### **BID FORM**

(Bidders are requested to furnish the Bid Form in the Format given in this section, filling the entire Blank and to be submitted on Letter Head in original)

To Webel Technology Limited Plot – 5, Block – BP, Sector - V, Salt Lake City, Kolkata – 700091.

Sub:Selection of System Integrator for Capacity Enhancement of West Bengal State Data Centre (WB-SDC) and setting up its DR Site at Remote Location

Dear Sir,

- We the undersigned bidder/(s), having read and examined in details the specifications and other documents of the subject tender no. WTL/WBSDC/CE/21-22/031 (2<sup>nd</sup> call) dated 24.02.2022, do hereby propose to execute the job as per specification as set forth in your Bid documents.
- 2. The prices of all items stated in the bid are firm during the entire period of job irrespective of date of completion and not subject to any price adjusted as per in line with the bidding documents. All prices and other terms & conditions of this proposal are valid for a period of 180 (one hundred eighty) days from the date of opening of bid. We further declare that prices stated in our proposal are in accordance with your bidding.
- 3. We confirm that our bid prices include all other taxes and duties and levies applicable on bought out components, materials, equipments and other items and confirm that any such taxes, duties and levies additionally payable shall be to our account.
- Earnest Money Deposit: We have enclosed EMD / BID SECURITY remittance details for a sum of Rs.12000000.00
- 5. We declare that items shall be executed strictly in accordance with the specifications and documents irrespective of whatever has been stated to the contrary anywhere else in our proposal. Further, we agree that additional conditions, deviations, if any, found in the proposal documents other than those stated in our deviation schedule, save that pertaining to any rebates offered shall not be given effect to.
- 6. If this proposal is accepted by you, we agree to provide services and complete the entire work, in accordance with schedule indicated in the proposal. We fully understand that the work completion schedule stipulated in the proposal is the essence of the job, if awarded.
- 7. We further agree that if our proposal is accepted, we shall provide a Performance Bank Guarantee of the value equivalent to three percent (3%) of the Order value as stipulated in Financial Bid (BOQ).
- 8. We agree that WTL reserves the right to accept in full/part or reject any or all the bids received without any explanation to bidders and his decision on the subject will be final and binding on Bidder.

Thanking you, we remain,

Yours faithfully	
Name in full	
Si	ignature & Authorized Verified by
	Signature
	Name in full
	Designation
	Company Stamp
Dated, thisday of2021	

### SECTION - F

#### TECHNO COMMERCIAL EVALUATION & AWARDING OF CONTRACT

# 1. EVALUATION PROCEDURE

- The Eligibility Criteria will be evaluated by Tender Committee and those qualify will be considered for further evaluation.
- After qualifying in Eligibility Criteria, the qualified bidders will only be considered for Financial Bid evaluation.

#### 2. FINAL EVALUATION

FinancialProposal of the bidders qualifying in the evaluation of Eligibility Criteria will be evaluated. The bidder who has qualified in the Eligibility Criteriavaluation and returns with lowest quote (L1) in financial bid would normally be awarded the contract subject to Post Qualification.

### 3. AWARDING OF CONTRACT

An affirmative Post Qualification determination will be prerequisite for award of the contract to the lowest quoted bidder. A negative determination will result in rejection of bidder's bid, in which event the WTL will proceed to the next lowest evaluated bidder to make a similar determination of that bidder's capability to perform satisfactorily. The successful bidder (s) will have to give security deposit in the form of Performance Bank Guarantee.

## 4. POST QUALIFICATION

The determination will evaluate the Bidder's financial, technical, design, integration, customization, production, management and support capabilities and will be based on an examination of the documentary evidence of the Bidder's qualification, as well as other information WTL deems necessary and appropriate. This determination may include visits or interviews with the Bidder's client's reference in its bid, site inspection, and any other measures.

### SECTION - G

#### **GUIDANCE FOR E-TENDERING**

Instructions / Guidelines for electronic submission of the tenders have been annexed for assisting the Bidders to participate in e-Tendering.

## • Registration of Bidder:

Any Bidder willing to take part in the process of e-Tendering will have to be enrolled & registered with the Government e-Procurement System through logging on to https://wbtenders.gov.in. The Bidder is to click on the link for e-Tendering site as given on the web portal.

## • Digital Signature Certificate (DSC):

Each Bidder is required to obtain a Class-II or Class-III Digital Signature Certificate (DSC) for submission of tenders from the approved service provider of the National Informatics Centre (NIC) on payment of requisite amount. Details are available at the Web Site stated above. DSC is given as a USB e-Token.

 The Bidder can search & download N.I.T. & BOQ electronically from computer once he logs on to the website mentioned above using the Digital Signature Certificate. This is the only mode of collection of Tender Documents.

## • Participation in more than one work:

A prospective bidder shall be allowed to participate in the job either in the capacity of individual or as a partner of a firm. If, found to be applied severally in a single job all the applications will be rejected.

### • Submission of Tenders:

Tenders are to be submitted through online to the website stated above in two folders at a time, one in Techno Commercial Proposal & the other is Financial Proposal before the prescribed date & time using the Digital Signature Certificate (DSC). The documents are to be uploaded virus scanned copy duly Digitally Signed. The documents will get encrypted (transformed into non readable formats)

The proposal should contain scanned copies of the following in two covers (folders).

### Techno Commercial Cover:

### Technical Document1 (scanned & join in pdf format then upload)

- 1. Copy of Remittance details of Earnest Money Deposit (EMD / BID SECURITY)
- 2. Copy of Remittance details of Tender Fee

## Technical Document2 (scanned & join in pdf format then upload)

- 1. NIT Declaration duly stamped & signed in letter head, Section Q
- 2. Bid Form as per format (Section E)

## Technical Compliance (scanned &joins in pdf format then upload)

1. Manufacturer Authorization Form

## Financial Cover:

BOQ will be downloaded and same will be uploaded with quoted rates. While uploading BOQ file name shall remain unchanged. Absence of this document shall lead to summary rejection of the bid.

# NON-STATUTARY COVER (MY SPACE) CONTAIN FOLLOWING DOCUMENT:

(In each folder, scanned coy will be uploaded with single file having multiple pages)

Sl. No.	Category Name	Sub Category Name	Sub Category Description
A	CERTIFICATES	A1. CERTIFICATES	<ul> <li>GST Registration Certificate</li> <li>PAN</li> <li>Trade License</li> <li>Document as per Section – B</li> </ul>
В	COMPANY DETAILS	B1. COMPANY DETAILS 1 B2. COMPANY DETAILS 2	<ul> <li>Document as per Section – B</li> <li>Document as per Section – B</li> <li>Company Profile (Not more than 3 pages)</li> <li>Document as per Section – B</li> </ul>
С	CREDENTIAL	CREDENTIAL 1	Order copy & performance certificate as per Section – B
		CREDENTIAL 2	<ul> <li>Other documents, if any</li> <li>Support Service &amp;Manpower as per Section</li> <li>B</li> </ul>
D	DECLARATION	DECLARATION 1	<ul> <li>List of Clients as per format (Section – O)</li> <li>Support Service Centre &amp; Manpower (Section – M)</li> </ul>
		DECLARATION 2	Financial Capability of Bidder as per format (Section – K)
		DECLARATION 3	Bidder's Details as per format (Section – L)
		DECLARATION 4	Details of Order Executed as per format (Section – J)
		DECLARATION 5	Document as per Section – B Financial document as per Section – B
F	FINANCIAL INFO	P/L & BALANCE SHEET 2016-2017	P/L & BALANCE SHEET 2017-2018
		P/L & BALANCE SHEET 2017-2018	P/L & BALANCE SHEET 2018-2019
		P/L & BALANCE SHEET 2018-2019	P/L & BALANCE SHEET 2019-2020
		P/L BALANCE SHEET 2019-2020	P/L & BALANCE SHEET 2020-2021

# SECTION - H

# IT EQUIPMENT &NON-IT EQUIPMENT DETAILS

	List of IT Equipments:								
S1. No	Device Type	Make	Model	S/ N	Start Date	End Date	BoQ Sl.No.		
1	Blade Server Chassis	Cisco	UCS 5108		11-Jan- 19	10-Jan-24	211&212		
2	Blade Server	Cisco	UCS B200 M5		12-Jan- 19	11-Jan-24	211&212		
3	Blade Server	Cisco	UCS B200 M5		12-Jan- 19	11-Jan-24	211&212		
4	Blade Server	Cisco	UCS B200 M5		12-Jan- 19	11-Jan-24	211&212		
5	Blade Server	Cisco	UCS B200 M5		12-Jan- 19	11-Jan-24	211&212		
6	Blade Server Chassis	Cisco	UCS 5108		11-Jan- 19	10-Jan-24	211&212		
7	Blade Server	Cisco	UCS B200 M5		12-Jan- 19	11-Jan-24	211&212		
8	Blade Server	Cisco	UCS B200 M5		12-Jan- 19	11-Jan-24	211&212		
9	Blade Server	Cisco	UCS B200 M5		12-Jan- 19	11-Jan-24	211&212		
10	Blade Server	Cisco	UCS B200 M5		12-Jan- 19	11-Jan-24	211&212		
11	Rack Server	Cisco	UCS C480 M5		11-Jan- 19	10-Jan-24	211&212		
12	Rack Server	Cisco	UCS C240 M5		22-Oct- 18	21-Oct-23	210 & 211 & 212		
13	Rack Server	Cisco	UCS C240 M5		22-Oct- 18	21-Oct-23	210 & 211& 212		
14	Fabric Interconnect	Cisco	CISCO UCS FI 6332 16 UP		FAH	11-Jan-24	211&212		
15	Blade Server Chassis	Cisco	UCS 5108		11-Jan- 19	10-Jan-24	211&212		
16	Blade Server	Cisco	UCS B200 M5		12-Jan- 19	11-Jan-24	211&212		
17	Blade Server	Cisco	UCS B200 M5		12-Jan- 19	11-Jan-24	211&212		
18	Blade Server	Cisco	UCS B200 M5		12-Jan- 19	11-Jan-24	211&212		
19	Blade Server	Cisco	UCS B200 M5		12-Jan- 19	11-Jan-24	211&212		
20	Blade Server Chassis	Cisco	UCS 5108		14-Dec- 18	13-Dec- 23	210&211&212		
21	Blade Server	Cisco	UCS B200 M5		11-Jan- 19	10-Jan-24	211&212		
22	Blade Server	Cisco	UCS B200 M5		11-Jan- 19	10-Jan-24	211&212		

23	Blade Server	Cisco	UCS B200 M5	11-Jan- 19	10-Jan-24	211&212
24	Blade Server	Cisco	UCS B200 M5	11-Jan- 19	10-Jan-24	211&212
25	Rack Server	Cisco	UCS C480 M5	11-Jan- 19	10-Jan-24	211&212
26	Rack Server	Cisco	UCS C240 M5	22-Oct- 18	21-Oct-23	210&211&212
27	Rack Server	Cisco	UCS C240 M5	22-Oct- 18	21-Oct-23	210&211&212
28	Fabric Interconnect	Cisco	CISCO UCS FI 6332 16 UP	12-Jan- 19	11-Jan-24	211&212
29	Blade Server Chassis	Cisco	UCS 5108	11-Jan- 19	10-Jan-24	211&212
30	Blade Server	Cisco	UCS B200 M5	11-Jan- 19	10-Jan-24	211&212
31	Blade Server	Cisco	UCS B200 M5	11-Jan- 19	10-Jan-24	211&212
32	Blade Server	Cisco	UCS B200 M5	11-Jan- 19	10-Jan-24	211&212
33	Blade Server	Cisco	UCS B200 M5	11-Jan- 19	10-Jan-24	211&212
34	Blade Server Chassis	Cisco	UCS 5108	14-Dec- 18	13-Dec- 23	210&211&212
35	Blade Server	Cisco	UCS B200 M5	11-Jan- 19	10-Jan-24	211&212
36	Blade Server	Cisco	UCS B200 M5	11-Jan- 19	10-Jan-24	211&212
37	Blade Server	Cisco	UCS B200 M5	11-Jan- 19	10-Jan-24	211&212
38	Blade Server	Cisco	UCS B200 M5	11-Jan- 19	10-Jan-24	211&212
39	Rack Server	Cisco	UCS C480 M5	11-Jan- 19	10-Jan-24	211&212
40	Rack Server	Cisco	UCS C240 M5	22-Oct- 18	21-Oct-23	210&211&212
41	Rack Server	Cisco	UCS C240 M5	22-Oct- 18	22-Oct-23	210&211&212
42	Fabric Interconnect	Cisco	CISCO UCS FI 6332 16 UP	07-Jan- 21	06-Jan-26	
43	Blade Server Chassis	Cisco	UCS 5108	14-Dec- 18	13-Dec- 23	210&211&212
44	Blade Server	Cisco	UCS B200 M5	11-Jan- 19	10-Jan-24	211&212
45	Blade Server	Cisco	UCS B200 M5	11-Jan- 19	10-Jan-24	211&212
46	Blade Server	Cisco	UCS B200 M5	11-Jan- 19	10-Jan-24	211&212
47	Blade Server	Cisco	UCS B200 M5	11-Jan- 19	10-Jan-24	211&212

48	Blade Server	Cisco	UCS 5108	11-Jan- 19	10-Jan-24	211&212
49	Chassis Blade Server	Cisco	UCS B200	ll-Jan-	10-Jan-24	
50	Blade Server	Cisco	M5 UCS B200	19 11-Jan-	10-Jan-24	211&212
51	Blade Server	Cisco	M5 UCS B200 M5	19 11-Jan- 19	10-Jan-24	211&212 211&212
52	Blade Server	Cisco	UCS B200 M5	11-Jan- 19	10-Jan-24	211&212
53	Rack Server	Cisco	UCS C480 M5	11-Jan- 19	10-Jan-24	211&212
54	Rack Server	Cisco	UCS C240 M5	22-Oct- 18	21-Oct-23	210&211&212
55	Rack Server	Cisco	UCS C240 M5	22-Oct- 18	21-Oct-23	210&211&212
56	Fabric Interconnect	Cisco	CISCO UCS FI 6332 16 UP	07-Jan- 21	06-Jan-26	
57	Blade Server Chassis	Cisco	UCS 5108	11-Jan- 19	10-Jan-24	211&212
58	Blade Server	Cisco	UCS B200 M5	11-Jan- 19	10-Jan-24	211&212
59	Blade Server	Cisco	UCS B200 M5	11-Jan- 19	10-Jan-24	211&212
60	Blade Server	Cisco	UCS B200 M5	11-Jan- 19	10-Jan-24	211&212
61	Blade Server	Cisco	UCS B200 M5	11-Jan- 19	10-Jan-24	211&212
62	Rack Server	Cisco	UCS C240 M5	22-Oct- 18	21-Oct-23	210&211&212
63	Rack Server	Cisco	UCS C240 M5	22-Oct- 18	21-Oct-23	210&211&212
64	Rack Server	Cisco	UCS C240 M5	22-Oct- 18	21-Oct-23	210&211&212
65	Rack Server	Cisco	UCS C240 M5	22-Oct- 18	21-Oct-23	210&211&212
66	Fabric Interconnect	Cisco	CISCO UCS FI 6332 16 UP	07-Jan- 21	06-Jan-26	
67	Fabric Interconnect	Cisco	CISCO UCS FI 6332 16 UP	07-Jan- 21	06-Jan-26	
68	Blade Server Chassis	Cisco	UCS 5108	07-Jan- 21	06-Jan-26	
69	Blade Server	Cisco	UCS B200 M5	07-Jan- 21	06-Jan-26	
70	Blade Server	Cisco	UCS B200 M5	07-Jan- 21	06-Jan-26	
71	Blade Server	Cisco	UCS B200 M5	07-Jan- 21	06-Jan-26	

72	Blade Server	Cisco	UCS B200 M5	07-Jan- 21	06-Jan-26	
73	Blade Server	Cisco	UCS B200 M5	07-Jan- 21	06-Jan-26	
74	Blade Server	Cisco	UCS B200 M5	07-Jan- 21	06-Jan-26	
75	Rack Server	Cisco	UCS C240 M5	07-Jan- 21	06-Jan-26	
76	Rack Server	Cisco	UCS C240 M5	07-Jan- 21	06-Jan-26	
77	Rack Server	Cisco	UCS C240 M5	07-Jan- 21	06-Jan-26	
78	Rack Server	Cisco	UCS C240 M5	07-Jan- 21	06-Jan-26	
79	Netapp Node l	NetApp	AFF-A700	07-Aug- 18	30-Nov- 23	210&211&212
80	Netapp Node 2	NetApp	AFF-A700	07-Aug- 18	30-Nov- 23	210&211&212
81	Netapp Node 3	NetApp	AFF-A700	07-Aug- 18	30-Nov- 23	210&211&212
82	Netapp Node 4	NetApp	AFF-A700	07-Aug- 18	30-Nov- 23	210&211&212
83	Hitachi VSP	Hitachi	Hitachi VSP	01-Apr- 19	31-Mar- 21	AMC NOT REQUIRED
84	SAN SWITCH	Cisco	MDS 9148S	20-Oct- 18	19-Oct-23	210&211&212
85	SAN SWITCH	Cisco	MDS 9148S	20-Oct- 18	19-Oct-23	210&211&212
86	SAN SWITCH	Cisco	MDS 9148S	20-Oct- 18	19-Oct-23	210&211&212
87	SAN SWITCH	Cisco	MDS 9148S	20-Oct- 18	19-Oct-23	210&211&212
88	SAN SWITCH	Cisco	MDS 9148S	07-Jan- 21	06-Jan-26	
89	SAN SWITCH	Cisco	MDS 9148S	07-Jan- 21	06-Jan-26	
90	SAN SWITCH	Cisco	MDS 9134	21-Mar- 10	17-May- 18	210&211&212
91	SAN SWITCH	Cisco	MDS 9134	21-Mar- 10	17-May- 18	210&211&212
92	SAN SWITCH	Cisco	MDS 9148	21-Mar- 10	17-May- 18	210&211&212
93	SAN SWITCH	Cisco	MDS 9148	21-Mar- 10	17-May- 18	210&211&212
94	SAN SWITCH	Cisco	MDS 9148	21-Mar- 10	17-May- 18	210&211&212
95	SAN SWITCH	Cisco	MDS 9148	21-Mar- 10	17-May- 18	210&211&212
96	Router	CISCO	ASR1001-X	NA	03-Oct-22	210&211&212
97	Router	CISCO	ASR1001-X	NA	03-Oct-22	210&211&212

98	Switch	CISCO	N9K-C9504	22-Oct-	21-Oct-23	210&211&212
99	Switch	CISCO	N9K-C9504	22-Oct- 18	21-Oct-23	210&211&212
100	Switch	CISCO	N9K- C93108TC- EX	14-Oct- 18	13-Oct-23	210&211&212
101	Switch	CISCO	N9K- C93108TC- EX	14-Oct- 18	13-Oct-23	210&211&212
102	Switch	CISCO	N9K- C93180LC- EX	28-Oct- 18	27-Oct-23	210&211&212
103	Switch	CISCO	N9K- C93180LC- EX	28-Oct- 18	27-Oct-23	210&211&212
104	Switch	CISCO	N9K- C93180YC- EX	14-Oct- 18	13-Oct-23	210&211&212
105	Switch	CISCO	N9K- C93180YC- EX	14-Oct- 18	13-Oct-23	210&211&212
106	Switch	CISCO	N9K- C93180YC- EX	14-Oct- 18	13-Oct-23	210&211&212
107	Switch	CISCO	N9K- C93108TC- EX	14-Oct- 18	13-Oct-23	210&211&212
108	Switch	CISCO	N9K- C93180YC- EX	14-Oct- 18	13-Oct-23	210&211&212
109	Switch	CISCO	N9K- C93108TC- EX	14-Oct- 18	13-Oct-23	210&211&212
110	Switch	CISCO	N9K- C93180YC- EX	14-Oct- 18	13-Oct-23	210&211&212
111	Switch	CISCO	N9K- C93108TC- EX	14-Oct- 18	13-Oct-23	210&211&212
112	Switch	CISCO	N9K- C93180YC- EX	14-Oct- 18	13-Oct-23	210&211&212
113	Switch	CISCO	N9K- C93108TC- EX	14-Oct- 18	13-Oct-23	210&211&212
114	Switch	CISCO	N9K- C93180YC- EX	14-Oct- 18	13-Oct-23	210&211&212
115	Switch	CISCO	N9K- C93108TC- EX	14-Oct- 18	13-Oct-23	210&211&212

116	Switch	CISCO	N9K- C93180YC- EX	14-Oct- 18	13-Oct-23	210&211&212
117	Switch	CISCO	N9K- C93108TC- EX	14-Oct- 18	13-Oct-23	210&211&212
118	Switch	CISCO	N9K- C93108TC- EX	14-Oct- 18	13-Oct-23	210&211&212
119	Switch	CISCO	N9K- C93180YC- EX	14-Oct- 18	13-Oct-23	210&211&212
120	Switch	CISCO	N9K- C93180YC- EX	14-Oct- 18	13-Oct-23	210&211&212
121	Switch	CISCO	N9K- C9348GC- FXP	28-Oct- 18	27-Oct-23	210&211&212
122	Switch	CISCO	N9K- C9348GC- FXP	28-Oct- 18	27-Oct-23	210&211&212
123	Switch	CISCO	N9K- C9348GC- FXP	28-Oct- 18	27-Oct-23	210&211&212
124	Switch	CISCO	N9K- C9348GC- FXP	28-Oct- 18	27-Oct-23	210&211&212
125	Switch	CISCO	N9K- C9348GC- FXP	28-Oct- 18	27-Oct-23	210&211&212
126	Switch	CISCO	N9K- C93108TC- EX	14-Oct- 18	13-Oct-23	210&211&212
127	Switch	CISCO	N9K- C93108TC- EX	14-Oct- 18	13-Oct-23	210&211&212
128	Switch	CISCO	N9K- C93108TC- EX	14-Oct- 18	13-Oct-23	210&211&212
129	Switch	CISCO	N9K- C93180YC- EX	14-Oct- 18	13-Oct-23	210&211&212
130	Switch	CISCO	N9K- C93180YC- EX	14-Oct- 18	13-Oct-23	210&211&212
131	Switch	CISCO	N9K- C93180YC- EX	14-Oct- 18	13-Oct-23	210&211&212
132	Switch	CISCO	N9K- C93180YC- EX	14-Oct- 18	13-Oct-23	210&211&212

133	Switch	CISCO	N9K- C93180YC- EX	14-Oct- 18	13-Oct-23	210&211&212
134	Switch	CISCO	N9K- C93180YC- EX	14-Oct- 18	13-Oct-23	210&211&212
135	Switch	CISCO	N9K- C93108TC- EX	14-Oct- 18	13-Oct-23	210&211&212
136	Switch	CISCO	N9K- C93108TC- EX	14-Oct- 18	13-Oct-23	210&211&212
137	Switch	CISCO	N9K- C93108TC- EX	14-Oct- 18	13-Oct-23	210&211&212
138	Switch	CISCO	N9K- C93108TC- EX	14-Oct- 18	13-Oct-23	210&211&212
139	Switch	CISCO	N9K- C93108TC- EX	14-Oct- 18	13-Oct-23	210&211&212
140	Switch	HP	HPE 1950 12XGT	28-Mar- 20	26-Dec- 44	210&211&212
141	Switch	HP	HPE 1950 12XGT	03-Mar- 20	01-Dec- 44	210&211&212
142	Power Supply	HP	HPE RPS 800	14-Nov- 19	28-Dec- 20	210&211&212
143	Power Supply	HP	HPE RPS 800	14-Nov- 19	28-Dec- 20	210&211&212
144	Appliance	CISCO	APIC Appliance	07-Jan- 21	06-Jan-24	211&212
145	Appliance	CISCO	APIC Appliance	07-Jan- 21	06-Jan-24	211&212
146	Appliance	CISCO	APIC Appliance	07-Jan- 21	06-Jan-24	211&212
147	Firewall	CISCO	FMC1000-K9	16-Jul- 19	23-Oct-23	210&211&212
148	Firewall	CISCO	FPR4110- NGFW-K9	28-Oct- 18	27-Oct-23	210&211&212
149	Firewall	CISCO	FPR4110- NGFW-K9	28-Oct- 18	27-Oct-23	210&211&212
150	Server	ARRAY	AVX-10650	27-Sep- 18	26-Sep- 23	210&211&212
151	Virtual Server	ARRAY	VAPV	27-Sep- 18	26-Sep- 23	210&211&212
152	Virtual Server	ARRAY	VAPV	27-Sep- 18	26-Sep- 23	210&211&212
153	Virtual Server	ARRAY	VAPV	27-Sep- 18	26-Sep- 23	210&211&212
154	Server	ARRAY	AVX-10650	27-Sep- 18	26-Sep- 23	210&211&212

155	Virtual Server	ARRAY	VAPV	27-Sep- 18	26-Sep- 23	210&211&212
156	Virtual Server	ARRAY	VAPV	27-Sep- 18	26-Sep- 23	210&211&212
157	Virtual Server	ARRAY	VAPV	27-Sep- 18	26-Sep- 23	210&211&212
158	Firewall	Checkp oint	Check Point 23500	28-Jul- 19	12-Jun-24	211&212
159	Firewall	Checkp oint	Check Point 23500	28-Jul- 19	12-Jun-24	211&212
160	Firewall	Checkp oint	Smart-1 410	27-Jul- 19	13-Jun-24	211&212
161	Firewall	Checkp oint	Check Point TE1000X	27-Jul- 19	13-Jun-24	211&212
162	Firewall	Checkp oint	Check Point TE1000X	27-Jul- 19	13-Jun-24	211&212
163	DDoS	Checkp oint	DDoS Protector 3006	02-Apr- 18	10-Sep- 24	AMC NOT REQUIRED
164	DDoS	Checkp oint	DDoS Protector 3006	14-May- 20	10-Sep- 24	AMC NOT REQUIRED
165	Tape Library	Overlan d	NEO XL- Series	18-Jul- 18	17-Jul-23	210&211&212
166	Red Hat Insights	REDHA T	MCT3474	01/11/2 018	31/10/20 23	210&211&212
167	Red Hat Cloud Infrastructur e, Premium (2-sockets)	REDHA T	MCT2844	01/11/2 018	31/10/20 23	210&211&212
168	Red Hat Cloud Infrastructur e (without guest OS), Premium (2- sockets)	REDHA T	MCT2847	01/11/2 018	31/10/20 23	210&211&212
169	Red Hat Enterprise Linux Server with Smart Managemen t, Premium (Physical or Virtual Nodes)	REDHA T	RH00008	01/11/2 018	31/10/20 23	210&211&212
170	Ansible Tower by Red Hat, Premium (100	REDHA T	MCT3305	01/11/2 018	31/10/20 23	210&211&212

	Managed Nodes)					
171	High Availability for Unlimited Guests	REDHA T	RH00059	01/11/2 018	31/10/20 23	210&211&212
172	Red Hat Cloud Infrastructur e, Premium (2-sockets)	REDHA T	MCT2844	20/10/2 018	19/10/20 23	210&211&212
173	High Availability for Unlimited Guests	REDHA T	RH00059	20/10/2 018	19/10/20 23	210&211&212
174	High Availability for Unlimited Guests	REDHA T	RH00059	25/04/2 020	24/04/20 25	212
175	Red Hat Cloud Infrastructur e, Premium (2-sockets)	REDHA T	MCT2844	25/04/2 020	24/04/20 25	212
176	Red Hat Cloud Infrastructur e (without guest OS), Premium (2- sockets)	REDHA T	MCT2847	25/04/2 020	24/04/20 25	212
177	High Availability for Unlimited Guests	REDHA T	RH00059F5	01/11/2 021	31/10/20 26	
178	Red Hat OpenStack Platform with Smart Managemen t, Premium (2-sockets)	REDHA T	MCT2979F5	01/11/2 021	31/10/20 26	

179	Red Hat Enterprise Linux for Virtual Datacenters, Standard	REDHA T	RH00002	17/08/2 021	16/08/20 22	210&211&212
180	Commvault Backup Software 11.20.64	Commv ault	Commvault Backup Software 11.20.64 (30 TB)	28-Nov- 18	28-Nov- 23	210&211&212
181	Commvault Backup Software 11.20.64	Commv ault	Commvault Backup Software 11.20.64(10 TB)	09- <b>Se</b> p- 21	01-Aug- 24	211&212
182	DDAN	Trend Micro	DDAN·Deep Discovery Analyzer - 5.0 - Software	01-Nov- 18	31-Oct-23	AMC NOT REQUIRED
183	Deep Security	Trend Micro	Deep Security - Enterprise - per Server (VM)	01-Nov- 18	31-Oct-23	210&211&212
184	OfficeScan	Trend Micro	OfficeScan Multilingual Full Feature	01-Nov- 18	31-Oct-23	210&211&212
185	ServerProte ct Linux	Trend Micro	ServerProte ct Linux	01-Nov- 18	31-Oct-23	210&211&212
186	Control Manager	Trend Micro	Control Manager Advanced Edition - Multi-lingual	01-Nov- 18	31-Oct-23	210&211&212
187	CA Client Automation - IT Client Manager	CA Broadco m	CA Client Automation - IT Client Manager	29-Jun- 18	28-Dec- 23	210&211&212
188	CA Network Flow Analysis (NetQos / NFA)	CA Broadco m	CA Network Flow Analysis (NetQos / NFA)	29-Jun- 18	28-Dec- 23	210&211&212
189	CA Privileged Access Manager (PAM)	CA Broadco m	CA Privileged Access Manager (PAM)	29-Jun- 18	28-Dec- 23	210&211&212

190	CA Privileged Access Mgr - Server Control (PAMSC)	CA Broadco m	CA Privileged Access Mgr - Server Control (PAMSC)	29-Jun- 18	28-Dec- 23	210&211&212
191	CA Service Managemen t - Asset Portfolio Managemen t	CA Broadco m	CA Service Managemen t - Asset Portfolio Managemen t	29-Jun- 18	28-Dec- 23	210&211&212
192	CA Service Managemen t - Service Desk Manager	CA Broadco m	CA Service Managemen t - Service Desk Manager	29-Jun- 18	28-Dec- 23	210&211&212
193	CA Spectrum	CA Broadco m	CA Spectrum	29-Jun- 18	28-Dec- 23	210&211&212
194	DX Unified Infrastructur e Managemen t (Nimsoft / UIM)	CA Broadco m	DX Unified Infrastructur e Managemen t (Nimsoft / UIM)	29-Jun- 18	28-Dec- 23	210&211&212
195	RACK SERVER	НР	HP DL560 Gen9 CTO Mod-X		31 <sup>st</sup> Aug- 2022	238 & 239
196	RACK SERVER	НР	HP DL560 Gen9 CTO Mod-X		31st Aug- 2022	238 & 239
197	RACK SERVER	НР	HP DL560 Gen9 CTO Mod-X		31st Aug- 2022	238 & 239
198	RACK SERVER	НР	HP DL560 Gen9 CTO Mod-X		31 <sup>st</sup> Aug- 2022	238 & 239

	List of Non-IT Equipments:										
S1. No.	Existing Equipmen t	Make	Model	S/ N	Q ty	Floo r	Install Date	AMC upto	BoQ S1. No.		

1	Main LT Panel (ACB, MCCB)	Electro Allied Porducts / Schneider	Customiz e	1	2nd	20/05/2 019	19/05/ 2024	214 & 215
2	PAC DB (RAW Power DB)	Electro Allied Porducts / Schneider	Customiz e	1	2nd	20/05/2 019	19/05/ 2024	214 & 215
3	UPS DB-P (200 KVA)- New	Electro Allied Porducts /Schneider	Customiz e	1	2nd	20/05/2 019	19/05/ 2024	214&21 5
4	UPS DB-S (160 KVA) - Existing	Electro Allied Porducts/Schne ider	Customiz e	1	2nd	20/05/2 019	19/05/ 2024	214&21 5
5	UPS DB (20 KVA)	Electro Allied Porducts/Schne ider	Customiz e	1	2nd	20/05/2 019	19/05/ 2024	214&21 5
6	DG SYNC PANEL (800A ACB, Woodward -DG Sync Controller	Electro Allied Porducts/Schne ider	Customiz e	1	2nd	20/05/2 019	19/05/ 2024	214&21 5
7	Incomer-1 GF(ACB)	Electro Allied Porducts/Schne ider	Customiz e	1	2nd	20/05/2 019	19/05/ 2024	214&21 5
8	Incomer-2 GF(ACB)	Electro Allied Porducts/Schne ider	Customiz e	1	2nd	20/05/2 019	19/05/ 2024	214&21 5
9	Server DB Primary- (MCCB)	Electro Allied Porducts/Schne ider	Master Pact NT/NW	4	2nd	20/05/2 019	19/05/ 2024	214&21 5
10	Server DB Secondary- (MCCB)	Electro Allied Porducts/Schne ider	Master Pact NT/NW	4	2nd	20/05/2 019	19/05/ 2024	214&21 5
11	MCCB for Secondary UPS fixed in 160 kVA UPS O/P Panel	Schneider	Master Pact NT/NW	1	2nd	20/05/2 019	19/05/ 2024	214&21 5
12	UPS DB-20 kVA	Schneider Electric	A9HTND0 4	2	2nd	20/05/2 019	19/05/ 2024	214&21 5
13	CAC DB	Schneider Electric	A9HTND0 4	5	2nd	20/05/2 019	19/05/ 2024	214&21
14	ECM FAN DB	Schneider Electric	A9HTND0 4	1	2nd	20/05/2 019	19/05/ 2024	214&21
15	Active Tiles DB	Schneider Electric	A9HTND1 2	1	2nd	20/05/2 019	19/05/ 2024	214&21 5

16	Lighting DB	Schneider Electric	A9HTND0 8	1	2nd	20/05/2 019	19/05/ 2024	214&21 5
17	Emergenc y Lighting DB	Schneider Electric	A9HTND0 8	1	2nd	20/05/2 019	19/05/ 2024	214&21 5
18	Cooling Optimize Panel	Switchgear & Automation	-	6	2nd	20/05/2 019	19/05/ 2024	214&21 5
19	Metal Detector	Samarth	106F	1	2nd	20/05/2 019	19/05/ 2024	214&21 5
20	Luggage Scanner with all Necessary Items	VEHANT	Kritiscan 6040	1	2nd	20/05/2 019	19/05/ 2024	214&21 5
21	LED			1	2nd	20/05/2 019	19/05/ 2024	214&21 5
22	MONITOR for CCTV	Samsung	LS24F350 FHWXXL	1	2nd	20/05/2 019	19/05/ 2024	214&21
23	Display			1	2nd	20/05/2 019	19/05/ 2024	214&21
24	Video Display for NOC	LG India Pvt Ltd	47LV35A	1	2nd	20/05/2 019	19/05/ 2024	214&21
25				1	2nd	20/05/2 019	19/05/ 2024	214&21
26				1	2nd	20/05/2 019	19/05/ 2024	214&21
27				1	2nd	20/05/2 019	19/05/ 2024	214&21
28				1	2nd	20/05/2 019	19/05/ 2024	214&21
29				1	2nd	20/05/2 019	19/05/ 2024	214&21
30	Video Display Wall controller	Aten	VM1600A	1	2nd	20/05/2 019	19/05/ 2024	214&21
31	I/O module for Video Display Controller	Aten	VM7904	1	2nd	20/05/2 019	19/05/ 2024	214&21 5
32	I/O module for Video Display Controller	ale eo Aten	VM7804	1	2nd	20/05/2 019	19/05/ 2024	214&21 5
33	I/O module for Video Display Controller	Aten	VM8804	1	2nd	20/05/2 019	19/05/ 2024	214&21 5
34	I/O module for Video	Aten		1	2nd	20/05/2 019	19/05/ 2024	214&21 5

	Display Controller							
35	Network Switch for BMS	CISCO	SG300- 52P-K9	1	2nd	20/05/2 019	19/05/ 2024	214&21 5
36	Laserjet	НР	M126NW	1	2nd	20/05/2 019	19/05/ 2024	214&21 5
37	Printer	nr	M126NW	1	2nd	20/05/2 019	19/05/ 2024	214&21 5
38	LCD Projector	EPSON	EB-X41	1	2nd	20/05/2 019	19/05/ 2024	214&21 5
39	Fire Proof Enclosuer for Media Storage	<b>a</b> 1 :		1	2nd	20/05/2 019	19/05/ 2024	214&21 5
40	Fire Proof Enclosuer for Media Storage	Godrej	Apollo-M	1	2nd	20/05/2 019	19/05/ 2024	214&21 5
41	Addressab le Fire Alarm Control Panel with controller	Siemens	FC2025/F CI2016- U1	1	2nd	20/05/2 019	19/05/ 2024	214&21 5
42	Repeater Panel for FAS	Siemens	Desigo/F T2014	1	2nd	20/05/2 019	19/05/ 2024	214&21 5
43	Multicriteri a Detector	Siemens	FDOT421 /HFP-11	8 2	2nd	20/05/2 019	19/05/ 2024	214&21 5
44	Monitor Module	Siemens	HTRI-S	1 0	2nd	20/05/2 019	19/05/ 2024	214&21 5
45	Manual Call Point	Siemens	HMS-S	8	2nd	20/05/2 019	19/05/ 2024	214&21 5
46	Sounder Cum Strobe	Siemens	ZH-MC-R	7	2nd	20/05/2 019	19/05/ 2024	214&21 5
47	Sounder Cum Strobe for Door Panic Bar	Siemens	ZH-MC-R	3	2nd	20/05/2 019	19/05/ 2024	214&21 5
48	Control Module	Siemens	HTRI-R	3 0	2nd	20/05/2 019	19/05/ 2024	214&21 5
49	Fault Isolator Module	Siemens	HLIM	3	2nd	20/05/2 019	19/05/ 2024	214&21 5
50	WLD Panel	Synopsis	T103	1	2nd	20/05/2 019	19/05/ 2024	214&21 5
51	AATID LUITEI	bynopsis	1100	1	2nd	20/05/2 019	19/05/ 2024	214&21 5

1			1	1		20/05/2	19/05/	214&21
52				1	2nd	019	2024	5
	WLD	<b>~</b> .				20/05/2	19/05/	214&21
53	Hooter	Siemens	-	3	2nd	019	2024	5
				٠,	01	20/05/2	19/05/	214&21
54				1	2nd	019	2024	5
55	VESDA	Siemens	FDA221	1	01	20/05/2	19/05/	214&21
55	VESDA	Siemens	FDA241	1	2nd	019	2024	5
56				1	2nd	20/05/2	19/05/	214&21
36				1	Ziid	019	2024	5
	VESDA					20/05/2	19/05/	214&21
57	Power	Sanster	-	3	2nd	019	2024	5
	Supply							
58				1	2nd	20/05/2	19/05/	214&21
					2110	019	2024	5
59	Rodent	Synopsis	24 BL	1	2nd	20/05/2	19/05/	214&21
	Panel	Бупорыы			2110	019	2024	5
60				1	2nd	20/05/2	19/05/	214&21
						019	2024	5
61	Transducer	Synopsis	R-Scat	5	2nd	20/05/2	19/05/	214&21
			1 2 2 2 2 2 2	8		019	2024	5
62				1	2nd	20/05/2	19/05/	214&21
	Fire					019	2024	5
63	Suppressio	Ravel	RE-	1	2nd	20/05/2	19/05/	214&21
	n System		120GR	<u>_</u>		019	2024	5
64	Panel			1	2nd	20/05/2	19/05/	214&21
	_					019	2024	5
65	Access	Siemens	AC5102	1	2nd	20/05/2	19/05/	214&21
	Controller					019	2024	5
00	Access	<b>G</b> :	G:	١,	01	20/05/2	19/05/	214&21
66	Control	Siemens	Sipass	1	2nd	019	2024	5
	Software			_				
	Desktop		O-stireless			20/05/2	10/05/	014801
67	for Access	Dell	Optiplex 7060	1	2nd	019	19/05/ 2024	214&21
	Control Software		1060			019	4044	5
	Fire							
	Suppressio							
68	n Cylinder	Siemens	Sinorix	1	2nd	20/05/2	19/05/	214&21
00	(Novec-	biemens	BILIOTIX	5	Ziid	019	2024	5
	1230)							
	Fire							
	Suppressio			1		20/05/2	19/05/	214&21
69	n Cylinder	Siemens	VSB33	5	2nd	019	2024	5
	Nozzle					010	2024	J
	Pressure		A6E60200			20/05/2	19/05/	214&21
70	Box	Siemens	461	3	2nd	019	2024	5
	Abort		RE-			20/05/2	19/05/	214&21
71	Switch	Siemens	716MY	3	2nd	019	2024	5
	Release		RE-			20/05/2	19/05/	214&21
72	Switch	Siemens	716MG	3	2nd	019	2024	5
L	DAATICII		1101410		l	010	2024	5

73	FSS Hooter	Siemens	_	3	2nd	20/05/2 019	19/05/ 2024	214&21 5
74	Card Reader With PIN Pad	HID	iClass RK40	1	2nd	20/05/2 019	19/05/ 2024	214&21 5
75	Push Button	EBELCO	EBP-S01A	1	2nd	20/05/2 019	19/05/ 2024	214&21 5
76	Card Reader	HID	iClass SE- iClass R10	1 8	2nd	20/05/2 019	19/05/ 2024	214&21 5
77	Emergenc y Break Glass	Agni	NA	1 0	2nd	20/05/2 019	19/05/ 2024	214&21 5
78	Biometric Reader	Morpho	MA Sigma Lite Multi WR	1	2nd	20/05/2 019	19/05/ 2024	214&21 5
79	EM Lock	Algatech	ALAUL27 5CDP	1	2nd	20/05/2 019	19/05/ 2024	214&21 5
80	16 CH NVR			1	2nd	20/05/2 019	19/05/ 2024	214&21 5
81	with 12 TB internal	HIKVISION	DS7616NI -K2/16P	1	2nd	20/05/2 019	19/05/ 2024	214&21
82	HDD			1	2nd	20/05/2 019	19/05/ 2024	214&21
83				1	2nd	20/05/2 019	19/05/ 2024	214&21
84				1	2nd	20/05/2 019	19/05/ 2024	214&21
85				1	2nd	20/05/2 019	19/05/ 2024	214&21
86				1	2nd	20/05/2 019	19/05/ 2024	214&21
87				1	2nd	20/05/2	19/05/	214&21
88				1	2nd	019 20/05/2	19/05/	5 214&21
89	CCTV	HIKVISION	DS- 2CD1123	1	2nd	019 20/05/2	2024 19/05/	5 214&21
90	CAMERA		GO-I	1	2nd	019 20/05/2	2024 19/05/	5 214&21
						019 20/05/2	2024 19/05/	5 214&21
91				1	2nd	019	2024	5
92				1	2nd	20/05/2	19/05/	214&21
	-					019 20/05/2	2024 19/05/	5 214&21
93	]			1	2nd	019	2024	5
94				1	2nd	20/05/2 019	19/05/ 2024	214&21
					•	20/05/2	19/05/	5 214&21
95				1	2nd	019	2024	5

1			1.1		20/05/2	19/05/	214&21
96			1	2nd	019	2024	5
07	]		1	0 4	20/05/2	19/05/	214&21
97			1	2nd	019	2024	5
98			1	2nd	20/05/2	19/05/	214&21
90			1	ZIIU	019	2024	5
99			1	2nd	20/05/2	19/05/	214&21
- 55				ДПС	019	2024	5
100			1	2nd	20/05/2	19/05/	214&21
	_				019	2024	5
101			1	2nd	20/05/2	19/05/	214&21
	 				019	2024	5
102			1	2nd	20/05/2	19/05/	214&21
	-				019	2024	5 2148-21
103			1	2nd	20/05/2 019	19/05/ 2024	214&21 5
	_				20/05/2	19/05/	214&21
104			1	2nd	019	2024	5
	-				20/05/2	19/05/	214&21
105			1	2nd	019	2024	5
	-		T _		20/05/2	19/05/	214&21
106			1	2nd	019	2024	5
105	1		١,	0.1	20/05/2	19/05/	214&21
107			1	2nd	019	2024	5
100			,	0	20/05/2	19/05/	214&21
108			1	2nd	019	2024	5
109			1	2nd	20/05/2	19/05/	214&21
100				ZII.G	019	2024	5
110			1	2nd	20/05/2	19/05/	214&21
110	1				019	2024	5
111			1	2nd	20/05/2	19/05/	214&21
	-				019	2024	5
112			1	2nd	20/05/2	19/05/	214&21
-	-				019 20/05/2	2024	5
113			1	2nd	019	19/05/ 2024	214&21 5
					20/05/2	19/05/	214&21
114			1	2nd	019	2024	5
	-				20/05/2	19/05/	214&21
115			1	2nd	019	2024	5
110	1		١,	0.7	20/05/2	19/05/	214&21
116			1	2nd	019	2024	5
117			,	O c <sup>1</sup>	20/05/2	19/05/	214&21
117			1	2nd	019	2024	5
118			1	2nd	20/05/2	19/05/	214&21
110	_			Jila	019	2024	5
119			1	2nd	20/05/2	19/05/	214&21
					019	2024	5
120			1	2nd	20/05/2	19/05/	214&21
	-		_		019	2024	5
121			1	2nd	20/05/2	19/05/	214&21
					019	2024	5

122				1	2nd	20/05/2	19/05/	214&21
				_		019	2024	5
123				1	2nd	20/05/2	19/05/	214&21
				_		019	2024	5
124				1	2nd	20/05/2	19/05/	214&21
101					Dila	019	2024	5
125				1	2nd	20/05/2	19/05/	214&21
120					ZIIG.	019	2024	5
126				1	2nd	20/05/2	19/05/	214&21
120				1	Ziiu	019	2024	5
	PA-		DVP-			20/05/2	19/05/	214&21
127	CD/DVD	SONY	SR660P	1	2nd	019	2024	5
	Player		DICOOF			013	404	3
	PA-Plena		I DD 106E/			00 /05 /0	10/05/	014801
128	Massage	BOSCH	LBB1965/ 00	1	2nd	20/05/2	19/05/ 2024	214&21
	Manager		00			019	4044	5
	PA-Plena		I DD 100E /			00 /05 /0	10/05/	014901
129	System Pre	BOSCH	LBB1925/	1	2nd	20/05/2	19/05/	214&21
	Ámplifier		10			019	2024	5
	PA-Plena		LBB1930/	_		20/05/2	19/05/	214&21
130	Amplifier	BOSCH	20	1	2nd	019	2024	5
	PA-12 W							
131	Volume	BOSCH	LBC1400/	1	2nd	20/05/2	19/05/	214&21
	Controller		10	-		019	2024	5
	PA-6 Zone							
	Selection							
	Controller		LBB			20/05/2	19/05/	214&21
132	with	BOSCH	1946/00	1	2nd	019	2024	5
	Microphon		1040/00			010	2024	J
	e							
	PA-		LBD	1		20/05/2	19/05/	214&21
133	SPEAKER	BOSCH	0606/10	7	2nd	019	2024	5
	PA-System		WM-9-	-		20/05/2	19/05/	214&21
134	RACK	NETRACK	550500	1	2nd	019	2024	5
	Idion		WM-6-			20/05/2	19/05/	214&21
135	CCTV Rack	NETRACK	550500	1	2nd	019	2024	5
	Tomporatu		000000			20/05/2	19/05/	214&21
136	Temperatu re Sensor	Siemens	QAA2012	8	2nd	019	2024	5
	IBMS		Dogigo			20/05/2		214&21
137		Siemens	Desigo CC	1	2nd	019	19/05/ 2024	5
	Software		CC			019	4044	5
138	Desktop for IBMS	Dell	Optiplex	,	O== -1	20/05/2	19/05/	214&21
138		Den	7060	1	2nd	019	2024	5
	Software							
	DDG 5 .		PXC100.E					
1,00	DDC Panel	α.	.D,		0.7	20/05/2	19/05/	214&21
139	with IBMS	Siemens	PXC001.E	2	2nd	019	2024	5
	Controller		.D,					
			PXC36					
	DDC Panel	Shchneider	Smart X	_		20/05/2	19/05/	214&21
140	with DCIM	Electric	Controlle	1	2nd	019	2024	5
	Controller		r					J

141	Dual Door (reader) Interface	Siemens	ADD5100	1 2		2nd	20/05/2 019	19/05/ 2024	214&21 5
142				1	1 2	2nd	20/05/2	19/05/ 2024	214&21
							019 20/05/2	19/05/	5 214&21
143				1	l   2	2nd	019	2024	5
							20/05/2	19/05/	214&21
144	25 Tr PAC	Schneider	TDAV284	1	l   2	2nd	019	2024	5
	Indoor Unit	Electric	2AN40-1				20/05/2	19/05/	214&21
145				1	L   2	2nd	019	2024	5
140				١,		21	20/05/2	19/05/	214&21
146					L   2	2nd	019	2024	5
147				1		) al	20/05/2	19/05/	214&21
141				1		2nd	019	2024	5
148					.   ,	2nd	20/05/2	19/05/	214&21
140						JIIG	019	2024	5
149				1	.   2	2nd	20/05/2	19/05/	214&21
110							019	2024	5
150	25 Tr PAC			1	ı   2	2nd	20/05/2	19/05/	214&21
	Outdoor	Schneider	CAP5002				019	2024	5
151	Unit	Electric	PN410-1	1	ı   2	2nd	20/05/2	19/05/	214&21
							019	2024	5
152				1	l   2	2nd	20/05/2	19/05/	214&21
							019 20/05/2	2024 19/05/	5 214&21
153				1	l   2	2nd	019	2024	5
							20/05/2	19/05/	214&21
154				1	l   2	2nd	019	2024	5
							20/05/2	19/05/	214&21
155				1	l   2	2nd	019	2024	5
							20/05/2	19/05/	214&21
156				1	L   2	2nd	019	2024	5
100				١,			20/05/2	19/05/	214&21
157				1	L   2	2nd	019	2024	5
150				1		) al	20/05/2	19/05/	214&21
158				1	4	2nd	019	2024	5
159			CS-		.   ,	2nd	20/05/2	19/05/	214&21
100	2 Tr CAC	Panasonic	LC24UKY			JIIG	019	2024	5
160	Indoor Unit	1 0110001110	D	1	.   ,	2nd	20/05/2	19/05/	214&21
			_				019	2024	5
161				1	ı   2	2nd	20/05/2	19/05/	214&21
							019	2024	5
162				1	l   2	2nd	20/05/2 019	19/05/ 2024	214&21 5
							20/05/2	19/05/	214&21
163				1	l   2	2nd	019	2024	5
							20/05/2	19/05/	214&21
164				1	l   2	2nd	019	2024	5
					.		20/05/2	19/05/	214&21
165				1	1   2	2nd	019	2024	5

166				,	0-4	20/05/2	19/05/	214&21
166				1	2nd	019	2024	5
167				1	2nd	20/05/2	19/05/	214&21
101				1	Ziiu	019	2024	5
168				1	2nd	20/05/2	19/05/	214&21
						019	2024	5
169				1	2nd	20/05/2	19/05/	214&21
						019	2024	5
170				1	2nd	20/05/2 019	19/05/ 2024	214&21 5
						20/05/2	19/05/	214&21
171				1	2nd	019	2024	5
						20/05/2	19/05/	214&21
172				1	2nd	019	2024	5
172				1	0 4	20/05/2	19/05/	214&21
173				1	2nd	019	2024	5
174				1	2nd	20/05/2	19/05/	214&21
111						019	2024	5
175				1	2nd	20/05/2	19/05/	214&21
						019	2024	5
176				1	2nd	20/05/2 019	19/05/ 2024	214&21 5
						20/05/2	19/05/	214&21
177				1	2nd	019	2024	5
						20/05/2	19/05/	214&21
178				1	2nd	019	2024	5
179				1	2nd	20/05/2	19/05/	214&21
119				1	2110	019	2024	5
180				1	2nd	20/05/2	19/05/	214&21
				_   -		019	2024	5
181				1	2nd	20/05/2	19/05/	214&21
						019	2024	5
182	2 Tr CAC		CU-	1	2nd	20/05/2 019	19/05/ 2024	214&21 5
	Outdoor	Panasonic	LC24UKY			20/05/2	19/05/	214&21
183	Unit		20210111	1	2nd	019	2024	5
104				١,	0.1	20/05/2	19/05/	214&21
184				1	2nd	019	2024	5
185				1	2nd	20/05/2	19/05/	214&21
100				1	Ziiu	019	2024	5
186				1	2nd	20/05/2	19/05/	214&21
						019	2024	5
187				1	2nd	20/05/2	19/05/	214&21
$\vdash$					+	019 20/05/2	2024 19/05/	5 214&21
188				1	2nd	019	2024	5
					<del> </del>	20/05/2	19/05/	214&21
189					2nd	019	2024	5
100				,	01	20/05/2	19/05/	214&21
190				1	2nd	019	2024	5
191				1	2nd	20/05/2	19/05/	214&21
101				1	21IG	019	2024	5

					I	20/05/2	19/05/	214&21
192				1	2nd	019	2024	5
100				,	01	20/05/2	19/05/	214&21
193				1	2nd	019	2024	5
194	200 KVA				2nd	20/05/2	19/05/	214&21
104	Modular	Eaton	93PR-200		- Ind	019	2024	5
195	UPS	Laton	00110 200	1	2nd	20/05/2	19/05/	214&21
						019	2024	5
196	00 777 7 7		00E 00 B	1	2nd	20/05/2	19/05/	214&21
	20 KVA UPS	Eaton	93E-20-D- MBS			019 20/05/2	2024	5 214&21
197	UPS		IVIDO	1	2nd	019	19/05/ 2024	5
						20/05/2	19/05/	214&21
198	Isolation	Magnetic &		1	2nd	019	2024	5
	Transforme	Control	IT 300	_		20/05/2	19/05/	214&21
199	r				2nd	019	2024	5
	SMF		0					
200	Battery for	Amaran	Quanta 12AL200	8	2nd	20/05/2	19/05/	226, 227
200	200 KVA	Allialali	N	0	ZIIG	019	2024	& 228
	UPS		11					
	SMF		_					
201	Battery for	Amaran	Quanta	6	2nd	20/05/2	19/05/	226, 227
	20 KVA		12AL042	4		019	2024	& 228
	UPS Pottory for							
202	Battery for FAS, FSS &	Exide	12v 7AH	1	2nd	20/05/2	19/05/	214&21
202	VESDA	LAIGE	12V 1A11	4	Zila	019	2024	5
	V 20211				<u> </u>	20/05/2	19/05/	214&21
203					2nd	019	2024	5
004				,	01	20/05/2	19/05/	214&21
204					2nd	019	2024	5
205				1	2nd	20/05/2	19/05/	214&21
203	ATS for	L&T	CX2-	1	ZIIG	019	2024	5
206	PAC	IGI	CO2-125	1	2nd	20/05/2	19/05/	214&21
						019	2024	5
207				1	2nd	20/05/2	19/05/	214&21
						019	2024	5
208				1	2nd	20/05/2 019	19/05/ 2024	214&21 5
						20/05/2	19/05/	214&21
209				1	2nd	019	2024	5
						20/05/2	19/05/	214&21
210				1	2nd	019	2024	5
011						20/05/2	19/05/	214&21
211	ATS for	Tata	TATIOLON		2nd	019	2024	5
210	Rack	Eaton	EATS16N	1	0	20/05/2	19/05/	214&21
212				1	2nd	019	2024	5
213				1	2nd	20/05/2	19/05/	214&21
410				1	Zilu	019	2024	5
214				1	2nd	20/05/2	19/05/	214&21
			1			019	2024	5

215				1	2nd	20/05/2 019	19/05/ 2024	214&21 5
216				1	2nd	20/05/2 019	19/05/ 2024	214&21
217	DCE SERVER with Applicatio n	Dell/SE-OEM	OEMR XL R230	1	2nd	20/05/2 019	19/05/ 2024	214&21 5
218	ADP MACHINE -SERVER (DCO) with Applicatio n	Dell/SE-OEM	PowerEd ge R530	1	2nd	20/05/2 019	19/05/ 2024	214&21 5
219	Computer server ( ITO) with Applicatio n	Dell/SE-OEM	PowerEd ge R230	1	2nd	20/05/2 019	19/05/ 2024	214&21 5
220	AI ENGINE R330 (Cooling Server) with Applicatio n	Vigilent/Dell/S E-OEM	OEMR XL R330	1	2nd	20/05/2 019	19/05/ 2024	214&21
221				1	2nd	20/05/2 019	19/05/ 2024	214&21 5
222				1	2nd	20/05/2 019	19/05/ 2024	214&21 5
223	Hand Held Fire		ABC	1	2nd	20/05/2 019	19/05/ 2024	214&21
224	Extinguish er	Flame Cool	Туре	1	2nd	20/05/2 019	19/05/ 2024	214&21
225	. 01			1	2nd	20/05/2 019	19/05/ 2024	214&21
226				1	2nd	20/05/2 019	19/05/ 2024	214&21
227	380 kVA			1	Com mon	19/05/2 011	30/06/ 2022	219&22 0&221
228	Diesel Generator	Cummins	380 kVA/ NTA-14-	1	Com mon	19/05/2 011	30/06/ 2022	219&22 0&221
229	(DG)		<b>G</b> 3	1	Com mon	19/05/2 011	30/06/ 2022	219&22 0&221
230	Battery for	7	Hi-way-	1	Grnd Floor	24/06/2 018	23/06/ 2023	219&22 0&221
231	DG	Amaron	12v 180AH	1	Grnd Floor	24/06/2 018	23/06/ 2023	219&22 0&221

232				1	Grnd Floor	24/06/2 018	23/06/ 2023	219&22 0&221
233				1	Grnd Floor	24/06/2 018	23/06/ 2023	219&22 0&221
234				1	Grnd Floor	24/06/2 018	23/06/ 2023	219&22 0&221
235				1	Grnd Floor	24/06/2 018	23/06/ 2023	219&22 0&221
236	160 kVA			1	lst	19/05/2 011	30/06/ 2022	219&22 0&221
237	Uninterupt ed Power Supply	Emerson/Vertiv	Hipulse	1	lst	19/05/2 011	30/06/ 2022	219&22 0&221
238	(UPS)			1	lst	19/05/2 011	30/06/ 2022	219&22 0&221
239	20 kVA Uninterupt	English of Albertin	740004	1	lst	19/05/2 011	30/06/ 2022	219&22 0&221
240	ed Power Supply (UPS)	Emerson/Vertiv	7400M	1	lst	19/05/2 011	30/06/ 2022	219&22 0&221
241	160 kVA Battery Bank	Amara Raja	2 V 375 AH	6 1 2	lst	14/09/2 018	13/09/ 2023	226, 227 & 228
242	20 kVA Battery Bank	Amaron	Quanta 12 V 42 AH	6 8	lst	15/11/2 018	14/11/ 2023	226, 227 & 228
243	Battery for FAS & FSS	Exide	12v 7AH	4	lst	03/07/2 020	02/07/ 2021	219&22 0&221
244				1	lst	19/05/2 011	30/06/ 2022	219&22 0&221
245	22 Tr PAC	Emerson/Vertiv	PEX380E	1	lst	19/05/2 011	30/06/ 2022	219&22 0&221
246	22 II PAC	Emerson/verm	С	1	lst	19/05/2 011	30/06/ 2022	219&22 0&221
247				1	lst	19/05/2 011	30/06/ 2022	219&22 0&221
248	Water Leake		-	1	lst	19/05/2 011	30/06/ 2022	217&21 8
249	Detection System (WLD) Panel	JAY FIRE SYSTEM	-	1	lst	19/05/2 011	30/06/ 2022	217&21 8
250	Water Leake Detection System	Honeywell	NA	2	lst	19/05/2 011	30/06/ 2022	217&21 8

	(WLD) Hooter							
251	Very Early Smoke Detection (VESDA) Apparatus	Extralis	VLC RO	1	lst	19/05/2 011	30/06/ 2022	217&21 8
252	Very Early Smoke Detection (VESDA) Apparatus Hooter	Extralis	NA	1	lst	19/05/2 011	30/06/ 2022	217&21 8
253			DS- 2CD1123 GO-I	1	lst	26/09/2 019	25/09/ 2024	217&21 8
254			DS- 2CD1123 GO-I	1	lst	26/09/2 019	25/09/ 2024	217&21 8
255			DS- 2CD1123 GO-I	1	lst	26/09/2 019	25/09/ 2024	217&21 8
256			DS- 2CD1123 GO-I	1	lst	26/09/2 019	25/09/ 2024	217&21 8
257			DS- 2CD1123 GO-I	1	lst	26/09/2 019	25/09/ 2024	217&21 8
258	CCTV	TTI mining	DS- 2CD1123 GO-I	1	lst	26/09/2 019	25/09/ 2024	217&21 8
259	CAMERA	Hikvision	DS- 2CD1123 GO-I	1	lst	26/09/2 019	25/09/ 2024	217&21 8
260			DS- 2CD1123 GO-I	1	lst	26/09/2 019	25/09/ 2024	217&21 8
261			DS- 2CD1123 GO-I	1	lst	26/09/2 019	25/09/ 2024	217&21 8
262			DS- 2CD1123 GO-I	1	lst	26/09/2 019	25/09/ 2024	217&21 8
263			DS- 2CD1123 GO-I	1	lst	26/09/2 019	25/09/ 2024	217&21 8
264			DS- 2CD1123 GO-I	1	lst	26/09/2 019	25/09/ 2024	217&21 8

1	l I	I	l 5c				I	1	
005			DS-		,	1 -4	26/09/2	25/09/	217&21
265			2CD1123 GO-I		1	lst	019	2024	8
			DS-						
000			2CD1123		,	1 ~4	26/09/2	25/09/	217&21
266					1	lst	019	2024	8
			GO-I						
007			DS-		,	14	26/09/2	25/09/	217&21
267			2CD1123		1	lst	019	2024	8
			GO-I						
000			DS-		.	•	26/09/2	25/09/	217&21
268			2CD1123		1	lst	019	2024	8
			GO-I					_	
			DS-			_	26/09/2	25/09/	217&21
269			2CD1123		1	lst	019	2024	8
			GO-I				010	2021	
			DS-				26/09/2	25/09/	217&21
270			2CD1123		1	lst	019	2024	8
			GO-I				019	2024	0
			DS-				26/09/2	25/09/	217&21
271			2CD1123		1	lst			
			GO-I				019	2024	8
			DS-				00 (00 (0	00,000	017801
272			2CD1123		1	lst	26/09/2	25/09/	217&21
			GO-I				019	2024	8
			DS-				00 (00 (0	05 (00 (	017001
273			2CD1123		1	lst	26/09/2	25/09/	217&21
			GO-I				019	2024	8
			DS-				00 (00 (0	0= (00 (	000.
274			2CD1123		1	lst	26/09/2	25/09/	217&21
			GO-I				019	2024	8
	Fire								
	Suppressio							00 (00 (	
275	n Cylinder	Honeywell/Ans	Sapphire		2	lst	19/05/2	30/06/	217&21
	(Novec-	ul	Soppasso		_		011	2022	8
	1230)								
	Fire								
	Suppressio						19/05/2	25/09/	217&21
276	n Systm	Ravel	RE-GR		2	lst	011	2024	8
	Panel						011	2024	O
	Multicriteri				7		26/09/2	25/09/	217&21
277	a Detector	Siemens	FDOT421		7	lst	019	2024	8
<b>—</b>	Addressab				-		010	4044	U
	le Fire								
	Alarm		FC2025/F				26/09/2	25/09/	217&21
278		Siemens	CI2016-		1	lst			
	Control		U1				019	2024	8
	Panel with								
	controller				_		00 (00 (0	05 (00 (	015001
279	Control	Siemens	HTRI-R		3	lst	26/09/2	25/09/	217&21
_	Module				1		019	2024	8
280	Manual	Siemens	HMS-S		1	lst	26/09/2	25/09/	217&21
	Call Point				0		019	2024	8

281	Monitor Module	Siemens	HTRI-S	2	lst	26/09/2 019	25/09/ 2024	217&21 8
282	Sounder Cum Strobe	Siemens	ZH-MC-R	1 0	lst	26/09/2 019	25/09/ 2024	217&21 8
283	Sounder Cum Strobe for Door Panic Bar	Siemens	ZH-MC-R	1	lst	26/09/2 019	25/09/ 2024	217&21 8
284	Fault Isolator Module	Siemens	HLI-M	4	lst	26/09/2 019	25/09/ 2024	217&21 8
285	ELECTRIC ACTUATO R for FSS	Honeywell/Ans ul	TSP	2	lst	19/05/2 011	30/06/ 2022	217&21 8
286	Dual Door (reader) Interface	Siemens	ADD5100	5	lst	26/09/2 019	25/09/ 2024	217&21 8
287	Eight reader Interface	Siemens	ADE5300	1	lst	26/09/2 019	25/09/ 2024	217&21 8
288	EM Lock	Bell	600 LED	1 4	lst	19/05/2 011	30/06/ 2022	217&21 8
289	Push Button	NA	NA	5	lst	19/05/2 011	30/06/ 2022	217&21 8
290	Card Reader	HID	iClass SE- iClass R10	8	lst	26/09/2 019	25/09/ 2024	217&21 8
291	Card Reader With PIN Pad	HID	iClass RK40	3	lst	26/09/2 019	25/09/ 2024	217&21 8
292			MA	1	lst	26/09/2 019	25/09/ 2024	217&21 8
293	Biometric Reader	Morpho	Sigma Lite Multi	1	lst	26/09/2 019	25/09/ 2024	217&21 8
294			WR	1	lst	26/09/2 019	25/09/ 2024	217&21 8
295	Rodent Repelant System	Masar	Maser VHFO	5	lst	19/05/2 011	30/06/ 2022	217&21 8
296	Rodent Repelant System Satellite	Masar	NA	L ot	lst	19/05/2 011	30/06/ 2022	217&21 8
297	Building Manageme nt System (BMS) RACK	Honeywell	NA	3	lst	19/05/2 011	30/06/ 2022	217&21 8

298	16 CH NVR with	TT3	DS7616NI	1	lst	26/09/2 019	25/09/ 2024	217&21 8
299	internal HDD	Hikvision	-K2/16P	1	lst	26/09/2 019	25/09/ 2024	217&21 8
300	IBMS Software	Siemens	Desigo CC	1	lst	26/09/2 019	25/09/ 2024	217&21 8
301	Desktop for IBMS Software	Dell	Optiplex 7060	1	lst	26/09/2 019	25/09/ 2024	217&21 8
302	PA- CD/DVD Player	Philips	DVP3326 X/94	1	lst	19/05/2 011	25/09/ 2024	217&21 8
303	PA-System Voice Alarm Controller	Bosch	LBB1990/ 00	1	lst	19/05/2 011	25/09/ 2024	217&21 8
304	Volume Controller	Bosch	NA	1	lst	19/05/2 011	25/09/ 2024	217&21 8
305	Call Station	Bosch	LBB1956/ 00	1	lst	19/05/2 011	25/09/ 2024	217&21 8
306	PA- Speaker	АНИЈА	NA	3 0	lst	19/05/2 011	25/09/ 2024	217&21 8
307	Fire Proof Enclosuer for Media Storage	Godrej	NA	1	lst	19/05/2 011	Not applic able	AMC NOT REQUI RED
308	2 Tr Comfort Air Conditioni ng System (CAC)	Voltas	2.0 Vertis	1 3	lst	19/05/2 011	11/12/ 2021	AMC NOT REQUI RED
309	Low Tension (LT) Panel (Motorised MCCB)	Shree Electricals	Customiz e	1	lst	19/05/2 011	30/06/ 2022	219&22 0&221
310	UPS Output Panel (MCCB)	Shree Electricals	Customiz e	1	lst	19/05/2 011	30/06/ 2022	219&22 0&221
311	PAC Panel	Shree Electricals	Customiz e	2	lst	19/05/2 011	30/06/ 2022	219&22 0&221
312	Server Distributio n Box	Shree Electricals	Customiz e	4	lst	19/05/2 011	30/06/ 2022	219&22 0&221
313	Comfort Air Conditioni ng System (CAC) Distributio	Shree Electricals	Customiz e	2	lst	19/05/2 011	30/06/ 2022	219&22 0&221

	n Board (DB)							
314	Emergenc y Lighting Distributio n Box	Shree Electricals	Customiz e	1	lst	19/05/2 011	30/06/ 2022	219&22 0&221
315	Raw Power Distributio n Box	Shree Electricals	Customiz e	1	lst	19/05/2 011	30/06/ 2022	219&22 0&221
316	UPS Distributio n Box	Shree Electricals	Customiz e	1	lst	19/05/2 011	30/06/ 2022	219&22 0&221
317	Building Manageme nt System (BMS) Panel with All Controller	Siemens	PXC 22.1- E.D, PXC 001-E.D	1	lst	26/09/2 019	25/09/ 2024	217 <b>&amp;</b> 21 8
318	LED MONITOR for CCTV Display	SAMSUNG	LS24F350 FHWXXL	1	lst	26/09/2 019	25/09/ 2024	217&21 8
319	Acces Control Panel with Access Controller	Siemens	AC5200 (ACC- Lite)	1	lst	26/09/2 019	25/09/ 2024	217&21 8
320	Earth Pits for DG	-	-	6	Gnd	19/05/2 011	30/06/ 2022	219&22 0&221
321				1	2nd	20/05/2 019	19/05/ 2024	214&21 5
322				1	2nd	20/05/2 019	19/05/ 2024	214&21 5
323				1	2nd	20/05/2 019	19/05/ 2024	214&21 5
324				1	2nd	20/05/2 019	19/05/ 2024	214&21 5
325	Desktop	Dell	Optiplex 3060	1	2nd	20/05/2 019	19/05/ 2024	214&21 5
326				1	2nd	20/05/2 019	19/05/ 2024	214&21
327				1	2nd	20/05/2 019	19/05/ 2024	214&21
328				1	2nd	20/05/2 019	19/05/ 2024	214&21
329				1	2nd	20/05/2 019	19/05/ 2024	214&21

330	LED Monitor	LG India Pvt Ltd	22M38D	1 8	2nd	26/09/2 019	25/09/ 2024	214&21
331	SERVER Rack	Schneider Electric	AR3350	1 4	2nd	20/05/2 019	19/05/ 2024	214&21 5
332	SERVER Rack	Schneider Electric	AR3150	1 8	2nd	20/05/2 019	19/05/ 2024	214&21 5
333	NETSHELT ER 2 POST RACK for MUX	Schneider Electric	AR201	2	2nd	20/05/2 019	19/05/ 2024	214&21 5
334	RACK PDU METERED- l Phase	Schneider Electric	AP8853	4 0	2nd	20/05/2 019	19/05/ 2024	214&21 5
335	RACK PDU METERED- 1 Phase	Schneider Electric	AP7822B	4	2nd	20/05/2 019	19/05/ 2024	214&21 5
336	RACK PDU METERED- 3 Phase	Schneider Electric	AP8886	2 4	2nd	20/05/2 019	19/05/ 2024	214&21 5
337	Earth Pits for 2nd Floor		NA	1 0	2nd	20/05/2 019	19/05/ 2024	214&21 5
338	Cold Aisle			1	2nd	20/05/2 019	19/05/ 2024	214&21 5
339	Containme	Schneider	ACDC240 0	1	2nd	20/05/2 019	19/05/ 2024	214&21 5
340	111	nt		1	2nd	20/05/2 019	19/05/ 2024	214&21 5
341			AFM4500 B	1	2nd	20/05/2 019	19/05/ 2024	214&21 5
342			AFM4500 B	1	2nd	20/05/2 019	19/05/ 2024	214&21 5
343			AFM4500 B	1	2nd	20/05/2 019	19/05/ 2024	214&21 5
344	ACTIVE		AFM4500 B	1	2nd	20/05/2 019	19/05/ 2024	214&21 5
345	FLOOR MODULE	Schneider	AFM4500 B	1	2nd	20/05/2 019	19/05/ 2024	214&21 5
346			AFM4500 B	1	2nd	20/05/2 019	19/05/ 2024	214&21 5
347			AFM4500 B	1	2nd	20/05/2 019	19/05/ 2024	214&21
348			AFM4500 B	1	2nd	20/05/2 019	19/05/ 2024	214&21
349			2	1	2nd	20/05/2 019	21/02/ 2022	213&21 4&215
350	LED Display at BMS Room	LG India Pvt Ltd	49SE3KD	1	2nd	20/05/2 019	21/02/ 2022	213&21 4&215
351				1	2nd	20/05/2 019	21/02/ 2022	213&21 4&215

352					1	2nd	20/05/2 019	21/02/ 2022	213&21 4&215	
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#### SERVICE LEVEL MANAGEMENT

The purpose of this Service Level Agreement (hereinafter referred to as SLA) is to clearly define the levels of service which shall be provided by the SI to SIA for the duration of this contract.

The SI and SIA shall regularly review the performance of the services being provided by the SI and the effectiveness of this SLA

#### Note:

The purpose of this Service Level Agreement (hereinafter referred to as SLA) is to clearly define the levels of service which shall be provided by the SI to SIA for the duration of this contract.

The SI and SIA shall regularly review the performance of the services being provided by the SI and the effectiveness of this SLA

#### 2.1. Definitions

For purposes of this Service Level Agreement, the definitions and terms as specified in the contract along with the following terms shall have the meanings set forth below:

"Uptime" shall mean the time period for which the specified services / components with specified
technical and service standards are available to the state and user departments. Uptime, in
percentage, of any component (Non IT & IT) can be calculated as:

Uptime = {1- [(Downtime) / (Total Time – Scheduled Maintenance Time)]} \* 100

- "Downtime" shall mean the time period for which the specified services / components with specified technical and service standards are not available to the state and user departments and excludes the scheduled outages planned in advance for the West Bengal State Data Center and the link failures that are SWO's responsibility.
- "Incident" refers to any event / abnormalities in the functioning of the Data Center Equipment / specified services that may lead to disruption in normal operations of the West Bengal State Data Center services.

- "Helpdesk Support" shall mean the 24x7 Center which shall handle Fault reporting, Trouble
   Ticketing and related enquiries during this contract.
- "Resolution Time" shall mean the time taken in resolving (diagnosing, troubleshooting and fixing)
  an incident after it has been reported at the helpdesk. The resolution time shall vary based on the
  severity of the incident reported at the help desk. The severity would be as follows:
  - Critical Production server or other mission critical system(s) are down and no workaround
    is immediately available. All or a substantial portion of your mission critical data is at a
    significant risk of loss or corruption. You have had a substantial loss of service. Your
    business operations have been severely disrupted.
  - Medium Operations can continue in a restricted fashion, although long-term productivity
    might be adversely affected. A major milestone is at risk. Ongoing and incremental
    installations are affected. A temporary workaround is available.
  - Low Partial, non-critical loss of functionality of the software. Impaired operations of some components, but allows the user to continue using the software. Initial installation milestones are at minimal risk.

#### 2.2. Category of SLAs

This SLA document provides for minimum level of services required as per contractual obligations based on performance indicators and measurements for the WBSDC Infrastructure (IT and Non-IT) The SI shall ensure provisioning of all required services while monitoring the performance of the same to effectively comply with the performance levels. The services provided by the SI shall be reviewed by the West Bengal Electronics Industry Development Corporation Limited that shall:

- Regularly check performance of the SI against this SLA.
- Discuss escalated problems, new issues and matters still outstanding for resolution.
- Review of statistics related to rectification of outstanding faults and agreed changes.
- Obtain suggestions for changes to improve the service levels.

The SLA has been set on:

#### 2.2.1. Implementation Service levels

The following measurements and targets shall be used to track and report the implementation performance on a regular basis. The targets shown in the following table are applicable for the duration of the contract. All the targets for the completion of the implementation activity are calculated on a weekly basis. Please note that the Bidder should provide comprehensive, end-to-end service to implement the SDC Infrastructure, including replacement of the equipment in case of physical damage. No reason shall be entertained (unless those mentioned in Force Majeure) in case of unavailability of any service given in the scope of work in this CONTRACT and the appropriate penalty shall be levied.

#### > Implementation Service Levels

Table 5: Implementation Service Levels

Measurement	Target	Severity	Penalty
Civil Work, Installation of all Non-IT Components including Electrical and BMS, Installation of all IT Components, Integrated Testing and Final Acceptance test (FAT)completed and handing over.	25 weeks from the signing of contract	Critical	A Penalty as 0.5% per week for every week delay in PAT. Subject to a maximum of 5% Penalty will be computed on the remaining milestone activity

For purposes of this Service Level Agreement, the definitions and terms as specified in the contract along with the following terms shall have the meanings set forth below:

 "Uptime" shall mean the time period for which the specified services / components with specified technical and service standards are available to the state and user departments. Uptime, in percentage, of any component (Non IT & IT) can be calculated as:

Uptime = {1- [(Downtime) / (Total Time - Scheduled Maintenance Time)]} \* 100

 "Downtime" shall mean the time period for which the specified services / components with specified technical and service standards are not available to the state and user departments and excludes the scheduled outages planned in advance for the West Bengal State Data Center and the link failures that are SWO's responsibility.

- "Incident" refers to any event / abnormalities in the functioning of the Data Center Equipment / specified services that may lead to disruption in normal operations of the West Bengal State Data Center services.
- "Helpdesk Support" shall mean the 24x7 center which shall handle Fault reporting, Trouble Ticketing and related enquiries during this contract.
- "Resolution Time" shall mean the time taken in resolving (diagnosing, troubleshooting and fixing)
  an incident after it has been reported at the helpdesk. The resolution time shall vary based on the
  severity of the incident reported at the help desk. The severity would be as follows:
  - a) Critical: Incidents whose resolution shall require additional investment in components or time or shall involve coordination with OEMs. These incidents shall impact the overall functioning of the SDC. For example, purchase of printer, router, software bug fixing etc.
  - b) Medium: Incidents, whose resolution shall require replacement of hardware or software parts, requiring significant interruption in working of that individual component. For example, installation of operating system, replacement of switch etc.
  - c) Low: Incidents whose resolution shall require changes in configuration of hardware or software, which will not significantly interrupt working of that component. For example, installation of printer on a client etc.

#### 2.2.2. Operation& Maintenance Service levels

#### 2.2.2.1. IT Infrastructure Service

#### Levels

Following outlines the service level indicators & and the target performance levels to be maintained by the Agency during the contract period. These SLAs shall be strictly imposed and athird party audit/certification agency shall be deployed for certifying the performance of the Agency against the target performance metrics as outlined in the table below:

Table 6: IT Infrastructure Service Levels

Sr	Measurement	Target	Severity	Penalty
	Individual Server / VM Availability  1. (including the OS, database and	>= 99.749%		No Penalty
,		>=99 % <99.749%	Critical	1% of the QGR
1.		>=98 % < 99 %	Cittical	2% of the QGR
		>=95 % < 98%		3% of the QGR

Sr	Measurement	Target	Severity	Penalty
	supplied / installed by SI for hosting the web portal)	< 95 %		Maximum of 5 of the QGR can be imposed
		>= 99.749%		No Penalty
		>=99 % <99.749%		2% of the QGR
		>=98 % < 99 %		5% of the QGR
2.	Storage Availability	>=95 % < 98%	<u>Critical</u>	8% of the QGR
		< 95 %		Maximum of 10 % of the QGR can be imposed
		>= 99.749%		No Penalty
		>=99 % <99.749%		1% of the QGR
	Connectivity with SWAN at the SDC	>=98 % < 99 %		2% of the QGR
3.	Connectivity with SWAN at the SDC end	>=95 % < 98%	Critical	5% of the QGR
		< 95 %		Maximum of 10 % of the QGR can be imposed
		>= 99.749%		No Penalty
		>=99 % <99.749%		1% of the QGR
		>=98 % < 99 %		2% of the QGR
4.	VTL Availability	>=95 % < 98%	<u>Critical</u>	5% of the QGR
		< 95 %		Maximum of 10 % of the QGR can be imposed
		>= 99.749%		No Penalty
		>=99 % <99.749%		1% of the QGR
	Connectivity at SDC end with the	>=98 % < 99 %		3% of the QGR
5.	Disaster Recovery Site	>=95 % < 98%	<u>Medium</u>	5% of the QGR
	,	< 95 %		Maximum of 10 % of the QGR can be imposed
		>= 99.749%		No Penalty
		>=99 % <99.749%		1% of the QGR
		>=98 % < 99 %		3% of the QGR
6.	Connectivity with Internet	>=95 % < 98%	<u>Critical</u>	5% of the QGR
		< 95 %		Maximum of 10 % of the QGR can be imposed
7.	LAN Availability	>= 99.749%	Critical	No Penalty

Sr	Measurement	Target	Severity	Penalty
	(Active and passive	>=99 % <99.749%		2% of the QGR
	Component, including the	>=98 % < 99 %		5% of the QGR
	expanded SDC equipments)	>=95 % < 98%		8% of the QGR
		< 95 %		Maximum of 10 % of the QGR can be imposed
8.	Restore the backed up databases/ applications etc. to be initiated within 2 hours of request	Full Restore	Medium	1% of the QGR for > 5 violations of service parameter on every QCR
	Scheduled downtime for Preventive maintenance Per Week	Notification of >= 7 days in advance		No Penalty
9.	lam to 3am on Sundays     Any further requirement for scheduled downtime	Notification of less than 7 days	Medium '	0.5% of the QGR

Note: Equipment Availability Related penalties shall be governed by the following conditions:

- The Penalty shall be calculated on a quarterly basis.
- If the SLAs drop below the lower limits specified for each component in the table above, it will be governed by the event of default / penalty clause as specified under "Section D: Instruction to the bidder" of the NIT.

### 2.2.2.2. Physical Infrastructure Service Levels

Table 7:Physical Infrastructure Service Levels

Sr	Measurement	Target	Severity	Penalty
1.	Power Availability	>= 99.749%	Critical	No Penalty

Sr	Measurement	Target	Severity	Penalty
	( UPS output )	<99.749% to >= 99 %		2% of the QGR
		>=98% to <99%		5% of the QGR
		>=95% to <98%		8% of the QGR
		<95%		Maximum of 10 % of the QGR can be imposed
	PAC system Availability	>= 99.749%		No Penalty
	PAC System availability would mean (all PAC's including the	<99.749% to >= 99 %	Critical	2% of the QGR
2.	standby) temperature and the	>=98% to <99%		5% of the QGR
۷.	humidity at the sensor level.  Temperature to be	>=95% to <98%		8% of the QGR
	maintained 20°± 2° at all times Relative humidity to be maintained 50°± 5° at all times	<95%		Maximum of 10 % of the QGR can be imposed
	Surveillance: CCTV Availability would include DVR system availability, availability of CCTV recording – 180 days of backup data from the	>= 99.749%		No Penalty
		<99.749% to >= 99 %	<u>Critical</u>	0.5% of the QGR
		>=98% to <99%	Offical	2% of the QGR
3.		>=95% to <98%		5% of the QGR
	present date	<95%		Maximum of 10 % of the QGR can be imposed
	Complete BMS system. This	>= 99.749%		No Penalty
	parameter applies to all individual components of BMS system, i.e.,	<99.749% to >= 99 %		2% of the QGR
4.	VESDA, Fire detection, fire suppression, water leak detection, S&EMU, Rodent repellant etc.,	>=98% to <99%	Critical	5% of the QGR
	which can be monitored through	>=95% to <98%		8% of the QGR
	DCIM/ BMS software. For any component downtime, the penalty will be applicable	<95%		Maximum of 10 % of the QGR can be imposed
	Data Center Infrastructure	>= 99.749%		No Penalty
5.	Management (Measure all the components at the end terminal	<99.749% to >= 99 %		2% of the QGR
	level)	>=98% to <99%		5% of the QGR
		>=95% to <98%	<u>Critical</u>	8% of the QGR

Sr	Measurement	Target	Severity	Penalty
		<95%		Maximum of 10 % of the QGR can be
				imposed

### 2.2.2.3. Civil Work & Minor Works Service Levels

Table 8: Civil Work & Minor Works Service Levels

Sr	Measurement	Target	Severity	Penalty
	Major Civil Work including the False	T days		No Penalty
	Flooring, False Ceiling, Doors & Locking, Partitioning, Fire Proofing of all surfaces, Furniture & Fixtures and Painting to be replaced within 2 days of reporting the problem	T1 = T + 2 days		0.05% of the QGR for every unresolved call
		T2 = T1 + 2 days		1% of the QGR for every unresolved call
1	The SI should maintain sufficient inventory to carry out civil and electrical repairs without any disruption to operations.  For critical items, the Resolution time shall be mutually agreed by the State and the SI at the time of award of contract.  T shall be the agreed Resolution (All aspects of the Physical Data Center)	>T2	Critical	2% of the QGR for every unresolved call
		T= 2 days		No Penalty
	Minor Civil Work including Cement Concrete Work, Masonry Work, Trench Work, Storage, Glazing and Scaffolding Work to be carried within 4 days of the reporting	T1 = T + 2 days		0.05% of the QGR for every unresolved call
2		T2 = T1 + 2 days	Low	1% of the QGR for every unresolved call
	problem	>T2		2% of the QGR for every unresolved call

### 2.2.2.4. Helpdesk Service Levels

Table9:Help desk Parameters for Response time

Sr	Type of Incident	Target	Penalty
		T=5 minutes	No Penalty
		T1=T+10 Min	0.5% of the QGR for every unattended call
1.	Critical	T2=T1+15 Min	1% of the QGR for every unattended call
		>T2	2% of the QGR for every unattended call
	Medium	l Hour	No Penalty
2.		>1 hr and <= 3 hr	1% of the QGR for every unattended call
		>3 hr	2% of the QGR for very unattended call
		2 Hour	No Penalty
	>2 hr and <=4 hr   >4hr   >15 Min and <=   Min   >30 Min	>2 hr and <=4 hr	1% of the QGR
		>4hr	2% of the QGR
3.		>15 Min and <=30 Min	0.5% of the QCR
		>30 Min	1% of the QGR for every delay

Table 10: Helpdesk Services SLA for Resolution time

Sr No	Type of Incident	Target	Penalty
		T=30 minutes	No Penalty
		T1=T+ 1 hr	0.5% of the QGR for every unattended
	Critical		call
1	(excluding	T2=T1+1 hr	1% of the QGR for every unattended
	hardware fault)	12-11-11	call
		>T2	2% of the QGR for every unattended
			call
2		< OEM CTR*	No Penalty

	Critical (for hardware faults)	OEM CTR + 1 Day	0.5% of the QGR for every unattended call
	nardware faults)	OEM CTR + 2 Days	1% of the QGR for every unattended call
		OEM CTR + 5 Days	2% of the QGR for every unattended call
3	Medium	One day from the time of incident logged at the help desk	No Penalty
	Medium	>1 day and <= 2 days	1% of the QGR for every unattended call
		>2 days	2% of the QGR for very unattended call
4	Low	<= 2days from the time of response logged	No Penalty
		>2 days and <=4 days	0.5% of the QGR for every unattended call
		>4 days	1% of the QGR for every unattended call

<sup>\*</sup> The SI shall furnish the up-to-date standard OEM Onsite Call-to-Repair Service agreed turnaround / resolution time details to the SIA at regular intervals. The same should be either a global document or should be on the letterhead on the OEM.

### 2.2.2.5. Compliance and Reporting Process Service Levels

Table 10: Reporting Process Service Levels

Sr	Measurement	Target	Severity	Penalty
1	Submission of MIS	Report for previous	Medium	1% of the QGR for
	reports.	month to be submitted		every 1 day of delay in
	The SI shall	by 7th of next Month		submission of
	submit the MIS			incremental basis to a
	reports as			maximum of 5%
	requested by SIA			

2	Implementing	100% of all approved	Medium	1% of QGR for >5
	Change Requests:	change requests		violations of Service
	The SI would			Parameter
	implement			
	approved change			
	request within 2			
	days of its			
	approval			
3	Customization of	Customized reports	Medium	1% of QGR for every 7
	EMS reports	shall be created and		days delay in
		submitted within 7 days		submission of
		from date of request		customized reports to a
		submitted by SIA.		maximum of 10% of
				QGR.

These SLAs would

be calculated for each of the following types of incidences:

#### Virus Attack

Any virus infection and passing of malicious code shall be monitored at the gateway level or user complains of virus infection shall be logged at the help desk system and collated every quarter.

#### • Denial of Service Attack

Non availability of any services shall be analyzed and forensic evidence shall be examined to check whether it was due to external DoS attack.

#### Intrusion

Compromise of any kind of data hosted by SDC

- SPAM statistics on monthly basis shall be monitored through reports generated by Anti-SPAM software.
- Any other security related threat

Table 11: Security and Incident Management Service Level

Sr	Incidents	Penalty
1	For every virus attack reported and not resolved within 24 hours from the time of patch or virus removal	Rs. 10,000
2	For every incidence of Denial of service attack	Rs. 200,000

3	For every incidence of Data Theft/Destroy/compromised on data Integrity (Compromise of any kind of data hosted by SDC)	Rs. 5,00,000  (In addition to any other penalty, punishment applicable under the legal provisions of the Country and the State prevailing at that point in time.)
4	Host level Intrusion	Rs. 2,00,000
5	Web Defacement	Rs 10,00,000
6	Ransomware Incident	Rs 5,00,000
7	Missing a security incident alert of critical nature	Rs 1,00,000/- per incident

### 2.2.2.6. Cloud Management Related SLA

Table 12: Virtual infrastructure related Service Levels

S.No	Measurement	Target	Severity	Penalty
1.	Provisioning and Deprovisioning of Virtual Machines	Within 30 Minutes after the approval of the request by the concerned Authority	Medium	0.5% of the QCR for every 1 hours or part delay beyond the target time. To the maximum capping of 5 hrs.  Beyond 5 hours, 1% of the QGR for every 1 hour.
2.	Uptime of Cloud Solution including the individual Cloud Solution Modules	99.749%	Critical	99.25% - 99.749% - 1% of QGR 98.75% - 99.25% - 2% of QGR Subsequently, every 0.5% drop in SLA criteria - 2% of QGR

S.No	Measurement	Target	Severity	Penalty
3.	Overall Cloud Solution Availability	99.749%	Criticfal	99.25% - 99.749% - 1% of QGR  98.75% - 99.25% - 2% of QGR  Subsequently, every 0.5% drop in SLA criteria - 2% of QGR  Overall Cloud Solution Availability will be measured by following formula:  Availability %age = {(Agreed Service Time - Subsystem Down Time)/ (Agreed Service time)*(100%).  ** Scheduled downtime will be excluded.
4.	Cloud Network Availability	99.749%	Critical	99.25% - 99.749% - 1% of QGR  98.75% - 99.25% - 2% of QGR  Subsequently, every 0.5% drop in SLA criteria - 2% of QGR  The component availability will be measured by following formula:  Component Availability %age = {(Agreed Service Time for the component — Down Time of the component)/ (Agreed Service time for the component)/ (Agreed Service time for the component)/ (Agreed

S.No	Measurement	Target	Severity	Penalty
5.	Cloud Virtualization Layer Availability	99.749%	Critical	99.25% - 99.749% - 1% of QGR  98.75% - 99.25% - 2% of QGR  Subsequently, every 0.5% drop in SLA criteria - 2% of QGR  The component availability will be measured by following formula:  Component Availability %age = {(Agreed Service Time for the component- Down Time of the component)/ (Agreed Service time for the component)/ (Agreed Service time for the component)/ (Agreed
6.	Cloud Storage Availability	99.749%	Critical	99.25% - 99.749% - 1% of QGR  98.75% - 99.25% - 2% of QGR  Subsequently, every 0.5% drop in SLA criteria - 2% of QGR  The component availability will be measured by following formula:  Component Availability %age = {(Agreed Service Time for the component — Down Time of the component)/ (Agreed Service time for the component)/ (Agreed Service time for the component)/ (Agreed

S.No	Measurement	Target	Severity	Penalty
7.	Virtual Operating System Availability	99.749%	Critical	99.25% - 99.749% - 1% of QGR  98.75% - 99.25% - 2% of QGR  Subsequently, every 0.5% drop in SLA criteria - 2% of QGR  The component availability will be measured by following formula:  Component Availability %age = {(Agreed Service Time for the component— Down Time of the component)/ (Agreed Service)}
8.	Cloud Orchestration layer Availability	99.749%	Critical	99.25% - 99.749% - 1% of QGR  98.75% - 99.25% - 2% of QGR  Subsequently, every 0.5% drop in SLA criteria - 2% of QGR  The component availability will be measured by following formula:  Component Availability %age = {(Agreed Service Time for the component — Down Time of the component)/ (Agreed Service time for the component)/ (Agreed Service time for the component)/*(100%)

S.No	Measurement	Target	Severity	Penalty
9.	Cloud Security layer Availability	99.749%	Critical	99.25% - 99.749% - 1% of QGR  98.75% - 99.25% - 2% of QGR  Subsequently, every 0.5% drop in SLA criteria - 2% of QGR  The component availability will be measured by following formula:  Component Availability %age = {(Agreed Service Time for the component- Down Time of the component)/ (Agreed Service time for the component)/ (Agreed Service time for the component)/*(100%)
10	Data/VM Backup success per day	100% 96-99% 90-95.9%	Critical	No penalty 1% of QGR 5% of QGR

# 2.2.2.7. Patch Management related SLA

Table 13: Patch Management SLA

Measurement	Target	Severity	Penalty
Patch Management	Critical Patches to be implemented within 10 days of patch release	Medium	0.05% of QGR
	Non Critical Patches to be implemented within 15 days of patch release	Low	0.01% of QGR
	Optional Patches to be implemented within 30 days of patch release	Low	0.01% of QGR

#### 2.2.2.9. Non Closure Service Levels

The selected SI in consultation with CT shall be responsible for maintaining CAPA tracker and if any of the issue related to policy implementation or modification or closure of identified issues by TPA/PMU,STQC auditors or SIA or SI which are not part of aforementioned SLA, are kept open for more than a stipulated time frame as given below, penalty will be applicable as below. The criticality of the issue will be determined by external auditors or consultants or after mutual consent bet ween selected SI and SIA.

Sr	Measurement	Target	Severity	Service Level Down
1	All open issues listed in the CAPA tracker	<7 days	Critical	No penalty
		>7 days to <15 days		0.5% of QGR
		>15 days to <30 days		1% of QGR
		>30 days		5% of QGR
		<30 days	Medium	No penalty
		>30 days to <60 days		0.1% of QGR
		>60 days to <90 days		0.5% of QGR
		>90 days		2% of QGR

#### 2.2.2.10. Manpower Resources Service levels

Incases where 24x7 manpower is not available the support personnel should be available over phone. On critical situations or when directed by SIA, the support personnel must be available onsite within 3hours of request from SIA. Non availability of the support personnel as stated above will be treated equivalent to single occasion downtime for critical components. The core resources/manpower like Project Manager and level 3 resources deployed by the SI should be on rolls of the respective SI and not contracted or outsourced personnel.

Table 15: Manshift Service Level

Measurement	Target	Severity	Penalty
Resource availability for all services requested under Operations and Maintenance  Resource availability would be calculated as: (No. of shift days for which resource present at the designated location / Total No. of shift days ) x 100		Critical	No Penalty  2% of QGR  5% of QGR
	Operations) services and calculated on a quarterly basis		

Measurement	Target	Severity	Penalty
	< 95% to >= 90% averaged over all resources designated for System Integration (Data Center Operations) services and calculated on a quarterly basis  < 90% averaged over all resources designated for System Integration (Data Center Operations) services and calculated on a quarterly basis		8% of QGR  Maximum penalty may be imposed i.e. 10% of QGR or on actual whichever is higher

Example: to illustrate the manshift availability in case there are 3 shifts per day which will have 2 people in shift 1, 1 in shift 2 and 1 in shift 3.

Total shift per day will be =  $4(2 \times 1 + 1 \times 1 + 1 \times 1)$  per quarter it would be = 360 shifts

In a quarter if two people were not present in shift 1 for 7 days then  $2 \times 7 = 14$  shifts will be considered for the unavailability of manpower.

Uptime % = (shifts in which manpower was available / total number of shifts) x 100

Uptime  $c1/0 = (1 - 14/360) \times 100$ 

**Uptime** % = 96.11%

TPA will follow the process mentioned above while calculating man shift availability.

Notwithstanding anything contained in this Agreement of the RFP, the maximum aggregate penalty
that can be levied on the SI for a quarter shall not exceed 10% of the total QGR value of the respective
quarter (i.e. the sum of all invoices raised for the respective quarter by the SI) and can be imposed for
reasons that are solely applicable to the SI.

#### 2.3. SLA Review Process

Either SIA or SI may raise an issue by documenting the business or technical problem, which presents a reasonably objective summary of both points of views and identifies specific points of disagreement with possible solutions.

- A meeting or conference call will be conducted to resolve the issue in a timely manner. The
  documented issues will be distributed to the participants at least 24 hours prior to the discussion if
  the issue is not an emergency requiring immediate attention.
- The SIA and the SI shall develop an interim solution, if required, and subsequently the permanent solution for the problem at hand. The SI will then communicate the resolution to all interested parties.
- Incase the issue is still unresolved; the arbitration procedures described in the Terms & Conditions section will be applicable.

#### 2.3.1. Penalties are subject to:

- Maximum cumulative of 10% penalty can be levied on the value of contract (exclusive of taxes)
   for reasons that are solely applicable to the SI / OEM.
- In the event of exceeding 20% penalty, it will be deemed to be an event of default and can lead to termination.
- In the case of maximum Penalty of 10% being calculated for the SLA breaches by the SI for four
  consecutive QGR due to breach of service level as per the agreement, then the performance of
  the SI will be reviewed and also may be subjected to Termination of the order for the FMS
  Period. In such case, the provisions of the Termination clause as per the agreement shall apply.

#### SAMPLE SLA AUDIT REPORT

Com	Computation of other Penalty except manpower					
Sr #	SLA Description	Penalty (%)	Remarks	Priority		
1	Server Availability					
2	Storage Availability					

Con	Computation of other Penalty except manpower				
Sr #	SLA Description	Penalty (%)	Remarks	Priority	
3	Connectivity with SWAN				
4	VTL Availability				
5	Connectivity with Disaster Recovery Site				
6	Internet Availability				
7	LAN Availability				
8	Restore Requests				
9	Scheduled downtime				
10	Power Availability				
11	PAC Availability				
12	Surveillance				
13	BMS Availability				
14	DCIM Availability				
15	Civil and Minor Works				
16	Help Desk Service Response Time				
17	Help Desk Service Resolution Time				
18	MIS Reporting				
19	Implementing Change Requests				
20	Customization of EMS Report				
21	Virus Attack				
22	DoS Attack				
23	Data Theft				
24	Host level Intrusion				
25	Web Defacement				
26	Ransomware Incident				
27	Missing Security Incident alert of Critical Nature				

Con	Computation of other Penalty except manpower					
Sr #	SLA Description	Penalty (%)	Remarks	Priority		
28	Provisioning and de-provisioning of VMs					
29	Overall Cloud Solution Availability					
30	Cloud storage Availability					
31	Cloud Orchestration layer Availability					
32	Cloud Security layer Availability					
33	Data/VM Backup success per day					
34	Patch Management					
35	Non-closure service levels					
Tota	l Penalty (%)					

## SECTION - I

# BILL OF MATERIAL WBSDC CAPACITY AUGMENTATION

SI. No.	Item Description	Quantity	Units
1	2	3	4
1	HPE Storage DC (Primera 650) - existing 450TB usable space upgrade to 650TB USABLE space (i.e additional 100TB SSD and additional 100TB SAS)	1	Lot
2	Netapp Storage DC (AFF-A700) - existing 220TB usable space upgrade to 430TB USABLE space (i.e additional 210TB SSD)	1	Lot
3	Blade server with 2 x Intel 6238R 2.2GHz/165W 28C/38.5MB, 1536GB DDR4 2933MHz mem, 2x960GB 12G SAS 10K RPM SFF HDD, 12G SAS RAID controller with Drive bays OR Equivalent for DC as per detail specification	18	Nos
4	Blade Chassis with converged network connectivity for 4x32GB FC, 4x10G FCOE/Equivalent and 2x40G connectivity, Redundant 2500W Platinum AC Hot Plug Power Supply along with necessary QSFP 40G Transceivers / FI Extender as required for DC as per detail specification OR Equivalent	3	Nos

5	Rack Server with 2 x Intel latest generation Xeon® Gold Ice Lake Processors with minimum 2.0 Ghz & 32Core per socket and 48 MB Cache., 768GB DDR4 2933MHz mem, 4x1.2TB 12G SAS 10K RPM SFF HDD or equivalent for DC.	5	Nos
6	Red Hat Cloud Infrastructure, Premium (2-sockets) with support for 3 years required for DC	10	Nos
7	High Availability for Unlimited Guests with support for 3 years for DC.	10	Nos
8	DCO, Capacity & ITO software license - 20 Nos. along with Data Center Operation Cooling Optimize Temperature Sensor - 6 Nos. And Cooling Optimize Gateway - 1 No 24 Port DCIM Switch- 2no's as per site requirement for DC.	1	Lot
9	EDB Postgres Enterprise Unicore per year license - Production DB Support Plan for 3 years for DC	16	Nos
10	EDB Postgres Enterprise Unicore per year license - Replica DB Support Plan for 3 years for DC	16	Nos
11	EMS Software per device for 3 years (as per technical spec.). Underlying Hardware Infra required including VMware, Microsoft licenses etc will be provisioned by WTL and bidder to mention requirement with sizing for same in bid for DC	200	Nos
12	Red Hat Enterprise Linux for Virtual Datacenters, Standard with support for 3 years for DC	8	Nos
13	Red hat Openshift Container Platform (Bare Metal Node) with run time, Premium, 1-2 Nodes upto 64 Cores for 3 years for DC	4	Nos
14	Version Control Software with Functional test automation - 10 Concurrent User, Load runner professional foundation - qty 1 (500 virtual users) and Application Life Cycle Manager - 10 concurrent user license with support for 2 years. Underlying Hardware Infra required including VMware, Microsoft licenses etc will be provisioned by WTL and bidder to mention requirement with sizing for same in bid for DC	1	Lot
15	MS SQL Standard Latest version for DC	2	Nos
16	My SQL enterprise version (3 years) for DC	2	Nos
17	Lotus Domino/ MS Exchange/ Equivalent Email software with 250 user mail box with all security features. The required IT infra for proposed MS Exchange solution [Compute & Storage] will be provided from the existing cloud infrastructure of WBSDC. The successful Bidder has to provide the MS Exchange with necessary security software licenses required for installation and smooth running of mailing solution for DC	1	Set
18	DDOS First 2 Years - BOQ - DDoS Protector appliance with SME Dual Power Supply for DC	2	Nos
19	10Gbps Pluggable Optics (XFP) Multimode SR for DDOS for DC	2	Nos

20	Deployment of DDoS Protector in basic configuration at the	0	Mag
<u> 2</u> 0	customer site, including configuration, testing and tuning for DC	2	Nos
21	DDoS Management VA2 Virtual Appliance for management of 2 DDoS Protector physical devices for 2Y for DC	2	Nos
22	SOAR (Security Orchestration Automation Response) - Simplify Platform Base Package Premium. Includes: 2 years License for Platform, 3 analyst seats, 5 Advanced Reporting Users, 24x7 Premium support for 2 Years incuding implementation & training For 24X7 support for SOAR should include minimum 2 nos L2 level & 1 no L3 level Onsite Resources. Underlying Hardware Infra required including VMware, Microsoft licenses etc. will be provisioned by WTL and bidder to mention requirement with sizing for same in bid for DC	1	Nos
23	Deep Security Software - Deep Security - Enterprise - per Server (VM) for DC	150	Nos
24	DDAN-Deep Discovery Analyzer for DC	1	Nos
25	VTL SYSTEM,DD4200,CTL,NFS,CIFS - CAPACITY UPGRADE to 75TB for DC	1	Nos
26	Integration of VTL with Commvault Tape Library for DC	1	Lot
27	UPS 80 KVA with 30 mins battery backup for uninterrupted power supply to active tiles with necessary electrical cabling including ATS for switching between two power sources for DC	1	Nos
28	LTO 7 Tapes for Data Backup for DC	100	Nos
29	Rack Containment Zone Net Work and Server Racks - Supply, Installation, Testing & Commissioning of 42U Server Cabinet with Extruded Aluminium Profile based frame with top panel; having Static load bearing capacity of 1300 Kg as per Tender specifications Dimensions: 2100mm x 750mm / 800mm x 1200mm all complete as requirred and as per detailed specifications. Racks, PDUs, containment should be from same OEM for DC	14	Nos
30	Active tiles for 2nd,3rd & 4th containment for DC	16	Nos
31	Perforated tiles for 3rd & 4th containment for DC	20	Nos
32	Supply, Installation, Integration with existing infra, Testing & Commissioning of 42U Server Cabinet Extruded Aluminium Profile frame with top panel; having static load bearing capacity of 1300 Kg as per Tender specifications Dimensions: 2200mm x 800mm x 1200mm all complete as required and as per detailed specifications. Racks, PDUs, containment should be from same OEM for DC	1	Nos
33	Supply, Installation, testing and intregation with existing infra, Commissioning & Intregation of Single Phase 32 A, 7 kW Zero U Vertical Rack IPDU with combination of C 13 and C 19 sockets of total 36 Nos. VDE Certified & ROHS Compliant as per technical specifications for DC	30	Nos

34	Supply, Installation, Testing and intregation with existing infra, Commissioning of Universal Cold Aisle Containment including wall beams, end-of-row frames, dual sliding doors with provision for CCTV Cameras, FAS detectors (Width - 1200mm), necessary passive cabling, all complete as required and as per detailed specifications.( for existing and new containment) for DC	1	Set
35	Supply, Installation, Testing and intregation with existing infra, Commissioning of CCTV camera near BMS corridor, 4kl UG Fuel tank, First floor entry, Landing room for DC	5	Nos
36	Dismantling of existing false celing and existing electrical wiring, DBs, Fire fighting system and Modification of AC duct and opening of Exit Door at DR Site	1	LS
37	Mineral Fiber Ceiling for DR False Ceiling of Mineral fiber board at appropriate height should be installed concealing any cabling tray and electrical lighting wiring in all areas except server/network room. The False Ceiling tile should be Dust free type and of Noncombustible material. 1200 mm cross tee at every 600 mm c/c and 600mm cross tee at every 1200mm c/c max and wall angle all around the wall to form a grid of 600 mm x 600 mm and suspending the grid using 2mm GI rod and 6 mm raw plug at every 1200 mm intervals at the main tee and laying the Ceiling tiles of size 595 mm x 595 mm x 15 mm over the formed grid having fire rating of 60 minutes as per BS 476/23 of 1987, Noise reduction Coefficient (NRC) of 0.50-0.60, to resist temperature and humidity conditions up to 40degree (104deg. F) and humidity of 99% RH should be installed. All overhead cable trays will be secured to a rigid frame that carries the load either to the roof structure or to the floor slab.	600	Sqft

38	Metal Ceiling for Server Room for DR  False Ceiling of Metal board at appropriate height should be installed concealing any cabling tray and electrical lighting wiring in all areas except server/network room.  The False Ceiling tile should be Dust free type and of Noncombustible material.  1200 mm cross tee at every 600 mm c/c and 600mm cross tee at every 1200mm c/c max and wall angle all around the wall to form a grid of 600 mm x 600 mm and suspending the grid using 2mm GI rod and 6 mm raw plug at every 1200 mm intervals at the main tee and laying the Ceiling tiles of size 595 mm x 595 mm x 15 mm over the formed grid having fire rating of 60 minutes as per BS 476/23 of 1987, Noise reduction Coefficient (NRC) of 0.50-0.60, to resist temperature and humidity conditions up to 40degree (104deg. F) and humidity of 99% RH should be installed.  All overhead cable trays will be secured to a rigid frame that carries the load either to the roof structure or to the floor slab.	600	Sqft
39	Raised Floor for DR- Supply & Installation of stepped raised floor .The floor panels shall be of size 600mm x 600mm fabricated entirely from non-combustible component which shall be 100% interchangeable and shall consist of flat steel top sheet, resistance welded to steel bottom section finished with anti corrosive and conductive paint. Pedestal assembling: Consisting of $100x100x2$ mm thick galvanized MS base plate die-pressed fully welded to 1.6mm thick galvanized MS pipe to engage the Pedestal head assembly. The Pedestal head shall be $90x90mm$ , 4mm thk assembly consisting of an embossed steel plate having 4 holes with 6mm thk taping for fastening of stringer and locating of Tile. Care to be taken to achieve the zero levelling.	600	Sqft
40	Double Cup Tile Puller for DR	2	Nos
41	Ramp for DR: Its sub floor elements must be sufficient to support fully loaded heavy equipment weighing at least 1600 kilograms. Ramp will be having lines with non-skid type mats on lining. The angle of inclination for ramp should not be more than 10 degree.	1	Job
42	Steps for DR: Providing steps at the location shown in layout to match raised floor level to true floor level. The steps will be having lines with non-skid type mats on liningThe height of single step should not be more than 250 mm and width should not be less than 250 mm.	1	Job
43	Tharmal insulation with 19 mm Nitrel rubber for DR	1400	Sqft

44	Providing and Applying approved Emulsion Low VOC paint in three or more coats of approved brand and shade to internal sufaces (walls / partitions/ ceiling or any other location as directed),to give an even shade to the approval of the engineer, including Putty & horoughly brushing the surface free from foreign matter, sand papering smooth, filling in all holes and cracks, applying lambi / palti and rubbing down the surface, lambi/palti sandwitched with two coats of approved primer, rate to include all tools, labour, scaffolding, primer as required completed as directed by the engineer for DR site	6400	Sqft
45	Fire Rated Paint with putty work for Server Room and Electrical Room at DR site	2500	Sqft
46	Fire Rated Partition for DR: Providing and fixing in position full height partition wall of 100 mm thick fire line gyp-board partition using 12.5 mm thick double fire line gypboard on both sides with GI steel metal vertical stud frame of size 50 mm fixed in the floor and ceiling channels of 50 mm wide to provide a strong partition. Glass wool insulation inside shall be provided as required. Fixing is by self-tapping screw with vertical studs being at 610 mm intervals. The same should be inclusive of making cut-outs for switch board, sockets, grill etc. It shall also include preparing the surface smoothly and all as per manufacture's specification etc. finally finishing with one coat of approved brand of fire resistant coating. (Server Room and Electrical Room)	2040	Sqft
47	Non Fire Rated Partition for DR: Providing and fixing in position full height partition wall of 100 mm thick gyp-board partition using 12.5 mm thick double fire line gypboard on both sides with GI steel metal vertical stud frame of size 50 mm fixed in the floor and ceiling channels of 50 mm wide to provide a strong partition. Glass wool insulation inside shall be provided as required. Fixing is by self-tapping screw with vertical studs being at 610 mm intervals. The same should be inclusive of making cut-outs for switch board, sockets, grill etc. It shall also include preparing the surface smoothly and all as per manufacture's specification etc. finally finishing with one coat of approved brand of fire resistant coating.	1050	Sqft
48	Fire rated door 2400 x 1500 double leaf in equal door for DR	2	nos
49	Panic bar for fire exit door for DR	1	nos
50	Fire rated door 2400 x 1000 single leaf for DR	2	nos
51	Main Flash Door at Data Centre Entrance double leaf $1500 \times 2400$ for DR	1	No
52	BMS and Manager Room Flash Door single leaf 1000 x 2400 mm for DR	1	Nos
53	Liner work station for DR	4	nos
54	Hydrolic lo back chair for DR	10	nos

55	Cleanning & house keeping till hand over the project including debrise cleanning and out from site for DR.	1	job
56	Sinages as required considering all rooms, Danger plat, Push, Pull, Fire exit, Emergency exit for DR.	1	job
57	Drawing & Design cost of DR site	1	Job
58	Strutural Steel with Stair case for DR	1	LS
59	Main Power Distribution Panel for DR: Supply Installation testing commissioning for Main Data Centre Panel. making of CRCA powder coated sheet, Having Incommer 200 A 4 pole MCCB with 36 KA. Out Going: 100 A 4 pole MCCB 3 nos, 63 A 4 pole MCCB 4 Nos, 32 A 4 pole MCB 6 nos, with multifunction meter with communication port (RS 485) & R,Y, B, ON, OFF, Trip Indication LED lamps & 500 A rated Aluminium bus bar.	1	nos
60	UPS Output Panel for DR: Incomer 2 Nos 100A 4 Pole MCCB with Metering (MFM with RS 485 Port, Indication lamp and control MCBs) Outgoing 32A DP 18 Nos	1	nos
61	Lighting DBs, BMS DBs and Raw Power DBs for DR	3	Nos
62	$4\ \mathrm{Run}\ \mathrm{X}\ 25\ \mathrm{sq.mm}.$ copper flexible cable for 80 KVA UPS Input and Output cable for DR	100	Mtr
63	4 Core 240 sq.mm. AL. Armured cable Incomer Supply for DR	100	Mtr
64	4 Run X 10 sq.mm. copper flexible cable for Lighting DB, Power DB, BMS DBs and PAC for DR	600	Mtr
65	50 sq.mm. copper flexible cable for earthing for DR	300	Mtr
66	3 Core X 4 sq.mm. copper flexible cable for server rack for DR	150	Mtr
67	Supply laying and commissioning of power points by 25 mm PVC conduit and 2.5 sqmm copper wire for power points and 1.5 sq.mm copper wire for lights points including modular switch sockets & all accessories for DR	25	points
68	Supply fixing and commissioning of power points for server racks including 32 A 3 pin industrial socket for DR	14	nos
69	Supply Installation testing commissionong of chemical earthing with 17.5 sq.mm. copper bonded pipe for electrod, chemical compund as per ISI, Chamber High duty Polycarbonet cover etc for DR	6	nos
70	Supply and fixing of 25 x 6 mm G.I Strip for DR	300	Mtrs
71	Earh Bus bar box with copper strip for DR	2	Nos
72	10 sqmm single core cable for DGs earthing, UPS earthing and server Rack earthing for DR	150	Mtrs
73	Light Point wiring with 3 x 1.5 sqmm copper flexible wire and PVC conduit with modular switch & accessories for DR	30	Points
74	Light fixture 36W 2ft x 2 Ft LED tupe for DR	24	Nos
75	Occupency Sensor for DR	6	Nos
76	Cable tray and raceway for DR:	1	Lot

77	$300 \times 50 \text{ mm}$ Ladder G.I cable tray with support arrangement for DR	150	Mtrs
78	$200 \times 50 \ mm$ G.I perforated cable tray with support arrangement ( Power ) for DR	100	Mtrs
79	$200 \times 50$ mm G.I perforated cable tray with support arrangement ( Data ) for DR	40	Mtrs
80	MS structural Steel for cable tray support and Panel Base Frame for DR	300	KG
81	Supply & Laying of Anti static rubber mate 1.1 kv tested for electrical room as per ISI for DR	2	nos
82	Shock Treatment chart for DR	2	nos
83	First Aid Box for DR	1	nos
84	Cost for devloping of all GFC & As built drawings as per recomendated size encluding design for DR	1	Job
85	UPS 60 KVA (3x20 KVA) Modular UPS with 30 mins battery backup in single cabinet and all accessories for running as hot standby.Each UPS should expandable upto 4x20 kva moduler UPS in future for DR	2	Sets
86	Precision AC for DR Site Server Room as per detailed spec	2	Nos.
87	G I hard drawn drain piping for DR	20	RMT
88	Supply, installation, testing & commissioning of GI class 'B' cut to required lengths and installed with all screwed joints, and providing and fixing in position with the necessary elbows, tees and reducers as per specifications. It shall be insulated with 9 mm thk nitrile rubber insulation. Humidifier Piping (assumption of 40 RMT/unit) 25mm dia all complete as required for DR	20	RMT
89	Supply, Lifting, shifting, & Installation of MS Stands for indoor PAC units with rubber pads. The frame shall be painted with one coat of metal primer two coats rust proof Epoxy Paint. The stand shall be Height adjustable type $\pm$ 25mm for Server Room stands all complete as required for DR	2	Nos
90	REFRIGERANT PIPING: Hard copper piping (7/8" Liquid + 1 1/8" Gas) along with closed cell elastomeric nitrile rubber insulation. Refrigerant pipe cost shall incude required neccessary supporting arrangement of hanging, wall fixed type, cost of wall chasing/breaking and finish, etc all complete as required for DR	30	RMT
91	Refrigerant gas R410A all complete for DR	2	Lot
92	Refrigerant Oil all complete as required for DR	2	Lot
93	Supply, Laying, installation, Testing & Commissioning of Interconnection cable(3C X2.5 SQ MM, Armoured Cable) between Indoor & Outdoor units all complete.for DR	50	RMT
94	Seq CAT6 cable for multiple Indoor units all complete for DR	20	RMT

95	Supply & Installation of MS Stands for outdoor PAC condenser units with rubber pads. The frame shall be painted with one coat of metal primer and two coats rust proof Epoxy Paint all complete for DR	2	Nos
96	Providing and Fixing of Fire Sealant to close the cut-outs of Cables, refrigerant pipes and tray all complete as required for DR	1	Lot
97	Copper piping with electrical wirings for the above	8	Nos
98	IT Hardware Requirement at DR Site: Blade Server AC2 Chassis with fans (As per details specification shared seperately	2	Nos
99	Blade With 02 CPU, 1TB Memory, 2*960GB SSD for DR	6	Nos
100	SAN Switch: 16G FC switch, w/ 48 active ports + 16G SW SFPs for DR	2	Nos
101	Certificate Server/Rack Server for DR	4	Nos
102	Desktop Computer set for DR	4	Nos
103	L3 Switch 48 port for DR	2	Nos
104	L2 Switch for DR	3	Nos
105	Router one for DC and another for DR	2	Nos
106	Red Hat Cloud Infrastructure, Premium (2-sockets with guest OS) open Stack with Smart Management for DR, with VM replication feature between DC and DR	3	Nos
107	High Availability for Unlimited Guests for DR	3	Nos
108	VMware vCloud Suite Subscription- per CPU per year Commitment Plan - 60 month Prepaid + Vcentre 1 Nos for DR	4	Nos
109	EMS Software per device/VM for 5 years. Underlying Hardware Infra required including VMware, Microsoft licenses etc will be provisioned by WTL and bidder to mention requirement with sizing for same in bid for DR	50	Nos
110	Deep Security - Enterprise - per Server (VM) for 5 years for DR	20	Nos
111	Redhat Enterprise Linux Standard for virtual Datacentres with 1 Yr Standard Subscription for 5 years for DR site	2	Nos
112	HPE SAN Storage with 650 TB NL SAS usable space + 50 TB SSD usable space at DR for replication with existing DC HPE Primera 650 storage usable space	1	Lot
113	NetApp SAN Storage with 370 TB NL SAS usable space + 100 TB SSD usable space at DR for replication with existing DC Netapp Storage AFF-A700	1	Lot
114	Enterprise Firewall as per specification mentioned/Equivalent for DR	1	Nos
115	24 Port (all) PoE+(190W) switch with 2 SFP uplink ports for CCTV for DR	1	Each
116	10M HDMI CABLE. for DR	5	Mtr.
117	Performance Lite 2 MP IP Eyeball Camera Fixed lens. for DR	10	Each
118	CAT 6 Cable for DR	1000	RMT

119	Performance Lite 2 MP IP Bullet Camera Fixed lens. for DR	2	Each
120	H265 4K 32CH NVR NO POE. for DR	1	Each
121	Conduit 25 mmm PVC for DR	600	RMT
122	49" Colour Monitor Industrial duty for DR	1	No
123	9 U Network Rack (BMS) for DR	1	nos
124	2 door access Controller for DR	3	nos
125	Supply of SMPS for Door Controller. for DR	4	Nos.
126	Supply & Installation of Door controller Enclosour.for DR	3	Nos.
127	Biometric Reader for DR	2	Nos.
128	Card Reader for DR	4	Nos.
129	Supply of "L" and "U" Bracket. for DR	4	Nos.
130	Double Door EM Lock 600 lbs with LED for DR	2	Nos.
131	Z bracket for 600lbs EM Lock. for DR	8	Nos.
132	600lbs electromagnetic lock unmonitored type 12V LED Lamp Only for Singleleafe door. for DR	4	Pcs.
133	MAGNETIC CONTACT 2 WIRE. for DR	8	No.
134	Supply of ACS Workstation Intel® Quad Core, 2.8GHz or higher, 8 GB RAM, 100 GB free disk space, Dual Ethernet 10/100MBs, Software Requirements:  * Microsoft Windows 10 (Enterprise) 64-bits  * Microsoft .NET Framework v4.0 for DR	1	Set
135	Exit Button 3 inches X 1 inch. for DR	6	Nos.
136	Smart Access Card for DR	25	Nos
137	Access Control software for DR	1	nos
138	Supply Installation Testing & Commissioning of addressable Optical Smoke Detector, Smoke Detection by : Photo-electric light scattering. for DR	34	Nos
139	Supply Installation Testing & Commissioning of addressable Heat Detector, Detection Technology : Thermistor / ROR for DR	2	Nos
140	Supply Installation Testing & Commissioning of Addressable Manual call point with built in isolator and DIL switch for Address Setting for DR	6	Nos
141	Supply Installation Testing & Commissioning of The Loop Powered 100 dB Sounder Base with Beacon for DR	5	Nos
142	Supply Installation Testing & Commissioning of Addressable Control Module for DR	6	Nos
143	Supply Installation Testing & Commissioning of Addressable Monitor Module for DR	3	Nos
144	Supply Installation Testing & Commissioning of Addressable Isolator module for DR	2	Nos
145	Supply Installation Testing & Commissioning of 2 Loop Fire Alarm Panel with 126 Addresses per Loop, Battery and accessories as per requirement. Battery Back-up for DR	1	Nos

146	2 core x 1 sqmm Copper Flexible FRLS Cable for DR	500	Mtrs
147	20 mm PVC Conduit for DR	200	Mtrs
148	ABC Type Fire Extingusher 5 Kg for DR	6	Nos
149	SITC of short wavelength laser based ultra high sensitive aspiration smoke detector as per detailed spec for DR		LOT
150	SITC of Power Supply units - Power supply unit with 110/230VAC input and 18 to 29VDC output. The power supply unit has the following indications:  OK - Green LED and Fault - Yellow LED Power supply unit should have capacity to operate on battery backup in case of AC mains failure & should have built in charging circuit for batterys. for DR	t. The power supply unit has the  Tellow LED Power supply unit should pattery backup in case of AC mains	
151	SITC of Trunk Adaptor, Capillary Tube Connector, Capillary Tube, Capillary Sampling Point, Sampling point label red (complete set) for air sampling in room voids for area having false ceilings.for DR	9	Nos.
152	SITC of Sampling Pipe having Smooth bore PVC Pipe 25mm Outer Dia & 19 to 21mm Inner Dia with all required accessories for DR.	40	mtr
153	Supply, Installation,Testing and Commissioning of 2 ZONE Water Leak Detection Panel (for server Room and Electrical Room) for DR	2	Nos.
154	Water Leak detection Cable Sensor – 25 mtrs for DR	4	Nos.
155	Electronic Hooter for DR	2	Nos.
156	SITC of 2 x 1.0 sq mm screened copper flexible cable for DR	20	Mtrs
157	SITC of Main Rodent Controller suitable to connect 24 Satelites @		Nos.
158	SITC of Satellite Stations / Transducers covering for DR	12	Nos.
159	Cable and Conduits for DR	1	Lot
160	2 core 1 sq.mm Cu. Flexible Shielded cable @ 275 meter each coil for DR	2	Mtrs.
161	20 mm PVC Conduit for DR	20	Mtrs.
162	Console for DR	2	Nos.
163	Stand Brackets for DR	2	Nos.
164	120 ltrs Tank and valve assembly with solenoid actuator, straps Empty (fill 60 - 100 Kgs.) for DR	2	Nos
165	Fire Suppression Fluid Novec1230, OEM Factory Fill per KG for DR	198	kg
166	Cylender Accessories for DR	1	Lot
167	7 Cylinder strap for DR 1		
168			
169	Local Manual actuator for DR	1	Lot
170	Flexible discharge Hose -49 mm / SWIVEL ADAPTOR for DR	1	Lot
171	Flexible Actuation Hose / Pilot hose for DR	1	Lot

172	Nozzles, Brass drilled -360/180 deg throw selection for DR	1	Lot
173	LED type display sign board flashing with inbuilt Sounder "EVACUATE GAS RELEASED" & "DO NOT ENTER" for DR	1	Nos
174	49 mm MANIFOLD CHECK VALVE for DR	1	Nos
175	PRESSURE SWITCH - DPST for DR	1	Nos
176	MANUAL RELELASE SWITCH for DR	1	Nos
177	ABORT SWITCH for DR	1	Nos
178	M.S. Seamless pipes as per ASTM A 106 Gr. B, schedule 40 with necessary Fittings & Hangers.for DR	1	lot
179	2 WAY MANIFOLD for DR	1	lot
180	MS Channel support for DR	1	lot
181	Gass Release Panel for DR	1	Nos
182	Cross Zoning Detector for DR	6	Nos
183	Hooter with strobe 100 DB for DR	2	nos
184	BUILDING MANAGEMENT SYSTEM APPLICATION for DR	1	Lot
185	6KVA online UPS with 20 minutes backup for DR	1	Nos
186	Structured cabling & Server racks: 10 M Cat 6 Cable for DR	50	Nos
187	15 M Cat 6 Cable for DR	75	Nos
188	25 M Cat 6 Cable for DR	15	Nos
189	Cat-6 UTP Cable Roll of 305 Mtrs for DR	4	Box
190	12MTP/F-12MTP/F Trunk Cable, OM4, LSZH, 15m, polarity Reversed, Low-Loss for DR	10	Nos
191	12MTP/F-12MTP/F Trunk Cable, OM4, LSZH, 25m, polarity Reversed, Low-Loss for DR	20	Nos
192	LC-LC Fiber Duplex Patch Cord OM4 Multimode-3 Meter for DR	100	Nos
193	LC-LC Fiber Duplex Patch Cord OM4 Multimode-5 Meter for DR	15	Nos
194	24 Core Fiber Cassette (MPO) AB/BA Pair Flipped 24 Core fiber MPO LC Cassette, Pair Flipped AB/BA, Multi-Mode for DR	18	Nos
195	Trunk Cable (MPO-MPO) 25Meter MPO-MPO Trunk Male cable, 12 Fiber straight, 50.125 OM4 LSZH Multimode for DR	10	Nos
196	Trunk Cable (MPO-MPO) 15Meter MPO-MPO Trunk Male cable, 12 Fiber straight, 50.125 OM4 LSZH Multimode for DR	10	Nos
197	DR Site Installation, Commissioning & System Integration Charges	1	LS
198	Server Rack - Supply, Installation, Testing & Commissioning of 42U, 7KW Server Cabinet Extruded Aluminium Profile frame with top panel; having static load bearing capacity of 1300 Kg as per Tender Specifications. Dimensions: 2200mm x 800mm x 1200mm all complete as required and as per detailed specifications. Racks, PDUs, containment should be from same OEM. for DR	6	Nos

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199	Network Rack - Supply, Installation, Testing & Commissioning of 42U, 2KW network rack with PDU for DR	1	Nos
200	Manpower Requirement at DR Site for 24x7 Support: BMS Person for 5 years for DR	2	Nos
201	Manpower Requirement at DR site: IT - 1 L1 & 1 L2 engineer for 5 years for DR	2	Nos
202	Dedicated DC-DR Link 2x155 Mbps Leased Circuits from 2 different service providers with 1 Year ARC for DR	1	Year
203	1x100 Mbps ILL (1:1) at DR Site with 1 Year ARC for DR	1	Year
204	Providing of 2 Nos physical security at SDC 1st floor for 1 year.FY-23-24	1	Year
205	Providing of 2 Nos physical security at SDC 1st floor for 1 year.FY-24-25	1	Year
206	Providing of 2 Nos physical security at SDC 1st floor for 1 year.FY-25-26	1	Year
207	FM Cost for 5 Years as per requirement mentioned in existing DCO terms & conditions for 1 year FY-23-24 for DC	1	Year
208	FM Cost for 5 Years as per requirement mentioned in existing DCO terms & conditions for 1 year FY-24-25 for DC	1	Year
209	FM Cost for 5 Years as per requirement mentioned in existing DCO terms & conditions for 1 year FY-25-26 for DC	1	Year
210	AMC/Support Cost for IT (software and hardware) equipment for 1 year FY-23-24 for DC	1	Year
211	AMC/Support Cost for lT (software and hardware) equipment for 1 year FY-24-25 for DC $$	1	Year
212	AMC/Support Cost for lT (software and hardware) equipment for 1 year FY-25-26 for DC $$	1	Year
213	AMC/Support Cost for Non-IT Equipment including UPS battery replacement (1st Floor) for 1 year FY-23-24 for DC	1	Year
214	AMC/Support Cost for Non-IT Equipment (2nd Floor) for 1 year FY-24-25 for DC	1	Year
215	AMC/Support Cost for Non-IT Equipment (2nd Floor) for 1 year FY-25-26 for DC	1	Year
216	AMC/Support Cost for Non-IT Equipment (1st Floor) for 1 year FY-23-24 for DC	1	Year
217	AMC/Support Cost for Non-IT Equipment (1st Floor)for 1 year FY-24-25 for DC	1	Year
218	AMC/Support Cost for Non-IT Equipment (1st Floor)for 1 year FY-25-26 for DC	1	Year
219	AMC/Support Cost for PAC, UPS, Panel & DG. (1st Floor) for 1 year FY-22-24 for DC	2	Year
220	AMC/Support Cost for PAC, UPS, Panel & DG. (1st Floor) for 1 year FY-24-25 for DC	1	Year
221	AMC/Support Cost for PAC, UPS, Panel & DG. (1st Floor) for 1 year FY-25-26 for DC	1	Year

222	Cost of dedicated Operation and AMC Support for RSA SIEM for WBSDC through L2 Level Engineer for 1 year FY-22-23. For 24X7 support for SIEM should include minimum 3 nos L2 level Onsite Resources for DC	1	Year
223	Cost of dedicated Operation and AMC Support for RSA SIEM for WBSDC through L2 Level Engineer for 1 year FY-23-24. For 24X7 support for SIEM should include minimum 3 nos L2 level Onsite Resources for DC	1	Year
224	Cost of dedicated Operation and AMC Support for RSA SIEM for WBSDC through L2 Level Engineer for 1 year FY-24-25. For 24X7 support for SIEM should include minimum 3 nos L2 level Onsite Resources for DC	1	Year
225	Cost of dedicated Operation and AMC Support for RSA SIEM for WBSDC through L2 Level Engineer for 1 year FY-25-26. For 24X7 support for SIEM should include minimum 3 nos L2 level Onsite Resources for DC.	1	Year
226	AMC/Support Cost for UPS batteries, for 612 cells of 2v/375ah, 132 nos batteries of 12v/42 AH and 80 nos of batteries of 12v/200 AH for 1 year FY-23-24 (batteries to be replaced as per OEM guidelines) at DC.	1	Year
227	AMC/Support Cost for UPS batteries, for 612 cells of 2v/375ah, 132 nos batteries of 12v/42 AH and 80 nos of batteries of 12v/200 AH for 1 year FY-24-25 (batteries to be replaced as per OEM guidelines) at DC.	1	Year
228	AMC/Support Cost for UPS batteries, for 612 cells of 2v/375ah, 132 nos batteries of 12v/42 AH and 80 nos of batteries of 12v/200 AH for 1 year FY-25-26 (batteries to be replaced as per OEM guidelines) at DC.	1	Year
229	Professional Support Services for two Database and two System Administrators with effect from 1.4.2022 FY-22-23 for DC	1	Year
230	Professional Support Services for two Database and two System Administrators with effect from 1.4.2023 FY-23-24 for DC	1	Year
231	Professional Support Services for three Database and three System Administrators with effect from 1.4.2024 FY-24-25 for DC	1	Year
232	Professional Support Services for three Database and three System Administrators with effect from 1.4.2025 FY-25-26	1	Year
233	Vodafone/other ISP 1000 Mbps ILL for WBSDC for 1 year upto 31.03.2023 FY-22-23 for DC	1	Year
234	Vodafone/other ISP 1000 Mbps ILL for WBSDC for 1 year upto 31.03.2024 FY-23-24 for DC	1	Year
235	Vodafone/other ISP 1000 Mbps ILL for WBSDC for 1 year upto 31.03.2025 FY-24-25 for DC	1	Year
236	Vodafone/other ISP 1000 Mbps ILL for WBSDC for 1 year upto 31.03.2026 FY-25-26 for DC	1	Year

237	Vodafone/other ISP 1000 Mbps ILL for WBSDC for 1 year upto 31.03.2027 FY-26-27 for DC	1	Year
238	AMC & UPGRADE of old SDC cloud servers (4)FY-22-23 (NIC card from 1 to 10 GBPS and RAM 256 GB to 512 GB) for DC	1	Year
239	AMC of old SDC cloud servers (4)FY-23-24 for DC	1	Year
240	AMC & UPGRADE (30 to 75TB) of Dell VTL of old SDC cloud system period for 1 year FY-22-23 for DC	1	Year
241	AMC of upgraded Dell VTL of old SDC cloud system period for 1 year FY-23-24 for DC	1	Year
242	AMC & UPGRADE (75 to 100TB) of Dell VTL of old SDC cloud system period for 1 year FY-24-25 for DC	1	Year
243	AMC of upgraded Dell VTL of old SDC cloud system period for 1 year FY-25-26 for DC	1	Year
244	AMC / ATS & UPGRADE (from 40 to 50TB) of Commvault Backup System for 1 year FY-22-23 for DC	1	Year
245	AMC / ATS & UPGRADE (from 50 to 60TB) of Commvault Backup System for 1 year FY-23-24 for DC	1	Year
246	AMC / ATS & UPGRADE (from 60 to 70TB) of Commvault Backup System for 2 years FY-24-26 for DC	2	Years
247	AMC of WBSDC new cloud (existing blade server) servers - lot one FY-23-24 for 1 year	1	Year
248	AMC of WBSDC new cloud (existing blade server) servers - lot one FY-24-25 for 1 year	1	Year
249	AMC of WBSDC new cloud (existing blade server) servers - lot one FY-25-26 for 1 year	1	Year
250	AMC of Netapp SAN storage (430 TB) for the period for 1 year FY-23-24 for DC	1	Year
251	AMC of Netapp SAN storage (430 TB) for the period for 1 year FY-24-25 for DC	1	Year
252	AMC of Netapp SAN storage (430 TB) for the period for 1 year FY-25-26 for DC	1	Year
253	AMC of WBSDC new network (SDN) infrastructure for 1 year FY-23-24	1	Year
254	AMC of WBSDC new network (SDN) infrastructure for 1 year FY-24-25	1	Year
255	AMC of WBSDC new network (SDN) infrastructure 1 year FY-25-26	1	Year
256	AMC & UPGRADE of RedhatOpenstack Cloud Software License SA for 1 year FY-23-24 for DC	1	Year
257	AMC & UPGRADE of RedhatOpenstack Cloud Software License SA for 1 year FY-24-25 for DC	1	Year
258	AMC & UPGRADE of RedhatOpenstack Cloud Software License SA for 1 year FY-25-26 for DC	1	Year

259	Renewal of RSA Software Product Licenses with OEM support for 1 year FY-22-23. All underlying Hardware Infra required including VMware, Microsoft licenses etc will be provisioned by WTL and bidder to mention requirement with sizing for same in bid for DC	1	Year
260	Renewal of RSA Software Product Licenses with OEM support for 1 year FY-23-24. All underlying Hardware Infra required including VMware, Microsoft licenses etc will be provisioned by WTL and bidder to mention requirement with sizing for same in bid for DC	1	Year
261	Renewal of RSA Software Product Licenses with OEM support for 1 year FY-24-25. All underlying Hardware Infra required including VMware, Microsoft licenses etc will be provisioned by WTL and bidder to mention requirement with sizing for same in bid for DC	1	Year
262	Renewal of RSA Software Product Licenses with OEM support for 1 year FY-25-26. All underlying Hardware Infra required including VMware, Microsoft licenses etc will be provisioned by WTL and bidder to mention requirement with sizing for same in bid for DC	1	Year
263	SOAR (Security Orchestration Automation Response) Software License Renewal for 1 year FY-24-25. For 24X7 support for SOAR renewal should include minimum 2 nos L2 level & 1 no L3 level Onsite Resources for DC	1	Year
264	SOAR (Security Orchestration Automation Response) Software License Renewal for 1 year FY-25-26. For 24X7 support for SOAR renewal should include minimum 2 nos L2 level & 1 no L3 level Onsite Resources for DC	1	Year
265	DDOS 10Gbps additional 1 Years subscription FY-24-25 for DC	1	Year
266	DDOS 10Gbps additional 1 Years subscription FY-25-26 for DC	1	Year
267	DC Augmentation - Installation, Commissioning & System Integration Charges	1	LS
268	Deep Security Enterprise Software License - additional 50 VMs for 1 year during FY-22-23 for DC	1	Year
269	Deep Security Enterprise Software License - additional 50 VMs for 1 years & License renewals for all existing licenses during FY-23-24 for DC	1	Year
270	Deep Security Enterprise Software License - additional 50 VMs for 1 years & License renewals for all existing licenses for year FY-24-25 for DC	1	Year
271	Deep Security Enterprise Software License - additional 50 VMs for 1 years & License renewals for all existing licenses for year FY-25-26 for DC	1	Year
272	Deep Security Enterprise Software License - additional 50 VMs for 1 years & License renewals for all existing licenses for year FY-26-27 for DC	1	Year

273	EDB Postgres Enterprise License CPU Core support renewal / upgrade - Production Support (including Replica DB servers) FY-22-23 for DC	1	Year
274	EDB Postgres Enterprise License CPU Core support renewal / upgrade - Production Support (including Replica DB servers) FY-23-24 for DC	1	Year
275	EDB Postgres Enterprise License CPU Core support renewal / upgrade - Production Support (including Replica DB servers) FY-24-25 for DC	1	Year
276	EDB Postgres Enterprise License CPU Core support renewal / upgrade - Production Support (including Replica DB servers) FY-25-26 for DC	1	Year
277	EDB Postgres Enterprise License CPU Core support renewal / upgrade - Production Support (including Replica DB servers) FY-26-27 for DC	1	Year
278	Existing VMware vCloud Suite Subscription per CPU for 20 CPUs with 1 vCenter & Tanzu Commitment Plan - 12 month Prepaid with support FY-22-23	1	Year
279	Existing VMware vCloud Suite Subscription per CPU for 20 CPUs with 1 vCenter & Tanzu Commitment Plan - 12 month Prepaid with support FY-23-24	1	Year
280	Existing VMware vCloud Suite Subscription per CPU for 20 CPUs with 1 vCenter & Tanzu Commitment Plan - 12 month Prepaid with support FY-24-25	1	Year
281	Existing VMware vCloud Suite Subscription per CPU for 20 CPUs with 1 vCenter & Tanzu Commitment Plan - 12 month Prepaid with supportFY-25-26	1	Year
282	DC-DR LC & ILL ARC for DR Site FY-22-23	1	Year
283	DC-DR LC & ILL ARC for DR Site FY-23-24	1	Year
284	DC-DR LC & ILL ARC for DR Site FY-24-25	1	Year
285	DC-DR LC & ILL ARC for DR Site FY-25-26	1	Year
286	Capacitor Bank change of old UPS FY-22-23 for VERTIV make UPS	1	Lot
287	Capacitor Bank change of old UPS FY-24-25 for ETON make UPS	1	Lot
288	Electrical Earth Pit Repair / Reconstruction FY-22-23	1	Year
289	DG Repair / Replacement due to aging / obsolescence FY-22-23	1	Year
290	DG Repair / Replacement due to aging / obsolescence FY-24-25	1	Year

## SECTION - J

#### **DETAILS OF ORDERS EXECUTEDBY BIDDER**

(Tender No. WTL/WBSDC/CE/21-22/00)

S1. No.	Order No.	Order Date	Order Value	Brief description of items and job details	Completed (Yes/NO)	Name of the Customer	Contact details of the Customer

Authorized Signatory (Signature In full):				
Name and title of Signatory:				
Stamp of the Company:				
r ,				

#### Note:

- A. Type of Project shall indicate the implementation of services (Delivery& Installation of Network Security Device).
- B. Scope of work shall indicate whether it is implementation, Operation or maintenance.
- C. Submit Customer Order Copy details of the order indicating the project value, customer contact details.

## SECTION - K

#### FINANCIAL CAPABILITY OF BIDDER

WTL/WBSDC/CE/21-22/00)

## **FINANCIAL INFORMATION**

Sl. No.	Name of the Bidder	Turnover (Rs. / Crores)			
31. 140.	Name of the Bluder	2017-18		2019-20	
1					

Name and title of Signatory:	
Stamp of the Company:	
Note: Submit the audited financial statement/ audited annual report of the last three	financial wears

Authorized Signatory (Signature In full):

## SECTION - L

## **BIDDERS'S DETAILS**

(WTL/WBSDC/CE/21-22/00)

1	Name of the Firm	
2	Registered Office Address	
	Contact Number	
	Fax Number	
	E-mail	
3	Correspondence / Contact address	
	Name & Designation of Contact person	
	Address	
	Contact Number	
	Fax Number	
	E-mail	
4	Is the firm a registered company? If yes, submit	
	documentary proof	
	Year and Place of the establishment of the company	
6	Former name of the company, if any	
7	Is the firm	
	<ul> <li>a Government/ Public Sector Undertaking</li> </ul>	
	<ul><li>a propriety firms</li></ul>	
	<ul><li>a partnership firm (if yes, give partnership deed)</li></ul>	
	<ul> <li>a limited company or limited corporation</li> </ul>	
	<ul><li>a member of a group of companies, (if yes, give</li></ul>	
	<ul> <li>name and address and description of other</li> </ul>	
	companies)	
	<ul> <li>a subsidiary of a large corporation (if yes give the</li> </ul>	
	name and address of the parent organization). If	
	the company is subsidiary, state what	
	involvement if any, will the parent company have	
	in the project.	
8	Is the firm registered with Sales Tax department? If yes,	
	submit valid GST Registration certificate.	
9	Is the firm registered for Service Tax with Central Excise	
	Department (Service Tax Cell)? If yes, submit valid	
	Service Tax registration certificate.	
10	Total number of employees. Attach the organizational	
<b></b>	chart showing the structure of the organization.	
11	Are you registered with any Government/ Department/	
10	Public Sector Undertaking (if yes, give details)	
12	How many years has your organization been in business	
	under your present name? What were your fields when	
10	you established your organization	
13	What type best describes your firm? (Purchaser reserves	
	the right to verify the claims if necessary)	
	Manufacturer     Grand House	
	• Supplier	
	System Integrator	
	• Consultant	
1	<ul> <li>Service Provider (Pl. specify details)</li> </ul>	

	Software Development	
	<ul> <li>Total Solution provider (Design, Supply,</li> </ul>	
	Integration, O&M)	
	■ IT Company	
14	Number of Offices in district headquarters in West Bengal	
15	Is your organization having ISO 9001:2015 certificates?	
16	List the major clients with whom your organization has	
	been / is currently associated.	
17	Have you in any capacity not completed any work	
	awarded to you? (If so, give the name of project and	
	reason for not completing the work)	
18	Have you ever been denied tendering facilities by any	
	Government / Department / Public sector Undertaking?	
	(Give details)	

Authorized Signatory (Signature In full):
Name and title of Signatory:
Company Rubber Stamp:

## **SECTION - M**

## SUPPORT SERVICE CENTER & MANPOWER DETAILS OF BIDDER

(WTL/WBSDC/CE/21-22/00)

Sl. No.	Name of Place	Address	Name of Support Personnel	Contact Number
			1 013011101	
				<u>L</u>

Authorized Signatory (Signature In full): _	
Name and title of Signatory:	
Company Rubber Stamp:	

## SECTION - N

## **FORMAT FOR PRE-BID MEETING QUERY**

(WTL/WBSDC/CE/21-22/00)

Queries				
S1. No.	Section No.	Clause No.	Page No.	Queries
before P		ng. Queries	received	S & PDF Format. There is a cutoff date for receiving of queries after the cutoff period will not be accepted. The Purchaser ver e-mail.
Authoriz	ed Signatory	(Signature	In full):	
Name an	d title of Sig	natory:		
Compan	y Rubber Sta	amp:		

Name of the Bidder:

## SECTION - O

#### LIST OF CLIENTS OF SIMILAR ORDERS

(WTL/WBSDC/CE/21-22/00)

Sl. No.	Name of the Client	Address	Contact Person	Designation	Contact Numbers

dutionzed signatory (signature in tun).
Name and title of Signatory:
Company Rubber Stamp:

## SECTION - P

#### PROFORMA FOR PERFORMANCE BANK GUARANTEE

(On non-judicial stamp paper of appropriate value to be purchased in the name of executing Bank)

# PROFORMA OF BANK GUARANTEE FOR SECURITY DEPOSIT –CUM-PRFORMANCE GUARANTEE

Ref Bank Guarantee no
Date
PROFORMA OF BG FOR SECURITY DEPOSIT
KNOW ALL MEN BY THESE PRESENTS that in consideration of WEBEL TECHNOLOGY LIMTED, a Government of West Bengal Undertaking incorporated under the Companies Act, 1956 having its Registered office at Webel Bhavan, Block EP&GP, Sector V, Kolkata-700 091 (hereinafter called "The Purchaser") having agreed to accept from
dated
(2) AND WE,DO HEREBY Guarantee and undertake to pay forthwith on demand to the Purchaser such sum not exceeding the said sum ofRupees) only as may be specified in such demand, in the event of the Contractor failing or neglecting to execute fully efficiently and satisfactorily the order for Work Order no. ,dated
(3) WE further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said order as laid down in the said Work Order No dated including the warranty obligations and that it shall continue to be enforceable till all the dues of the Purchaser under or by virtue of the said Work Order No dated have been fully paid and its claims satisfied or is charged or till the Purchaser or its authorized representative certified that the terms and conditions of the said Work Order No dated have been fully and properly carried out by the said contractor and accordingly discharged the guarantee.  (4) We the Guarantor undertake to extend the validity of Bank Guarantee at the request of the contractor for further period of periods from time to time beyond its present validity period failing which we shall pay the Purchaser the amount of Guarantee.
(5) The liability under the Guarantee is restricted to Rs (Rupees) only and will expire on and unless a claim in writing is presented to us or an action or suit to enforce the claim is filled against us within 6 months from all your rights will be forfeited and we shall be relieved of and discharged from all our liabilities (thereinafter)

(6) The Guarantee herein contained shall not be determined or affected by liquidation or winding up or insolvency or closer of the Contractor.
(7) The executants has the power to issue this guarantee on behalf of Guarantor and holds full and valid power of Attorney granted in his favour by the Guarantor authorizing him to execute the Guarantee.
(8) Notwithstanding anything contained herein above, our liability under this guarantee is restricted to Rs
WE, lastly undertake not to revoke this guarantee during the currency except with the previous consent of the Purchaser in writing. In witness whereof we have set and subscribed our hand on this day or
SIGNED, SEALED AND DELIVERED
WITNESS  1)  2) (Name & address in full with Rubber Stamp)
Form of Bid Security (Bank Guarantee)
Bank Guarantee No Date
WHEREAS,
for which payment will and truly to be made to the said Employer the Bank binds itself, his successors and assigns by these presents.
SEALED with the Common Seal of the said Bank this day of 20
THE CONDITIONS of this obligation are: (1) If after Bid opening the Applicant (a) withdraws his bid during the period of Bid validity specified in the Letter of Bid, ("the Bid Validity Period"); or (b) does not accept the correction of the Bid Price or

- (2) If the Applicant having been notified of the acceptance of his bid by the Employer during the period of Bid validity:
- (a) fails or refuses to execute the Contract Agreement in accordance with the Instructions to Bidders, if required; or
  - (b) fails or refuses to furnish the Performance Security, in accordance with the Instruction to Bidders.

we undertake to pay to the Employer up to the above amount upon receipt of his first written demand, without the Employer having to substantiate his demand, provided that in his demand the Employer will note that the amount claimed by him is due to him owing to the occurrence of one or any of the four conditions, specifying the occurred condition or conditions.

conditions, specif	ying the occurred condition or conditions.	
deadline for subnextended by the I	ill remain in force up to and including the date	ns to Bidders or as it may be beby waived. Any demand in
DATE	SIGNATURE OF THE BANK	
WITNESS	SEAL	
[signature, name,	and address]	

#### INSTRUCTIONS FOR FURNISHING BANK GUARANTEE

- 1. Bank Guarantee (B.G.) for Advance payment, Mobilization Advance, B.G. for security Deposit-cum-Performance Guarantee, Earnest Money should be executed on the Non- Judicial Stamp paper of the applicable value and to be purchased in the name of the Bank.
- 2. The Executor (Bank authorities) may mention the Power of Attorney No. and date of execution in his/her favour with authorization to sign the documents. The Power of Attorney is to be witnessed by two persons mentioning their full name and address.
- 3. The B.G. should be executed by a Nationalised Bank/ Scheduled Commercial Bank preferably on a branch located in Kolkata. B.G. from Co-operative Bank / Rural Banks is not acceptable.
- 4. A Confirmation Letter of the concerned Bank must be furnished as a proof of genuineness of the Guarantee issued by them.
- 5. Any B.G. if executed on Non-Judicial Stamp paper after 6 (six) months of the purchase of such stamp shall be treated as Non-valid.
- 6. Each page of the B.G. must bear signature and seal of the Bank and B.G. Number.
- 7. The content of the B.G. shall be strictly as Proforma prescribed by WTL in line with Purchase Order /LOI/ Work Order etc. and must contain all factual details.
- 8. Any correction, deletion etc. in the B.G. should be authenticated by the Bank Officials signing the B.G.
- 9. In case of extension of a Contract the validity of the B.G. must be extended accordingly.
- 10. B.G. must be furnished within the stipulated period as mentioned in Purchase Order / LOI / Work Order etc.
- 11. Issuing Bank / The Bidder are requested to mention the Purchase Order / Contract / Work Order reference along with the B.G. No. For making any future queries to WTL.

#### SECTION - Q

#### **NIT DECLARATION**

(Bidders are requested to furnish the Format given in this section, filling the entire Blank and to be submitted on Bidder's Letter Head)

To WebelTechnologyLimited Plot-5,Block-BP,Sector-V,SaltLakeCity, Kolkata-700091.

Thankingyou, were main

Sub:Selection of System Integrator for Capacity Enhancement of West Bengal State Data Centre (WB-SDC) and setting up its DR Site at Remote Location

DearSir,

Wethe undersignedbidder/(s) declare that wehavereadandexaminedindetailsthespecification s andother documents of the subject Tenderno. WTL/WBSDC/CE/21-22/00)

dated 00.00.21 for Selection of System Integrator for Capacity Enhancement of West Bengal State Data Centre (WB-SDC) and setting up its DR Site at Remote Location published by Webel Technology Limited in e-Tender website.

We further declare that we have agreed and accepted all the clauses / sub-clauses / formats / terms & conditions other requirements related to the said tender and we will abide by the same as mentioned in the tender document while participating and executing the said tender.

Coursfaithfully
Signature
Designation
CompanyStamp

Dated, this.....dayof......2021

Please submit undertaking letter as per Ministry of Finance Memorandum No.: F.No.6/18/2019PPD dated 23.07.2020 & Office Memorandum No.: F.18/37/2020-PPD dated 08.02.2021 as per proforma given below on OEM letterhead as well as on bidder's letterhead.

## On letterhead of Bidder

Sub: Undertaking as per Office Memorandum No.: F. No.6/18/2019-PPD dated 23.07.2020 & Office

Memorandum No.: F.18/37/2020-PPD dated 08.02.2021 published by Ministry of Finance, Dept. of				
Ref: Bi	Expenditure, Public Procurement div	ision		
I have read the clause regarding restriction on procurement from a bidder of a country which shares a land border with India. I certify that we as a bidder and quoted product from following OEMs are not from such a country or, if from such a country, these quoted products OEM has been registered with competent authority. I hereby certify that these quoted product & its OEM fulfills all requirements in this regard and is eligible to be considered for procurement for Bid number				
No.	Item Category	Quoted Make & Model		
for vali	I'm supplying material from a country which shares a land borded registration by the competent authority, otherwise Webel Tes the right to take legal action on us.			
(Signat Authori	ure) ized Signatory of <b>M/s &lt;<name company="" of="">&gt;</name></b>			

140

#### On letterhead of OEM

Sub: Undertaking as per Office Memorandum No.: F. No.6/18/2019-PPD dated 23.07.2020 & Office Memorandum No.: F.18/37/2020-PPD dated 08.02.2021 published by Ministry of Finance, Dept. of Expenditure, Public Procurement division

	Expenditure, Public Procurement division			
Ref: Bi	d Number:			
Dear Si	r,			
I have read the clause regarding restriction on procurement from a bidder of a country which shares a land border with India. I certify that our quoted product and our company are not from such a country, or if from such a country, our quoted product and our company have been registered with competent authority. I hereby certify that these quoted product and our company fulfills all requirements in this regard and is eligible to be considered for procurement for Bid number.				
No.	Item Category	Quoted Make & Model		
for vali	I'm supplying material from a country which shares a land borded registration by the competent authority; otherwise Webel Tees the right to take legal action on us.			
(Signat Authori	ure) zed Signatory of <b>M/s &lt;<name company="" of="">&gt;</name></b>			

#### SECTION - R

#### TECHNICAL COMPLIANCE

## WBSDC CAPACITY AUGMENTATION

## STORAGE AUGMENTATION BOQ FOR DC

S1.	Description	Make / Model Applicable – by the bidder)	Complied (Yes / No)
1	Existing HPE Primera 650 Storage upgrade at DC – 450TB USABLE to 650TB USABLE space. Out of 200TB usable space to be procured, 100TB must be SSDs (7.6TB SSDs) & 100 TB must be SAS Discs. Warranty co-terminus with existing storage warranty.		
2	Existing Netapp Storage <b>AFF- A700</b> at DC upgrade - 170TB USABLE space to 430TB USABLE space. All 260 TB additional usable space should be SSD only (7.6 TB SSDs). Warranty co-terminus with existing storage warranty		

#### **IT Hardware**

Sl. No.	Description	Make / Model Applicable – by the bidder)	Complied (Yes / No)
	Blade with 2 x Intel processor minm 2.0 GHz /165W		
3	32C/48 MB, 1536 GB DDR4 2933MHz mem, 2x960GB 12G SAS 10K RPM SFF HDD, 12G SAS RAID controller with		
	Drive bays OR Equivalent as per details specification		
	Blade Chassis with converged network connectivity for		
4	4x32GB FC, 4x10G FCOE/Equivalent and 2x40G		
	connectivity, Redundant 2500W Platinum AC Hot Plug		
	Power Supply OR Equivalent as per details specification		
	Rack Server with 2 x Intel latest generation Xeon® Gold		
5	Ice Lake Processors with minimum 2.0 Ghz& 32Core per		
	socket and 48 MB Cache., 768GB DDR4 2933MHz mem,		
	4x1.2TB 12G SAS 10K RPM SFF HDDOR Equivalent as per		
	details specification		

Detail Spec for Sr no 3: Blade Server

Sr. No.	Item	Specification	Make / Model Applicable - by the bidder)	Complied (Yes / No)
------------	------	---------------	--	------------------------

1	СРИ	Each blade shall have two numbers of latest Intel Xeon Scalable Processors (Intel® Xeon® processor family or higher) with Min. 32 cores per processor each having Min. 2.0 GHz processor speed with 48 MB Cache	
2	Motherboard	Intel chipset compatible with the offered processors.	
3	Memory	Min. 32 DIMM slots, should be provided with 24 GB RAM per core using DDR4 DIMM's operating at 2933 MT/s (depending on processor model). Server should be configured with 1536 GB RAM from day one.	
4	Memory Protection	Advanced ECC protection, online mirror memory	
5	Hard disk drive with carrier	2 X 960 GB 12G SSD Drives	
6	Storage Controller	SAS Raid Controller with RAID 0/1 with 4GB cache	
7	Networking features	The server should provide a minimum of 100 Gbps of bandwidth with Converged network adapter ports across two or more cards.  Each Blade should have redundant network Connectivity to all the Chassis Interconnect modules.  Server must be populated with all internal mLOM, PCI-e slots with Connectivity cards to offer maximum throughput to the overall Network on Day 1.	
8	Redundancy	The blade server to be provided with card level redundancy	
9	Interfaces	Minimum of 1* internal USB 3.0 port ,1* internal SD card slot	
10	Operating System and Virtualization Support	Microsoft Windows Server, Red Hat Enterprise Linux (RHEL), VMware, SUSE Linux Enterprise Server (SLES)	

Detail Spec for Sr no 4: Blade Chassis

Sr.No.	Item	Specification	Make / Model Applicable - by the bidder)	Complied (Yes / No)
		Blade chassis shall be 19" rack mountable		
1	Enclosure	The enclosure Should support minimum 8 nos. of latest generation INTEL Dual socket		

I	I	gorgorg aggregating a may of 10DII rogl-	l I
		servers occupying a max of 10RU rack	
}		height  The enclosure should be populated fully	
	Power	with power supplies of the highest capacity & should be energy efficient.	
		The power subsystem should support N + N	
		/ N+1 power redundancy (where N is	
		greater than 1) for a fully populated chassis	
	Cooling	Each blade enclosure should have a cooling	
	Cooling	subsystem consisting of redundant hot pluggable fans or blowers	
	Chassis	The chassis should be provided with	
	connectivity	redundant modules for connectivity	
	Connectivity	Chassis should have sufficient number of	
		redundant converged modules to provide a	
		minimum FCoE/ Equivalent uplink	
		bandwidth of 50Gbps per blade server and 25Gbps sustained per blade server ( with 1	
		module failure) for a fully populated chassis for converged Traffic	
		Chassis should support aggregation of	
		multiple enclosures. the interconnects	
2	Converged	(internal or external) should be provided in	
	Module	redundancy along with all	
	Wiodule	modules/switches for chassis	
		interconnectivity should be in redundancy.	
		internal interconnect switches all the	
		switches in the chassis should be fully	
		populated for maximum throughput &	
		redundancy from day 1.	
		All Network and management	
		modules/solution should be populated from	
		day 1 to ensure redundancy	
		Blade chassis management solution may be	
		provided internal / external to the chassis	
		and must provide single console for	
		managing all associated components like	
		Blade Servers, raid settings, NIC/HBA	
		cards, IO Modules, Power supplies, Fans.	
		Licenses to support the features to be	
		supplied for fully populated chassis.	
	Chassis	The management software should be used	
3	Management	to create resource pools and have the	
	software	blade resources assigned to the respective	
		resource pools & re-assign resources to	
		effectively utilize infrastructure	
		Should be able to provide Single Pane of	
		Glass view management for both Rack	
		Servers and Blade Servers together in a	
		given location with customizable dashboard	
		to show overall faults / health / inventory for	
		=	
		all managed infrastructure. With option to	

		create unique dashboards for individual users. The user should have flexibility to select names for dashboards and widgets (ex:- health, utilization etc.). These licenses should be included on day 1.	
		The proposed solution should use AI/ML technology for infrastructure firmware updates & upgrades for the proposed system	
		The management solution should be open & programmable should provide Rest API's, SDK for programming languages ex:- Python, power shell scripting etc.	
		The management tool should be able to provide global resource pooling and policy management to enable policy-based automation	
		Zero-touch auto configuration to auto deploy a baseline server configuration profile Automated hardware configuration and Operating System deployment to multiple servers	
4	Configuration & Management	System should support multiple management interface like Web UI, CLI and XML API. Management solution should be able to manage different form factor hardware and provide single console. * Real-time out-of-band hardware performance monitoring & alerting. * Remote Power On, Off and reset from Web UI, XML API and KVM. * The management tool should be able to provide global resource pooling and policy management to enable policy based automation and capacity planning	
		* Zero-touch repository manager and self- updating firmware system, Automated hardware configuration and Operating System deployment to multiple servers	

|--|

Detail Spec for Sr no 5: Rack Server

SN	Parameters	Specification for Rack Server	Make / Model Applicable – by the bidder)	Complied (Yes / No)
1	Processors	Rack Server shall have a minimum of two (2) Intel latest generation Xeon® Gold Ice Lake Processors with minimum 2.0 Ghz& 32Core per socket and 48 MB Cache.		
2	Chipset	Intel chipset compatible with the offered processors.		
3	Internal Storage	The server should Support upto 8 hot- swappable SAS, NL-SAS and SSD drives.		

1 1		Server should be configured with 4 Nos 1.2TB	l I
		12G SAS 10K RPM	
		The Server RAID controller should support the	
		following configurations RAID 0, 1, 5, 6, 10, 50,	
		and 60	
		Server should be configured minimum with	
		4GB of cache module.	
		Should have at least 32 DIMM slots per server	
		and support minimum up to 2 TB of DDR4 2933	
		MHz memory.	
		The Server should be configured with	
4	Memory	minimum 768 GB of DDR4 Memory from day	
		one	
		Support for advanced memory redundant	
		technologies like Advanced error-correcting	
		code (ECC) and memory mirroring.	
	<b>37</b> ( )	Should have 2 * 10 GbE (embedded) LAN ports	
5	Network	& 2*10G SFP+ GbE network cards for LAN	
	SAN	connectivity	
6	Connectivity	Should support Dual port 16Gbps FC HBA.	
7	PCIe Slots	He to C DCI o Comparation 2 0 plats	
1	PCIE SIOIS	Up to 6 PCIe Generation 3.0 slots	
		Should support out of band upgrades,	
		Agentless out-of-band management, integrated	
		diagnostics and Power monitoring and reporting.	
		The server should support industry standard	
		management protocols like IPMI v2 and SNMP	
		v3	
		One 1-Gbps RJ-45 management port	
		The server should support multiple	
		management interfaces including web user	
		interface and command line interface.	
		Should be provided with anti-counterfeit to	
	<b>G</b> C	lockdown the system in case the hardware is	
8	Configuration &	not genuine	
0	Management	System should support multiple management	
	Management	interface like Web UI, CLI and XML API.	
		Management solution should be able to	
		manage different form factor hardware and	
		provide single console.  * Real-time out-of-band hardware performance	
		monitoring & alerting.	
		* Remote Power On, Off and reset from Web	
		UI, XML API and KVM.	
		* The management tool should be able to	
		provide global resource pooling and policy	
		management to enable policy based	
		automation and capacity planning	
		* Zero-touch repository manager and self-	
		updating firmware system, Automated	

		hardware configuration and Operating System deployment to multiple servers	
		The system should have hardware root of trust	
		The system should provide bios recovery & firmware update should be cryptographically signed	
9	Application Resource Management	The solution should provide a workload automation solution that dynamically defines and controls the environment based on real time analytics to assure application performance at maximum efficiency by ensuring underlying infrastructure is at optimal state.  The solution should be an agentless architecture which should provide full stack visibility & control being Application, network, storage, cloud aware.  * The solution should provide dynamic resource allocation to ensure demand of applications is matched with available resources in real time.  The solution should provide vertical and horizontal scaling of workloads and automate provisioning of infrastructure resources.  *The proposed solution should be application aware (Oracle WebLogic, IBM WebSphere, apache, tomcat etc.), the solution should manages the resources used by application servers, including heap, threads, transactions, and response time in the server process, and VMem and VCPU in the VM that hosts the application server.  The solution should collect information from network switches and load balancers to ensure minimal application latency, it should ensure chatty VMs are often placed together to maximize resource utilization and minimize noisy neighbor effect.	

10	Server Security	Should have a cyber resilient architecture for a hardened server design for protection, detection & recovery from cyber attacks Should protect against firmware which executes before the OS boots - Hardware based Root of Trust - Signed firmware updates - Secure default passwords - Secure alerting - Automatic BIOS recovery - Rapid OS recovery - Chassis Intrusion Detection - System Lockdown - System Drift Detection - Configuration upgrades should be only with cryptographically signed firmware and software"	
11	Ports	Should have the following ports for server connectivity  •1 serial port  • 4 USB 3.0/2.0 ports  • 1 VGA video port	
12	Others	Supports hot swappable redundant fans Supports hot swappable redundant power supplies Rail Kit and cable management arm to be provided along with the server	
13	Form Factor	Maximum 2 RU	

#### **Software Licenses**

Sr. No.		Description	Make / Model Applica ble - by the bidder)	Compli ed (Yes / No)
6	Red Hat Cl PART # MCT297 9	PRODUCT DESCRIPTION  Red Hat OpenStack Platform with Smart Management, Premium (2-sockets)	rs:	
7	PART # RH00059	PRODUCT DESCRIPTION  High Availability for Unlimited Guests		
8	DC	O, Capacity & ITO Software License for DCIM:		

	Platform	Item Description	Uom	Qty
	Schneider/APC	DCIM DCO License	Nos	20
	Schneider/APC	DCIM Capacity License	Nos	20
		DCIM IT Optimize		
	Schneider/APC	License	Nos	20
9	EDB Postgres Enterprise	Unicore license - Productio	n DB Suյ	port
9	Plan for 3 years with 24*7 support			
10	EDB Postgres Enterprise	e Unicore license - Replica	DB Supp	ort
10	Plan for 3	years with 24*7 support		

11 EMS Software per device for 3 years		
--	--	--

#### Detail Spec for EMS for sl no. 11

Centralized Monitoring Software (EMS) Solutions				
		Make / Model	Compl ied	
1	General Requirement	Applicabl e – by the bidder)	(Yes / No)	
1	The proposed EMS systems must have out-of-the-box connectors available for integration with existing CA EMS and helpdesk tools.			
2	The proposed EMS solution should be an integrated, modular, and scalable solution from single OEM family (i.e., all Network Monitoring, server Monitoring including application, database monitoring and Service Management tools should be from single OEM) to provide comprehensive fault management, performance management, Traffic Analysis, IT service desk\help desk\trouble ticketing system & SLA monitoring functionality.			
3	The system should be accessible via a Web based GUI console/portal from intranet as well as from internet.			
4	It should have a secured single sign-on and unified console for all functions of components offered for seamless cross-functional navigation & launch for single pane of glass visibility across multiple areas of monitoring & management.			
5	The proposed EMS solution deployment must support latest version of both Windows and Linux Operating Systems and should be 64-bit application to fully utilize the server resources on which it is installed.			
6	Proposed EMS solution MUST have at least 3 deployments in Indian Government/ Public Sector, monitoring & managing 10,000+ devices (including IT assets - Network devices, etc.; Non-IT Assets - UPS, KVM, PDU, etc.; Surveillance system - Cameras, Sensors, etc. in each of such deployments. Customer names, solution details and OEM undertaking needs to be provided at the time of bidding.			
7	Any additional components (hardware, software, database, licenses, accessories, etc.) if required for implementation and execution of project, for providing the total solution as mentioned in the rfp document should be provided by the bidder.			

	The proposed solution should have the capability to support the	
8	deployment on either on-premises data centre platform or the	
	public/private cloud platform like AWS, Azure etc.	
	The proposed EMS solution should be built on modern container	
	technologies and have an option to deploy on classic mode (non-	
	containerized) as well as containerized (like Docker, Kubernetes)	
9	mode. The solution should either support built-in Kubernetes	
	technology or Bring Your Own Kubernetes (BYOK) platform	
	provided by the bidder.	
	The proposed EMS solution should be an integrated, modular, and	
	scalable solution, accessible from a single pane of glass for KPI	
	insights across the entire IT environment. This dashboard will	
	provide service status, performance view, response-time data etc	
1	based on role-based access. Since the operations manager solution	
0	provides a single framework for streaming metrics across Systems,	
	applications, networks, topology & event data, the operations	
	manager must be FIPS 140-2 compliant, which ensures that	
	cryptographic-based security Systems are to be used to provide	
	protection for sensitive or valuable data.	
	To ensure the mature security standard of proposed EMS solution,	
1	SI must ensure that the proposed EMS solution OEM is ISO 27034	
1	certified from one of the following certification agencies like;	
*	Schellman/ KPMG/ PwC/ Ernst & Young/ Deloitte. Documentary	
	proof must be provided at the time of submission.	
2	Server, Database & Application Fault, Performance Monitoring	
	Management	
	The proposed Enterprise Management tools must be able to	
_	monitor end to end performance of Server Operating Systems &	
1	Databases and Should be able to manage distributed,	
	heterogeneous Systems – Windows, UNIX & LINUX from a single	
	management station.	
	There should be a single agent on the managed node that provides	
	the system performance data, and for event management it should	
2	be able to prioritize events, do correlation & duplicate suppression	
	ability to buffer alarms and provide automatic actions with	
	capability to add necessary annotations	
3	The system must support multiple built in discovery mechanisms for e.g., Active Directory, Windows Browser, DNS with capability to	
٥		
	discover and services discovery  Each operator should be provided with user roles that should	
1		
4	include operational service views enabling operators to quickly	
4	include operational service views enabling operators to quickly determine impact and root cause associated with events.	
	include operational service views enabling operators to quickly determine impact and root cause associated with events.  The system should integrate with Helpdesk / Service desk tool for	
5	include operational service views enabling operators to quickly determine impact and root cause associated with events.	
	include operational service views enabling operators to quickly determine impact and root cause associated with events.  The system should integrate with Helpdesk / Service desk tool for automated incident logging and notify alerts or events via e-mail or	
	include operational service views enabling operators to quickly determine impact and root cause associated with events.  The system should integrate with Helpdesk / Service desk tool for automated incident logging and notify alerts or events via e-mail or SMS.	
5	include operational service views enabling operators to quickly determine impact and root cause associated with events.  The system should integrate with Helpdesk / Service desk tool for automated incident logging and notify alerts or events via e-mail or SMS.  Solution should provide alarm correlation and facilitate reduction	
	include operational service views enabling operators to quickly determine impact and root cause associated with events.  The system should integrate with Helpdesk / Service desk tool for automated incident logging and notify alerts or events via e-mail or SMS.  Solution should provide alarm correlation and facilitate reduction of total number of alarms displayed by means of intelligent alarm correlation, suppression and root cause analysis techniques built into the system. The system must ensure reduction in MTTR by	
5	include operational service views enabling operators to quickly determine impact and root cause associated with events.  The system should integrate with Helpdesk / Service desk tool for automated incident logging and notify alerts or events via e-mail or SMS.  Solution should provide alarm correlation and facilitate reduction of total number of alarms displayed by means of intelligent alarm correlation, suppression and root cause analysis techniques built	

7	The proposed Alarm Correlation and Root Cause Analysis system shall integrate network, server and database performance information and alarms in a single console and provide a unified reporting interface for network components. The current performance state of the entire network & system infrastructure shall be visible in an integrated console.  It should have capability to perform cross domain correlation with		
8	alarm correlation from Network Monitoring tool, Systems monitoring tool and other domain monitoring tools.		
9	The proposed solution should provide out of the box root cause analysis with multiple root cause algorithms inbuilt for root cause analysis.		
1	Alarms should be mapped to the live topology views and real time		
0	updates to topology based on alarm occurrences.		
	Network Management System (NMS)		
		Make /	Compl
1)	Network Fault Monitoring & Performance Management with Reporting	Model Applicabl e – by the	ied (Yes/ No)
		bidder)	
1	The Network Management function must monitor performance across heterogeneous networks from one end of the enterprise to the other.		
2	The solution should allow for discovery to be run on a continuous basis which tracks dynamic changes near real-time; to keep the topology always up to date. This discovery should run at a low		
3	overhead, incrementally discovering devices and interfaces.  NMS should provide integrated fault, performance Monitoring,		
	Configuration & compliance Management together in one tool.		
4	NMS should support Industry-leading support for physical, virtual, and SDN-enabled devices like Cisco ACI, VMWare NSX, Viptela, Big Switch Networks, etc.		
5	NMS should provide network Trap Analytics out of the box.		
6	NMS should support out of the box monitoring of at least 5000+ devices from at least 150+ vendors.		
7	Diagnostic Analytics providing change-Correlated Performance Views and should show the difference either in either a side-by- side, or line-by-line presentation		
8	NMS should have built-in audit and compliance policies for industry best practices/ Gov. regulations like PCI, HIPAA, NERC others		
9	NMS should support 3-Dimensional Compliance Model - Configuration, Software, Running State		
1 0	The tool should automatically discover different type of heterogeneous devices (all SNMP supported devices i.e., Router, Switches, LAN Extender, Servers, Terminal Servers, Thin-Client and UPS etc.) and map the connectivity between them with granular visibility up to individual ports level. The tool shall be able to assign different icons/ symbols to different type of discovered elements. It should show live interface connections between discovered network devices		

	It should support various discovery protocols to perform automatic	
1	discovery of all L2, L3 Network devices across SWAN and any	
1	further Network connectivity's planned in future.	
	The tool shall be able to discover IPv4 only, IPv6 only as well as	
1	devices in dual stack. In case of dual stack devices, the system	
2	shall be able to discover and show both IPv4 and IPv6 IP	
	addresses.	
	The tool shall be able to work on SNMP V-1, V-2c & V-3 based on	
1	the SNMP version supported by the device. It shall provide an	
3	option to discover and manage the devices/elements based on	
	SNMP as well as ICMP.	
	The proposed Network Fault Management solution must support	
1	extensive discovery mechanisms and must easily discover new	
4	devices using mechanisms such as SNMP Trap based discovery. It	
4	must also allow for inclusion and exclusion list of IP address or	
	devices from such discovery mechanisms	
	The proposed solution must provide a detailed asset report,	
1	organized by vendor name, device type, listing all ports for all	
5	devices. The Solution must provide reports to identify	
	unused/dormant Network ports in order to facilitate capacity	
<b>O</b> \	planning	
2)	Network Configuration Automation	
١,	The system should be able to clearly identify configuration	
1	changes / policy violations / inventory changes across multi-	
	vendor network tool.	
	The system should support secure device configuration capture	
2	and upload and thereby detect inconsistent "running" and "start-	
	up" configurations and alert the administrators.	
	The proposed system should be able to administer configuration changes to network elements by providing toolkits to automate the	
	following administrative tasks of effecting configuration changes to	
3	network elements: a) Capture running configuration; b) Capture	
	start-up configuration; c) Upload configuration; d) Write start-up	
	configuration; e) Upload firmware	
	The proposed fault management solution must be able to perform	
4	"load & merge" configuration changes to multiple network	
_	devices.	
	The proposed fault management solution must be able to perform	
5	real-time or scheduled capture of device configurations.	
3)	Network Traffic Flow Analysis System	
	It shall be able to capture, track & analyse traffic flowing over the	
1	network via different industry standard traffic capturing	
	methodologies viz. NetFlow, jflow, sFlow, IPFIX etc.	
	It shall provide key performance monitoring capabilities by giving	
2	detailed insight into the application traffic flowing over the	
	network.	
	It shall be able to monitor network traffic utilization, packet size	
3	distribution, protocol distribution, application distribution, top	
	talkers etc. for network traffic.	
4	It shall collect the real-time network flow data from devices across	
	the network and provide reports on traffic based on standard	

	TCP/IP packet metrics such as Flow Rate, Utilization, Byte Count,		!
4)	Flow Count, TOS fields etc.		
4)	Reporting Reporting solution should be able to report on Service Level status		
1	of configured business service.		
	It should be able to collect and collate information regarding		
2	relationship between IT elements and business service, clearly		
"	showing how infrastructure impacts business service levels.		
_	The solution must be built on big data platform and should be user		
3	configurable for building additional reports.		
	Solution should be able to collect Key performance measurements		
4	and statistics from all network domains and store it. This data is to		
4	be used for evaluation of performance of the end-to-end network		
	infrastructure/services.		
	The performance management system shall be able to collect and		
	report data like:		
5	a. Packet delay and packet loss; b. User bandwidth usage rate; d.		
	Network availability rate; e. CPU usage rate; f. Input/output traffic		
	through physical ports; g. Input/output traffic through logical ports	-	
	The Performance Management shall have user defined set of		
	reports like:		
	a. Summary Reports for specific groups: Reports displaying per		
	group of resources the group aggregations for a set of metrics (for example, per City, the maximum traffic or the total traffic).		
	b. Summary Reports for specific Resources: Reports displaying		
6	for a set of resources the period aggregations for the same set of		
	metrics (for example, per interface, the maximum traffic over the		
	day).		
	c. Detailed chart Reports: Reports displaying for one resource		
	and the same set of metrics the values over the period (for		
	example, the raw collected values for the day).		
	Helpdesk and IT Service Management		
1)	General Requirement of IT Service/ Helpdesk		
	Should be able to support and handle large volume of incident,		
1	service requests, changes, etc. and be able to integrate with third		
	party IVR or CTI.		
	The solution should have IT Service Management documentation/		
2	guidelines in-built based on ITIL best practices and must be ITIL		
-	2011 certified on at least 7 processes by Pink Elephant. The		
	certification copies to be submitted.		
3	The solution should have a single CMDB across ITSM and Asset		
<u> </u>	Management system.	<del>                                     </del>	
	IT Service Management OEM must be an industry standard,		
4	enterprise grade solution and shall be in the present in Leaders		
	Quadrant of Forrester / Gartner / IDC report for ITSM for the last		
	two years.  The solution should have a Single Architecture and leverage a	+	
5	single application instance across ITIL processes, including unique data and workflows segregated by business unit, cost centre, and		
3	user role for Incident, Problem, Change, Release, Knowledge		
	Management, Asset Management and CMDB.		
L		1	

1	Solution should support multi-tenancy with complete data isolation		ı
6	as well as with ability for analysts based on access rights to view		
0	· · · · · · · · · · · · · · · · · · ·		
	data for one, two or more organizational units.  Solution should support multi-tenancy with complete data isolation		
7	as well as with ability for analysts based on access rights to view		
	data for one, two or more organizational units.		
	The solution should provide to browse through CMDB which		
	should offer powerful search capabilities for configuration items		
8	and services, enabling to quickly find CIs as well as their		
	relationships to other CIs.		
	Provide option for approval engine so that any customized		
	applications developed could incorporate the hierarchy, role		
9	based, level-based ad-hoc approval structure. Include notification		
	and escalation capability if approval is not performed.		
1	The support person can interact with the end users through chat in		
0	built and add those chat transcripts in the ticket.		
1	A virtual bot should be available, which can respond to user		
1	requests, immediate via portal, email or mobile interfaces.		
1	Beyond mobile iOS and Android apps, Self Service App should be		
2	available on any device with an HTML5 browser.		
1	Should provide out-of-the-box categorization, as well as routing		
3	and escalation workflows that can be triggered based on criteria		
	such as SLA, impact, urgency, CI, location, or customer.		
1	Should provide modern data analysis methods for insight and value		
4	to service desk by leveraging unstructured as well as structured		
	data.		
	Tool Analytics should be completely configurable in terms of		
	source data and results, enabling Process Managers and other IT		
	Users to proactively identify trends that can be used to drive		
1	action. Multiple instances shall be allowed to be configured in different ways in different modules for different outcomes - for		
5	example one should be able to identify trends in one set of data		
	and subsequently develop linkages with other data, or Analytics		
	can run on top of reporting results to provide further insights from		
	unstructured data.		
	The tool should allow the user to take a screenshot of the error		
_	message and sends it to the service desk. The user can type in a		
1	couple of text lines to describe the error in simple language. The		
6	service desk agent then can pick up the ticket with the information		
	already filled in (category, impact, and assignment).		
	The tool should have the knowledge management OOB –		
1	knowledge databases to support investigations, diagnoses, root		
7	cause analysis techniques, and creating / updating workarounds,		
	temporary fixes and resolutions.		
	Self Service App should provide a snapshot of your day, displaying		
1	your activities feed with upcoming appointments, pending		
8	requests, unresolved issues, and alerts from systems you use in		
	your daily work.		
1	Integrates with any underlying service management including		
9	Service Desk, Change Management, Service Level Management		
	and CMDB for request fulfilment.		

		1 1	
2	The solution should have the ability to operate all functionality		
0	available in the incident, problem, change, assets etc. via a mobile		
	app on iPhone or Android phone.		
2)	Service Level Management		
	SI's must proposed a full fledges Service Level Management		
1	Solution that allows for tracking of various service level		
	performances of IT Infrastructure and vendor performance.		
	Solution should support comprehensive SLA management platform		
2	and must allow creating and applying various operational level		
_	parameters to Incidents, Requests, Changes, and Release		
	management modules.		
	The tool should provide an audit trail, tracking & monitoring for		
	record information and updates from opening through fulfilment to		
3	closure for example: IDs of individuals or groups opening,		
	updating & closing records; dates / times of status & activities		
	updates, etc.		
	The solution should support SLA violations alerts during the		
4	tracking period and should support managing and maintaining a full history of an SLA.		
	The solution must provide a flexible framework for collecting and		
	managing service level templates including Service Definition,		
5	Service Level Metrics, Penalties, and other performance indicators		
	measured across infrastructure and vendors.		
3)	Auto-Discovery and Inventory		
3)	Discovery should work without requiring agent installation (that is,		
1	agent-less discovery) while discovery Layers 2 through Layers 7 of		
_	OSI model.		
	Should use Industry-standard protocols such as WMI, SNMP, JMX,		
2	SSH to perform discovery without requiring the installation of an		
_	agent.		
	Discovery system should have the ability to capture configuration		
3	files for the purposes of comparison and change tracking.		
	Discovery system should be capable of supporting role-based		
4	access to various aspects of CMDB administration.		
	Discovery should be object-oriented, allowing specific CIs and		
5	relationships to be discovered using a library of discovery		
	patterns.		
	Discovery engine should gather detailed asset and configuration		
6	item (CI) information for specific servers and the applications		
	running on them.		
-	Solution should dynamically discover and continuously map IT		
7	hardware inventory and service dependencies.		
	Discovery system should have ability to modify out-of-box		
8	discovery scripts, create customized discovery scripts.		

		Make /	Compli
	Description	Model Applicab	ed (Yes/
		le – by	No)

				the bidder)	
				,	
	PART #	PRODUCT DESCRIPTION	1		
12	RH00002	Red Hat Enterprise Linux for Virtual Datacenters, Standard			
	Red hat Op	enshift Container Platform (Bare Meta	•		
	with run ti	me, Premium, 1-2 Nodes upto 64 Core	es for 3		
13	PART #	years : PRODUCT DESCRIPTION			
		Red Hat OpenShift Container Platfor Metal Node), Premium (1-2 sockets			
	MW01501	cores)	- F 10 01		

14	Version Control Software with Functional test automation - 10 Concurrent User, Load runner professional foundation - qty 1 (500 virtual users) and Application Life Cycle Manager - 10 concurrent user license with support for 2 years		
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#### Detail Spec for Sr no 14: Version Control Software & ADM

S1. No.	Technical Specifications of Version Control Software Solutions (Software Change and Configuration Management):	Make / Model Applica ble - by the bidder)	Compli ed (Yes / No)
1	SCCM should preserves the integrity of known baseline configurations.		
2	SCCM solution should simplify rollback and recovery, streamlines approval, and maintains integrity when automating builds and deployments.		
3	SCCM solution should Hardened Enterprise Repository features integration with developer friendly repositories and IDEs(suchasGit,Intelli],EclipseandMicrosoft.net),detailed auditing and logging, and immutable versioning and history.		
4	SCCM solution should provide optimized developer experience allows for collaborative parallel development to minimize rework, visualize and reduce conflict, and lower risk while improving team velocity and throughput.		
5	SCCM solution should support Shift-left.		
6	SCCM solution should support security, audit and compliance.		
7	SCCM solution should support peer code review.		

8	SCCM solution should support No Touch Compliance to minimizes the preparation and effort required for audits and regulatory compliance with comprehensive and tamper proof history and audit trails.	
9	SCCM solution should have enterprise scalability.	
10	SCCM solution should have integrated access controls, detailed auditing and logging, integrated collaborative peer review, and immutable versioning and history.	
11	SCCM solution should have Integrated Software Change and Configuration Management.	
12	The Proposed SCCM Software, Application Testing Software and Enterprise Management Software should be from single OEM for seamless integration, betterperformance and single pane of glass availability and accessibility.	

**Application Delivery Management:** 

Make / Model Applica ble - by the bidder)	Compli ed (Yes / No)
	Applica ble – by the

Should provide Dashboards to see overall project status and should		
provide realtime reports for various testing activities within the projects		
Should allow for test execution to be linked with the corresponding release of the application for tracking of requirements coverage and defect trends for different releases of the application and different cycles of testing.		
Should provide an integrated defect management system to automatically link defects with test runs and associated release and cycle.		
Should align testing process by gathering all available documentation on the application under test, such as marketing and business requirements documents, system requirements specifications, and design documents.		
Should allow requirements definitions to include traceability between the requirements. When analyzing the impact of a change proposed in a specific requirement, traceability should show the other requirements that the change might affect.		
Should allow versioning of key assets like requirements, tests and defects to maintain data integrity and prevent accidental loss of data.		
Support baselines to allows capture of requirements and tests at key points, compare baselines to assess changes and reflect signoffs and contracts as baselines.		
Should allow sharing of tests, requirements and defects across projects to promote reuse		
Should support process enablement by configuring and maintaining templates centrally with workflows and user defined fields, propagate template changes across multiple projects, therefore enforcing consistent workflows and customizations across projects.		
Should enable out of the box integration with different category of testing tools like Functional testing, Performance testing, Web application security and Web Services testing tools.		
Should have out of the box plugins for Microsoft Excel/Microsoft Word for importing and exporting of test cases/requirements		
Should have out of the box plugin for Microsoft Excel for reporting purpose so that data can be automatically and directly extracted within excel by connecting to the ALM tool via the API interface		
Should be an industry standard solution listed in Gartner/Forester.		
Deufermen and Mantin and		
Performance Testing:  Proposed solution should support tesing a wide range of application technologies and should be able to simulate lacks of users and provide the results and analysis		
Proposed solution should be a industry standard/leading tool and should be listed in either World quality report or Gigaom Radar		
Performance testing solution should be capable to test GUI/Web/API and mobile applications.		
Should allow selection of different network bandwidth, emulating analog modems, ISDN, DSL, or custom bandwidth.		
Performance testing tool should also provide a report to finetune the applications on mobile networks to ensure mobile user do not impact wother connected users on servers.		
	-	

Performance testing solution should have integrations with AWS/AZZURE/Google cloud to test application on geo locations and run heavy user loads as well	
Performance testing solution should have capability to test IoT	
Should have out of the box (OOTB) integration to APM Tools(like Dynatrace, AppDynamics,New Relic)	
Performance testing tool should support execution of scripts created in jmeter/selenium/silk test would be an added advantage	
Should support IP Spoofing of Virtual Users to test load balancing algorithms	
Should provide flexibility to allow user to perform custom correlation between test result metrics	
Should be able to access results of multiple test runs the same time, to display correlation between different test runs	
Should provide Virtual User Rendezvous capability to emulate true concurrent transactions.	
should have option to capture client download time as well to validate real user experience	
All solutions should be in leaders in any one leading reports Gartner/Forrester/GigaOm/World Quality report.	
General Requirements:	
All solutions should provide integration with other required solutions.	
All solutions should be COTS products and should be from single OEM.	
The proposed Application testing Software solutions should be either prepetual/SaaS based software model in nature.	

#### Softwares:

15	MS SQL Standard Latest version	
16	My SQL enterprise latest version (3 years)	
17	Lotus Domino/ MS Exchange/ Equivalent Email software with	
11	250 user mail box with all security features	

#### DDOS:

18	DDOS First 2 Years - BOQ - DDoS Protector appliance with SME  Dual Power Supply DC	
19	10Gbps Pluggable Optics (XFP) Multimode SR	
20	Deployment of DDoS Protector in basic configuration at the customer site, including configuration, testing and tuning	
21	DDoS Management VA2 Virtual Appliance for management of 2 DDoS Protector physical devices for 2Y	

## Details Specification for DDOS (Sr no 18-21)

Sl.no	Specifications	Make /	Complied
31.110	specifications	Model	(Yes / No)

		Applicable - by the bidder)	
	DDoS Solution	Didde:	
	OEM Eligibility Criteria		
	OEM should be present in the "LEADER" quadrant in the		
1	Latest published Forrester wave Report OR IDC Report for		
	DDoS.		
2	DDoS OEM should have TAC based in INDIA.		
3	OEM should have DDoS Cloud Scrubbing Centre in INDIA.		
4	OEM must have atleast 5 DDoS References in Government /		
	PSU /BFSI in last 3 Years		
	Technical Specifications		
	DDoS mitigation solution should be a Dedicated appliance		
	(NOT a part of Router, UTM, Application Delivery		
1	Controller, Proxy based architecture or any StateFul Device)		
	with 20Gbps attack mitigation and 8Gbps legitimate throughput.		ļ
	Support DDoS Flood Attack Prevention Rate: upto20MPPS (In		
	addition to Legitimate throughput)		ļ
	Attack Concurrent sessions: Unlimited		ļ
	Inspection Ports supported: 8 X 1G RJ45 and 8x 10G SFP+		
2	(Without any break-out cable)		
	Latency should be less than 60 microseconds.		
	The appliance should have dual power supply and dedicated		
	2 x PORTS10/100/1000 Copper Ethernet Out-of-band		
	Management Port.		
	Behavioral DoS Protection		
	Behavioral DoS (Behavioral Denial of Service) Protection should defend against zero-day network-flood attacks, detect		
	traffic anomalies and prevent zero-day, unknown, flood		
	attacks by identifying the footprint of the anomalous traffic.		
	Solution must have auto-learning and behavioral-analysis		
	algorithms to establish legitimate-traffic baselines and		
3	automatically detect and block non-conforming traffic.		
	Network-flood protection should include:		
	• TCP floods—which include SYN Flood, TCP Fin + ACK		
	Flood, TCP Reset Flood, TCP SYN + ACK Flood, and TCP Fragmentation Flood		
	• UDP flood		
	• ICMP flood		
	• IGMP flood		
	Security Protections:		
	BEHAVIORAL ANALYSIS using behavioral algorithms and		
	automation to defend against IoT botnet threats, including		
4	Mirai DNS Water Torture, Burst and Randomized attacks.		
_ <del>-</del>	The solution should utilize behavioral algorithms and		
	stateless solution to detect and defend against IoT Botnet		ļ
	threats at L3-7.		

5	ZERO DAY ATTACK PROTECTION should be provided using behavior based technology. The device should generate Automatic Real Time Signature within 30 seconds, without any manual intervention for protection against Zero Day DDoS Attacks.  CUSTOM TAILORED HARDWARE must be proposed using dedicated DoS Mitigation platform which off-loads high volume attacks, inspecting without impacting user		
	experience.		
	Deployment Modes:		
7	1) Inline		
	2) SPAN / Copy port monitoring		
8	Tunneling Protocols:		
	VLAN Tagging, L2TP, MPLS, GRE, GTP, IPinIP		
	• Server-based vulnerabilities:		
	— Web vulnerabilities		
	— Mail server vulnerabilities		
	FTP server vulnerabilities     SOL server vulnerabilities		
	— DNS server vulnerabilities  — DNS server vulnerabilities		
	— SIP server vulnerabilities		
9	Worms and viruses		
	Trojans and backdoors		
	Client-side vulnerabilities		
	• IRC bots		
	• Spyware		
	• Phishing		
	Anonymizers		
	The appliance should have below Security Protection		
	Profiles:		
	1. BDOS Protection.		
10	2. DNS Protections		
	3. SYN-Flood Protection.		
	4. Traffic Filters.		
	5. Anti-Scanning Profile.  The proposed Device should use the following Block		
	Actions:		
	netions :		
	1) Drop packet,		
11	2) Reset (source, destination, both),		
	3) Suspend (source IP address, source port, destination IP		
	address, destination port or any combination),		
	4) Challenge-Response for TCP, HTTP and DNS suspicious		
	traffic		
	For future Scalability, The proposed solution should support		
	Integration with OEM Cloud based Scrubbing Centers, in		
	case of Bandwidth Saturation attacks, using the same		
12	technology. All the baseline information including attack		
	footprint should be in sync between physical appliance and scrubbing centre.		
	OEM Should have its own Cloud DDoS Scrubbing Centre in		
	INDIA.		
	ı	1	

13	For future Scalability, The proposed solution should support REAL-TIME attacker intelligence feeds, pertaining to a active attack sources recently involved in DDoS attacks. The feed should support real-time and ongoing validated and actionable threat intelligence from multiple sources for preemptive protection.	
14	For future Scalability, DDoS OEM should support 24x7 (SLA defined), REAL TIME Emergency Response Services for the network facing denial-of-service (DoS) attack in order to restore network and service operational status.	
15	Bidder should propose Separate Centralized Management & Reporting Solution from Day 1 integated with NGFW logging and management solution.	
16	Bidder to propose 24x7 Support for 2 Years.	

#### SOAR:

Base Package Premium. Includes: 2 years License for Platform, 3 analyst seats, 5 Advanced Reporting Users, 24x7 Premium support including implementation & training	22
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## Detail specification of $\,$ sl no. 22 - $\,$ SOAR

Sl.no	Specifications	Make / Model Applicable – by the bidder)	Complied (Yes / No)
	SOAR Solution		
	Functional Specifications		
1	The Solution should be able to achieve security orchestration, automation and response (SOAR) through and unified platform integrated with the security contols and SOC in SDC. The solution should be vendor-agnostic security operations platform.		
2	The solution should automate contextual grouping of alerts to clean up your queue and streamline cross-product triage		
3	The proposed solution should run use cases that automate away false positives and consistently reduce response times		
4	The solution should be able to collaborate on cases with internal and external teams directly from the platform  Technical Specifications		

5	The Security Operations Platform should be able to continuously analyzes each alert as it comes into the system, looking for contextual relationships. If a relationship is identified, the alert should get automatically grouped with the related alerts into a case. Then, the platform should be able to initiate the relevant playbook to automatically block an attack on the firewall and/or disable a compromised user in the enterprise.	
6	Use case scenario running inside the Security Operations Platform should be able to integrate with NGFW and should have the capability to run at set intervals for firewall policy management. Operators should be able to automate auditing and remediation, such as activating a firewall rule, and workflows can tie into ticketing systems to notify administrators and track efforts.	
7	The user must be able to create "use cases" (scenarios) from a graphical user interface without using programming languages.	
8	The platform Should allow creation of use cases in visual use case editor	
9	The platform must be able to enroll the following products (without being limited to): o Endpoint Protection Antivirus o NGFW o SIEM	
10	The platform must allow writing of own integrations by the end user for products not supported out of the box	
11	The solution must offer out of the box use cases.	
12	The SOAR platform should be able to handle objects like (without being limited to): hash signatures, URLs / domains, IP addresses, file names, email addresses, user names, hostnames. This objectshould be later subjected to enrichment and processing.	
13	The solution must be able to include in use cases the following: automated tasks, manual tasks, filters, sub-use cases, data enrichment tasks, conditional tasks	
14	The platform must permit interaction between different actors on the same use case	
15	It must offer the possibility to specify different SLAs for different tasks in a use case and must permit task delegation	
16	The platform must be able to detect redundant alerts and must use aggregation of duplicates under one single ticket	
17	Every incident handled by the platform must be properly documented in all aspects: changes to the use case, interactive commands, evidences, tasks, timestamp, all user activity etc	
18	Proposed SOAR product should have tight and Two-way integration with SIEM platform. Proposed Solution be able to read, analyse, de-duplicate and create incidents based on IOC, IOR attached in the mail in the form of pdf, text,RSS,Xpath, xml, json, MS-office document, security	

	bulletins/blogs, or attached mail or text as a part of mail body etc. convert into actionable and perform the same on its own.	
19	SOAR solution should have a inbuilt Threat Intel Platform and Threat Indicator repository which can be used for active threat hunting using automated playbooks. Threat indicator repository should be able to integrate with third party intelligence sources. SOAR solution must allow to add IOC sources in platform such as TOR Project official exit nodes, Ransomware Tracker, Cyber Crime tracker etc. based on IP Address, URLs, Domain, Files hashes (MD5)	
20	SOAR solution should collect real time global threat intel data, de-dupe, aggregate, normalize, enrich and process threat intelligence in a holistic and actionable manner and the solution must provide out of the box open source threat intel feeds. SOAR solution should be able to gather, collect and deduplicate mulitple intelligence feeds using industry standards such as CyBOX, OpenIOC, Yara, STIX/TAXII and keeping it non-proprietary.	
21	SOAR solution must provide MITRE ATT&CK mapping out of the box. The threat intel must map with MITRE TTP's to create a prioritized threat detection dashboard.	

#### **Deep Security Software**

SL. No	Description	Make / Model Applicable – by the bidder)	Complied (Yes / No)
23	Trend Micro Deep Security - Enterprise - per Server (VM)		
24	DDAN-Deep Discovery Analyzer		

# VTL Upgrade:

25	VTL SYSTEM,DD4200,CTL,NFS,CIFS - CAPACITY UPGRADE to 75TB	
26	Integration of VTL with Commvault Tape Library	

## Detail Specification of S1. No. 25 VTL Upgrade

SL.No	Description	Make / Model Applicable – by the bidder)	Complied (Yes / No)
1	SYSTEM,DD4200,CTL,NFS,CIFS		
2	SYSTEM,DD4200+1ES30,3TB SAS HDD,NFS,CIFS		
3	LICENSE,BOOST,DD4200		

4	LICENSE BASE DD OE DD4200=IA	
5	LICENSE DD OE PER TB MID CAPACITY ACT=CB	
6	LICENSE,REPLICATOR,DD4200	
7	LICENSE,VTL,OPEN SYSTEMS,DD4200	
8	OPTION,ES30 SHELF,15X2TB SAS HDD	
9	OPTION,ES30 SHELF,15X3TB SAS HDD	

#### **New UPS for DC Active Tiles**

SL.No	Description	Make / Model Applicable – by the bidder)	Complied (Yes / No)
27	UPS 80 KVA with 30 mins battery backup for uninterrupted power supply to active tiles with necessary electrical cabling		

#### Detail Spec for Sr no 27: UPS

#### TECHNICAL SPECIFICATIONS FOR 80 KVA UPS SYSTEMS

PARAMETER	REQUIRED SPECIFICATIONS	Make / Model Applicable – by the bidder)	Complied (Yes / No)
PARAMETER	REQUIRED SPECIFICATIONS		
Rating	80 KVA (80 KVA / 64 KW)		
Technology	Online, double-conversion topology with IGBT based Technology with DSP (Digital Signal Processing) controls and static bypass switch		
Scalability & Redundancy	There should be provision to add 2 nos. or more UPS in N+1 parallel redundant (load sharing) mode. The parallel system shall have intelligence to automatically recognize the need for capacity and/or redundancy.		
Input Parameters			
Nominal input voltage(VAC)	380/400/415 VAC three-phase		
Input voltage range	-20%, +20% from nominal at 100% load		
Input Operating frequency	50 Hz		
Input frequency range	45 to 55 Hz		

	Isolation Transformer of <b>Suitable</b> Rating with each	
Isolation Transformer	UPS module for providing galvanic isolation between	
Output	input & output.	
Parameters		
Nominal output		
voltage	380/400/415 VAC three- phase	
Output voltage		
regulation	±1 % static	
	±5% dynamic at 100% load change with <20 ms	
	response time	
Outrout Evansuarian	50/60 Hz; ±1 or ±2 Hz selectable, synchronization to	
Output Frequency	mains, ± 0.05 Hz free-running (single module)	
Overload capacity	125% for 10 minutes, 150% for 60 seconds	
Voltage distortion	<2% THD on linear load; <5% THD on nonlinear load	
Overall Efficiency	>92% in Double Conversion mode	 
(AC-AC)	732 70 III Double Conversion mode	
User interface		
	The UPS control panel shall be a digital front panel	
	display that features a backlit LCD display. The LCD	
LCD display	shall display UPS status, metering, battery status,	
	alarm/event queue, active alarms and other	
	necessary parameters.	
LED indicators	UPS on, On battery, On bypass, Alarm	
	The UPS shall be equipped with an interface panel	
Interface panel	which provides the following signals and	
	communication features	
Alarm contact	A dry contact for annunciating a summary alarm shall	
Tharm contact	be provided for customer use.	
	A 9-pin sub-D or USB connector shall provide	
Serial (RS-232)	capability for communicating with manufacturer's	
Communication	servicing software package. The UPS shall also	
Interface:	provide plug-in communication options to provide	
	signals for remote indication of UPS alarm status.	
	The UPS shall be equipped with WEB/SNMP	
Communications	communication support as optional. The UPS shall	
	have Power Management feature to provide UPS	
	monitoring, notification, management, and emergency computer shutdown capabilities	
Pattore	emergency computer shutdown capabilities	
Battery	VRIA Souled Maintenance Erec load acid	
Type	VRLA Sealed Maintenance Free, lead-acid batteries	
	The system must be capable of providing	
	30 minutes of battery back-up time with	
	each UPS module,	
	72,000 VAH for 30 minutes' back-up with	
Backup time	each UPS	
- acrep tonic	(Total number of batteries, Voltage of each battery,	
	Ampere-Hour rating and Total Volt-Ampere-Hour	
	rating of the Battery Bank Offered should be clearly	
	mentioned.)	
Environmental		
		L

Operating			
temperature	0°C to +40°C		
Storage			
temperature	-25°C to +50°C		
Altitude	< 1000 m		
Audible noise at 1	CE AD		
metre	65 dB		
Humidity	15-95 % RH Non-condensing		
COMPLIANCE			
WITH			
STANDARDS			
Quality	ISO 9001, ISO 14001, ISO 45001, ISO 50001		
Safety	IEC 62040-1		
EMC	IEC 62040-2		
E-Waste	EPR authorization from CPCB, Govt of India		
OEM CRITERIA:	1.UPS OEM should have registered office in Kolkata,		
	WB for at least 05 years and should also have		
	minimum 10 years of experience in Supply,		
	installation & commissioning of On-Line UPS with		
	Govt. / PSU undertakings in West Bengal.		
	2.UPS OEM should have previous experience of		
	having successfully supplied, installed &		
	commissioned at least 02 units of 80 KVA or		
	higher capacity UPS System in any Govt. or PSU		
	Data Centre/Server Room/Computer Centre Site in		
	WB/Eastern India. Documentary evidence such as		
	details of Contract, Client Details to be furnished		
	,		
	3.UPS OEM should have proper after sales service		
	facilities in Kolkata, WB and should not have been		
	blacklisted or debarred from business, at any point		
	of time by any Govt./PSU undertaking. Service set-		
	up Details with details on manpower and		
	infrastructure available to be provided. Affidavit with		
	Undertaking on non-blacklisting to be provided		
	4 777		
	4. The bidder should submit documentary evidence		
	in support of 100% compliance to the tender		
	specifications. The bidder should submit the Datasheet and user/operation manual of the UPS		
	system offered.		
	5. The bidder should submit documentary evidence		
	in support of 100% compliance to the tender		
	specifications. The bidder should submit the		
	Datasheet and user/operation manual of the UPS		
	system offered.		
		1	1

LTO 7 Tape Library for Data Backup

SL.No	Description	Make / Model Applicable – by the bidder)	Complied (Yes / No)
28	LTO 7 Tapes for Data Backup		

#### **Rack Containment Zone**

Sl. No.	Description	Make / Model Applicable – by the bidder)	Complied (Yes / No)
	Net Work and Server Racks		
29	Rack Containment Zone Net Work and Server Racks - Supply, Installation, Testing & Commissioning of 42U Server Cabinet with Extruded Aluminium Profile based frame with top panel; having Static load bearing capacity of 1300 Kg as per Tender specifications. Dimensions: 2100mm x 750mm x 1200mm all complete as required and as per detailed specifications. Racks, PDUs, containment should be from same OEM.		
30	Active tiles for 2nd,3rd & 4th containment		
31	Perforated tiles for 3rd & 4th containment		
32	Supply, Installation, Integration with existing infra, Testing & Commissioning of 42U Server Cabinet Extruded Aluminium Profile frame with top panel; having static load bearing capacity of 1300 Kg as per Tender specifications  Dimensions: 2200mm x 800mm x 1200mm all complete as required and as per detailed specifications. Racks, PDUs, containment should be from same OEM		
33	Supply, Installation, testing and integration with existing infra, Commissioning &Integration of Single Phase 32 A, 7 kW Zero U Vertical Rack IPDU with combination of C 13 and C 19 sockets of total 36 Nos. VDE Certified & ROHS Compliant as per technical specifications		
34	Supply, Installation, Testing and integration with existing infra, Commissioning of Universal Cold Aisle Containment including wall beams, end-of-row frames, dual sliding doors with provision for CCTV Cameras, FAS detectors (Width - 1200mm), necessary passive cabling, all complete as required and as per detailed specifications. (for existing and new containment)		
35	Supply, Installation, Testing and integration with existing infra, Commissioning of CCTV camera near BMS corridor, 4kl UG Fuel tank, First floor entry, Landing room		

## **WBSDC DR Site Implementation**

#### Site Preparation Work at Disaster Recovery Site:

S.No	Description	Make / Model Applicable – by the	Complied (Yes / No)
	Folgo Coiling Work	bidder)	
	False Ceiling Work  Dismantling of existing false celing and		
	existing electrical wiring, DBs, Firefighting		
36	system and Modification of AC duct and		
	opening of Exit Door		
37	Mineral Fiber Ceiling False Ceiling of Mineral fiber board at appropriate height should be installed concealing any cabling tray and electrical lighting wiring in all areas except server/network room. The False Ceiling tile should be Dust free type and of Noncombustible material. 1200 mm cross tee at every 600 mm c/c and 600mm cross tee at every 1200mm c/c max and wall angle all around the wall to form a grid of 600 mm x 600 mm and suspending the grid using 2mm GI rod and 6 mm raw plug at every 1200 mm intervals at the main tee and laying the Ceiling tiles of size 595 mm x 595 mm x 15 mm over the formed grid having fire rating of 60 minutes as per BS 476/23 of 1987, Noise reduction Coefficient (NRC) of 0.50-0.60, to resist temperature and humidity conditions up to 40degree (104deg. F) and humidity of 99% RH should be installed. All overhead cable trays will be secured to a rigid frame that carries the load either to the roof structure or to the floor slab.		

	Bratal Calling Carrows B	
	Metal Ceiling for Server Room	
	False Ceiling of Metal board at appropriate	
	height should be installed concealing any	
	cabling tray and electrical lighting wiring in all	
	areas except server/network room. The False	
	Ceiling tile should be Dust free type and of	
	Noncombustible material. 1200 mm cross tee at	
	every 600 mm c/c and 600mm cross tee at	
	every 1200mm c/c max and wall angle all	
	around the wall to form a grid of 600 mm x 600	
38	mm and suspending the grid using 2mm GI rod	
36	and 6 mm raw plug at every 1200 mm intervals	
	at the main tee and laying the Ceiling tiles of	
	size 595 mm x 595 mm x 15 mm over the formed	
	grid having fire rating of 60 minutes as per BS	
	476/23 of 1987, Noise reduction Coefficient	
	(NRC) of 0.50-0.60, to resist temperature and	
	humidity conditions up to 40degree (104deg. F)	
	and humidity of 99% RH should be installed. All	
	overhead cable trays will be secured to a rigid	
	frame that carries the load either to the roof	
	structure or to the floor slab.	
	Flooring	
	Raised Floor- Supply & Installation of stepped	
	raised floor. The floor panels shall be of size	
	600mm x 600mm fabricated entirely from non-	
	combustible component which shall be 100%	
	interchangeable and shall consist of flat steel top	
	sheet, resistance welded to steel bottom section	
	finished with anti-corrosive and conductive	
	paint. Pedestal assembling: Consisting of	
39	100x100x2 mm thick galvanized MS base plate	
	die-pressed fully welded to 1.6mm thick	
	galvanized MS pipe to engage the Pedestal head	
	assembly. The Pedestal head shall be 90x90mm,	
	4mm thk assembly consisting of an embossed	
	steel plate having 4 holes with 6mm thk taping	
	for fastening of stringer and locating of Tile.	
	Care to be taken to achieve the zero levelling.	
40	Double Cup Tile Puller	
	Ramp:	
	Its sub floor elements must be sufficient to	
	support fully loaded heavy equipment weighing	
41	at least 1600 kilograms.	
**	Ramp will be having lines with non-skid type	
	mats on lining. The angle of inclination for ramp	
	should not be more than 10 degree.	
	Steps:	
	Providing steps at the location shown in layout to	
42	match raised floor level to true floor level. The	
42		
	steps will be having lines with non-skid type mats	
	on liningThe height of single step should not be	

	more than 250 mm and width should not be less than 250 mm.		
	than 250 mm.		
43	Thermal insulation with 19 mm Nitrel rubber		
10	Painting & Putty		
	Providing and Applying approved Emulsion Low		
	VOC paint in three or more coats of approved		
	brand and shade to internal sufaces (walls /		
	partitions/ ceiling or any other location as		
	directed), to give an even shade to the approval		
	of the engineer, including Putty &horoughly		
44	brushing the surface free from foreign matter,		
	sand papering smooth, filling in all holes and		
	cracks, applying lambi / palti and rubbing		
	down the surface, lambi/paltisandwitched with		
	two coats of approved primer, rate to include all		
	tools, labour, scaffolding, primer as required		
	completed as directed by the engineer.		
4.5	Fire Rated Paint with putty work for Server Room		
45	and Electrical Room		
	Fire Rated Partition : Providing and fixing in		
	position full height partition wall of 100 mm thick		
	fire line gyp-board partition using 12.5 mm thick		
	double fire line gypboard on both sides with GI		
	steel metal vertical stud frame of size 50 mm		
	fixed in the floor and ceiling channels of 50 mm		
	wide to provide a strong partition. Glass wool		
40	insulation inside shall be provided as required.		
46	Fixing is by self-tapping screw with vertical		
	studs being at 610 mm intervals. The same		
	should be inclusive of making cut-outs for switch		
	board, sockets, grill etc. It shall also include		
	preparing the surface smoothly and all as per		
	manufacture's specification etc. finally finishing		
	with one coat of approved brand of fire resistant		
	coating. (Server Room and Electrical Room)		
	Non Fire Rated Partition : Providing and fixing	T	
	in position full height partition wall of 100 mm		
	thick gyp-board partition using 12.5 mm thick		
	double fire line gypboard on both sides with GI		
	steel metal vertical stud frame of size 50 mm		
	fixed in the floor and ceiling channels of 50 mm		
47	wide to provide a strong partition. Glass wool		
**	insulation inside shall be provided as required.		
	Fixing is by self-tapping screw with vertical		
	studs being at 610 mm intervals. The same		
	should be inclusive of making cut-outs for switch		
	board, sockets, grill etc. It shall also include		
	preparing the surface smoothly and all as per		
	manufacture's specification etc. finally finishing		

	with one coat of approved brand of fire resistant coating.	
	Doors	
48	Fire rated door 2400 x 1500 double leaf in equal door	
49	Panic bar for fire exit door	
50	Fire rated door 2400 x 1000 single leaf	
51	Main Flash Door at Data Centre Entrance double leaf 1500 x 2400	
52	BMS and Manager Room Flash Door single leaf 1000 x 2400 mm	
53	Liner work station	
54	Hydraulic low back chair	
55	Cleaning&house keeping till hand over the project including debriscleaning and out from site.	
56	Sinages as required considering all rooms, Danger plat, Push, Pull, Fire exit, Emergency exit,	
57	Drawing & Design cost	
58	Structural Steel with Stair case	

#### **Electrical Work at Disaster Recovery Site**

Sr. NO.	Description	Make / Model Applicable – by the bidder)	Complied (Yes / No)
59	Main Power Distribution Panel: Supply Installation testing commissioning for Main Data Centre Panel. making of CRCA powder coated sheet, Having Incomer 200 A 4 pole MCCB with 36 KA. Out Going: 100 A 4 pole MCCB 3 nos, 63 A 4 pole MCCB 4 Nos, 32 A 4 pole MCB 6 nos, with multifunction meter		
	with communication port (RS 485) & R,Y, B, ON, OFF, Trip Indication LED lamps & 500 A rated Aluminium bus bar.		
60	<b>UPS Output Panel</b> : Incomer 2 Nos 100A 4 Pole MCCB with Metering (MFM with RS 485 Port, Indication lamp and control MCBs) Outgoing 32A DP 18 Nos		
61	Lighting DBs, BMS DBs and Raw Power DBs		
62	4 Run X 25 sq.mm. copper flexible cable for 40 KVA UPS Input and Output cable		

63	4 Core 240 sq.mm. AL. Armored cable Incomer Supply	
	4 Run X 10 sq.mm. copper flexible cable for Lighting DB,	
64	Power DB, BMS DBs and PAC	
65	50 sq.mm. copper flexible cable for earthing.	
66	3 Core X 4 sq.mm. copper flexible cable for server rack	
	Supply laying and commissioning of power points by 25 mm	
67	PVC conduit and 2.5 sqmm copper wire for power points and	
01	1.5 sq.mm copper wire for lights points including modular	
	switch sockets & all accessories.	
	Supply fixing and commissioning of power points for server	
68	racks including 32 A 3 pin industrial socket	
	Supply Installation testing commissioning of chemical earthing	
69	with 17.5 sq.mm. copper bonded pipe for electrode, chemical	
	compound as per ISI, Chamber High duty Polycarbonate	
70	cover etc. Supply and fixing of 25 x 6 mm G.I Strip for	
71		
11	Earh Bus bar box with copper strip  10 sqmm single core cable for DGs earthing, UPS earthing and	+
72	server Rack earthing	
	Light Point wiring with 3 x 1.5 sqmm copper flexible wire and	
73	PVC conduit with modular switch & accessories	
74	Light fixture 36W 2ft x 2 Ft LED tupe	
75	Occupancy Sensor	
76	Cable tray and raceway (Lot as per below breakup)	
77	300 x 50 mm Ladder G.I cable tray with support arrangement	
	200 x 50 mm G.I perforated cable tray with support	
78	arrangement (Power)	
79	200 x 50 mm G.I perforated cable tray with support	
19	arrangement (Data )	
80	MS structural Steel for cable tray support and Panel Base	
80	Frame	
	Supply & Laying of Anti-static rubber mate 1.1 kv tested for	
81	electrical room as per ISI	
82	Shock Treatment chart	
83	First Aid Box	
	Cost for developing of all GFC & As built drawings as per	
84	recompensated size including design .	
	3*20KVA Modular UPS with 30 minutes backup and	
85	extendibleupto 80 KVA (4 x 20 KVA)	

# Detail Specification of sl no. 85UPS

S. No.	TECHNICAL SPECIFICATIONS (20 KVA ON-LINE UPS: 03 NOS)	Make / Model Applicable – by the bidder)	Complied (Yes / No)
	GENERAL FEATURES:		
	Supply, installation and commissioning of 3 x 20 KVA/20KW True On-		
1	Line Double Conversion, modular type UPS. The 3 x 20 KW UPS system		
	will operate in parallel redundant mode, with 2 UPS to support the load		

	and third UPS to provide redundanc	•		
	Further, each 20 KVA/20KW UPS sha			
	within its frame. There shall be prov	rision to scale up the configuration		
	to 4 x 20KVA/20KW UPS in parallel.			
	Each 20 KVA N+1 redundant UPS s			
	with appropriate nos. of 20 KW H			
2	double conversion configuration, wh	nile ensuring 1 for redundancy, i.e.		
	2 nos modules of 20 KW Modules. Th	e 20 KW UPS shall be scalable upto		
	80 KW within the same frame sin	mply by inserting additional hot		
	swappable power modules as and w	hen necessary.		
3	The frame for Each 20 KVA UPS shal			
3	standard 30~42U frame			
	Each hot swappable UPM power	module shall include a rectifier,		
_	battery converter, inverter and in			
4	should be no common controller (e			
	the modules.	j ,		
	Each UPS shall also have an			
		fully rated, continuous duty static		
_		ed transfers along with RS232 port,		
5	USB port, SNMP Slot, Dry cor			
		Main Breaker, Maintenance Bypass		
	and Output Breaker			
	The control panel comprising of			
6	DISPLAY, touch screen based, with L			
	of all measured parameters, UPS and			
	BATTERIES: Each 20 KW UPS shall			
_	20,000 VAH using 12V, VRLA Sealed			
7	minutes backup time. The vendor h			
	rack and interconnecting cables (ny			
	Isolation Transformer of 40 KVA sh			
	providing galvanic isolation bety			
8	Transformer should be external to the			
	enclosure with powder coated paint			
	at bottom and hooks for lifting the ur	-		
9	DETAILED SPECIFICATION SHEE			
	MODEL RATING (1.0 p.f.)	20 KVA/KW N+1 Modular On-		
	(	Line UPS		
	Make & Model	To be Specified		
	ELECTRICAL			
	CHARACTERISTICS INPUT			
	Rated input voltage	380 V; 400 V; 415 V, 3 Phase		
	Voltage tolerance	305 ~ 478 VAC		
	Rated input frequency	50 or 60 Hz, user configurable		
	Frequency tolerance	45 to 55 Hz		
	Input power factor, double	> 0.99		
	conversion @100% load			
	Input current distortion at rated	< 3%, 100% load		
	input current	,		
	ELECTRICAL			
	CHARACTERISTICS OUTPUT			
	Crest factor	3:1		
	Rated output voltage	380 V; 400 V; 415 V, configurable		
		, , , <del></del>	1	

	Output realtage regristion stoods	+ 10/ (balanged lead): + 20/	
	Output voltage variation, steady		
	state	(unbalanced load)	
	Total voltage harmonic distortion 100% linear load	10/	
		< 1%	
	100% non-linear load	< 5%	
	Rated output frequency	50 or 60 Hz, configurable	
	Output frequency variation	± 0.1 Hz	
	Overload capability	1 hour: 110%, 10 mins: 125%, 1	
		min:150%	
	Efficiency in double-conversion,	>95%	
	rated linear load		
	BYPASS		
	Type of bypass	Static	
	Bypassrating	80 KW	
	Bypassvoltagerange	380V;400V;415V	
	BATTERYCHARACTERISTICS		
	Battery technology	12V,VRLA SMF Batteries	
	NominalVAHcapacity	20,000 VAH for 30 minutes Back-	
		up	
	Batterystart option	Yes	
	COMMUNICATIONCIRCUITS	165	
	Standardconnectivity ports	USB/RS-232, BMS/SNMP card	
	Standard Connectivity ports		
	System Display	Touch based graphical LCD	
		display	
		The proposed UPS shall have	
	Centralized UPS Monitoring &	Centralized UPS Monitoring &	
	Management System	Management system comprising	
	g	of hardware and software, for	
		real-time device monitoring and	
		notification	
	ENVIRONMENTAL		
	Acoustic noise at 1 m, in 25 °C	< 75 dBA	
	ambient temperature		
	Ambient service temperature	0°C to + 40°C without output	
	range	power derating	
	COMPLIANCE WITH		
	STANDARDS		
	Quality	ISO 9001, ISO 14001, ISO 45001,	
		ISO 50001	
	Safety	IEC 62040-1	
	EMC	IEC 62040-2	
	E-Waste	EPR authorisation from CPCB,	
	L- W date	Govt of India	
10	OEM CRITERIA:	JOVE OF ITICIA	
		office in Welleste Will for at least Off	
	1.UPS OEM should have registered		
	years and should also have minimum		
	installation & commissioning of	On-Line UPS with Govt. / PSU	
	undertakings in West Bengal.		
	2.UPS OEM should have previous		
	supplied, installed & commission	ed at least 05 units of 20 KVA or	

higher capacity Modular UPS System in any Govt. or PSU Data Centre/Server Room/Computer Centre Site in WB/Eastern India. Documentary evidence such as details of Contract, Client Details to be furnished	
3.UPS OEM should have proper after sales service facilities in Kolkata, WB and should not have been blacklisted or debarred from business, at any point of time by any Govt./PSU undertaking. Service set-up Details with details on manpower and infrastructure available to be provided. Affidavit with Undertaking on non-blacklisting to be provided	
4.The bidder should submit documentary evidence in support of 100% compliance to the tender specifications. The bidder should submit the Datasheet and user/operation manual of the UPS system offered.	
5. The bidder should submit documentary evidence in support of 100% compliance to the tender specifications. The bidder should submit the Datasheet and user/operation manual of the UPS system offered.	

## **Precision Air Conditioning for DR Site:**

Sr. No.	Description	Make / Model Applicable – by the bidder)	Complied (Yes / No)
	Precision AC for Server Room at DR Site		
86	10.5TR NET Sensible Capacity@ 7000 CFM at 25 Pa ESP; based on Return air conditions: 35 +/-1 Deg. C, RH 25% and ambient temp of Asanol all complete as required and as per final direction and approval of the Consultants. Supply of Variable speed DC brushless Inverter compressor based Precision Air Conditioning Units; with totally Double skin side panels with min 15mm 32 Kg/ cum PU sheet internal insulation, Bottom discharge type complete with dynamically balanced fan driven by Electronically Commutated (EC) motor, hydrophilic coated slant/flat cooling coil. The unit shall be equipped with high efficiency filters(G4) of minimum 100mm thick, micro processor based programmable logic controller, Liquid receiver, Oil Separator, LLSV, NRV, SS drain tray with nitrile rubber insulation, AL strip Heater & modulating Electrode steam Humidifier etc. Factory performance Testing (FAT) shall be carried in precence of Customer Representive& Consultant. PAC should have provision for connecting separate input power of UPS		

	power for fans and controller; Raw power for other components	
87	G I hard drawn drain piping	
88	Supply, installation, testing & commissioning of GI class 'B' cut to required lengths and installed with all screwed joints, and providing and fixing in position with the necessary elbows, tees and reducers as per specifications. It shall be insulated with 9 mm thk nitrile rubber insulation. Humidifier Piping (assumption of 40 RMT/unit) 25mm dia all complete as required and as per final direction and approval of the Consultants.	
89	Supply, Lifting, shifting, & Installation of MS Stands for indoor PAC units with rubber pads. The frame shall be painted with one coat of metal primer two coats rust proof Epoxy Paint. The stand shall be Height adjustable type ± 25mm for Server Room stands all complete as required and as per final direction and approval of the Consultants.	
90	REFRIGERANT PIPING: Hard copper piping (7/8" Liquid + 1 1/8" Gas) along with closed cell elastomeric nitrile rubber insulation. Refrigerant pipe cost shall incude required neccessary supporting arrangement of hanging, wall fixed type. cost of wall chasing/ breaking and finish, etc all complete as required and as per final direction and approval of the Consultants.	
91	Refrigerant gas R410A all complete as required and as per final direction and approval of the Consultants.	
92	Refrigerant Oil all complete as required and as per final direction and approval of the Consultants.	
93	Supply, Laying, installation, Testing & Commissioning of Interconnection cable(3C X2.5 SQ MM, Armoured Cable) between Indoor & Outdoor units all complete as required and as per final direction and approval of the Consultants.	

94	Seq CAT6 cable for multiple Indoor units all complete as required and as per final direction and approval of the Consultants.	
95	Supply & Installation of MS Stands for outdoor PAC condenser units with rubber pads. The frame shall be painted with one coat of metal primer and two coats rust proof Epoxy Paint all complete as required and as per final direction and approval of the Consultants.	
96	Providing and Fixing of Fire Sealant to close the cutouts of Cables, refrigerant pipes and tray all complete as required and as per final direction and approval of the Consultants.	
97	Copper piping with electrical wirings for the above	

#### IT Hardware Requirement at DR Site:

Sl. No.	Description	Make / Model Applicable – by the bidder)	Complied (Yes / No)
98	IT Hardware Requirement at DR Site: Blade Server AC2 Chassis with fans (As per details specification shared separately		
99	Blade With 02 CPU, 1TB Memory, 2*960GB SSD		
100	SAN Switch: 16G FC switch, w/ 48 active ports + 16G SW SFPs		
101	Certificate Server/Rack Server		
102	Desktop Computer set		
103	L3 Switch 48 port		
104	L2 Switch		
105	Router		

#### Detail Spec for Sr no 98: Blade Chassis

Sr.No.	Item	Specification	Make / Model Applicable – by the bidder)	Complied (Yes / No)
1	Enclosure	Blade chassis shall be 19" rack mountable  The enclosure Should support minimum 8 nos. of latest generation INTEL Dual socket servers occupying a max of 10RU rack height		

	1	The enclosure should be populated fully		
	Power	with power supplies of the highest capacity		
		& should be energy efficient.		
		The power subsystem should support N + N		
		/ N+1 power redundancy (where N is		
		greater than 1) for a fully populated chassis		
		Each blade enclosure should have a cooling		
	Cooling	subsystem consisting of redundant hot		
		pluggable fans or blowers		
	Chassis	The chassis should be provided with		
	connectivity	redundant modules for connectivity		
		Chassis should have sufficient number of		
		redundant converged modules to provide a		
		minimum FCoE/ Equivalent uplink		
		bandwidth of 50Gbps per blade server and		
		25Gbps sustained per blade server ( with 1		
		module failure) for a fully populated chassis		
		for converged Traffic.		
		Chassis should support aggregation of		
		multiple enclosures. the interconnects		
2	Converged	(internal or external) should be provided in		
	Module	redundancy along with all		
	Module	modules/switches for chassis		
		interconnectivity should be in redundancy.		
		internal interconnect switches all the		
		switches in the chassis should be fully		
		populated for maximum throughput &		
		redundancy from day 1.		
		All Network and management		
		modules/solution should be populated from		
		day 1 to ensure redundancy		
		Blade chassis management solution may be		
		provided internal / external to the chassis		
		and must provide single console for		
		managing all associated components like		
		Blade Servers, raid settings, NIC/HBA cards,		
		IO Modules, Power supplies, Fans. Licenses		
		to support the features to be supplied for		
		fully populated chassis.		
		The management software should be used		
	Chassis	to create resource pools and have the blade		
3	Management	resources assigned to the respective		
	software	resource pools & re-assign resources to		
		effectively utilize infrastructure		
		Should be able to provide Single Pane of		
		Glass view management for both Rack		
		Servers and Blade Servers together in a		
		given location with customizable dashboard		
		to show overall faults / health / inventory for		
		all managed infrastructure. With option to		
		create unique dashboards for individual		
		users. The user should have flexibility to		
	•	· · · · · · · · · · · · · · · · · · ·	·	

		select names for dashboards and widgets (ex:- health, utilization etc.). These licenses should be included on day 1.	
		The proposed solution should use AI/ML technology for infrastructure firmware updates & upgrades for the proposed system	
		The management solution should be open & programmable should provide Rest API's, SDK for programming languages ex:-Python, power shell scripting etc.	
		The management tool should be able to provide global resource pooling and policy management to enable policy-based automation	
		Zero-touch auto configuration to auto deploy a baseline server configuration profile Automated hardware configuration and Operating System deployment to multiple servers	
4	Configuration & Management	System should support multiple management interface like Web UI, CLI and XML API. Management solution should be able to manage different form factor hardware and provide single console. * Real-time out-of-band hardware performance monitoring & alerting. * Remote Power On, Off and reset from Web UI, XML API and KVM. * The management tool should be able to provide global resource pooling and policy management to enable policy based automation and capacity planning * Zero-touch repository manager and self- updating firmware system, Automated	
		hardware configuration and Operating System deployment to multiple servers	

5	Application Resource Management	The solution should provide a workload automation solution that dynamically defines and controls the environment based on real time analytics to assure application performance at maximum efficiency by ensuring underlying infrastructure is at optimal state.  The solution should be an agentless architecture which should provide full stack visibility & control being Application, network, storage, cloud aware.  * The solution should provide dynamic resource allocation to ensure demand of applications is matched with available resources in real time.  The solution should provide vertical and horizontal scaling of workloads and automate provisioning of infrastructure resources.  *The proposed solution should be application aware (Oracle WebLogic, IBM WebSphere, apache, tomcat etc.), the solution should manages the resources used by application servers, including heap, threads, transactions, and response time in the server process, and VMem and VCPU in the VM that hosts the application server.  The solution should collect information from network switches and load balancers to ensure minimal application latency, it should ensure chatty VMs are often placed together to maximize resource utilization and minimize noisy neighbor effect.		
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#### Detail Spec for Sr no 99: Blade Server

Sr.No.	Item	Specification	Make / Model Applicable – by the bidder)	Complied (Yes / No)
1	СРИ	Each blade shall have two numbers of latest Intel Xeon Scalable Processors (Intel® Xeon® processor family or higher) with Min. 32 cores per processor each having Min. 2.0 GHz processor speed with 48 MB Cache		
2	Motherboard	Intel chipset compatible with the offered processors.		
3	Memory	Min. 32 DIMM slots, should be provided with 24 GB RAM per core using DDR4 DIMM's operating at 2933 MT/s (depending on processor model)		

		Server should be populated with 1 TB RAM from day one.	
4	Memory Protection	Advanced ECC protection, online mirror memory	
5	Hard disk drive with carrier	2 X 960 GB 12G SSD Drives	
6	Storage Controller	SAS Raid Controller with RAID 0/1 with 4GB cache	
7	Networking features	The server should provide a minimum of 100 Gbps of bandwidth with Converged network adapter ports across two or more cards.  Each Blade should have redundant network Connectivity to all the Chassis Interconnect modules.  Server must be populated with all internal mLOM, PCI-e slots with Connectivity cards to offer maximum throughput to the overall Network on Day 1.	
8	Redundancy	The blade server to be provided with card level redundancy	
9	Interfaces	Minimum of 1* internal USB 3.0 port ,1* internal SD card slot	
10	Operating System and Virtualization Support	Microsoft Windows Server, Red Hat Enterprise Linux (RHEL), VMware, SUSE Linux Enterprise Server (SLES)	

# Detail Spec for Sr no 100: SAN SWITCH

S. No.	General Requirement	Make / Model Applicable – by the bidder)	Complied (Yes / No)
1	The switch should have complete non-blocking architecture with 48 ports in a single domain concurrently active 48 Port at 32 Gbps full duplex and with no oversubscription.		
2	The switch should support auto-sensing 8,16 and 32 Gbps capabilities.		
3	The switch should be rack mountable in 1 RU form factor		
4	All 48 autosensing Fibre Channel ports should be capable of speeds of 8,16 and 32 Gbps, with 32 Gbps of dedicated bandwidth for each port.		
5	FC buffer credits available for data frames should be up to min. 56 per port		
6	The switch should support non disruptive software upgrade and configuration file installation on newly deployed switches. Additionally, it provides intelligent diagnostics, protocol		

	decoding, network analysis tools for added reliability, faster problem resolution, and reduced service costs.	
7	The switch should protect SAN and End devices from corrupted frames (inbuilt CRC and Slow Drain detection and Mitigation)	
8	The switch must be equipped with congestion control mechanisms such that it is able to throttle back traffic away from a congested link.	
9	The switch must be capable of creating multiple hardware-based isolated Virtual Fabric (ANSI T11) instances. Each Virtual Fabric instance within the switch should be capable of being zoned like a typical SAN and maintains its own fabric services, zoning database, Name Servers and FSPF processes etc. for added scalability and resilience	
10	Switch management, the management software must support both Fabric wide and Device level management without the additional purchase of software.	
11	The switch must be able to load balance traffic through an aggregated link with Source ID and Destination ID. The support for load balancing utilizing the Exchange ID must also be supported.	
12	Offered SAN switch shall support services such as Quality of Service (QoS) to help optimize application performance in consolidated, virtual environments. It should be possible to define high, medium and low priority QOS zones to expedite high-priority traffic	
13	The switch using FSPF protocol, the switch must be able to load balance up to 16 equal cost paths across the SAN network	
14	The switch should have USB port which should be able to provision the switch in addition to storing log files, firmware images and configuration	
15	The switch should offer fabric wide, per-VSAN role-based authentication, authorization, and accounting (AAA) services using RADIUS, Lightweight Directory Access Protocol (LDAP), Microsoft Active Directory (AD), and TACACS+.	
16	SAN Switch should provide end to end visibility of fibre channel SAN traffic. It should inspect I/O flow to bring out a unified view of the infrastructure irrespective of the architecture or vendor of storage arrays, servers or operating systems.	
17	Switch should provide proactive and predictive troubleshooting and capable of generating automated alarms. Switch should monitor flows between the compute and storage layers, including the read and the write transactions between a host and the backend storage.	

#### Detail Spec for Sr no 101: Rack Server

SN	Parameters	Specification for Rack Server	Make / Model	Complied (Yes / No)

			Applicable - by the bidder)	
1	Processors	Rack Server shall have a minimum of two (2) Intel latest generation Xeon® Gold Ice Lake Processors with minimum 2.0 Ghz& 32Core per socket and 48 MB Cache.		
2	Chipset	Intel chipset compatible with the offered processors.		
3	Internal Storage	The server should Support upto 8 hotswappable SAS, NL-SAS and SSD drives.  Server should be configured with 4 Nos 1.2TB 12G SAS 10K RPM  The Server RAID controller should support the following configurations RAID 0, 1, 5, 6, 10, 50, and 60  Server should be configured minimum with 4GB of cache module.		
4	Memory	Should have at least 32 DIMM slots per server and support minimum up to 2 TB of DDR4 2933 MHz memory.  The Server should be configured with minimum 512 GB of DDR4 Memory from day one  Support for advanced memory redundant technologies like Advanced error-correcting code (ECC) and memory mirroring.		
5	Network	Should have 2 * 10 GbE (embedded) LAN ports & 2*10G SFP+ GbE network cards for LAN connectivity		
6	SAN Connectivity	Should support Dual port 16Gbps FC HBA.		
7	PCIe Slots	Up to 6 PCIe Generation 3.0 slots		
	Configuration	Should support out of band upgrades, Agentless out-of-band management, integrated diagnostics and Power monitoring and reporting.  The server should support industry standard management protocols like IPMI v2 and SNMP v3		
8	& Management	One 1-Gbps RJ-45 management port		
		The server should support multiple management interfaces including web user interface and command line interface.  Should be provided with anti-counterfeit to lockdown the system in case the hardware is not genuine		

		System should support multiple management interface like Web UI, CLI and XML API.  Management solution should be able to manage different form factor hardware and provide single console.  * Real-time out-of-band hardware performance monitoring & alerting.  * Remote Power On, Off and reset from Web UI, XML API and KVM.  * The management tool should be able to provide global resource pooling and policy management to enable policy based automation and capacity planning  * Zero-touch repository manager and self-updating firmware system, Automated	
		hardware configuration and Operating System	
		deployment to multiple servers	
		The system should have hardware root of trust	
		The system should provide bios recovery & firmware update should be cryptographically signed	
9	Application Resource Management	The solution should provide a workload automation solution that dynamically defines and controls the environment based on real time analytics to assure application performance at maximum efficiency by ensuring underlying infrastructure is at optimal state.  The solution should be an agentless architecture which should provide full stack visibility & control being Application, network, storage, cloud aware.  * The solution should provide dynamic resource allocation to ensure demand of applications is matched with available resources in real time.  The solution should provide vertical and horizontal scaling of workloads and automate provisioning of infrastructure resources.  *The proposed solution should be application aware (Oracle WebLogic, IBM WebSphere, apache, tomcat etc.), the solution should manages the resources used by application servers, including heap, threads, transactions, and response time in the server process, and VMem and VCPU in the VM that hosts the application server.  The solution should collect information from network switches and load balancers to ensure minimal application latency, it should ensure chatty VMs are often placed together to	

		maximize resource utilization and minimize noisy neighbor effect.	
10	Server Security	Should have a cyber resilient architecture for a hardened server design for protection, detection & recovery from cyber attacks Should protect against firmware which executes before the OS boots - Hardware based Root of Trust - Signed firmware updates - Secure default passwords - Secure alerting - Automatic BIOS recovery - Rapid OS recovery - Chassis Intrusion Detection - System Lockdown - System Drift Detection - Configuration upgrades should be only with cryptographically signed firmware and software"	
11	Ports	Should have the following ports for server connectivity  1 serial port  4 USB 3.0/2.0 ports  1 VGA video port	
12	Others Form Factor	Supports hot swappable redundant fans Supports hot swappable redundant power supplies Rail Kit and cable management arm to be provided along with the server Maximum 2 RU	

# Specification of Desktop computer Sr. No. 102

Sr No	Specification	Make / Model	Complied (Yes / No)
	<b>SP</b>	Applicable	(1027 110)

		- by the bidder)	
102	Reputed Make Desktop computer with 8 GB RAM, 1 TB HDD, Min Intel i5 Processor with Windows 10 Pro along with monitor (17" LCD/ TFT), keyboard, Mouse, CD Drive, NIC Card (10/100/1000) and WiFi card, warranty 5 years onsite comprehensive.		

Detail Spec for Sr no 103: L3 Switch 48port

Sr No Specification		Make / Model Applicable – by the bidder)	Complied (Yes / No)
1	Solution Requirement		
1.1	The Switch should support non-blocking Layer 2 switching and Layer 3 routing		
1.2	Switch should support the complete STACK of IPv4 and IPv6 services.		
1.3	The proposed switches should be part of Gartner Leader Quadrant for DC Networking for last 2 years		
1.4	The Switch used have the capability to function in line rate for all ports		
2	Hardware and Interface Requirement		
2.1	Switch should have the following interfaces:		
2.1.1	Minimum 48 ports support 1/10/25 Gbps SFP ports for host connectivity and 6*100G ports for Fabric/Spine connectivity. The proposed switch should support native 25G and should be populated with 48*10G Multimode fiber transreceivers for downlink connectivity & 6*100G ports with multimode 100G Trancievers, for uplink connectivity.		
2.1.2	Switch should have console port for local management & management interface for Out of band management		
2.2	1 RU fixed form factor		
2.3	Switch should be rack mountable and support side rails if required		
2.4	Switch should be provided with power redundancy		
3	Performance Requirement		
3.1	Modular OS with dedicated process for each routing protocol		
3.2	Switch should re-converge all dynamic routing protocol at the time of routing update changes i.e. Graceful restart for fast re-convergence of routing protocols (OSPF, IS-IS, BGP)		
3.4	Switch should support minimum 1000 VRF instances with route leaking functionality		
3.5	The switch should support <b>400k</b> IPv4 LPM routes		

1		
3.6	The Switch should support intelligent buffer management	
	with a minimum buffer of <b>40MB</b> .	
3.7	The switch should have MAC Address table size of 90k	
3.8	The switch should support 8K multicast routes	
3.9	Switch should support 4000 VLANs	
3.1	Switch should support 64 nos of ECMP paths	
	Switch should support minimum 3 Tbps (Keep as per	
3.11	selected leaf model) of switching capacity (or as per	
3.11	specifications of the switch if quantity of switches are	
	more, but should be non blocking capacity)	
4	Network Virtualization Features	
4.1	Switch should support Network Virtualisation using Virtual	
7.1	Over Lay Network using VXLAN	
	Switch should support VXLAN and EVPN symmetric IRB for	
4.2	supporting Spine - Leaf architecture to optimise the east -	
	west traffic flow inside the data center	
	The Switch should support DC Briding i.e. IEEE 802.1Qbb	
5.9	Priority Flow Control (PFC), Data Center Bridging	
	Exchange (DCBX), IEEE 802.1Qaz Enhanced Transmission	
	Selection (ETS), Explicit Congestion Notification (ECN).	
5.1	Maximum number of port channels should be 48	
5.11	Maximum no of ports in the port channel should be 32	
5.12	The switch should support BGP EVPN Route Type 2, Type	
	4 and Route Type 5 for the overlay control plane	
6	Layer3 Features	
6.1	Switch should support static and dynamic routing	
6.2	Switch should support segment routing and VRF route	
6.2	leaking functionality from day 1	
6.2	leaking functionality from day 1 Switch should support Segment Routing and Layer3 VPN	
	leaking functionality from day 1 Switch should support Segment Routing and Layer3 VPN over Segment Routing	
6.3	leaking functionality from day 1 Switch should support Segment Routing and Layer3 VPN over Segment Routing Switch should support multi instance routing using VRF/	
	leaking functionality from day 1 Switch should support Segment Routing and Layer3 VPN over Segment Routing Switch should support multi instance routing using VRF/ VRF Edge/ Virtual Router routing and should support VRF	
6.3	leaking functionality from day 1 Switch should support Segment Routing and Layer3 VPN over Segment Routing Switch should support multi instance routing using VRF/ VRF Edge/ Virtual Router routing and should support VRF Route leaking functionality	
6.3 6.4 6.3	leaking functionality from day 1 Switch should support Segment Routing and Layer3 VPN over Segment Routing Switch should support multi instance routing using VRF/ VRF Edge/ Virtual Router routing and should support VRF Route leaking functionality Switch should provide multicast traffic reachable using:	
6.3 6.4 6.3 6.3.1	leaking functionality from day 1 Switch should support Segment Routing and Layer3 VPN over Segment Routing Switch should support multi instance routing using VRF/ VRF Edge/ Virtual Router routing and should support VRF Route leaking functionality Switch should provide multicast traffic reachable using: a. PIM-SM	
6.3 6.4 6.3 6.3.1 6.3.2	leaking functionality from day 1 Switch should support Segment Routing and Layer3 VPN over Segment Routing Switch should support multi instance routing using VRF/ VRF Edge/ Virtual Router routing and should support VRF Route leaking functionality Switch should provide multicast traffic reachable using: a. PIM-SM b. PIM-SSM	
6.3 6.4 6.3 6.3.1 6.3.2 6.4	leaking functionality from day 1 Switch should support Segment Routing and Layer3 VPN over Segment Routing Switch should support multi instance routing using VRF/ VRF Edge/ Virtual Router routing and should support VRF Route leaking functionality Switch should provide multicast traffic reachable using: a. PIM-SM b. PIM-SSM Support Multicast Source Discovery Protocol (MSDP)	
6.3 6.4 6.3 6.3.1 6.3.2 6.4 6.5	leaking functionality from day 1 Switch should support Segment Routing and Layer3 VPN over Segment Routing Switch should support multi instance routing using VRF/ VRF Edge/ Virtual Router routing and should support VRF Route leaking functionality Switch should provide multicast traffic reachable using: a. PIM-SM b. PIM-SSM Support Multicast Source Discovery Protocol (MSDP) IGMP v1, v2 and v3	
6.3 6.4 6.3 6.3.1 6.3.2 6.4	leaking functionality from day 1 Switch should support Segment Routing and Layer3 VPN over Segment Routing Switch should support multi instance routing using VRF/ VRF Edge/ Virtual Router routing and should support VRF Route leaking functionality Switch should provide multicast traffic reachable using: a. PIM-SM b. PIM-SSM Support Multicast Source Discovery Protocol (MSDP) IGMP v1, v2 and v3 Quality of Service	
6.3 6.4 6.3 6.3.1 6.3.2 6.4 6.5	leaking functionality from day 1  Switch should support Segment Routing and Layer3 VPN over Segment Routing  Switch should support multi instance routing using VRF/ VRF Edge/ Virtual Router routing and should support VRF Route leaking functionality  Switch should provide multicast traffic reachable using:  a. PIM-SM  b. PIM-SSM  Support Multicast Source Discovery Protocol (MSDP)  IGMP v1, v2 and v3  Quality of Service  Switch system should support 802.1P classification and	
6.3 6.4 6.3 6.3.1 6.3.2 6.4 6.5 7	leaking functionality from day 1  Switch should support Segment Routing and Layer3 VPN over Segment Routing  Switch should support multi instance routing using VRF/ VRF Edge/ Virtual Router routing and should support VRF Route leaking functionality  Switch should provide multicast traffic reachable using:  a. PIM-SM  b. PIM-SSM  Support Multicast Source Discovery Protocol (MSDP)  IGMP v1, v2 and v3  Quality of Service  Switch system should support 802.1P classification and marking of packet using:	
6.3 6.3 6.3.1 6.3.2 6.4 6.5 7 7.1	leaking functionality from day 1 Switch should support Segment Routing and Layer3 VPN over Segment Routing Switch should support multi instance routing using VRF/ VRF Edge/ Virtual Router routing and should support VRF Route leaking functionality Switch should provide multicast traffic reachable using: a. PIM-SM b. PIM-SSM Support Multicast Source Discovery Protocol (MSDP) IGMP v1, v2 and v3 Quality of Service Switch system should support 802.1P classification and marking of packet using: a. CoS (Class of Service)	
6.3 6.4 6.3 6.3.1 6.3.2 6.4 6.5 7	leaking functionality from day 1  Switch should support Segment Routing and Layer3 VPN over Segment Routing  Switch should support multi instance routing using VRF/ VRF Edge/ Virtual Router routing and should support VRF Route leaking functionality  Switch should provide multicast traffic reachable using:  a. PIM-SM  b. PIM-SSM  Support Multicast Source Discovery Protocol (MSDP)  IGMP v1, v2 and v3  Quality of Service  Switch system should support 802.1P classification and marking of packet using:  a. CoS (Class of Service)  b. DSCP (Differentiated Services Code Point)	
6.3 6.3 6.3.1 6.3.2 6.4 6.5 7 7.1	leaking functionality from day 1  Switch should support Segment Routing and Layer3 VPN over Segment Routing  Switch should support multi instance routing using VRF/ VRF Edge/ Virtual Router routing and should support VRF Route leaking functionality  Switch should provide multicast traffic reachable using:  a. PIM-SM  b. PIM-SSM  Support Multicast Source Discovery Protocol (MSDP)  IGMP v1, v2 and v3  Quality of Service  Switch system should support 802.1P classification and marking of packet using:  a. CoS (Class of Service)  b. DSCP (Differentiated Services Code Point)  Switch should support for different type of QoS features for	
6.3 6.4 6.3 6.3.1 6.3.2 6.4 6.5 7 7.1 7.2 7.3	leaking functionality from day 1  Switch should support Segment Routing and Layer3 VPN over Segment Routing  Switch should support multi instance routing using VRF/ VRF Edge/ Virtual Router routing and should support VRF Route leaking functionality  Switch should provide multicast traffic reachable using:  a. PIM-SM  b. PIM-SSM  Support Multicast Source Discovery Protocol (MSDP)  IGMP v1, v2 and v3  Quality of Service  Switch system should support 802.1P classification and marking of packet using:  a. CoS (Class of Service)  b. DSCP (Differentiated Services Code Point)  Switch should support for different type of QoS features for reaL time traffic differential treatment using	
6.3 6.4 6.3 6.3.1 6.3.2 6.4 6.5 7 7.1 7.2 7.3 7.4 7.4.1	leaking functionality from day 1  Switch should support Segment Routing and Layer3 VPN over Segment Routing  Switch should support multi instance routing using VRF/ VRF Edge/ Virtual Router routing and should support VRF Route leaking functionality  Switch should provide multicast traffic reachable using:  a. PIM-SM  b. PIM-SSM  Support Multicast Source Discovery Protocol (MSDP)  IGMP v1, v2 and v3  Quality of Service  Switch system should support 802.1P classification and marking of packet using:  a. CoS (Class of Service)  b. DSCP (Differentiated Services Code Point)  Switch should support for different type of QoS features for reaL time traffic differential treatment using  a. Weighted Random Early Detection	
6.3 6.4 6.3 6.3.1 6.3.2 6.4 6.5 7 7.1 7.2 7.3	leaking functionality from day 1  Switch should support Segment Routing and Layer3 VPN over Segment Routing  Switch should support multi instance routing using VRF/ VRF Edge/ Virtual Router routing and should support VRF Route leaking functionality  Switch should provide multicast traffic reachable using: a. PIM-SM b. PIM-SSM  Support Multicast Source Discovery Protocol (MSDP)  IGMP v1, v2 and v3  Quality of Service  Switch system should support 802.1P classification and marking of packet using: a. CoS (Class of Service) b. DSCP (Differentiated Services Code Point)  Switch should support for different type of QoS features for reaL time traffic differential treatment using a. Weighted Random Early Detection b. Strict Priority Queuing	
6.3 6.4 6.3 6.3.1 6.3.2 6.4 6.5 7 7.1 7.2 7.3 7.4 7.4.1	leaking functionality from day 1  Switch should support Segment Routing and Layer3 VPN over Segment Routing  Switch should support multi instance routing using VRF/ VRF Edge/ Virtual Router routing and should support VRF Route leaking functionality  Switch should provide multicast traffic reachable using: a. PIM-SM b. PIM-SSM  Support Multicast Source Discovery Protocol (MSDP)  IGMP v1, v2 and v3  Quality of Service  Switch system should support 802.1P classification and marking of packet using: a. CoS (Class of Service) b. DSCP (Differentiated Services Code Point)  Switch should support for different type of QoS features for reaL time traffic differential treatment using a. Weighted Random Early Detection b. Strict Priority Queuing  Switch should support Rate Limiting - Policing and/or	
6.3 6.4 6.3 6.3.1 6.3.2 6.4 6.5 7 7.1 7.2 7.3 7.4 7.4.1	leaking functionality from day 1  Switch should support Segment Routing and Layer3 VPN over Segment Routing  Switch should support multi instance routing using VRF/ VRF Edge/ Virtual Router routing and should support VRF Route leaking functionality  Switch should provide multicast traffic reachable using:  a. PIM-SM  b. PIM-SSM  Support Multicast Source Discovery Protocol (MSDP)  IGMP v1, v2 and v3  Quality of Service  Switch system should support 802.1P classification and marking of packet using:  a. CoS (Class of Service)  b. DSCP (Differentiated Services Code Point)  Switch should support for different type of QoS features for reaL time traffic differential treatment using  a. Weighted Random Early Detection  b. Strict Priority Queuing  Switch should support Rate Limiting - Policing and/or Shaping	
6.3 6.4 6.3 6.3.1 6.3.2 6.4 6.5 7 7.1 7.2 7.3 7.4 7.4.1	leaking functionality from day 1  Switch should support Segment Routing and Layer3 VPN over Segment Routing  Switch should support multi instance routing using VRF/ VRF Edge/ Virtual Router routing and should support VRF Route leaking functionality  Switch should provide multicast traffic reachable using: a. PIM-SM b. PIM-SSM  Support Multicast Source Discovery Protocol (MSDP)  IGMP v1, v2 and v3  Quality of Service  Switch system should support 802.1P classification and marking of packet using: a. CoS (Class of Service) b. DSCP (Differentiated Services Code Point)  Switch should support for different type of QoS features for reaL time traffic differential treatment using a. Weighted Random Early Detection b. Strict Priority Queuing  Switch should support Rate Limiting - Policing and/or	

8	Security	
	Switch should support control plane Protection from	
8.1	unnecessary or DoS traffic by control plane protection	
	policy	
8.2	Switch should support for external database for AAA using:	
8.2.1	a. TACACS+	
8.2.2	b. RADIUS	
	Switch should support to restrict end hosts in the network.	
0.0	Secures the access to an access or trunk port based on	
8.3	MAC address. It limits the number of learned MAC	
	addresses to deny MAC address flooding	
8.4	Switch platform should support MAC Sec (802.1AE)	
0.4	encryption in hardware	
0.5	VXLAN and other tunnel encapsulation/decapsulation	
8.5	should be performed in single pass in Hardware	
	Switch should support for Role Based access control	
8.6	(RBAC) for restricting host level network access as per	
	policy defined	
8.7	Switch should support DHCP Snooping	
	Switch should support Dynamic ARP Inspection to ensure	
8.8	host integrity by preventing malicious users from	
	exploiting the insecure nature of the ARP protocol	
	Switch should support IP Source Guard to prevents a	
8.9	malicious hosts from spoofing or taking over another host's	
0.9	IP address by creating a binding table between the client's	
	IP and MAC address, port, and VLAN	
	Switch should support unicast and/or multicast blocking	
8.1	on a switch port to suppress the flooding of frames	
0.1	destined for an unknown unicast or multicast MAC address	
	out of that port	
	Support for broadcast, multicast and unknown unicast	
8.11	storm control to prevent degradation of switch	
0.11	performance from storm due to network attacks and	
	vulnerabilities	
8.12	The Switch should support LLDP.	
8.13	Switch should support Spanning tree BPDU protection	
9	Manageability	
9.1	Switch should support for sending logs to multiple	
9.1	centralised syslog server for monitoring and audit trail	
9.2	Switch should provide remote login for administration	
3.4	using:	
9.3	a. Telnet	
9.4	b. SSHv2	
	Switch should support for capturing packets for identifying	
9.5	application performance using local and remote port	
	mirroring for packet captures	
0.7	Switch should support for management and monitoring	
9.7	status using different type of Industry standard NMS using:	
9.8	a. SNMP v1 and v2, SNMP v3 with Encryption	
	Switch should provide different privilege for login in to the	
9.9	I SWILCH SHOULD DIOVIDE CILIETEIL DRIVINEDE IOLIOCHI III IO IIIE	l l

9.1	Should have Open APIs to manage the switch through remote-procedure calls (JavaScript Object Notation [JSON] or XML) over HTTPS after secure authentication for management and automation purpose.	
9.11	The Switch Should support monitor events and take corrective action like a script when the monitored events occurs.	
	Should support hardware telemetry from ASIC-	
9.12	Flow path trace (ingress to egress switch)	
9.12	Per Flow Hop by Hop packet drop with reason of drop	
	Per Flow latency (per switch and end to end)	
10	AVAILABILITY	
10.1	Switch should have provisioning for connecting to 1:1/N+1 power supply for usage and redundancy	
10.2	Switch should provide gateway level of redundancy Ip V.4 and IP V.6 using HSRP/VRRP	
10.3	Switch should support for BFD For Fast Failure Detection	
11	MISCELLANEOUS POINTS	
11.1	Console cable and power cable (As per Indian standards) as per customer requirement to be provided. All Cables shall be factory-terminated.	
11.2	All Functionalities of Switch shall be IPv6 compliant and it should work on IPv6 Platform without any additional hardware/ software.	
11.3	All the components should be from same OEM.	

#### Detail Spec for Sr no 104: L2 Switch 24 port

S.	-	Make / Model	Complied (Yes / No)
No.	General Specifications	Applicable - by the bidder)	
1.1	General Features:		
1.1.1	Switch should be 1U and rack mountable in standard 19" rack.		
1.1.2	Switch should support internal field replaceable unit redundant power supply from day 1.*		
1.1.3	Switch should have minimum 2 GB RAM and 2 GB Flash.		
1.1.4	Switch should have dedicated slot for modular stacking, in addition to asked uplink ports. Should support for minimum 48 Gbps of stacking thoughput with 8 switch in single stack.		
1.2	Performance:		
1.2.1	Switch shall have minimum 128 Gbps of switching fabric and 95.23 Mpps of forwarding rate.*		
1.2.2	Switch shall have minimum 16K MAC Addresses and 250 active VLAN.		
1.2.3	Should support minimum 11K IPv4 routes or more		
1.2.4	Switch shall have 1K or more multicast routes.		
1.2.5	Switch should support atleast 16K flow entries		

1.2.6	Switch should support 128 or more STP Instances.	
1.2.7	Switch should have 6MB or more packet buffer.	
1.3	Functionality:	
1.3.1	Switch should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z.	
1.3.2	Switch must have functionality like static routing, RIP, PIM, OSPF, VRRP, PBR and QoS features from Day1	
1.3.3	Switch should support network segmentation that overcomes the limitation of VLANs using VXLAN and VRFs.	
1.3.4	Switch shall have 802.1p class of service, marking, classification, policing and shaping and eight egress queues.	
1.3.5	Switch should support management features like SSHv2, SNMPv2c, SNMPv3, NTP, RADIUS and TACACS+.	
1.3.6	Switch should support IPv6 Binding Integrity Guard, IPv6 Snooping, IPv6 RA Guard, IPv6 DHCP Guard, IPv6 Neighbor Discovery Inspection and IPv6 Source Guard.	
1.3.7	Switch should support 802.1x authentication and accounting, IPv4 and IPv6 ACLs and Dynamic VLAN assignment and MACSec-128 on hardware for all ports.	
1.3.8	Switch must have the capabilities to enable automatic configuration of switch ports as devices connect to the switch for the device type.	
1.3.9	During system boots, the system's software signatures should be checked for integrity. System should capable to understand that system OS are authentic and unmodified, it should have cryptographically signed images to provide assurance that the firmware & BIOS are authentic.	
1.4	Interfaces	
1.4.1	Switch shall have 24 nos. 10/100/1000 Base-T ports and additional 4 nos. SFP+ uplinks ports.	
	Contification	
1.5	Certification:	
1.5.1	Switch shall conform to UL 60950 or IEC 60950 or CSA 60950 or EN 60950 Standards for Safety requirements of Information Technology Equipment.	
1.5.2	Switch shall conform to EN 55022 Class A/B or CISPR22 Class A/B or CE Class A/B or FCC Class A/B Standards for EMC (Electro Magnetic Compatibility) requirements.	
1.5.3	Switch / Switch's Operating System should be tested for EAL 2/NDPP or above under Common Criteria Certification.	
1.5.4	OEM should be listed in Gartner Leader Quadrant for Wired and Wireless LAN Infrastructure from last 3 years before releasing this RFP.	

#### Detail Spec for Sr no 105 : ROUTER

S1. No.	Minimum Specification	Make / Model Applicable – by the bidder)	Complied (Yes / No)
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1	Router with minimum 200 Mbps of throughput from Day 1 which can be scalable up to 2 Gbps if needed in the future. It should have minimum 4 GB of RAM/ DRAM from Day 1 which can be extended to 16GB for future usage. It should also have flash memory of 4 GB with 100% expandability option	
2	Router supports management protocol: SNMP v1/v2/v3, CLI (Telnet/Console), TFTP update and configured file management	
3	Router must have inbuilt state full firewall, zone-based firewall and 3 DES capability technologies to support the access controller strategy-based source and destination IP protocol port and time parameters	
4	Router should have tunneling protocols like Ipsec VPN, GET VPN or equivalent, Multi Point VPN and encryption mechanisms like DES, 3DES, AES (128 and 256Bit). It should support minimum 300 Ipsec tunnels from day one.	
5	Router has support for the following routing /WAN protocols: PPP/MLPPP, HDLC	
7	Router should be modular device with multicore processor and should accommodate a combination of high-density Gigabit Ethernet, Fast Ethernet interfaces	
8	Router should support protocols like RIP, OSPF, BGP, VRRP/HSRP, 802.1q, GRE, ACL's ,and NAT MPLS, traffic engineering, EoMPLS or VPLS or equivalent, L2 VPN from day one	
10	Shall support the RIPng& BGP for Ipv6, OSPFv3, MPLS, BGP from day one.	
11	The router supports state full packet inspection supporting H.323, SIP and other application level gateway support	
12	The state full firewall supports Ipsec pass through	
13	System shall support to provide the ability to filter and gather application information in a flexible manner from day one	
14	Router should support QoS Classification and marking policy- based routing, IP precedence, DSCP	
18	Time-based ACL for controlled forwarding based on time of day for offices	
19	Should have extensive support for SLA monitoring for metrics like delay latency, jitter, packet loss and MoS	
20	Provides QoS features like traffic prioritization, differentiated services, and committed, and committed access rate, QoS Support, RSVP/WFQ/MRED. Router should be able to take pre-configured action on these events like changing routes, changing routing metric	
21	Router supports for QoS Features for defining the QoS policies. Support for low latency queuing, Layer 2 and Layer 3 CoS/DSCP	
22	Router should have multicast routing protocols support: IGMPv1, v2 (RFC2236) PIM- SM (RFC2362) and PIM-DM/Multicast VLAN Registration	
23	The following interface required from Day-1: 3*1GE interfaces with all required accessories	

24	The router should be Ipv6 ready	
25	The router should have the capability of acting as the IPEPABX in case of the actual EPABX failure and should also be able to work as a voice gateway and should be able to register at least 10 IP phones during the failure scenario. Incase the router does not have this capability natively, then a separate device should be proposed along with the router to achieve the functionality	

IT Software Requirement at DR Site:

Sr. No.		Description	Make / Model Applicable – by the bidder)	Complied (Yes / No)
	Premium (2-s 50 VM replic	nStack Platform with Smart Management, sockets) for 5 years. Bidder to ensure minimun ation license at DR	n	
106	PART #  MCT2979	PRODUCT DESCRIPTION  Red Hat OpenStack Platform with Smart  Management, Premium (2-sockets)		
	High Availab PART #	ility for Unlimited Guests; PRODUCT DESCRIPTION		
107	RH00059	High Availability for Unlimited Guests		
108		oud Suite Subscription- per CPU per year Plan - 60 month Prepaid + Vcentre 1 no		

EMS Software License Requirement at DR Site:

Sl. No.	Product		Make / Model Applicable – by the bidder)	Complied (Yes / No)
109	EMS Softwar	e per device/VM for 5 years		
110	Trend Micro	Deep Security - Enterprise - per Server (VM)		
	for 5 years			
		prise Linux Standard for virtual Datacentres		
	with 1 Yr Sta	ndard Subscription for 5 years :		
	PART #	PRODUCT DESCRIPTION		
		Red Hat Enterprise Linux for Virtual		
111	RH00002	Datacenters, Standard		

# Detail Spec for Sr no 109 (EMS Software):

		Make /	Complied
		Model	(Yes / No)
1	General Requirement	Applicable	
		- by the	
	The prepared EMC createnes must have out of the hore	bidder)	
	The proposed EMS systems must have out-of-the-box		
1	connectors available for integration with existing SDC CA EMS and helpdesk tools.		
	Lind and herpdesk tools.		
	The proposed EMS solution should be an integrated,		
	modular, and scalable solution from single OEM family (i.e.,		
	all Network Monitoring, server Monitoring including		
0	application, database monitoring and Service Management		
2	tools should be from single OEM) to provide comprehensive		
	fault management, performance management, Traffic		
	Analysis, IT service desk\ help desk \trouble ticketing		
	system & SLA monitoring functionality.		
3	The system should be accessible via a Web based GUI		
	console/portal from intranet as well as from internet.		
	It should have a secured single sign-on and unified console		
١.	for all functions of components offered for seamless cross-		
4	functional navigation & launch for single pane of glass		
	visibility across multiple areas of monitoring &		
	management.		
	The proposed EMS solution deployment must support latest		
5	version of both Windows and Linux Operating Systems and should be 64-bit application to fully utilize the server		
	resources on which it is installed.		
	Proposed EMS solution MUST have at least 3 deployments in		
	Indian Government/ Public Sector, monitoring & managing		
	10,000+ devices (including IT assets - Network devices, etc.;		
6	Non-IT Assets - UPS, KVM, PDU, etc.; Surveillance system -		
	Cameras, Sensors, etc. in each of such deployments.		
	Customer names, solution details and OEM undertaking		
	needs to be provided at the time of bidding.		
	Any additional components (hardware, software, database,		
	licenses, accessories, etc.) if required for implementation		
7	and execution of project, for providing the total solution as		
	mentioned in the rfp document should be provided by the		
	bidder.		
_	The proposed solution should have the capability to support		
8	the deployment on either on-premises data centre platform		
	or the public/private cloud platform like AWS, Azure etc.		
	The proposed EMS solution should be built on modern		
	container technologies and have an option to deploy on		
9	classic mode (non-containerized) as well as containerized (like Docker, Kubernetes) mode. The solution should either		
	support built-in Kubernetes technology or Bring Your Own		
	Kubernetes (BYOK) platform provided by the bidder.		
	nazornotos (bron) planorni provided by the blader.		

10	The proposed EMS solution should be an integrated, modular, and scalable solution, accessible from a single pane of glass for KPI insights across the entire IT environment. This dashboard will provide service status, performance view, response-time data etc based on role-based access. Since the operations manager solution provides a single framework for streaming metrics across Systems, applications, networks, topology & event data, the operations manager must be FIPS 140-2 compliant, which ensures that cryptographic-based security Systems are to be used to provide protection for sensitive or valuable data.	
11	To ensure the mature security standard of proposed EMS solution, SI must ensure that the proposed EMS solution OEM is ISO 27034 certified from one of the following certification agencies like; Schellman/ KPMG/ PwC/ Ernst & Young/ Deloitte. Documentary proof must be provided at the time of submission.	
2	Server, Database & Application Fault, Performance Monitoring Management	
1	The proposed Enterprise Management tools must be able to monitor end to end performance of Server Operating Systems & Databases and Should be able to manage distributed, heterogeneous Systems – Windows, UNIX & LINUX from a single management station.	
2	There should be a single agent on the managed node that provides the system performance data, and for event management it should be able to prioritize events, do correlation & duplicate suppression ability to buffer alarms and provide automatic actions with capability to add necessary annotations	
3	The system must support multiple built in discovery mechanisms for e.g., Active Directory, Windows Browser, DNS with capability to discover and services discovery	
4	Each operator should be provided with user roles that should include operational service views enabling operators to quickly determine impact and root cause associated with events.	
5	The system should integrate with Helpdesk / Service desk tool for automated incident logging and notify alerts or events via e-mail or SMS.	
6	Solution should provide alarm correlation and facilitate reduction of total number of alarms displayed by means of intelligent alarm correlation, suppression and root cause analysis techniques built into the system. The system must ensure reduction in MTTR by means of advanced event correlation, filtering, and root cause analysis.	
7	The proposed Alarm Correlation and Root Cause Analysis system shall integrate network, server and database performance information and alarms in a single console and provide a unified reporting interface for network components. The current performance state of the entire	

	network & system infrastructure shall be visible in an	
	integrated console.	
	It should have capability to perform cross domain	
	correlation with alarm correlation from Network Monitoring	
8	tool, Systems monitoring tool and other domain monitoring	
	tools.	
	The proposed solution should provide out of the box root	
9	cause analysis with multiple root cause algorithms inbuilt for	
	root cause analysis.	
10	Alarms should be mapped to the live topology views and	
	real time updates to topology based on alarm occurrences.	
	Network Management System (NMS)	
1)	Network Fault Monitoring & Performance Management with Reporting	
	The Network Management function must monitor	
1	performance across heterogeneous networks from one end	
1	of the enterprise to the other.	
	The solution should allow for discovery to be run on a	
	continuous basis which tracks dynamic changes near real-	
2	time; to keep the topology always up to date. This discovery	
-	should run at a low overhead, incrementally discovering	
	devices and interfaces.	
	NMS should provide integrated fault, performance	
3	Monitoring, Configuration & compliance Management	
	together in one tool.	
	NMS should support Industry-leading support for physical,	
4	virtual, and SDN-enabled devices like Cisco ACI, VMWare	
	NSX, Viptela, Big Switch Networks, etc.	
5	NMS should provide network Trap Analytics out of the box.	
6	NMS should support out of the box monitoring of at least	
	5000+ devices from at least 150+ vendors.	
	Diagnostic Analytics providing change-	
7	Correlated Performance Views and should show the	
	difference either in either a side-by-side, or line-by-line presentation	
	NMS should have built-in audit and compliance policies for	
8	industry best practices/ Gov. regulations like PCI, HIPAA,	
	NERC others	
	NMS should support 3-Dimensional Compliance Model -	
9	Configuration, Software, Running State	
	The tool should automatically discover different type of	
	heterogeneous devices (all SNMP supported devices i.e.,	
	Router, Switches, LAN Extender, Servers, Terminal Servers,	
10	Thin-Client and UPS etc.) and map the connectivity between	
10	them with granular visibility up to individual ports level. The	
	tool shall be able to assign different icons/ symbols to	
	different type of discovered elements. It should show live	
	interface connections between discovered network devices	
	It should support various discovery protocols to perform	
11	automatic discovery of all L2, L3 Network devices across	
**	SWAN and any further Network connectivity's planned in	
	future.	

12	The tool shall be able to discover IPv4 only, IPv6 only as well as devices in dual stack. In case of dual stack devices, the system shall be able to discover and show both IPv4 and IPv6 IP addresses.	
13	The tool shall be able to work on SNMP V-1, V-2c & V-3 based on the SNMP version supported by the device. It shall provide an option to discover and manage the devices/elements based on SNMP as well as ICMP.	
14	The proposed Network Fault Management solution must support extensive discovery mechanisms and must easily discover new devices using mechanisms such as SNMP Trap based discovery. It must also allow for inclusion and exclusion list of IP address or devices from such discovery mechanisms	
15	The proposed solution must provide a detailed asset report, organized by vendor name, device type, listing all ports for all devices. The Solution must provide reports to identify unused/dormant Network ports in order to facilitate capacity planning	
2)	Network Configuration Automation	
1	The system should be able to clearly identify configuration changes / policy violations / inventory changes across multi-vendor network tool.	
2	The system should support secure device configuration capture and upload and thereby detect inconsistent "running" and "start-up" configurations and alert the administrators.	
3	The proposed system should be able to administer configuration changes to network elements by providing toolkits to automate the following administrative tasks of effecting configuration changes to network elements: a)  Capture running configuration; b) Capture start-up configuration; c) Upload configuration; d) Write start-up	
4	configuration; e) Upload firmware  The proposed fault management solution must be able to perform "load & merge" configuration changes to multiple network devices.	
5	The proposed fault management solution must be able to perform real-time or scheduled capture of device configurations.	
3)	Network Traffic Flow Analysis System	
1	It shall be able to capture, track & analyse traffic flowing over the network via different industry standard traffic capturing methodologies viz. NetFlow, jflow, sFlow, IPFIX etc.	
2	It shall provide key performance monitoring capabilities by giving detailed insight into the application traffic flowing over the network.	
3	It shall be able to monitor network traffic utilization, packet size distribution, protocol distribution, application distribution, top talkers etc. for network traffic.	

I	It shall collect the real-time network flow data from devices	1 1
	across the network and provide reports on traffic based on	
4	standard TCP/IP packet metrics such as Flow Rate,	
	Utilization, Byte Count, Flow Count, TOS fields etc.	
4)	Reporting	
,	Reporting solution should be able to report on Service Level	
1	status of configured business service.	
	It should be able to collect and collate information	
2	regarding relationship between IT elements and business	
4	service, clearly showing how infrastructure impacts	
	business service levels.	
3	The solution must be built on big data platform and should	
0	be user configurable for building additional reports.	
	Solution should be able to collect Key performance	
4	measurements and statistics from all network domains and	
•	store it. This data is to be used for evaluation of performance	
	of the end-to-end network infrastructure/services.	
	The performance management system shall be able to	
	collect and report data like:	
5	a. Packet delay and packet loss; b. User bandwidth usage	
	rate; d. Network availability rate; e. CPU usage rate; f.	
	Input/output traffic through physical ports; g. Input/output	
	traffic through logical ports	
	The Performance Management shall have user defined set of reports like:	
	_	
	a. Summary Reports for specific groups: Reports displaying per group of resources the group aggregations	
	for a set of metrics (for example, per City, the maximum	
	traffic or the total traffic).	
6	b. Summary Reports for specific Resources: Reports	
Ū	displaying for a set of resources the period aggregations for	
	the same set of metrics (for example, per interface, the	
	maximum traffic over the day).	
	c. Detailed chart Reports: Reports displaying for one	
	resource and the same set of metrics the values over the	
	period (for example, the raw collected values for the day).	
	Helpdesk and IT Service Management	
1)	General Requirement of IT Service/ Helpdesk	
	Should be able to support and handle large volume of	
1	incident, service requests, changes, etc. and be able to	
	integrate with third party IVR or CTI.	
	The solution should have IT Service Management	
	documentation/ guidelines in-built based on ITIL best	
2	practices and must be ITIL 2011 certified on at least 7	
	processes by Pink Elephant. The certification copies to be	
	submitted.	
3	The solution should have a single CMDB across ITSM and	
	Asset Management system.	
	IT Service Management OEM must be an industry standard,	
4	enterprise grade solution and shall be in the present in	
	Leaders Quadrant of Forrester / Gartner / IDC report for	
	ITSM for the last two years.	]

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	The solution should have a Single Architecture and leverage	
5	a single application instance across ITIL processes,	
	including unique data and workflows segregated by	
	business unit, cost centre, and user role for Incident,	
	Problem, Change, Release, Knowledge Management, Asset	
	Management and CMDB.	
	Solution should support multi-tenancy with complete data	
6	isolation as well as with ability for analysts based on access	
	rights to view data for one, two or more organizational units.	
	Solution should support multi-tenancy with complete data	
7	isolation as well as with ability for analysts based on access	
-	rights to view data for one, two or more organizational units.	
	The solution should provide to browse through CMDB which	
	should offer powerful search capabilities for configuration	
8	items and services, enabling to quickly find CIs as well as	
	their relationships to other CIs.	
	Provide option for approval engine so that any customized	
	applications developed could incorporate the hierarchy,	
9	role based, level-based ad-hoc approval structure. Include	
	notification and escalation capability if approval is not	
	performed.	
10	The support person can interact with the end users through	
	chat in built and add those chat transcripts in the ticket.	
11	A virtual bot should be available, which can respond to user	
11	requests, immediate via portal, email or mobile interfaces.	
12	Beyond mobile iOS and Android apps, Self Service App	
14	should be available on any device with an HTML5 browser.	
	Should provide out-of-the-box categorization, as well as	
13	routing and escalation workflows that can be triggered	
13	based on criteria such as SLA, impact, urgency, CI, location,	
	or customer.	
	Should provide modern data analysis methods for insight	
14	and value to service desk by leveraging unstructured as	
	well as structured data.	
	Tool Analytics should be completely configurable in terms	
	of source data and results, enabling Process Managers and	
	other IT Users to proactively identify trends that can be used	
	to drive action. Multiple instances shall be allowed to be	
	configured in different ways in different modules for	
15	different outcomes - for example one should be able to	
	identify trends in one set of data and subsequently develop	
	linkages with other data, or Analytics can run on top of	
	reporting results to provide further insights from	
	unstructured data.	
	The tool should allow the user to take a screenshot of the	
	error message and sends it to the service desk. The user can	
16	type in a couple of text lines to describe the error in simple	
	language. The service desk agent then can pick up the	
	ticket with the information already filled in (category,	
	impact, and assignment).	
17	The tool should have the knowledge management OOB –	
- 1	knowledge databases to support investigations, diagnoses,	

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	root cause analysis techniques, and creating / updating	
	workarounds, temporary fixes and resolutions.	
	Self Service App should provide a snapshot of your day,	
18	displaying your activities feed with upcoming appointments,	
	pending requests, unresolved issues, and alerts from	
	systems you use in your daily work.	
	Integrates with any underlying service management	
19	including Service Desk, Change Management, Service Level	
	Management and CMDB for request fulfilment.	
	The solution should have the ability to operate all	
20	functionality available in the incident, problem, change,	
	assets etc. via a mobile app on iPhone or Android phone.	
2)	Service Level Management	
	SI's must proposed a full fledges Service Level Management	
1	Solution that allows for tracking of various service level	
	performances of IT Infrastructure and vendor performance.	
	Solution should support comprehensive SLA management	
2	platform and must allow creating and applying various	
4	operational level parameters to Incidents, Requests,	
	Changes, and Release management modules.	
	The tool should provide an audit trail, tracking & monitoring	
	for record information and updates from opening through	
3	fulfilment to closure for example: IDs of individuals or	
	groups opening, updating & closing records; dates / times	
	of status & activities updates, etc.	
	The solution should support SLA violations alerts during the	
4	tracking period and should support managing and	
	maintaining a full history of an SLA.	
	The solution must provide a flexible framework for	
	collecting and managing service level templates including	
5	Service Definition, Service Level Metrics, Penalties, and	
	other performance indicators measured across	
	infrastructure and vendors.	
3)	Auto-Discovery and Inventory	
	Discovery should work without requiring agent installation	
1	(that is, agent-less discovery) while discovery Layers 2	
	through Layers 7 of OSI model.	
	Should use Industry-standard protocols such as WMI, SNMP,	
2	IMX, SSH to perform discovery without requiring the	
_	installation of an agent.	
	Discovery system should have the ability to capture	
3	configuration files for the purposes of comparison and	
	change tracking.	
	Discovery system should be capable of supporting role-	
4	based access to various aspects of CMDB administration.	
	Discovery should be object-oriented, allowing specific CIs	
5	and relationships to be discovered using a library of	
	discovery patterns.	
	Discovery engine should gather detailed asset and	
6	configuration item (CI) information for specific servers and	
6	the applications running on them.	
	the applications running on them.	

7	Solution should dynamically discover and continuously map IT hardware inventory and service dependencies.	
0	Discovery system should have ability to modify out-of-box	
0	discovery scripts, create customized discovery scripts.	

SAN Storage Capacity Requirement at DR Site:

	bill biologe outliery neglinement at bit bite.		
Sl. No.	Product Description	Make / Model Applicable – by the bidder)	Complied (Yes / No)
	HPE SAN Storage with 650 TB USABLE space NL SAS+		
	50 TB SSD USABLE space at DR for replication with		
112	existing DC HPE Primera 650 storage –		
	NetApp SAN Storage with 370 TB USABLE space NL SAS		
	+ 100 TB SSD USABLE space at DR for replication with		
113	existing DC Netapp Storage AFF-A700		

	Description	Make / Model Applicable - by the bidder)	Complied No)	(Yes/
114	Enterprise Firewall as per specification mentioned OR Equivalent as per detailed specification			

# **Details Specification for Serial No. 114**

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	Make / Model Applicable – by the	Complied (Yes/ No)
Item Description	bidder)	
The proposed solution must be an appliance based solution with a minimum throughput of 7 Gbps enabling firewall+ IPS+ Anti-Viru & Zero day prevention module. The proposed solution would be non-proprietary multicore CPU powered appliance based solution.		
Propose solution should allow delivering clean content of a file by eliminating any unknown malicious code on a real time basis before even receiving the emulation verdict		
The Proposed appliance must provide a minimum connectivity to the existing network segments over 1G RJ45 and must have the necessary expansion slot for additional 4 X 10G SFP+ and 2 X 40G QSFP ports in future - if needed.		
The proposed solution must be managed from an on premise centralized management with all logs correlated across all the NGFW modules.		
The proposed solution must not have any vulnerability release in last 3 years as per the global CVE analysts and should not have any proprietary architecture		

The propose solution should be able to cater to a minimum of 8 Million concurrent connection scalable to double in future	
The solution should have minimum licenses' for two virtual instances from day one and scalable to 20 in future with additional upgrade.	
The propose solution should be considered as leaders in segment of Next Generation Firewall by third party industry analyst like Gartner, NSS Lab for last 5 years	
The proposed solution must not have any vulnerability release in last 3 years as per the global CVE analysts and should not have any proprietary architecture	

#### NON-IT at DR

		Make / Model Applicable – by the	Complied (Yes/ No)
Sl. No.	Description	bidder)	
115	24 Port (all) PoE+(190W) switch with 2 SFP uplink ports.		
116	10M HDMI CABLE.		
117	Performance Lite 2 MP IP Eyeball Camera Fixed lens.		
118	CAT 6 Cable		
119	Performance Lite 2 MP IP Bullet Camera Fixed lens.		
120	H265 4K 32CH NVR NO POE.		
121	Conduit 25 mmm PVC		
122	49" Colour Monitor Industrial duty		
123	9 U Network Rack		
124	2 door access Controller		
125	Supply of SMPS for Door Controller.		
126	Supply & Installation of Door controller Enclosure.		
127	Biometric Reader		
128	Card Reader		
129	Supply of "L" and "U" Bracket.		
130	Double Door EM Lock 600 lbs with LED		
131	Z bracket for 600lbs EM Lock.		
	600lbs electromagnetic lock unmonitored type 12V LED		
132	Lamp Only for Single Leafe door.		
133	MAGNETIC CONTACT 2 WIRE.		
	Supply of ACS Workstation Intel® Quad Core, 2.8GHz or higher, 8 GB RAM, 100 GB free disk space, Dual Ethernet		
	10/100MBs, Software Requirements:		
	* Microsoft Windows 10 (Enterprise) 64-bits		
134	* Microsoft .NET Framework v4.0		
135	Exit Button 3 inches X 1 inch.		

136	Smart Access Card	
137	Access Control software	
	Supply Installation Testing & Commissioning of	
	addressable Optical Smoke Detector, Smoke Detection by	
138	: Photo-electric light scattering.	
	Supply Installation Testing & Commissioning of	
	addressable Heat Detector, Detection Technology:	
139	Thermistor / ROR	
	Supply Installation Testing & Commissioning of	
	Addressable Manual call point with built in isolator and	
140	DIL switch for Address Setting	
141	Supply Installation Testing & Commissioning of The Loop	
141	Powered 100 dB Sounder Base with Beacon	
140	Supply Installation Testing & Commissioning of	
142	Addressable Control Module	
143	Supply Installation Testing & Commissioning of Addressable Monitor Module	
140	Supply Installation Testing & Commissioning of	
144	Addressable Isolator module	
111	Supply Installation Testing & Commissioning of 2 Loop Fire	
	Alarm Panel with 126 Addresses per Loop, Battery and	
145	accessories as per requirement. Battery Back-up	
146	2 core x 1 sqmm Copper Flexible FRLS Cable	
	1 - 1	
147	20 mm PVC Conduit	
148	ABC Type Fire Extinguisher 5 Kg	
	SITC of short wavelength laser based ultra high sensitive	
	aspiration smoke detector with resolution of 0.00006%	
	obs/ft (0.0002% obs/m,), 4 pipe inlets, shall support	
	minimum 100 meters pipe length per pipe inlet with	
	cumulative pipe length up to 550 meters for one single detector, 4 alarm levels, optional auto cleaning mechanism	
	for detection chamber, on-board dual stage filter with	
	memory, built-in event memory of 20000 events, pipe wise	
	4 stage flow monitoring, LED indications for alarm	
	and fault conditions. Detector shall support as an inbuilt	
	colour touch screen 3.5" display for status monitoring	
	including smoke level bar graph, analytics to determine	
	nature of sampled airborne particles (dust, diesel & PVC	
	wire burning), connectivity using RS485 & TCP/IP, Wi-Fi	
	support for monitoring using smart phones, connection of	
149	additional displays for remote monitoring.	
	SITC of Power Supply units - Power supply unit with	
	110/230VAC input and 18 to 29VDC output. The power	
	supply unit has the following indications:	
	OK - Green LED and Fault - Yellow LED Power supply unit	
	should have capacity to operate on battery backup in case	
150	of AC mains failure & should have built in charging circuit	
150	for batteries.	
151	SITC of Trunk Adaptor, Capillary Tube Connector,	
151	Capillary Tube, Capillary Sampling Point, Sampling point	

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	label red (complete set) for air sampling in room voids for area having false ceilings.	
	SITC of Sampling Pipe having Smooth bore PVC Pipe	
	25mm Outer Dia& 19 to 21mm Inner Dia with all required	
152	accessories.	
	Supply, Installation, Testing and Commissioning of 2 ZONE Water Leak Detection Panel (for server Room and	
153	Electrical Room)	
154	Water Leak detection Cable Sensor – 25 mtrs	
155	Electronic Hooter	
156	SITC of 2 x 1.0 sq mm screened copper flexible cable	
	SITC of Main Rodent Controller suitable to connect 24	
167	Satellites @ 300sft at room area and 150 at ceiling and floor	
157 158	area. Server Room SITC of Satellite Stations / Transducers covering	
159	Cable and Conduits 2 core 1 sq.mm Cu. Flexible Shielded cable @ 275 meter	
160	each coil	
161	20 mm PVC Conduit	
162	Console)	
163	Stand Brackets	
104	120 ltrs Tank and valve assembly with solenoid	
164	actuator, straps Empty (fill 60 - 100 Kgs.) Fire Suppression Fluid Novec1230, OEM Factory Fill per	
165	KG	
166	Cylender Accessories	
167	Cylinder strap	
168	Pneumatic Actuator Shipping assembly	
169	Local Manual actuator	
170	Flexible discharge Hose -49 mm / SWIVEL ADAPTOR	
171	Flexible Actuation Hose / Pilot hose	
172	Nozzles, Brass drilled -360/180 deg throw selection	
150	LED type display sign board flashing with inbuilt Sounder	
173	"EVACUATE GAS RELEASED" & "DO NOT ENTER"	
174	49 mm MANIFOLD CHECK VALVE	
175	PRESSURE SWITCH – DPST	
176	MANUAL RELELASE SWITCH	
177	ABORT SWITCH  M.S. Seamless pipes as per ASTM A 106 Gr. B, schedule 40	
178	with necessary Fittings & Hangers.	
179	2 WAY MANIFOLD	
180	MS Channel support	
181	Gas Release Panel	
182	Cross Zoning Detector	

184	BUILDING MANAGEMENT SYSTEM APPLICATION	
185	6KVA online UPS with 20 minutes backup	
186	Structured cabling & Server racks: 10 M Cat 6 Cable	
187	15 M Cat 6 Cable	
188	25 M Cat 6 Cable	
189	Cat-6 UTP Cable Roll of 305 Mtrs	
190	12MTP/F-12MTP/F Trunk Cable, OM4, LSZH, 15m, polarity Reversed, Low-Loss	
191	12MTP/F-12MTP/F Trunk Cable, OM4, LSZH, 25m, polarity Reversed, Low-Loss	
192	LC-LC Fiber Duplex Patch Cord OM4 Multimode-3 Meter	
193	LC-LC Fiber Duplex Patch Cord OM4 Multimode-5 Meter	
194	24 Core Fiber Cassette (MPO) AB/BA Pair Flipped 24 Core fiber MPO LC Cassette, Pair Flipped AB/BA, Multi-Mode	
195	Trunk Cable (MPO-MPO) 25Meter MPO-MPO Trunk Male cable, 12 Fiber straight, 50.125 OM4 LSZH Multimode	
196	Trunk Cable (MPO-MPO) 15Meter MPO-MPO Trunk Male cable, 12 Fiber straight, 50.125 OM4 LSZH Multimode	
197	Installation Charge	
198	Server Rack - Supply, Installation, Testing & Commissioning of 42U Server Cabinet Extruded Aluminium Profile frame with top panel; having static load bearing capacity of 1300 Kg as per Tender specifications Dimensions: 2200mm x 800mm x 1200mm all complete as required and as per detailed specifications. Racks, PDUs, containment should be from same OEM	
199	Network Rack with PDU	

#### **B.11** Manpower Requirement for 24x7 Support:

Sr. No.	Description	Complied No)	(Yes/
200	Manpower Requirement for 24x7 Support: BMS Person -3 persons for 5 years for DR site		
201	IT - L1 &L2- 2 persons for 5 years for DR site		

#### B.12 Dedicated DC-DR Link & ILL

Sr.	Description	Complied	(Yes/
No.	Description	No)	
	Dedicated DC-DR Link 2x155 Mbps Leased Circuits from		
202	2 different service providers with 1 Year ARC		
203	1x100 Mbps ILL (1:1) for with 1 Year ARC		

#### **Physical Security:**

204	Providing of 2 Nos physical security for SDC.FY-23-24	Complied No	(Yes/
205	Providing of 2 Nos physical security for SDC.FY-24-25		
206	Providing of 2 Nos physical security for SDC.FY-25-26		

# $FMS/AMC: All\ AMC/ATS\ support\ should\ be\ with\ backline from\ OEM\ and\ OEM\ confirmation\ on\ backlining\ to\ be\ submitted\ in\ bid$

207	FM Cost for 28 persons as per requirement mentioned in existing DCO terms & conditions for 1 year FY-23-24:  Details of 28 persons: 1 Project Manager, 1 Network expert, 2 Network administrators, 1 Security Expert, 2 Security administrators, 1 Server & Cloud Expert, 2 Server & Cloud administrators, 1 Storage expert, 1 Database expert, 3 Helpdesk personnel, 1 BMS expert, 2 BMS administrators, 1 EMS expert, 3 Backup administrators, 4 Security Guards, 2 House Keeping personnel	Complied No)	(Yes /
208	FM Cost for 28 persons as per requirement mentioned in existing DCO terms &conditions for 1 year FY-24-25:  Details of 28 persons: 1 Project Manager, 1 Network expert, 2 Network administrators, 1 Security Expert, 2 Security administrators, 1 Server & Cloud Expert, 2 Server & Cloud administrators, 1 Storage expert, 1 Database expert, 3 Helpdesk personnel, 1 BMS expert, 2 BMS administrators, 1 EMS expert, 3 Backup administrators, 4 Security Guards, 2 House Keeping personnel		
209	FM Cost for 28 persons as per requirement mentioned in existing DCO terms & conditions for 1 year FY-25-26: Details of 28 persons: 1 Project Manager, 1 Network expert, 2 Network administrators, 1 Security Expert, 2 Security administrators, 1 Server & Cloud Expert, 2 Server & Cloud administrators, 1 Storage expert, 1 Database expert, 3 Helpdesk personnel, 1 BMS expert, 2 BMS administrators, 1 EMS expert, 3 Backup administrators, 4 Security Guards, 2 House Keeping personnel		
210	AMC/Support Cost for IT (software and hardware) equipmentFY-23-24	Complied No)	(Yes /
211	AMC/Support Cost for IT (software and hardware) equipmentFY-24-25		
212	AMC/Support Cost for IT (software and hardware) equipmentFY-25-26		
213	AMC/Support Cost for Non-IT Equipment (2nd Floor)FY-23-24		
214	AMC/Support Cost for Non-IT Equipment (2nd Floor)FY-24-25		
215	AMC/Support Cost for Non-IT Equipment (2nd Floor)FY-25-26		
216	AMC/Support Cost for Non-IT Equipment (1st Floor)FY-23-24		

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217	AMC/Support Cost for Non-IT Equipment (1st Floor)FY-24-25		
218	AMC/Support Cost for Non-IT Equipment (1st Floor)FY-25-26		
219	AMC/Support Cost for PAC, UPS, Panel & DG. (1st Floor))FY-23-24		
220	AMC/Support Cost for PAC, UPS, Panel & DG. (1st Floor))FY-24-25		
221	AMC/Support Cost for PAC, UPS, Panel & DG. (1st Floor))FY-25-26		
222	Cost of dedicated Operation and AMC Support for RSA SIEM for WBSDC through L2 Level EngineerFY-22-23		
223	Cost of dedicated Operation and AMC Support for RSA SIEM for WBSDC through L2 Level EngineerFY-23-24		
224	Cost of dedicated Operation and AMC Support for RSA SIEM for WBSDC through L2 Level EngineerFY-24-25		
225	Cost of dedicated Operation and AMC Support for RSA SIEM for WBSDC through L2 Level EngineerFY-25-26		
226	AMC/Support Cost for UPS batteries for 2 years (4th & 5th years), post initial 3 years warranty period for 204 cells of 2v/357ahFY-23-24		
227	AMC/Support Cost for UPS batteries for 2 years (4th & 5th years), post initial 3 years warranty period for 204 cells of 2v/357ahFY-24-25		
228	AMC/Support Cost for UPS batteries for 2 years (4th & 5th years), post initial 3 years warranty period for 204 cells of 2v/357ahFY-25-26		
229	Professional Support Services for one Database and one System Administrators with effect from 1.4.2022FY-22-23		
230	Professional Support Services for two Database and two System Administrators with effect from 1.4.2022FY-23-24		
231	Professional Support Services for three Database and three System Administrators with effect from 1.4.2022FY-24-25		
232	Professional Support Services for three Database and three System Administrators with effect from 1.4.2022FY-25-26		
233	Vodafone/other ISP 1000 Mbps ILL for WBSDC for 1-year upto 31.03.2022FY-21-22		
234	Vodafone/other ISP 1000 Mbps ILL for WBSDC for 1-year upto 31.03.2023FY-22-23		
235	Vodafone/other ISP 1 Gbps (1:1) ILL for WBSDC for 1-year upto 31.03.2024FY-23-24		
236	Vodafone/other ISP 1 Gbps (1:1) ILL for WBSDC for 1-year upto 31.03.2025FY-24-25	Complied No	(Yes/
237	Vodafone/other ISP 1 Gbps (1:1) ILL for WBSDC for 1-year upto 31.03.2026FY-25-26		
238	AMC & UPGRADE of old SDC cloud servers (Qty. 4)FY-22-23 (NIC card from 1 to 10 GBPS and RAM 256 GB to 512 GB)		

239	AMC of old SDC cloud servers (Qty.4)FY-23-24/Equivalent	
240	AMC & UPGRADE (30 to 75 TB) of Dell VTL old SDC cloud system OR Equivalent for period from 1/4/2022 to 31/3/2023FY-22-23	
241	AMC of Upgraded Dell VTL of old SDC cloud system OR Equivalent for period from 1/4/2023 to 31/3/2024FY-23-24	
242	AMC & UPGRADE (75 TO 100TB) of Dell VTL old SDC cloud systemOR Equivalent for period from 1/4/2024 to 31/3/2025FY-24-25	
243	AMC of Upgraded Dell VTL of old SDC cloud system periodOR Equivalent from 1/4/2025 to 31/3/2026FY-25-26	
244	AMC / ATS & UPGRADE (from 40 to 60TB) of Commvault Backup SystemOR Equivalent upgraded BOQ from 2023for FY-23-24	
245	AMC / ATS (60TB) of Commvault Backup SystemOR Equivalent upgraded BOQ from 2024FY-24-25	
246	AMC / ATS (60TB) of Commvault Backup SystemOR Equivalent upgraded BOQ from 2025 FY-25-26	
247	AMC of WBSDC new cloud (blade) servers - lot one for FY-23-24	
248	AMC of WBSDC new cloud (blade) servers - lot one for FY- 24-25	
249	AMC of WBSDC new cloud (blade) servers - lot one for FY-25-26	
250	AMC of Netapp SAN storage (430 TB) for the period from 2023FY-23-24	
251	AMC of Netapp SAN storage (430 TB) for the period from 2023FY-24-25	
252	AMC of Netapp SAN storage (430 TB) for the period from 2023FY-25-26	
253	AMC of WBSDC new network (SDN) infrastructureFY-23-24	
254	AMC of WBSDC new network (SDN) infrastructureFY-24-25	
255	AMC of WBSDC new network (SDN) infrastructureFY-25-26	
256	AMC & UPGRADE of RedhatOpenstack Cloud Software License SA for FY-23-24:  PRODUCT DESCRIPTION  Red Hat OpenStack Platform with Smart Management, Premium (2-sockets)	
257	AMC & UPGRADE of RedhatOpenstack Cloud Software License SA for FY-24-25 PRODUCT DESCRIPTION Red Hat OpenStack Platform with Smart Management, Premium (2-sockets)	
258	AMC & UPGRADE of RedhatOpenstack Cloud Software License SA for FY-25-26	

	PRODUCT DESCRIPTION			
	Red Hat OpenStack Platform with Smart Management, Premium (2-sockets)			
	Renewal/ upgrade of RSA Software Product I OEM support for 1 yearFY-22-23	icenses w	rith	
	RSA existing Item Description	Qty		
	Issues Management Perp EnhMaint /100	1	1	
	On-Demand App Perp EnhMaint /100	5		
	CYBINBR PERP <5K ENH /100EMP /MO	1		
	NW S5 Hybrid for Pkts EnhMnt1M	1	]	
259	NW S5S HeadUnit Archiver EnhMnt 1M	1	]	
	NW S5SHeadUnit EvntStrmAnalysis EnhMnt1M	1	<u> </u>	
	NW S5 Hybrid for Logs EnhMntlM	1	<u> </u>	
	NW S5 AnlyticsSvr 10U EnhMnt1M	1		
	Tier1 RNWE EnhMnt p/Host 1-250 1Mo	1		
	EMULEX 2 PORT 8GB SAN HBA EnhMnt1Mo	1		
260	Renewal / upgrade of RSA Software Product OEM support for 1 yearFY-23-24	Licenses v	vith	
261	Renewal / Upgrade of RSA Software Product OEM support for 1 yearFY-24-25	Licenses	with	
262	Renewal / upgrade of RSA Software Product OEM support for 1 yearFY-25-26	Licenses v	vith	
263	SOAR (Security Orchestration Automation Re Software License RenewalFY-24-25	sponse)		
264	SOAR (Security Orchestration Automation Re Software License RenewalFY-25-26	esponse)		
265	DDOS additional 1 Years subscription for suthis RFP for FY-24-25	pplied BC	Q in	
266	DDOS additional 1 Years subscriptionfor sup this RFP for FY-25-26	plied BO	Q in	
267	DC Augmentation – Installation, Commiss System Integration Charges	sioning &	:	
268	Deep Security Enterprise Software License - VMs for 2 years during FY-21-22	additiona	1 150	
269	Deep Security Enterprise Software License - VMs for 1 years & License renewals for all ex during FY-22-23			

Deep Security Enterprise Software License - additional 50 VMs for 1 years & License renewals for all existing licenses		
Deep Security Enterprise Software License - additional 50 VMs for 1 years & License renewals for all existing licenses		
Deep Security Enterprise Software License - additional 50 VMs for 1 years & License renewals for all existing licenses		
Existing EDB Postgres Standard License CPU - 16 Core support renewal for FY-22-23 with 24*7 support		
Existing EDB Postgres Standard License CPU - 16 Core support renewal for FY-23-24 with 24*7 support		
Existing EDB Postgres Standard License CPU - 16 Core support renewal for FY-24-25 with 24*7 support		
Existing EDB Postgres Standard License CPU - 16 Core support renewal for FY-25-26 with 24*7 support		
EDB Postgres Enterprise License CPU Core support renewal for FY-25-26 with 24*7 support : for Production & Replication both of Sr no 9 & 10		
VMware vCloud Suite Subscription per CPU 20 CPUs with 1 vCenter Commitment Plan - 12 month Prepaid with		
VMware vCloud Suite Subscription per CPU 20 CPUs with 1 vCenter Commitment Plan - 12 month Prepaid with		
VMware vCloud Suite Subscription per CPU 20 CPUs with 1 vCenter Commitment Plan - 12 month Prepaid with		
VMware vCloud Suite Subscription per CPU 20 CPUs with 1 vCenter Commitment Plan - 12 month Prepaid with		
DC-DR Leased Circuit (2x155 Mbps) & 100 Mbps ILL (1:1) ARC for DR SiteFY-22-23		
DC-DR Leased Circuit (2x155 Mbps) & 100 Mbps ILL (1:1) ARC for DR SiteFY-23-24		
DC-DR Leased Circuit (2x155 Mbps) & 100 Mbps ILL (1:1) ARC for DR SiteFY-24-25		
DC-DR Leased Circuit (2x155 Mbps) & 100 Mbps ILL (1:1) ARC for DR SiteFY-25-26		
Capacitor Bank change of old UPSFY-21-22		
Capacitor Bank change of old UPSFY-24-25		
Electrical and Earth Pit Repair / ReconstructionFY-22-23		
DG Repair / Replacement due to aging / obsolescenceFY- 22-23		
DG Repair / Replacement due to aging / obsolescenceFY- 24-25		
	VMs for 1 years & License renewals for all existing licenses for yearFY-23-24  Deep Security Enterprise Software License - additional 50  VMs for 1 years & License renewals for all existing licenses for yearFY-24-25  Deep Security Enterprise Software License - additional 50  VMs for 1 years & License renewals for all existing licenses for yearFY-24-25  Deep Security Enterprise Software License - additional 50  VMs for 1 years & License renewals for all existing licenses for yearFY-25-26  Existing EDB Postgres Standard License CPU - 16 Core support renewal for FY-22-23 with 24*7 support  Existing EDB Postgres Standard License CPU - 16 Core support renewal for FY-23-24 with 24*7 support  Existing EDB Postgres Standard License CPU - 16 Core support renewal for FY-24-25 with 24*7 support  Existing EDB Postgres Standard License CPU - 16 Core support renewal for FY-25-26 with 24*7 support  EDB Postgres Enterprise License CPU - 16 Core support renewal for FY-25-26 with 24*7 support  EDB Postgres Enterprise License CPU - 16 Core support renewal for FY-25-26 with 24*7 support  EDB Postgres Enterprise License CPU - 16 Core support renewal for FY-25-26 with 24*7 support EDB Postgres Enterprise License CPU - 16 Core support renewal for FY-25-26 with 24*7 support EDB Postgres Enterprise License CPU - 16 Core support renewal for FY-25-26 with 24*7 support EDB Postgres Enterprise License CPU - 16 Core support renewal for FY-25-26 with 24*7 support EDB Postgres Enterprise License CPU - 16 Core support EDB Postgres Enterprise License CPU - 16 Core support EDB Postgres Enterprise License CPU - 16 Core support EDB Postgres Enterprise License CPU - 16 Core support EDB Postgres Enterprise License CPU - 16 Core support EDB Postgres Enterprise License CPU - 16 Core support EDB Postgres Enterprise License CPU - 16 Core support EDB Postgres Enterprise License CPU - 16 Core support EDB Postgres Enterprise License CPU - 16 Core support EDB Postgres Enterprise License CPU - 16 Core support EDB Postgres Enterprise License CPU - 16 Core sup	VMs for 1 years & License renewals for all existing licenses for yearFY-23-24  Deep Security Enterprise Software License - additional 50  VMs for 1 years & License renewals for all existing licenses for yearFY-24-25  Deep Security Enterprise Software License - additional 50  VMs for 1 years & License renewals for all existing licenses for yearFY-28-26  Existing EDB Postgres Standard License CPU - 16 Core support renewal for FY-22-23 with 24*7 support  Existing EDB Postgres Standard License CPU - 16 Core support renewal for FY-23-24 with 24*7 support  Existing EDB Postgres Standard License CPU - 16 Core support renewal for FY-24-25 with 24*7 support  Existing EDB Postgres Standard License CPU - 16 Core support renewal for FY-24-25 with 24*7 support  Existing EDB Postgres Standard License CPU - 16 Core support renewal for FY-28-26 with 24*7 support  EDB Postgres Enterprise License CPU Core support renewal for FY-28-26 with 24*7 support  EDB Postgres Enterprise License CPU Core support renewal for FY-28-26 with 24*7 support: for Production & Replication both of Sr no 9 & 10  VMware vCloud Suite Subscription per CPU 20 CPUs with 1 vCenter Commitment Plan - 12 month Prepaid with supportFY-22-23  VMware vCloud Suite Subscription per CPU 20 CPUs with 1 vCenter Commitment Plan - 12 month Prepaid with supportFY-24-25  VMware vCloud Suite Subscription per CPU 20 CPUs with 1 vCenter Commitment Plan - 12 month Prepaid with supportFY-24-25  UMware vCloud Suite Subscription per CPU 20 CPUs with 1 vCenter Commitment Plan - 12 month Prepaid with supportFY-24-25  DC-DR Leased Circuit (2x155 Mbps) & 100 Mbps ILL (1:1)  ARC for DR SiteFY-22-23  DC-DR Leased Circuit (2x155 Mbps) & 100 Mbps ILL (1:1)  ARC for DR SiteFY-23-24  Capacitor Bank change of old UPSFY-21-22  Capacitor Bank change of old UPSFY-21-22  Capacitor Bank change of old UPSFY-21-22  Capacitor Bank change of old UPSFY-22-23  DG Repair / Replacement due to aging / obsolescenceFY-22-23  DG Repair / Replacement due to aging / obsolescenceFY-

#### Note:

- 1. The bidder can propose different OEM component / device with same specification and quantity mentioned in RFP if the existing security components reach end of life (EOL). However the
- 2. new component needs to be integrated with the existing security devices/systems.
- 3. There is no SOAR at WBSDC at present. It is proposed to implement new SOAR but it has to be implemented with existing SIEM tool in use at WBSDC.
- **4.** Existing CA EMS will be migrated to new EMS after expiry of support from existing SI/OEM after August 2023. New EMS may be implemented prior to actual expiry for smooth transition of services.
- 5. End of OEM support items in good working condition may be used for low priority jobs.
- 6. End of life & end of OEM support equipments will be disposed by WTL as and when required.
- 7. Existing HPE Primera 650 Warranty support coverage validity is upto 30th September 2026.
- 8. 2x155 Mbps Leased Circuits between DC and DR required from Day1 (from 2 different telecom service providers), upgradeable upto total 500 Mbps (2x250 Mbps) or higher bandwidth if required. Complete address for DC & DR as follows:
  - DC Address: WBSDC, 2nd Floor Monibhandar, Webel Bhavan Complex, Block-EP&GP, Sector-V, Salt Lake City, Kolkata 700091.
  - DR Site Address: Webel IT Park, North Lake Road, Saheb Bandh, Purulia -- 723101, West Bengal.
- 9. lx 100 Mbps ILL (1:1) upgradeable to 1 Gbps ILL (1:1) in future required for DR site only.