

Sr. No	Section & Clause Ref. No / Annexure No	Clause (in brief) of RFP requiring clarification (s)	Points of clarifications referred by Bidder (s)	LIC Clarification /Modification in clause (Highlighted in Bold)
				Capacity Planning -
1	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The solution shall be able to maintain a record of the rack capacity and utilization including: i) Total rack space and occupied rack space ii) Total number of available intelligent panel ports iii) Total number of non-intelligent panel ports iv) Total number of switch ports and “switch utilization” v) Total number of PDU power outlets (if applicable) vi) Total number of env. Sensors (if applicable)
2	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The solution should provide the capability to automatically check the possible movement of any device to a new location by verifying the network availability with any proposed setting, providing the patching information with options and creating a work order for the same. All this is to be achieved by a mere drag and drop operation.
				Server Management
3	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Overall hardware monitoring including temperature
4	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Monitor both standalone and blade Infrastructure and its components.
5	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Power Consumption of standalone and blade infrastructure

6	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Monitoring of the following server parameters: i) Disk Usage ii) CPU Usage iii) Swap Memory iv) Virtual Memory v) Interface status vi) Log file monitoring vii) Process status viii) CPU Utilization by a process ix) Service Status x) Fan Status xi) Power Status
7	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		We should be able to ascertain the latency in socket programming, if any. In a client-server architecture with several remote hosts communicating with a central cluster server, might develop latency due to network congestion or due to database impropriety.
8	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The proposed solution should be able to ascertain application level issues in the server
				Storage Management- Parameters
9	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Overall hardware monitoring including temperature
10	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Support for various storages type like NAS, SAN, etc.
11	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		IOPS at lun level
12	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Hosts/wwns connected to the storage

13	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Disk usage at lun level
14	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Fault in hardware components
15	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Cache Utilization
16	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Host Port Utilization
17	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Disk utilization
				Database Management - Parameters
18	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Support for multiple databases like Oracle, DB2, Sybase, MySQL, PostgreSQL etc.
19	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Table space information used/free
20	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		List of Top sessions CPU/memory/IO consumption with history
21	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		List of Active sessions with history

22	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Invalid objects
23	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Undo/Temp space usage with history
24	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Top wait events in database
25	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Log switch frequency
26	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Memory usage SGA/Shared pool
27	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Disk Read/Write Latency Monitor
28	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Monitoring block locks
29	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Overall database health status in single dashboard
30	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Database query monitoring

				Virtual Environment Management - Parameters
31	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		CPU and Memory Utilization in general
32	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Process Utilization- Correlation between CPU, memory, I/O, paging
33	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Paging space & I/O Utilization
34	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Error reports generated by hypervisors
35	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		System, security and audit logs
36	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Integrate with industry leaders in hypervisor technology.
37	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Detect the failover and fall-back in high availability environment.
38	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Bandwidth utilization at the physical and virtual host level.

				Network Management
39	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The proposed solution should have a pre-integrated network fault and performance management platform, so that it allows us to monitor all the networking equipment which constitutes the backbone network.
40	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The proposed solution should provide a GUI which should show the rack status upfront. We should get the information on every equipment on the rack. Right from the make of the equipment to the equipment type. Power input to any equipment should be visible upfront. The temperature & humidity maintained across the rack should be visible at least 3 levels.
41	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		We should get to know, which equipment is connected to which other equipment physically and logically in the DC. We should be able to create a matrix between a couple of products, which are critical to any customer. The proposed solution should support event co-relation where the correlation logic can be configured by operator.
42	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The proposed solution should support for SNMP traps.
43	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The OSS framework of the proposed solution should be such that we can consolidate the management of various IT devices (networks, security, storage, application, virtualised platforms), along with the infra devices like the LT panel, DG sets, the HVAC parameters, from a single console. The idea is to find out the impact of the NON IT infra on the IT infrastructure in the DC.
44	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Trend analysis and instant drill down capability to know the peaking issues, which could hurt the operations of the infrastructure at any point of time. That is possible when the application has a inbuilt round robin database or some other static DB.

45	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		All alarm/event messages shall be automatically time and date-stamped.
46	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The proposed solution should be able to filter out events for device / infrastructure marked under maintenance. It should have a GUI to define maintenance schedule.
47	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The proposed solution should suppress events for all the network elements that are down for routine maintenance. This would assist faster root cause determination, while it would also help to prevent flooding of non-relevant console messages. We should have the provision of appropriating parent-child relationship between all the networking devices in the network.
48	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The solution should be capable of tracking device history for networked end devices including the following forensics details: i) When device was first connected to the network ii) If and when it was removed from the network iii) If and when it was moved from one physical location to another iv) How long it has been active or inactive v) Asset, configuration and change management
49	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The solution should be based on a designated intelligent hardware which deliver physical connectivity information to the management software
50	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The Physical Layer Management solution should be strictly based on the physical detection of patch cord connectivity.
51	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The solution should provide the capability of electronically tagging any network equipment such as network printer, servers, IP Camera, desktop, switches, modems, etc.

52	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The system should be robust and should report the patching connectivity information as complete only when the two ends of the same patch cords are connected and should not get confused by any subsequent insertion of any other patch cord.
53	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Patch cord removal from Panel / Switch side should be monitored and alerts like email/SMS should be sent even if one end of the patch cords removed.
54	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		No need for manual acknowledge at the patch panel port if a cord has been inserted on the switch side. (Manual acknowledge means: push button adjacent to a specific port).
55	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The solution should provide the capability to automatically monitor 24/7 of remote sites network links and verify network availability all the time. In case of a link brake, the solution should send a real time event & alarm.
56	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The solution should be able to monitor on-line of patch cord removal from either side : i) Between intelligent panels ii) Between intelligent panel to active device like Switch.
57	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The solution should have the following visual indications: i) LED above each port - indicating patching rough, parching work order pending and correcting bilking mode in case of patching mistake. ii) LED per each patching frame – indicating panel status. iii) Sound – in case of patching or removal of a cord between either intelligent panels or between intelligent panel to a switch. iv) Rack indicator – the solution should support rack indicator (beacon) in order to guide the work order executer to the specific work order cabinets/racks.

58	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The solution should provide the capability of monitoring port availability status on network equipment including switches, patch panels and telecommunication outlets should be monitored in real time for the purpose of detecting unexpected or unauthorized activities.
59	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The solution should be able to communicate and exchange data with other system using of standard protocols and database formats (e.g. SNMP, SQL).
60	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The solution should provide the capability of monitoring any Physical link port type including copper and fibre
61	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The solution should be capable to handle multiple provisioning operations to reduce the time of such operations drastically.
62	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The solution should offer as a built in feature the possibility to report any unauthorized MAC outside the white list of MACs allowed on the site.
63	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The solution should be capable to block switch ports automatically on intrusion detection. This capability however should be selectable by the user depending on the critical nature of the location.
64	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The solution should be capable to detect IP Phones connected along with Computers.
65	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The software should provide a location based security to manage authorized /un authorized connectivity. The security should be per port /desk/room/floor basis.

66	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The solution should have inbuilt dashboard which should show switch/panel port utilization
67	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The solution should be capable to detect and report about device connection and identify the associated location. This information can be used to establish whether this is an authorized connection in order to respond appropriately.
68	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The solution should provide a comprehensive open-ended solution e.g. an SDK (software development Kit) and not just the capability to send SNMP traps to integrate the solution with any 3rd party software or in-house software.
69	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Integration can be done via: SNMP traps, XML, database sharing and web services.
70	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The solution should be provided with an unlimited user licenses. This is important to enable use by multiple users.
				Cooling Management- Parameters
71	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The system should be capable of integrating any air-conditioning device. Whether it's a HVAC or a PAC. It should provide relevant info for energy conservation and safety.
72	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		System should be able to represent the environmental condition of the data centre area in terms of temperature and humidity, on the same dashboard where operational parameters of air-conditioning are getting monitored. This would enable us to take necessary steps to optimize the PAC/AC settings and bring down energy usage/bill.

73	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		System should have the capability to collect and integrate the energy consumption data from all the components which are affected by the Chiller, HVAC, AHU systems respectively to produce the total energy consumption data. Reports for us to understand the cost of operations.
74	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		System should be able to provide trend reports on the energy consumption pattern by the air-conditioning systems and their run-hours for each data centre. These reports would help the authorities to understand and fine tune its process to increase the operational efficiency in the DC operations.
75	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Centralize and Proactive fault and performance monitoring of all the air-conditioning system installed in the data centres.
				Energy Management - Parameters
76	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The system should be capable of integrating with the mains, DG, UPS, PDU, rectifier, energy meter for continuous monitoring of its health. The battery health of the UPS would also be needed.
77	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		System should be able to integrate the Transformer and LT section of the DC. We should be able to nomenclate every circuit breaker to the end equipment visually, so that all electrical problems are immediately tracked to the route. It should also be able to do AMR (automated meter reading) to keep track of daily energy usage.
78	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		System should be able to continuously monitor the quality of power, supplied from the electricity board and by the Generators (PF,frequency,harmonics distortion etc.), in order to avoid downtime.
79	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		System should have the feature to setup thresholds on each of the monitored energy parameter.

80	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		System should be able to clearly provide load trend for each rack. If need be we should be able to setup practical thresholds to get alerted on overload situations, in order to avoid blackouts. Secondly would also allow us to understand the electric bills vs the revenue generated per rack.
81	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Based on the information of network provisioning, space available in the racks and the real time power being consumed, the solution should be able to automatically provision any new device in a datacentre and provide the required work order. All this is to be achieved by a mere drag and drop operation.
82	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The solution should provide visual representation of the datacentre environment specially to view the power consumption status in the racks at one go.
83	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The solution should be ready to integrate to IP power strips to get information of the power being consumed in the racks in real time and use this information for provisioning of servers inside any communication room.
				UPS Parameters for monitoring
84	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Mains Failure
85	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Capacity
86	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Input Frequency, Voltage

87	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Output Frequency, Voltage
88	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Output Current
89	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Output Load
90	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Low Battery
91	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		On Bypass
92	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Battery Charging and Discharging Cycle.
				Energy meters and PDU - Parameters
93	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		KWh
94	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Volts

95	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Current
96	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Frequency
97	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Power Factor
98	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Phase Angle, Watts, VA.
				CCTV & Access Control - Parameters
99	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Proposed system should be capable to integrate with the surveillance systems and access control systems of the DCs for availability monitoring to give results in unison.
100	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Should manage various areas of operations which would be managed by the combination of CCTV and Access control
101	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The power source along with the network BW needs to be constantly monitored.
102	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		At any point the power should not be less than 7.5 watts to any camera.

103	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Every camera has to be managed for its "FOV" (field of value). Thus the moment the camera moves from its prefixed FOV setup, command centre should get an alert for the camera and its location.
104	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The system should be able to monitor the health of all the associated servers & encoders installed for the collection of video feed from the cameras installed in the premises.
105	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The access control should allow only responsible people to access the cameras and the VDO captured in the relevant servers.
106	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The proposed solution should be open to integrate with any camera on standard interfaces irrespective of the make or model.
107	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		View feed and recording feed from the camera's should be separately monitored.
108	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Detection of constant vs variable bit rate
109	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The proposed solution should be able to collect various outputs of the metadata, as configured by the VMS application. Which would allow detection of accidents, Unruly crowd, wrong parking etc.
110	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		We should get info from 1. incident logs, 2. Viewing logs, 3. Fault logs and Viewing logs

111	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		We should always have a check on image resolution vs the bandwidth usage
112	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Availability of the network and availability of enough throughput on the fibre would be an important component to be managed. The designated VPN on the fibre for CCTV traffic should be always under scanner. Similarly, the space on the storage boxes should always be on scanner.
113	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Capacity mgmt. on the network side and that on the storage side should be on constant watch on the command centre dashboard.
114	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The proposed solution should be using a round robin database, for instantaneous information on a few critical aspects packet drops, high latency, high jitters and errors on the network switch ports.
115	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The proposed solution should be able to detect motion, detect object missing, or object added. These 3 facets can actually detect an accident, object missing can detect a theft and object detection can detect that a foreign object was added (say in a loc, where we don't expect any foreign object)
116	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		We need to check whether all the cameras were sending continuous data and not garbage.
				Fire Alarm System Monitoring and Management - Parameters
117	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The system should proactively alert in case there is a possibility of a electrical fire (short circuit or over current)

118	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The system should have the capability to integrate with different makes of fire alarm panels in the DCs and provide the alarms generated by the system on the centralized Dashboard.
119	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The system should be able to process a proper evacuation plan in case of fire
120	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Trigger Audio and Visual alarm
121	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Co-relate with the nearest camera in the site with the FAS zone.
122	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Switching ON of lights on the evacuation pathway.
				DG Monitoring & Fuel Automation - Parameters
123	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Proposed system should be able to integrate with diesel generators for measuring fuel level and run hours of the DG. System should also allow us to monitor various alarms (like: LLOP, dg on, etc.) including quality of power of the DG.
124	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		System should be capable to do fuel level monitoring of the diesel tanks installed for the gen-sets in the DC' building, in order to have a proactive estimation of fuel availability.
125	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		System should be able to provide information on the exact details of the diesel supplied, DG run hours and fuel consumed through automated reports, in order to give transparency.

126	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		If required, system should have the capability to automate the process of fuel supply using pumps from the main diesel tank to the individual diesel tanks of the gen-sets. Automation of the pumps for the filling of the diesel tanks should be based on user definable threshold level of diesel in the tanks
127	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		System should be able to capture the diesel consumption and then be able to co-relate it with the gen-set run-hours and amount of energy generated by the gen-set to provide reports on the cost per hour and cost per unit values.
128	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		System should be capable to detect and notify in case of fuel pilferage, fraud, based on the fuel consumption pattern.
129	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Automation of transfer of Fuel supply from Main tank to buffer tanks in case of low fuel levels in the buffer tank.
130	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Automatic Notification of low fuel level in main tank for procurement of the fuel.
131	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Manual remote filling of the fuel from main tank to buffer tanks.
132	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The system should be capable enough to store the raw data or as polled data, for at-least for 365 days. It should also have the facility to automate the backup process or allow us to take manual backup, in case if it is required.
133	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The system should support multiple administrators, if need be using separate accounts with associated individual and group rights and privileges. Normal users may have only read access, that too only to related areas.

				Centralized Reporting & Dashboard
134	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The dash board and reporting engine should provide, centralized view as the face of all the elements in the IT (network, server, application and database) and Non-IT infrastructure (physical security, safety & energy) at DC.
135	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Reporting provides business users with highly interactive and power-users with highly sophisticated, pixel-perfect reports.
136	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Web-based interactive reporting for business users, Rich graphical report designer for power users, Parameterized reports with powerful charting, Output in popular formats: HTML, CSV, PDF.
137	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The reports should be able to be filtered and sorted on the basis of customer name/ Impact based/ Environmental based mapped to date and time
138	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Intuitive & rich graphic designer to create customized reports, such as: DC-PUE (enable us to measure how much energy is getting consumed in IT and how much in DC infrastructure).
139	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Solution should provide us a comprehensive centralized dashboard for health monitoring of DC (IT + Facility Infrastructure) components like: Routers, Switches, AC, UPS, DG, Fuel etc.)
140	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		It should have the ability to connect and provide datacentre environment reports like power consumption in racks in real time, temperatures within racks, rack door closures, water level sensing etc.
141	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		DC Sample Reports

142	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Capacity Planning Reports: Current usage Vs. Available for Power, Cooling & Fuel.
143	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		DC temperature profile: weekly, monthly
144	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		PUE: Live, last week, last month
145	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Comparative analysis of Energy usage of the DC on monthly basis.
146	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Monthly DC operation cost: Analysis covering main's run hours, DG run hours, and fuel consumed.
147	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Weekly and Monthly trend of the power factor of the Mains supply.
148	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Weekly and Monthly trend of the power factor of the Gen-set supply.
149	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		DC wise V/s Main Analysis.
150	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		DC wise Equipment's Availability report which would help us in SLA computation.

				Service Management - Parameters
151	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The proposed solution should be able to anticipate, all issues which might occur at any point of time in a DC. The fastest methodology of closing these issues would be the highest priority of this proposed solution. The proposed solution should be able to manage the priorities of all services being rendered by this DC. Time to acknowledge and time to respond would be maintained by this proposed solution. All escalation handling, in case the TTA and TTR are not managed, would be handled by this proposed solution
152	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		All the stakeholders who are part of the DC would be managed by this proposed solution.
153	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The solution should provide predefined ITIL workflows for Incident, Request, Problem and Change Management.
154	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The proposed solution should have a built-in service management module which allows the operations team to document all the contracts and services, they have under their control.
155	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Service Desk should have a complete CMDB (Configuration management database) which allows IT operations to document IT inventory.
156	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Service Desk should have known error database that allows IT operations to document known issues in order to speed up the resolution process.
157	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		All Changes of the telecommunications infrastructure facilities and networked devices should be maintained within the intelligent management system to keep track of current activities and completed activities including:

158	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Real time tracking of authorized and unauthorized patching activities
159	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Generation of move, add, change work orders
160	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Providing means for retrieval of work orders at racks with intelligent equipment using port LEDs, tablet
161	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Automated tracking of work order completion
162	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Scheduled work order and work order history
163	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Monitoring and alerting on connected information
164	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The solution should be fully comply with ANSI/TIA 606-B (including B-1) and ISO/IEC 18598 standards.
165	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The scanning devices should automatically detect the panel type; the scanning devices are connected to, and should also automatically detect the connectivity between the scanning devices. This is necessary for automatic & error free real time detection & installation of hardware components in the software.

166	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The solution should offer flexibility to extend the panel scanning capability to distances more than 7 feet (one rack) in order to cover more than a single rack.
167	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The solution connectivity, between the different scanning appliances, should be based on RJ-45 cords.
168	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Since all the upper & centre units of the rack (critical real estate space in rack) will be required to mount panels or switches to provide a hassle free environment for their control and installation, the scanning devices would be mounted either at the top or bottom of the rack. Hence it is important that the scanning devices should carry a design such that they require minimum interaction during any work order execution and do not force any change in the rack design to enable their functioning.
169	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The solution should be efficient and should not require use of multiple media for providing or verifying of the same information or carrying out a work order. Any work order execution should be achieved by means of lights without requiring any other interface. This is essential to ensure easy usage of the system.
170	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The solution should provide the technician an easy method of patching with- out imposing any specific sequence rules/order for the patching, thus allowing the technician to carry patching work orders as in the case of a non-intelligent solution including physical location.
171	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The solution should provide the capability to automatically connecting to a remote DB sites as well as to a local DB

172	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Third Party Integration - In case need be. The proposed solution should have both north and south bound gateways. proposed solution should be open for third party integration via (soap, xml, web service, snmp-v1,v2,v3). It should also allow gateway level integration with 3rd party interfaces like BACnet and Modbus RTU, whenever needed.
173	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Salient Facility Dependencies - Monitor & Control salient interdependencies between safety and security systems: In case of fire, we should get immediate notification(ex: less than 5 secs) and the respective incident should automatically get logged in the service desk with methods suggesting retrieval of the situation.
174	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		System with CMDB - Integrate people, process & technology. Decreasing the likelihood of downtime in the data centre by facilitating communication across people responsible(part of the facilities) to keep the SLAs and Asset Lifecycle with IMAC process. A definite inventory management solution should be part of the solution.
175	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Root-Cause Analysis - Isolate and pinpoint the problem area before it impacts the overall DC operations & business continuity while suppressing down the unwanted events.
176	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The integrated system should keep an eye on the amount of energy used by individual racks, vis a vis the total power allocated for the DC/Aisles
177	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		The DC should be designed in Hot and cold Aisles. This would help in better energy usage. A step towards making a green DC.
178	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Energy sources should always be kept in check. Rated power consumption vs the power available for consumption. Since one of the big reasons for fire is higher load than the Rated load

179	2.2.2. Desired State and Broad Scope of Work, Point No 25, Page No 15	Detailed DC monitoring specifications for Centralised Command Center		Rise in Humidity and temperature can actually slow down the processing of any heavy duty server or networking equipment. Thus we should get an automated report on weekly basis to measure temperature and humidity pattern.
180	2.2.2. Desired State and broad Scope of Work Page No 13 Point No 06	Detailed DC monitoring specifications for Centralised Command Center		Information on each of the equipment on the rack should be available 24X7. The DC manager should also know, in case there are empty spaces in any of the racks in the datacentre. Should know the various information about the equipment's in the Datacentre. Say, customer names, Power consumption wise, warranty wise, etc.
181	2.2.2. Desired State and broad Scope of Work Page No 13 Point No 06	Detailed DC monitoring specifications for Centralised Command Center		Integration with a third party Element manager may be required to be shown in the POC. The integration should be possible via XML, Web Service, SNMP V1, V2, V3).
182	2.2.2. Desired State and broad Scope of Work Page No 13 Point No 06	Detailed DC monitoring specifications for Centralised Command Center		Support for email and SMS both (integration with SMS-gateway communication).
183	2.2.2. Desired State and broad Scope of Work Page No 13 Point No 06	Detailed DC monitoring specifications for Centralised Command Center		The centralized GUI of the proposed system should provide close to actual view of the data centre. So that whenever any equipment or any infra equipment is not in good health, the same could be quickly identified. Requisite alarm should be generated and the maintenance team doesn't have any problem in reaching the spot (for which a ticket was generated).

184	2.2.2. Desired State and broad Scope of Work Page No 13 Point No 06	Detailed DC monitoring specifications for Centralised Command Center		<p>The Data centre infrastructure management solution should focus on provisioning of racks, optimising cost while saving precious energy and to enhance operational efficiency.</p> <p>Impact analysis is one of the key techniques for any DC, for enhancing efficiency. Its to analyse the impact of one equipment going down or misbehaving on a dependent product. Viz 1. Impact of network latency on storage. 2. Impact of security changes on network latency. 3. Impact of ill planned rack provisioning to utilised power.</p> <p>Wrong processes in a DC can lead to huge losses. The proposed solution should help in creating and maintaining, several SOPs automatically. DC administrators should be able to choose from bouquet of best practices, translated into SOPs for them. We should be able to customise.</p> <p>We should be able to manage as well as compare power usage/cooling etc. between the different locations.</p>
185	2.2.2. Desired State and broad Scope of Work Page No 13 Point No 06	Detailed DC monitoring specifications for Centralised Command Center		<p>The DCIM solution should provide necessary functionality to ensure that all the sub-systems work with each other and provide on-line information so that necessary decision can be taken in time to avoid any mishap/ delays. The OEM/SI should demonstrate the functionality of inter dependencies during the proof of concept (poC) stage as mentioned in the tender document. Kindly provide the above Details.</p>
186	2.2.2. Desired State and broad Scope of Work Page No 13 Point No 06	Detailed DC monitoring specifications for Centralised Command Center		<p>The event records shall be available in the report format, with each event classified by its priority level and shall be tagged with details of the date and time at which the event occurred. Each event shall be displayed and highlighted until the event has been acknowledged and cancelled in the automatic event log, and provided the fault has been satisfactorily rectified in the equipment, which generated the event.</p>

187	2.2.2. Desired State and broad Scope of Work Page No 13 Point No 06	Detailed DC monitoring specifications for Centralised Command Center		The system should be administrated at various levels. The system should provide individual privileges or group rights as need be. Few users might have read access only, where as very few would have all access to all servers
188	2.2.2. Desired State and broad Scope of Work Page No 13 Point No 06	Detailed DC monitoring specifications for Centralised Command Center		The system should be capable enough to store the raw data or as polled data, for at-least for 365 days. It should also have the facility to automate the backup process or allow us to take manual backup, in case if it is required.
189	2.2.2. Desired State and broad Scope of Work Page No 13 Point No 06	Detailed DC monitoring specifications for Centralised Command Center		There should be a mechanism to take the backup of the threshold policies, based on the groups of devices or on any single individual device.
190	2.2.2. Desired State and broad Scope of Work Page No 13 Point No 06	Detailed DC monitoring specifications for Centralised Command Center		Whenever a fault arises in the physical infrastructure, a ticket should automatically get logged as an incident in the service desk and the same should be assigned with predefined SLAs to the concern team.
191	9.10, Page 52	LIC reserves the right to incorporate standard contract provisions and the contract shall at all times be compliant to:	We request for a copy to be provided as the link provided is not available	The correct URL is https://meity.gov.in/model-rfp-template-and-guidance-notes-e-gov-projects
192	eFEAP Next PPT. Slide-12	Storage & Latency	While the initial required performance is mentioned, request you to kindly change the clause to "sustained 2ms response" to ensure that the performance is consistent without compromising on latency.	The specified IOPS at ZO and co-locations sites should give sustained 2ms response over the project period.
193	eFEAP Next PPT. Slide-8	Minimum Server Configuration for App, Web & DB.	Can you please include performance numbers and system utilizations or some kind of external benchmark reports like TPC, SPECint etc. to ensure that compute performances are well taken into consideration?	The all India average CPU utilization in existing environment for web server and app server is 25 % and database server is 50% Memory utilization is 80% in case of web, app and database server, this information is gathered using Linux "top" command. The bidder should not use this information to arrive at some kind of virtualization ratio.

194	Object Store Specifications for using file system over NFS and archival storage	Proposed object storage should be offered with minimum 1 PB of usable storage and should be scalable to 8 PB usable for future expansion maintaining single namespace.	<p>A. For NFS requirement, a file server is the best suited solution. Conversion of object protocol to file (NFS/CIFS) protocol will be an overhead</p> <p>B. The capacity for file server/file system can be merged into the primary storage system itself. Please confirm</p> <p>C. The current File system size is 1 TB per Division Office, considering its 15 % YOY growth for 5 years, it will be 2 TB per Division Office. If we consider total 125 DO and their copy in CO's, total will be 250 X 2 TB = 500 TB data. Please append this minimum 1 PB of usable capacity requirement</p>	NFS file system mounted on file server or exposed from storage is allowed. Further NFS storage could be merged in primary storage or provided as NAS box. For archival of backup, archival storage or object storage is allowed. The bidder should provide the file storage per site as per the minimum specifications provided for one division.
195	Object Store Specifications for using file system over NFS and archival storage, Queries Part of Compliance	Should support access through CIFS/NFS, CAS, REST/SOAP, Open stack Swift, native S3 API, SWIFT and HDFS without need for additional hardware. Should be able to integrate with custom applications and software, backup/archive to cloud, file tiering, file sync and share applications seamlessly.	Different object storage allow access through multiple protocols via different implementation methods. Request to revise as "Should support access through CIFS/NFS, REST/SOAP, Open stack Swift, native S3 API, SWIFT and by Hadoop, without need for additional hardware. Should be able to integrate with custom applications and software, backup/archive to cloud, file tiering, file sync and share applications seamlessly."	The proposed alternate solution to meet the requirements is allowed subject to the condition that the proposed solution should satisfy the reliability, availability, performance and scalability requirement mentioned in this object store specification. The bidder is allowed to propose archival storage for backup data and NFS file system could be merged in primary storage or as NAS box.

196	Page 13 / Point No # 10 of 2.2.2	Minimum cores for Database: 8 (compute power of core equivalent to 2.3 GHz Intel Skylake Processor with 22MB Cache)	Current Proposed CPU specifications for Web + App Servers do not match with any of the existing Intel Xeon Scalable (Skylake) CPU SKUs. .Request you to specify exact CPU SKU which will enable all OEMS / Bidders for identifying appropriate core equivalence.OLTP databases perform better on CPU running at higher frequency. Hence, we would like to propose compute power of core equivalent to Intel Scalable (Skylake) 2.6GHz Processor with 22 MB Cache, delivering SPECint_rate_base2006 50 and above per core. We propose to use SPECint_rate_base2006 benchmark to be used to evaluate core equivalence of CPU since comparative core performance data for the existing Nehalem Processor E5540 and proposed processor both are available there for performance comparative analysis.	For one division load, all virtual machines like web, app and database should have minimum 8 physical cores (compute power of core equivalent to 2.3 GHz Intel Skylake Processor or higher)
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197	Page 13 / Point No # 10 of 2.2.2	Minimum SSD usable Storage for Database : 5 TB (Enterprise Class - without de-duplication and compression)	There are no specific features mentioned to ensure Enterprise class storage. We would like to propose the following specifications to be incorporated for the drives required for the Database system: i) Endurance -DWPD 3 and above (Drive Writes Per Day) ii) Minimum read and write latency should be 40 micro sec or lesser	The proposed enterprise class storage should provide Endurance - DWPD 3 and above (Drive Writes Per Day) and Minimum read and write latency should be 40 micro sec or lesser
198	SAN Switch Specifications. Point No. 10	The switch must support port mirroring for both Fibre Channel and Gigabit Ethernet (802.3z),	Need to remove the highlighted as this is an FC switch	The switch must support port mirroring for Fibre Channel.
199	Enterprise Server Security solution Specification. Point no.109	The OEM TAM should conduct half yearly health check for the deployed solution . The health check should cover detailed configuration audit , findings and recommendations of the deployed solution.	1. We assume that the OEM TAM designated for LIC is responsible for mentioned deliverables. Pls clarify. 2. We assume that OEM TAM support for LIC is required 24*7 with Priority case handling for any support ticket raised. Pls clarify. 3. Pls provide details of the response time expected from OEM TAM for all critical , high and medium severity incidents.	1. The OEM TAM should be responsible for all the deliverables. 2. Yes. The support from OEM TAM is required 24*7 with Priority case handling for any support ticket raised. 3. Response time for critical events should be maximum one hour, 4 hours for high and 8 hours for medium severity events.
200	Page 21, Clause 3.7.7	Bid Submission Date &Time	The Bid submission to be extended by few days	All bidders are hereby informed that there are some pre-bid queries which are still under consideration, response to those queries will be published soon and accordingly date of submission of bid will be extended