

WEBEL TECHNOLOGY LIMITED

CORRIGENDUM – III

Tender No. WTL/NKGS/ICCC/20-21/024 dated 26.02.2021

Revised Corrigendum - II

Section No.	Clause No.	Page No.	Queries	WTL Replies
ICCC/TR/39.01 // Technical Requirements for ICCC // 38. Local Application Buffer NAS		122	<ul style="list-style-type: none"> • 32 Core, 27M Cache, Turbo, HT (150W) DDR4-2666 • 2666MT/s RDIMMs • Performance Optimized • 128GB RDIMM 2666MT/s Dual Rank • No Additional Processor • iDRAC9,Enterprise • 192TB 7.2K RPM NLSAS 12Gbps 512e 3.5in Hot-plug Hard Drive • PERC H730P RAID Controller, 2GB NV Cache, Mini card • Jumper Cord,10A,2M,C13/C14 (India BIS) • Dual, Hot-plug, Redundant Power Supply (1+1), 1100W • Trusted Platform Module 1.2 • Broadcom 57416 Dual Port 10GbE BASE-T & 5720 Dual Port 1GbE BASE-T, rNDC • Redhat OS • RAID 5 	<ul style="list-style-type: none"> • iDRAC9 /iLO• 32 Core, 27M Cache, Turbo, HT (150W) DDR4-2666 • 2666MT/s RDIMMs • Performance Optimized • 128GB RDIMM 2666MT/s Dual Rank • No Additional Processor • iDRAC9/iLO, Enterprise • 192TB 7.2K RPM NLSAS 12Gbps 512e Hot-plug Hard Drive • RAID Controller, 2GB NV Cache, Mini card • Jumper Cord,10A,2M,C13/C14 (India BIS) • Dual, Hot-plug, Redundant Power Supply (1+1), 1100W • Trusted Platform Module 1.2 • Dual Port 10GbE BASE-T & 5720 Dual Port 1GbE BASE-T, rNDC • Redhat OS • RAID 5

WEBEL TECHNOLOGY LIMITED

<p>ICCC/TR/39.01 // Technical Requirements for ICC // 39. Local Application Aggregating Device</p>		<p>122</p>	<ul style="list-style-type: none"> • 16 Core, 22M Cache, Turbo, HT (125W) DDR4-2666 • 3.5" Chassis with up to 4 Hot Plug Hard Drives • Standard Bezel • Riser Config 1, 1 x 16 FH • 64 GB DDR4 RAM, 2666MT/s RDIMMs • iDRAC9,Enterprise • 960GB SSD SATA Mix Use 6Gbps 512 2.5in Hot-plug AG Drive,3.5in HYB CARR, 3 DWPD, 5256 TBW • 2TB 7.2K RPM NLSAS 12Gbps 512n 3.5in Hot-Plug Hard Drive • Internal PERC • PERC H730P RAID Controller, 2GB NV Cache, Adapter, Low Profile • Standard Heat Sink • DVD +/-RW, SATA, Internal • Jumper Cord,10A,2M,C13/C14 (India BIS) • No Trusted Platform Module • Broadcom 57416 Dual Port 10Gb, Base-T, PCIe Adapter, Full Height • Dual-Port 1GbE On-Board LOM • Redhat OS • ReadyRails Sliding Rails With Cable Management Arm • RAID 5 	<ul style="list-style-type: none"> • 16 Core, 22M Cache, Turbo, HT (125W) DDR4-2666 • 3.5" Chassis with up to 4 Hot Plug Hard Drives • Standard Bezel • Riser Config 1, 1 x 16 FH • 64 GB DDR4 RAM, 2666MT/s RDIMMs • iDRAC9 / iLO, Enterprise • 960GB SSD SATA Mix Use 6Gbps 512, Hot-plug AG Drive, HYB CARR, 3 DWPD, 5256 TBW • 2TB 7.2K RPM NLSAS 12Gbps 512n 3.5in Hot-Plug Hard Drive • RAID Controller, 2GB NV Cache, Adapter, Low Profile • Standard Heat Sink • DVD +/-RW, SATA, Internal • Jumper Cord,10A,2M,C13/C14 (India BIS) • No Trusted Platform Module • Dual Port 10Gb, Base-T, PCIe Adapter, Full Height • Dual-Port 1GbE On-Board LOM • Redhat OS • ReadyRails Sliding Rails With Cable Management Arm • RAID 5
--	--	------------	--	--

WEBEL TECHNOLOGY LIMITED

<p>ICCC/TR/12.1 // General</p>	<p>12. Video Conferencing</p>	<p>83-86</p>	<ul style="list-style-type: none"> • The multipoint function be done using a common server running VMware based Appliance Virtualization Platform and support H.323 and SIP optionally supporting H.263 , H.264, H.265 , H.264, H.265 High Profile and H.264, H.265 SVC • The Multipoint Conference Server should support Advance Video Coding format when connecting to end points and should retain the same layout and CP options of minimum 15 CP on the display unit. • All components of the solution – the multipoint conference server and software, Management software, Scheduling, web access desktop client software, web collaboration plug and WebRTC client should be from the same OEM. • In a multipoint conference server support symmetric 1080p30 conferences should be available on day one. • The multipoint conference server should support be a Full high definition and should support 1080p30, 720p30 and 480p30 resolutions in continuous presence mode using H.264, H.265 and H.264, H.265 SVC. • The capacity of the multipoint conference the number of ports should be <u>30 ports@720p30</u> or <u>15ports@1080p30</u> and upgradable to <u>40ports@720p30</u> and <u>80ports@480p30</u> in the same server. • Features should be uniform across protocols used H.264, H.265 AVC, H.264, H.265 SVC and H.264, H.265 Hi Profile. 	<p>Alternatively Cloud Video Meeting for 5 users each support minimum 350 participants using HD 720p30 fps</p>
<p>ICCC/TR/12.2// Video multipoint feature</p>	<p>12. Video Conferencing</p>	<p>83-86</p>	<ul style="list-style-type: none"> • For security during a multipoint conference, standard ITU protocol - H.235 standard AES encryption without impacting port capacity. • Each participant should support a video layout of their own choice • The Video infrastructure should support H.239 standard for sending/receiving multiple streams of video and presentation content. The H.239 support should not cost additional conference ports supporting 1080p30 for presentation and should allow web collaboration plug in for annotation and white boarding and application sharing. • The Multipoint conference infrastructure should support unlimited conferences as per the capacity of the Video Infrastructure as per the resolution selected – 1080p30 , 720p30 and 480p30 	<p>Alternatively Cloud Video Meeting with Data encryption, 24-character meeting ID + 10-digit password, private user</p>

WEBEL TECHNOLOGY LIMITED

ICCC/TR/12.3// Video Multipoint Infrastructure	12. Video Conferencing	83- 86	<ul style="list-style-type: none"> □ In a Multipoint conference server the number of Continuous Presence participants that are seen should be 15 with aspect ratios of 16:19 should supported from 480p30 resolution onwards. • The capacity of the number of 480p 30 ports should be to four times the number of 1080p30 ports • The video infrastructure should support transcoding at 1080p30, 72030 and 480p30. 	Support minimum 30 participants in single view
ICCC/TR/12.5// Audio Protocol	12. Video Conferencing	83- 86	<ul style="list-style-type: none"> □ Should Support AAC-LC, Opus, Siren14/G.722.1 Annex C, G.722, G.722.1, G.729, G.711. 	Alternative as per cloud based standard audio protocol
ICCC/TR/12.6// Video Protocol	12. Video Conferencing	83- 86	<ul style="list-style-type: none"> □ Should Support H.263, H.264, H.265, H.264, H.265 Hi-Profile, VP8. 	Alternative as per cloud based standard video protocol
ICCC/TR/12.10/ /Moderator Control	12. Video Conferencing	83- 86	<ul style="list-style-type: none"> • The system should support H.243 Chair control functions for conference management by a terminal endpoint. • The Moderator should have the rights to conference control using functions like invite, terminate conference, take or release chair control, mute, volume control, video layout change and block or unblock admission to a conference 	Alternative as per cloud-based host control
ICCC/TR/12.15/ /Conference scheduling	12. Video Conferencing	83- 86	<ul style="list-style-type: none"> • Scheduling Capacity: Minimum 80 concurrent calls • Should support Microsoft/Linux/Unix scheduling with email notifications to individual participants and web collaboration. • Should be provided in order to control all system resources, reserve conferences, and provide ongoing conference, point to point call, and fault management functions, through Web portal • Should be able to send e- mail notification to all participants. • The Web based application portal should implement single sign-on, wherein the enterprise Directory is accessed for pass- through authentication from the Web based application portal. • The conference scheduling application should support Direct Inward Dial to scheduled meetings. • The conference scheduling application should be able to manipulate conference layouts via a “drag and drop” Web user interface at scheduling time or in real time when conferences are in session • The conference scheduling application should support intelligent and optimized real time resource allocation algorithm for Multipoint ports on the Video Infrastructure and dynamically reuse the allocated ports according to the actual terminal capabilities. • The conference scheduling application should support Lecture 	conference scheduling through outlook

WEBEL TECHNOLOGY LIMITED

			style conferences where the lecturer sees students in a continuous presence layout, and the students all see the lecturer in a single screen layout.	
ICCC/TR/12.17/ /Availability	12. Video Conferencing	83-86	The conference scheduling application and network management application should support redundant deployment for high availability in case required.	Alternatively Cloud Video Meeting
ICCC/TR/12.19/ /Desktop Conferencing	12. Video Conferencing	83-86	<ul style="list-style-type: none"> • Minimum 1000 web access client download / WebRTC clients for Laptops and 1000 clients for mobile devices. • Desktop connectivity to PCs /laptops through desk top client installed and be able to participate in an ongoing conference using PC web camera and audio facilities and devices like Apple iPad , iPhone and Android phones. • The solution provided should support email exchange. This desktop clients on the PC should be able to initiate H.239 data collaboration and participate or View video and H.239 with support for annotation over H.239 • The desktop client should control the remote camera when required. • Desktop PC users should be able to connect behind firewalls with configuration. • Desktop PC users should be able to conference controls like lock meeting, terminate meeting, invite participant, mute/un-mute, disconnect any participant. • The Desktop client should support Waiting room and Virtual room with support for full screen video on the desktop. • It shall be possible to receive resolutions of 1080p on desktop clients. • Each Desktop Client participant should have the ability to change between voice activated video switching mode and continuous presence mode on the fly. • The Desktop Client user interface should provide simultaneous views of the participants and H.239 data collaboration portions of the conference. The user interface should provide full screen views of the participants or H.239 data collaboration portion of the conference. • It shall be possible to annotate over the presentation. The annotations should be sent as part of the standard H.239 stream so it 	Alternatively Cloud Video Meeting from Browser, Desktop, Mobile Applications

WEBEL TECHNOLOGY LIMITED

			<p>is visible on all other H.239 compliant endpoints (software or hardware) connected to the conference.</p> <ul style="list-style-type: none">• The Desktop Client should include a native component that enables desktop client participants to text chat while in conference.• The Desktop Client user interface should provide a participant list showing which participants are currently connected to the conference and whether each participant can send and is sending audio, is sending video, can send/receive data and is sending data.• The desktop administrator should be able to provision a directory of room systems. This directory shall be available in the desktop client user interface to ease the process of inviting room systems.• The Desktop Client solution should be able to secure conferences via PINs/passwords.• The desktop client should support white-boarding and web collaboration.• Should natively support Zoom, Cisco Webex, Google Meet, Microsoft Teams	
--	--	--	---	--

WEBEL TECHNOLOGY LIMITED

General Query	12. Video Conferencing	83-86	VC End Point camera spec is not mentioned	<p>Specs of VC-end point with tracking camera</p> <p>The VC Room System for Conference Room Support High-Definition room video up to the 1080p60 format (1920x1080 pixels at 60fps progressive) and 720p60. It should also provide a Tracking Camera by focusing on an active speaker. With the combination of audio tracking and face recognition supporting up to the 1080p60 format, a minimum horizontal field of view of 70°, at least a 12x optical zoom, 12x digital zoom and a minimum range for PAN of +/-90° and for TILT of - 30° to +90° .</p> <p>The VC Room System must be able to support up to two cameras and two screens, and Support dual video capabilities both in H.323 (H.239) and SIP (BFCP based).</p> <p>System must Provide up to 2 cascadable 3 way microphones with each microphone independently echo cancelled.</p> <p>The VC Room System must be able to record the conference (up to 1080p solution) on a USB Key or Disk.</p>
ICCC/TR/22.3	22 Contact Centre	100-103	The callers shall be able to access the various services through state- of-art centralized integrated Interactive Voice Response	System should support Self-Service IVR and Speech in future.

WEBEL TECHNOLOGY LIMITED

	Solution (For Helpdesk)		System (IVRS). The information is envisaged to be available to the customer through telephone (IVRS) and call centres operators.	
ICCC/TR/22.4	22 Contact Centre Solution (For Helpdesk)	100-103	The IVRS shall establish two-way communication on the same channel with customers through recorded synthesized voice in Hindi / English / Oriya or in combination of languages to give information, reply to queries and provide other.	Instead of Oriya it will be Bengali
ICCC/TR/22.8	22 Contact Centre Solution (For Helpdesk)	100-103	The system shall have the ability to define business rules based upon which the system shall quickly identify, classify and prioritize callers, and using sophisticated routing, to deliver interactions to the best qualified operator in the any of the connected local/remote call centre, regardless of interaction channel.	System should support Self-Service IVR and Speech in future.
ICCC/TR/22.15	22 Contact Centre Solution (For Helpdesk)	100-103	IVRS shall be able to get information /text/data from databases, convert to voice, and speaks it back to the caller in relevant/desired language.	System should support Self-Service IVR and Speech in future.
F	2 (1) [TQ # 01]	53	<p>We kindly request you to amend this clause as per following for broader scope of participation: -</p> <p>City Surveillance Experience The Bidder should have successfully completed SITC (supply, Installation, Testing & Commissioning) <u>of IP based CCTV project of minimum value of INR 5 Cr per project for City Surveillance during last five years (as on Bid Submission date).</u> Marks shall be allotted as below: >=2 Projects: 10 Marks 1 Project: 8 Mark OR</p> <p>The Bidder should have been awarded and successfully designed <u>any project comprising of Datacenter and project value of INR 5 Cr during last five years (as on Bid Submission date) per project.</u></p> <p>Marks shall be allotted as below: >=2 Projects: 10 Marks 1 Project: 8 Mark</p>	<p>City Surveillance Experience The Bidder should have successfully completed SITC (supply, Installation, Testing & Commissioning) of IP based CCTV project of minimum value of INR 5 Cr per project for City Surveillance during last five years (as on Bid Submission date). Marks shall be allotted as below: >=2 Projects: 10 Marks 1 Project : 8 Marks OR The Bidder should have been awarded and successfully designed any project comprising of Datacenter and project value of INR 5 Cr during last five years (as on Bid Submission date) per project.</p>

WEBEL TECHNOLOGY LIMITED

				Marks shall be allotted as below: >=2 Projects: 10 Marks 1 Project: 8 Mark
F	2(4) [TQ # 04]	53	<p>We kindly request you to amend this clause as per following for broader scope of participation: -</p> <p>The Bidder have been awarded and successfully designed, executing & commissioning and Operation & Maintenance of <u>project comprising of</u> Integrated command & control room/emergency response Centre / Security and Surveillance control room/Surveillance control room / <u>Data Centre for any State/ Central Government Department or Central/ State PSUs/ Corporates / Smart City in India</u> of minimum value of INR 10 Crores per projects during last Five (5) years (as on Bid Submission date) >=2 Projects: 20 marks 1 Project: 10 marks</p>	<p>The Bidder have been awarded and successfully designed, executing & commissioning and Operation & Maintenance of <u>project comprising of</u> Integrated command & control room/emergency response Centre / Security and Surveillance control room/Surveillance control room / <u>Data Centre for any State/ Central Government Department or Central/ State PSUs/ Corporates / Smart City in India</u> of minimum value of INR 10 Crores per projects during last Five (5) years (as on Bid Submission date) >=2 Projects: 20 marks 1 Project: 10 marks</p>
ICCC/TR/25.05	ICCC/TR/25.05	110	<p>User Identity / Awareness</p> <ul style="list-style-type: none"> • Should be able to acquire user identity from Microsoft/Linux Active Directory without any type of agent installed on the domain controllers. • Should support Kerberos transparent authentication for single sign on. • Should support the use of LDAP nested groups. • Should be able to create rules and policies based on identity roles to be used across all security applications. • Should have the inherent ability to detect multi-stage attacks. • Should include static analysis technologies like antivirus, antimalware/anti bot however in an integrate mode with the solution. <p>Security</p> <ul style="list-style-type: none"> • Should inspect the web sessions (HTTP and HTTPS both) to detect 	<p>Bidders must supply an Anti-APT platform covering Web & Network infection vectors, as a dedicated purpose-built solution to be deployed independently without any functional reliance on existing or 3rd party security solutions. Proposed APT solution should be designed as independent of other layers of security such as firewall , IPS, WebProxy, Anti-Spam or Anti Virus solutions, in a scenario, if any of these layers are replaced or non-functional at certain point of time, the proposed APT solution should be capable of working</p>

WEBEL TECHNOLOGY LIMITED

		<p>and notify the malicious web activity including malicious file downloads through the internet. Third Party/Separate appliance for SSL offloading will not be accepted.</p> <ul style="list-style-type: none">• The proposed solution should dynamically generate real-time malware intelligence for immediate local protection via integration with the separate Automated Management and Event Correlation System.• Solution should have an ability to remove all the active content, macros, block the malicious contents while sending document to the end user as clean document.• Solution should have a Multi-tier engine to detect & prevent Command and Control IP/URL and DNS.• Solution should be able to detect & prevent unique communication patterns used by BOTs i.e. Information about Botnet family.• Solution should be able to detect & prevent attack types i.e., such as spam sending click fraud or self-distribution, that are associated with Bots.• Solution should be able to block traffic between infected Host and Remote Operator and not to legitimate destination.• Solution should be able to provide with Forensic tools which give details like Infected Users/Device, Malware type, Malware action etc.	<p>independently without any dependencies.</p> <p>The proposed APT solution must detect zero-day, multi-stage, file-less, multi-flow and other evasive advanced attacks using dynamic, signature-less analysis in a safe, anti-evasive execution environment. The solution must be sized appropriately by the bidder with no additional costs to achieve performance, scalability, and sizing required to run the proposed solution during entire project period. Proposed Web APT solution should also have SSL Intercept capability to examine encrypted user bound traffic to detect threats (such as CnC traffic and data exfiltration) that attackers may hide in encrypted streams. If solution does not have native SSL capability, 3rd party SSL solution must be factored.</p>
--	--	--	---

WEBEL TECHNOLOGY LIMITED

				<p>The proposed solution must stop the infection, compromise, and intrusion phases of the kill chain by identifying zero-day malicious exploits, malware, and command, and control (CnC) call-backs, including internal Reconnaissance, Credential Privilege access, Lateral Movements, and Data exfiltration through correlation of detections amongst multiple dedicated channels at the minimum (Web & Internal Network).</p>
				<p>Sandbox engine must support micro-tasking within VM environment (Windows, Macintosh & Linux) running different versions and service packs and multiple versions of O.S and applications, performing the analysis in parallel and must include all licenses and dependencies within the platform.</p>
				<p>The bidder must provide security threat Intelligence feeds for the solution in non-sharing mode along with the solution without the requirement to submit any analysis or data to the cloud for analysis.</p>
				<p>The proposed solution must support SNMP, Syslog, API etc. for integration with all leading SIEM/SOC solutions.</p>

WEBEL TECHNOLOGY LIMITED

				<p>Intended bidders must propose APT appliance for Web having a minimum of 250 mbps in redundancy mode to inspect internet traffic with the minimum capability of 10 VM's and 2 (Twelve) sandbox submissions per minute. If solution does not have SSL inspection capabilities, the bidder must provide the required 3rd party SSL inspection components required to run the solution.</p>
				<p>The proposed solution should be capable of analysis of different file types, including portable executable (PEs), web content, Web objects, images, Java, Microsoft and Adobe applications, archive files and multimedia, files including payloads used as initial compromise or backdoor or malicious droppers and the capability to analyse scripts, objects, sessions, flows and server file types like php, war, jsp, asp, aspx, etc. <u>without any dependence on 3rd party or cloud</u></p>
				<p>Network appliance sensors must be supplied with the minimum number of Interfaces - 4 x 1 GE copper & 4 x 10G SFP+ fiber ports with a dedicated management and IPMI ports. The appliance onboard must have a Hard Disk Drive of 2 x 4TB, with min 7.2k rpm for performance</p>

WEBEL TECHNOLOGY LIMITED

<p>ICCC/TR/37.01</p>	<p>ICCC/TR/37.01</p>	<p>121</p>	<ul style="list-style-type: none"> • 48x10G ports and 4xSFP+ (shared) Managed Switch • L3 Fully Managed Switch • Full width 1-unit 1U rack mount • 960 Gps • 24 ports (independent) 100M; 1G; 10G • 24 ports (independent) 1G; 10G • Ethernet: Out-of-band 1G port (Front) Console: RJ45 RS232 (Front) • Console: Mini-USB (Front) Storage: USB (Front) • RPS (Redundant Power Supply) 		<ul style="list-style-type: none"> • 48x10G ports and 4xSFP+ (shared) Managed Switch • L3 Fully Managed Switch • Full width 1-unit 1U rack mount • 960 Gps • 24 ports (independent) 100M; 1G; 10GBE • 24 ports (independent) 1G; 10GBE • To be populated with 12 x 10GBE ports and 12 1G ports from day 1 • Ethernet: Out-of-band 1G port (Front) Console: RJ45 RS232 (Front) • Console: Mini-USB (Front) Storage: USB (Front) • RPS (Redundant Power Supply) 																				
<p>ICCC/TR/40.01</p>	<p>ICCC/TR/40.01</p>	<p>122</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;">Description</th> <th style="width: 40%;">Minimum Specifications</th> </tr> </thead> <tbody> <tr> <td>Wireless Interface</td> <td>IEEE 802.11b/g/n 2.4GHz wireless IEEE 802.11b/g/n/ac Wave 2 5GHz wireless</td> </tr> <tr> <td>MIMO</td> <td>2 x 2</td> </tr> <tr> <td>Data Rate</td> <td>2.4 GHz - Up to 400 Mbps 5 GHz (1) - Up to 867 Mbps 5 GHz (2) - Up to 867 Mbps</td> </tr> <tr> <td>Antenna</td> <td>Internal omnidirectional antennas 2.4 GHz: 3 dBi 5 GHz: 4 dBi</td> </tr> <tr> <td>Operating Frequency</td> <td>2400 to 2483.5 MHz 5150 to 5850 MHz</td> </tr> <tr> <td>Operating Channels</td> <td>1 to 13 channels for 2.4 GHz band (per country code) 36 to 165 channels for 5 GHz band (per country code)</td> </tr> </tbody> </table>	Description	Minimum Specifications	Wireless Interface	IEEE 802.11b/g/n 2.4GHz wireless IEEE 802.11b/g/n/ac Wave 2 5GHz wireless	MIMO	2 x 2	Data Rate	2.4 GHz - Up to 400 Mbps 5 GHz (1) - Up to 867 Mbps 5 GHz (2) - Up to 867 Mbps	Antenna	Internal omnidirectional antennas 2.4 GHz: 3 dBi 5 GHz: 4 dBi	Operating Frequency	2400 to 2483.5 MHz 5150 to 5850 MHz	Operating Channels	1 to 13 channels for 2.4 GHz band (per country code) 36 to 165 channels for 5 GHz band (per country code)	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;">Minimum Specifications</th> </tr> </thead> <tbody> <tr> <td>IEEE 802.11b/g/n 2.4GHz wireless IEEE 802.11b/g/n/ac Wave 2 5GHz wireless</td> </tr> <tr> <td>2 x 2</td> </tr> <tr> <td>2.4 GHz - Up to 400 Mbps 5 GHz (1) - Up to 867 Mbps 5 GHz (2) - Up to 867 Mbps</td> </tr> <tr> <td>Internal omnidirectional antennas 2.4 GHz: 3 dBi 5 GHz: 4 dBi</td> </tr> <tr> <td>2400 to 2483.5 MHz 5150 to 5850 MHz</td> </tr> <tr> <td>1 to 13 channels for 2.4 GHz band (per country code) 36 to 165 channels for 5 GHz band (per country code)</td> </tr> </tbody> </table>	Minimum Specifications	IEEE 802.11b/g/n 2.4GHz wireless IEEE 802.11b/g/n/ac Wave 2 5GHz wireless	2 x 2	2.4 GHz - Up to 400 Mbps 5 GHz (1) - Up to 867 Mbps 5 GHz (2) - Up to 867 Mbps	Internal omnidirectional antennas 2.4 GHz: 3 dBi 5 GHz: 4 dBi	2400 to 2483.5 MHz 5150 to 5850 MHz	1 to 13 channels for 2.4 GHz band (per country code) 36 to 165 channels for 5 GHz band (per country code)
Description	Minimum Specifications																								
Wireless Interface	IEEE 802.11b/g/n 2.4GHz wireless IEEE 802.11b/g/n/ac Wave 2 5GHz wireless																								
MIMO	2 x 2																								
Data Rate	2.4 GHz - Up to 400 Mbps 5 GHz (1) - Up to 867 Mbps 5 GHz (2) - Up to 867 Mbps																								
Antenna	Internal omnidirectional antennas 2.4 GHz: 3 dBi 5 GHz: 4 dBi																								
Operating Frequency	2400 to 2483.5 MHz 5150 to 5850 MHz																								
Operating Channels	1 to 13 channels for 2.4 GHz band (per country code) 36 to 165 channels for 5 GHz band (per country code)																								
Minimum Specifications																									
IEEE 802.11b/g/n 2.4GHz wireless IEEE 802.11b/g/n/ac Wave 2 5GHz wireless																									
2 x 2																									
2.4 GHz - Up to 400 Mbps 5 GHz (1) - Up to 867 Mbps 5 GHz (2) - Up to 867 Mbps																									
Internal omnidirectional antennas 2.4 GHz: 3 dBi 5 GHz: 4 dBi																									
2400 to 2483.5 MHz 5150 to 5850 MHz																									
1 to 13 channels for 2.4 GHz band (per country code) 36 to 165 channels for 5 GHz band (per country code)																									

WEBEL TECHNOLOGY LIMITED

			Ethernet Interface	2 x 10/100/1000BASE-T LAN port	2 x 10/100/1000BASE-T LAN port
			Console Port	RJ45	RJ45
			Advanced Features	Auto Channel selection, 802.1p Quality of Service (QoS), Wireless Multimedia (WMM), Wireless Distribution System (WDS), Band steering, Airtime Fairness, Link Aggregation, IEEE 802.11k Fast Roaming	Auto Channel selection, 802.1p Quality of Service (QoS), Wireless Multimedia (WMM), Wireless Distribution System (WDS), Band steering, Airtime Fairness, Link Aggregation, IEEE
			SSID Security	Up to 48 SSIDs, 16 per radio 802.1Q VLAN Station Isolation	802.11k Fast Roaming Up to 16 SSIDs per AP, 8 SSID per radio 802.1Q VLAN Station
			Wireless Security	WPA/WPA2 Personal/ Enterprise, AES, TKIP	Isolation WPA/WPA2 Personal/
			Detection & Prevention	Rogue and Valid AP Classification	Enterprise, AES, TKIP
			Authentication	MAC Address Filtering	Rogue and Valid AP
			Power over Ethernet	IEEE 802.3at	Classification MAC Address Filtering
			Power Consumption	Max. 20W	IEEE 802.3at
			Operating Conditions	0°~40°C, 10-90%RH	Max. 20W
			Certifications	CE EN55032, EN55024, EN61000-3-2, EN61000-3-3, EN606011-2 (Medical Electrical equipment), EN301489-1, EN301489-17, EN300328, EN301893 FCC, IC, cUL+UL, CB, RCM, NCC, BSMI, UL2043	0°~40°C, 10-90%RH CE EN55032, EN55024, EN61000-3-2, EN61000-3-3, EN60601-1-2 (Medical Electrical equipment)/EN 60601-1-2, EN301489-1, EN301489-17, EN300328, EN301893 FCC, IC/ICES, cUL/UL/CB/RCM/NCC/BSMI/UL 2043
			MTBF	>700000 Hours	>700000 Hours
			The proposed specifications for the WLC are as below:		The proposed specifications for the WLC are as below:

WEBEL TECHNOLOGY LIMITED

			Ports	4 x 10/100/1000 Mbps RJ-45 ports 4 x 100/1000 Mbps SFP combo ports 2 x USB 2.0 ports 1 x 10/100/1000 Mbps console port	6 x 10/100/1000 Mbps RJ-45 ports 2 x USB 2.0 ports 1 x 10/100/1000 Mbps console port
			Port Standard & Functions	IEEE 802.3 Ethernet IEEE 802.3u 100BASE-TX/FX Fast Ethernet IEEE 802.3ab 1000BASE-T Gigabit Ethernet	IEEE 802.3 Ethernet IEEE 802.3u 100BASE-TX/FX Fast Ethernet IEEE 802.3ab 1000BASE-T Gigabit Ethernet 64 (default), 512 (upgraded)
			Maximum APs / unit	64 (default), 256 (upgraded)	VLAN group – Up to 255 entries Subnet-based VLAN
			Maximum APs / cluster	256 (default), 1024 (upgraded)	802.1q VLAN tagging Port-based VLAN
			Concurrent Captive Portal Authentication Users	2048	Wireless security – WEP, Dynamic WEP, WPA personal/enterprise, WPA 2 personal/enterprise LAN security – 802.1x port-based access control and guest VLAN Wireless Intrusion Detection System (WIDS) – Rogue and valid AP classification, Rogue AP mitigation
			VLAN	VLAN group – Up to 255 entries Subnet-based VLAN 802.1q VLAN tagging Port-based VLAN	Authentication – Captive portal, MAC authentication Fast roaming, Intra/inter-subnet roaming, Intra/inter-controller roaming Web-based GUI – HTTP, SNMP v1/v2c/v3, Intra/Inter-Subnet Roaming
			Security	Wireless security – WEP, Dynamic WEP, WPA personal/enterprise, WPA 2 personal/enterprise LAN security – 802.1x port-based access control and guest VLAN Wireless Intrusion Detection System (WIDS) – Rogue and valid AP classification, Rogue AP mitigation Authentication – Captive portal, MAC authentication	
			Roaming	Fast roaming, Intra/inter-subnet roaming, Intra/inter-controller roaming	
			Management	Web-based GUI – HTTP, SNMP v1/v2c/v3, Intra/Inter-Subnet Roaming	

WEBEL TECHNOLOGY LIMITED

			<p>AP Management</p> <p>AP discovery & control – Layer 2, Layer 3 AP monitoring – Managed AP, Rogue AP, Authentication Fail AP, Standalone AP Client monitoring – Authenticated client, Rogue client, Authentication fail client, Ad-hoc client Centralized RF/security policy management</p>	<p>AP discovery & control – Layer 2, Layer 3 AP monitoring – Managed AP, Rogue AP, Authentication Fail AP, Standalone AP Client monitoring – Authenticated client, Rogue client, Authentication fail client, Ad-hoc client Centralized RF/security policy management</p>
			<p>User Account Management</p> <p>Permanent account authentication method – Local database, External RADIUS, External POP3, External LDAP Payment gateways – Authorize.net, Paypal Temporary account authentication method – Local database Temporary account creation – Single or batch account generation by system with customized active or usage expired time</p>	<p>Permanent account authentication method – Local database, External RADIUS, External LDAP Temporary account creation – Single or batch account generation by system with customized active or usage expired time</p>
			<p>Emission (EMI)</p> <p>FCC Class A, CE Class A, C-Tick, IC</p>	<p>FCC Class A, CE Class A, IC</p>
			<p>Safety</p> <p>cUL, LVD (EN60950-1)</p>	
			<p>Power Supply</p> <p>100-240VAC, 50-60Hz</p>	<p>100-240VAC, 50-60Hz</p>
			<p>Power Consumption</p> <p>Max. 26.95W</p>	<p>Kindly amend 26.95 or more or better</p>
			<p>Operating Conditions</p> <p>0°~40°C, 5-95%RH</p>	<p>0°~40°C, 5-85%RH</p>
				<p>> 70000 Hours</p> <p>Minimum Specifications</p> <p>48 x 1000Base-T PoE</p> <p>4 x 1000 Mbps Base-T/FX</p>

WEBEL TECHNOLOGY LIMITED

			<table border="1"> <tr> <td>Certifications</td> <td>CE EN55032, EN55024, EN61000-3-2, EN61000-3-3, EN606011-2 (Medical Electrical equipment), EN301489-1, EN301489-17, EN300328, EN301893 FCC, IC, cUL+UL, CB, RCM, NCC, BSMI, UL2043</td> <td>IEEE 802.3af/at 104 Gbps 16K 370W 41.7 Mpps @ 64Byte Packet 0°~40°C, 0-85%RH EMI: CE Class A, VCCI Class A, FCC Class A, BSMI, CCC Safety: CB, UL, BSMI, CCC</td> </tr> <tr> <td>MTBF</td> <td>> 700000 Hours</td> <td></td> </tr> <tr> <td colspan="3">L2 Switch:</td> </tr> <tr> <td>Description</td> <td>Minimum Specifications</td> <td></td> </tr> <tr> <td>Primary Ports</td> <td>48 x 1000Base-T PoE</td> <td></td> </tr> <tr> <td>Uplink Ports</td> <td>4 x 1000 Mbps Base-T/FX</td> <td></td> </tr> <tr> <td>PoE Compliance</td> <td>IEEE 802.3af/at</td> <td></td> </tr> <tr> <td>Switching Capacity</td> <td>104 Gbps</td> <td></td> </tr> <tr> <td>MAC Address Table</td> <td>16K</td> <td></td> </tr> <tr> <td>PoE Power Budget</td> <td>370W</td> <td></td> </tr> <tr> <td>Forwarding Rate</td> <td>41.7 Mpps @ 64Byte Packet</td> <td></td> </tr> <tr> <td>Operating Conditions</td> <td>-5°~50°C, 0-95%RH</td> <td></td> </tr> <tr> <td>Certifications</td> <td>EMI: CE Class A, VCCI Class A, FCC Class A, BSMI, CCC Safety: CB, UL, BSMI, CCC</td> <td></td> </tr> <tr> <td>MTBF</td> <td>>200000 Hours</td> <td></td> </tr> </table>	Certifications	CE EN55032, EN55024, EN61000-3-2, EN61000-3-3, EN606011-2 (Medical Electrical equipment), EN301489-1, EN301489-17, EN300328, EN301893 FCC, IC, cUL+UL, CB, RCM, NCC, BSMI, UL2043	IEEE 802.3af/at 104 Gbps 16K 370W 41.7 Mpps @ 64Byte Packet 0°~40°C, 0-85%RH EMI: CE Class A, VCCI Class A, FCC Class A, BSMI, CCC Safety: CB, UL, BSMI, CCC	MTBF	> 700000 Hours		L2 Switch:			Description	Minimum Specifications		Primary Ports	48 x 1000Base-T PoE		Uplink Ports	4 x 1000 Mbps Base-T/FX		PoE Compliance	IEEE 802.3af/at		Switching Capacity	104 Gbps		MAC Address Table	16K		PoE Power Budget	370W		Forwarding Rate	41.7 Mpps @ 64Byte Packet		Operating Conditions	-5°~50°C, 0-95%RH		Certifications	EMI: CE Class A, VCCI Class A, FCC Class A, BSMI, CCC Safety: CB, UL, BSMI, CCC		MTBF	>200000 Hours	
Certifications	CE EN55032, EN55024, EN61000-3-2, EN61000-3-3, EN606011-2 (Medical Electrical equipment), EN301489-1, EN301489-17, EN300328, EN301893 FCC, IC, cUL+UL, CB, RCM, NCC, BSMI, UL2043	IEEE 802.3af/at 104 Gbps 16K 370W 41.7 Mpps @ 64Byte Packet 0°~40°C, 0-85%RH EMI: CE Class A, VCCI Class A, FCC Class A, BSMI, CCC Safety: CB, UL, BSMI, CCC																																											
MTBF	> 700000 Hours																																												
L2 Switch:																																													
Description	Minimum Specifications																																												
Primary Ports	48 x 1000Base-T PoE																																												
Uplink Ports	4 x 1000 Mbps Base-T/FX																																												
PoE Compliance	IEEE 802.3af/at																																												
Switching Capacity	104 Gbps																																												
MAC Address Table	16K																																												
PoE Power Budget	370W																																												
Forwarding Rate	41.7 Mpps @ 64Byte Packet																																												
Operating Conditions	-5°~50°C, 0-95%RH																																												
Certifications	EMI: CE Class A, VCCI Class A, FCC Class A, BSMI, CCC Safety: CB, UL, BSMI, CCC																																												
MTBF	>200000 Hours																																												
Section A:	1.2 SCOPE OF WORK	8	<p>Content in the RFP: Similar to the network layer, data center layer will be scalable to cater to the increasing computing and storage needs in future.</p> <p>Clarification Required:</p>	It may be considered to have 1000 concurrent administrative users. All citizen centric applications shall have a much larger user base and concurrency.																																									

WEBEL TECHNOLOGY LIMITED

			Please provide tentative count of total userbase/concurrent users across various departments access DC infrastructure.	
Section A:	1.2 SCOPE OF WORK	23	<p>Content in the RFP: The Data Centre will be housed by using the existing State Data Centre at Monibhandar</p> <p>Clarification Required: Please brief the MSI scope of work at State data center at Monibhandar.</p>	All aspects are part of MSI scope.
Section A:	1.2 SCOPE OF WORK	23	<p>Content in the RFP: The Data Centre will be housed by using the existing State Data Centre at Monibhandar</p> <p>Clarification Required: As per our understanding, WBSDC authorities will provide enough rackspace as per bidder's requirement & other basic amenities like physical/logical security, fire proof system, cooling, power, bandwidth, internet etc.. to host required IT hardware at SDC as per RFP solution. Please confirm.</p>	WBSDC shall provide enough rack space.
Annexure 1	1. General	74	<p>Content in the RFP: A Command and Control Centre shall be implemented in an area of approx. 4000 sq. ft. (including 500 sq.ft. for Data Centre) equipped with all hardware equipment's and software (as per the BOM) for monitoring and management of all smart solutions till the permanent ICCC is not ready for operations.</p> <p>Clarification Required: As per the statement in ICCC/TR/1.01 , conflict in Data center location. Please clarify if DC IT hardware is to be hosted at SDC or ICCC location. And also please provide bidder's scope of work in detail for data center.</p>	The architecture is as per MSI best understanding. The existing WBSDC is to be utilized to the optimum.
Annexure 1	5.1.3.2.1 Security Services for CCC solution	158	<p>Content in the RFP: The proposed solution should have a Business Continuity Plan and a Disaster Recovery Plan prepared and implemented by the SI before commencement of the operations. Robust backup procedures to be established for the same.</p>	

WEBEL TECHNOLOGY LIMITED

			<p>Clarification Required: For disaster recovery plan, please provide the disaster recovery location & hosting details (on premise or on cloud) and also MSI's scope of work.</p>	
Annexure 1	5.1.3.2.1 Security Services for CCC solution	158	<p>Content in the RFP: The proposed solution should have a Business Continuity Plan and a Disaster Recovery Plan prepared and implemented by the SI before commencement of the operations. Robust backup procedures to be established for the same.</p> <p>Clarification Required: As per our understanding from the RFP, Disaster recovery is not part of RFP and DR is provisioned by authorities. Please confirm if our understanding is correct.</p>	As per tender
Annexure 1	5.1.3.2.1 Security Services for CCC solution	158	<p>Content in the RFP: The proposed solution should have a Business Continuity Plan and a Disaster Recovery Plan prepared and implemented by the SI before commencement of the operations. Robust backup procedures to be established for the same.</p> <p>Clarification Required: What is the DR compute & storage capacity to be considered.</p>	As per tender
Annexure 1	5.1.3.2.1 Security Services for CCC solution	158	<p>Content in the RFP: The proposed solution should have a Business Continuity Plan and a Disaster Recovery Plan prepared and implemented by the SI before commencement of the operations. Robust backup procedures to be established for the same.</p> <p>Clarification Required: Please provide RTO & RPO parameters to plan the failover/failback system efficiently.</p>	To be provided during planning stage
Annexure 1	5.1.3.2.1 Security Services for CCC solution	158	<p>Content in the RFP: The proposed solution should have a Business Continuity Plan and a Disaster Recovery Plan prepared and implemented by the SI before commencement of the operations. Robust backup procedures to be established for the same.</p>	Quarterly

WEBEL TECHNOLOGY LIMITED

			<p>Clarification Required: How many DR drills to be conducted yearly.</p>	
Annexure 1	1.2 SCOPE OF WORK	22	<p>Content in the RFP: Preparation of requisite system configuration for disaster recovery management and fail over system plan shall also be under the supervision of MSI.</p> <p>Clarification Required: Please provide the SLA performance metrics for IT hardware/software to be maintained by MSI.</p>	As per tender
Annexure 1	5.1.3.2.1 Security Services for CCC solution	158	<p>Content in the RFP: The proposed solution should have a Business Continuity Plan and a Disaster Recovery Plan prepared and implemented by the SI before commencement of the operations. Robust backup procedures to be established for the same.</p> <p>Clarification Required: Please confirm who will provision the network connectivity between DR to SDC & DR to ICCC locations so that DR will take over in failover conditions.</p>	In scope of MSI
Annexure 1	5.1.3.2.1 Security Services for CCC solution	158	<p>Content in the RFP: Data Backup/Archival over tape drive</p> <p>Clarification Required: Please confirm if the backup/ replication software to be procured by bidder as this line item is not mentioned in RFP BOM. Please clarify.</p>	In scope of MSI
Annexure 1	5.1.3.2.1.1 Intrusion Prevention System (IPS)	158	<p>Clarification Required: Minimum specifications provided in RFP for IPS are very open ended and basic. Please provide detail specs. And also this line item is not mentioned in the BOM, please add.</p>	In scope of MSI
Annexure 1	39. ICCC/TR/39.0 1 - 960GB SSD SATA & Redhat OS	122	<p>Clarification Required: Please make changes as "960GB SSD SATA or SSD" as SSD drives can be used for faster performance and "Redhat or any other OS" as OS is limited to particular OEM. Every application runs in different OS.</p>	WBSDC has only Red Hat OS

WEBEL TECHNOLOGY LIMITED

Annexure 1	1.1.3.1 Functional Specifications of the Application Software	139	Content in the RFP: 3b Software (Application, Database and any other) must not be restricted by the license terms of the OEM from scaling out on unlimited number of cores and servers during future expansion. Clarification Required: Please provide tentative count of CCC concurrent users across various departments and also the expected growth of userbase over next 3-5 years. This is to plan the IT systems and also scalability.	Up to 10L citizens
Annexure 1	ICCC/TR/14.3 Voice Recordings	91	Clarification Required: Please confirm us the retention period for voice recordings to arrive the storage sizing.	During entire tenure of project
Annexure 1	ICCC/TR/14.3 Self-Service IVR	91	Clarification Required: Please confirm the number languages to be enabled in the IVR and voice scripts for all the required languages and flows to be provided by smart city authority.	English, Bengali, Hindi
Annexure 1	ICCC/TR/14.9 PRI Lines	92	Clarification Required: As mentioned in this section, 4 + 4 PRI lines for both inbound and outbound activities shall be provided by smart city authority. Please confirm.	To be provided by authority
Annexure 1	ICCC/TR/14.1 Call center licenses	88	Clarification Required: How many call center licenses are required?	As per tender
Annexure 1	ICCC/TR/14.1 Users of IP-PBX system.	88	Clarification Required: Other than call center executives, who are the other users of IP-PBX system.	ICCC Users
Annexure 1	ICCC Platform Functional Specifications , Section 1.1.1, Mobile Module – 2 - way communication for Field	149	Content in the RFP: a. Create an incident from the field b. View incidents and relevant incident information including location and attachments c. Exchange comments with the control room operators and other users d. Support incident management at offline mode with ability to sync information when reconnect with network e. Use a native app (iPad) running IOS operating systems or web based portal	As per tender

WEBEL TECHNOLOGY LIMITED

	personnel		<p>Clarification Required: Request to amend the standard ICCC Mobile Module – 2 - way communication for Field personnel related specification as follows: ICCC field responder mobile application which allows the field team to perform the following actions:</p> <ol style="list-style-type: none"> a. Create an incident from the field b. View incidents and relevant incident information including location and attachments c. Exchange comments with the control room operators and other users d. Support incident management at offline mode with ability to sync information when reconnect with network e. Use a native app (iPad) running IOS operating systems or web based portal f. View new incidents as part of the incident SOP actions g. Update the status of the incident h. View individual, bulk and escalation notifications i. View the incident location on the map j. Navigation option provided to reach the incident location k. Able to view attached image/document of the incident l. Update the ATR- Action Taken Report (Audio/ Video/ Image) for the incident along with appropriate remarks 	
Annexure 1	ICCC Platform Functional Specifications , Section 1.1.1. Standard Operations Procedures (SOP)	144	<p>Content in the RFP: Standard Operations Procedures (SOP) The SOP Tool should have capability to define the following activity types: Manual Activity - An activity that is done manually by the owner and provide details in the description field.</p> <p>Automation Activity - An activity that initiates and tracks a particular work order and select a predefined work order from the list.</p> <p>If-Then-Else Activity - A conditional activity that allows branching based on specific criteria. Either enter or select values for Then and Else.</p> <p>Notification Activity - An activity that displays a notification window</p>	As per tender

WEBEL TECHNOLOGY LIMITED

		<p>that contains an email template for the activity owner to complete, and then sends an email notification.</p> <p>SOP Activity - An activity that launches another standard operating procedure.</p> <p>Clarification Required: Request to amend the standard ICCC Standard Operating Procedures (SOPs) related specification as follows:</p> <p>SOP Tool should have capability to define the following activity types:</p> <p>Manual Activity - An activity that is done manually by the owner and provide details in the description field.</p> <p>Automation Activity - An activity that initiates and tracks a work flow and select a predefined flow order from the list.</p> <p>If-Then-Else Activity - A conditional activity that allows branching based on specific criteria. Either enter or select values for Then and Else. Shall use inputs from related other devices to auto-configure responses and email responses to relevant stakeholders creating both time stamped event response and the actual communication sent out to the airport administrative hierarchy and to the field formations</p> <p>Notification Activity - An activity that displays a notification window that contains an email template for the activity owner to complete, and then sends an email notification as per manual alternate responses to the situation, if not an automated standard response to the Smart City administrative hierarchy and the field formations</p> <p>REST Activity - An activity that creates a REST service call. The user can specify the service URL and any required authentication information to be invoked when the activity is started.</p> <p>Mass Notification Activity – An activity should provide the software component for the message broadcast and notification solution that allows authorized personal and/or business processes to send large number of messages to target audience with various communication methods including SMS, Email and Push notification on Mobile apps.</p>	
--	--	---	--

WEBEL TECHNOLOGY LIMITED

			SOP Activity - An activity that launches another standard operating procedure.	
Annexure 1	ICCC Platform Functional Specifications , Section 1.1.1, Rule Engine & Optimization	148	<p>Content in the RFP: Should have ability to respond to real-time data with intelligent & automated decisions Should provide an environment for designing, developing, and deploying business rule applications and event applications. The ability to deal with change in operational systems is directly related to the decisions that operators are able to make. Should have at-least two complementary decision management strategies: business rules and event rules. Should provide an integrated development environment to develop the Object Model (OM) which defines the elements and relationships</p> <p>Clarification Required: Request to amend the standard ICCC Rule Engine & Optimization related specification as follows:</p> <p>Should have ability to respond to real-time data with intelligent & automated decisions Should provide an environment for designing, developing, and deploying business rule applications and event applications. The ability to deal with change in operational systems is directly related to the decisions that operators are able to make. Should have at-least two complementary decision management strategies: business rules and event rules.</p> <p>Should provide an integrated development environment to develop the Object Model (OM) which defines the elements and relationships</p> <p>Should provide geospatial marker representation rules for different conditions of sensors and data.</p> <p>Command and Communications Center should be able to correlate two or more events coming from different subsystems (incoming</p>	As per tender

WEBEL TECHNOLOGY LIMITED

			sensors) based on time, place, custom attribute and provide correlation notifications to the operators based on predefined business and operational rules in the configurable and customizable rule engine.	
Annexure 1	3a, Solution & Platform:	139	<p>Content in the RFP: Integration of up to 2500 CCTV Camera Live Feed at the ICCC from Network connected CCTV Camera. The same should be viewed on real-time with at least 250 camera feed to be projected onto the Video-wall at any given time. Note : The bidder shall not get any form of direct access to the existing VMS. They shall be provided with only a feed via a network. The interpretation of that feed and needful display of the same shall require appropriate equipment (VMS or others) to display. Such solution and infrastructure should be a designed to support up to 2500 CCTV feeds</p> <p>Clarification Required: ICCC is a thin client model cannot handle 250 cameras live feed on web based application. Hence, request to amend the clause as follows.</p> <p>Integration of up to 2500 CCTV Camera Live Feed at the ICCC from Network connected CCTV Camera. Thin client of command center should be able to handle upto 100 cameras live feed and thick client should be able to handle upto 250 cameras live feed to be projected onto the Video Wall at any given time.</p>	As per tender
a) Page no 11	a) MSI shall be responsible for development	a) Page no 11	a) As per our understanding, as per RFP and BOQ, COTS GIS software having Image processing capabilities like georeferencing, tagging of assets, images processing etc. (Refer GIS/NKGSCL/1.03 in RFP) will be required. Please confirm our understanding.	Geofencing & Tagging is required. Survey not part of scope.

WEBEL TECHNOLOGY LIMITED

<p>b) S.L No 59, 196, 186</p>	<p>and deployment of all software required to meet the requirements of the project. Some of the software may be “Commercial Off-The-Shelf (COTS)” or may require bespoke development as outlined in the subsequent sections of this document.</p> <p>and b) All 3rd party license cost including GIS platform, Maps,OTC software per year</p>	<p>b) S.L No 59, 196, 186</p>	<p>b) Taking stock of the RFP - GIS requirements,3D visualisation (refer RFP clause -GIS/NKGSCCL/1.18) , data creation and survey is also a part of GIS scope of work. Request you to add this line of items in BOQ also for techno-commercial aspect.</p>	
<p>a) Page no 184</p>	<p>a) GIS/NKGSCCL/1.01- MSI shall integrate all spatial & non-spatial</p>	<p>a) Page no 184</p>	<p>a) GIS is an important components of Smart city project which have been undertaken in India till now. The GIS scope cater the requirements of department, citizen and other stakeholders. For it, GIS based web application is developed for specific department(GIS based departmental modules) and citizen / stakeholder specific Web application. So, we may request you to clarify on regards to</p>	<p>The total users or web based applications are not fixed as of yet. It should be able to accommodate all the administrative users.</p>

WEBEL TECHNOLOGY LIMITED

<p>b) Page no 184</p>	<p>data of this project into an Enterprise Geodatabase and develop a GIS portal with required GIS functions, Tools, Analysis & Dashboard to provide web access to all users of the project</p> <p>and</p> <p>b) GIS/NKGSCCL/1.06 - MSI shall carry out application development to functions & tools as per requirement</p>	<p>b) Page no 184</p>	<p>number of web application modules / portal with functional requirements which needs to developed / customize for departments /citizen . As it plays a pivotal role for techno-commercial estimation of project.</p> <p>b) All the required GIS based data needs to be migrated / Integrated (Refer clause-GIS/NKGSCCL/1.01-) .Kindly confirmed that all concerned departments are going to provide all required spatial & Non spatial information to the bidder as per the requirements of the web application.</p>	
<p>a) Page no 185</p> <p>b) Page no 185</p>	<p>i) Integration, export & import of various formats of data such as KML, JSON, XLS, XML, etc.; - 3D Data</p>	<p>a) Page no 185</p>	<p>a) As per our understanding, the user want to drape the base map layers over the terrain for visualisation purpose. This process is generally adopted for 3D visualisation of the city. Further the terrain data should be provided by department (refer clause no 3D view options of buildings & terrain). Please confirmed our understanding.</p> <p>b) As per requirements specified in RFP, the bidder needs to do periodic data updation. we request you to specify the time interval for data updation. Further, for updation, all required data should be</p>	<p>The terrain data is not available as of yet. The time interval of updation is not defined, may or so be depending on the pace of change of landscape.</p>

WEBEL TECHNOLOGY LIMITED

	<p>of city.</p> <p>ii)After successful Go-live and implementation, the Maintenance & Operation of GIS shall be carried out during MSI's contract period by taking care of Data Management, 24/7 availability of Database, periodical data updation, editing & performance management.</p>	<p>b) Page no 185</p>	<p>provided by concerned departments only . Please confirmed our understanding, as it relates to Techno-commercial estimation.</p>	
<p>a) Page no 185</p>	<p>a) GIS/NKGSCC L/1.07 - Data creation - Necessary Field Survey, collection from various sources,</p>	<p>a) Page no 185</p>	<p>we may assumed that for basemap creation, survey will be required. We request to provide the detail functional requirements of survey type, Area to be covered which needs to be undertaken for data creation. As its required for techno-commercial estimation for the project.</p>	<p>The existing base map is available in AutoCAD format, the same would need to be rendered into importing with needful corrections.</p>

WEBEL TECHNOLOGY LIMITED

	<p>compilation, digitization, accurate geo-referencing of spatial & Image data, migration, data conversion, integration, Enterprise Geodatabase preparation</p>			
a) Page no 185	<p>1) GIS/NKGSCC L/1.08 - Should be capable of integrating with existing GIS data available with NKDA</p>	a) Page no 185	<p>1) As specified in RFP, GIS data will be provided by departments. So , we may understand that all related information on regards to GIS scope will be provided by departments. Please provide detail on list of data availabilities with client. Please confirmed our assumption.</p>	<p>The existing base map is available in AutoCAD format, the same would need to be rendered into importing with needful corrections. There are other data sets available in different geo-spacial formats with different layers of data to be imported.</p>
a) Page no 186	<p>GIS/NKGSCC L/1.19 - GIS base map shall include following, but not limited to these data with attributes which shall be finalized during study phase; - Building</p>	a) Page no 186	<p>1) For creation of base map, different information gathering techniques are adopted to collect different level of information. As per GIS scope mentioned in RFP, we are assuming that all the base map required information is with departments in GIS ready formats which needs to be incorporated in base layers. 2) Building footprint will be captured from current image. We assumed that information like name of building ,Point of interest, health services etc will be get updated in base map as per department input 3) Most important, address and utility mapping is altogether a big project. It includes high cost and manpower. It also a time consuming work. As this project is based on fixed timeline and Funds, we may request to confirm, that all the required information relates to address, utility networks will only be incorporates over</p>	

WEBEL TECHNOLOGY LIMITED

	<p>footprints and names</p> <ul style="list-style-type: none">- Points of Interest data, not limited to:- Health Services• Land-Cover (Green areas, Open areas, Water bodies)• Address Layers (Pin code, Locality, Sub- Locality etc.)• Utility Networks (OFC, Water, Sewer, Drainage etc.)• Locations of other Municipal Assets• Education (Primary/Secondary/High school/Colleges)• Religious structures• Community centres		<p>base map from departmental input or CAD drawing. Further during AMC period, the updation can be carried out in fixed timely manner using departmental information.</p>	
--	---	--	---	--