



Government of Jharkhand  
Urban Development & Housing Department  
**Ranchi Smart City Corporation Limited**

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Ranchi/Date: 12/10/2018

Memo No.:RSCCL/C4/140(Part)/2018/372

Tender No.: RSCCL/C4/140 (Part)/2018/347  
Issued on: September 28, 2018

## **Corrigendum - I**

It is hereby informed that corrigendum/amendment have been made with respect to various clauses of invited RFP (Tender Notice No. : RSCCL/C4/140 (Part)/2018/347) for "Selection of Master System Integrator (MSI) for Implementation of Command Control and Communication Centre (C4) under Smart City Mission in Ranchi (Call 4)".

The corrigendum/amendments/addendums have been indicated in Enclosure-I. The above document along with Pre-bid replies are uploaded to our websites i.e. <https://smartranchi.jharkhand.gov.in> and <https://jharkhandtenders.gov.in>.

Bidders are advised to refer the above documents before submission of their proposals.

Encl: As Above

-sd-

(Ashish Singhmar)  
**CEO, RSCCL**

**ENCLOSURE - 1**

#	Volume No.	Clause No.	Page No.	RFP Original Clause	Amended/Added Clause
1.	I	-	3	Last date and time for submission of Proposals (online) - October 24, 2018 at 03:PM	Last date and time for submission of Proposals (online) - <b>November 01, 2018 at 04:00 PM</b>
2.	I	-	3	Date and Time for Opening of Technical Proposals - October 24, 2018 at 04:00 PM	Date and Time for Opening of Technical Proposals - <b>November 02, 2018 at 04:30 PM</b>
3.	I	2.3.17	31	2.3.17 Pre-Qualification Criteria	<b>Refer Annexure I: Changes in Pre-Qualification Criteria</b>
4.	I	2.3.18	33	2.3.18 Technical Evaluation Criteria	<b>Refer Annexure II: Changes in Technical Evaluation Criteria</b>
5.	I	2.3.24	47	The bidder's proposed OEM for C4 software should be deployed in minimum 5 cities globally. C4 software should be have minimum 1 deployment in cloud and minimum 1 deployment on-premises in globally with multiple smart city application / use cases. Bidder to submit OEM undertaking and project case study.	The bidder's proposed OEM for C4 software should be deployed in minimum <b>2 cities globally</b> . C4 software should be have minimum 1 deployment in cloud and minimum 1 deployment on-premises in globally with multiple smart city application / use cases. Bidder to submit OEM undertaking and project case study.
6.	I	Schedule A1	86	3.63 Centralized Wi-Fi Management Solution for City Buses	This line item stands deleted.
7.	I	Schedule A1	87	3.75 One time setting-up backup aggregate bandwidth cost at DC	<b>3.75 One time cost for Internet Lease Line (1 Gbps) and Backup Internet Lease Line (500 Mbps)</b>
8.	I	Schedule A2	91	Addition	<b>3.4 360 Degree Camera – 25 No.</b>
9.	-	-	-	Addition	<b>Annexure III: Minimum Technical Specification of 360 Degree Camera</b>
10.	I	Schedule A2	92	8.2 Camera with ANPR Capability - 300	<b>8.2 Camera with ANPR Capability + IR Illuminator – 300</b>
11.	I	Schedule A6	101	Addition	<b>Addition of one more expert in the financial format: 11. Business Intelligence (BI) Expert</b>
12.	I	Schedule A6	103	Schedule A6 – Integration with Existing and Proposed Applications	Schedule <b>A7</b> – Integration with Existing and Proposed Applications
13.	I	Schedule B1	107	Mobile Broadband Uplink for Wi-Fi on Buses (20 Mbps)	Mobile Broadband Uplink for Wi-Fi on Buses <b>(2 Mbps)</b>
14.	I	Schedule B1	107	7. MPLS line between DC & Cloud DR – No. – 1	7. MPLS line between DC & Cloud DR – No. – <b>2</b>
15.	II	2	13	4. a. ATCS – 50 Locations	4. a. ATCS – <b>40</b> Locations

#	Volume No.	Clause No.	Page No.	RFP Original Clause	Amended/Added Clause
16.	II	-	-	Addition	Annexure IV: Minimum Technical Specification for Wi-Fi router for City Bus
17.	-	-	-	Clarification	Annexure V: Tentative Layout of C4 Set-up into the upcoming Urban Tower
18.	II		110	10. Other Essential Feature: Support for IPv6 host, ICMPv6, IPv6 ACL, Dual-stack IPv4/IPv6 management, IPv6 applications WEB/SSL, IEEE 802.3ad, ICMP, LLDP, DHCP snooping, DHCP option 82, DHCP relay, ICMP. The switch should have ECO Friendly design and operation.	Other Essential Feature: Support for IPv6 host, ICMPv6, IPv6 ACL, IPv6 applications WEB/SSL, IEEE 802.3ad, ICMP, LLDP, DHCP snooping, DHCP option 82, DHCP relay, ICMP. The switch should have ECO Friendly design and operation.
19.	II	4.2.3	132	New Addition	Chat Features: a. Solution should offer chat support features as an additional interaction channel to citizens. b. It should provide conversational bot capabilities for 24x7 citizen support. c. All conversation between bot and citizens should be logged and time stamped. d. It should be possible to escalate conversation from bot to live agent by agents whenever needed by citizen. e. Chat bot shall be also be integrated with City Portal and Mobile App
20.	II	4.2.4	137	Other requirements - ▪ RS232 control (with loop-through) ▪ On Screen Display (OSD) ▪ IR remote control / IR Access through IP ▪ flicker free image on the Large Screen	Other requirements - ▪ On Screen Display (OSD) ▪ IR remote control / IP based Access ▪ Flicker free image on the Large Screen
21.	II	4.2.5	139	13. Input/ Output Support: VI/HDMI/USB/ LAN/ VGA/SATA port	13. 13. Input/ Output Support: DVI/HDMI/USB/ LAN/ VGA/SATA port

#	Volume No.	Clause No.	Page No.	RFP Original Clause	Amended/Added Clause
22.	II	4.2.6	141	New Addition	The video wall content will be able to show live securely on any remote display through web browser.
23.	II	4.2.14	150	It should support for H.323 SIP Interworking Encryption and H.323 SIP Interworking DuoVideo.	It should support for H.323 SIP Interworking.
24.	II	4.3.4	155	Security Maintenance: Should show real-time and History reports of Bandwidth usage per policy	Security Maintenance: Should show real-time and History reports of Bandwidth usage per policy/application
25.	II	4.3.4	156	General: To get layered approach to Security, Firewall and IPS should be of different OEM.	General: To get layered approach to Security, Firewall and IPS may be of different OEM.
26.	II	4.3.8	161	Processor <ul style="list-style-type: none"> <li>▪ Latest series/ generation of 64 bit x86 processor(s) with Ten or higher Cores</li> <li>▪ Processor speed should be minimum 2.4 GHz</li> <li>▪ Minimum 2 processors per each physical server</li> </ul> MSI Should go for fully populated blade configuration.	Processor <ul style="list-style-type: none"> <li>▪ Latest series/ generation of 64 bit x86 processor(s) with Ten or higher Cores</li> <li>▪ Processor speed should be minimum 2.4 GHz</li> <li>▪ Minimum 2 processors per each physical server</li> </ul> MSI Should go for fully populated CPU socket
27.	II	4.3.9	174	Intake system : Naturally Aspirated	Intake system : Naturally Aspirated/Turbo Charged
28.	II	4.3.25	198	Addition	33. Enterprise Level support is to be taken from the OEM for the entire period of the contract.
29.	II	4.4.4.1	235	d. The following Traffic violations to be automatically detected by the system by using appropriate Non-Intrusive sensors technology: The system should have both provisions to detect red light status by taking the signal feed from the traffic signal controller as well as by video analytics method using another camera (Evidence Camera) focused at the red light. The Evidence camera should also be used for evidence snap generation. <ul style="list-style-type: none"> <li>▪ Red Light Violation</li> <li>▪ Stop Line Violation</li> <li>▪ Wrong left turn violation</li> <li>▪ Wrong direction driving violation</li> </ul>	d. The following Traffic violations to be automatically detected by the system by using appropriate Non- Intrusive sensors technology: The system should have both provisions to detect red light status by taking the signal feed from the traffic signal controller as well as by video analytics method using another camera (Evidence Camera) focused at the red light. The Evidence camera should also be used for evidence snap generation. <ul style="list-style-type: none"> <li>▪ Red Light Violation</li> <li>▪ Stop Line Violation</li> <li>▪ Wrong left turn violation</li> <li>▪ Wrong direction driving violation</li> </ul>

#	Volume No.	Clause No.	Page No.	RFP Original Clause	Amended/Added Clause
					<ul style="list-style-type: none"> <li>▪ <b>No Helmet Detection</b></li> </ul>
30.	II	4.4.4.1	236	k. Free Left Violation	This functionality stands deleted.

### Changes in Pre-qualification Criteria

Pre-qualification Criteria PQ4 and PQ5 are revised as per the following:

#	Basic Requirement	Specific Requirements	Documentary Evidence
PQ 4	Command and Control Center related Experience	<p><b>1. Criteria shall be met by:</b> Sole Bidder or <b>Any Member</b> of a consortium</p> <p><b>2. Project:</b> Two (2) project as a System Integrator for the implementation &amp; maintenance of Command Control and Communication Centre (Comprising minimum of Command Control Centre Application, Dashboard, Video Wall and Operation Room). Project must meet the following conditions to be considered as an eligible project for pre-qualification purpose:</p> <p style="padding-left: 40px;">(i) Successfully completed (Implementation as well as Maintenance)</p> <p style="text-align: center;">OR</p> <p style="padding-left: 40px;">(ii) Completed implementation i.e. Go-Live of all modules as per the SoW and realized at least 50 % of CAPEX cost/Fee as per Contract Agreement</p> <p><b>3. Client:</b> Project should have been executed for any Central Government/ State Government/PSU/ ULB/Govt. Boards/Defence/Metro Rail in India or Globally</p> <p><b>4. Project Cost:</b> Should not be less than <b>INR 15 Cr</b> in the last 7 (Seven) financial years or <b>INR 30 Cr</b> (in case of projects done Globally)</p>	<p>1. Work order/ Contract clearly highlighting the scope of work, Bill of Material and value of the contract/order with value excluding civil/mechanical/ HVAC works;</p> <p>2. Completion/Commission Certificate issued &amp; signed by the competent authority of the client entity on the entity's Letterhead with value excluding civil/mechanical/HVAC works <b>OR Self-certificate from the bidder signed by the concerned project in-charge of the bidder and counter signed by authorized signatory for this bid holding written special power of attorney along with the official contact details of the competent authority of the client entity along with Work Order. The Client reserves the right to contact the aforementioned competent authority.</b></p> <p>In case of large orders/orders with operations &amp; maintenance phase, the completion may specify successful execution and in operation status of a part of the order meeting the requirement.</p>

#	Basic Requirement	Specific Requirements	Documentary Evidence
PQ5	ITMS related Experience	<p><b>Criteria shall be met by:</b> Sole Bidder or <b>Any</b> Member of a consortium</p> <p><b>2. Project:</b> Two (2) projects as a System Integrator for the implementation &amp; maintenance of Intelligent Traffic Management System [comprising at least three (3) components out of 1. Red Light Violation Detection System (RLVD) 2. Automatic Number Plate Recognition System (ANPR), 3. Adaptive Traffic Control system (ATCS), 4. Variable Message Sign Boards (VMSB) and 5. Public Address System (PAS)].</p> <p>Project must meet the following conditions to be considered as an eligible project for pre-qualification purpose:</p> <p>(i) Successfully completed (Implementation as well as Maintenance)</p> <p>OR</p> <p>(ii) Completed implementation i.e. Go-Live of all modules as per the SoW and realized at least 50 % of CAPEX cost/Fee as per Contract Agreement</p> <p><b>3. Client:</b> Project should have been executed for any Central Government/ State Government/PSU/ ULB/Govt. Boards/Defence/Metro in India</p> <p><b>4. Project Cost:</b> Should not be less than INR 10 Cr in the last 7 (Seven) financial years</p>	<p>1. Work order/ Contract clearly highlighting the scope of work, Bill of Material and value of the contract/order with value excluding civil/mechanical/ HVAC works;</p> <p>2. Completion/Commission Certificate issued &amp; signed by the competent authority of the client entity on the entity's Letterhead with value excluding civil/mechanical/HVAC works <b>OR Self-certificate from the bidder signed by the concerned project in-charge of the bidder and counter signed by authorized signatory for this bid holding written special power of attorney along with the official contact details of the competent authority of the client entity along with Work Order. The Client reserves the right to contact the aforementioned competent authority.</b></p> <p>In case of large orders/orders with operations &amp; maintenance phase, the completion may specify successful execution and in operation status of a part of the order meeting the requirement.</p>

### Changes in Technical Evaluation Criteria

Technical Evaluation Criteria TQ 3.1, TQ 3.2, TQ 3.3, and TQ 3.6 are revised as per the following:

#	Technical Evaluation Criteria	Marks	Documentary Evidence*
TQ 3.1	<p><b>1. Criteria:</b> Execution of Command and Control Centre related projects</p> <p><b>2. Criteria shall be met by:</b> Sole Bidder or Any Member of a consortium</p> <p><b>3. Project:</b> As a System Integrator for the implementation &amp; maintenance of Command Control and Communication Centre (Comprising minimum of Command Control Centre Application, Dashboard, Video Wall and Operation Room) in the last 7 (Seven) financial years.</p> <p>Project must meet the following conditions to be considered as an eligible project:</p> <p>(i) Successfully completed (Implementation as well as Maintenance)</p> <p>OR</p> <p>(ii) Completed implementation i.e. Go-Live of all modules as per the SoW and realized at least 50 % of CAPEX cost/Fee as per Contract Agreement</p> <p><b>3. Client:</b> Project should have been executed for Central Government/ State Government/PSU/ ULB/Govt. Boards/Defence/Metro Rail in India or Globally</p> <p><b>4. Project Cost:</b> Should not be less than <b>INR 15 Cr</b> (in case of projects in India) or <b>INR 30 Cr</b> (in case of projects done Globally)</p> <p><b>5. Scoring Structure:</b> For two projects – <b>5 marks</b>. For each additional project <b>4 marks</b> would be awarded. Maximum <b>4 projects</b> would be considered for evaluation.</p>	13.0	<p>1. Work order/ Contract clearly highlighting the scope of work, Bill of Material and value of the contract/order with value excluding civil/mechanical/ HVAC works;</p> <p>2. Completion/Commission Certificate issued &amp; signed by the competent authority of the client entity on the entity's Letterhead with value excluding civil/mechanical/HVAC works <b>OR Self-certificate from the bidder signed by the concerned project in-charge of the bidder and counter signed by authorized signatory for this bid holding written special power of attorney along with the official contact details of the competent authority of the client entity along with Work Order. The Client reserves the right to contact the aforementioned competent authority.</b></p> <p>In case of large orders/orders with operations &amp; maintenance phase, the completion may specify successful execution and in operation status of a part of the order meeting the requirement.</p>



#	Technical Evaluation Criteria	Marks	Documentary Evidence*
TQ 3.2	<p><b>Criteria:</b> Execution of Command and Control Centre related projects in Smart Cities in India</p> <p><b>2. Criteria shall be met by:</b> Sole Bidder or Any Member of a consortium</p> <p><b>3. Project:</b> As a System Integrator for the implementation &amp; maintenance of Command Control and Communication Centre (Comprising minimum of Command Control Centre Application, Dashboard, Video Wall and Operation Room) in the last 7 (Seven) financial years. Project must meet the following conditions to be considered as an eligible project:</p> <ul style="list-style-type: none"> <li>(i) Successfully completed (Implementation as well as Maintenance)</li> <li>OR</li> <li>(ii) Completed implementation i.e. Go-Live of all modules as per the SoW and realized at least 50 % of CAPEX cost/Fee as per Contract Agreement</li> </ul> <p><b>4. Client:</b> Project should have been executed for any of the 100 selected smart cities in India</p> <p><b>5. Project Cost:</b> Should not be less than <b>INR 15 Cr.</b></p> <p><b>6. Scoring Structure:</b> For each project <b>1.5 marks</b> would be awarded for each project, maximum <b>3 projects</b> would be considered for evaluation.</p>	4.5	<p>1. Work order/ Contract clearly highlighting the scope of work, Bill of Material and value of the contract/order with value excluding civil/mechanical/ HVAC works;</p> <p>2. Completion/Commission Certificate issued &amp; signed by the competent authority of the client entity on the entity's Letterhead with value excluding civil/mechanical/HVAC works <b>OR Self-certificate from the bidder signed by the concerned project in-charge of the bidder and counter signed by authorized signatory for this bid holding written special power of attorney along with the official contact details of the competent authority of the client entity along with Work Order. The Client reserves the right to contact the aforementioned competent authority.</b></p> <p>In case of large orders/orders with operations &amp; maintenance phase, the completion may specify successful execution and in operation status of a part of the order meeting the requirement.</p>
TQ 3.3	<p><b>1. Criteria:</b> Execution of Intelligent Traffic Management System related projects</p> <p><b>2. Criteria shall be met by:</b> Sole Bidder or Any Member of a consortium</p> <p><b>3. Project:</b> As a System Integrator for the implementation &amp; maintenance of any Intelligent Traffic Management System project [comprising at least three (3) out of 1. Red Light Violation Detection System (RLVD), 2. Automatic Number Plate</p>	8.0	<p>1. Work order/ Contract clearly highlighting the scope of work, Bill of Material and value of the contract/order with value excluding civil/mechanical/ HVAC works;</p> <p>2. Completion/Commission Certificate issued &amp; signed by the competent authority of the client entity on the entity's Letterhead with value excluding civil/mechanical/HVAC works <b>OR Self-certificate from the bidder signed by the concerned project in-charge of the bidder and counter signed by authorized signatory for this bid holding written</b></p>

#	Technical Evaluation Criteria	Marks	Documentary Evidence*
	<p>Recognition (ANPR), 3. Adaptive Traffic Control system (ATCS), 4. Variable Message Sign Boards (VMSB) and 5. Public Address System (PAS)] in the last 7 (Seven) financial years. Project must meet the following conditions to be considered as an eligible project:</p> <ul style="list-style-type: none"> <li>(i) Successfully completed (Implementation as well as Maintenance)</li> <li>OR</li> <li>(ii) Completed implementation i.e. Go-Live of all modules as per the SoW and realized at least 50 % of CAPEX cost/Fee as per Contract Agreement</li> </ul> <p><b>4. Client:</b> Project should have been executed for any Central Government/ State Government/Urban Local Bodies in India. Project for Metro rail or Railways wouldn't be consider for technical evaluation in this category.</p> <p><b>5. Project Cost:</b> Should not be less than INR 10 Cr.</p> <p><b>6. Scoring Structure:</b> For two projects – 2 marks. For each additional project <b>3 marks</b> would be awarded. Maximum <b>4 projects</b> would be considered for evaluation.</p>		<p><b>special power of attorney along with the official contact details of the competent authority of the client entity along with Work Order. The Client reserves the right to contact the aforementioned competent authority.</b></p> <p>In case of large orders/orders with operations &amp; maintenance phase, the completion may specify successful execution and in operation status of a part of the order meeting the requirement.</p>
TQ 3.6	<p><b>1. Criteria:</b> Execution of ERP implementation related projects (COTS or Bespoke)</p> <p><b>2. Criteria shall be met by:</b> Sole Bidder or Any Member of a consortium</p> <p><b>3. Project:</b> As a system integrator for implementation &amp; maintenance of any ERP system including utilities management/ billing &amp; maintenance, <b>HR &amp; Payroll, Project Management, Vehicle Tracking System, Automated Fare Collection System,</b> Asset management, Finance modules (comprising of at-least two modules) in the last 7 (Seven) financial years</p>	5.0	<p>1. Work order/ Contract clearly highlighting the scope of work, Bill of Material and value of the contract/order with value excluding civil/mechanical/ HVAC works;</p> <p>2. Completion/Commission Certificate issued &amp; signed by the competent authority of the client entity on the entity's Letterhead with value excluding civil/mechanical/HVAC works <b>OR Self-certificate from the bidder signed by the concerned project in-charge of the bidder and counter signed by authorized signatory for this bid holding written special power of attorney along with the official contact details of the competent authority of the client entity along with Work Order. The Client reserves the right to contact the aforementioned competent authority.</b></p>

#	Technical Evaluation Criteria	Marks	Documentary Evidence*
	<p><b>4. Client:</b> Project should have been executed for any Central Govt. / State Govt. / PSUs/ ULBs/ Govt. Boards in India or Globally</p> <p><b>5. Project Cost:</b> Should not be less than INR 5 Cr.</p> <p><b>6. Scoring Structure:</b> For each project 2.5 marks would be awarded. Maximum 2 projects would be considered for evaluation.</p>		<p>In case of large orders/orders with operations &amp; maintenance phase, the completion may specify successful execution and in operation status of a part of the order meeting the requirement.</p>

Note: "Documentary Evidence" shall remain same for all project experiences proposed by the bidder (s) for evaluation.

**Minimum Technical Specification for 360 Degree Camera**

Sr.	Parameter	Minimum Technical Specifications	Compliance (Yes/No)	Product Documentation reference
1.	Make	<to be provided by the bidder>		
2.	Model	<to be provided by the bidder>		
3.	Image Sensor	1/3.2" progressive scan RGB CMOS, 12MP		
4.	Image Control	The camera shall incorporate: <ul style="list-style-type: none"> <li>▪ Automatic exposure control</li> <li>▪ Automatic white balance (Range; 2500K~8000K)</li> <li>▪ 50Hz and 60Hz mains frequency flicker control.</li> <li>▪ Sharpness control setting</li> <li>▪ EV compensation control setting</li> </ul>		
5.	Video Resolution	9.6MP (3200x3000)		
6.	GOP length (Group of Pictures)	Configurable GOP length (H.264 streaming)		
7.	Wide dynamic range	60db		
8.	Lens and Lens Mount Specifications	The camera shall use a 12 mega-pixel resolution single lens with focal length of 1.5 mm/ F2		
9.	Lens Mount	The camera shall use a lens mount of M12		
10.	Certification	<ul style="list-style-type: none"> <li>▪ FCC</li> <li>▪ CE</li> </ul>		
11.	Protocol Support	The camera shall support the following IP protocols: TCP/IP, HTTP, DHCP, DNS, NTP, FTP, STP, SMTP, Ipv4 (REC 791). Color: 0.3 lux, B/W: 0.06 lux		
12.	ONVIF Support	The camera shall fully support ONVIF Profile S.		
13.	Minimum Illumination	The camera shall provide pictures down to 0.1 lux at 50 IRE / F2.0 (6500k).		
14.	Standard Angle of View	60/90/180/270/ 360 degree views		
15.	Customized Angle of View	The Camera shall be able to create customized four field of views as per RSCCL requirement in any combination like 4 views consisting of 60 degree/120 degree/ 150 degree/360 degree angles simultaneously.		
16.	Multi-View	Each user shall be able to create its own viewing angle in single or combination irrespective of other user's view. For example, client 1 should be able to view a 60 degree dewarped image while another client is able to view a 120 degree dewarped view.		

Sr.	Parameter	Minimum Technical Specifications	Compliance (Yes/No)	Product Documentation reference
17.	Field of View	The cameras shall be able to give a field of view of 360 degree for recording irrespective of the angle of the view.		
18.	Number of Clients	Support for 20 users simultaneously		
19.	App Support	The camera shall support an app based client side dewarping on any android / apple / windows platform.		
20.	Privacy Masking	Yes on 360 degree image in 2D		
21.	Motion Detection	Yes, atleast individually configurable 16 zones .		
22.	Electrical Specifications	The camera shall have Power over Ethernet (PoE) capability, in accordance with IEEE 802.3af Class 2 standard and 12V, 1.0A (min) "LPS or NEC Class 2" power supply		
23.	Environmental Specifications	The camera shall operate in the temperature range of 0°C to +55°C.		
24.	Mounting Details	Yes, the OEM shall have option of recess mounts, Pole Mount, Pendant Mount, Recess, Concealed, Wall and Ceiling mounts. All mounts have to be of the same make as camera.		
25.	Sunshield	Camera should have integrated sunshield as part of its housing accessories .Sunshield has to be same make as camera.		
26.	Ingress Protection Rating	IP 66 rated		
27.	Impact Resistance	IK 09/10		
28.	Intelligent Recording	The camera shall at all times continue to record the complete 360 degree image irrespective of angle of view.		
29.	Intelligent Analysis	Based on the 360 degree recording irrespective of angle of view, RSCCL should be able to dewarp the recorded image in any angle to have accurate forensic analysis.		
30.	Dewarping in recorded view	The media player should be able to 3D dewarp the recorded image of the AVI format on the player itself for full proof forensic analysis.		
31.	Audio	An audio microphone input (via 3.5mm jack; via RTSP using G711 codec (μLaw - 8K sample rate); via ONVIF S). An audio line output (via 3.5mm jack; via RTSP using G711 Codec.		
32.	Memory card	Camera shall be support Micro SD card upto 64 GB.		

**Minimum Technical Specification for Wi-Fi Router for City Buses**

<b>Sr.</b>	<b>Minimum Technical Specifications</b>	<b>Compliance (Yes/No)</b>	<b>Product Documentation reference</b>
1.	Make	<to be provided by the bidder>	
2.	Model	<to be provided by the bidder>	
3.	Support 2.4G and 5G Wi-Fi		
4.	Support 3G/4G,designed for vehicle application		
5.	Professional vehicle power supply design, with multiple protective measures		
6.	With large capacity SSD or TF storage		
7.	Push advertisements to Wi-Fi users		
8.	Automatic user data acquisition		
9.	Support firmware and content update from cloud platform		
10.	Dual SIM cards and GPS optional		
11.	Cloud platform centralized remote management		
12.	Power supply protection (enhanced MTBF)		
13.	Battery-saving feature: remote/managed power off		
14.	Passengers Wi-Fi Management		

**Tentative Layout of C4 Set-up into the upcoming Urban Tower**

