

## Corrigendum - I

**RFP for Selection of System Integrator for Integrated Transport Management System (ITMS) for OSRTC**

**RFP No. 123 Dated 06/05/2023.**

**No. 145/OSRTC/MIS-924/2020**

**Date: 05/06/2023**

S.No.	Section / Page No.	Existing Clause	Revised Clause
1.	Volume-I Clause No.2 Page No. 6	Schedule bidding process Last date for Bid Submission: 08/06/2023	Schedule bidding process Last date for Bid Submission: 19/06/2023 (3:00 PM)
2.	Volume-I Clause No.2 Page No. 6	Schedule bidding process Date and time for opening of bids: 08/06/2023	Schedule bidding process Date and time for opening of bids: 21/06/2023 (11:30 AM)
3.	Volume-I Clause No. 4.7 Page No. 11	EMD* fee in the shape of Demand Draft from any Scheduled Commercial or Nationalized Bank	EMD* fee in the shape of Demand Draft or Bank Guarantee from any Scheduled Commercial or Nationalized Bank
4.	Volume-I Clause No 5.3, PQ3 Page No. 18	Legal Entity In case of Consortium only two companies can form consortium (Including Lead Bidder)	Legal Entity In case of Consortium only three companies can form consortium (Including Lead Bidder)
5.	Volume-I Clause No 5.3, PQ4	Annual Turnover Minimum average annual turnover (Lead Bidder in case of Consortium) of the organization must be INR 200 Crores from	Annual Turnover

S.No.	Section / Page No.	Existing Clause	Revised Clause
	Page No. 18	<p>the last three (3) financial years (FY 19-20, FY 20-21, FY 21-22).</p> <p>Documents Required:</p> <p>Audited balance Sheet and Profit &amp; Loss account statement of the bidder for each of the last 3 audited financial years. Certificate duly signed by Statutory Auditor of the Bidder for total turnover.</p>	<p>Minimum average annual turnover (Lead Bidder in case of Consortium) of the organization must be INR 50 Crores from the last three (3) financial years (FY 20-21, FY 21-22, FY 22-23).</p> <p>Documents Required:</p> <p>Audited balance Sheet and Profit, provisional financial report of FY 22-23 &amp; Loss account statement of the bidder for each of the last 3 audited financial years. Certificate duly signed by Statutory Auditor / Chartered Accountant (CA) of the Bidder for total turnover.</p>
6.	Volume-I Clause No 5.3, PQ6 Page No. 19	The Bidder should have ISO 9001, ISO 27001, ISO 20000:2015 and CMMI Level 5	The Bidder (Any bidder in case of Consortium) should have ISO 9001, ISO 27001, ISO 20000:2015 and CMMI Level 5
7.	Volume-I Clause No 5.3, PQ7 Page No. 19	<p>Experience in AFCS</p> <p>The Bidder should have experience of at least two qualifying AFCS project where qualifying AFCS project shall mean AFCS project for intracity/intercity public transit organization like bus/metro (state govt. or ULB) in India wherein the bidder shall have provided AFC system software application for Fare Collection, with minimum of 100 (one hundred) nos. EMV certified ETM Machines/Validators/Ticket Office Machines. The qualifying AFC project should have been completed within the past 5 (Five) years from the date of submission of the bid submission.</p> <p>Documents Required:</p>	<p>Experience in AFCS</p> <p>The Bidder should have experience of at least one qualifying AFCS project where qualifying AFCS project shall mean AFCS project for intracity/intercity public transit organization like bus/metro (state govt. or ULB) in India wherein the bidder shall have provided AFC system software application for Fare Collection, with minimum of 100 (one hundred) nos. EMV certified ETM Machines/Validators/Ticket Office Machines. The qualifying AFC project should have been completed within the past 5 (Five) years from the date of submission of the bid submission.</p> <p>Documents Required:</p> <p>Go-Live Certificate or Completion certificate duly signed by client</p>

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		Only Completion certificate duly signed by client will be considered for the criteria.	
8.	Volume-I Clause No 5.3, PQ8 Page No. 19	<p>Experience of National Common Mobility card (NCCM) / Common Mobility Card (CMC)</p> <p>The Bidder should have experience of at least two qualifying projects where in NCCM / CMC are enabled to accept the payment.</p> <p>Documents Required:</p> <p>Only Completion certificate duly signed by client will be considered for the criteria.</p>	<p>Experience of National Common Mobility card (NCCM) / Common Mobility Card (CMC)</p> <p>The Bidder should have experience of at least one qualifying projects where in NCCM / CMC are enabled to accept the payment.</p> <p>Documents Required:</p> <p>Go-Live Certificate or Completion certificate duly signed by client</p>
9.	Volume-I Clause No 5.3, PQ9 Page No. 19	<p>Experience in AVLS &amp; PIS</p> <p>Bidder should have an experience of two qualifying AVLS Projects where Qualifying AVLS project shall mean intra city/intercity public transit system for a public transport (state govt. or ULB) with a fleet of at least 300 buses wherein the bidder has provided AVL system software and hardware to monitor, manage and established command and control centre to monitor and control transit operations. In addition, the bidder should have integrated the AVL system with Passenger Information sub-system to provide route and ETA (expected travel arrival) to passengers at bus station/depot/terminal via PIS Hardware.</p> <p>The qualifying AVL projects should have been completed within the past 5 (Five) years from the date of submission of the bid.</p>	<p>Experience in AVLS &amp; PIS</p> <p>Bidder should have an experience of one qualifying AVLS Projects where Qualifying AVLS project shall mean intra city/intercity public transit system for a public transport (state govt. or ULB) with a fleet of at least 100 buses wherein the bidder has provided AVL system software and hardware to monitor, manage and established command and control centre to monitor and control transit operations. In addition, the bidder should have integrated the AVL system with Passenger Information sub-system to provide route and ETA (expected travel arrival) to passengers at bus station/depot/terminal via PIS Hardware.</p> <p>The qualifying AVL projects should have been completed within the past 5 (Five) years from the date of submission of the bid.</p> <p>Documents Required:</p> <p>Go-Live Certificate or Completion certificate duly signed by client.</p>

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		<p>Documents Required:</p> <p>Only Completion certificate duly signed by client will be considered for the criteria.</p>	
10.	<p>Volume-I</p> <p>Clause No 5.3, PQ10</p> <p>Page No. 20</p>	<p>Experience in Planning &amp; Scheduling (P&amp;S)</p> <p>The Bidder have experience of at least two qualifying P&amp;S projects where qualifying P&amp;S project shall mean P&amp;S Project for intracity/intercity public transit organization (state govt. or ULB) in India wherein the bidder shall have provided P&amp;S system software application for a fleet/Conductor Duty management of at least 300 buses. P&amp;S System Shall have Scheduling Software, and Roster of buses and crew. The P&amp;S projects should have been completed within the past 5 (Five) years from the date of submission of the bid.</p> <p>Documents Required:</p> <p>Only Completion certificate duly signed by client will be considered for the criteria.</p>	<p>Experience in Planning &amp; Scheduling (P&amp;S)</p> <p>The Bidder have experience of at least One qualifying P&amp;S projects where qualifying P&amp;S project shall mean P&amp;S Project for intracity/intercity public transit organization (state govt. or ULB) in India wherein the bidder shall have provided P&amp;S system software application for a fleet/Conductor Duty management of at least 100 buses. P&amp;S System Shall have Scheduling Software, and Roster of buses and crew. The P&amp;S projects should have been completed within the past 5 (Five) years from the date of submission of the bid.</p> <p>Documents Required:</p> <p>Go-Live Certificate or Completion certificate duly signed by client.</p>
11.	<p>Volume-I</p> <p>Clause No 5.3, PQ10</p> <p>Page No. 20</p>	<p>Selection Procedure</p> <p>The Bidders would be technically evaluated out of 100 marks. All the bidders who will secure overall minimum of 70% (80 Marks out of 100 across all components) in Technical Evaluation will be considered as technically qualified. The Technical Evaluation Committee will be assigning technical marks individually. The final technical marks for a bidder will be calculated as the average of the marks assigned.</p>	<p>Selection Procedure</p> <p>The Bidders would be technically evaluated out of 100 marks. All the bidders who will secure overall minimum of 80 Marks out of 100 across all components in Technical Evaluation will be considered as technically qualified. The Technical Evaluation Committee will be assigning technical marks individually. The final technical marks for a bidder will be calculated as the average of the marks assigned.</p>
12.	Volume-I	Organization's Turnover	Organization's Turnover

S.No.	Section / Page No.	Existing Clause	Revised Clause
	Clause No 5.6, Technical Evaluation criteria, A.1 Page No. 22	The bidder should have an average annual turnover (Combine turnover in case of Consortium) of at least INR 200 Crores in last 3 financial years (FY 2019-20, 2020-21 & 2021-22) Mark Allocation will be as follows. <ul style="list-style-type: none"> <li>• 200 - 250 Cr. - 1 Marks</li> <li>• 251 - 300 Cr. - 2 Marks</li> <li>• 301 - 350 Cr. - 3 Marks</li> <li>• More than 400 Cr - 5 Marks</li> </ul> Documents Required: Extracts from the audited Balance sheet and Profit & Loss statements, Certificate from the Statutory Auditor.	The bidder should have an average annual turnover (Combine turnover in case of Consortium) of at least INR 50 Crores in last 3 financial years (FY 2020-21, FY 2021-22, FY 2022-2023) Mark Allocation will be as follows. <ul style="list-style-type: none"> <li>• 50 - 100 Cr. - 1 Marks</li> <li>• 101 - 300 Cr. - 2 Marks</li> <li>• 301 - 400 Cr. - 4 Marks</li> <li>• More than 400 Cr - 5 Marks</li> </ul> Documents Required: Audited balance Sheet and Profit, provisional financial report of FY 22-23 & Loss account statement of the bidder for each of the last 3 audited financial years. Certificate duly signed by Statutory Auditor / Chartered Accountant (CA) of the Bidder for total turnover.
13.	Volume-I Clause No 5.6, Technical Evaluation criteria, A.2 Page No. 22	Number of IT skilled on roll resources working with the organization as on 31st March 2019 500 resources = 5 marks Every additional 50 On Roll Employees – Additional 1 marks each (maximum 5 Marks) Total 10 Marks Documents Required: Undertaking of HR Certificate	Number of IT skilled on roll resources working with the organization as on 31st March 2019 100 resources = 5 marks Every additional 50 On Roll Employees – Additional 1 marks each (maximum 5 Marks) Total 10 Marks Documents Required: Undertaking of HR Certificate
14.	Volume-I Clause No 5.6,	Experience in AVLS & PIS	Experience in AVLS & PIS

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	Technical Evaluation criteria, B.1 Page No. 22	<p>The Bidder shall have experience of at least two qualifying AVLS projects. "Qualifying AVLS project shall mean intra city/intercity public transit system for a bus based public transport (state govt. or ULB) with a fleet of at least 300 buses wherein the bidder has provided AVL system software and hardware to monitor, manage and established command and control centre to monitor and control transit operations. In addition, the bidder should have integrated the AVL system with Passenger Information sub-system to provide route and ETA (expected travel arrival) to passengers at bus station/depot/terminal via PIS Hardware. The qualifying AVL projects should have been completed within the past 5 (Five) years from the date of submission of the bid.</p> <ul style="list-style-type: none"> <li>• One Project with 300 buses – 5 Marks</li> <li>• 2.5 marks will be allotted for every additional 300 units subject to a maximum of 5 additional marks."</li> </ul> <p>Total Marks – 10</p> <p>Documents Required</p> <p>Only Completion certificate duly signed by client will be considered for the criteria.</p>	<p>The Bidder shall have experience of at least One qualifying AVLS projects. "Qualifying AVLS project shall mean intra city/intercity public transit system for a bus based public transport (state govt. or ULB) with a fleet of at least 100 buses wherein the bidder has provided AVL system software and hardware to monitor, manage and established command and control centre to monitor and control transit operations. In addition, the bidder should have integrated the AVL system with Passenger Information sub-system to provide route and ETA (expected travel arrival) to passengers at bus station/depot/terminal via PIS Hardware. The qualifying AVL projects should have been completed within the past 5 (Five) years from the date of submission of the bid.</p> <ul style="list-style-type: none"> <li>• One Project with 100 buses – 5 Marks</li> <li>• 2.5 marks will be allotted for every additional 100 units subject to a maximum of 5 additional marks."</li> </ul> <p>Total Marks – 10</p> <p>Documents Required</p> <p>Go-Live Certificate or Completion certificate duly signed by client.</p>
15.	Volume-I Clause No 5.6, Technical Evaluation criteria, B.2 Page No. 22	<p>Specific Experience in Planning &amp; Scheduling System(P&amp;S)</p> <p>The Bidder have experience of at least two qualifying P&amp;S projects where qualifying P&amp;S project shall mean P&amp;S Project for intracity/intercity public transit organization (state govt. or ULB) in India wherein the bidder shall have provided P&amp;S system software application for a fleet of at least 300 buses. P&amp;S System shall have Scheduling Software, and Roster of</p>	<p>Specific Experience in Planning &amp; Scheduling System(P&amp;S)</p> <p>The Bidder have experience of at least One qualifying P&amp;S projects where qualifying P&amp;S project shall mean P&amp;S Project for intracity/intercity public transit organization (state govt. or ULB) in India wherein the bidder shall have provided P&amp;S system software application for a fleet of at least 100 buses. P&amp;S System shall have Scheduling Software, and Roster of buses and crew. The P&amp;S</p>

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		<p>buses and crew. The P&amp;S projects should have been completed within the past 5 (Five) years from the date of submission of the bid.</p> <p>2 Projects – 3 Marks</p> <p>1 Marks will be allotted per project subject to a maximum of 2 additional marks.</p> <p>Total Marks – 5 Marks</p> <p>Documents Required</p> <p>Only Completion certificate duly signed by client will be considered for the criteria.</p>	<p>projects should have been completed within the past 5 (Five) years from the date of submission of the bid.</p> <p>1 Projects – 3 Marks</p> <p>1 Marks will be allotted per project subject to a maximum of 2 additional marks.</p> <p>Total Marks – 5 Marks</p> <p>Documents Required</p> <p>Go-Live Certificate or Completion certificate duly signed by client.</p>
16.	<p>Volume-I</p> <p>Clause No 5.6, Technical Evaluation criteria, B.3</p> <p>Page No. 23</p>	<p>Specific Experience in Transit Management System (TMS)</p> <p>The Bidder have experience on at least two qualifying TMS projects "Qualifying TMS project means TMS project for intra-city/intercity public transit system for a bus based public transport organization (state govt. or ULB) in India with a fleet of at least 100 (one hundred) buses wherein the bidder shall have provided integrated solution comprising Depot Management System qualifying TMS project means TMS project for intracity/intercity public transit system for a bus based public transport organization (state govt. or ULB) in India with a fleet of at least 100 (one hundred) buses wherein the bidder shall have provided integrated solution comprising Depot Management System essentially integrated with Inventory Management System with additional integration of two or more component such as Workshop Management System, Fuel Management System, Tyre Management System". The TMS projects should have been completed</p>	<p>Specific Experience in Transit Management System (TMS)</p> <p>The Bidder have experience on at least One qualifying TMS projects "Qualifying TMS project means TMS project for intra-city /intercity public transit system for a bus based public transport organization (state govt. or ULB) in India with a fleet of at least 100 (one hundred) buses wherein the bidder shall have provided integrated solution comprising Depot Management System qualifying TMS project means TMS project for intracity/intercity public transit system for a bus based public transport organization (state govt. or ULB) in India with a fleet of at least 100 (one hundred) buses wherein the bidder shall have provided integrated solution comprising Depot Management System essentially integrated with Inventory Management System with additional integration of two or more component such as Workshop Management System, Fuel Management System, Tyre Management System". The TMS projects</p>

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		<p>within the past 5 (Five) years from the date of submission of the bid.</p> <ul style="list-style-type: none"> <li>• 2 Projects – 3 Marks</li> <li>• 1 Marks will be allotted per project subject to a maximum of 2 additional marks."</li> </ul> <p>Total Marks – 5</p> <p>Documents Required</p> <p>Only Completion certificate duly signed by client will be considered for the criteria.</p>	<p>should have been completed within the past 5 (Five) years from the date of submission of the bid.</p> <ul style="list-style-type: none"> <li>• 1 Projects – 3 Marks</li> <li>• 1 Marks will be allotted per project subject to a maximum of 2 additional marks."</li> </ul> <p>Total Marks – 5</p> <p>Documents Required</p> <p>Go-Live Certificate or Completion certificate duly signed by client.</p>
17.	<p>Volume-I</p> <p>Clause No 5.6, Technical Evaluation criteria, B.4</p> <p>Page No. 23</p>	<p>Experience in AFCS Projects</p> <p>The Bidder have experience of at least two qualifying AFCS project where qualifying AFCS project shall mean AFCS project for intracity/intercity public transit organization (state govt. or ULB) in India wherein the bidder shall have provided AFC system software application for Fare Collection, with minimum of 100 (one hundred) nos. EMV certified ETM Machines/Validators/Ticket Office Machines. The qualifying AFC project should have been completed within the past 5 (Five) years from the date of submission of the bid submission.</p> <p>2 Projects – 6 Marks</p> <p>3 projects - 10 Marks.</p> <p>Total Marks -15</p> <p>Documents Required</p>	<p>Experience in AFCS Projects</p> <p>The Bidder have experience of at least One qualifying AFCS project where qualifying AFCS project shall mean AFCS project for intracity/intercity public transit organization (state govt. or ULB) in India wherein the bidder shall have provided AFC system software application for Fare Collection, with minimum of 100 (one hundred) nos. EMV certified ETM Machines/Validators/Ticket Office Machines. The qualifying AFC project should have been completed within the past 5 (Five) years from the date of submission of the bid submission.</p> <p>1 Projects – 5 Marks</p> <p>Each additional project will be awarded 5 Marks.</p> <p>Total Marks -15</p> <p>Documents Required</p> <p>Go-Live Certificate or Completion certificate duly signed by client.</p>



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18.	Volume-I Clause No 5.6, Technical Evaluation criteria, B.6 Page No. 24	<p>Experience of National Common Mobility card (NCMC)</p> <p>The Bidder should have experience of at least two qualifying AFCS project where in qualifying project bidder should have payment acceptance through NCMC. The qualifying projects should have been commissioned within the past 5 (Five) years from the date of submission of the bid and project should be in operations for 12 months.</p> <p>2 projects - 10 marks. 3 projects - 15 marks Total Marks -15</p> <p>Documents Required</p> <p>Only Completion certificate duly signed by client will be considered for the criteria.</p>	<p>Experience of National Common Mobility card (NCMC) or equivalent experience</p> <p>The Bidder should have experience of at least One qualifying AFCS project where in qualifying project bidder should have payment acceptance through NCMC. The qualifying projects should have been commissioned within the past 5 (Five) years from the date of submission of the bid and project should be in operations for 12 months.</p> <p>1 projects - 10 marks. 3 or more projects - 15 marks Total Marks -15</p> <p>Documents Required</p> <p>Go-Live Certificate or Completion certificate duly signed by client.</p>
19.	Volume-I Commercial bid and priced bill of material Page No. 63	Format for Commercial bid and priced bill of material	Revised Format for Commercial bid and priced bill of material Annexure -2
20.	Volume-II: Clause No. 1.2	Objective: 7 – Bus Terminal Management System	Objective: 7 – Bus Terminal Management System

S.No.	Section / Page No.	Existing Clause	Revised Clause
	Page No. 8	<p>A bus terminal is a designated place where a bus starts or ends its scheduled route and picks and drops passengers. Bus Terminal Management shall receive data from the bus devices and transmit the same to the Command-and-Control Centre (CCC).</p> <p>A command-and-control center (CCC) in OSRTC refers to a secure room that operates as the surveillance monitoring center, coordination office and alarm monitoring center all in one. The CCC is the “nerve center” - a central administrative location from where overall assets and activities are monitored and managed.</p> <p>CCC has an objective to implement holistic and integrated video surveillance system which includes Command and Control center, Video Management Software and Video Analytics for the seven cities of the state of Rajasthan. This system shall also integrate with surveillance systems of different stakeholders with the objective of enhancing safety and security in the buses. The system shall help-</p> <ul style="list-style-type: none"> <li>• To aid citizen at the time of emergency</li> <li>• To provide facilities of Ambulance, Police Van, Fire Brigade to the citizens</li> <li>• To effectively manage Road Traffic</li> <li>• To make use of technology for traffic challan</li> <li>• Support police to maintain Law and Order</li> <li>• To help in investigation of crime</li> </ul>	<p>A bus terminal is a designated place where a bus starts or ends its scheduled route and picks and drops passengers. Bus Terminal Management shall receive data from the bus devices and transmit the same to the Command-and-Control Centre (CCC).</p> <p>A command-and-control center (CCC) in OSRTC refers to a secure room that operates as the surveillance monitoring center, coordination office and alarm monitoring center all in one. The CCC is the “nerve center” - a central administrative location from where overall assets and activities are monitored and managed.</p> <p>CCC has an objective to implement holistic and integrated video surveillance system which includes Command and Control center, Video Management Software and Video Analytics for OSRTC. This system shall also integrate with surveillance systems of different stakeholders with the objective of enhancing safety and security in the buses. The system shall help-</p> <ul style="list-style-type: none"> <li>• To aid citizen at the time of emergency</li> <li>• To help in investigation of crime</li> <li>• Monitoring of suspicious people, vehicles, objects etc. with respect to protecting life and property and maintaining law and order in the city</li> </ul> <p>The Proposed video surveillance system will enable the above by using VMS and Video analytics. This system will provide.</p> <ul style="list-style-type: none"> <li>• Alerts/ feedback about abnormal movements/ suspicious objects.</li> <li>• Better Management of Security breaches based on alerts received from system.</li> </ul>

S.No.	Section / Page No.	Existing Clause	Revised Clause
		<ul style="list-style-type: none"> <li>• Help in preventing, detecting, and dealing with criminal activities with minimum TAT.</li> <li>• Provide alerts and video analytics for counter terrorism.</li> <li>• Monitoring of suspicious people, vehicles, objects etc. with respect to protecting life and property and maintaining law and order in the city</li> <li>• Continuous monitoring of some important locations/ public places in city area like area near to railway station, airport, and other public places for keeping eye on regular activities &amp; for emergency support</li> </ul> <p>The Proposed video surveillance system will enable the above by using VMS and Video analytics. This system will provide.</p> <ul style="list-style-type: none"> <li>• Alerts/ feedback to the Police Department about abnormal movements/ suspicious objects.</li> <li>• Better Management of Security breaches based on alerts received from system.</li> </ul> <p>Improved turnaround time in responding to any investigation case, faster access to evidence in case of security breach, law violation in the prescribed areas.</p>	<p>Improved turnaround time in responding to any investigation case, faster access to evidence in case of security breach, law violation in the prescribed areas.</p>
21.	Volume-II: Clause No. 2.3 Page No. 12	<p>ITMS Overview</p> <p>Mobile App (Android, iOS, Windows) for Citizens, Officials &amp; Bus Crew Member</p>	<p>ITMS Overview</p> <p>Mobile App (Android, iOS) for Citizens, Officials &amp; Bus Crew Member</p>
22.	Volume-II:	Detailed scope and specification for Digital Fare Collection	Revised Detailed scope and specification for Digital Fare Collection Annexure -1

S.No.	Section / Page No.	Existing Clause	Revised Clause
	Clause No. 4.1.4 Page No. 23		
23.	Volume-II: Clause No: 6.13 Page 82	Technical specification for BDU -	Technical specification for BDU Annexure -3
24.	Volume-II: Clause No: 6.13 Page 97	Technical specification for CCTV The camera shall support H.254 Video Compression	Technical specification for CCTV The camera shall support H.264 Video Compression
25.	Volume-II: Clause No: 6.13 Page 97	Technical specification for CCTV <ul style="list-style-type: none"> <li>• Rugged, vibration, shock and tamper proof metal housing. Anti-vibration installation with locking mechanism</li> <li>• Vibration resistance as per /IS 9000-part 7 Shock resistant as per / IS 9000-part 8.</li> </ul>	Technical specification for CCTV <ul style="list-style-type: none"> <li>• Rugged, vibration, shock and tamper proof metal housing Anti-vibration installation with locking mechanism</li> <li>• Vibration resistance as per /IS 9000-part 7 / IEC 60068-2-6 or Equivalent</li> <li>• Shock resistant as per /IS 9000-part 8 / IEC 60068-2-27 or Equivalent</li> </ul>
26.	Volume-II: Clause No: 6.13 Page 97	Technical specification for CCTV Wide Dynamic Range (WDR) and Automatic Backlight Compensation.	Technical specification for CCTV Wide Dynamic Range (WDR) or Automatic Backlight Compensation.
27.	Volume-II: Clause No: 6.13 Page 97	OEM standards for CCTV -	<ul style="list-style-type: none"> <li>• OEM standards for CCTV</li> <li>• Bidder shall ensure compliance to the Office Memorandum for insertion of Rule 144 (xi) in the General Finance Rules (GFR)-2017 bearing reference number F.No. 6/18/2019-PPD dated 23 July 2020 or latest, by the Public Procurement Division, Department of Expenditure, Ministry of Finance. Non-compliant bid(s) will be</li> </ul>

S.No.	Section / Page No.	Existing Clause	Revised Clause
			<p>summarily rejected. The OEM should not have any common directors who are also on the board of companies having beneficiaries from land border countries at the time of bidding.</p> <ul style="list-style-type: none"> <li>• CCTV OEM should be active company and should have direct presence in India (not as joint venture, partnership firms or through any other association) &amp; manufacturing in India (not as joint venture, partnership firms or through any other association) (3rd Party Manufacturing not allowed). Documentary evidence should be submitted.</li> <li>• The camera OEM should be a genuine manufacturer and should have valid H.265 HEVC / H.264 AVC / BIS Certificate. Documentary evidence should be submitted.</li> </ul>
28.	Volume-II: Clause No: 6.16 Page 100	Technical specification for Videowall Resolution 920 x 1080	Technical specification for Videowall Resolution 1920X1080
29.	Volume-II: Clause No: 6.16 Page 100	Technical specification for Videowall Standard Inputs 1x Digital DVI-I/1x Digital DVI-D/other standard compatible input ports	Technical specification for Videowall Standard inputs HDMI(2), DP, DVI-D, Audio, USB
30.	Volume-II: Clause No: 6.16 Page 100	Technical specification for Videowall Control RS-232/RS-422/IR	Technical specification for Videowall RS232C In/out, RJ45(LAN) In, IR In
31.	Volume-II: Clause No: 6.16 Page 100	Technical specification for Videowall Combined Bezel (Typical) 5.7 mm	Technical specification for Videowall Combined Bezel (Typical) 0.88 mm

S.No.	Section / Page No.	Existing Clause				Revised Clause			
32.	Volume-II: Clause No: 6.16 Page 100	Technical specification for Videowall Video Wall Tiling 20X15				Technical specification for Videowall Video Wall Tiling as 3x3			
33.	Volume-II: Clause No: 8.1 Page 116	<b>S.N.</b>	<b>Item Description</b>	<b>Quantity</b>	<b>UoM</b>	<b>S.N.</b>	<b>Item Description</b>	<b>Quantity</b>	<b>UoM</b>
		<b>Hardware Requirement</b>				<b>Hardware Requirement</b>			
		1	LED with metal frame at Bus Stop as per technical specifications	155	Nos	1.	LED with metal frame at Bus Stop as per technical specifications	155	Nos
		2	PIS at Bus terminus	25	Nos	2.	PIS at Bus terminus	25	Nos
		3	Bus Terminal UPS 3 KVA, UPS with 4 hours of backup at Bus Terminal to operate POS	23	Nos	3.	Bus Terminal UPS 3 KVA, UPS with 4 hours of backup at Bus Terminal to operate POS	23	Nos
		4	Depot workstations as per specification mentioned in the RFP with inbuilt OS	30	Nos	4.	Depot workstations as per specification mentioned in the RFP with inbuilt OS	30	Nos
		5	HQ & CCC workstations as per as per specification mentioned in the RFP with inbuilt OS	20	Nos	5.	HQ & CCC workstations as per as per specification mentioned in the RFP with inbuilt OS	20	Nos

S.No.	Section / Page No.	Existing Clause				Revised Clause			
		6	AVL System with GPS Devices (AIS-140)	500	Nos	6.	AVL System with GPS Devices (AIS-140)	500	Nos
		7	Control Centre Hardware including 3X3 video wall, Networking equipment's, etc.	1	Nos	7.	e-SIM for GPS Devices	500	Nos
		8	CCTV with NVR	420	Lot	8.	Control Centre Hardware including 3X3 video wall, Networking equipment's, etc.	1	Nos
		9	PIS for Pre BS-6 buses	840	Nos	9.	NVR	420	Lot
		10	Passenger Counting System	600	Nos	10.	CCTV	840	Nos
		11	Printer	2	Nos	11.	PIS for Pre BS-6 buses	840	Nos
		12	Network Switches	2	Nos	12.	Passenger Counting System	600	Nos
		13	UPS	2	Nos	13.	Printer	2	Nos
		14	Commissioning & Networking	1	Nos	14.	Network Switches	2	Nos
		15	Router	2	Nos	15.	UPS	2	Nos
		16	Firewall cum IPS/IDS	2	Nos	16.	Commissioning & Networking	1	Nos

S.No.	Section / Page No.	Existing Clause				Revised Clause			
		17	100 TB Storage	2	Nos	17.	Router	2	Nos
		18	42U Rack	1	Nos	18.	100 TB Storage	2	Nos
		19	Cabling (UTP CAT6)	As per actuals	Meter	19.	42U Rack	1	Nos
		20	Videowall	1	Nos	20.	Cabling (UTP CAT6)	As per actuals	Meter
		21	ETIM Machine	600	Nos	21.	Videowall	1	Nos
		22	SAM Module	600	Nos	22.	BDU / OBU's	420	Nos
		23	SIM for ETIMs	600	Nos	23.	ETIM Machine	600	Nos
		24	ETIM charging station	30	Nos	24.	SAM Module	600	Nos
						25.	SIM for ETIMs	600	Nos
						26.	ETIM charging station	30	Nos





### **Digital Fare Collection**

The following are the processes defined for the purpose of the proposed digital fare collection system.

#### **Card Issuance**

- The selected bidder shall be responsible for instant issuance of OTCs at depot/sub-depot level and carry out related activities. Besides the OTC, cards issued by any banks will be used by customers for fare payment in future.
- This includes both personalized as well as non- personalized cards. The selected bidder Shall provide the personalized cards for concession pass holders and employee/staffs based on OSRTC's requirements with required details of photo, name, Age printed on the card.
- OSRTC shall review and approve the card design before proceeding with printing.
- OSRTC shall facilitate issuance of the selected bidder's prepaid /Concessional OTCs from depot counters through operators/ OSRTC personnel. However, the issuance from counters by OSRTC's personnel shall in general be limited to only instant issuance requiring minimum KYC.
- The selected bidder to take necessary measures to minimize the card issuance time and transaction time.
- The selected bidder shall provide an easy-to-use website and Mobile app service. Commuters should be able to fill in the required minimum details including KYC and collect the smart card kit at the depot with ease by showing a code for the registration form confirmation. The selected bidder shall also provide the APIs (if required in future) for the same as per request from OSRTC to enable this service through its Mobile app/website & other third-party apps as approved by OSRTC.
- The selected bidder shall be responsible for all compliances and business-related aspects of the card and OSRTC shall not have any liability for the same.
- The selected bidder shall be responsible for onboarding FI/bank in future to deploy NCMC ecosystem and card issuance.
- The selected bidder shall maintain entire life cycle indicative activities of OSRTC Transit Card (OTC) such as:
  - Issuance of Smart card
  - Activation of Smart card
  - Deactivation of Smart card
  - Blacklisting of Smart card
  - Re-loading/ Re-use of Smart card
  - Loss of Smart card and
  - Replacement of Smart card etc.

#### **Transaction Acquiring**

The customer will use the OTCs for digital fare payment. The selected bidder will be responsible for the acquiring of these transactions done using OTCs issued by the department certified as per OTC

specification.

### **Card Top-up**

Bidder shall provide various payment channels for the Card Top-up on the web/mobile interface provided by the Authority/its vendor.

- The selected bidder shall be responsible for the setup process and enabling the Top-up of all OTCs at OSRTC's service points under any payment scheme, based on commuters' request. The selected bidder shall not charge any additional fee for such services from the Customer or the OSRTC unless otherwise specified in the RBI guidelines or the agreement.
- The selected bidder shall provide interfaces for the top-up channel of the OTCs.
- The selected bidder shall enable online top-up of OTCs through its mobile app and website (interoperability for top-up of other bank cards to be enabled as and when permitted by RBI).
- The selected bidder should provide the required APIs and documentation for enabling such top-up through its mobile app/website & other third-party apps on approval from OSRTC.
- Commuters shall be able to check balance/transaction statement of the OTCs via SMS, or web-based channels, mobile apps etc.
- This should support standard Internet security including, but not limited to Digital Certificates, Various levels of encryption, Secure Socket Layers (SSL), Secure Hypertext Transfer Protocol (HTTPS). The selected bidder shall be responsible for the Top-up of OTCs, issued by any Bank in future, based on customers' request. The Bidder shall not charge any additional amount from the Customer or the Authority unless otherwise agreed in the agreement.

### **Hardware Provisioning**

- Provide necessary hardware for all required applications as per the mentioned Scope of the Services to be provided by the bidder. Kindly refer to Bill of material as per clause 15 of section V of the RFP document.
- Certify Acquiring Host as per EMV, PCI-DSS and NCMC standards.

### **Non-Payment Usage**

- Bidder to ensure all non-payment use cases are met and necessary integration with Authority's domain systems are completed.
- The authorities may appoint a 3rd party agency to certify the data formats and standards used by the bidder for terminal interface.

### **Service Points Management**

- Bidder to provide support /services are their service point to OTC commuters.
- Bidder to ensure that the Service Points display the OTC Issuance activity prominently.
- Bidder will facilitate following through Service Points:
- Instant card issuance and card top-up as per given process (in case of general cards)
  - Bidder to maintain inventory of prepaid general cards.
  - Help end users / customers with the use of cards.

**Fraud and Risk Management**

Provide risk, fraud and dispute/chargeback capabilities including KEY management.

**Helpdesk and Dispute Management**

- Provide central toll-free helpdesk/ IVRS to handle OTC transaction related issues.
- Provide OTC dedicated support with reference to transaction disputes, refunds, chargeback and merchant account management etc.

**Certifications and Compliances**

The bidder will be responsible for necessary certifications and compliances required for transactions acquiring of OTCs.

**ETIM Certification Requirements:**

S. No	Product/System	Role in Payment Eco- system	Certification Type	Followed Guidelines
1	Terminal	Acceptance	Hardware Level Requirement (L1)	EMVCo
			Terminal Kernel-(Contact L2)	EMVCo
			Terminal Kernel-(Contactless L2)	NCMC
			Terminal Application (L3)	NCMC

**Admin Console for OSRTC**

- To access MIS reports
- The authority foresees the need for implementing changes during the contract period (e.g., generation of new MIS reports, provision to upload additional formats, modify reconciliation logic, etc.). This may also include incorporation of new modes of payment along with the current modes of payment. Bidder to provide the above with no additional cost to Authority.

**Field Training, Hardware Maintenance and Spares**

- The bidder should have a local technical team set up in city for operations and support.
- The Bidder shall provide a dedicated Relationship Manager to take care of all issues of commuters arising out of this contract.
- Provide training to concerned persons/staffs/officials in Hindi/ English/ local language for citizen-friendly operations.
- Bidder should provide training material and user manuals.
- Bidder should provide training on the FI related MIS report and fund reconciliation.
- Manage hardware in a field including requests for adding new hardware.
- Manage spares in case of faults in the machine.

**SMS and e-mail Gateway**

Manage email/SMS for citizens and merchants.

## **Integration with State Road Transport Undertaking Domain System**

- Provide MIS integration points for Authority.
- Provide APIs for mobile apps and web applications for the public.
- Facilitate integration between Authority and MIS dashboard requirements.

## **Settlement & Reconciliation Procedure**

- The selected Bidder shall undertake complete OTC-based transaction settlement and reconciliation responsibilities.
- Settlement shall be automatically triggered at pre-defined cut-off time daily.
- Post settlement, the selected bidder shall process & reconcile all transactions performed via all delivery channels.
- It shall be possible to generate settled and unsettled transaction summary alerts. For transactions where reconciliation has failed, they will be flagged for reversal/dispute resolution.
- OSRTC may open a separate settlement account with FI/Bank, if required in future. Post settlement, FI/Bank shall transfer payment of settlement amount on next day (T+1) by 10:00 hours in OSRTC's designated Account (in Bidder Bank or another Bank). For the transactions occurred on Saturday, Sunday or any holiday as declared under the Negotiable Instruments Act 1988 or any bandh/bank strike etc., the transfer of payment will be conducted concurrently on the next working day. Bank shall make flexi deposit on the very same day of credit after leaving minimum balance i.e., mutually agreed for a minimum period of 365 days at Bank Bulk card rate and whenever fund is required to transfer flexi deposit shall reverse as per instruction of Authority.
- For any delay in settlement of daily cash collection/card-based transaction to OSRTC's accounts beyond T+1 day, the OSRTC reserves the right to deduct the Damages as amount by charging interest rates of 12% per annum for any additional period for which cash settlement is delayed.
- Selected Bidder shall undertake reconciliation of cash collected and transaction reported.
- Selected Bidder shall have to provide explanation for any discrepancy found.

**Annexure -2 - Commercial bid and priced bill of material, Volume-1, Page No.-63**

**Summary**

**A. Hardware Components**

S.N	Component Category	Unit Price	Quantity	Total Price	Price during Operations and Maintenance			Total O&M price	Total Amount exclusive of taxes, levies duties, etc.	Total Amount in Words
					Year 1	Year 2	Year 3			
					A	I	II			
1.	LED with metal frame at Bus Stop as per technical specifications		155							
2.	PIS at Bus terminus		25							
3.	Bus Terminal UPS 3 KVA, UPS with 4 hours of backup at Bus Terminal to operate POS		23							
4.	Depot workstations as per specification mentioned in the RFP with inbuilt OS		30							
5.	GPS Devices (AIS-140)		500							
6.	e-SIM for GPS Devices		500							
7.	Control Centre Hardware including 3X3 video wall, Networking equipment's, etc.		1							
8.	NVR		420							
9.	CCTV		840							

S.N	Component Category	Unit Price	Quantity	Total Price	Price during Operations and Maintenance			Total O&M price	Total Amount exclusive of taxes, levies duties, etc.	Total Amount in Words
					Year 1	Year 2	Year 3			
				A	I	II	III	B = (I+II+III)	C = A + B	C
10.	PIS for Pre BS-6 buses		840							
11.	Passenger Counting System		600							
12.	HQ & CCC workstations as per mentioned in the RFP with inbuilt OS		20							
13.	Printer		2							
14.	Network Switches		2							
15.	100 TB Storage		2							
16.	UPS		2							
17.	Commissioning & Networking		1							
18.	Router		2							
19.	42U Rack		1							
20.	Video Wall		1							
21.	OBU's / BDU's		420							
22.	Cabling (UTP CAT6)		as per actuals							
23.	ETIM Machine		600							
24.	SAM Module		600							
25.	SIM for ETIMs		600							
26.	ETIM charging station		30							
<b>Hardware component Total</b>										

## B. Software Component

S.N.	Component Category	Unit Price	Quantity	Total Price	Price during Operations and Maintenance			Total O&M price	Total Amount exclusive of taxes, levies duties, etc.	Total Amount in Words
					Year 1	Year 2	Year 3			
				A	I	II	III	B = (I+II+III)	C = A + B	C
1	Financial Management System		1							
2	Inventory Management Software		1							
3	Incident/Grievance Management/Help Desk Software		1							
4	Bus crew Scheduling and Dispatch Management Software		1							
5	Depot Management System		1							
6	Business Intelligence Software (5 Users)		1							
7	Enterprise Management System		1							
8	Commuter Mobile Application (Android and iOS)		1							
9	Software for Control Centre, Networking equipment's System		1							



S.N.	Component Category	Unit Price	Quantity	Total Price	Price during Operations and Maintenance			Total O&M price	Total Amount exclusive of taxes, levies duties, etc.	Total Amount in Words
					Year 1	Year 2	Year 3			
				A	I	II	III	B = (I+II+III)	C = A + B	C
	Software – License Fee									
	a) Operating System									
	b) Database System									
	c) Application Server Platform									
	d)Third party Software / plug in / development Tools									
10	Human Resource Management System (HRMS) Software		1							
11	Passenger Counting Solution for OSRTC Fleet		1							
12	Automated Fare Collection System (AFCS)		1							
<b>Software component Total</b>										

**C. Cloud hosting and connectivity Component**

S.N.	Component Category	Unit Price/Month	Quantity	Months	Total Amount exclusive of taxes, levies duties, etc.	Total Amount in Words
1	Cloud hosting		1	36		
2	Connectivity		1	36		
<b>Cloud hosting and connectivity component Total</b>						

**D. Project Resource Component\*: Technical Resources (Development and Implementation Phase)**

S.N.	Component Category	Quantity	Man-month Rate	Total Amount in Words
1	Program Manager	1		
2	Team Leader	1		
3	Solution Architect	1		
4	UI Designer	1		
5	Developers (3-5 years' Experience)	1		
6	Quality Expert	1		
7	Mobile Application Developers (3-5 years' Experience)	1		
8	Database Admin (5+ Years' Experience)	1		
9	Security Expert	1		
10	Systems Admin	1		
11	Tester (3-5 years' Experience)	1		
12	Helpdesk Services	1		
<p><b>Note:</b> The manpower cost sheet is only for reference; it shall not be added to the Cost Summary Sheet (E)</p>				

### E. Cost Summary

S.N.	Component Category	Total Price	Total price during Operations and Maintenance			Total O&M price	Total Amount exclusive of taxes, levies duties, etc.	Total Amount in Words
			Year 1	Year 2	Year 3			
		A	I	II	III	$B = (I+II+III)$	$C = A + B$	C
1	Hardware (A)							
2	Software (B)							
3	DC Hosting and connectivity (C)	Not Applicable						
<b>Grand Total</b>								

Authorised signatory on behalf of the bidder:

Full name: ...

Address: ...

Seal of the Firm:

**Annexure -3 – Technical specification for BDU, Clause No.: 6, Volume-2, Page No.-82**

S.No.	Minimum Requirements
	<b>Onboard Device (SCU &amp; BDU)</b>
1	<p><b>Signal Control Unit</b></p> <ul style="list-style-type: none"> <li>• Processor: 32/ 64 bit</li> <li>• Operating system: Embedded Windows/Linux with programming software</li> <li>• Memory: flash: 2 GB minimum, RAM 512 MB minimum (RAM memory includes SCU and BDC)</li> <li>• Interface: CAN 2.0, RS 485, RS 232, fast Ethernet, USB, digital outputs, digital/Analog inputs, WLAN, audio input output, amplified audio output</li> <li>• Interface protocols: as specified elsewhere in this document.</li> <li>• In built GPS and 3G/4G or latest (GSM) modules WLAN</li> <li>• Combi antenna using RG174 cable. The connectors on Combi antenna will be preferably SMA(M) ST plug type for GPS and FME(F) jack type 1/4"-36UNS-2B for 3G/4G or latest.</li> <li>• In built /external two channel amplifier minimum 10 Watts rms each suitable for 4 ~8 Ohm impedance with input for external microphone</li> <li>• In-built MP3 files storage/playback function.</li> <li>• Power to SCU &amp; BDC will be supplied through bus multiplexing wiring system</li> </ul>
2	<p><b>Technical specifications: GPS modules</b></p> <ul style="list-style-type: none"> <li>• Tracking sensitivity: -165 dBm typ</li> <li>• Navigation sensitivity; -148 dBm typ</li> <li>• Update rate 1 Hz (configurable to 10 Hz)</li> <li>• Time to first fix cold acquisition 35 - 42 seconds typ</li> <li>• Time to first hot acquisition 1 - 2 second typ</li> </ul>
3	<p>Navigation accuracy 3M horizontal</p> <p><b>Technical specifications: 3G(GSM) modules</b> GSM/GPRS SMT quad band and UMTS (3G)/4G or latest Temperature range -15°C to +80°C</p> <p><b>Technical specifications: 'Combi' Antenna</b> AMPS 850MHz, GSM900MHz, DCS1800MHz, PCS1900MHz, 3G UMTS 2.1GHz, Wi-Fi /Blue Tooth (2.4 GHz), GPS (1575.42MHz). A separate WLAN antenna may be provided if necessary.</p> <p>b.GPS</p> <ul style="list-style-type: none"> <li>i Impedance 50 Ohms</li> <li>ii VSWR &lt;1.5:1</li> <li>iii Polarization RHCP</li> </ul> <p>c. Waterproof IP-66 d. Temperature range: -15°C to +80°C</p>

S.No.	Minimum Requirements
4	<p><b>Technical Specification: BDC</b></p> <p>a. Display</p> <ul style="list-style-type: none"><li>i Size 8" diagonal minimum</li><li>ii Full color graphic TFT-640 x 480 dots minimum, capable of showing minimum 10 lines in English.</li><li>iii Viewing angle (horizontal) 70°/70° (right/left)/ (vertical) 60°/60° (up and down)</li></ul>

-Sd

**General Manager (A),  
OSRTC, Bhubaneswar**