

AMENDMENTS TO THE TENDER NO. SM-III(IT)/DMS(01)/2023-IT, dt: 10-02-2024 FOR implementation of Advanced Driver Assistance System (ADAS) and Driver Monitoring System (DMS)

Amendment No. 1

AS PER RFP

Annexure - 9: Technical Specifications Compliance Statement

The specifications mentioned are minimum requirements. The bidders may offer better/equivalent/ higher models.

Form T1:

The following are the technical parameters for the Mobile MDVR (to be fixed inside the bus):		
SL NO	Parameter	Minimum Requirement or Better
1	Operating System	Embedded Linux
2	Operation Interface	WEB, VGA
3	Analog Camera Input	4-ch, Max. 1080P
4	Encoding Capacity	Mainstream: 1080p/720p/WD1/4CIF Sub-stream: 720P/WD1/4CIF/2CIF/CIF
5	Streaming Capability	2 Streams Supported (up to 4CIF encoding for sub stream)
6	Video Frame Rate	PAL, NTSC
7	Video Output	1 VGA output
8	Display Split	1,4
9	Video Compression	H.265 and H.264
10	Audio Compression	G.711a/G.711u/G.722.1/G.726
11	Stream Type	Video, video & audio
12	Mobile Phone Access	iOS, Android
13	Wi-Fi	Pluggable 5.8 G Wi-Fi module
14	Browser	Google, IE9 or newer, Firefox
15	Device Update	WEB, USB, remote platform, upgrade tool
16	Recording Playback	1, 4
17	Backup	HDD, USB flash drive and network backup
18	Playback Mode	Normal playback
19	HDD	2 No's 2.5-inch HDDs (SATA) up to 2 TB HDD each

20	SD card	1 (256GB Max)
21	G-sensor	Built in
22	GPS & GLONASS	Precisely positioning the vehicle via the satellite and recording the location information in the video stream
23	Audio Output	1
24	Two-way Audio	1
25	Alarm Input	4 high/low level signal inputs, 1 pulse signal input, 1 BUTTON input
26	Alarm Output	2 relay signal outputs
27	Interfaces	RS-232, RS-422
28	USB	Front panel: 1 × USB 2.0 Rear panel: 1 × USB 2.0 (5-pin aviation connector)
29	Network Port	Front panel :1 ×10M/100M RJ45 Rear panel: 1 × 10M/100M M12 6-pin aviation connector
30	Firewall	Software based should support
31	Network Connectivity	4G Support
	AI Function	Distraction prompt detection, fatigue driving (eyes closed), seatbelt unbuckled detection, smoking detection, phone calling detection, driver out of seat detection, camera covered detection for Driving status monitoring Forward collision Warning, Pedestrian Collision Warning, Lane departure warning, headway monitoring warning for driving assistance
32	Power Supply	DC 9V-36V Should support Build-in super-capacitor prevents the mobile NVR from damage caused by sudden power outage.
33	Power Consumption	20W maximum (Without peripheral and storage media)
34	Certifications	CE/FCC/Emark/EN50155/CB/EN45545/ROHS2.0/ISO-7637-2
35	Accessories	Mounting kit, cables and connectors shall be supplied
37	Working Temperature and Humidity	-10 °C to +60 °C with 10% to 95% Humidity

AMENDED AS

- External Mobile DVR is not required. Storage integrated with DMS and ADAS unit is sufficient.
- No change in specifications of Vehicle-Mounted Camera for Driver and Vehicle-Mounted Camera for Front View
- slight changes in the specification, without the altering the solution requirements will be allowed

- The specifications mentioned are minimum requirements. The bidders may offer better/equivalent/ higher models.

Amendment No. 2

DATA SHEET

RFP Document Reference		Content as per RFP	Amended as
5	Earnest Money Deposit ('EMD')	₹2,00,000 (Rupees twenty -five lakhs only), in the form of a DD, drawn in favor of "Telangana State Road Transport Corporation (TSRTC)", payable at Hyderabad, valid for 210 (Two hundred and ten) days from the Bid Submission Deadline date.	₹2,00,000 (Rupees two lakhs only), in the form of a DD, drawn in favor of "Telangana State Road Transport Corporation (TSRTC)", payable at Hyderabad, valid for 210 (Two hundred and ten) days from the Bid Submission Deadline date.

Amendment No. 3

7. ELIGIBILITY CRITERIA FOR BIDDERS

	Basic Requirement	Content as per RFP	Amended as
7(F)	Financial Turnover	The bidder should have an average turnover of Rupees five crores per annum, during the last three financial years. Audited Financial Statements (Balance Sheets, P&L and IT Returns) shall be submitted for the last three financial years (2020-21, 2021-22 & 2022-23) alongwith tender(Technical Bids)	The bidder should have turnover of Rupees Three crores per annum, during each financial for the last three financial years. (2020-21, 2021-22 & 2022-23) Audited Financial Statements (Balance Sheets, P&L and IT Returns) shall be submitted for the last three financial years alongwith tender(Technical Bids)

Amendment No. 4

7. ELIGIBILITY CRITERIA FOR BIDDERS

	Basic Requirement	Content as per RFP	Amended as
7.1 (vi)		Audited Financial Statements (Balance Sheets, P&L and IT Returns) for the last three financial years (2020-21, 2021-22 & 2022-23) as proof of having an average turnover of Rupees twenty-five crores per annum, during the said financial years.	Audited Financial Statements (Balance Sheets, P&L and IT Returns) for the last three financial years (2020-21, 2021-22 & 2022-23) as proof of having turnover of Rupees Three crores per annum each year, during the said financial years. The turnover of subsidiary / group companies will also be considered

Amendment No. 5

9. EARNEST MONEY DEPOSIT

	Basic Requirement	Content as per RFP	Amended as
9.1		A sum of Rs. 2,00,000/- (Rupees Two lakhs only) shall be paid towards Earnest Money Deposit in the form of Demand Draft from any Nationalized Bank or Scheduled Bank other than a Cooperative Bank, drawn in favor of “FA & CAO, TSRTC, Hyderabad.”	A sum of Rs. 2,00,000/- (Rupees Two lakhs only) shall be paid towards Earnest Money Deposit in the form of Demand Draft from any Nationalized Bank or Scheduled Bank other than a Cooperative Bank, drawn in favor of “ <u>Telangana State Road Transport Corporation</u> ”, Hyderabad.”

Amendment No. 6

14. PAYMENT TERMS

	Basic Requirement	Content as per RFP	Amended as
14.1		50% of CAPEX will be paid after Pilot implementation, observation for a period of one month and delivery of all devices. 30% of CAPEX will be paid after installation of all the equipment and declaration of Go-Live. The balance 20% will be paid after completion of the total project period or against submission of Bank Guarantee for this value, valid for 84 months, in the format prescribed by TSRTC. Payment of the said 10% amount, against Bank Guarantee will be made only after completion of full implementation.	50% of CAPEX will be paid after Pilot implementation, observation for a period of one month and delivery of all devices. 30% of CAPEX will be paid after installation of all the equipment and declaration of Go-Live. The balance 20% will be paid after completion of the total project period or against submission of Bank Guarantee for this value, valid for 84 months, in the format prescribed by TSRTC. Payment of the said 20% amount, against Bank Guarantee will be made only after completion of full implementation.

Amendment No. 7

4. Scope of the Work

	Basic Requirement	Content as per RFP	Amended as
4	The scope of the Project includes	The Roadside conditions must also be considered when a DMS alert is generated.	The Roadside conditions must also be considered when a ADAS alert is generated.

Amendment No. 8

13 Functional / Technical Requirements of Project and Responsibilities of Successful Bidder

	Basic Requirement	Content as per RFP	Amended as
13.1.9		Any damages to the cameras shall be attended by the successful bidder at his own cost.	Any damages caused by the user shall be borne by TSRTC. However, the selected bidder must replace the device within the time specified by TSRTC

Amendment No. 9

Included now

12.5 Technical Bid Evaluation

The proposals will be evaluated on following basis:

Sl No	Criteria	Basis of Evaluation	Max Marks	Supporting
1	Should have experience in execution of similar AI based telematics solutions such as implementation of Video management and Analytics solution, alerts generation for any Central Govt./ State Govt. Departments/PSUs/Reputed Private Transport Organizations/ Fleet Management Organizations in the last 3 Financial years i.e., 2020-21, 2021-22, 2022-23 as on bid calling date.	<ul style="list-style-type: none">At least one project -102 Projects: -153 to 4 Projects: 20 Marks	20	Copy of Purchase Orders/ Work Orders to be submitted along with completion/ Performance letters. (Projects under execution will also be considered along with client certificate/Certificate from the Statutory Auditor or Company Secretary)
2	Should have experience in Implementation of any AI related projects during the last five years.	<ul style="list-style-type: none">2 Projects : 5 Marks3 Or More than 3 projects: 10 Marks	10	Copy of Purchase Orders/ Work Orders to be submitted along with completion/ Performance letters.

3	Technical Presentation with Solution Proposed and Demonstration of understanding of the Organization's requirements etc.	(i) Walk-through of the proposal in the presentation (ii) Clarity of understanding of the project and risks	20	Details about the duration, venue and schedule of the presentations shall be communicated to bidders during technical evaluation process.
4	Online Demo/POC of Solution. Demo of all standard features as requested in proposal.	Assessment will be based on successful demonstration of all the required features	30	Details about the duration, venue and schedule of the presentations shall be communicated to bidders during technical evaluation process.
5	Team Structure	Project manager should have at-least 8 years of total experience - 5 Min 2 resources having Experience in AI - 5	10	CVs of resources
6	Financial Turnover: The bidder should have a minimum turnover of Rs. 3 crores in the last three each financial years. Audited Financial Statements along with IT Returns have to be submitted for the last three financial years (2020-21, 2021-22 & 2022-23).	<ul style="list-style-type: none"> • INR 3 to 10 Crores: 05 Marks • More than INR 10 Cr: 10 Marks 	10	<ul style="list-style-type: none"> • Audited balance sheet for last 3 financial years • Certificate from CA with registration number/ seal clearly specifying the average annual turnover for the specified years.
	Total		100	

Minimum Technical Score of 70 out of 100 is required to qualify for opening of financial Bid. Only those bids having minimum score would be considered 'Qualified' and eligible for opening of financial bids.

Amendment No. 10

As per RFP

12. BID EVALUATION PROCESS

12.6 Financial Bid Opening

12.6.7 Total project cost including the CAPEX and OPEX will be considered for evaluation of L1 bidder.

Amended as

The financial proposals of only technically shortlisted Applicants (qualified bidders) will be opened and will be ranked in terms of their total evaluated cost using QCBS process with Technical Score having weightage of 70% and financial score having weightage of 30%.

Quality and Cost based Selection (QCBS) method shall be used for evaluation of the bids, as per the formula given below:

The individual bidder's financial score (SF) will be evaluated as per the formula given below:

$$SF = [F_{min} / F_b] * 100 \text{ (rounded off to 2 decimal places)}$$

where,

SF= Normalized financial score of the bidder under consideration

F_{min}=Minimum financial quote among the technically qualified bidders

F_b= Financial quote of the bidder under consideration

$$\text{Combined Score (S)} = ST * 0.7 + SF * 0.3$$

Where ST = Technical score secured by the bidder. Where SF = Financial score secured by the bidder.

Selection Process

The qualified bidder with the highest score based on above mentioned QCBS Criteria shall be selected for the award of the project.

Right to accept or reject the Proposal is reserved with the Department without assigning any reason and without any liability.

AMENDMENT NO:11

AS PER RFP:

Annexure - 8 (Financial proposal)**FINANCIAL BID****(To be submitted in the financial bid cover)**

Financial bid for Implementation of Driver Monitoring System (DMS) & Advanced Driver Assistance System (ADAS) in TSRTC for a period of five years, as per the terms and conditions stipulated in the RFP

Indicative project cost with component wise breakup

s.no	item	Make & Model Proposed	UoM		Unit Cost (Rs.)	Tax %	Total Cost incl. taxes (Rs.)
A	B	C	D	E	F	G	H = (E x (F+G))
1	IP Based Full HD Camera		Nos				
2	5G/4G SIM Cards (cost per year)		Nos.				
3	Cost of the DMS & ADAS Solution including deployment, customization & maintenance		Lumpsum				
4	4. Cloud Services Cost per year		Lumpsum				
5	Any other item required for scope of work: a. b.						
	Grand Total						

OPTION -1**CAPEX and OPEX model**

Description	Rate in Rs. (Excluding taxes) in figures and words
IP based Full HD cameras (Cost per device) including installation, connected spare parts and software for DMS and ADAS	
OPEX- Monthly hosting charges	

AMENDED AS:

s.n o	item	Make & Model Proposed	UoM	Qty	Unit Cost (Rs .)	Tax%	Total Cost incl. taxes (Rs.)
A	B	C	D	E	F	G	H = (E x (F+G))
1	IP Based Full HD Cameras (ADAS -1 and DMS-1)		Nos	400			
2	5G/4G SIM Cards (cost per year)		yearly	5 years			
3	Cost of the DMS & ADAS Solution including development, deployment, cloud hosting, customization & maintenance		Lumpsum for 5 years				
4	Any other item required for scope of work: a. b.						
	Grand Total Cost						