

Guidelines for the Implementation of VTMS

URL for Suraksha Mitr Application: <https://www.tracking.keralamvd.gov.in>

1. Guidelines to VLT Vendors/Manufacturers

a. Regarding Franchisees/ Registered Agencies for installation and maintenance

- Vendors should arrange a minimum of four registered agencies/franchisees at Four zones in Kerala
 - Thiruvananthapuram
 - Ernakulam
 - Trissur
 - Kozhikode
- Vendors should have a supervisory control over franchisee's operations and should ensure quality service to customers
- KMVD & C-DAC shall communicate with franchisee through Vendors only
- Franchisees should have the following facilities
 - An office in the region
 - **Trained technicians** to fit the VLT device in vehicles
 - A minimum of one person with computer & internet knowledge for tagging device with KMVD application
 - A minimum of one computer with internet connectivity & printer for printing the installation certificate
 - A contact telephone number should be given to customer to call for support
- Service Time

If any complaint is raised against the installed VLT device, then the concerned manufacturer/registered agency/ franchisee should respond within 8 hours

 - i. for complaint classified as **high**, resolve within 24 hrs of reporting the complaint.
 - ii. for complaint classified as **medium**, resolve within 48 hrs of reporting the complaint.
 - iii. for complaint classified as **low**, resolve within 72 hrs of reporting the complaint.

If more time is required, then a standby VLT should be installed temporarily and replaced once the original VLTs issue gets solved. The complaint and clarifications should be logged into the KMVD application.

Classification of High, Medium & Low Complaints

High - Any physical damage or hardware issue which completely stops or effects the normal working of VLT/ Error in normal & emergency data sending/ Missing or unwanted generation of Critical alerts / Issues related to Emergency buttons etc.

Medium - any condition which makes the device partially working like wrong update frequency, Missing or unwanted generation of Non critical alerts, issues related to hooter/buzzer etc.

Low - any condition which limits certain features of the device without effecting the normal working of the VLT like Issues related to full packet, health packets etc.

- Complaint Register

If the VLT device is found to have any complaints, then it should be registered in the complaint register module of the application to avoid false alerts. All the complaint registered should be rectified within the timeline specified in the above Service Time

- Subscription Renewal

All vendors should ensure that their franchisees provide a subscription renewal certificate to vehicle owners at the time of renewal of the subscription. This certificate should be produced by vehicle owner to MVD at the time of inspection for Certificate of Fitness (CF)

- Training to Franchises

All vendors should have master trainers who are well trained and thorough in KMVD application. These master trainers should give training to franchises technicians for fitment and tagging of VLT device.

b. Regarding Fitment of VLT device in Vehicle

- **Position of VLT and Panic Buttons**

Physical mounting of VLT device in vehicle should be as per AIS140 section 5.3. It is mentioned as '*The VLT system shall be mounted in a suitable location such a way that it is not easily accessible /exposed to passengers*'. VLT device may be fitted over the dashboard for heavy vehicles and under the dashboard for light vehicles. **The IMEI Number of VLT device should be clearly indicated above the device in such a way that it can be easily identified.**

In EIBs it has been decided to fit a minimum of 1+1 (1 for passengers and 1 for driver) and a maximum of 4+1 (4 for passengers and 1 for driver) panic buttons based on the seating capacity of the vehicles. Panic buttons for passengers may be fitted suitably in the vertical pillars on both sides of the vehicle. Panic buttons should be easily and equally accessible to all passengers and students in the vehicle. The fitment may be as follows

Guidelines for Implementing GPS based Vehicle Tracking & Management System

- Up to 7 seat : 1+1(1 for driver and 1 in back of 2nd row seat).
- 8 seat to 13 seat : 1+2(1 for driver and 1 each in 2 sides).
- 14 seat to 23 seat : 1+3 (1 for driver and 1 in right side 2nd row , 2nd in right side 2nd last row and 3rd in left side middle row).
- 24 seat and above : 1+ 4(As shown in Figure 2).

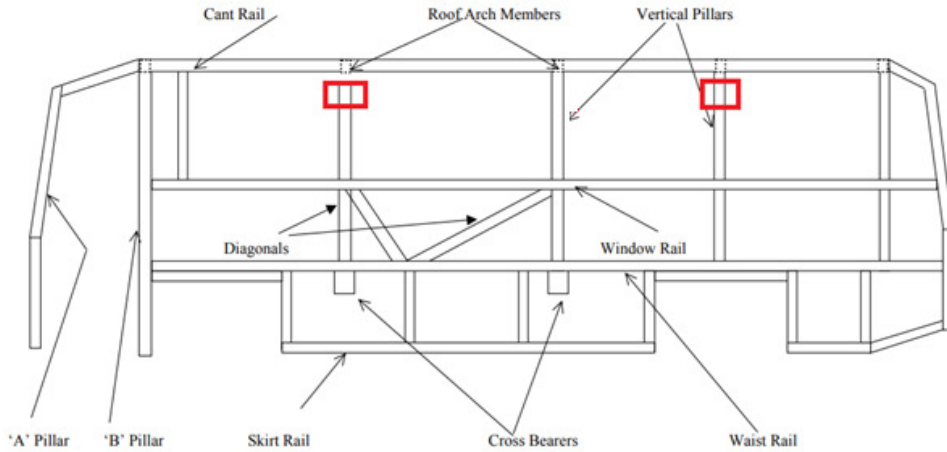


Figure 1: Panic Button position in vertical pillars

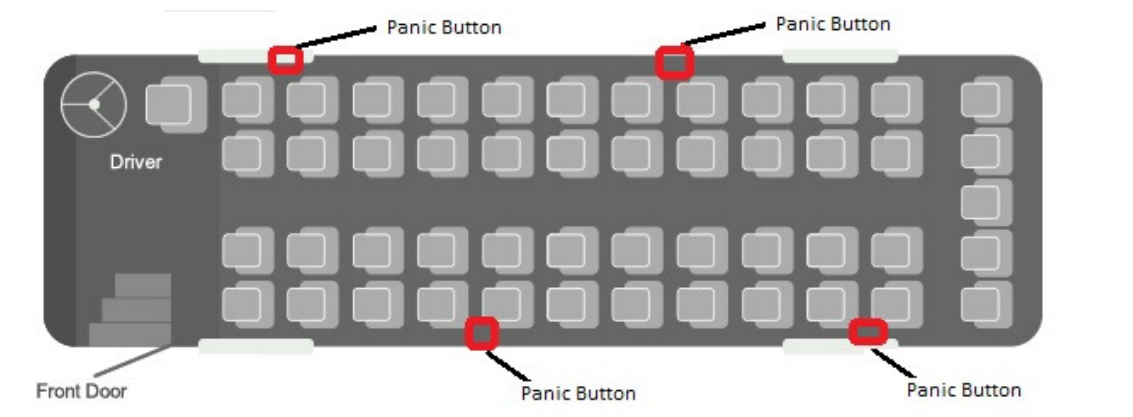


Figure 2: Indicative Panic Button positions for 49 seater

Note: The images shown are indicative. Fitment technicians should identify best positions for panic buttons based on the seating layout and body type of the vehicle. Primary consideration should be given to accessibility and safety of passengers.

- **Wiring of VLT and Panic buttons**

VLT devices and panic buttons should be properly wired in the vehicle. Wires to panic buttons and hooter/ buzzer should be provided with proper shielding or outer covering. No wires should be exposed or seen hanging. Wires should be properly coupled and should be fire proof. All safety precautions should be taken in fitment of VLT devices and panic buttons.

- **Hooter / buzzer**

Hooter/buzzer for emergency condition and over speed alert should be loud enough to be audible to passengers and nearby people outside the vehicle. It should be placed in a convenient position inaccessible by passengers.

Notice to Passengers & Public

Proper indication to passengers and public should be given in the vehicle. Stickers indicating the fitment of Vehicle Tracking Device (**Fitted with AIS140 Vehicle Tracking System - Suraksha Mitr**) may be placed at front and back side of the vehicle.

Information regarding the panic button should be provided to passengers. Messages indicating the use of Panic button eg: **Press in case of Emergency Only, Misuse will result in penalty**, should be placed above each panic button.

c. NERS

As per the mandate of AIS140, when NERS system of the state become operational, the device should send the emergency alert packet to the server mentioned by NERS team. The data format should be as per the NERS specifications. The vendor should ensure that all deployed devices meet this mandate.

d. White listing of IP and SMS mobile number

C-DAC/ KMVD will publish the IP / Domain to which data should be send. Vendors should ensure that the device will send data to the allowed IPs only.

C-DAC will publish the SMS gateway short code or mob number from which the activation key and other configuration parameters may send. Vendor should ensure in the firmware that the device will not respond to any SMS from any unauthorized mobile number.

e. Customer Support

Vendor should set up a call centre or a 24/7 toll free number for customer support. Any queries regarding the VLT, service or complaints should be properly addressed.

2. Guidelines to Vehicle Owners & Schools

a. About the system

Government of India has mandated Vehicle tracking system and panic button in all transport vehicle. AIS140 is the standard recommended by Ministry of Road Transport & Highway (MoRTH) for vehicle tracking device in India. Government of Kerala has decided to implement AIS140 based Vehicle tracking system in all public transport vehicles. Motor vehicles department of Kerala has entrusted C-DAC, a government of India agency under Ministry of Electronics and Information Technology (MeitY) for the implementation of the project. In the first phase of the implementation, all Educational Institution Buses in the State are mandated to fit with a vehicle tracking system. C-DAC has developed the Software application to monitor all vehicles fitted with Tracking device. A master control room has been setup at Transport Commissionerate Trivandrum. Each RTO office have a mini control room to monitor the vehicle in its jurisdiction.

C-DAC has short listed various manufacturers & models of AIS140 certified Vehicle Location Tracking (VLT) devices. The list is published in the official website of Motor Vehicles Department www.keralamvd.gov.in. Only Vendors & Devices specified in the list are approved to operate in Kerala.

b. Fitment of Device

- Owner/ Customer has to approach the franchisee of any of the approved Vendor.
- Vehicle Owner is free to choose any approved vendor and device.
- Vehicle Owner may have to give the KYC details, RC book and mobile number to the franchisee
- Technician of the franchisee will fit the device in the vehicle and will enter various details like IMEI number, Registration number etc. to Motor Vehicles Department's web application.
- After completing data entry, owner will receive an OTP, it has to be entered in the application to successfully complete the process.
- After successful completion of data entry the franchisee will give a print out of Installation certificate. Owner has to go to the RTO office with the print out for inspection and approval.
- MVD officials will inspect the vehicle to verify the fitment of device and panic buttons. If found satisfactory MVD will approve it and will give the installation certificate, else they may reject the device. In case of rejection owner has to approach the franchisee to rectify or replace the device.

c. Operation of Device

Once the device is approved the system will continuously monitor your vehicle. The device generate various alerts and is monitored at the control room. The device should not be removed from the vehicle and should be continuously powered. The device and the panic buttons should be maintained in working condition without any failure. Tampered or non functional device may attract penalty. Most of the device have LED indications of its working status.

If the device found to be faulty or the vehicle need some maintenance which require disconnection of the device, then it has to be immediately conveyed to the franchisee, franchisee will register complaint in the application. This will avoid unnecessary alerts like Panic wire cut, Tilt, Main power removal etc.

d. Operation of Panic Buttons

Panic buttons are important part of AIS140 implementation. These buttons are placed for the safety of passengers and drivers. In case of any emergency, the passenger or driver can press the panic button to inform the control room about the emergency situation.

All panic buttons have a continuous glowing LED to indicate that the button is working. On pressing of the button the LED will start blinking and the hooter will start making sound. The device will also send SMS about the emergency condition to control room as well as owner.

If any repair or maintenance is required for which panic button needs to be removed, then immediately inform franchisee and ask them to register a complaint register entry.

e. Subscription renewal

Vehicle owner should renew the subscription of the device every year before the test for certificate of fitness. The vehicle owner should get a renewal certificate from the vendor stating that the subscription has been renewed for a period of one year. This certificate should be produced to RTO during CF test.

3. Guidelines to Public & Students

a. About the system

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Guidelines for Implementing GPS based Vehicle Tracking & Management System

All Education Institution Buses will have a tracking system and panic buttons. These buttons are placed for the safety of passengers and drivers. In case of any emergency the passenger or driver can press the panic button to inform the control room about the emergency.

All panic buttons have a continuous glowing LED to indicate that the button is working. On pressing of the button the LED will start blinking and the hooter will start generating sound (if available). The device will also send data & SMS about the emergency to control room as well as owner. Unwanted or fake press of panic button will attract penalty.

For Technical Clarification & Queries, contact C-DAC

Mobile Number : +91 9446556001

Time : 10 AM to 5 PM (Monday to Friday)

A video related to tagging of vehicles is uploaded in the YouTube. Link is <https://youtu.be/tsdGKB1SBEQ>