GOVERNMENT OF MEGHALAYA
TRANSPORT DEPARTMENT.

NOTIFICATION

Dated Shillong, the 6th October, 2025.

No.TPT.8/2020/454- In pursuance of the direction of the Ministry of Road Transport & Highways vide letter No.S.O.5453 (E) dated 25th October, 2018 the Governor of Meghalaya is pleased to notify the Standard Operating Procedure (SOP) for Emergency Alerts Management in AIS 140 Vehicle Tracking System in the State of Meghalaya.

Sd/-
(Sanjay Goyal, IAS)
Commissioner & Secretary to the Govt. of Meghalaya
Transport Department.

Memo No. TPT.8/2020/454-A **Dated Shillong, the 6th October, 2025.**

Copy to.

1. The P.S to the Hon'ble Deputy Chief Minister, in-charge Transport for kind information of the Deputy Chief Minister.
2. The P.S to the Chief Secretary for kind information of the Chief Secretary.
3. The P.S to Commissioner & Secretary, Transport Department for kind information of the Commissioner & Secretary
4. The P.A to the Secretary, Transport Department for kind information of the Secretary.
5. The Joint Secretary, Transport Department for kind information
6. The Commissioner of Transport, Meghalaya Shillong for kind information and necessary action.
7. All Deputy Commissioners, Meghalaya, for kind information.
8. All Superintendent of Police Meghalaya, for kind information.
9. All District Transport Officer, Meghalaya, for kind information.
10. The Director of Printing & Stationery, Meghalaya. He is requested to publish above notification in the issue of Gazette and to furnish 50 (copies) of notification to this department.
11. All Administrative Departments. / Head Offices.
12. Guard File.

By Order etc.,

Under Secretary to the Govt. of Meghalaya,
Transport Department

SOP for Emergency Alerts Management in AIS 140 Vehicle Tracking System

1. Introduction

Ministry of Road Transport & Highways, Government of India had issued G.S.R 1095 (E) notification dated November 28th, 2016. As per this notification Central Motor Vehicles Rules, 1989 was amended with a rule "125 H Provision of vehicle location tracking device and emergency button". The vehicle location tracking device and emergency button referred to in sub-rule (1) shall be fitted in all public transport vehicles, in accordance with AIS-140.The rule came in force on 1st April, 2018. To re-enforce the objective, the S.O 5453(E) dated October 25th, 2018 was published by MoRTH to implement the Vehicle Location Tracking Device & Emergency Button in public service vehicles.

Based on this Transport department of every state has to implement the vehicle tracking system & panic buttons in all public transport vehicles as per AIS140 standard.

2. Vehicle Tracking System as per AIS140 standard

Vehicle tracking system as per AIS140 standard has 4 major components :

1. Vehicle Location Tracking Device(VLTD) :-
    a. This is a device fitted inside the vehicle probably near the dashboard of the vehicle. This device has a GNSS receiver, which receives location data (Latitude & Longitude) from GPS& IRNSS satellites.
    b. The device has a Mobile communication module with embedded SIM cards (e-SIM). These sims are not detachable from the device and has dual profiles (two mobile connections).
    c. This device has an internal battery, if somebody removes the main power of the device, which is the vehicle battery, the device will switch to its internal battery and start sending data to the backend servers for a minimum period of 4 hours.
    d. This device sends the location data and other relevant information like speed and alerts to the backend cloud through the mobile connection.

2. Panic Buttons :-
    a. Panic buttons are fitted inside the vehicle for passenger safety.

b. There is dedicated panic button for driver and multiple panic buttons for passengers.
c. The number of panic buttons for the passengers is decided based on the seating capacity of the vehicle.
d. If panic buttons are pressed, the VLTD will send emergency alert to the backend Monitoring center & to ERSS.

3. Vehicle Tracking Backend system & servers :-

The vehicle tracking backend system consists of the vehicle tracking application which receives the data and alerts from all the devices. The application also consists Map and data processing system. It also consists of all the server & cloud resources required for processing and storing data. In this project the cloud is provided by NIC.

4. Monitoring & Control Center (MCC) :-

Monitoring & Control Center consist of Control center operators, large displays, computers and other required infrastructures for monitoring and management of the system. Most of the alerts generated by the devices are managed at MCC.

3. Alerts Management

The main object of this activity is to improve the utilization of the system by improving the passenger and road safety by providing possible aid during emergency situation.

Based on the type of the alerts the total alerts are categorized into Critical alerts and non-critical alerts

Critical Alerts other than Emergency/Panic Button Press are:

a. Over Speed
b. Tilt
c. Impact
d. Main power Removal
e. Panic button wire Cut

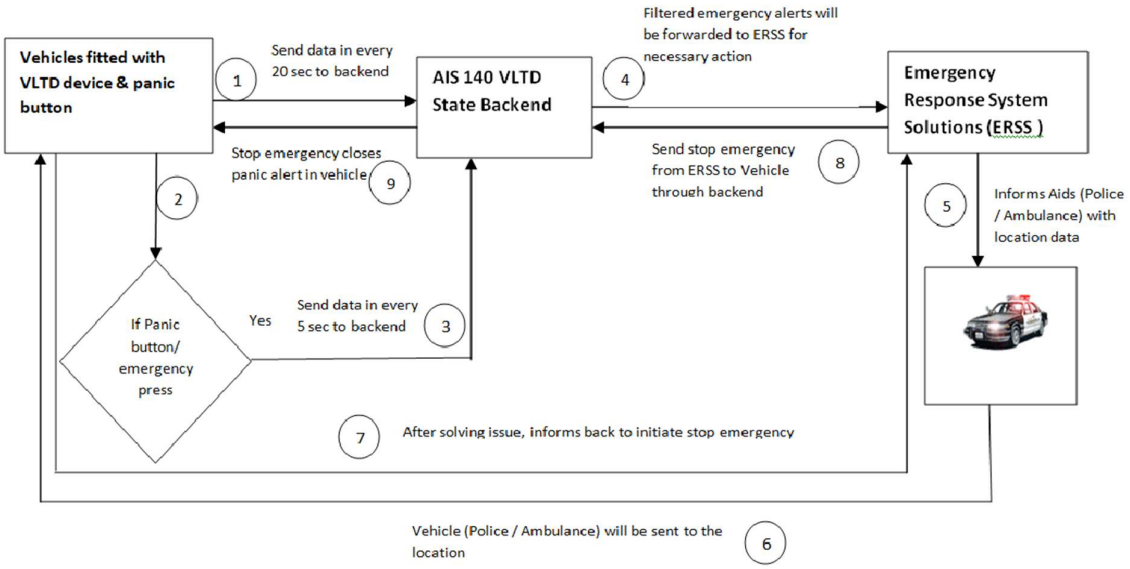
Critical alerts are more priority alerts and require actions to taken from MCC / Help Desk. Emergency / Panic Button Press is the only critical alert that is handled by external system (ERSS/NERS). All the other critical alerts are handled by AIS140 VLTS Backend Application.

4. SOP for Emergency / Panic Button Press

4.1 Emergency/Panic Button Press Alert

1. VLTD device along with panic button is mandated in all public transport vehicles as per CMVR 125H.
2. VLTD device fitted in public transport vehicles will send data every 20 sec to AIS-140 VLTD State Backend.
3. AIS-140 VLTD State Backend is integrated with **ERSS** for quick response in case of emergency/ panic button press.
4. In case of an emergency press inside a vehicle, the device starts sending data in every 5 sec to State backend.
5. Filtered emergency alerts will be forwarded to **ERSS** for necessary action.
6. ERSS/Police Department will identify the nearest aid vehicle (Police/ Ambulance/Fire & Rescue) and send this vehicle to the location (from where emergency alert raised) to attend the situation.

7. When the needed assistance/help is assured, the emergency state of the VLTD will be stopped by sending stop emergency command to the device from ERSS through State Backend.
8. The main attraction is that the emergency state of a vehicle due to panic button press can be switched off from the control room/backend only.



4.2 SOP for Emergency/Panic Button Press

On successful tagging of a vehicle with the state backend, the vehicle owner will get User credentials to login to AIS-140 Backend. The details of the vehicle & vehicle owner like vehicle type, owner name, mobile number, address etc. are fetched from VAHAN at the time of tagging. **There is a feature provided to vehicle owners to add their crew/driver details (eg name, mobile number etc. of driver and other staffs) through the application**.

*If the state transport department makes it mandatory to add & update crew/ Driver details by the vehicle owner then vehicle owner will have to update crew details and the same will be displayed in Control Room View. Otherwise only owner details will be available.

Minimum response time (First call to Driver / owner) for an Emergency/Panic Button Press should be less than 5 minutes. Total time taken for closing emergency alert including ERSS response should be less than 20 minutes.

When an emergency alert is raised by a vehicle the backend application has 2 options to forward to ERSS

1. Direct Forward
    - In this option all emergency alerts will be directly forwarded to Police/ERSS system. There will not be any filtering or verification of alerts. ERSS systems have to take the responsibility for identifying the genuine alert and providing support.
2. Filter & Forward
    - In this option the alert will first land on the monitoring center. Then the monitoring center operator will try to filter-out genuine alerts either by making calls to the crew or vehicle owner or by analyzing various other alerts & state of the vehicle.

Whenever there is an Emergency button press, follow the mentioned steps.

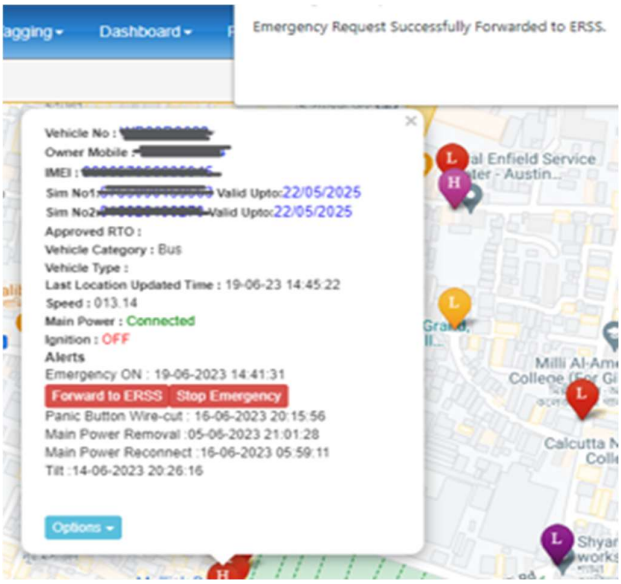
1. An alarm sound will be played in the application when a new emergency alert is raised.
2. The emergency alerts will be available in the Control Room View as a separate list.
3. From this list click on the vehicle to locate the vehicle in the map.

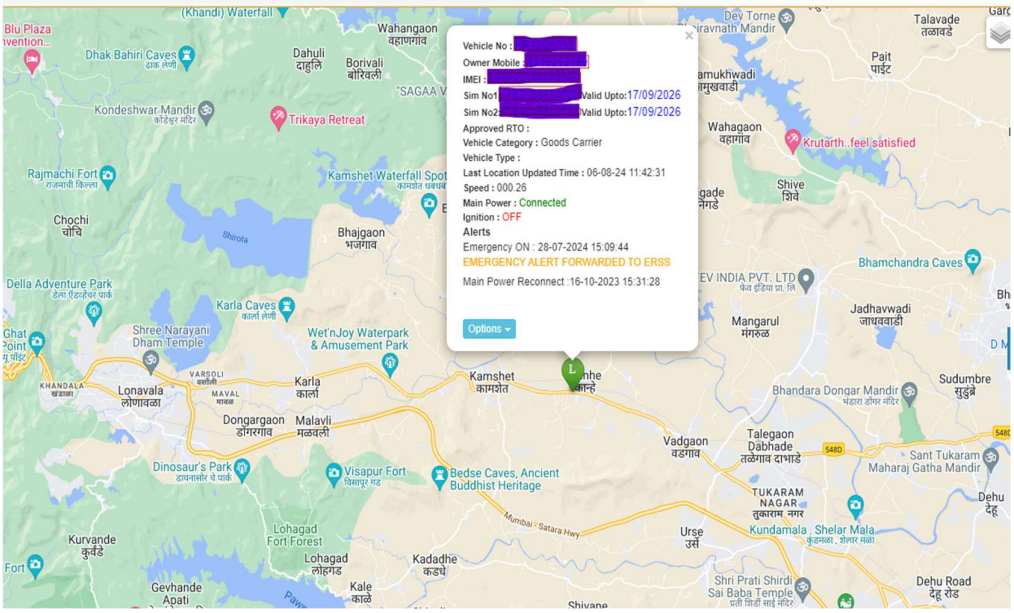
Now continue the steps as per use cases given below

Use Case 1:

Crew/Driver Details is Available / Crew Details has been added by Owner

1. In the popup above the vehicle marker Crew details (of Driver / Helper) as entered by owner will be available.
2. Call Driver/Helper
    a. If driver/helper is not responding
        I. Repeat the call.
        II. Even after calling 2 times, there is no response then the alert shall be forwarded to ERSS team for further handling. Hence click the **Forward to Police/ERSS** button to forward the alert to Police ERSS.
        III. Wait for ‘Emergency Request Successfully Forwarded to ERSS’ message as shown in figure given below
        IV. The status will be updated as EMERGENCY ALERT FORWARDED TO ERSS





b. If Driver/Helper attended the call

   I. Enquire and confirm the alert

   II. If the alert is found to be genuine

      i. Click the **Forward to ERSS** button to forward the alert to ERSS.

      ii. Wait for 'Emergency Request Successfully Forwarded to ERSS' message as shown in figure given below

      iii. The status will be updated as **EMERGENCY ALERT FORWARDED TO ERSS**

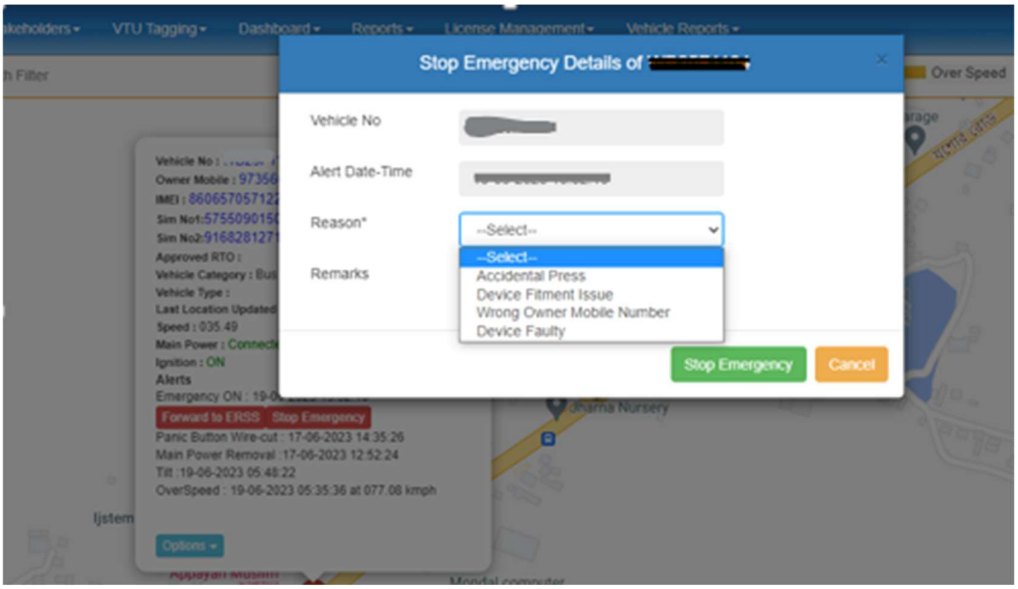
III. If the alert is due to device fitment issue, accidental press or some other fault of device then

i. Click on **Stop Emergency button** available on the popup above vehicle marker.

ii. A screen/window will be displayed as shown below.

iii. Reason for stopping emergency has to be selected and remarks if any shall be entered.

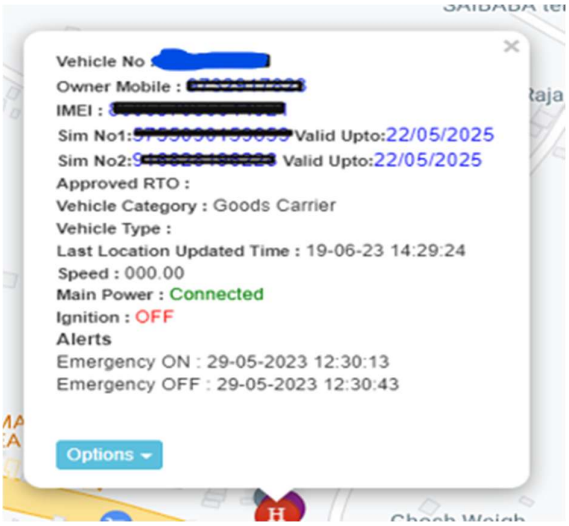
iv. Click on **Stop Emergency** to close the alert.



v. The status will be updated as STOP EMERGENCY TO VLTD: INITIATED BY CTRL ROOM.

vi. Once the stop emergency is forwarded to VLTD the status will be updated as STOP EMERGENCY TO VLTD: SEND BY CTRL ROOM.

vii. Once the stop emergency is received and processed by VLTD an Emergency OFF alert will be send back as shown in figure below.



Use Case 2:

Owner Details is Available / Crew Details has not been added by Owner

1. In the popup above the vehicle marker Owner Mobile will be available.
2. Call Owner
   a. If Owner attended the call
      a. Enquire and confirm the alert
      b. If the alert is found to be genuine
         i. Click the **Forward to ERSS** button to forward the alert to ERSS.
         ii. Wait for 'Emergency Request Successfully Forwarded to ERSS' message as shown in figure given below
         iii. The status will be updated as **EMERGENCY ALERT FORWARDED TO ERSS**
      c. If the alert is due to device fitment issue, accidental press or some other fault of device then
         i. Click on **Stop Emergency button** available on the popup above vehicle marker.
         ii. A screen/window will be displayed as shown below.
         iii. Reason for stopping emergency has to be selected and remarks if any shall be entered.
         iv. Click on **Stop Emergency** to close the alert.

b. If owner is not responding

I. Repeat the call.

II. **Even after calling 2 times there is no response then the alert has to be forwarded to ERSS for further handling**. Hence click the Forward to ERSS button to forward the alert to ERSS.

III. Wait for 'Emergency Request Successfully Forwarded to ERSS' message as shown in figure given below

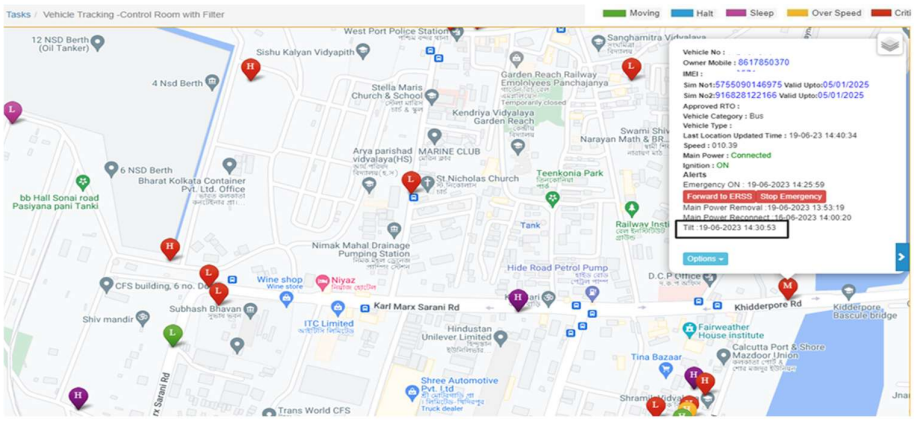
IV. The status will be updated as EMERGENCY ALERT FORWARDED TO ERSS

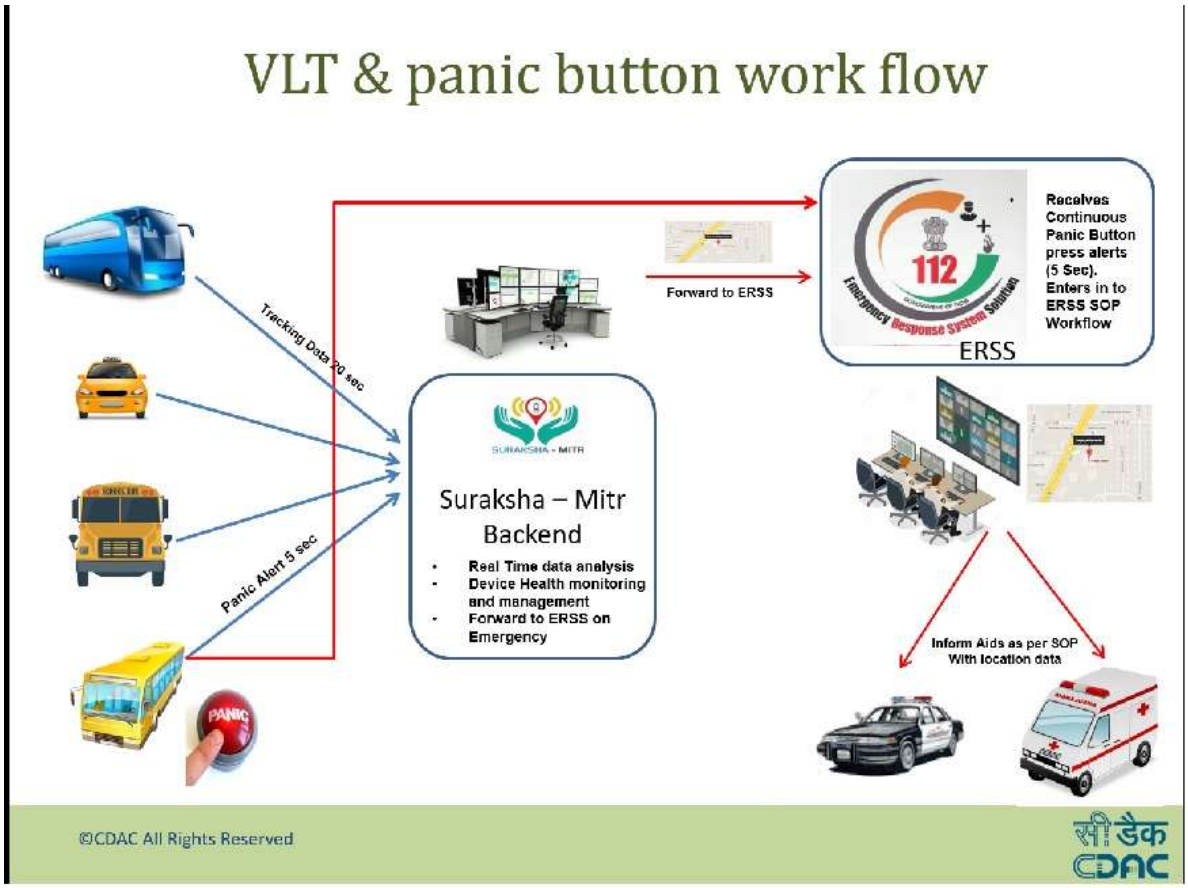
Use Case 3:

If Emergency/Panic Button Press happened along with other Critical alerts

If Emergency Button Press happened along with critical alerts like **Tilt**

As shown below then forward the alert to Police ERSS by Clicking **Forward to ERSS** button. In this instance, **manual verification via phone is not required**.




VLT & panic button work flow
Tracking Data 20 sec
Panic Alert 5 sec
PANIC
Forward to ERSS
112
Emergency Response System Solution
ERSS
Receives Continuous Panic Button press alerts (5 Sec). Enters in to ERSS SOP Workflow
Suraksha – Mitr Backend
Real Time data analysis
Device Health monitoring and management
Forward to ERSS on Emergency
Inform Aids as per SOP With location data
©CDAC All Rights Reserved
सी-डैक CDAC