

No. RT-16011/7/2020-T  
Government of India  
Ministry of Road Transport & Highways  
Transport Section  
Transport Bhawan, 1 Parliament Street, New Delhi-110001

22 February, 2021

To,

The Principal Secretary (Transport)/Secretary (Transport) and Transport Commissioners of all States/UTs

**Subject: Standard Operating Procedure (SOP) for Vehicle Location Tracking (VLT), registration and activation in VAHAN**

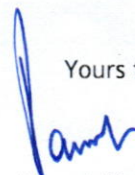
The undersigned is directed to state that the Ministry of Road Transport and Highways, GOI has earlier issued the Guidelines for the Scheme, namely "Deployment and Management of State wise Vehicle Tracking Platform for Safety & Enforcement as per AIS 140 Specifications in States & Union Territories under Nirbhaya Framework" dated 15th January, 2020.

2. As per the Scheme Guidelines, Monitoring Centres (backend systems) are to be established by States/UTs with central assistance to monitor public service vehicles (PSVs) as well as to handle Vehicle Location Tracking and Panic Button alerts raised in such vehicles. All PSVs registered after 01st January, 2019 were mandated to be fitted with Vehicle Location Tracking (VLT) device and emergency buttons. For old PSVs, State/UT may take decide an appropriate time of implementation of VLT device and emergency buttons.

3. With an intent of effective implementation of the scheme, this Ministry has prepared the SOP for Vehicle Location Tracking (VLT) registration and activation in VAHAN. A copy of the same is enclosed with this letter for your information and necessary action. The SOP details the following process of registration and activation in VAHAN:

- (i) VLT registration and activation for new vehicle
- (ii) VLT registration and activation retro-fitment in vehicles

Yours faithfully,



(Paresh Kumar Goel)  
Director (Transport)  
Tele: 011-23351967

Encl. - Standard Operating Procedure (SOP) for Vehicle Location Tracking (VLT) registration and activation in VAHAN

Copy to:

1. Director (Women Safety), Ministry of Home Affairs
2. Director(MVL), Ministry of Road Transport & Highways
3. The Under Secretary, Nirbhaya Cell, Ministry of Women and Child Development
4. ED ASRTU
5. DG, SIAM
6. ACMA
7. NIC-May be upload on MoRTH website



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**Ministry of Road Transport and Highways**

Standard Operating Procedures for Vehicle Location Tracking (VLT) registration and activation in  
VAHAN

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**Standard Operating Procedure (SOP) for  
Vehicle Location Tracking (VLT) Registration and Activation in  
VAHAN**



**Government of India  
Ministry of Road Transport and Highways**

Issued on  
\_\_\_ February, 2021

## Ministry of Road Transport and Highways

Standard Operating Procedures for Vehicle Location Tracking (VLT) registration and activation in VAHAN

### 1. Introduction

The Standard Operating Procedure (SOP) specifies the operational procedure, pre-requisites, and other details for compliance as per AIS-140 Standard for Vehicle Location Tracking registration and activation in VAHAN / State Registration Application.

### 2. Background

As part of the scheme, MoRTH intends to support States/ UTs in implementation of the Vehicle Tracking Platform as per AIS-140 specifications under Nirbhaya Framework.

As per MoRTH S.O 5453 (E) dated October 25<sup>th</sup>, 2018 the installation of Vehicle Location Tracking Device and Emergency button on the public service vehicle shall be done as follows-

- The VLT device manufacturer/OEM dealer/Authorised dealer should get their device tested from any of the testing agencies referred to in Rule 126 of the Central Motor Vehicles Rules (CMVR), 1989<sup>1</sup>.
- The States/ UTs shall ensure compliance to Rule 125H of Central Motor Vehicles Rules, 1989<sup>2</sup> and check fitment and functional status of the VLT device in the public service vehicles at the time of fitness certification of the vehicle.
- The VLT device manufacturer/OEM dealer/Authorised dealer using its secured authenticated access shall upload the details of each VLT device on the VAHAN along with details of vehicle on the corresponding Monitoring Center in real-time.
- The authorised dealer of the VLT device manufacturer/OEM dealer/Authorised dealer shall enter the Unique Identification number in VAHAN for the purposes of linking the VLT device to the specific public service vehicle. In case the public service vehicle manufacturer installs the VLT device, then the vehicle manufacturer shall undertake the above process.
- Regional Transport Offices shall verify the unique identification number of VLT device at the time of fitness testing.

These Guidelines were detailed in Annexure C of Nirbhaya scheme published by MoRTH:

#### 1.1. General Guidelines for Implementation of State-wise Monitoring Center for VLT devices as per AIS-140

- i. The specified public service vehicle owners have to ensure that the VLT devices installed in their vehicles are in working condition and regularly send required data to the corresponding Monitoring Center through cellular connectivity.

<sup>1</sup> Rule 126 of Central Motor Vehicle Rules, 1989(CMVR) mandates that every manufacturer of motor vehicles other than trailers and semi-trailers requires to submit the prototype of the vehicle to be manufactured by him for test by any of the agencies specified therein for granting a certificate to the compliance of the provisions of the Central Motor Vehicles Act, 1988 and Central Motor Vehicle Rules, 1989.

<sup>2</sup> Rule 125H of the Central Motor Vehicle Rules (CMVR) 1989 mandates the installation of Vehicle Location Tracking (VLT) device and emergency button for the new public service vehicle registered after 1st January 2019. This rule is not applicable for two-wheelers, e-rickshaw, three-wheelers, and any transport vehicles for which permit is not required under the Motor Vehicle Act, 1988. VLT device manufacturers will have to get their devices tested and certified from the testing agencies referred to in rule 126 of the CMVR for compliance with the rule 125H of CMVR

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### Standard Operating Procedures for Vehicle Location Tracking (VLT) registration and activation in VAHAN

- ii. The specified new public service vehicles shall not be registered in the State/UT, if the vehicles are not equipped with or fitted with vehicle location tracking device and one or more emergency buttons, in compliance with the CMVR 1989.
- iii. The Unique Identification number and others details of each VLT device shall be uploaded on the VAHAN by the Vehicle manufacturer or its authorized agency, in case of New Vehicles using their secured authenticated access The Unique Identification number of VLTD shall be tagged to vehicles details (Engine no. /Chassis Number) in VAHAN for the purpose of linking the VLT device to the specific public service vehicle. For the registration of new PSV in VAHAN, the VLTD shall be activated and functional and the Unique ID of VLTD shall be tagged to the vehicles in VAHAN.
- iv. In case of retro-fitment in vehicles, the VLT device manufacturer/OEM dealer/Authorised dealer shall install the VLT devices in public service vehicles and register the devices along with Unique Identification number and other details on VAHAN and the corresponding Monitoring Center systems in real-time.
- v. The State/UT shall enforce fitment/functional status of device at the time of registration/ permit issuance/ renewal / fitness check of the vehicle in VAHAN or the respective state vehicle registration/ permit system and the State/UT Monitoring System.
- vi. The VLT device shall be activated on the Monitoring Center as per the process set-out in AIS 140 and the functional status shall be updated in VAHAN / State Registration Backend of the State.
- vii. The State/UTs shall ensure compliance to rule 125 H of Central Motor Vehicles Rules, 1989 and check fitment and functional status of the VLT device in the public service vehicles at the time of checking of the vehicles for fitness certification in VAHAN and State/UT Monitoring Center.

The States/UTs shall ensure a strict compliance of SOP for implementation of Vehicle Tracking Platform as per AIS 140 Specification.

### 3. Standard Operating Procedure (SOP) for VLT Device Registration and Activation

#### 3.1. Pre-Requisites of VLT Device Registration and Activation

1. The VLT device manufacturer/OEM dealer/Authorised dealer should get their devices tested from any of the testing agencies referred to in rule 126 of the Central Motor Vehicles Rules, 1989<sup>3</sup>.
2. VLT devices shall be tested for conformity of production every year after the first certification, from the testing agencies referred to in rule 126 of the Central Motor Vehicles Rules, 1989
3. The testing agencies shall upload the details of the VLT devices certified by them on the VAHAN database. Testing agencies shall also update the status relating to the Conformity of Production (CoP) on the VAHAN / State Registration Application

<sup>3</sup> Approved list of VLT device manufacturers is available on the below URLs-  
ARAI: [https://cms.araiindia.com/MediaFiles/AIS140161220\\_11563.pdf](https://cms.araiindia.com/MediaFiles/AIS140161220_11563.pdf)  
iCAT: [https://icat.in/storage/app/public/uploads/certificate\\_form\\_1564983033.pdf](https://icat.in/storage/app/public/uploads/certificate_form_1564983033.pdf)

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Standard Operating Procedures for Vehicle Location Tracking (VLT) registration and activation in VAHAN

### 3.2. VLT Device Registration and Activation in Case of New Vehicles

1. VLT device registration & activation on VAHAN for new vehicles shall be carried out by vehicle manufacturers or their authorised agencies.
2. NIC will provide credentials for all vehicle manufacturers on VAHAN for VLT device registration and activation. The VAHAN will have facility for the vehicle manufacturers to create their authorised agencies to carry out VLT device registration and activation on their behalf.
3. The Vehicle manufacturer or its authorized agency, using its secured authenticated access will upload the following details of VLT devices on VAHAN.
  - VLTD Make & Model
  - Unique Identification Number of VLTD
  - IMEI number
  - ICCID number
4. At the time of tagging of VLTD on a vehicle, the Vehicle manufacturer or its authorized agency will tag/link the VLTD with the corresponding vehicle details (Engine no. /Chassis Number) in VAHAN / state registration application.
5. Only those VLT Devices registered as per 3.2.3 will be allowed to be tagged against the vehicle type and model.
6. The vehicle manufacturer will ensure that the VLTD has an active cellular plan with minimum two years validity at the time of registration of vehicle.
7. The Vehicle manufacturer or its authorised agency will upload the details of VLTD on State monitoring center as per the following steps. The Vehicle manufacturer or its authorised agency will enter the Unique Identification number of VLTD and the State monitoring center will pull the corresponding details of VLTD and vehicle from VAHAN.
8. The Vehicle manufacturer or its authorised agency will enter the following details on State monitoring center-
  - Model Code
  - M2M Service Provider details
  - Sim Details (Mobile Numbers, International Mobile Subscriber Identity(IMS))
  - Vehicle Details (Vehicle Type, Make, Model)
  - Permit Holder Details ( Name of Permit holder, number of Permit holder)
9. The State monitoring center will ensure that VLTD connected and sending data as per communication protocol AIS-140.
10. The State monitoring center will check the Sim Validity (24months) with M2M/Telecom service provider.
11. The State Monitoring Center will ensure that VLTD is sending the health status as per AIS-140 to the State Monitoring Center.

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### Standard Operating Procedures for Vehicle Location Tracking (VLT) registration and activation in VAHAN

12. The State Monitoring Center will ensure that Device responds to activation command sent by the State backend as per AIS-140 and the VLT device manufacturer/OEM dealer/Authorised dealer updates the OTP send to permit holder.
13. The State Monitoring Center will check the Panic Button functionality as per AIS-140 before activation of the VLT device.
14. State Monitoring Center will update activation details/health status of the VLTD in VAHAN/ State Registration Software
15. Once activation details are received in VAHAN from State AIS-140 backend/Common layer, the VLTD fitment certificate from VAHAN can be downloaded and registration/Fitness of Vehicle can be processed.
16. The specified public service vehicle owners have to ensure that the VLT devices installed in their vehicles, are in working condition and regularly send required data to the corresponding state Monitoring Center through cellular connectivity.

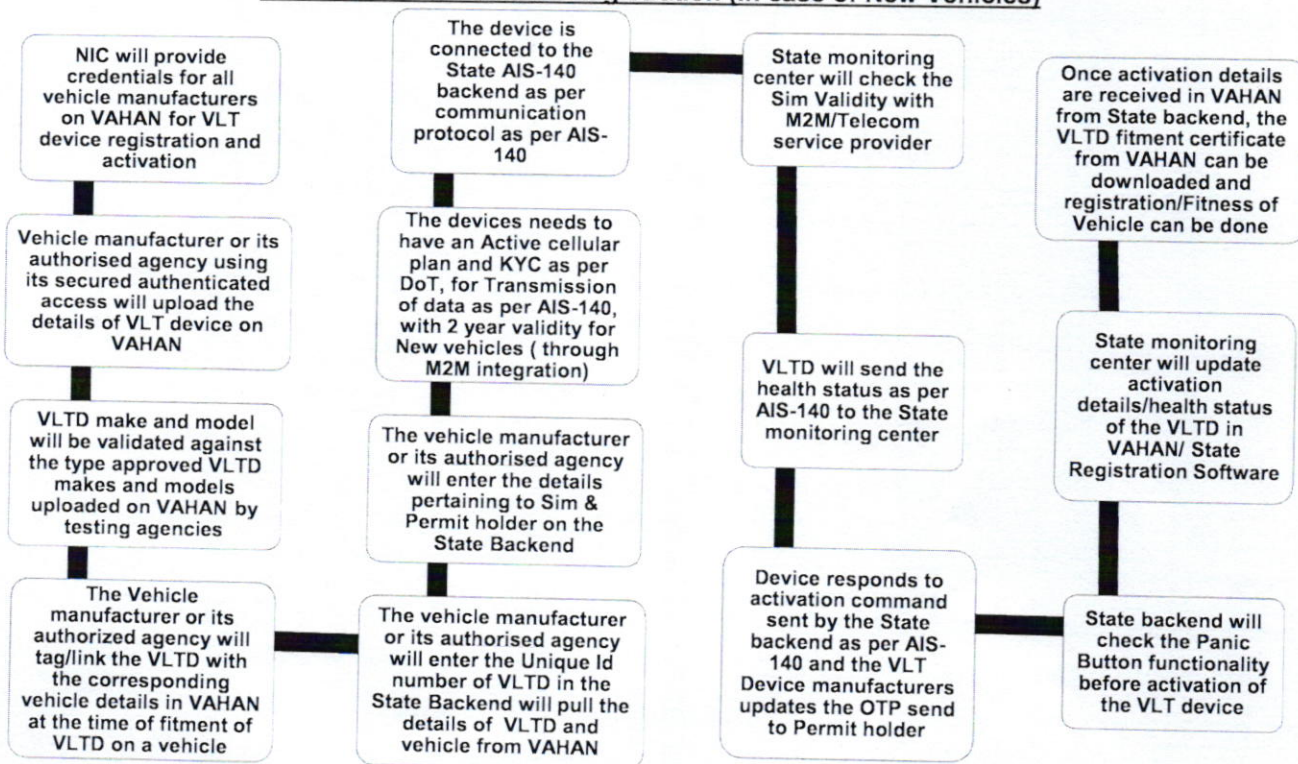
**Note:**

- The backend should be tested by the testing agency referred to in rule 126 of the Central Motor Vehicles Rules, 1989 to check the compliance as per AIS-140.

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Standard Operating Procedures for Vehicle Location Tracking (VLT) registration and activation in VAHAN

Process flow for Vehicle Registration (in case of New Vehicles)



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Standard Operating Procedures for Vehicle Location Tracking (VLT) registration and activation in VAHAN

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### 3.3. SOP for VLT Device Registration and Activation in Case of Old Vehicles

1. In case of retro-fitment in vehicles, the VLT device manufacturers or their authorized dealers shall install the VLT devices in public service vehicles and register the devices along with Unique Identification number and other details on VAHAN and the State Monitoring Center in real-time.
2. The State/UT shall enforce fitment/functional status of device at the time of registration/ permit issuance/ renewal / fitness check of the vehicle in VAHAN or the respective state vehicle registration/ permit system and the State Monitoring Center.
3. After the type approval, NIC shall provide credentials for all the VLT Device manufacturer for uploading the Type approval data on VAHAN
4. VLT device manufacturers or their authorized dealers using its secured authenticated access will upload the following details of VLTD on VAHAN.
  - VLTD Make & Model
  - Unique Identification Number of VLTD
  - IMEI number
  - ICCID number
5. VLTD make and model will be validated against the type approved VLTD makes and models uploaded on VAHAN by the test agencies.
6. The VLT device manufacturers or their authorized dealers will ensure that the VLTD has an active cellular plan with minimum two years validity for any public service vehicle less than 8 years old and one-year validity for any public service vehicle older than 8 years
7. The VLT device manufacturers or their authorized dealers shall install the VLT devices in public service vehicles and register the devices along with details of vehicle on the corresponding State Monitoring Center in real-time.
8. The VLT device manufacturers or their authorized dealers will enter the following details of the VLTD on State monitoring center-
  - Model Code
  - M2M Service Provider details
  - Sim Details (Mobile Numbers, International Mobile Subscriber Identity(IMSI))
  - Vehicle Details (Vehicle Type, Make, Model)
  - Permit Holder Details ( Name of Permit holder, number of Permit holder)
9. The State monitoring center will establish connectivity with the VLTD and confirm that data is being received from the VLTD as per communication protocol as per AIS-140.



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### Standard Operating Procedures for Vehicle Location Tracking (VLT) registration and activation in VAHAN

10. The State monitoring center will check the Sim Validity (12 months) with M2M/Telecom service provider.
11. The VLTD will send the health status as per AIS-140 to the State monitoring center.
12. The Device responds to activation command as per AIS-140 and the VLT device manufacturers or their authorized dealers updates the OTP send to Permit holder
13. The State Monitoring Center will check the Panic Button functionality as per AIS-140 before activation of the VLT device
14. State monitoring center will upload activation details/health status of the VLTD in VAHAN/ State Registration Software.
15. Once activation details are received in VAHAN from State AIS-140 backend/Common layer, the VLTD fitment certificate from VAHAN can be downloaded by the VLT device manufacturers or their authorized dealers and registration/Fitness of Vehicle can be processed.
16. The specified public service vehicle owners have to ensure that the VLT devices installed in their vehicles, are in working condition and regularly send required data to the corresponding Monitoring Center through cellular connectivity.

#### Note-

- The Backend should be tested by the testing agency referred to in rule 126 of the Central Motor Vehicles Rules, 1989 to check the compliance as per AIS-140.

State Monitoring Center means Monitoring Center with AIS 140 State Backend System.

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Standard Operating Procedures for Vehicle Location Tracking (VLT) registration and activation in VAHAN

**Process flow for Vehicle Registration (in case of Old Vehicles)**

