

**Registration of AIS 140 Compliant Vehicle
Location Tracking Device (VLTD) Manufacturers
with Emergency system
for specified public service & commercial vehicles
in Assam**

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Contact details:

Particulars	Telephone	E-mail
Commissionerate of Transport	0361-2304110	transport.assam@gmail.com
Website	www.comtransport.assam.gov.in	
Office Address	COMMISSIONERATE OF TRANSPORT Paribahan Bhawan, Jawahar Nagar, Khanapara, Guwahati-22	

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Document Title: AIS 140 Vehicle Location Tracking & Monitoring System in Assam

Name of Organization: Commissionerate of Transport Assam

Abstract: This document provides the detailed procedure for registration of VLTD manufacture/RFC for the implementation of AIS-140 standard based Vehicle Location Tracking and Monitoring System for all Public Service Vehicles, Commercial & National Permit Vehicles registered in Assam. For this AIS-140 certified VLTDs from manufacturer will be listed, based on the selection procedures specified in this document.

1	Listing Ref. No.	
2	Name of the Department	Commissionerate of Transport, Government of Assam
3	Non-Refundable Application Cost for OEM and their AIS 140 device	10,000/- (Rupees ten thousand only)
4	Call for Applications	Soft copy can be downloaded from the website of Transport Department Assam https://comtransport.assam.gov.in/
5	Submission of application along with 1 VLTDs with AIS-140 standard certificates by Manufacturers	Office of The Commissioner of Transport Assam Paribahan Bhawan, Jawahar Nagar, Khanapara, Guwahati-22 (Assam)
6	Validity of Registration	Three years from the date of registration
7	Timeline	Application for registration has to be submitted within 45 days from the date of issue of the advertisement.

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Abbreviations/Acronyms:

ARAI	Automotive Research Association of India
CIRT	Central Institute of Road Transport
ICAT	International Centre for Automotive Technology
VRDE	Vehicle Research and Development Establishment
CFMTTI	Central Farm Machinery Training and Testing Institute
IIP	Indian Institute of Petroleum
GARC	Global Automotive Research Centre
NIC	National Informatics Centre
STQC	Standardization Testing and Quality Certification
CERT-IN	Indian-Computer Emergency Response Team
GSM	Global System for Mobile Communication
ISO	International Organization for Standardization
RTA/R&LA	Regional Transport Authority/Registering & Licensing Authority
SIM	Subscriber Identity Module
COMMISSIONERATE OF TRANSPORT	Commissionerate of Transport, Assam/State Transport Commissioner
VLT / VLTD	Vehicle Location Tracking Unit
GNSS	Global Navigation Satellite System
IRNSS	Indian Regional Navigation Satellite System
MORTH	Ministry of Road Transport and Highways
AIS	Automotive Industry Standard
eSIM	Embedded SIM
RFC	Retro fitment Centre
CCC	Command Control Centre
GAGAN	GPS-aided GEO augmented navigation
OEM	Original Equipment Manufacturer
API	Application programming interface

Glossary of Terms

The definitions of various terms that have been used in this document are as follows:

"Manufacturer" means a registered firm/company manufacturing AIS-140 (as per the latest amendment) certified Vehicle Location Tracking units in India.

Retro Fitment Centre” means a firm/company who is authorised to sell, install, support and service AIS-140 certified Vehicle Location Tracking Unit of Manufacturer.

Background

About Regulatory Compliance requirement for VLT devices with Emergency Buttons

References :

- 1) MoRTH, Central Government, Notifications dated: 28.11.2016, 18.04.2018, 25.10.2018 and 2.11.2018
- 2) MoRTH, Central Government Letter No. RT-11028/12/2015-MVL dated: 31.10.2018
- 3) AIS-140 Standard including amendment 1 (December'17) & Amendment 2 (December'18)

In pursuance to the series of notifications and orders issued by the Ministry of Road, Transport & Highways ('MORTH'), Government of India dated: 28.11.2016, 18.04.2018, 25.10.2018 ,2.11.2018 and letter dated 31.10.2018 wherein all Public Service Vehicle as defined under section 2(35) of the Motor Vehicle Act, 1988 ('MV Act') means any motor vehicle used or adapted to be used for the carriage of passengers for hire or reward, and includes a maxi cab, a motor cab, contract carriage, and stage carriage, shall mandatorily be equipped with the Vehicle Location Tracking device ('VLTD') along with one or more emergency button in compliance with AIS-140 standard including amendments 1 (December'17), 2 (December'18) & any other amendments issued from time to time. Additionally, MoRTH in its various notifications / guidelines through letter No. RT/11028/12/2015-MVL dated 31/10/2018 to the states have advised the states to use the Manufacturer's backend system. Hence, COMMISSIONERATE OF TRANSPORT has decided to follow MORTH's AIS-140 standard and guidelines sent by MoRTH to the COMMISSIONERATE OF TRANSPORT.

VLTD Device shall be capable of transmitting data to Backend Control Server (Government authorized server / Manufacturer's backend server) from the VLTD units via Wide Area (Mobile) Communications Network (Cellular) as per Communication Protocol in Section 4. As per section 3 of AIS 140, Devices are required to be capable for operating in L and/or S band and include support for NAVIC/IRNSS (Indian Regional Navigation Satellite System).

Commissionerate of Transport, Assam, under the Ministry of Transport, Government of Assam is the principal agency for the enforcement of the Motor Vehicles Act and Rules in the State. Vehicle Tracking & Monitoring System is a technology used by many countries, companies and individuals to track vehicles using IRNSS and GNSS. Apart from enforcement of public road transport rules, the system can also give other valuable services to COMMISSIONERATE OF TRANSPORT and the general public.

In view of above, Transport Department, Government of Assam is desirous of implementing an online system for tracking the movement of identified all new & old public service vehicles (PSVs) & commercial vehicles, shall be equipped with or fitted with vehicle location tracking device and one or more emergency buttons.

Scope of the Project

125 H. Provision of vehicle location tracking device and emergency button.-

All public service vehicles, as defined under clause (35) of section 2 of the Act, shall be equipped with or fitted with vehicle location tracking device and one or more emergency buttons:

Provided that this rule shall not apply to the following category of vehicles, namely:-

- (i) two wheelers;
- (ii) E-rickshaw;
- (iii) three wheelers; and
- (iv) any transport vehicle for which no permit is required under the Act.

Commissionerate of Transport Assam is planning to track all Public Service Vehicle as defined under section 2(35) of the Motor Vehicle Act, 1988 ('MV Act') means any motor vehicle used or adapted to be used for the carriage of passengers for hire or reward, and includes a maxi cab, a motor cab, contract carriage and stage carriage, shall mandatorily be equipped with the Vehicle Location Tracking device ('VLTD') along with one or more emergency button in compliance with the standard of AIS-140 in Assam, in a phased manner. Commissionerate of Transport Assam is of the view that Assam is a very critical state and also has various environmental & security issues and Vehicle location tracking device with its advanced technology would be a great tool monitor the movement of the commercial vehicles. Hence, looking at the various advantages of the vehicle location tracking device in not only tackling traffic problems, but also in detection of crime, prevention of illegal activities and tracing out criminals, Commissionerate of Transport, Assam is also planning to track all commercial vehicles under the same scope. These vehicles should be tagged with VLT devices. The owners of the vehicles registered should purchase the VLT devices from selected registered manufacturers/RFC only.

- ➔ Initially the VLT device Manufacturers/consortium are required to setup at their own expense & cost a “Command and Control Centre” (also called “CCC” or “Backend System”), individually or jointly, and these CCC centres should provide login & monitoring interface to various stakeholders such as state emergency response team, the transport department or Regional Transport Offices, Police and any other agency defined by state as per requirement, Ministry of Road Transport and Highways and its designated agencies..
- ➔ The Manufacturers are required to setup a 24x7 “Monitoring Center” individually or jointly (in case of consortium of common backend system) at the office / utility provided by the Commissionerate of Transport. Only the required space for such setup shall be provided by the Commissionerate of Transport at its own discretion, anywhere in the state. Manufacturer must ensure that requisite manpower, furniture, computer, video wall, etc. required for the setup must be provided by the Manufacturer at its own costs and expense.
- ➔ Further in future as per requirement of the department VLT Manufacturers/registered RFC will need to connect their backend system with the backend application of COMMISSIONERATE OF TRANSPORT, Command Control Centre / Common Layer (with controlled access) and State Data Centre for tagging (connecting) and feeding the details of the VLTDs to the backend

application/State Data Centre in real time. In addition to above, It will also ensure regular updation in Vahan through manufacturer's backend or a common layer for the registration, activation, health check and alert updates of VLT devices. Such common layer/CCC shall be setup as per discretion of the state at the later stage, through a separate notification by the COMMISSIONERATE OF TRANSPORT. However, for initial stage, manufacturers backend system would be used for activation, registration, updation, health checks and/or alert updations as required in Vahan. COMMISSIONERATE OF TRANSPORT will facilitate the manufacturer in getting the API for integration with VAHAN. In case of delay the manufacturers will continue with fitment and activation but will retain the activation data with themselves and upload on VAHAN within 30 days of API being made available. There will be no delay in implementation in this regard.

- ➔ The backend system must provide interface where the COMMISSIONERATE OF TRANSPORT must be able to create Routes with route/Point fencing and receive alerts and reports in case the vehicle deviates from its routes or in case of non-serving of their respective routes. The backend system must also provide interface to COMMISSIONERATE OF TRANSPORT to be able to create stoppages in the routes and also define the allowed stoppage time. Alerts and reports must be created for the Vehicles in violation to the allowed stops and stoppage timings.
- ➔ The Backend system must have provision for integration with the any other technology used by the department for better monitoring system.
- ➔ In the interest of the public, it must provide a "Customer web interface" and "customer mobile app" for the vehicle owner to track his vehicles in real time and also provide various historical & real time reports & alerts (over speeding, geo-fencing, tampering, sos, anti-theft / towing, etc.) to the vehicle owner/COMMISSIONERATE OF TRANSPORT.
 - i. Manufacturer must also provide to educational institute, a Separate Parent's School Bus Tracking Mobile App & Web Interface, which would enable the parents (through secured Authentication/Mobile OTP process) to :-
 - Live Track the Buses.
 - See Bus route / stoppages over a map
 - View ETA (Estimated Time of Arrival)

- View Emergency messages / Circulars from Institute
- SMS/App Notification, when the bus:-
 - Is about to OR reaches boarding-deboarding locations
 - Reaches institute
- ii. Similarly, for other Citizens traveling through the Passenger vehicles, Manufacturer must provide a separate Citizen's Mobile App & Citizen's Web Interface, which would enable the citizens to:-
 - Live Track the PSVs
 - Get details of the PSVs running on different Routes
 - Find information on Public Service Buses (Intercity & Interstate) and their running routes, ETA, ETD for a particular geo-location, bus stand or station.
 - Find information on Taxis & their bookings.

Registered manufacturer must ensure mapping of panic button with VLTD device and CCC/Backend/State Data Centre, it must send SOS SMS, tracking info, Email and alert by an automated call to specific mentioned contacts of the state agencies in case of panic button is pressed i.e. Geo fencing of jurisdiction of various enforcement authorities will be required to be done at the backend system of the manufacturer so that in case of panic button pressed, it will automatically alert the concerned authority, vehicle owner and other required stakeholders as required by COMMISSIONERATE OF TRANSPORT. Additionally, manufacturer must ensure that there is a provision of hooter with the VLTD device, so that it gets automatically activated, when the panic button is pressed, to alert the people / citizens / enforcement / emergency team nearby and hence prompt support can reach the distressed passenger(s). This may be enforced by the COMMISSIONERATE OF TRANSPORT at any later stage.

Registered manufacturers should train the RFC for installing the VLT devices in vehicles and support the customers whenever required. In compliance to the order, registered manufacturer must ensure proper fitment of the VLT device in the public service & commercial vehicle.

Manufacturer shall provide warranty (at least for two year) and AMC for their products. Manufacturers /the registered RFC have to supply and support certified VLT models across the State.

Any complaint registered through the COMMISSIONERATE OF TRANSPORT website/Manufacturer's Backend/email/Mobile App/CCC or transport department official, should be serviced within stipulated time as specified in general terms & conditions of the document. For redressal of complaints the customer web interface and mobile app must also have a support ticketing system to enable customers to report problem or raise support requests, which should be serviced by the respective manufacturer/ registered RFC and monthly MIS reporting to COMMISSIONERATE OF TRANSPORT shall be ensured.

Registration of VLTDs manufacturer

COMMISSIONERATE OF TRANSPORT intends to invite manufacturers of AIS 140 certified Vehicle Location Tracking Device units (VLTDs), which can be used in the public service vehicles and commercial vehicles, for enabling tracking and monitoring of the vehicles. The objective of VLTD registration is to standardize the VLTD data protocol and data format specification to meet the state specific requirements and to support the customers to avail good quality VLT devices and after sales services and its RFC for sales/after sale services. Accordingly, the pre-qualification requirements for the manufacturer and the specifications for vehicle Location tracking unit firmware & backend system details are listed in this document. The COMMISSIONERATE OF TRANSPORT will publish the list of registered manufacturers of VLTD models and the vehicle owners will be advised to procure only the registered VLTD models from registered manufacturers and/or their registered RFCs.

1. All VLT device type with valid Type Approval Certificate approved from CMVR test agencies as per AIS 140 having valid COP and owned/licensed backend system (as per the backend system requirements of AIS 140) are eligible to apply.
2. The manufacturer must have their own or their authorised backend system applications both in Web & Mobile application formats and the respective backend applications (Web & Mobile) must have valid security audit certificate. The backend system application must be tested for test parameters (table 2 of AIS 140 Amendment 2) by the testing agencies specified in CMVR Rule 126/STQC/NIC.
3. The Manufacturers can apply their VLT models for registration based on the criteria specified in this document.

4. The manufacturer can register more than one AIS 140 certified VLT model for installation in vehicles in the state.
5. The evaluation of application for registration would be carried out based on the pre-qualification criteria and technical evaluation.
6. Only registered VLT models of registration manufacturers are to be used by public service vehicles & commercial vehicles in Assam.
7. VLT manufacturers cannot sell their models for the public service vehicles and/or commercial vehicles in Assam once their authorization/ certification issued by the testing agency is suspended, cancelled or not renewed for any reason.
8. Manufacturers must give an undertaking to COMMISSIONERATE OF TRANSPORT that in case their authorization/certification is suspended, cancelled or withdrawn for any reason, they will continue to support the devices already sold for the public service & commercial vehicles.
9. Manufacturers must have 24 x 7 Call/ Service-centre or similar arrangements to address the queries and any other issues from the end users. Call agents must be able to speak in English, Hindi & Assamese.
10. Manufacturers must ensure the privacy of the data/information captured during VLTD activation process, in case of breach strict action, as per laws can be taken. The data will be maintained in servers located in India only.
11. Manufacturers must arrange registered RFC, who is authorised to sell, install, support and service the VLTDs in Assam, Hence the manufactures must submit a declaration and details of RFC for the same.
 - a. The manufacturer, should facilitate eSIM subscription in VLTDs along with a subscription of two years for new vehicles and one year for old vehicles from Mobile service providers on behalf of the Vehicle Owners and must take necessary steps to ensure the continuity of the service once the eSIM validity period is expired. The eSIMs must be preactivated before installation.

- b. COMMISSIONERATE OF TRANSPORT can terminate the approval of the registered manufacturer at any time if it is found violating any of the provisions of the CMVR- 1989, AIS- 140, any other direction issued by the COMMISSIONERATE OF TRANSPORT or any other applicable law.
12. COMMISSIONERATE OF TRANSPORT reserves the right to change the terms and conditions governing the certification and approval at any point of time.
 13. Unless the Certification of any VLTD model is cancelled by COMMISSIONERATE OF TRANSPORT, the certification of VLTD model shall remain valid as long as such model continues to comply with the terms and conditions in AIS-140 standard or for 3 years whichever is less. Before the expiry period manufacturers have to renew the certification in accordance with COMMISSIONERATE OF TRANSPORT regulations.
 14. COMMISSIONERATE OF TRANSPORT reserves the right to modify the VLTD firmware specification or add additional features to existing specification. The release of the VLTD specifications will be in a version controlled manner. The backend system must be able to upgrade the firmware over the air through OTA process defined in the AIS 140 standard.
 15. COMMISSIONERATE OF TRANSPORT may initiate or suspend the registration process, as and when required. Registration shall be done on first come first serve basis.
 16. Interested Manufacturers for the respective VLT models which comply with the COMMISSIONERATE OF TRANSPORT requirements may download the registration document from the website and submit the same duly filled in and supplemented with all relevant documents to COMMISSIONERATE OF TRANSPORT for further processing.

Pre-Qualification Criteria for VLT Manufacturer

COMMISSIONERATE OF TRANSPORT shall carry out the evaluation process of VLTDs. Manufacturers have to meet the following pre-qualification criteria for registration.

Pre-Qualification Criteria

S.No.	Criteria	Required Documents
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S.No.	Criteria	Required Documents
1	The Manufacturer should be a registered company in India under the Companies Act, 1956/2013, a Partnership firm or a MSME registered firm with certified AIS 140 product and valid COP	Certification of incorporation/ Registered Partnership Deed/ MSME certificate
2	The Manufacturer should not be blacklisted by any Central/ State agencies in India.	Self-declaration by the manufacturer signed by the authorized signatory
3	Only OEMs will be allowed to participate in registration as VLTD manufacturer.	Copy of relevant Certificate
4	The VLT model which Manufacturer intends to submit for registration must be certified according to AIS-140 standard by CMVR test agency. Device must support IRNSS.	Copy of relevant Certificate(s)
5	The VLT device should have feature to customized integration with Manufacturer's Backend / Command and Control Centre /State Data Centre, as per COMMISSIONERATE OF TRANSPORT requirement	Self-declaration by the manufacturer signed by the authorized signatory.
6	The Manufacturer shall agree to open an Office in Assam within one month, once the Manufacturer is registered.	Self-declaration by the manufacturer signed by the authorized signatory
7	3 Year balance sheet, income tax return, PAN and GST registration number of manufacturers is required (2017-18, 2018-19, 2019-20)	CA certificate to be submitted along with IT return Certificate
8	Type of approval from test agencies (ARAI /CIRT/ICAT /VRDE/ CFMTTI /IIP/GARC/STQC	Copy of relevant Certificate(s)
9	Manufacturer must possess Valid COP from testing agency (ARAI/CIRT/ ICAT/ VRDE/CFMTTI/IIP/GARC), as per AIS 140	Copy of valid COP(s)
10	The manufacturer shall submit an affidavit for privacy of the data/information stored related to VLTD/Vehicle/vehicle owner	Affidavit
11	Manufacturer must submit Affidavit to setup monitoring center at the location/utility provided by COMMISSIONERATE OF TRANSPORT within 15 days from the date of getting registered.	Affidavit
12	Manufacturer is also required to submit one	Delivery chalan mentioning the

S.No.	Criteria	Required Documents
	VLT devices, eSIM with 2-year data plan validity	Serial number of the devices and their eSIM validity.
13	Manufacturer's affidavit stating 100% right full ownership/license of the backend system & software on which the citizen / parents / customer tracking Mobile app/website are being run, as per the attached format.	Affidavit
14	Manufacturer's backend application must be tested as per Test Parameters for Auditing of VLT Device Manufacturer's Backend specified in table 2 (page 14) of the AIS140 Amendment No 2, dated 05/12/2018, from the testing agencies referred to in rule 126 of the CMVR/STQC/NIC	Copy of Certificate / report from testing agencies specified in CMVR Rule 126/STQC/NIC
15	Manufacturer to provide a Vulnerability Analysis and Penetration Testing report of their backend web application & app from a 3 rd party test agency authorized by CERT-In/STQC.	Copy of certificate / report from 3 rd party testing agency authorized by CERT-In/STQC

The Manufacturer must submit all the certified and authenticated documentary proof for meeting the pre-qualification criteria. Such documents may include AIS-140 certification for submitted model, company registration certificates and other credentials.

Any entity (manufacturer) which has been punished for any offence or any representative of that entity is convicted for any offence or against whom any criminal cases is/are pending before competent court, shall not be eligible to submit the proposal. The manufacturer shall have to submit affidavit to this effect.

In addition to the standard, Transport Department Assam (COMMISSIONERATE OF TRANSPORT) recommends below features.

- a) Hooter (Optional)
- b) Tilt Alert (Optional)
- c) Impact Alert (Optional)
- d) Alert on tampering and vehicle battery removal (Mandatory)
- e) Alert in case of geo- fencing violation (Mandatory)

- f) Any other alert/MIS report required by COMMISSIONERATE OF TRANSPORT
- g) Minimum 2 emergency buttons in all passenger cars; one for passenger seat and one for driver (Mandatory). Details are in 'Guidelines for implementation'.
- h) Minimum 1 emergency button in all commercial vehicles for driver (Mandatory). Additional panic button each for additional cabin or row. Details are in 'Guidelines for implementation'.
- i) Minimum 4-7 emergency buttons in all other public transport vehicles (Mandatory). Details are in 'Guidelines for implementation'.
- j) The emergency buttons should be fitted in location easily accessible to the person (driver/passenger) intended to use it. In public transport vehicles like buses the emergency buttons should preferably be fitted on the vertical pillar above the window rail below the luggage rack. Refer pic 2 and 3 in 'Guidelines for implementation'.

Pre-Qualification Criteria for RFC

COMMISSIONERATE OF TRANSPORT shall carry out the evaluation process of RFC of registered OEMs of VLTD in Assam. RFC have to meet the following pre-qualification criteria for registration.

Pre-Qualification Criteria

S.No.	Criteria	Required Documents
1	The RFC should be a registered entity in India.	Certification of incorporation / MSME Certificate / Firm
2	The RFC must have letter of authorization issued by Manufacturer registered in Assam	Copy of authorization letter
3	RFC must ensure selling of only AIS-140 compliance VLT model of manufacturer	Self declaration by the RFC signed by the authorized signatory
4	PAN and GST number of RFC	Copy of relevant Certificate(s)
5	RFC must have trained manpower for fitment of VLT device and its activation/integration with Backend/CCC	Self-declaration by the RFC signed by the authorized signatory
6	RFC must fulfill minimum infrastructure requirement as per terms & conditions of this document.	Self-declaration by the RFC signed by the authorized signatory

Any RFC which has been punished for any offence or any representative of that entity is convicted for any offence or against whom any criminal cases is/are pending before competent court, shall not be eligible to submit the proposal. The manufacturer shall have to submit affidavit to this effect.

Backend Control Centre System

Manufacturers may singly / jointly (in case of consortium / common backend system) setup their backend & command control system as per the code of practice guidelines of AIS140. The backend system (Both the Web and Mobile App) must have valid security Audit certificate from the authorised agency as defined in AIS 140. Additionally, the backend system application must be tested for test parameters (Table 2 of AIS 140 Amendment 2 - Test Parameters for Auditing of VLT Device Manufacturer's Backend) by the testing agencies specified in CMVR Rule 126/STQC/NIC. The following mandatory provisions will have to be made in the Backend Control Centre:

- 1) Registration and activation of the device(s) fitted on the vehicle, including the details of vehicle registration number, engine number, chassis number, vehicle make and model, device make and model, and telecom service provider's name.
- 2) Re-registration/re-activation of the device(s) fitted on the vehicle in case of any change in device or telecom service provider, etc.
- 3) Regular health check of the device(s) fitted on the vehicle, as per the parameters and frequency defined in Sub-section 3.1.4 of AIS 140 document
- 4) Administration/configuration of devices for any changes in the parameters as decided by the state from time to time.
- 5) Notification of alerts in case of press of an Alert Button fitted on the vehicle, in the protocol defined in Section 4 of AIS 140 document
- 6) Notification of alerts in case of defined deviations by vehicle such as over-speeding, deviation from defined route/geographic area, time of operation, etc.
- 7) Location tracking of the vehicle including real-time as well as history tracking for up to last 90 days.

- 8) Notification to the permit-holder through SMS in case any device(s) stops functioning/sending data to the Backend Control Centre.
- 9) Reports of the vehicles with devices not working/sending data beyond defined number of days (1 day, 3 days, 7 days, 30 days, configurable by COMMISSIONERATE OF TRANSPORT).
- 10) Ensure that the security and privacy of the data is maintained in accordance with applicable laws/guidelines of various government authorities.
- 11) The backend software proposed to be used by the manufacturers should be tested for Vulnerability Analysis and Penetration Testing from a 3rd party test agency authorized by CERT-In/STQC.
- 12) The backend system application must be tested for test parameters (Table 2 of AIS 140 Amendment 2 - Test Parameters for Auditing of VLT Device Manufacturer's Backend) by the testing agencies specified in CMVR Rule 126/STQC/NIC
- 13) Common Layer software will be got tested by the State in case State develops its own or the same will be got tested by the agency who the state engages for design & implementation of the common layer.
- 14) The Backend of Manufacturer must have provision for migration/integration with State Data Centre/NIC/CDAC /Control Command Centre/ common layer, whenever made operational.
- 15) The backend system must have the facility to retain activation & other Vahan related data for unlimited duration for the period the backend system is unable to connect to the Vahan. The data must be updated to Vahan as soon as the backend system is connected to Vahan.

In addition to the above mandatory provisions, the Backend Control Centre shall be capable to provide any other optional features as per requirement of the State, at no costs or expenses to the State.

Submission of Application for Registration

The Manufacturer can apply for registration of one or more models of VLT devices in the state. Separate application is required for each model.

General Conditions

Manufacturers are advised to study the document carefully. Submission of application will be deemed to have been done after careful study of all instructions, eligibility norms, terms and requirement specifications in this document with full understanding of its implications. Applications not complying with all the given clauses in the document are liable to be rejected. Failure to furnish all information specified in this document or submission of application not substantially responsive to the document in all respects will be liable for rejection.

- (i) Application for registration will be hosted on COMMISSIONERATE OF TRANSPORT official web site (<https://comtransport.assam.gov.in/>) and can be downloaded and used for submission of application forms. Application fee shall be paid to COMMISSIONERATE OF TRANSPORT along with the submission of application.
- (ii) Un-signed and un-sealed application shall not be accepted.
- (iii) All pages of the application and documents being submitted must be signed and sequentially numbered by the Manufacturer.
- (iv) Ambiguous applications will be out-rightly rejected.
- (v) Applications not submitted as per the format will be rejected straight away.
- (vi) No deviations from the specifications will be accepted.
- (vii) The Manufacturers will bear all costs associated with the preparation and submission of their applications. COMMISSIONERATE OF TRANSPORT will, in no case, be responsible or liable for those costs, regardless of the outcome of the registration process. In case of incomplete applications where COMMISSIONERATE OF TRANSPORT requires the Applicants to submit any missing/incomplete information/documents, the receipt of such clarification/documents by COMMISSIONERATE OF TRANSPORT shall be deemed to be the date of submission of the Application. COMMISSIONERATE OF TRANSPORT may, at its own discretion, can add or delete any clause of this document.

Registration fee for VLTD Manufacturer

The application shall be submitted along with registration fee as prescribed in this document. It can be submitted through demand draft in favour of "**State Transport Commissioner Assam**" payable at **Guwahati**. The registration fees paid to COMMISSIONERATE OF TRANSPORT will not be refundable. An application not accompanied by the aforesaid payment shall be considered as non-responsive and will be rejected.

An application not accompanied by the aforesaid payment shall be considered as non-responsive and will be rejected.

Registration fee for RFC

The application shall be submitted along with registration fee as prescribed in this document. It can be submitted through demand draft in favour of "**State Transport Commissioner Assam**" payable at **Guwahati**. For additional RFC registration, the manufacturer shall submit an additional fee as prescribed in this document for each RFC. The registration fees paid to COMMISSIONERATE OF TRANSPORT will not be refundable. An application not accompanied by the aforesaid payment shall be considered as non-responsive and will be rejected.

Performance Guarantee Fee

A performance guarantee of Rs 5,00,000/- (Rupees Five lakh only) shall be submitted by the successful manufacturer intending to be registered, within 15 days. The performance guarantee shall be in the form of bank guarantee issued from any of the nationalized banks and shall remain valid for three years.

Forfeiture of Performance Bank Guarantee:

Performance Bank Guarantee amount in full or part may be forfeited, including interest, if any, in the following cases :-

- (i) When any of the below circular/notifications are breached by the manufacturer
 - (1) AIS-140 Standard including amendment 1 (December'17) & Amendment 2 (December'18) and any other amendments from time to time.

(2) When manufacturer fails to comply with any other circular/notifications issued by MoRTH Central Government/state Government /COMMISSIONERATE OF TRANSPORT from time to time.

(ii) When the manufacturer fails to comply with any applicable terms & conditions of this document

(iii) When manufacturer fails to provide integration with Vahan data base on real time basis and / or customized backend to the State as per requirement, once the state has facilitated the Vahan access for Assam to the manufacturers.

(iv) When the manufacturer or RFC is involved in malpractices.

Notice will be given to the manufacturer with 14 days to respond after which Performance Bank Guarantee deposited, in part or full, will be forfeited.

No interest shall be payable on the Performance Bank Guarantee.

Submission of Application

- a. A Manufacturer can apply for registration of one or more models of VLT devices.
- b. The Manufacturer is required to submit statement of compliance of the devices with the specifications as set out in this document.
- c. The Manufacturer is required to submit their application in the prescribed format in this document.
- d. The Manufacturer is also required to submit one VLT devices (with atleast 2 panic buttons each) having eSIM with 2 year data plan validity and all other necessary documentation / manuals needed for interfacing and testing. The department may call registered VLT devices for inspection any time. The submit devices shall not be returned to the manufacturers.
- e. All communications and proceedings shall be in writing in Assamese or English language only
- f. The application shall be submitted by the VLTD Manufacturers within ninety (90) days of the publication of this document. Subsequently submission date for

second phase of the application shall be uploaded on COMMISSIONERATE OF TRANSPORT website.

Details of Document to be submitted

The Manufacturers are required to submit the following documents.

- a) Table of contents listing documents and other details submitted.
- b) DD towards Registration Cost.
- c) Manufacturer/RFC Registration Form.
- d) Type approval certificate.
- e) Working VLTD devices with valid eSIMs
- f) Authorization for RFC.
- g) Compliance Report in terms with Specifications for VLT devices. Both hardcopy and softcopy (in pdf format) of the above documents are required to be submitted. The documents along with registration form need to be submitted in a sealed envelope clearly bearing the following: **"Application for Registration of AIS 140 VLTD Manufacturer and their VLT device/s", Commissionerate of Transport – Assam"**. Name and address/email of manufacturer/RFC with contact number. The application should reach COMMISSIONERATE OF TRANSPORT at the :

**The Commissioner of Transport, Office of The Commissioner of Transport Assam, Paribahan Bhawan, Jawahar Nagar, Khanapara, Guwahati-22 (Assam)
Email : comtrans.assam@gov.in Telephone: 0361-2304110,2308525**

Evaluation of Applications

- a) The application found complete in all respect shall be considered for processing and testing of VLT devices for compliance with specifications. An advance notice of atleast 3 days by email or registered/speed post would be given to applicant manufacturer for the date of commencement of operational evaluation.

- b) Detailed Operational Evaluation of the VLTD device and the manufacturer's backend system shall be carried out commencing on the date as intimated by the Commissionerate to individual manufacturers. Such evaluation would be carried out by a technical committee formed by the Commissionerate of Transport and must be completed within 3 working days.
- ◆ Each manufacturer would be required to fit atleast 2 devices in 2 different vehicle (with atleast 2 panic buttons in each vehicle) as allocated by COMMISSIONERATE OF TRANSPORT for a period of 1-2 days.
 - ◆ Each manufacturer must demonstrate individually all the applications (web & mobile) & functionalities in details as decribed in operational evaluation of this document.
 - ◆ Each manufacturer must demonstrate individually all the test parameters of the backend system as described in the Table 2: Test Parameters for Auditing of VLT Device Manufacturer's Backend Application/System of the AIS 140 2nd Amendment
 - ◆ Manufacturer's must be able to demonstrate all the requirements of the backend system and citizen / parent's / tracking application requirements of COMMISSIONERATE OF TRANSPORT in both required Web/Mobile Application formats.
- c) COMMISSIONERATE OF TRANSPORT reserves the right to verify all statements, information and documents submitted by the Applicant. Applicant may be asked to submit more documents, if any clarification required.
- d) Decision of COMMISSIONERATE OF TRANSPORT regarding registration/ rejection of the VLT devices under this process will be final and no correspondence in this regard will be entertained by COMMISSIONERATE OF TRANSPORT.
- e) Selected manufacturer models will be published on COMMISSIONERATE OF TRANSPORT website after submission of PBG by the shortlisted manufacturers.
- f) COMMISSIONERATE OF TRANSPORT may conduct site inspections and validate the facilities of RFC identified by manufacturers as RFC for distributing and fitting the VLT device to customers.

- g) In case COMMISSIONERATE OF TRANSPORT delist any RFC due to any dissatisfaction or RFC withdrawal, then the corresponding manufacturer shall arrange alternate RFC in the same region.

Operational Evaluation

Compliance against the operational specifications below needs to be submitted by the Applicant. The same should be subjected to demonstration by the Applicant and/or testing by COMMISSIONERATE OF TRANSPORT for validation, as mentioned below:-

Sl.No.	Specification	Validation Process	Confirmation (Yes/No)
1	Communication Protocol as per AIS140 standards in line with Ministry of Road Transport & Highways (MoRTH) directives and notifications.	Device functionalities to be demonstrated by the Applicant at the time of submission	
2	Demonstration VLTD device on test server configuration	Acknowledgement of test command given to device and display of Tracking message to the backend system	
3	Fitment of the VLT device with Panic Button System, in a test passenger vehicle	Demonstration and connection, in the test vehicle	
4	Demonstration of Call & Alert Messages as per AIS-140, when the Panic button is pressed.	Demonstration of the calls & alert message at Manufacturer's backend system test server and emergency response server (2 messages at two different servers).	
5	The Primary source of power for the device should be from vehicle's battery. When the device is disconnected from vehicle battery it should start operating on internal battery	A demonstration by Applicant together with supporting document as under: AIS-140 Certification.	
6	Alert on tampering and vehicle battery removal.	A demonstration by Applicant together with supporting document as	

		under: AIS-140 Certification	
7	Device should meet all the features of manufacturer's backend system prescribed as per department's operational & feature requirement as well as AIS-140, including all the test parameters as described in Table 2 of AIS 140 2 nd Amendment - "Test Parameters for Auditing of VLT Device Manufacturer's Backend Application/System"	A demonstration by Applicant	
8.	Manufacturer backend system must be able to create geographical areas / zones and allocate the emergency response team responsible for action in that particular area / zone, in case of press of panic button	A demonstration by Applicant	
9.	Manufacturer's backend system must be able to demonstrate all the Panic Alert logs along with the list of stakeholders to whom the alerts (SMS & Call) was notified along with the time of notification. Alerts must go to vehicle owner, manufacturer, state emergency response team (for that particular zone) responsible for action.	A demonstration by Applicant	
10.	Device shall be capable for operating in L and/or S band and include support for NAVIC/IRNSS (Indian Regional Navigation Satellite System)	Certification from certified testing agencies	
11.	Demonstration of Web & Mobile App of the Backend system & application with logins for RTA/MVI, Technician, Dealer & Distributor	A demonstration by Applicant	
12.	Demonstration of Customer Web & Mobile Apps. Mobile Apps must	A demonstration by Applicant.	

	be available for both Android & iPhone/iOS platforms.		
13.	Demonstration of Parent's Web & Mobile Apps. Mobile Apps must be available for both Android & iPhone/iOS platforms.	A demonstration by Applicant.	
14.	Demonstration of Citizen's Web & Mobile Apps. Mobile Apps must be available for both Android & iPhone/iOS platforms.	A demonstration by Applicant.	
15.	Backend System (Web & Mobile App) must have a valid security audit certificate	Security Audit certificate from the certified Auditing agency with validity of 3 months or more.	
16.	Demonstration of generation of Installation, Warranty & Fitment certificates with secure & encrypted QR Code from the Backend application	A demonstration by Applicant	
17.	Backend Server must be physically located in India	Undertaking from manufacturer with Details of IP & location of server	
18.	Manufacturer's affidavit stating 100% right full ownership/license of the backend system & software on which the citizen / parents / customer tracking Mobile app/website are being run, as per the attached format.	Affidavit as per attached format	
19.	All Backend / Tracking / Parents / Citizen App/web application must be multilingual and must support at least English, Hindi & Assamese	Demonstration of all applications by Applicant in English, Hindi & Assamese	
20.	Manufacturer's Backend system Application programming interface (API) document	Self-Attested Document	
21.	Manufacturer's Backend system Manuals for RTO / MVI / Commissioner / Govt	Self Attested Manual for Installation, Software Manual (Web & Mobile)	

Legend:

Yes: Feature is available in the Vehicle Location Tracking Device model submitted.

No: Feature is not available in the Vehicle Location Tracking Device model submitted.

- After successful demonstration/ evaluation intimation will be sent to of successful manufacturers.
- A performance guarantee shall be submitted by the successful manufacturer or RFC intending to be registered, within 15 days.
- Subsequent to which successful manufacturer name will be published in registered VLT manufacturer list and required credentials of the VAHAN & access to Vahan APIs will be issued to the manufacturer.

Final Selection of VLTD Manufacturer:

The final selection of VLTD manufacturer will be done on the basis of fulfilling pre-qualification criteria as well as and operational evaluations done by the COMMISSIONERATE OF TRANSPORT.

Setup of Monitoring Center in Assam

Manufacturer must setup at its own expense & cost, a 24x7 monitoring center either themselves or as a consortium through their authorised agency, as per the following manpower/technical requirements of COMMISSIONERATE OF TRANSPORT within 15 days after being registered:

- Minimum One (1) Technical Support Agent per manufacturer (or agency in case of consortium / common backend system) must be available at all times at the monitoring centre. The responsibilities of the agent are:
 - To monitor & keep track of all the Emergency alerts
 - To take appropriate action as directed by the State
 - Provide health check reports, tracking reports, uptime reports, or any other report as may be desired by the office of the Commissionerate of transport.
- Manufacturer (or their authorised agency in case of consortium / common backend system) is required to setup at its own expense & cost the following minimum hardware requirement:

- 1 PC with required accessories (Mouse, Keyboard, Monitor) for Agent
- Furniture: 1 Table + 1 Chair + 1 Almirah
- 1 PC with requisite Video cards & Video Wall of 55" x 2 x 2
- Multifunctional Laser Printer (B&W) + Scanner
- Required UPS (with minimum 1-hour backup)
- Internet Connection, LAN

Blacklisting:

If any information or document provided by the manufacturer is found to be false or misleading during the evaluation process, such application would be liable for rejection and if the VLT device has been registered, its registration would be liable to be cancelled. Further, the Manufacturer may be considered for blacklisting.

Guidelines for implementation

Guidelines for the Implementation of VTMS

1. Guidelines to VLT Manufacturers

a) Vahan 4.0 :

- i. The details of each VLT device (VLT device manufacturer code, device serial number, IMEI number, IccID number and other details as notified by the Central Government/State Government) shall be uploaded on the Vahan 4.0 directly or through backend system by the VLT device manufacturer using its secure authenticated access.
- ii. The VLT device manufacturer will ensure uploading device data in Vahan 4.0 system against the respective vehicle record at the time of installation and registration/activation of VLT device. COMMISSIONERATE OF TRANSPORT shall assist the Manufacturer in getting the access to VAHAN and VAHAN API.

- iii. In case of any problem in updating Vahan 4.0, it will be VLT device manufacturer's responsibility to resolve the same. Till or during the time the Vahan access is not available to manufacturer's backend system, manufacturer must retain Vahan related data and information on the backend system and the same must be uploaded to Vahan as and when the access to Vahan is made available to the manufacturer.
- iv. Regional Transport offices/Motor Vehicle Inspectors shall be able to verify the registration/activation/functional status of VLT device in the Vahan 4.0 / corresponding backend system (both in web & mobile App) at the time of fitness testing.
- v. The permit holder will have option to check the installation and device working status in the Vahan 4.0 / corresponding customer mobile App & interface provided by the manufacturer.
- vi. Publish VLT device details in the Vahan 4.0/ any other State system used for registration of vehicles and/or issuance of permits
- vii. Publish alerts and health check received from VLT device in the Vahan 4.0/ any other State system used for registration of vehicles and/or issuance of permits.

b) Operational Process:

- i. Each VLT device manufacturer shall provide the details of their respective internet protocol address (IP address) and Short Message Service Gateway (SMS gateway) number of their respective emergency response system, setup by the manufacturer, where VLT devices will send the emergency alerts on press of emergency button and Manufacturer's Backend system.
- ii. The VLT device manufacturers or their authorised RFC, at the time of installation of VLT device in vehicles, shall configure the IP address and SMS gateway details in the device for sending emergency alerts to the

emergency response system of the COMMISSIONERATE OF TRANSPORT/Manufacturer's Backend.

- iii. In case of press of emergency button, the VLT device manufacture must ensure that the backend system is configurable to forward Emergency alerts & calls to the designated officers/offices, as may be notified by the department from time to time.
- iv. The Manufacturer's Backend should also provide information with regard to the VLT device fitment validity, device health status, etc to ensure execution of the order and to ensure proper fitment and functional status of the VLT device in the public service & commercial vehicles at all times.
- v. In compliance to the order, manufacturer must ensure proper fitment of the VLT device in the public service & commercial vehicle. Also, in the interest of the public, it must provide a "Customer web interface" and " customer mobile app" for the vehicle owner to track his vehicles in real time and also provide various historical & real-time reports to the vehicle owner. This should also enable the public service & commercial vehicle owners to ensure that the VLT devices installed in their vehicles are in working condition and is regularly sending required data to the corresponding backend system through cellular connectivity. The customer web interface and mobile app must also have a support ticketing system to enable customers to report problem or raise support requests, which should be serviced by the respective manufacturer.
- vi. Manufacturer must ensure that the tracking data should be kept live in the system for at least 90 days. Utilities should be provided to support archive and restore functions for older data. Alerts/ reporting shall be available for one year in the backend.
- vii. Authentication of vehicle shall be done through an OTP sent on vehicle owner's registered mobile number from the corresponding backend system.
- viii. An installation certificate Annexure E (Sample format), along with the fitment certificate and warranty certificate must be issued to the vehicle owner as owners copy and Department's copy. Fitment certificate with photo of the installed device in the vehicle, photo of the front of the vehicle with number plate, photo of the RC and a unique encrypted QR code must be provided by the manufacturer at the time of installation & fitment of the VLT in the

vehicle. After activation of the device on the backend the data will be available on VAHAN 4.0 VLT maker module and/or Manufacturer's backend system. This shall enable proper checking of the vehicles for fitness certificate and for compliance of the functional requirements at RTA end.

- ix. The backend system of the VLT device Manufacturer must provide both backend web portal and backend mobile app to the Transport Commissioner, Regional Transport Authority, MVI, flying squad, or any authorised enforcement officer, which should provide a facility to on-spot verify the certificate of the vehicle/ registration /activation/functional status of the VLT devices at any time, online through scanning of the printed QR code on the fitment/ installation certificate. The QR code must be encrypted and should be readable & authenticated through the said mobile app only. The encrypted QR code must provide complete information related to the fitment of the VLT device in the vehicle. Such information must include: VLT serial/ IMEI No, Manufacturer name & code, VLT Device Model, Vehicle Registration No., Chassis No, Engine No., Vehicle Model, Owner Name, installation Date, Expiry date and direct link to live Track the vehicle. The QR scan screen of the App must also provide the live location of the vehicle as well as the location where the printed Certificate is being scanned, to ensure that the VLT location as well as the location where it is being scanned through the App is same. The web portal must provide various detailed real-time state-wide reports to the transport commissioner and the Regional Transport Authority and any other authority.
- x. The Manufacturer backend system must provide interface where the State Transport Commissioner/RTA must be able to create routes with route fencing for each public service vehicles and receive alerts as well as reports in case the vehicle deviates from its routes or in case of non-serving of their respective routes. The backend system must also provide interface for the Transport Commissioner/RTA to be able to creates stoppages in the routes and also define the allowed stoppage time. Alerts and reports must be created for the vehicles in violation to the allowed stops and stoppage timings.

- xi. Manufacturer backend system must be able to create geographical areas / zones and allocate the emergency response team responsible for action in that particular area / zone, in case of press of panic button.
- xii. Manufacturer's backend system must be able to display all the Panic Alert logs along with the list of stakeholders to whom the alerts (SMS & Call) was notified along with the time of notification. Alerts must go to vehicle owner, manufacturer, state emergency response team (for that particular zone) responsible for action.
- xiii. Each manufacturer must be able to comply with all the test parameters of the backend system as described in the Table 2: Test Parameters for Auditing of VLT Device Manufacturer's Backend Application/System of the AIS 140 2nd Amendment and during the time of evaluation be able to demonstrate the following :
 - Manufacturer's backend system must be able to query the current version of the firmware, its binary size and its build datetime and display it on the manufacturer's backend interface. The same should be matched with the binary size and build datetime as received through SMS query to the device.
 - Manufacturer's backend system must be able to remotely upgrade the new firmware over the air (OTA) through a click of button on the manufacturer's backend system. This must be evaluated by re-querying the version of the firmware, binary size and build date time from the manufacturer's system interface as well as by sending the version command by SMS.
 - Manufacturer's backend system must be able to demonstrate the uptime availability of minimum 99% during the period of evaluation.
 - Manufacturer's backend system must be able to demonstrate the other functionalities like mapping, unmapping, tracking & historical data for the period of evaluation on the interface.
 - Firmware binary should be made available with version matching one in the device as well as binary size & modification timestamp and/ or checksum should match for the binary provided and one installed on device.

- Manufacturer's backend system must be able to demonstrate the IP configured on the device through a query from the backend interface as well as match it by sending the SMS read command for the configured IP on the device. The same must match against a list of IPs provided by the VLT manufacturer in their registration application.
- xiv. Each manufacturer must ensure that they are able to customise their backend system/web portal/ mobile app, at their own expense and costs, as per the requirements of the Transport Department from time to time.
- xv. Manufacturer must ensure that the Backend system application, all web & mobile applications must be available in English, Hindi and Assamese, principally in line with the guidelines of the GoI/ Govt of Assam to support & promote Indian & regional languages and to enhance its prospective use by local populace in towns and vilages.
- xvi. The backend system of the VLT device Manufacturer must provide both backend web portal and backend mobile app to the RFC/Dealer and its technicians to ensure online real-time installation & fitment of the VLT device in public service & commercial vehicle.
- xvii. In compliance to the functional requirements of the order, each VLT must send health & location data at regular intervals to the established CCC/backend.
- xviii. CCC/backend system/customer and the entire data should be hosted on server physically located at the manufacturer or Data Center within the boundaries of India only and no data or its copies should be hosted outside India. In case of need we may notify a specific state facility/data center for setting up of servers and storage of data.
- xix. VLT device Manufacturer/RFC must ensure that the backend system must be in strict compliance to the clause 8 – code of practice (for implementation of VLT device, emergency button(s) and CCC) of the AIS 140
- xx. To further ensure safety, good and continued service for the public at large, the Backend must have compatibility for transfer of complete software along with data to CCC/State data centre, so that commercial/public/PSV who have installed that OEM's device continue to get service through use of this software through CCC/State data centre from time to time.

xxi. Each Manufacturer must provide to State the following Software API of its backend system:

- ✓ A secure mechanism with the Application programming interface (API) Code/ Protocol to decrypt the secure QR code printed on their Installation/ Warranty/ Fitment Certificates.
- ✓ A secure mechanism with API code to Pull/Push data or information from their respective backend system. This data includes, but not limited to Installed VLT devices, Activated VLT devices, Certified vehicles, Vehicle Certificates, health status of the VLT device, live & on demand location of the VLT device, Alerts & reports related to Over speeding, Emergency button, offline devices, VLT firmware, VLT device activations/registration , route deviations , etc
- ✓ A secure mechanism with API code to configure their respective backend systems, as per the requirements of the state from time to time. This configuration includes, but not limited to: configure routes, stops and allowed minimum / maximum stoppage timing of the public service vehicle, etc.

c) Regarding RFC for installation and maintenance

- Registered OEM should arrange registered RFC in the state
- Registered OEM should have a supervisory control over franchisee's operations and should ensure quality service to customers

RFC 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 COMMISSIONERATE OF TRANSPORT 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

- **Quality of service (QOS) –**

The VLT manufacturer will provide directly or through RFC the following QOS as per standards mentioned below:-

- UP time of the device and tracking upto 97% calculated in the month.
 - i. If any complaint is raised against the installed VLT device, then the concerned manufacturer/registered agency/ franchisee/RFC should respond within 8 hours .
 - ii. For complaint classified as **high**, resolve within 24 hrs of reporting the complaint.
 - iii. For complaint classified as **medium**, resolve within 48 hrs of reporting the complaint.
 - iv. For complaint classified as **low**, resolve within 72 hrs of reporting the complaint.
 - v. If more time is required, then a standby VLT should be installed temporarily and replaced once the original VLTDs issue gets solved. The complaint and clarifications should be logged into the CCC/Backend/Mobile app.
- The department can anytime ask for the above i to v reports.
- For every complaint pending beyond the allowed resolution time (as stated above in ii to iv), Rs 100/- (Rupees hundred only) per day per complaint shall be paid to the department which will be encashed from the Bank Guarantee.
- In case of gross irregularity i.e. if manufacturer/RFC unable to resolve minimum 40% of complaints in time than notice of cancellation to be issued to concerned VLTD manufacturer/RFC.

- 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 manufacturers should ensure that they / their RFCs 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 MVI at the time of inspection for Certificate of Fitness (CF) in printed or electronic format (in backend App / customer App)

- **Training to RFC**

All manufacturer should have master trainers who are well trained and thorough in COMMISSIONERATE OF TRANSPORT application. These master trainers should give training to franchises/RFC technicians for fitment and tagging of VLT device.

d) 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.

It has been recommended, in case of commercial vehicle, to fit a minimum of 1 (for driver), and in case of passenger vehicle, 1+1 (1 for passengers and 1 for driver) to a maximum of 6+1 (6 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. Additional panic buttons for ladies rows to be fitted as per the AIS140 section 5.3. Panic buttons should be easily and equally accessible to all passengers and students in the vehicle. The minimum recommended fitment may be as follows

- ❖ 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)

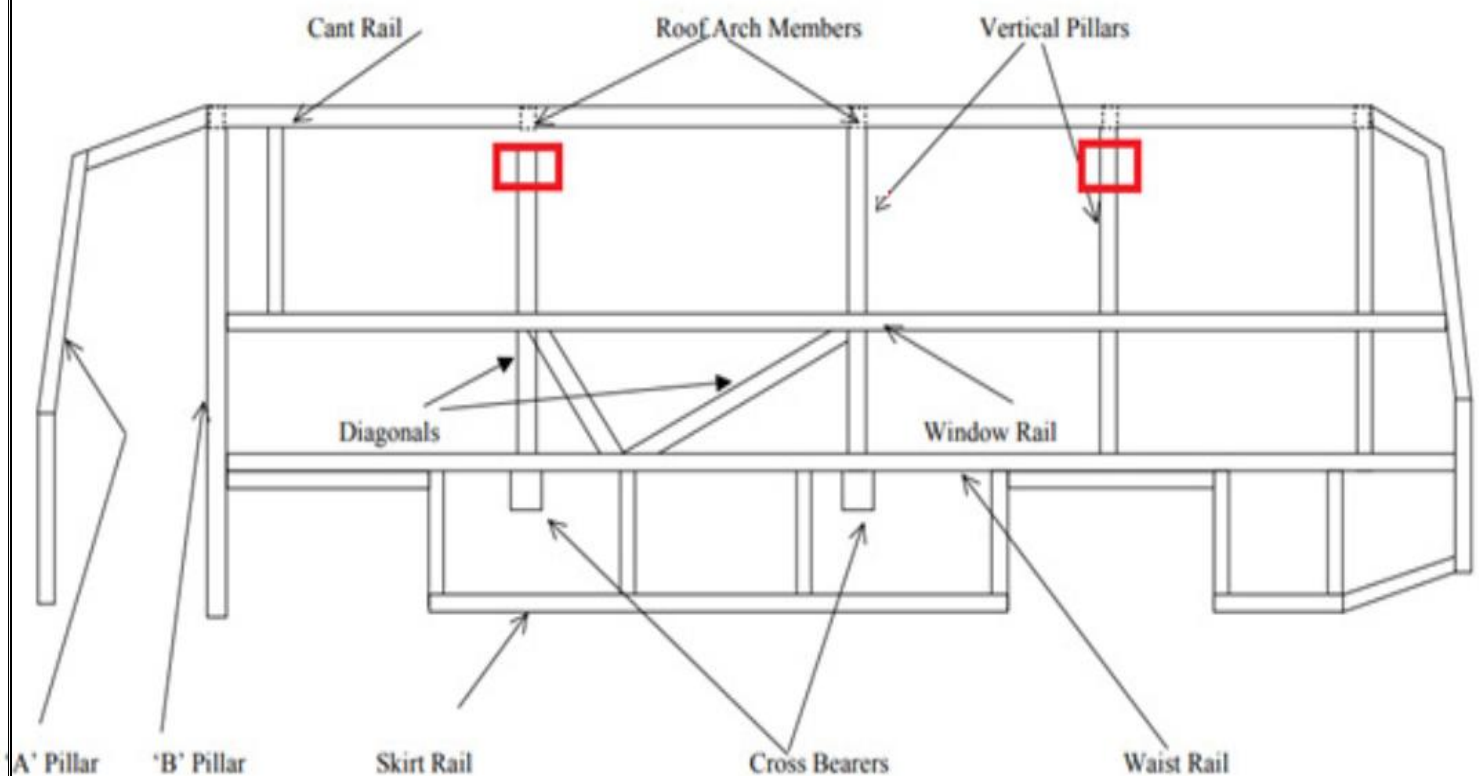


Figure 1: Panic Button position in vertical pillars

- ❖ Additional panic buttons for women row or as per the AIS140 section 5.3

The above is minimum recommendation. However, the number of Panic buttons must be strictly as per the section 5.3 of the AIS 140 Amendment 2 or subsequent amendments.

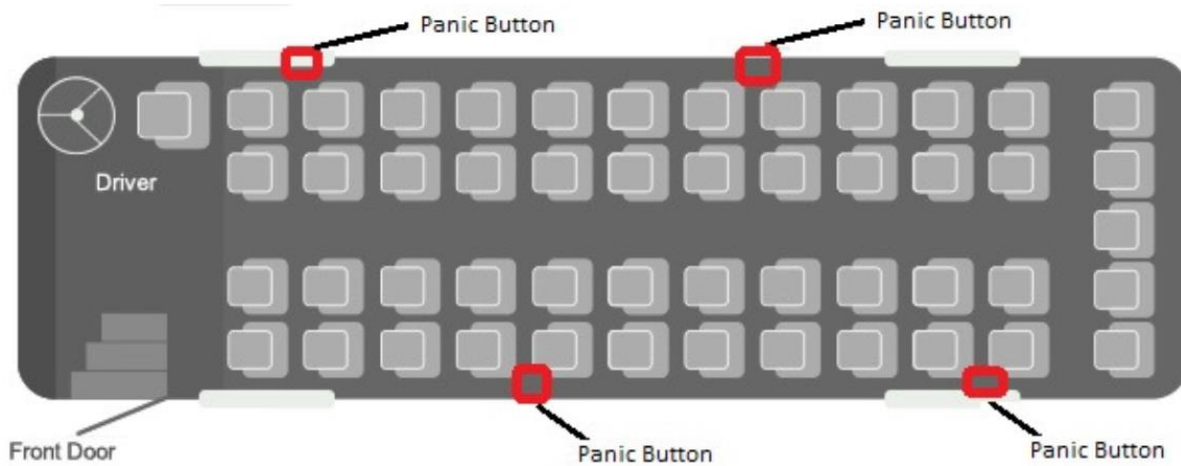


Figure 2: Indicative Panic Button positions for 49 seater

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 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**) - 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.

e) **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.

f) **White listing of IP and SMS mobile number**

In future backend will publish the IP / Domain to which data should be send. Manufacturers should ensure that the device will send data to the allowed IPs only.

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

g) **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.

Annexure - A. Application Form for registration of OEM & their VLT device

Annexure - A.

**Application Form for Registration of OEM & their VLT Device
Format for VLT Application Form
(on the official letter head of manufacturer)**

Date :

To,
State Transport Commissioner, Assam,
The Office of The Commissioner of Transport Assam
Paribahan Bhawan, Jawahar Nagar, Khanapara, Guwahati-22 (Assam)
E-mail ID: comtrans.assam@gov.in

Sub: Registration of AIS 140 VLTD OEM Manufacturer in Assam

Sir,
We have fully understood the requirements of the process "Registration of OEM & their Vehicle Location Tracking Unit (VLT) for Public & Commercial Vehicles in Assam" and are submitting our registration application for the following VLT device(s) being manufactured by us together with the required details, other information as per the registration process and the compliance report for VLT specification and protocols

OEM name and address	
Name of authorized person with Contact no	
VLT device model details	
Address of VLT production center	
Contact Person details (If different from undersigned)	
Details & URL of CCC / backend system Web Portal	
Details & URL of CCC / backend system Mobile App	
Details of CCC / backend system IP & SMS Center Number	
Details & URL of Customer Web portals	

Details & URL of Customer Mobile Apps	
Details & URL of Citizen Web portals	
Details & URL of Citizen Mobile Apps	
Details & URL of Parents Web portals	
Details & URL of Parents Mobile Apps	
Physical Address / Location of the servers	

In relation to our application, COMMISSIONERATE OF TRANSPORT may also note the following:

1. Our application is unconditional and all information provided in the application is true and correct.
2. We hereby declare that the VLT device(s) being submitted for registration complies with the specifications as set out in the registration process document and we shall make available any additional information as COMMISSIONERATE OF TRANSPORT may find necessary as required for clarification.
3. We acknowledge the right of COMMISSIONERATE OF TRANSPORT to reject our application without assigning any reason and accept the right of COMMISSIONERATE OF TRANSPORT to cancel the registration process at any time without incurring any liability to the registered Manufacturers.
4. We confirm that we are not blacklisted by any state government or central government/department/ agency in India from participating in bids for last three financial years.
5. We agree to keep the quality of the registered VLT models and support the customers whenever required.
6. We confirm that we will train all the RFCs to distribute the certified VLT models of our products.
7. We confirm that we will maintain privacy of all data related to VLT device/owner/vehicle.

Sincerely,

(Signature, name and designation of the authorized signatory) (Contact no. including, phone no., fax, email and contact address)

Annexure - B. Application Form for Registration of RFC

Annexure - B.

Application Form for VLT Registration Format for VLT Application Form (on the official letter head of RFC)

Date:

To,
State Transport Commissioner, Assam,
The Office of The Commissioner of Transport Assam
Paribahan Bhawan, Jawahar Nagar, Khanapara, Guwahati-22 (Assam)
E-mail ID: Transport.assam@gmail.com

Sub: Registration of RFC for selling / servicing VLT devices of OEM registered in Assam, for the Public & Commercial Vehicles

Sir,

We have fully understood the requirements of the process "Registration of RFC for selling / servicing Vehicle Location Tracking Unit (VLTD) devices of OEM registered in Assam for Public & Commercial Vehicles" and are submitting our registration application for the following VLT device(S) being manufactured by (Name of OEM of VLTD) with the required details, other information as per the registration process and the compliance report for VLT specification and protocols

RFC Name	
Address	
VLT device model number(s) registered by OEM	
Contact Person details of RFC (If different from undersigned)	

In relation to our application, COMMISSIONERATE OF TRANSPORT may also note the following:

1. Our application is unconditional and all information provided in the application is true and correct.
2. We hereby declare that we will only sell AIS-140 compliance VLT model of manufacturer registered in Assam complies with the specifications as set out in the registration process document and we shall make available any additional information

as COMMISSIONERATE OF TRANSPORT may find necessary as required for clarification.

3. We acknowledge the right of COMMISSIONERATE OF TRANSPORT to reject our application without assigning any reason and accept the right of COMMISSIONERATE OF TRANSPORT to cancel the registration process at any time without incurring any liability to the registered Manufacturers.
4. We confirm that OEM & their VLT devices registered in Assam are not blacklisted by any state government or central government/department/ agency in India from participating in bids for last three financial years.
5. We agree to keep the quality of the registered VLT models and support the customers whenever required.
6. We confirm that we will arrange all infrastructure requirements as per terms & conditions of this document
7. We confirm that we will arrange trained manpower for fitment of VLT device and its activation/integration with Backend/CCC.

Sincerely,

(Signature, name and designation of the authorized signatory) (Contact no. including, phone no., fax, email and contact address)

List of Submissions for Manufacturer

1. Details of the VLTD Manufacturer

- a. Name of the Company
- b. Registered Office
- c. Date of Incorporation / Commencement of Business
- d. Address of Head Office/ branch offices, if any
- e. PAN and GST number of VLTD Manufacturer
- f. Details of VLT devices manufacturing facilities (also mention whether owned or contracted its capacity, third party etc)
- g. Certificates of agencies, manufacturing facility (like ISO, CE etc)
- h. Brief description of the Company including details of its main lines of business.
- i. Details of production facilities (area, machinery, manpower, production capacity).
- j. Website details /URL
- k. Particulars of the authorised signatory of the Company including name designation, address, phone no, mobile no, fax and e-mail
- l. Details of office in the state of Assam or Self-declaration to open within 1 month, in support of the same

2. Documents in support of compliance of the Manufacturer with regard to criteria mentioned in this document.

- a) Certificate of Incorporation / formation issued by the competent authority with copy of registration documents.
- b) Demand Draft towards the Application fee.
- c) Statement of Compliance reports.
- d) One (1) sample VLT devices with related documents (with device brochures; Do"s and Don"ts; user manuals; device protocol(s)/API

documents explaining all the messages, fields and their values; other certifications for VLT devices standard"s compliance and eSIMs and their details)

- e) All documents referred in pre-qualification criteria or as mentioned in terms & conditions document.

List of Submissions for RFC

3. Details of the RFC

- a. Name of the firm/company
- b. Address of RFC
- c. Details of registered OEM and their VLT devices to be sold in Assam)
- d. Letter of Authorization Issued by registered OEM of VLT device/s in Assam
- e. Details about infrastructure available at RFC
- f. Details about trained manpower appointed
- g. PAN and GST number of RFC
- h. Particulars of the authorised signatory of the firm including name designation, address, phone no, mobile no, fax and e-mail

4. Documents in support of compliance of the RFC with regard to criteria mentioned in this document.

- a) Certificate of Incorporation issued by the competent authority with copy of registration documents.
- b) Demand Draft towards the Application fee
- c) Statement of Compliance reports.
- d) All documents referred in pre-qualification criteria or as mentioned in terms & conditions document.

Annexure - D. Terms and Conditions Governing Registration

Annexure - D.

Terms and Conditions Governing Registration

1. **Commercial arrangement of VLTDs between Manufacturers and Vehicle Owners** - Any commercial or other arrangements/agreements between the registered manufacturer and the vehicle owners (customers) shall be as mutually agreed between them. The price of the certified VLT device and all other terms and conditions including those related to warranty, AMC, nature of service etc shall be as mutually agreed by and between the Manufacturer and the vehicle owners. COMMISSIONERATE OF TRANSPORT shall have no role, responsibility and liability in relation to the same.
2. **Response Time** - If any complaint is raised against the installed VLT device, then the concerned registered manufacturer/ RFC should resolve the complaint as per guidelines for implementation mentioned in the document.
3. **Monitoring and Audit** - Once the registered manufacturer/ RFC is authorised/ approved, COMMISSIONERATE OF TRANSPORT shall have the right to monitor/audit the certified VLT devices installed in the Vehicles and the service and support provided with a view to ascertain their continued compliance with the terms and conditions governing the registration.
4. **Cancellation of Registration** - If any fault is found or any complaint received from end user customers, then COMMISSIONERATE OF TRANSPORT shall take actions against the registered manufacturer/RFC and have the right to suspend or cancel the registration/registration issued to that particular VLT model.
5. **Liability** – Registered manufacturer/RFC shall be liable and responsible for performance of the VLT devices supplied to the Vehicle owners.
6. **Jurisdiction** - Any issues related to registration of VLT or licensing of agencies are governed by the laws established in India and competent to deal with disputes, if any,

arising out, the court in Guwahati alone have jurisdiction to lay any matter relating to this registration.

7. **Dispute** - In case of any dispute related to technical (operational testing), the decision of COMMISSIONERATE OF TRANSPORT shall be final and binding.
8. **Use of Trademark/ Logo of COMMISSIONERATE OF TRANSPORT** - Manufacturer shall not use the COMMISSIONERATE OF TRANSPORT logo or any other trademark, symbol, or icon on or in connection with the registered VLTD Devices or any of the manufacturers VLT devices including those on its packaging, manuals, promotional and/or advertising materials, or for any other purpose without an express written permission from COMMISSIONERATE OF TRANSPORT.
9. **Notice** Any notice or other communication to be given by a party to the other under, or in connection with the matters contemplated by or under the registration shall be in writing and shall be delivered by hand/ registered post/ courier at the notified address of the party concerned.

Bank Guarantee Format for Performance Security

Beneficiary: Transport Commissioner, Transport Department, Assam

Date: *[Insert date of issue of BG].....*

PERFORMANCE BANK GUARANTEE No.: ... *[Insert guarantee number] ...*

PERFORMANCE BANK GUARANTEE Amount: ... *[Insert guarantee amount] ...*

Manufacturer: ... *[Insert manufacturer Name and Address]/*

Guarantor: *[Insert name and address of the issuing Bank]....*

1. The Manufacturer named above has entered into above referred contract with the Beneficiary, for the supply of VLT and / or Services as defined in the said VLT manufacturer registration. According to the conditions of the VLT manufacturer/RFC registration, a performance security is required to be furnished by the manufacturer to the Beneficiary for due performance of the contract.

2. At the request of the Applicant, we as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of Rs 5,000,00/- (for Manufacturer) Rupees five lakhs only], upon receipt by us of the Beneficiary's demand stating that the manufacturer is in breach of its obligation(s) specified in the registration document, without the Beneficiary needing to prove or to show grounds for your demand or the sum specified therein.

3. We do hereby undertake to pay the amount due and payable under this Guarantee without any demur, merely on a demand from the Beneficiary / Government. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs of 5,00,000/- (Rupees five lakhs only)

4. We undertake to pay the Government any money so demanded notwithstanding any dispute or disputes raised by Manufacturer in any suit or proceeding pending before any Court or Tribunal relating thereto liability under this present being absolute and unequivocal.

5. The payment so made by us under this Bond shall be a valid discharge of our liability

for payment there under and the manufacturer shall have no claim against us for making such payment.

6. We further agree that the Guarantee here in contained shall remain in full force and effect during the period that would be taken for the performance of the said Contract including Guarantee/ Warrantee period and that it shall continue to be enforceable till all the dues of the Government under or by virtue of the said Contract have been fully paid and its claims satisfied or discharged.

7. We further agree with Government that the Government shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and condition of the said Contract or to extend time of performance by the said Manufacturer/RFC from time to time or to postpone any time or from time to time powers exercisable by the Government against the said manufacturer/RFC and to forbear or enforce any of the terms and condition relating to the said Contract and we shall not be relieved from our liability by reason of any such variation, or only extension being granted to the said manufacturer or for any forbearance, act or omission on the part of the Government or any indulgence by the Government to the said manufacturer or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

8. Notwithstanding anything contained herein above our liability under the Guarantee is restricted to Rs. 5,00,000/- and shall remain in force until

9. This Guarantee will not be discharge due to be change in the constitution of the Bank or the manufacturer.

10. We lastly undertake not to revoke this Guarantee during its currency except with the previous consent of the Government in writing.

Dated.....

For.....

(Indicate the name of the Bank)

Signature.....

Name of the Officer

Designation of the officer.....

Code no.....

Name of the Bank and Branch.....

Affidavit for ownership of Software/Mobile App

SPECIMEN AFFIDAVIT (To be submitted on a Rs. 100 non-Judicial Stamp paper)

I, _____ son/daughter of _____ resident of _____
do solemnly declare and affirm as follows.

- That I am the Owner/Partner of the firm operating in the name and style as _____ having its Headquarters at _____.
- That I am competent to sign this affidavit on behalf of the company mentioned at serial one above.
- That we are OEM of AIS 140 approved VLT systems with panic button, for fitment in all Public Service & Commercial vehicles of Assam.
- That we are having 100% right full ownership/ License of the software for all tracking and backend applications required for implementation of VLTD in the state of Assam by our company.
- Above has been within the framework or rules of Government of India as prescribed in its any law, rule or notification in force by any competent authority of Govt. of India.
- That we affirm and declare that we shall be responsible for any dispute arising out of Technology mentioned above and shall bear the cost of any litigation and loss/damage caused to COMMISSIONERATE OF TRANSPORT.

(Signature)

(Name, Title, Address and Date)

Witness 1.

2.

VERIFICATION Verified this _____ day of _____ year 202_ that the contents of my above affidavit are true to the best of my knowledge and belief and nothing untrue has been stated not any facts has been concealed.

Annexure - E. Sample format for certificate



To
Regional Transport Authority
Guwahati
Assam Only

VEHICLE DETAILS		FITMENT DETAILS	
VEHICLE REG.NO		FITMENT DATE	
VEHICLE REG.DATE		FITMENT RENEWAL DATE	
ENGINE NO		FITMENT CERT.NO	
CHASSIS NO		INVOICE NO.	
VEHICLE MAKE		INVOICE DATE	
VEHICLE MODEL		RTO CODE	
PRODUCT DETAILS		SERVICE/ESIM DETAILS	
VVTS SR.NO/UINO		IMEI NO.	
VTS MODEL		ICCID NO/SIM NO	
Test Report NO.		Sim Card Service Provider	
TAC NO.		No. Of Panic Button	
COP NO.		Sim No.	
COP Validity upto			



PRODUCT SATISFACTION REPORT

Dealer Name:		Dealer Contact no:		Dealer Address:	
Customer Name:		Customer Contact no:		Customer Adresse:	
Installed By:	Dealer Sign:	RTA/MVI/STA:

XXXXXXXXXXXXXXXXXXXXXXXXXXXXX-----End of Document-----XXXXXXXXXXXXXXXXXXXXXXXXXXXXX