

## TMC Location Table (TMC-LT)

A TMC message, comprising a defined location and an event code, is transmitted over-the-air to the navigation device or radio receiver in the vehicle. A Location Table (LT) stores the location codes and referencing rules that include road links, intersections and other useful travel information such as carpark locations. This is required for navigation systems to decode the TMC messages.

With LTA's domain knowledge in traffic and local road networks, together with unparalleled access to a wealth of information on TMC standards and specifications from TISA, LTA has developed a Location Table of the highest quality. LTA's TMC-LT was certified by the *Traveller Information Services Association (TISA)* in July 2010, which is recognised as meeting industry standards for ease of integration and adoption with industry maps and navigation/radio devices.

For enquiries on LTA's TMC-LT, please e-mail us at [live\\_traffic@lta.gov.sg](mailto:live_traffic@lta.gov.sg)

## About TISA

**TISA** is a non-profit organisation based in Brussels, Belgium. TISA is responsible for the framework, development, implementation of traffic and travel information services, and products based on standards such as TMC.

For more information on TISA, please visit their website at [www.tisa.org](http://www.tisa.org).

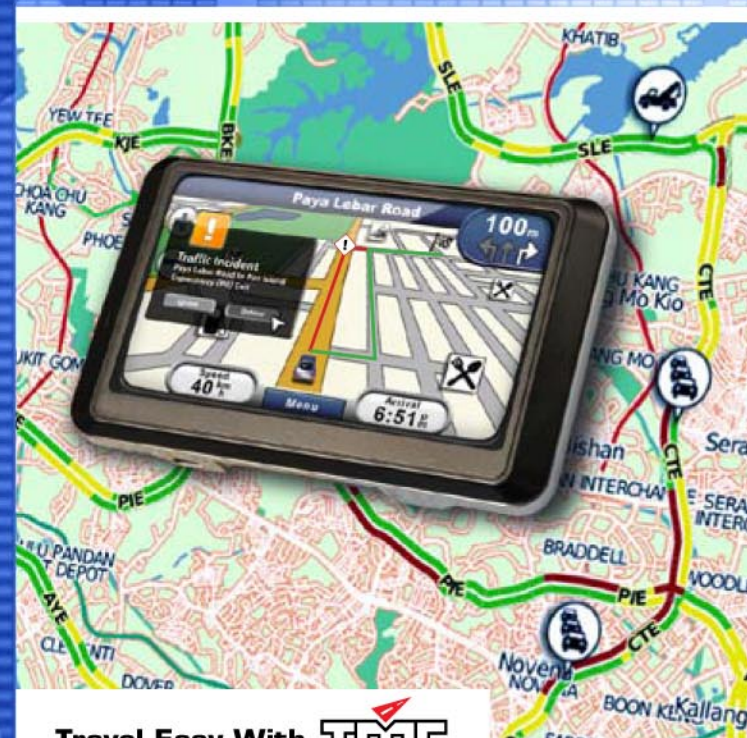
Information is with courtesy of TISA.

Besides TMC-LT, the Land Transport Authority also has a repository of real-time traffic information (such as webcam images, traffic speed, incident and carpark lots availability) available for collaborative opportunities.

For enquiries please e-mail us at [live\\_traffic@lta.gov.sg](mailto:live_traffic@lta.gov.sg)

or visit our website at [www.lta.gov.sg](http://www.lta.gov.sg) for more information

Land Transport Authority



Travel Easy With **TMC**  
TRAFFIC MESSAGE CHANNEL



# TRAFFIC MESSAGE CHANNEL

Land Transport Authority

## Traffic Message Channel (TMC)



is a standardised technology and protocol under the ISO14819, and is designed to deliver real-time traffic and travel information to motorists.

TMC information is broadcasted through the *FM - Radio Data System (FM-RDS)* communications protocol. It can also be transmitted through the *General Packet Radio Service (GPRS)* and *Digital Audio Broadcast (DAB)*. The traffic information can be displayed either as text messages on radio display, or as graphics on TMC-compatible devices such as Portable Navigation Devices (PNDs) and in-vehicle navigation systems.

Because of its low bandwidth the TMC protocol is a cost-effective means of disseminating traffic information. This benefits not only motorists but also adds value to the whole business chain.

The TMC standard is widely-accepted globally and has been adopted by many countries in Europe and America. In recent years, many countries in the Asia Pacific and Middle East have also started adopting and providing TMC services as a means of delivering traffic messages to the motorists.



## How the Traffic Message Channel (TMC) Works

- 1** Detection of traffic incident by Intelligent Transport Systems (ITS)
- 2** Traffic Control Centre receives information for traffic management.  
Information is also shared with other traffic service providers.
- 3** Traffic service provider generates TMC traffic event messages and broadcasts to drivers
- 4** TMC enabled navigation device integrated with TMC-LT receives real-time TMC message



- 5** Navigation device provides dynamic re-routing advice to driver



## Benefits To Motorists

Motorists will be able to enjoy the following benefits with the Traffic Message Channel:

- ⌚ **Real-time traffic information** updates sent straight to the navigation device
- ⌚ **Timely notifications** to help motorists avoid traffic incidents, congestion, roadworks, etc.
- ⌚ **Dynamic route guidance** and **alternative route choice** provided by the TMC-enabled navigation system
- ⌚ **Filtered information** specific to the motorists' immediate route
- ⌚ **Globally-compatible receiver** for the international traveller



## Benefits To Industry

The adoption of the globally-accepted standardised TMC protocol and specifications reduces time-to-market of products. It also provides a cost-effective means for the service providers and manufacturers to work in synergy to deliver real-time traffic information in their products and services to end users, adding value to the entire business chain.