

# THE IMPLEMENTATION OF INTELLIGENT TRANSPORTATION SYSTEM PROJECTS IN MALAYSIA – AN UPDATE

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**2022**  
**CHENGDU**

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# ITS



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### Key Objectives of the ITS Blueprint:

1. Seamless Intelligent Mobility
2. Congestion-Free Network
3. Safety
4. Commercial Vehicle Operations

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CONGESTION-FREE INFRASTRUCTURE -  
ELECTRONIC TOLLING COLLECTION (ETC):  
TOUCH - N - GO & RADIO FREQUENCY IDENTIFICATION (RFID)



Fully implemented since 2017



On-Going since 2018

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## CONGESTION-FREE INFRASTRUCTURE: MULTI LANE FREE FLOW (MLFF)

### Brief Description:

- To enable toll collection without toll booths & barriers
- Vehicles can pass through at speeds of 80 km/h

### Issues & Mitigation:

- Public acceptance – social media campaigns to get buy-in
- Technical issues – fine-tuning the systems
- Toll violators – introduce legislation to deal with toll dodgers

### Status:

To be fully implemented in 2025



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## CONGESTION-FREE INFRASTRUCTURE: NATIONAL INTELLIGENT TRANSPORTATION MANAGEMENT CENTRE (NITMC)

### Brief Description:

- To monitor & manage real-time information of traffic data
- To collect traffic data from various sources such as DBKL, LLM, & APAD, social media & public transport operators / authorities

### Issues & Mitigation:

- Integration of data from various agencies – at the moment limited to DBKL, LLM & APAD
- Limitation of equipment at the various agencies to enable the integration – need to upgrade equipment at data centres

### Status:

Proof of Concept Project to be completed by end 2022

To get funding for the full-scale project in 2023 / 2024

## SEAMLESS INTELLIGENT MOBILITY: ADVANCED TRAVELLER INFORMATION SYSTEM

### Brief Description:

- To integrate all traffic data, especially for all modes of public transport
- To provide real-time traffic data to enable the public to plan their journeys via apps on their smartphones (traffic planner)
- To increase the use of public transport

### Issues & Mitigation:

- No traffic data centre to collect and integrate the real-time traffic data – the setting up of the NITMC as the traffic data centre & to engage the stakeholders to share their traffic data

### Status:

Proof of Concept Project to be completed by end 2022

To get funding for the full-scale project in 2023 / 2024

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## SAFETY SYSTEMS: WEIGH IN MOTION (WiM)

### Brief Description:

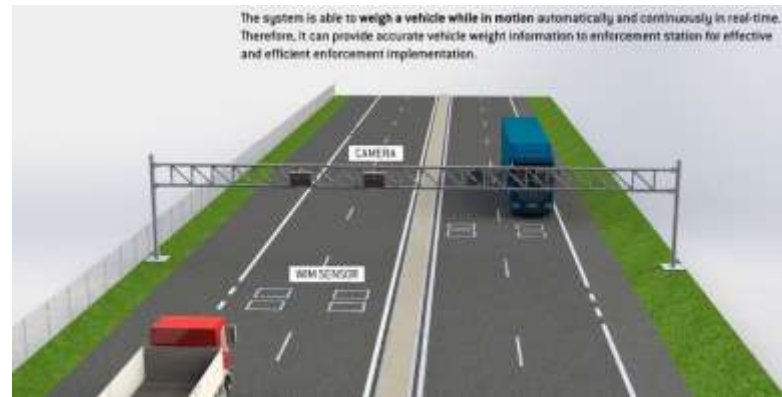
- Traffic data collection for highway planning purposes
- To determine the gross and axle weights of vehicles on the road
- For overloading management of vehicles continuously and in real-time

### Issues & Mitigation:

- Nil

### Status:

Tenders to be called in July 2022



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## COMMERCIAL VEHICLE OPERATIONS: ON BOARD UNIT (OBU)

### Brief Description:

- To install On Board Units (OBU) on commercial vehicles to obtain data on driving behaviour (speed & safety), routes, and toll payments

### Issues & Mitigation:

- Lack of data & consensus on the make and type of OBUs to be used – to carry out market survey & proof of concept on commercial vehicles
- Reluctance of industry players in sharing the data – to amend existing laws to enable data sharing

### Status:

Market survey being carried out





## COMMERCIAL VEHICLE OPERATIONS: NATIONAL FREIGHT DATA HUB

### Brief Description:

- To create a National Freight Data Hub to collect and share data on the logistics industry -
- ✓ to improve the goods & delivery services
- ✓ reduce costs in cross-border services
- ✓ improve timeliness of delivery
- ✓ assist in data integration regionally & internationally.

### Issues & Mitigation:

- To gather and integrate data from various sources – to engage with the logistics industry players to get them to share data
- No Central Logistics Database / Hub to store the data collected – to get funding from the Government

### Status:

Engagement with the industry players had started



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**COMMERCIAL VEHICLE OPERATIONS:  
PORTS CONNECTIVITY**

**Brief Description:**

To enable

- Connectivity between ports
- Connectivity between ports & stakeholders in the logistics industry
- to optimise the use of existing ports
- To optimise regional goods supply chain

**Issues & Mitigation:**

- Lack of Regional Distribution Centre (RDC) – to utilise ports & airports as the RDC
- Too many ports in the system resulting in certain ports being under-utilised – to turn smaller & private ports into “spokes” and the bigger ports into “hubs”



**Status:**

**Construction of the East Coast Rail Link (ECRL) and Serendah By-Pass as enablers for the ports connectivity**

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## SAFETY SYSTEMS: AUTONOMOUS VEHICLES

### Brief Description

- To provide self-driving vehicles to make every day journeys “safer, easier & greener”.

### Issues & Mitigation:

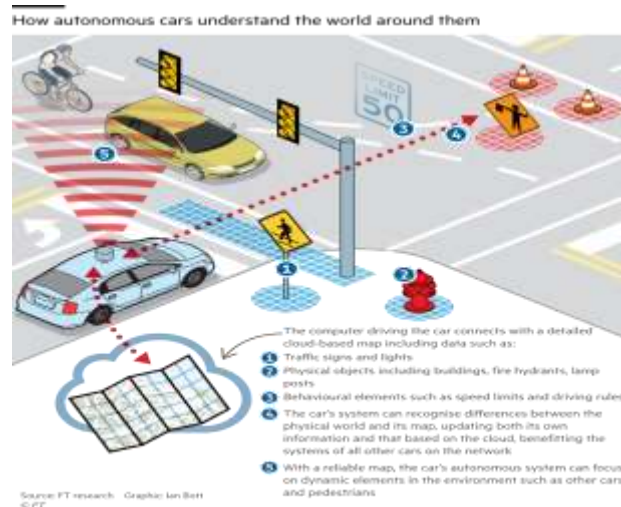
- Lack of takers from the industry to adopt autonomous vehicle technology even though the regulations & legislations are already in place

### Status:

**eMooVit Technology Sdn. Bhd. is now developing an autonomous vehicle for the first-mile & last-mile use**

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## COMMERCIAL VEHICLE OPERATIONS: INTERNATIONAL BORDER CROSSING CLEARANCE

### Brief Description

- To improve coordination between border management agencies
- Seamless & automated clearance at borders

### Issues & Mitigation:

- Too many stakeholders involved – to implement the National Immigration Integrated System (NIISe) & Single Border Agency (SBA)

### Status:

**Discussions between the various border management agencies are on-going**



## SAFETY SYSTEMS: DISASTER MANAGEMENT

### Brief Description

- To use ITS technologies in disaster management



### Issues & Mitigation:

- To make the NITMC as the centre to coordinate disaster risk management – to engage with all the stakeholders in disaster management

### Status:

**Discussions between the various agencies are on-going**



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# THANKS



2022年4月27-29日 中国·成都

Chengdu, China 27-29 April 2022

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