



Smart JAMP(2021) Pre-feasibility Study on the Introduction of an Overloaded Vehicle Management System for the Realization of Smart City in the Ministry of Transport, Malaysia

Category of Issues in the Area



Target Area

- Peninsular Malay (Surrounding area centered on Kuala Lumpur), Malaysia

Background and Purpose

- According to the request from the Ministry of Transport of Malaysia (hereinafter referred to as "MOT"), there is an urgent need to take measures against roads and facility damage and traffic accidents caused by overloaded vehicle.
- The pre-feasibility study on the Overloaded Vehicle Management System was conducted. It also considers that the data obtained from the system will be used for various purposes such as vehicle operation management.

Related Organization

- Ministry of Transport (MOT), Ministry of Work (MOW), Road Transport Department (RTD)

Project Stage

- Pre-feasibility Study

Contents and Results

1. Review Current Conditions of MOT
 - Collecting online information about related plan for overloaded management, project organization, current traffic situation, regulations and social background, etc.
 - Reviewed vision, issues and current countermeasures for overloaded vehicle through interviews with stakeholders, and understood needs in Malaysia.
2. Considering introduction of the overloaded vehicle management system
 - Listed and compared the related technologies for the management system (eg, large vehicle operation management system based on weight estimation technology by AI analysis).
 - Evaluated the adaptability of the selected system in Malaysia.
3. Planning introduction of the system using ICT Equipment
 - Clarified issues for implementation of the system such as obligation of equipment installation and organization in Malaysia Government. Selected 8 routes for experimental implementation based on the installed location of the existing weigh station and traffic volume.
 - Considered intangible aspect such as incentives for implementation, the need for laws and regulations improvement, and the project organization in Malaysia.
4. Formulated an action plan
 - Establishment of an action plan including legal system and the project organization, and experimental implementation plan including the routes.

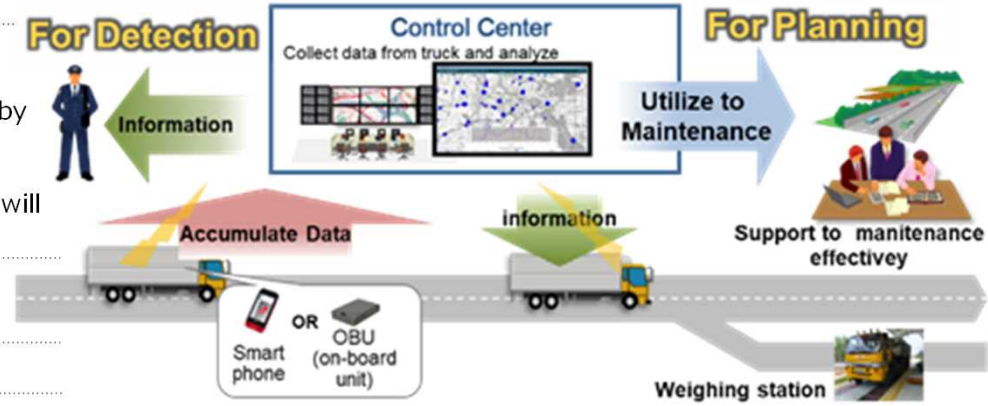


Figure1: Image of the System



Figure2: Overloaded vehicle in Malaysia

Source: Degree of Vehicle Overloading and its Implication on Road Safety in Developing Countries



Figure3: Overloaded vehicle in Malaysia

Source: Current Situation of Heavy Vehicle Overloading in Malaysia