

The Project for Strengthening Capacity for Maintenance of Roads and Bridges
Project News (June, 2015)

Dynamic Response Intelligent Monitoring System (DRIMS)

The project has been launched in May, 2015 in order to improve maintenance management capacity of roads and bridges. One of the main features of the project is establishment of a road maintenance cycle using International Roughness Index (IRI). IRI is an index for qualitative evaluation of road surface (see Fig.1). The application of IRI enables more efficient road maintenance and budget planning for repair works.

The project aims to transfer the latest IRI measurement technology, called Dynamic Response Intelligent Monitoring System (DRIMS), to Cambodia. IRI values can be easily obtained, using ordinary cars equipped with DRIMS that consists of laptop, GPS, accelerometer, and road monitor (see Fig.2). The compact and user-friendly device is expected to contribute to improvement of road maintenance in Cambodia.

Image				
IRI	<p>Degree of Damage</p>			
Rating	Bad	Poor	Fair	Good
Repair	Urgent Repair	Repair	Small Repair	

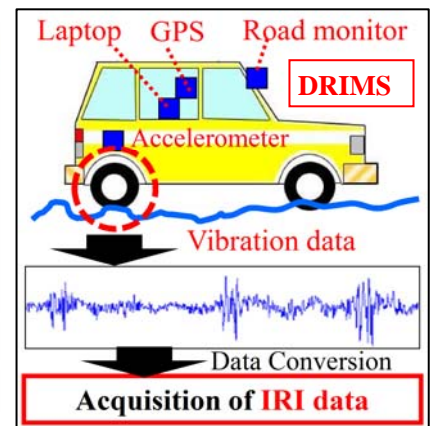


Fig.1 Classification of Road Surface Condition by IRI Values

Fig.2 IRI Measurement Mechanism

The training of DRIMS operation has been carried out as a part of technical transfer (see Fig.3 and Fig.4). MPWT officials are expected to master the operation of the system with JICA Experts' assistance and become instructors for DPWT officials. Development of human resource is one of the most important issues for the sustainability of the technical transfer.



Fig.3 One Scene of DRIMS Installation Work

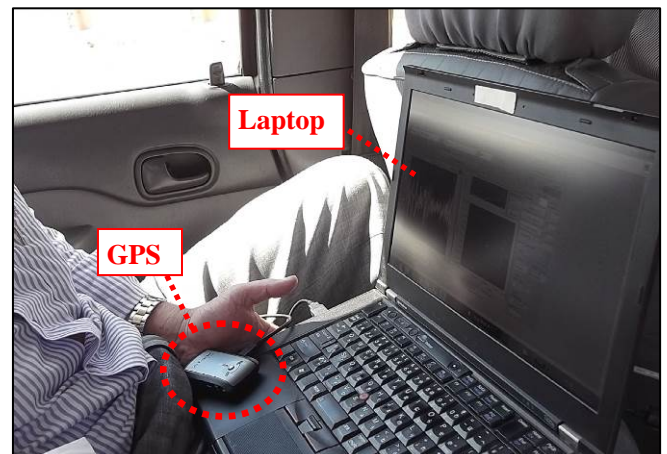


Fig.4 DRIMS Operation in the Car