



The Development of a state of the art Slope Management and Risk Tracking System for Malaysia: the SMART system

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The concerns of the Malaysian Government in addressing the issue of landslides, the impact of which is second only to flooding with regards to natural disasters in Malaysia, has seen close to two decades of research and development support. A product of this support, the **Slope Management And Risk Tracking (SMART) System**, has recently been recognized as a state of the art management system by the Joint Technical Committee on Landslides and Engineered Slopes (JTC-1) and in a review paper given at the International Conference on Landslide Risk Management (Vancouver 2005). The development of the SMART system was made possible through the successful collaboration and partnership of local and foreign expertise (from Hong Kong and the United Kingdom) and was initially developed through a test-bed study conducted along the 300km Tamparuli-Sandakan Road (TSR) in Sabah, Malaysia. The developed system uses risk management principles coupled with a Geographical Information System for the graphic representation of geospatial data. It is designed to allow the prioritization and organization of remedial as well as maintenance works for slopes along specific routes by the integration of the results of a hazard and risk mapping approach.

The SMART system will be applied to the whole Malaysian road network which consists of 16,136 km of Federal roads and 61,064 km of State roads, to improve and enhance the management of Public Works Department resources on a country-wide basis

and, through its application, provide an invaluable and comprehensive data source to aid effective management of slopes and landslide prevention measures in the future.

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