Cadastral In Supporting Smart Cities In Malaysia

Isa Mohd Noor, Teng Chee Hua, A. Rahman M. Jazuli, Sarah Shaharuddin and Siti Baiduri Mohd Yusof (Malaysia)

SUMMARY

The Department of Survey and Mapping Malaysia (JUPEM) has gone further afield in the way it conducts its cadastral business. It has made a paradigm shift in its workflow by transforming its conventional surveying technique into its current modern system with the help of cutting edge technology. The implementation of survey accurate coordinate cadastral system known as eKadaster was achieved by adopting the latest ICT, GIS and survey technologies. The main objective of eKadaster is to expedite the delivery system of final title plan in providing services for land administration in Malaysia. At its current state, eKadaster has more than sufficient information and layers to facilitate visualisation and extraction of information according to user needs in the two-dimensional (2D) plane. However, the existing two-dimensional cadastral system does not sufficiently represent the three-dimensional (3D) real-world objects, in alignment with the increasing demand of the present urban development related to rights, restrictions and responsibilities (RRRs). With that in mind, JUPEM has successfully leveraged eKadaster and spearheaded the development of Malaysia's very own 3D City Model in line with FIG's vision of Cadastre 2.0 with a project known as SmartKADASTER. The main purpose of the project is to establish a multi-purpose cadastral system for the future with the prime objective of providing a solid cadastral-based spatial analysis platform which support services towards smart cities enablement in Malaysia. Besides being able to accommodate 3D objects, the integration of eKadaster and 3D City Model also provides an exhaustive geospatial database or information that allows the development of smart cities in a sustainable manner. Smart cities will be more than just a trend in the future; it can become an indispensable system to drive economic growth by harnessing the 3D information that will eventually lead to a better tomorrow.

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