

3D Strata Modelling based on Indoor LiDAR Data

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SUMMARY

This paper discusses the current status of 3D cadastre situation in Malaysia and possible future developments. Land Administration Domain Model (LADM – ISO 19152) has being investigated by Malaysian National Mapping Agency (NMA) to serve the need for effective information handling as a basis for 3D Cadastral purposes. Currently, the authority utilises traditional technique and other existing floor plans for strata modelling. However, the existing technique (i.e. traditional building survey) is labourious and time consuming. Thus, it is the aim of this paper to investigate the most appropriate technique for 3D objects modelling purposes. The authority plans to utilise two most recent LiDAR based techniques such as static LiDAR and mobile LiDAR for 3D cadastre objects modelling. Various issues related to these approach will be investigated e.g. 3D modelling and accuracy. One of the issues – ‘party wall’ as part of Right, Restriction and Responsible (RRR). We also intend to incorporate the 3D cadastral objects with the Malaysian LADM model. In near future, we intend to incorporate Building Information Modelling (BIM) data with 3D cadastre.