A Vision for a Fully Digital Cadastral Survey System - Replacing Plan Images with Data and its Integration into a Complete Digital Cadastral Survey Network

Anselm Haanen and Trent Gulliver (New Zealand)

Key words: Cadastre; Digital cadastre; 3D Cadastre; Survey System

SUMMARY

Surveyors have traditionally prepared 'paper' plans of cadastral surveys. Some jurisdictions now accept image files for new plans (e.g., PDF, TIFF) and some receive digital data for the cadastral survey. Land Information New Zealand's cadastral system currently receives both 'plans' and data, and integrates the data into the survey network. It is now looking at further re-engineering the cadastral survey process to enable surveyors to take full advantage of digital technologies in the field and office. These processes would better enable a new survey to re-use existing data from previous surveys in the cadastre, as well as enabling the new survey dataset to be validated against the existing record. These digital processes would also support the flow of data through the survey supply chain and therefore minimise the opportunity for errors before being accepted into the cadastre. New processes are likely to include the lodgement of 3D cadastral survey data and reduce, or possibly eliminate the need for plans to be lodged. All the data would be managed in a fully integrated cadastral database. Tools for spatially viewing a cadastral survey or all the survey data in an area of interest would be needed in place of plans. Different views could to be tailored for different uses with one of those being the parcel fabric.

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