Shaping the Cadastral Infrastructure for a Digital Future

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SUMMARY

The cadastral network, represented by the Digital Cadastral Database (DCDB), plays a fundamental role in National Spatial Data Infrastructure (SDI), supporting decision making across all levels of Government. The accuracy and integrity of the DCDB is essential to ensure critical decisions are made based on current and correct land information. With the introduction of electronic Conveyancing and Survey Plan lodgement, land information from a variety of external sources will rapidly populate the SDI with Global Navigation Satellite System (GNSS)-based information. The integration of this highly accurate information will compound the inherent historical inaccuracies within the DCDB, causing considerable impact on service and information delivery. To ensure responsive service delivery in a digital land administration of the future, Cadastral Fabric technology is transitioning the decades-old static DCDB to a dynamic survey title-based Numerical Cadastral Database (NCDB) that accurately models the nation's cadastral network. This paper provides surveyors with a comprehensive overview of how improved rigour and accuracy of the DCDB will provide powerful spatial infrastructure to generate technical and legal certainty for all stakeholders. In this paper a case study from Tasmania, Australia outlines the implementation of a Numerical Cadastral Database Project and discusses the vision, the challenges and the benefits a project of this nature can deliver. Additionally, the lessons that can be derived from this case study can be applied to other similar Cadastres.