

Electronic processing of digital plans – Targeting the future

Making manual processing past history

Until recently, the Department of Lands (Lands) has been receiving and processing land title plans primarily in a largely hard-copy format. This involves manually lodging, examining, validating and registering all new land title plans, then manually checking and updating changes to the state's cadastre.

The plan

The aim is to improve the efficiency and quality of cadastral plan lodgment and processing by developing and testing a range of alternative options to the existing plan process.

Why change?

To reduce the time it currently takes between a plan being lodged at Lands and when a new title is issued. Although the land development process may extend over many months or even years, Lands' involvement is usually in the last stage of the process.

Some of the key constraints of the current system include:

- **collection of administrative data** – signatures from interested parties (banks, councils etc.) and the production of titles acts as a significant bottleneck in the land development process
- **a high proportion of plans being requisitioned prior to registration** – due to the (not exhaustive list) highly manual nature of plan preparation, examination and associated human error, a level of subjectiveness that results from a number of different examiners undertaking plan examination and existing QA processes across the surveying profession
- **plan data is not currently submitted in an 'intelligent' form** – plan data which is electronically submitted as a tagged image file format (TIFF) image or physically in the form of a linen cannot be readily interrogated or checked
- **constraints on existing human resources** – examiners have highly specialised skills which are developed over a relatively long time while the system also sees few para-professionals drawn upon to undertake the examination process. The current age structure of the workforce is expected to act as a significant constraint to Lands meeting its forecast workload in the short-medium term
- **timeliness of data being fed into the Digital Cadastral Data Base (DCDB)** – plan data are not submitted for update of the DCDB until the plan is registered and title issued. Given the delays that may be caused during the plan process, there can be significant lag between the time the final plan is lodged and the cadastre updated
- **non-compliance with proposed national standard and lodgment of electronic geometry files** – data is not currently lodged in LandXML format, the internationally adopted XML schema that will be adapted for use in NSW, as for all other specific jurisdictional uses
- **security risk of plans** – the existing manual lodgment system puts final plans at risk to loss or damage. There is also a significant risk of unauthorised alteration of hard copy plans
- **centralisation of parties and locations which are allowed to lodge plans** – stakeholder feedback revealed that there is some discontent with the current situation where manual lodgment and examination is centralised at Queens Square in Sydney

- **tailoring and automating information dissemination for plan development** – stakeholder feedback indicated that there is significant room for improving the labour intensive and time consuming activity involved in surveyors accessing and collating information and data for plan development
- **adequate tracking of plans** – there are concerns that the current plan process does not provide sufficient tracking of the status of the plan, particularly on more complex plans where clients require timely updates of the progress of the plan through the process.

Lands commissioned PricewaterhouseCoopers (PwC) to develop a business case of proposed options which could address the constraints outlined.

Input from key stakeholders on their priorities for an improved plan process was sought in order to develop meaningful and relevant options.

Based on the results of the stakeholder consultation process four alternative options were subject to detailed cost benefit risk analysis and appraisal.

Option 1: Base Case

No changes to the current lodgment and plan examination process.

Option 2: Electronic processing of digital plans

Full implementation of the electronic processing of digital plans with all cadastral plans lodged electronically in a standard national data transfer format – LandXML.

Option 3: Accreditation system for surveyors

A surveyor accreditation system is an additional quality assurance process that places greater reliance on surveyors maintaining the required standard of survey quality when lodging survey plans with Lands. An accredited surveyor accepts professional responsibility for both the accuracy of the land parcel boundaries and for the information it contains.

Plans submitted by accredited surveyors would be subject to fewer checks than non-accredited surveyors. Registration, title creation and update of the DCDB would remain the same for plans from both accredited and non-accredited surveyors and would be consistent with the Base Case.

Option 4: Outsourced plan lodgment and examination

Outsourcing of the lodgment and examination of plans to private providers. Lands' Land & Property Information Division (LPI) would no longer examine a proportion of plans lodged. Under the outsourced system, plans would be submitted directly to private providers who would then be responsible for the lodgment, examination and (where required) requisition of plans.

Plans would then be sent to LPI for registration, which must be completed by the Registrar General of NSW. LPI would also retain responsibility for the update and maintenance of the DCDB.

The end result; electronic processing of digital plans

The EPlan program is a series of projects that will deliver a system for the lodgment and examination of digital plans.

By providing a more efficient electronic environment, the program will substantially enhance the quality of plan data, reduce requisitions and improve plan processing and turnaround times.

Once submitted, preliminary validation checks on the file contents would be undertaken. The plan would then be requisitioned prior to lodgment if the validation checks pick up any errors or gaps.

Where possible, plan data would then be examined electronically. The automatic checks would be supplemented by manual examination of plan aspects which are not amenable to electronic examination.

In the meantime, LPI will continue to develop the internal business capabilities needed to achieve a new electronic information management system. LPI will also review relevant legislation and identify the legislative changes needed to enable a fully operational e-business environment for land title plan processing.

For more information

If you would like to view information on current projects and other EPlan initiatives go to www.lands.nsw.gov.au/land_titles/eplan/current_projects.

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