ePLAN

Electronic plans of subdivision



ePlan Update

Department of Environment, Land, Water & Planning

Victorian Implementation of ePlan



Implementation Progress

- From May 2013, ePlans have been able to be lodged in SPEAR replacing the PDF previously loaded by the surveyor
- SPEAR validates the ePlan data and creates a visualised PDF
- 6 surveying firms have submitted ePlans to SPEAR
 - Geometri, Absolute Surveying, Walpole Surveying, Berry & Whyte Surveyors, Digital Land Surveys and SMEC
- 30 ePlan submissions since May 2013
 - 10 have been registered



What Can Be Lodged Using ePlan?

- Most Subdivision Act application types currently supported by SPEAR can be lodged as ePlans
 - Section 22, 32, 32a, 35, 35(8) (See SPEAR User Guide 1)
 - Must be connected to MGA94 bearing datum this also applies to non-survey and partial survey plans
 - Boundaries can be defined by buildings (footprint only)



ePlan Services within SPEAR



ePlan Services



ePlan services are provided as part of SPEAR. They can be accessed via:

- Logging into SPEAR
- Guest access from SPEAR Web Site
- Web service from surveying software packages



Visualisation Enhancements



Visualisation Enhancements

- SPEAR used Qld visualisation web service from 2012 until mid-2014
- Land Victoria now maintains and hosts the Victorian visualisation service from mid 2014
- Released the first version in November 2014, with the following enhancements:
 - Improved look and feel of the plan
 - Support for new technique of capturing easements
 - Support the new annotations for Crown Description



Scheduled Visualisation Enhancements for 2015

- Release 2 (April)
 - Support staged and compiled plans
 - Support new plan templates
- Release 3 (May)
 - Provision of a web service for software vendors
 - Improve labelling and arrowing



ePlan Scheduled Enhancements and Focus Areas



Scheduled ePlan Enhancements for 2015

- SPEAR Release 4.1 (May)
 - Supporting the submission of staged plans
 - Pre-population of data in application wizard using uploaded ePlan (e.g. applicant reference number, dealing type, plan number, application parcels and number of lots)
 - Providing software vendors with validation and visualisation web services
- SPEAR Release 4.2 (October)
 - Supporting plans under Section 23/24A/32B as well as text-only plans



ePlan Focus Areas in 2015 - 2016

- Visualisation (quality improvement)
- Extension of ePlans
 - TLA Plans, Boundary Plans, Crown Plans, 3D building format plans
- Complete Abstract of Field Records in ePlan
 - Sheet definition, exaggeration and enlargement
 - Consider full inclusion of its data in ePlan
- Auto-generation of Surveyor's Report
 - Can it be generated from ePlan if all data are captured in it?
- ePlan provision in LASSI-SPEAR
 - Allowing surveyors to download registered ePlans
- Enabling building subdivisions to be submitted as ePlans
 - e.g. with the base plan as an ePlan and the floor plans remaining as a surveyor-supplied PDF



Surveyors Engagement Program for 2015

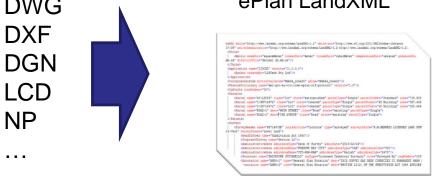
- Contacting and visiting the surveyors already involved in the two Pilot Programs
- Finding and training surveyors interested in ePlan creation and submission
 - LISCAD surveyors
 - GeoCivil surveyors
 - AutoCAD Civil 3D surveyors
- The ePlan team is available to provide ongoing support.



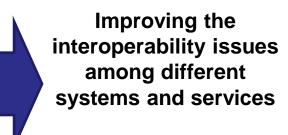


- Improves the interoperability issues of subdivision plans among different systems and services
 - Allows for transfer and reuse of standardised digital data between surveying software packages and between organisations and units

Various Drawing Formats National Standard Format ePlan LandXML DWG



Intelligent Digital Data File



Department of Environment, Land, Water & Planning



- Speeds up the application creation process in SPEAR
 - Once an ePlan is uploaded to application wizard, the following information will get pre-populated in the application screen (from May 2015):
 - o applicant reference number
 - \circ dealing type
 - \circ plan number
 - $\ensuremath{\circ}$ application parcels, and
 - \circ number of lots

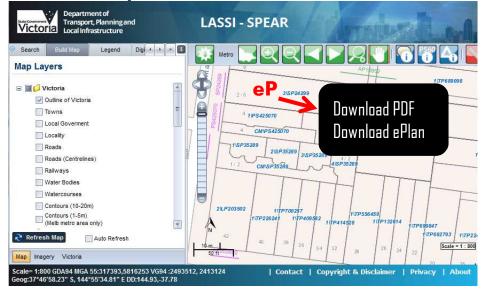


- Saves time for constructing the surveys through pre-populating administrative data from Vicmap and SMES
 - (e.g. admin boundaries, survey marks, location addresses, road abuttals, etc.)





- Provides access to / reuse of digital data for previous surveys through ePlan import functionality in surveying software packages
 - Download registered ePlan from LASSI-SPEAR (in 2016)





- Eliminates the 'drafting' step from the Plan of Subdivision creation process through the ePlan visualisation service
 - the new version of the visualiser is hosted and maintained by Land Victoria, which allows Land Victoria to respond to customer feedback and implement changes more quickly
 - the new plan templates will be supported from May 2015



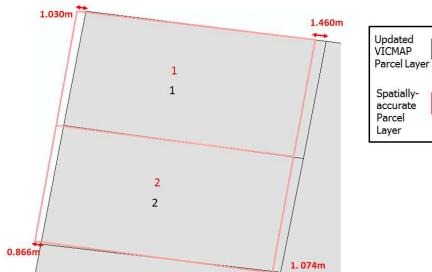
- Reduces lodgement errors due to missing or incorrect information as well as reducing the number of requisitions
 - 100 validation rules in place to check:
 - o ePlan schema consistency
 - mathematical errors (parcel misclosure and area, easement width)
 - geometric errors (title boundary consistency, title connections, easement and restrictions fixing, overlapping parcels)
 - $\circ~$ consistency of title SPI and vol/fol with VOTS
 - $\circ~$ consistency of road names, admin areas and location addresses with <code>VICMAP</code>
 - consistency of PMs/PCMs with SMES
 - completeness and correctness of data (e.g. front sheet details and notations, easements, restrictions, abuttals, Owners Corporation, multipart parcels, surveyor's registration details, primary and secondary purpose combination)
 - application types requirements based on regulations (e.g. consolidation plans and partial survey plans)



- Assists with improved plan processing resulting in reduction in examination and registration times
 - Pre-lodgement validations (recommended by examiners)
 - Pre-population of VOTS screens
 - $_{\rm O}$ case creation screens
 - examination screens: range groups, Owners
 Corporation, examination report, fee quantity, etc.



- Enhances the quality of subdivision plan data
 - ePlan stores distances and bearings to millimetre and second
 - Visualiser performs rounding recommended by the regulations
- Gradually builds up a spatially-accurate mapbase for Victoria ePlan stores a subset of field notes for adjustment purposes



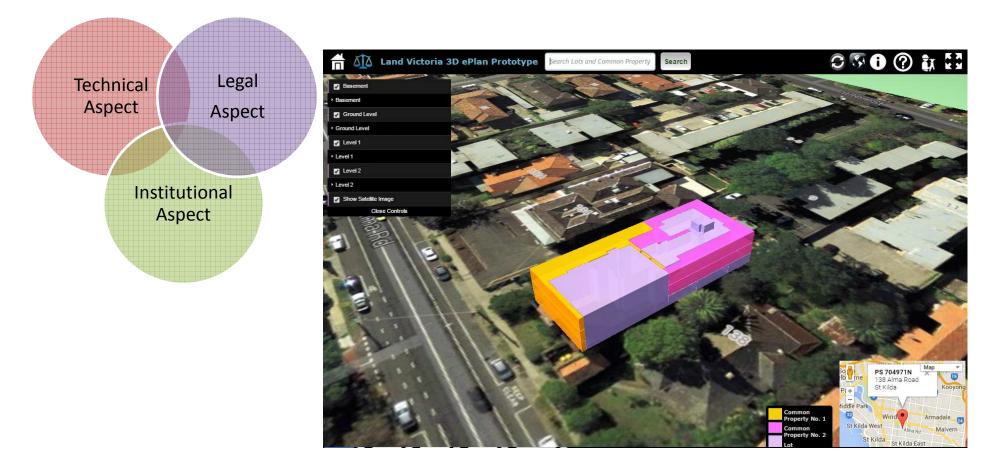
Victorian 3D Working Party

- Its objective is to investigate the introduction of 3D digital data and its implications for Victoria relevant to cadastre
- The 3D Working Party has been formed by Land Victoria, and it has representatives from:
 - the Association of Consulting Surveyors Victoria (ACSV)
 - the City of Melbourne
 - the University of Melbourne
 - RMIT University
 - SSSI
 - Land Victoria



3D Digital Cadastre Investigation

• Land Victoria 3D ePlan Prototype is under development.



Visualisation Examples

