

# Frequently Asked Questions

## ePlan Enabled Surveying Organisations

### 1. Is ePlan mandatory?

ePlan is NOT mandatory for surveying organisations. If your organisation is ePlan enabled in SPEAR, you will have the option to upload either an ePlan or a plan PDF following the current process.

### 2. What types of plans can be submitted as an ePlan?

ePlan currently supports dealings types under the *Subdivision Act 1988* except for building subdivisions including floor levels and cross sections.

### 3. Which software vendors support the Victorian ePlan protocol?

Civil Survey Solutions

- Stringer ePlan plug-in supports ePlan in AutoCAD Civil 3D, AutoCAD, AutoCAD MAP and BricsCAD

LISTECH

- ePlan import and export tools available in LISCAD 12.2 S.E.E and Neo Beta version

Geocomp Consulting

- GeoCivil software includes functionality compatible with the survey and subdivision design facets of ePlan

ePlan Services Pty Ltd

- ePSALON was established specifically to provide digital cadastral survey and subdivision services across Australia - the primary focus is on the requirements of ePlan

### 4. What is captured in ePlan and what is remaining in paper/PDF format?

ePlan supports all the content that would normally be captured on a plan and surveyors report along with the 'control traverse' shown on the Abstract of Field Records. The control traverse includes all traversing and radiations between survey marks, reference marks and title corners. ePlan also supports different types of occupation. The preparation and submission of the Abstract of Field Records and Surveyors Report is still required in PDF.

### 5. How does ePlan affect the current subdivision process?

In simplistic terms, the surveyor will assign attributes to survey and plan data that the surveyor undertakes in the normal course of their work; this is managed and stored in one single ePlan file (the LandXML file). This work replaces the requirement for surveyors to perform Quality Assurance (QA) as the data is validated, which reduces requisitions at examination, to draft the plan; and in due course, the Abstract of Field Records. The ePlan is uploaded and the visualised plan PDF is treated in the same way as the plan PDF is currently treated by SPEAR. The ePlan enabled surveyors also have the option to upload an ePlan at the start of the application creation process. The following data is prepopulated from the ePlan:

- Applicant reference number
- Application parcels
- Subdivision Act section/dealing type
- Plan number / stage number
- Number of lots

**6. How do I start lodging ePlans?**

ePlan lodgment is only available to applicant organisations that are ePlan enabled in SPEAR. If you have not been involved in the ePlan Pilot or Engagement Program and would like to start lodging ePlans, please register your interest with the SPEAR Service Desk on (03) 9194 0612.

**7. How does ePlan work in SPEAR?**

ePlan enabled applicants have the option to attach either a PDF or an ePlan to the application. The ePlan must be uploaded at the draft stage of the application and will follow the same process as per PDFs. The ePlan is visualised automatically when it is uploaded and this is used as the legal visual representation of the plan.

**8. Can I attach an ePlan to a current SPEAR application?**

The ePlan cannot be attached as an additional document. You can convert a PDF application to an ePlan application using the 'Modify' function. Before certification, the ePlan would become the latest version of the plan. After certification, the applicant would need to apply for a re-certification. In this case, the ePlan would become the proposed plan until the council accepted the Form 8. Upon acceptance of council, the ePlan will become the latest version of the plan.

**9. Do I need to provide a surveyor's plan version number when I upload an ePlan?**

No, you only need to enter the surveyor's plan version number into the ePlan file and SPEAR extracts it automatically.

**10. What is the ePlan Validation Service?**

The ePlan Validation Service checks for completeness and correctness to the ePlan Protocol and plan examination rules. Once an ePlan is uploaded, this service validates the ePlan and provides the user with an ePlan Validation Report.

**11. Can I add comments to the ePlan Validation Report for the consideration of Land Use Victoria?**

Yes, you can modify the ePlan Validation Report by leaving comments next to each rule's result.

**12. What is the ePlan Visualiser?**

The ePlan Visualiser generates a fully drafted PDF plan from the ePlan file. The PDF is then used for the council application process and registration process; the PDF is also used as the legal visual representation of the plan.

**13. What is the ePlan Visualisation Enhancement Tool?**

Through a collaborative program with the University of Melbourne, the ePlan team has developed the ePlan Visualisation Enhancement Tool for surveyors to improve the plan presentation of the PDF visualised from the ePlan data, using functions such as editing labels/arrows, defining sheets, creating enlargement diagrams and exaggerating features. This tool is available in the ePlan Services public page as well as in the Plan Version screen within the SPEAR application.

**14. What happens if I improve the plan presentation of my current PDF plan and upload a newer version of ePlan later?**

SPEAR will retain your enhancements for the next version of your ePlan, on the basis the geometry of the primary parcel(s) of the application remains the same.

**15. What coordinate systems and bearing datum does ePlan support?**

ePlan requires that all plans are connected to MGA94. Display coordinates can use any coordinate system, provided it is adequately described. Consult your software vendor for specific details about the coordinate systems used.

ePlan also supports the Geocentric Datum of Australia 2020 (GDA2020).

**16. Why must an ePlan be connected to MGA94 regardless of its survey type (survey, non-survey or partial survey)?**

All ePlans must be connected to MGA94 for the following reasons:

- ePlans need to be connected to MGA94 to fix the survey in space.
- ePlans will be downloaded and used by surveyors to undertake the subsequent surveys. Connecting the ePlan to MGA94 facilitates the re-use of digital data for surveyors.
- ePlans in the future will be the main digital resource for updating the state's digital cadastre; being connected to MGA94 will be a requirement for this purpose.

**17. What happens if insufficient co-ordinated survey marks are available (eg: in rural areas)?**

According to Section 2.3 of [Practice Directives](#) published by the OSGV in September 2014, GNSS may be used to derive MGA94 datum and connect a cadastral survey to the Survey Control Network (SCN). GNSS can achieve centimetre-level measurement quality and is therefore well suited to deriving MGA94 datum, provided appropriate standards and guidelines are adopted. For full directions, refer to the [OSGV publication](#).

**18. Why must easements be fully dimensioned?**

In ePlan, an easement is defined by a polygon. All ePlan validation rules considered for checking the geometry of polygons (eg: lot, common property, road and reserve) apply to easements as well. This means that easements must be fully dimensioned, including fixing connections and have no closure or area errors.

**19. Should grid distances or ground distances be used in an ePlan?**

According to [Practice Directives](#) published by the OSGV in September 2014, plane distances (at ground level) are to be displayed on the surveying documentation. Spheroid or grid distances are not to be shown on cadastral plans or Abstracts of Field Records.

**20. What do I need to round my measurements to?**

ePlan requires you to round measurements to millimetres and seconds.

**21. Why should the distances be provided to mm and bearings to seconds?**

ePlans are available for surveyors to import into their surveying software package, saving time in entering known information (parcellation and metadata) for subsequent surveys. ePlan data is used for updating the state's digital cadastre and generating databases (eg easements, observations). To maintain the highest possible level of spatial accuracy for these functions, it is required that the distances are provided to mm and bearings provided to seconds to eliminate misclosure errors.

Rounding of distances and bearings to meet the precision required for cadastral surveys will be handled by the ePlan Visualiser.

**22. How should misclosures be dealt with?**

The following applies to title closures, closed traverses and observational/mathematical redundancies, eg: tie lines across roads:

- For minor adjustments, to remove rounding discrepancies maintain title bearings and adjust distances (Crandall rule\*) - do not use a Bowditch adjustment.
- For major adjustments, due to survey differences, follow existing survey practice guidelines.

\* The Crandall rule is a method of balancing a traverse where all the angular error is distributed throughout the traverse and all adjustments to the traverse are due to modifying the

traverse distances (Ref: AutoCAD Civil 3D manual). This adjustment method is most frequently used in a closed traverse that represents a parcel from a subdivision plan (Ref: GIS Dictionary by ESRI).

**23. Does ePlan support field notes and surveyor's report?**

No.

**24. How are coordinates used in ePlan?**

Coordinates in ePlan are used purely for display purposes only. They are used by the ePlan Visualiser to position spatial elements.