

Vicmap Position – GPSnet™

Victoria's real-time high accuracy satellite positioning network

What is Vicmap Position – GPSnet™?

Vicmap Position – GPSnet is a cooperative network of Continuously Operating Reference Stations (CORS) that supports Global Navigation Satellite Systems (GNSS) users throughout Victoria and is comprised of two components:

1. **Infrastructure:** networked real-time reference stations, located across Victoria, and
2. **Services:** the following services are provided state-wide:
 - ± 2cm horizontal real-time positioning
 - Sub-metre real-time positioning
 - Post-processing

What does it do?

Vicmap Position - GPSnet provides accurate position information, 24/7, state-wide. Positioning information is provided in real-time or for post-processing via Internet enabled devices. High accuracy is achievable with appropriately specified equipment using best practice techniques.

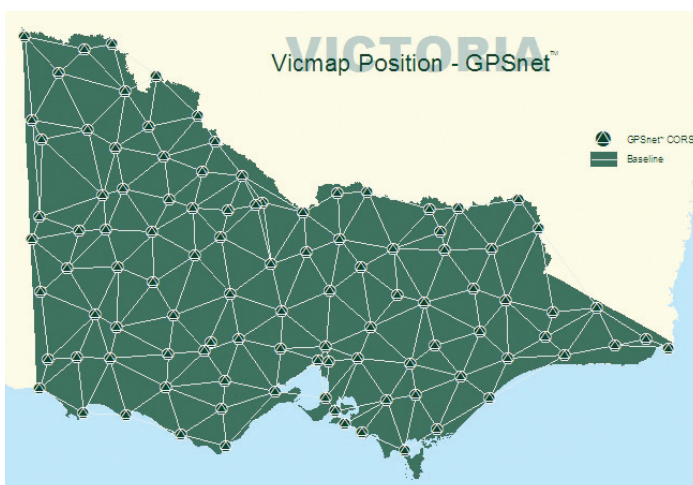


Figure 1: GPSnet CORS distribution

Key Features:

- High accuracy positioning 24/7
- Network integrity, reliability, availability and continual quality monitoring
- Access via wireless Internet
- Compliance with Geocentric Datum of Australia (GDA94).

What are the benefits of using Vicmap Position – GPSnet™?

Vicmap Position – GPSnet will provide productivity benefits to many Victorian industries through greater positional accuracy and reliability, by saving time and labour costs.

In particular, there are significant benefits for the surveying, precision farming, civil engineering and construction sectors, as well as logistics, emergency services, and audit and compliance.

The network:

- Is able to pinpoint a position and height above sea level anywhere in Victoria, to within a few millimetres
- Reduces the cost of entry to high accuracy positioning and seamless navigation
- Provides a state reference standard for the measurement of position in Victoria
- Provides a coordinated positioning system across Victoria that avoids costly fragmented localised development
- Keeps Victoria internationally competitive in an increasingly global marketplace.

About Vicmap Position - GPSnet™

Vicmap Position – GPSnet is one of the products in the Vicmap suite which is managed by the Spatial Information Infrastructure division of DSE. For more information on the suite of Vicmap products, visit www.dse.vic.gov.au/vicmap.

Vicmap Position - GPSnet has undergone continuous development since 1995 as a cooperative CORS network in partnership with industry, all levels of government, community groups and academic institutions.

Vicmap Position - GPSnet has evolved to meet the high service level requirements of emerging business uses such as precision guidance for agricultural machinery. These commercial activities are supported by continuous quality monitoring and a round the clock service desk for Value Added Resellers (VARs).

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Technical Requirements

To access the service the user must ensure that the following technical requirements are met:

- A receiver that supports the NTRIP protocol and RTCM 2.x or 3.x
- For sub-metre real-time positioning the receiver must support, at minimum, the GPS L1 satellite signal
- For high accuracy real-time positioning the receiver must support, at minimum, the GPS L1 and L2 satellite signals. Other satellite signals that will assist positioning include GPS L2C and GLONASS L1/L2 signals
- Connection to the Internet.

How do I get the technology?

A range of Value Added Resellers (VARs) have been accredited by DSE and are able to provide service packages for customers.

For more information on DSE's VARs, contact the DSE Customer Service Centre on 136 186 or visit <http://www.dse.vic.gov.au/GPSnet>.

How much does access to Vicmap Position - GPSnet™ cost?

For more information on pricing, please contact the DSE VARs. Their pricing schedules will cater for a range of users. Many options are available including annual, timed and pay per use, to suit user needs.

More Information:

To find out more about Vicmap Position – GPSnet, contact the DSE Customer Service Centre on 136 186 or visit <http://www.dse.vic.gov.au/GPSnet> to view the fact sheets, guidelines, maps, video presentations.

Additional information, as well as an interactive online map can also be found at <http://gnss.vicpos.com.au>.

The expansion of Vicmap Position – GPSnet across Victoria has been made possible through funding from the following government departments:

- Department of Sustainability and Environment
- Department of Primary Industries 'Future Farming' initiative
- Department of Innovation, Industry and Regional Development 'Regional Infrastructure Development Fund'.

It has also been supported by the Australian Federal Government.



Figure 2: Vicmap Position - GPSnet in action

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For more information contact the DSE Customer Service Centre 136 186

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