

# NSW Foundation Spatial Data Framework:

## Positioning Theme

### Dataset/product title: CORSnet-NSW

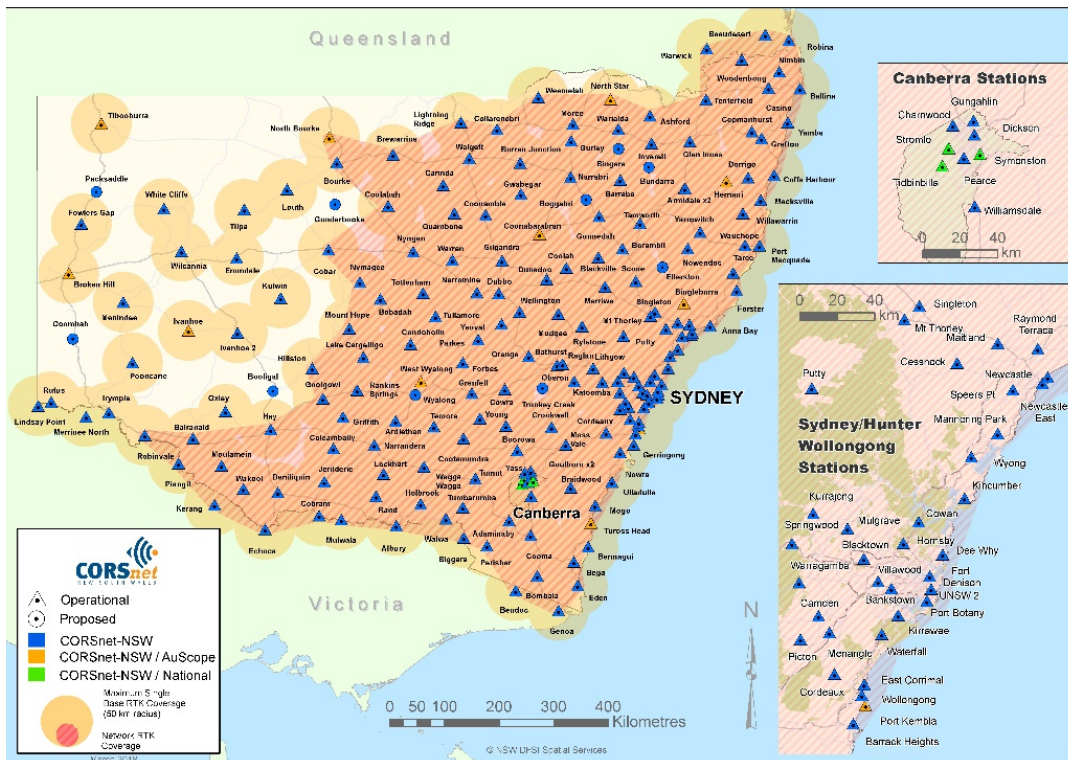



Image depicts the CORSnet-NSW coverage over NSW (valid at March 2018)  
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<p><b>Dataset/product description</b></p>	<p>CORSnet-NSW is a precise positioning service that gives users access to fast and accurate positioning and guidance solutions across NSW.</p> <p>CORSnet-NSW uses the latest Global Navigation Satellite System (GNSS) technology to provide an accurate spatial reference network for NSW and support the growing number of precise positioning and guidance applications throughout the state.</p>
<p><b>Dataset uses</b></p>	<p>Positioning Infrastructure is NSW’s authoritative, reliable, high-accuracy spatial referencing system and provides a common reference for all geospatial data. Services are used by specialists and non-specialists alike, for a growing number of applications (e.g. surveying, construction, mining, precision agriculture, asset capture, tracking, navigation, emergency response, law enforcement, insurance, security, climate/ weather forecast and recreation).</p>

	<p>In order to maximise the benefits of positioning and the enabling infrastructure, and to provide assurance to users of the fitness for purpose of the position outputs, guiding principles are required to enable the consistent and reliable determination and use of position information.</p> <p>CORSnet-NSW is a component of Positioning Infrastructure in which the services are used internally by surveyors to maintain and improve the NSW survey control network and by aerial operations to determine precise trajectories of the airborne sensors of imagery and LiDAR missions.</p> <p>CORSnet-NSW services are offered commercially through authorised resellers to the surveying and mapping, civil and construction and agriculture industries. For a list of these resellers and their contact details go to <a href="http://www.corsnet.com.au">www.corsnet.com.au</a>.</p>
<p><b>Current status</b></p>	<p>CORSnet-NSW is a network of permanent Global Navigation Satellite System (GNSS) Continuously Operating Reference Stations (CORS) providing DGPS, RTK/NRTK and RINEX data 24/7 to enable users to achieve sub-metre to 2 cm level positional accuracy.</p>
<p><b>Standards and specifications</b></p>	<p>The data provided complies with the following standards:</p> <p>Metadata for the relevant Spatial Services datasets are required to comply with: AS/NZS ISO 19115 ANZLIC Metadata Profile v1.1 and ISO 19139</p> <p>Intergovernmental Committee on Surveying and Mapping 2014. Standards and Practices for Control Surveys (SPI). ICSM Publication no 1. Version 2.1</p> <p>LPI. 2012. Guidelines for CORSnet-NSW Continuously Operating Reference Stations (CORS). Version 1.1</p> <p>IERS 2003 computation standards</p> <p>National Measurement Act 1960</p> <p>Surveying and Spatial Information Act 2002</p> <p>Surveying and Spatial Information Regulation 2017</p> <p>Data specifications available at <a href="http://www.corsnet.com.au">www.corsnet.com.au</a> for DGPS, RTK/NRTK and RINEX data</p>
<p><b>Access and licensing</b></p>	<p>Spatial Services, a division of the Department of Finance, Services and Innovation (DFSI) creates and manages Intellectual Property for the Crown in right of New South Wales.</p> <p>Acquisition of this data is subject to the customer entering into an appropriate Creative Commons license agreement.</p>

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<b>Metadata</b>	<a href="#">CORSnet-NSW dataset</a>
<b>Updates</b>	<p>CORSnet-NSW dataset is updated in real time every second for every CORS connected to the CORSnet-NSW data centre.</p> <p>The precise coordinates of the CORS sites are updated with NMI Regulation 13 Certification values:</p> <ol style="list-style-type: none"> <li>1. On operation and public release of the CORS site</li> <li>2. If the CORS monument has been shown to have physically moved</li> <li>3. If the CORS antenna has been replaced</li> <li>4. At least every five years.</li> </ol>
<b>Custodian agency and contact</b>	<p>Name: DFSI Spatial Services  Address: 346 Panorama Ave Bathurst NSW 2795  Email: SS-CORSNetCustomerSupport@finance.nsw.gov.au</p>
<b>Aggregator(s)</b>	<p>Name: DFSI Spatial Services  Address: 346 Panorama Ave Bathurst NSW 2795  Email: SS-CORSNetCustomerSupport@finance.nsw.gov.au</p>
<b>Distributor(s)</b>	<p>Name: DFSI Spatial Services  Address: 346 Panorama Ave Bathurst NSW 2795  Email: SS-CORSNetCustomerSupport@finance.nsw.gov.au</p>