

Legal Traceability of GPS Measurements in Australia

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SUMMARY

Surveyors are now regularly using Global Navigation Satellite Systems (GNSS) including the Global Positioning System (GPS) for many day-to-day surveys. However, in the context of calibration and legal traceability, measurements with GNSS are typically not yet subject to the same level of rigour as measurements with Electronic Distance Measuring Equipment (EDME) or steel tapes. This paper examines the approach being taken in Australia, which has a National Measurement Act, the purpose of which is to define legal units of measurement and provide a uniform system of weights and measures throughout Australia. Processes have been developed to allow GNSS measurements to be traceable to the relevant standard and thus conform to the National Measurement Act. The approach relies on both the actual connection to the so-called “value standard” and on Standards and Practices for the quality of the connection.

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