# **GUIDELINES FOR GPS SURVEYING IN AUSTRALIA**

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### ABSTRACT

The use of the Global Positioning System (GPS) continues to revolutionise surveying. With such a rapidly developing technology, many practising surveyors seek guidance to help them correctly perform GPS Surveying. Two issues relating to GPS Surveying in Australia are of relevance to this workshop and will be outlined in this paper. The first issue is Australia's *Standards and Practices for Control Surveys*. The Standards part of the document establish a way for specifying and reporting the quality of surveys while the second part outlines Recommended Practices for achieving the standards. The second issue of relevance is the process being developed to ensure *Legal Traceability of GPS Measurements*. Australia 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 are currently being developed to allow GPS Surveying measurements to be traceable to the relevant standard and thus conform with the Act.

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Matt Higgins is a Senior Surveyor with the Department of Natural Resources and Mines, Queensland, Australia. He received Bachelor and Masters degrees in Surveying in 1983 and 1988, respectively. He is presently undertaking a PhD at the University of New South Wales working in GPS Heighting. Matt is Vice Chair of FIG Commission 5 on Positioning and Measurement for the period 1998 to 2002. He is on the Editorial Advisory Board of GPS World Magazine. Matt is also a member of the Geodesy Sub-Committees of both the Australian Academy of Sciences and the Inter-Governmental Committee on Surveying and Mapping for Australia and New Zealand.