

Australian/New Zealand Standard™

**Geographic information/Geomatics—
Qualification and certification of
personnel**



AS/NZS ISO 19122:2006

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AS/NZS ISO 19122:2006
Geographic information/Geomatics—Qualification and certification of personnel

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NOTES

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee IT-004, Geographical Information/Geomatics.

This Standard is identical with, and has been reproduced from ISO/TR 19122:2004, *Geographic information/Geomatics—Qualification and certification of personnel*.

The objective of this Standard is to provide the geographical information and geomatics community with definitions to describe a system for the qualification and certification of personnel in the field of Geographic Information/Geomatics by a central independent body.

The term ‘informative’ has been used in this Standard to define the application of the annex to which it applies. An ‘informative’ annex is only for information and guidance.

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- (a) Its number appears on the cover and title page while the international standard number appears only on the cover.
- (b) In the source text ‘this International Standard’ should read ‘this Australian/New Zealand Standard’.
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INTRODUCTION

In 1998, the Canadian delegation made a proposal that the domain of interest for ISO/TC 211 should extend beyond data standards and encompass issues of certification and qualification of personnel. This proved to be a radical shift. From the beginning, the work encountered some difficulty. The voting on the original work item reflected ambiguity on the perceived value of the work. The initial reaction centred on whether there was a need for a single system of certification and whether it should be implemented through a central body.

After several years of discussion, a questionnaire was developed to obtain some of the background on different initiatives across the ISO/TC 211 membership. In August 2001, a small working group met to review the first eight case studies, analyse their content and develop recommendations to ISO/TC 211 through this Technical Report. Subsequently, five more case studies were added to this Technical Report.

To make further progress on the original Project Team 19122 agenda, there existed a continued need to expand the membership to represent better the different domains and approaches to certification and qualification of personnel. Nationally, this means the involvement of experts beyond the data standards arena; internationally, it means representation of the full range of professions and disciplines embraced by the broad geographic information/geomatics domain.

Certification in a technical subject domain raises issues for individual practitioners, education and training institutions, government agencies, professional organizations and the private sector. There remains the need for a mechanism that permits fair comparisons across jurisdictional boundaries; however the measures of skill and competency must be flexible and be cognizant of the social and cultural context.

The universal nature of geographic information/geomatics and the recent and ongoing publication of ISO/TC 211 data standards dictate a common international requirement for a deeper understanding of different education and training systems, and the available processes for the recognition of professional qualifications across a broad subject domain. In addition, this domain is changing rapidly as the result of the changes in the Information and Communication Technologies (ICT) industry and the integration of GI Technologies into an ever-expanding range of applications. This rapid rate of change has significant implications for educational institutions, professional associations as well as standard setting organizations. All of these must take care to build change management into any standards established. The Project Team hopes this report will initiate a broad dialog towards greater understanding of national and disciplinary differences.

Geographic information/Geomatics — Qualification and certification of personnel

1 Scope

This Technical Report describes and defines the following objectives of the field of Geographic Information/Geomatics.

- To develop a Type 3 report, which describes a system for the qualification and certification, by a central independent body, of personnel in the field of Geographic Information/Geomatics.
- To define the boundaries between Geographic Information/ Geomatics and other related disciplines and professions.
- To specify technologies and tasks pertaining to Geographic Information/Geomatics.
- To establish skill sets and competency levels for technologists, professional staff and management in the field.
- To research the relationship between this initiative and other similar certification processes performed by existing professional associations.
- To develop a plan for the accreditation of candidate institutions and programs, for the certification of individuals in the workforce, and for collaboration with other professional bodies.

While the background research leading to this Technical Report has remained true to the framework provided by these objectives, the focus has shifted to a more comprehensive, descriptive study of the current situation in some member countries and the ongoing activities of some of those international professional associations which cover the subject domain. This is in contrast to a prescriptive study, where the solution would be dictated by ISO/TC 211.

2 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

2.1

qualification

knowledge, skills, training and experience required to perform properly GIS/Geomatics tasks, normally achieved through formal education

2.2

certification

procedure leading to a written testimony of the qualification of an individual's professional competence provided by a range of public, private and professional institutions