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(Incorporating Amendment No. 1)



Australian/New Zealand Standard™

Geographic information — Well-known text representation of coordinate reference systems



AS/NZS ISO 19162:2020

This Joint Australian/New Zealand Standard™ was prepared by Joint Technical Committee IT-004, Geographical Information/Geomatics. It was approved on behalf of the Council of Standards Australia on 30 June 2020 and by the New Zealand Standards Approval Board on 5 August 2020.

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- ANZLIC — The Spatial Information Council
- Australian Antarctic Division
- Australian Bureau of Meteorology
- Australian Maritime Safety Authority
- CSIRO
- Curtin University of Technology
- Department of Agriculture, Water and the Environment
- Department of Defence (Australian Government)
- Geoscience Australia
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Preface

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee IT-004, Geographical Information/Geomatics, to supersede AS/NZS ISO 19162:2018.

A1 Amendment No. 1 to this Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee IT-004, Geographical Information/Geomatics. **A1**

A1 *This Standard incorporates Amendment No. 1 (March 2024). The start and end of changes introduced by the Amendment are indicated in the text by tags including the Amendment number 1. **A1***

The objective of this document is to define the structure and content of a text string implementation of the abstract model for coordinate reference systems described in AS/NZS ISO 19111. The string defines frequently needed types of coordinate reference systems and coordinate operations in a self-contained form that is easily readable by machines and by humans. The essence is its simplicity; as a consequence, there are some constraints upon the more open content allowed in AS/NZS ISO 19111. To retain simplicity in the well-known text (WKT) description of coordinate reference systems and coordinate operations, the scope of this document excludes parameter grouping and pass-through coordinate operations. The text string provides a means for humans and machines to correctly and unambiguously interpret and utilize a coordinate reference system definition with look-ups or cross references only to define coordinate operation mathematics. A WKT string is not suitable for the storage of definitions of coordinate reference systems or coordinate operations because it omits metadata about the source of the data and may omit metadata about the applicability of the information.

A1 This document is identical with, and has been reproduced from, ISO 19162:2019, *Geographic information — Well-known text representation of coordinate reference systems* and its Amendment No. 1 (2023), which has been added at the end of the source text. **A1**

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The terms “normative” and “informative” are used in Standards to define the application of the appendices or annexes to which they apply. A “normative” appendix or annex is an integral part of a Standard, whereas an “informative” appendix or annex is only for information and guidance.

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