

Australian/New Zealand Standard™

**Geographic information—Quality
evaluation procedures**



AS/NZS ISO 19114:2005

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PREFACE

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

This Standard incorporates Amendment No. 1 (October 2008). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.

A1 | This Standard is identical with, and has been reproduced from ISO 19114:2003, *Geographic information—Quality evaluation procedures*, and its corrigendum, ISO 19114:2003/Cor.1:2005.

The objective of this Standard is to specify, and provide geographic information system, developers with, a framework of procedures for determining and evaluating quality that is applicable to digital geographic datasets, consistent with the data quality principles defined in AS/NZS ISO 19113. It establishes a framework for evaluating and reporting data quality results, either as part of data quality metadata only, or also as a quality evaluation report.

The terms ‘normative’ and ‘informative’ are used to define the application of the annex to which they apply. A normative annex is an integral part of a standard, whereas 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.
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- (c) A full point substitutes for a comma when referring to a decimal marker.

References to International Standards should be replaced by references to Australian or Australian/New Zealand Standards, as follows:

<i>Reference to International Standard</i>		<i>Australian/New Zealand Standard</i>	
ISO		AS/NZS ISO	
19113	Geographic information—Quality principles	19113	Geographic information—Quality principles
19115	Geographic information—Metadata	19115	Geographic information—Metadata

CONTENTS

	<i>Page</i>
1	Scope..... 1
2	Conformance 1
3	Normative references 1
4	Terms and definitions..... 1
5	Abbreviated terms..... 2
6	Process for evaluating data quality 3
6.1	General 3
6.2	Components of the process..... 3
7	Data quality evaluation methods..... 4
7.1	Classification of data quality evaluation methods 4
7.2	Direct evaluation methods 5
7.3	Indirect evaluation method 6
7.4	Data quality evaluation examples 7
8	Reporting data quality evaluation information 7
8.1	Reporting as metadata 7
8.2	Reporting in a quality evaluation report..... 7
8.3	Reporting aggregated data quality result..... 7
Annex A	(normative) Abstract test suites 8
A.1	Introduction 8
A.2	Quality evaluation procedures 8
A.3	Evaluating data quality..... 8
A.4	Reporting data quality 8
Annex B	(informative) Uses of quality evaluation procedures 9
B.1	Introduction 9
B.2	Development of a product specification or user requirements 9
B.3	Quality control during dataset creation..... 9
B.4	Inspection for conformance to a product specification..... 9
B.5	Evaluation of dataset conformance to user requirements 9
B.6	Quality control during dataset update 9
Annex C	(informative) Applying quality evaluation procedures to dynamic datasets 10
C.1	Introduction 10
C.2	Determining and reporting the quality of a dynamic dataset 10
C.3	Establishing continuous quality evaluation procedures 10
C.4	Periodically re-establish the reference quality of the dataset..... 11
Annex D	(informative) Examples of data quality measures 12
D.1	Introduction 12
D.2	Relationship of the data quality components 12
D.3	Examples of data quality completeness measures..... 14
D.4	Examples of data quality logical consistency measures..... 15
D.5	Examples of data quality positional accuracy measures 19
D.6	Examples of data quality temporal accuracy measures 23
D.7	Examples of data quality thematic accuracy measures 26
Annex E	(informative) Guidelines for sampling methods applied to geographic datasets 30

E.1	Introduction.....	30
E.2	Lot and item	30
E.3	Sample size	30
E.4	Sampling strategies	31
E.5	Probability-based sampling	34
Annex F	(informative) Example of testing for thematic accuracy and completeness	36
F.1	Introduction.....	36
F.2	Quality evaluation process.....	36
F.3	Method for data quality evaluation	36
F.4	Inspection for quality	37
F.5	Determination of data quality results and conformance.....	38
F.6	Reporting quality results	39
Annex G	(informative) Example of measurement and reporting of completeness and thematic accuracy	42
G.1	Introduction.....	42
G.2	Dataset description	42
G.3	Evaluation of data quality.....	47
G.4	Reporting quality results	50
Annex H	(informative) Example of an aggregated data quality result.....	53
H.1	Introduction.....	53
H.2	Dataset description	53
H.3	Universe of discourse	54
H.4	Dataset.....	55
H.5	Aggregation of evaluation results and reporting.....	55
Annex I	(normative) Reporting quality information in a quality evaluation report	57
I.1	Introduction.....	57
I.2	Quality evaluation report components.....	57
Annex J	(informative) Aggregation of data quality results	61
J.1	Introduction.....	61
J.2	100 % pass/fail	61
J.3	Weighted pass/fail	61
J.4	Subset of results sufficient for product purpose.....	62
J.5	Maximum/minimum value.....	62
	Bibliography.....	63

INTRODUCTION

For the purpose of evaluating the quality of a dataset, clearly defined procedures must be used in a consistent manner. This enables data producers to express how well their product meets the criteria set forth in its product specification and enables data users to establish the extent to which a dataset meets their requirements. The quality of a dataset is described using two components: a quantitative component and a non-quantitative component. The objective of this International Standard is to provide guidelines for evaluation procedures of quantitative quality information for geographic data in accordance with the quality principles described in ISO 19113. It also offers guidance on reporting quality information.

This International Standard recognizes that a data producer and a data user may view data quality from different perspectives. Conformance quality levels can be set using the data producer's product specification or a data user's data quality requirements. If the data user requires more data quality information than that provided by the data producer, the data user may follow the data producer's data quality evaluation process flow to get the additional information. In this case, the data user requirements are treated as a product specification for the purpose of using the data producer process flow.

The quality evaluation procedures described in this International Standard, when applied in accordance with ISO 19113, provide a consistent and standard manner to determine and report the quality information in a dataset.

AUSTRALIAN/NEW ZEALAND STANDARD

Geographic information — Quality evaluation procedures**1 Scope**

This International Standard provides a framework of procedures for determining and evaluating quality that is applicable to digital geographic datasets, consistent with the data quality principles defined in ISO 19113. It also establishes a framework for evaluating and reporting data quality results, either as part of data quality metadata only, or also as a quality evaluation report.

This International Standard is applicable to data producers when providing quality information on how well a dataset conforms to the product specification, and to data users attempting to determine whether or not the dataset contains data of sufficient quality to be fit for use in their particular applications.

Although this International Standard is applicable to all types of digital geographic data, its principles can be extended to many other forms of geographic data such as maps, charts and textual documents.

2 Conformance

This International Standard defines three classes of conformance: one for quality evaluation procedures, one for evaluating data quality, and one for reporting quality information. The abstract test suites for the three classes of conformance are given in Annex A.

3 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 19113:2002, *Geographic information — Quality principles*

ISO 19115:2003, *Geographic information — Metadata*

4 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 19113 and ISO 19115 (some of which are repeated for convenience) and the following apply.

4.1**conformance quality level**

threshold value or set of threshold values for data quality results used to determine how well a dataset meets the criteria set forth in its product specification or user requirements

4.2**dataset**

identifiable collection of data

[ISO 19115]