

Australian/New Zealand Standard™

**Software engineering—Software
product Quality Requirements and
Evaluation (SQuaRE)—Planning and
management**



AS/NZS ISO/IEC 25001:2013

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee IT-015, Software and Systems Engineering. It was approved on behalf of the Council of Standards Australia on 6 May 2013 and on behalf of the Council of Standards New Zealand on 29 April 2013.
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This Standard was issued in draft form for comment as DR AS/NZS ISO/IEC 25001.

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee IT-015, Software and Systems Engineering.

The objective of this Standard is to provide requirements and recommendations for an organization responsible for implementing and managing the software product quality requirements specification and software quality evaluation activities through the provision of technology, tools, experiences and management skills.

This Standard is identical with, and has been reproduced from ISO/IEC 25001:2007, *Software engineering—Software product Quality Requirements and Evaluation (SQuaRE)—Planning and management*.

As this Standard is reproduced from an International Standard, the following applies:

- (a) In the source text ‘this International Standard’ should read ‘this Australian/New Zealand Standard’.
- (b) 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/IEC	AS/NZS ISO/IEC
15288 Systems and software engineering— System life cycle processes	15288 Systems and software engineering— System life cycle processes
25000 Software engineering—Software product Quality Requirements and Evaluation (SQuaRE)—Guide to SQuaRE	25000 Software engineering—Software product Quality Requirements and Evaluation (SQuaRE)—Guide to SQuaRE
25020 Software engineering—Software product Quality Requirements and Evaluation (SQuaRE)—Measurement reference model and guide	25020 Software engineering—Software product Quality Requirements and Evaluation (SQuaRE)—Measurement reference model and guide
25030 Software engineering—Software product Quality Requirements and Evaluation (SQuaRE)—Quality requirements	25030 Software engineering—Software product Quality Requirements and Evaluation (SQuaRE)—Quality requirements
25051 Software engineering—Software product Quality Requirements and Evaluation (SQuaRE)—Requirements for quality of Commercial Off-The- Shelf (COTS) software product and instructions for testing	25051 Software engineering—Software product Quality Requirements and Evaluation (SQuaRE)—Requirements for quality of Commercial Off-The-Shelf (COTS) software product and instructions for testing

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.

CONTENTS

1	SCOPE	1
2	CONFORMANCE	1
3	NORMATIVE REFERENCES	2
4	TERMS AND DEFINITIONS	3
4.1	EVALUATION ACTIVITY	3
4.2	EVALUATION GROUP	3
4.3	EVALUATION TECHNOLOGY (TECHNOLOGY USED FOR EVALUATION)	3
4.4	TECHNIQUES	3
5	EVALUATION MANAGEMENT CONCEPTS	3
6	REQUIREMENTS AND RECOMMENDATIONS FOR SOFTWARE QUALITY	
	REQUIREMENTS SPECIFICATION QUALITY EVALUATION	4
6.1	GENERAL	4
6.2	ORGANISATION LEVEL ACTIVITIES	5
6.3	PROJECT MANAGEMENT LEVEL ACTIVITIES	8
6.4	ANALYSIS AND USE OF EVALUATION RESULTS	9
	Annex A (Informative) Quality Evaluation Project Plan Template	11
	Bibliography	15

INTRODUCTION

ISO/IEC 25001 provides details about the planning and management requirements associated with software product quality requirements and evaluation.

While this standard is mainly concerned with product quality requirements and evaluation, wherever it is relevant the corresponding process requirements and evaluation activities are also discussed.

This standard aims to clarify the requirements which should be identified by the organization in order to ensure the success of specifying quality requirements and executing the evaluation.

This International Standard is intended to be used in conjunction with the other parts of the SQuaRE series (ISO/IEC 250nn) of standards, and with ISO/IEC 14598 and ISO/IEC 9126-1 until superseded by the ISO/IEC 25000 series of standards.

This International Standard complies with the technical processes identified in ISO/IEC 15288 related to quality requirements definition and analysis.

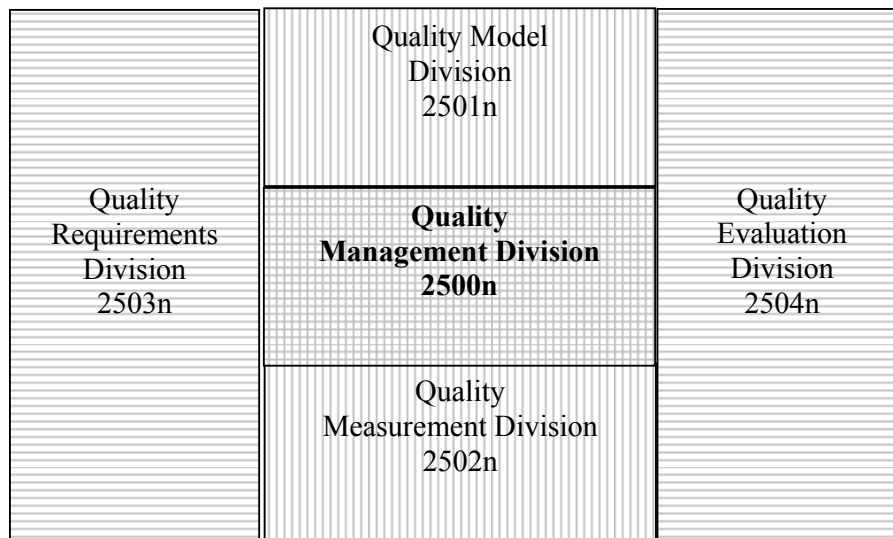


Figure 1 — Organization of SQuaRE series of standards

Figure 1 (quoted after ISO/IEC 25000) illustrates the organisation of the SQuaRE series representing families of standards, further called Divisions.

The Divisions within SQuaRE model are:

- **ISO/IEC 2500n — Quality Management Division.** The standards that form this division define all common models, terms and definitions referred further by all other standards from SQuaRE series. Referring paths (guidance through SQuaRE documents) and high level practical suggestions in applying proper standards to specific application cases offer help to all types of users. The division

also provides requirements and guidance for an evaluation group which is responsible for the management of software product quality requirements specification and quality evaluation.

- **ISO/IEC 2501n — Quality Model Division.** The standard that forms this division presents a detailed quality model including characteristics for internal, external and quality in use. Furthermore, the internal and external software quality characteristics are decomposed into subcharacteristics. Practical guidance on the use of the quality model is also provided.
- **ISO/IEC 2502n — Quality Measurement Division.** The standards that form this division include a software product quality measurement reference model, mathematical definitions of quality measures, and practical guidance for their application. Presented measures apply to internal software quality, external software quality and quality in use. Quality measure elements forming foundations for the latter measures are defined and presented,
- **ISO/IEC 2503n — Quality Requirements Division.** The standard that forms this division helps specifying quality requirements. These quality requirements can be used in the process of quality requirements elicitation for a software product to be developed or as input for an evaluation process. The requirements definition process is mapped to technical processes defined in ISO/IEC 15288,
- **ISO/IEC 2504n — Quality Evaluation Division.** The standards that form this division provide requirements, recommendations and guidelines for software product evaluation, whether performed by evaluators, acquirers or developers. The support for documenting a measure as an Evaluation Module is also presented.

AUSTRALIAN/NEW ZEALAND STANDARD

Software engineering—Software product Quality Requirements and Evaluation (SQuaRE)—Planning and management**1 Scope**

This International Standard provides requirements and recommendations for an organization responsible for implementing and managing the software product quality requirements specification and software quality evaluation activities through the provision of technology, tools, experiences and management skills.

The role of the evaluation group includes motivating people and training them for the requirements specification activities and the evaluation activities, preparing appropriate documents, identification or development of required methods, and responding to queries on relevant technologies.

Technology management is related to the planning and management of a software quality requirements specification and evaluation process, measures and tools. This includes the management of development, acquisition, standardization, control, transfer and feedback of requirements specification and evaluation technology experiences within the organisation.

The intended users of ISO/IEC 25001 are those responsible for:

- managing technologies used for requirements specification and evaluation execution,
- specifying software product quality requirements,
- supporting software product quality evaluation,
- managing software development organisations,

as well as those in a quality assurance function. It is also applicable to managers involved in other software related activities.

2 Conformance

In order to conform to ISO/IEC 25001, an organization shall apply requirements from Clause 6 giving the reasons for any exclusion, or describe its own recommendations and provide a mapping to the original requirements.