AS/NZS 14143.2:2003
ISO/IEC 14143-2:2002

Australian/New Zealand Standard™

Information technology—Software measurement—Functional size measurement

Part 2: Conformity evaluation of software size measurement methods to AS/NZS 14143.1:1999

Standards Australia

STANDARDS NEW ZEALAND
Paerewa Aotearoa

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee IT-015, Software Engineering. It was approved on behalf of the Council of Standards Australia on 1 May 2003 and on behalf of the Council of Standards New Zealand on 8 May 2003. It was published on 2 June 2003.

The following are represented on Committee IT-015:

Australian Computer Society
Australian Information Industry Association
Australian Society for Technical Communication, NSW
Australian Software Metrics Association
Griffith University
New Zealand Organisation for Quality
Quality Society of Australasia
Software Engineering Australia (QLD)
Software Quality Association (ACT)
Software Quality Association (NSW)
Software Verification Research Centre
Sydney SPIN Group (Software Process Improvement Network)
Systems Engineering Society of Australia
University of New South Wales
University of South Australia
University of Technology, Sydney

Keeping Standards up-to-date

Standards are living documents which reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued. Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments which may have been published since the Standard was purchased.

Detailed information about joint Australian/New Zealand Standards can be found by visiting the Standards Australia web site at www.standards.com.au or Standards New Zealand web site at www.standards.co.nz and looking up the relevant Standard in the on-line catalogue.

Alternatively, both organizations publish an annual printed Catalogue with full details of all current Standards. For more frequent listings or notification of revisions, amendments and withdrawals, Standards Australia and Standards New Zealand offer a number of update options. For information about these services, users should contact their respective national Standards organization.

We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Please address your comments to the Chief Executive of either Standards Australia International or Standards New Zealand at the address shown on the back cover.

This Standard was issued in draft form for comment as DR 03130.

Australian/New Zealand Standard™

Information technology—Software measurement—Functional size measurement

Part 2: Conformity evaluation of software size measurement methods to AS/NZS 14143.1:1999

First published as AS/NZS 14143.2:2003.

Jointly published by Standards Australia International Ltd, GPO Box 5420, Sydney, NSW 2001 and Standards New Zealand, Private Bag 2439, Wellington 6020

ISBN 0 7337 5276 4

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee IT-015, Software Engineering. It is identical with, and has been reproduced from, ISO/IEC 14143-2:2002, *Information technology—Software measurement—Functional size measurement*—Part 2: *Conformity evaluation of software size measurement methods to ISO/IEC 14143-1:1998*.

The objective of this Standard is to establish a framework for the conformity evaluation of a Candidate Functional Size Measurement Method against the provisions of AS/NZS 14143.1:1999; and to describe a process for conformity evaluation of whether a Candidate Functional Size Measurement Method meets the (type) requirements of AS/NZS 14143.1:1999 such that it is an actual Functional Size Measurement Method. Additionally, it describes the requirements for performing a conformity evaluation in order to ensure repeatability of the conformity evaluation process, as well as consistency of decisions on conformity and the final result; and aims to ensure that the output from the conformity evaluation process is objective, impartial, consistent, repeatable, complete and auditable.

This Standard is Part 2 of AS/NZS 14143, *Information technology—Software measurement—Functional size measurement*, which is published in parts as follows:

Part 1: Definition of concepts
Part 2: Conformity evaluation of software size measurement methods to AS/NZS 14143.1:1999 (this Standard)
Part 4: Reference model

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.

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

(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 part of ISO/IEC 14143' should read 'this Australian/New Zealand Standard'.

(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:

Reference to International Standard		*Australian/New Zealand Standard*	
ISO/IEC		AS/NZS	
14143	Information technology—Software measurement—Functional size measurement	14143	Information technology—Software measurement—Functional size measurement
14143-1	Part 1: Definition of concepts	14143.1	Part 1: Definition of concepts

CONTENTS

Page

NOTES

AUSTRALIAN/NEW ZEALAND STANDARD

Information technology — Software measurement — Functional size measurement —

Part 2:
Conformity evaluation of software size measurement methods to ISO/IEC 14143-1:1998

1 Scope

1.1 This part of ISO/IEC 14143:

a) establishes a framework for the conformity evaluation of a Candidate FSM Method against the provisions of ISO/IEC 14143-1:1998,

b) describes a process for conformity evaluation of whether a Candidate FSM Method meets the (type) requirements of ISO/IEC 14143-1:1998 such that it is an actual FSM method, i.e. they are of the same type,

c) describes the requirements for performing a conformity evaluation in order to ensure repeatability of the conformity evaluation process, as well as consistency of decisions on conformity and the final result,

d) aims to ensure that the output from the conformity evaluation process is objective, impartial, consistent, repeatable, complete and auditable,

e) provides informative guidelines (refer Annex A) for determining the competence of the conformity evaluation teams,

f) provides an example checklist (refer Annex B) to assist in the conformity evaluation of a Candidate FSM Method, and

g) provides an example template (refer Annex C) for the conformity evaluation report.

Conformity evaluations are conducted by a conformity evaluation team that has the competencies described in this part of ISO/IEC 14143. This part of ISO/IEC 14143 assumes familiarity with the concepts and definitions described in ISO/IEC 14143-1:1998.

The conformity evaluation is performed by cross-referencing each component of a Candidate FSM Method against the corresponding provisions of ISO/IEC 14143-1:1998. The components of the Candidate FSM Method are then evaluated for their conformity.

The output from the conformity evaluation includes a decision for each provision evaluated. Only the requirements (shalls) are considered when determining if the Candidate FSM Method conforms to ISO/IEC 14143-1:1998. The recommendations (shoulds) of ISO/IEC 14143-1:1998 may also be investigated to provide additional information to end users of the Candidate FSM Method.

The output from the conformity evaluation process is the conformity evaluation report. The report may be used to:

a) inform end users that a Candidate FSM Method conforms to ISO/IEC 14143-1:1998 in accordance with this part of ISO/IEC 14143, and is therefore an FSM Method, and

b) assist end users in making informed judgements about which method best suits their needs.