

National Measurement (Accuracy) Determination 2023

I, Dr Richard Bruce Warrington, Chief Metrologist, National Measurement Institute, make the following determination under the *National Measurement Regulations 1999*.

Dated 24 October 2023

Dr Richard Bruce Warrington

Chief Metrologist

Contents

1	Name
2	Commencement
3	Authority
	Schedules
5	Definitions
	Standards of measurement, artefacts and measuring instruments

1 Name

This instrument is the National Measurement (Accuracy) Determination 2023.

2 Commencement

This instrument commences the day after registration on the Federal Register of Legislation.

3 Authority

This instrument is made under the National Measurement Regulations 1999.

4 Schedules

Each instrument specified in a Schedule to this instrument is amended or repealed as set out in the applicable item in the Schedule concerned, and any other item in a Schedule to this instrument has effect according to its terms.

5 Definitions

In this instrument:

Act means the National Measurement Act 1960.

JCGM means the Joint Committee for Guides in Metrology

Note:

The JCGM is established under an international charter and composed of international organizations working in the field of metrology. The tasks of the JCGM are to maintain and promote the use of the *Guide to the expression of uncertainty in measurement* (known as the GUM) and the *International vocabulary of metrology — Basic and general concepts and associated terms* (known as the VIM).

JCGM 100:2008 means JCGM 100:2008 Evaluation of measurement data — Guide to the expression of uncertainty in measurement (corrected version 2010)

Note:

At the commencement of this Determination, *JCGM 100:2008* may be accessed via the website of the International Bureau of Weights and Measures: https://www.bipm.org/en/committees/jc/jcgm/publications

Regulations means the National Measurement Regulations 1999.

terms defined in the Act and the Regulations have the same meaning in this instrument.

6 Standards of measurement, artefacts and measuring instruments

- (1) For subregulation 17(2) of the Regulations, the accuracy of an Australian primary standard of measurement is to be ascertained and expressed as an uncertainty in accordance with the principles of *JCGM 100:2008* with an interval estimated to have a level of confidence of 95%.
- (2) For subregulation 17(2) of the Regulations, the accuracy of an Australian secondary standard of measurement is to be ascertained and expressed as an uncertainty in accordance with the principles of *JCGM 100:2008* with an interval estimated to have a level of confidence of 95% at the time of verification.
- (3) For subregulation 18(4) of the Regulations, the accuracy of a State primary standard of measurement must be ascertained as an uncertainty in accordance with the principles of *JCGM 100:2008* with an interval estimated to have a level of confidence of 95% at the time of verification.
- (4) For subregulation 19(2) of the Regulations, the accuracy of a reference standard of measurement must be ascertained and expressed as an uncertainty in accordance with the principles of *JCGM 100:2008* with an interval estimated to have a level of confidence of 95% at the time of verification.
- (5) For subregulation 34C(3) of the Regulations, the accuracy of a verification of a physical quantity of an artefact is to be ascertained and expressed as an uncertainty in accordance with the principles of *JCGM 100:2008* with an interval estimated to have a level of confidence of 95% at the time of verification.
- (6) For subregulation 39(1) of the Regulations, the accuracy of a certified measuring instrument must be ascertained as an uncertainty in accordance with the principles of *JCGM 100:2008* with an interval estimated to have a level of confidence of 95% at the time of verification.

Schedule 1 – Repeals

The instruments listed below are repealed in full.

1. Determination by the National Standards Commission - Accuracy of reference standards of measurement - 14 June 2002 (F2008B00669)