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Edition 1.3

SOUTH AFRICAN NATIONAL STANDARD

Calibration of pure-tone audiometers

Part 1: Air conduction

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Table of changes

Change No.	Date	Scope
Amdt 1	2000	Amended to update the referenced standards.
Amdt 2	2004	Amended to replace reference to SANS 60651 with SANS 61672-1.
Amdt 3	2012	Amended to update referenced standards.

Acknowledgement

The SABS Standards Division wishes to acknowledge the valuable assistance derived from publications of the following organizations:

International Electrotechnical Commission
International Organization for Standardization

Foreword

This South African standard was approved by National Committee SABS TC 76, *Acoustics, electro-acoustics and vibration*, in accordance with procedures of the SABS Standards Division, in compliance with annex 3 of the WTO/TBT agreement.

This document was published in February 2012.

This document supersedes SANS 10154-1:2004 (edition 1.2).

A vertical line in the margin shows where the text has been technically modified by amendment No. 3.

Annex A forms an integral part of this document. Annex B is for information only.

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Part 1: Air conduction

1 Scope

1.1 This part of SANS 10154 covers the method for the on-site verification of all types of pure-tone air conduction audiometers for compliance with IEC 60645-1 and with the relevant parts of ISO 389. **Amdt 1**

1.2 SANS 10154-2 covers the method for the on-site verification of the bone conduction of the audiometer.

NOTE 1 Guidance on the use of audiometers is given in the relevant parts of SANS 8253. **Amdt 1**

NOTE 2 The procedures to be followed for mobile audiometric facilities and for cases where the audiometer is moved from its calibration site, are given in annex A.

NOTE 3 The calibrating laboratory or organization should

- a) have personnel with the necessary education, training, technical knowledge and experience for their assigned functions, including at least one Registered Professional Engineer, Scientist or Technologist,
- b) have the necessary facilities with properly maintained and calibrated instruments, and
- c) implement and maintain a quality management system, in accordance with SANS 17025. **Amdt 3**

2 Normative references

The standards contain provisions which, through reference in the text, constitute provisions of this part of SANS 10154. All standards are subject to revision and, since any reference to a standard is deemed to be a reference to the latest edition of that standard, parties to agreements based on this part of SANS 10154 are encouraged to take steps to ensure the use of the most recent editions of the standards indicated below. Information on currently valid national and international standards can be obtained from the SABS Standards Division.

IEC 60050 (801), *International electrotechnical vocabulary – Chapter 801: Acoustics and electroacoustics*. **Amdt 1**

IEC 60318-1, *Electroacoustics – Simulators of human head and ear – Part 1: Ear simulators for the measurement of supra-aural and circumaural earphones*. **Amdt 1**

IEC 60318-3, *Electroacoustics – Simulators of human head and ear – Part 3: Acoustic coupler for the calibration of supra-aural earphones used in audiometry*. **Amdt 3**