INTERNATIONAL STANDARD

ISO 8253-3

Second edition
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Acoustics — Audiometric test methods —

Part 3: Speech audiometry

Acoustique — Méthodes d'essais audiométriques —

Partie 3: Audiométrie vocale

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 8253-3 was prepared by Technical Committee ISO/TC 43, *Acoustics*.

This second edition cancels and replaces the first edition (ISO 8253-3:1996), which has been technically revised.

ISO 8253 consists of the following parts, under the general title *Acoustics — Audiometric test methods*:

— *Part 1: Pure-tone air and bone conduction threshold audiometry*

— *Part 2: Sound field audiometry with pure-tone and narrow-band test signals*

— *Part 3: Speech audiometry*

Introduction

Speech audiometry is used for the assessment of hearing in connection with diagnostic evaluation and audiological rehabilitation.

The results of speech audiometry depend on the speech material and test method used. This part of ISO 8253 sets conditions for speech materials in order to assure minimum requirements of precision and comparability between different tests using different speech materials including materials in different languages. It also specifies procedures to be used when testing speech recognition.

Acoustics — Audiometric test methods —

Part 3:
Speech audiometry

1 Scope

This part of ISO 8253 specifies basic methods for speech recognition tests for audiological applications.

In order to ensure minimum requirements of precision and comparability between different test procedures including speech recognition tests in different languages, this part of ISO 8253 specifies requirements for the composition, validation and evaluation of speech test materials, and the realization of speech recognition tests. This part of ISO 8253 does not specify the contents of the speech material because of the variety of languages.

Furthermore, this part of ISO 8253 also specifies the determination of reference values and fulfilment requirements for the realization and manner of presentation.

This part of ISO 8253 specifies procedures and requirements for speech audiometry with the recorded test material being presented by air conduction through an earphone, or from a loudspeaker for sound field audiometry. Methods for using noise either for masking the non-test ear or as a competing sound are described.

Some test subjects, for example children, can require amended test procedures not specified in this part of ISO 8253.

Specialized tests such as those used for evaluating directional hearing and dichotic hearing are outside the scope of this part of ISO 8253.

2 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 266, *Acoustics — Preferred frequencies*

ISO 8253-1, *Acoustics — Audiometric test methods — Part 1: Pure-tone air and bone conduction audiometry*

ISO 8253-2, *Acoustics — Audiometric test methods — Part 2: Sound field audiometry with pure-tone and narrow-band test signals*

ISO/IEC Guide 98-3, *Uncertainty of measurement — Part 3: Guide to the expression of uncertainty in measurement (GUM:1995)*

IEC 60645-1, *Electroacoustics — Audiological equipment — Part 1: Pure-tone audiometers*

IEC 60645-2:1993, *Audiometers — Part 2: Equipment for speech audiometry*

IEC 61672-1, *Electroacoustics — Sound level meters — Part 1: Specifications*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 8253-1 and ISO 8253-2 and the following apply.