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Acoustics — Audiometric test methods — Part 3: Speech audiometry

*Acoustique — Méthodes d'essais audiométriques —
Part 3: Audiométrie vocale*



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International Organization for Standardization
Case postale 56 • CH-1211 Genève 20 • Switzerland
Internet central@isocs.iso.ch
X.400 c=ch; a=400net; p=iso; o=isocs; s=central

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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.

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.

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

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

- *Part 1: Basic 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*

Annexes A and B of this part of ISO 8253 are for information only.

Introduction

Speech audiometry is used in connection with diagnostic evaluation, audiological rehabilitation and the evaluation of hearing disability. The purpose of a particular test is to assist in the choice of speech test material and mode of presentation.

Acoustics — Audiometric test methods —

Part 3: Speech audiometry

1 Scope

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, by bone conduction through a bone vibrator, 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. All test procedures are based on the use of open-set test material.

This part of ISO 8253 also contains requirements on recorded speech material and recommended procedures for the maintenance and calibration of speech audiometric equipment.

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

It is recognized that standards for speech audiometry cannot be met using live voice speech tests, however, guidance is given in an informative annex so as to make such tests as reliable as possible.

This part of ISO 8253 does not specify the contents of the speech material because of the variety of languages. The type of test material may significantly influence the result of speech audiometry.

Specialized tests such as those used for evaluating directional hearing and dichotic hearing are not included in this part of ISO 8253.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 8253. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 8253 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 266:—¹⁾, *Acoustics — Preferred frequencies*.

ISO 8253-1:1989, *Acoustics — Audiometric test methods — Part 1: Basic pure tone air and bone conduction threshold audiometry*.

ISO 8253-2:1992, *Acoustics — Audiometric test methods — Part 2: Sound field audiometry with pure tone and narrow band test signals*.

IEC 645-1:1992, *Audiometers — Part 1: Pure-tone audiometers*.

IEC 645-2:1993, *Audiometers — Part 2: Equipment for speech audiometry*.

¹⁾ To be published. (Revision of ISO 266:1975)