



SLOVENSKI STANDARD

SIST EN 60268-16:2003

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Sound system equipment - Part 16: Objective rating of speech intelligibility by speech transmission index (IEC 60268-16:2003)

Sound system equipment -- Part 16: Objective rating of speech intelligibility by speech transmission index

Elektroakustische Geräte -- Teil 16: Objektive Bewertung der Sprachverständlichkeit durch den Sprachübertragungsindex

Equipements pour systèmes électroacoustiques -- Partie 16: Evaluation objective de l'intelligibilité de la parole au moyen de l'indice de transmission de la parole

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Sound system equipment
Part 16: Objective rating of speech intelligibility
by speech transmission index
(IEC 60268-16:2003)

Equipements pour systèmes
électroacoustiques
Partie 16: Evaluation objective
de l'intelligibilité de la parole
au moyen de l'indice de transmission
de la parole
(CEI 60268-16:2003)

Elektroakustische Geräte
Teil 16: Objektive Bewertung der
Sprachverständlichkeit durch den
Sprachübertragungsindex
(IEC 60268-16:2003)

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Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Lithuania, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of document 100/650/FDIS, future edition 3 of IEC 60268-16, prepared by IEC TC 100, Audio, video and multimedia systems and equipment, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60268-16 on 2003-07-01.

This European Standard supersedes EN 60268-16:1998.

The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2004-04-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2006-07-01

Annexes designated "normative" are part of the body of the standard.

Annexes designated "informative" are given for information only.

In this standard, annexes A and ZA are normative and annexes B to E are informative.

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60268-16:2003 was approved by CENELEC as a European Standard without any modification.

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Annex ZA (normative)

Normative references to international publications with their corresponding European publications

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
ISO/TR 4870	1991	Acoustics - The construction and calibration of speech intelligibility tests	-	-
ITU-T Recommendation P.51	1996	Artificial mouth	-	-

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IEC 60268-16

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2003-05

Sound system equipment –

Part 16: Objective rating of speech intelligibility by speech transmission index

iTeh STANDARD PREVIEW

Équipements pour systèmes électroacoustiques –

Partie 16: [SIST EN 60268-16:2003](https://www.intellego.com/standards/sist-en-60268-16-2003)

*Évaluation objective de l'intelligibilité de la parole
au moyen de l'indice de transmission de la parole*

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International Electrotechnical Commission
Международная Электротехническая Комиссия

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

SOUND SYSTEM EQUIPMENT –

Part 16: Objective rating of speech intelligibility
by speech transmission index

FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of the IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested National Committees.
- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical specifications, technical reports or guides and they are accepted by the National Committees in that sense.
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International Standard IEC 60268-16 has been prepared by IEC technical committee 100: Audio, video and multimedia systems and equipment.

This third edition cancels and replaces the second edition, published in 1998. This third edition constitutes a technical revision.

The text of this standard is based on the following documents:

FDIS	Report on voting
100/650/FDIS	100/677/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication will remain unchanged until 2005. At this date, the publication will be

- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- amended.

A bilingual edition of this standard may be issued at a later date

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SOUND SYSTEM EQUIPMENT –

Part 16: Objective rating of speech intelligibility by speech transmission index

1 Scope

This part of IEC 60268 defines objective methods for rating the transmission quality of speech with respect to intelligibility. The four methods, which are closely related, are referred to as the “STI,” the “STITEL”, the “STIPA” and the “RASTI” methods (see Clause 3). The methods are intended for rating speech transmission with or without sound systems.

A survey of other methods of determining or predicting speech intelligibility is also included, together with a method of correlating the results of different methods of determination.

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 4870:1991, *Acoustics – The construction and calibration of speech intelligibility tests*

ITU-T Recommendation P.51:1996, *Artificial mouth*

3 Definitions and abbreviations

For the purpose of this document, the following definitions apply.

3.1

speech transmission index (STI)

physical quantity representing the transmission quality of speech with respect to intelligibility

3.2

speech transmission index for telecommunication systems (STITEL)

index obtained by a condensed version of the STI method but still responsive to distortions found in communication systems

3.3

speech transmission index for public address systems (STIPA)

index obtained by a condensed version of the STI method but still responsive to distortions found in room acoustics including public address systems

3.4

room acoustics speech transmission index (RASTI)

index obtained by a condensed version of the STI method, to be used for screening purposes and focused on direct communication between persons without making use of a communication system. RASTI accounts for noise interference and distortions in the time domain (echoes, reverberation)