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Part 1:

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Acoustique — Description, mesurage et évaluation du bruit de l'environnement —

Partie 1: Grandeurs fondamentales et méthodes d'évaluation





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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.

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 43, *Acoustics*, Subcommittee SC 1, *Noise*.

This third edition cancels and replaces the second edition (ISO 1996-1:2003), which has been technically revised. In particular, the following subclauses and annexes have been added or revised: 3.6, 6.3.1, 6.5, 8.1, 8.2.1 i), Annex A, Annex D, Annex E, Annex F, Annex G, and Annex H.

ISO 1996 consists of the following parts, under the general title *Acoustics — Description, measurement* and assessment of environmental noise:

- Part 1: Basic quantities and assessment procedures
- Part 2: Determination of sound pressure levels

Introduction

To be of practical use, any method of description, measurement, and assessment of environmental noise is intended to be related in some way to what is known about human response to noise. Many adverse consequences of environmental noise increase with increasing noise, but the precise dose-response relationships involved continue to be the subject of scientific debate. In addition, it is important that all methods used be practicable within the social, economic, and political climate in which they are used. For these reasons, there is a very large range of different methods in use around the world for different types of noise, and this creates considerable difficulties for international comparison and understanding.

The broad aim of the ISO 1996 series is to contribute to the international harmonization of methods of description, measurement, and assessment of environmental noise from all sources.

The methods and procedures described in this part of ISO 1996 are intended to be applicable to noise from various sources, individually or in combination, which contribute to the total exposure at a site. At the stage of technology at the time of publication of this part of ISO 1996, the evaluation of long-term noise annoyance seems to be best met by adopting the adjusted A-weighted equivalent continuous sound pressure level, which is termed a "rating level".

The aim of the ISO 1996 series is to provide authorities with material for the description and assessment of noise in community environments. Based on the principles described in this part of ISO 1996, national standards, regulations, and corresponding acceptable limits for noise can be developed.