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INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION

R 1996

ACOUSTICS

ASSESSMENT OF NOISE

WITH RESPECT TO COMMUNITY RESPONSE

1st EDITION

May 1971

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BRIEF HISTORY

The ISO Recommendation R 1996, *Acoustics – Assessment of noise with respect to community response,* was drawn up by Technical Committee ISO/TC 43, *Acoustics,* the Secretariat of which is held by the British Standards Institution (BSI).

Work on this question led to the adoption of Draft ISO Recommendation No. 1996, which was circulated to all the ISO Member Bodies for enquiry in May 1970. It was approved, subject to a few modifications of an editorial nature, by the following Member Bodies :

Australia	France	New Zealand
Austria	Germany	Norway
Belgium	Greece	South Africa, Rep. of
Canada	Hungary	Sweden
Czechoslovakia	Ireland	Switzerland
Denmark	Japan	U.A.R.
Finland	Netherlands	U.S.S.R.

The following Member Bodies opposed the approval of the Draft :

United Kingdom
U.S.A.

This Draft ISO Recommendation was then submitted by correspondence to the ISO Council, which decided to accept it as an ISO RECOMMENDATION.

ISO Recommendation R 1996 May 1971

ACOUSTICS

ASSESSMENT OF NOISE WITH RESPECT TO COMMUNITY RESPONSE

INTRODUCTION

The reduction, or limitation, of noise which causes annoyance is of increasing general importance. This ISO Recommendation suggests methods for measuring and rating noises in residential, industrial and traffic areas with respect to their interference with rest, working efficiency, social activities and tranquillity.

Besides noise there may be other factors in connection with sound production and radiation, for example mechanical vibrations, which also give rise to annoyance in particular situations and which make the assessment more complex. No general method exists at present to take account of these factors, but the application of numbers and corrections, other than those described, may be desirable in some cases.

The method described in this ISO Recommendation is considered suitable for predicting approximately the public reaction likely to be caused by noise, and may help authorities to set limits for noise levels.

Some problems related to aircraft noise are treated separately; see ISO Recommendation R 507*, *Procedure for describing aircraft noise around an airport.*

1. SCOPE

This ISO Recommendation is intended as a guide to the measurement of the acceptability of noise in communities. It specifies a method for the measurement of noise, the application of corrections to the measured levels (according to duration, spectrum character and peak factor), and a comparison of the corrected levels with a noise criterion which takes account of various environmental factors.

The method given for rating noises with respect to community response forms a basis on which limits for noises in various situations may be set by the competent authorities.

The method of rating involves the measurement of the A-weighted sound level in decibels (commonly called dB(A))**.

Where corrective measures are required, a frequency analysis may be necessary. The resulting data may be compared with noise rating curves, for instance the NR-curves, in order to identify the intrusive frequency bands. This more elaborate procedure is described in Appendix Y.

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* 2nd edition, 1970.

** As defined in IEC Publication 123, *Recommendations for sound level meters,* or IEC Publication 179, *Precision sound level meters.*