

“Capacity Building and Strengthening Institutional Arrangement”

Analysis and sampling of air and air pollution

Iso 1996- 1:2003

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ISO 1996-1:2003

ISO 1996-1:2003 defines the basic quantities to be used for the description of noise in community environments and describes basic assessment procedures.

It also specifies methods to assess environmental noise and gives guidance on predicting the potential annoyance response of subjects to long-term exposure from various types of environmental noises.

The sound sources can be separated in various combinations. Application of the method to predict annoyance response is limited to areas where people reside and to related long-term land uses.

ISO 1996-1 does not specify limits for environmental noise.

Subjects response to noise can vary differently among sound sources that are observed to have the same acoustic levels. ISO 1996-1 describes adjustments for sounds that have different characteristics.

The term rating level is used to describe physical sound predictions or measurements to which one or more adjustments have been added. On the basis of these rating levels, the long-term community response can be estimated.

The sounds are assessed either singly or in combination, allowing for consideration, when deemed necessary by responsible authorities, of the special characteristics of their impulsiveness, tonality and low-frequency content, and for the different characteristics of road traffic noise, other forms of transportation noise (such as aircraft noise) and industrial noise.

In the following slides are listed some ISOs most used in the acoustic field:

UNI 11116:2004

Acoustics - B-chain electro-acoustic response of motion-picture control rooms and indoor theatres - Specifications and measurements

UNI EN 1794-1:2004

Road traffic noise reducing devices - Non-acoustic performance - Part 1: Mechanical performance and stability requirements

UNI EN 1794-2:2004

Road traffic noise reducing devices - Non-acoustic performance - Part 2: General safety and environmental requirements

UNI EN 12354-1

Building acoustics; estimation of acoustic performance of buildings from the performance of products, part 1, airborne sound insulation between rooms

UNI ISO 13472-1:2004

Acoustics - Procedure for measuring sound absorption properties of road surfaces in situ : "Extended surface method".

UNI EN ISO 140-14 :2004

Acoustics - Measurement of sound insulation in buildings and of building elements – Part 14: Guidelines for particular situations

UNI EN ISO 389-8

Acoustics - Reference zero for the calibration of audiometric equipment - Part 8: Reference equivalent threshold sound pressure levels for pure tones and circumaural earphones

UNI EN ISO 354:2004

Acoustics - Measurement of sound absorption in a reverberation room

UNI EN ISO 3745:2004

Acoustics - Determination of sound power levels of noise sources using sound pressure - Precision methods for anechoic and hemi-anechoic rooms

UNI EN ISO 5135:2003

Acoustics - Determination of sound power levels of noise from air-terminal devices, air-terminal units, dampers and valves by measurement in a reverberation room

UNI EN ISO 7779 :2003

Acoustics - Measurement of airborne noise emitted by information technology and telecommunications equipment - Noise measurement specification for CD/DVD-ROM drives

UNI EN ISO 9614-3

Acoustics. Determination of sound power levels of noise sources using sound intensity. Part 3: Precision method for measurement by scanning.

UNI EN ISO 11205 :2004

Acoustics. Noise emitted by machinery and equipment. Determination of emission sound pressure levels in situ at the work station and at other specified positions using sound intensity.

UNI EN ISO 11819-1:2004

Measurement of the influence of road surfaces on traffic noise - Part 1: Statistical Pass-By method

UNI EN ISO 14257 :2004

Acoustics - Measurement and parametric description of spatial sound distribution curves in workrooms for evaluation of their acoustical performance

UNI EN ISO 15186-1 :2003

Measurement of sound insulation in buildings and of building elements using sound intensity - Part 1: Laboratory conditions

UNI CEN/TS 1793-4:2004

Road traffic noise reducing devices - Test method for determining the acoustic performance - Part 4: Intrinsic characteristics - In situ values of sound diffraction"