

APPENDIX 7 AIR AND CLIMATE

Appendix 7.1 Explanation of Noise Terms

Definitions of environmental noise terms are detailed in ISO1996 (BS7445), *Description and Measurement of Environmental Noise*.

The following explanations of the terms used in this assessment are meant to clarify the nature and use of each term and are made with reference to the glossary of terms in PPG24.

L_A A-weighted sound pressure level (in decibels, dB)

The measured sound level incorporating a logarithmic base and weighting system to approximate the manner in which humans perceive sound. An increase in 10 dB is approximately equivalent to a perceived doubling of loudness.

$L_{Aeq, T}$ Equivalent continuous A-weighted sound pressure level (in decibels, dB), over a given time interval

An average of the energy associated with the noise at a location over a given time interval. Where a time interval is not given it is typically considered as a continuous level.

Indicates the activity noise level of a source. Typical source descriptions include “ambient noise”, “specific noise” and “residual noise” as defined in BS4142.

$L_{A10, T}$ A-weighted sound pressure level (in decibels, dB) obtained using “Fast” time-weighting that is exceeded for 10% of the given time interval.

Indicates the upper limit of a fluctuating noise source such as that from road traffic. For road traffic, it is typically expressed for peak hour, or as the arithmetic average of hourly L_{A10} values over an 18 hour day (06:00-24:00).

$L_{A90, T}$ A-weighted sound pressure level (in decibels, dB) obtained using “Fast” time-weighting that is exceeded for 90% of the given time interval.

Defined as the background noise level at a location in BS4142.

