

Annex B

Description of database

TABLE OF CONTENTS

1 The database *1*

TABLES

Table 1: description of fields in database 1

1 The database

The database is very simple and build of a single EXCEL sheet. The description of the fields is given in Table 1.

Table 1: description of fields in database

number	number of test
method (SPB/CPB)	method (SPB or CPB)
method (FF7.5/BB5.0)	method (free field 7.5 or Backing Board 5.0)
singularities (MC/HB/TC)	singularities (manhole cover, hump and bump or tram crossing)
(nor/ref)	normalised at singularities or at reference surface
reference no.	reference no. of test
date	date of test
air temperature	air temperature at test
number of vehicles	number of vehicles at test
v_mean	mean velocity in km/h
v_min	minimum velocity in km/h
v_max	maximum velocity in km/h
v_sig	standard deviation of velocity in km/h
L_mean	mean noise level in dB(A)
L_sig	standard deviation of noise level in dB(A)
a	axis intercept of regression line at $0 = \log(1 \text{ km/h} / \text{km/h})$ in dB(A)
b	slope of regression line in dB(A) = $\text{dB(A)} \log(\text{km/h} / \text{km/h})$
L_30	noise level at 30 km/h
s_30	standard deviation of noise level at 30 km/h
L_40	noise level at 40 km/h
s_40	standard deviation of noise level at 40 km/h
L_50	noise level at 50 km/h
s_50	standard deviation of noise level at 50 km/h
L_60	noise level at 60 km/h
s_60	standard deviation of noise level at 60 km/h
L_70	noise level at 70 km/h
s_70	standard deviation of noise level at 70 km/h

The regression line is defined as:

$$L(v) = a + b \cdot \log\left(\frac{v}{1\text{km/h}}\right)$$

where:

$L(v)$ is the noise level at velocity v ,

a is the axis intercept and

b is the slope of the regression line.

For normalisation corrections of the angle between direction of travelling and microphone where done. If the measurements were taken with an angle of 45° in a distance of $\sqrt{2} \cdot 5,0$ m there was a correction of -1.2 dB(A) to compensate the horn effect. There is no temperature correction.