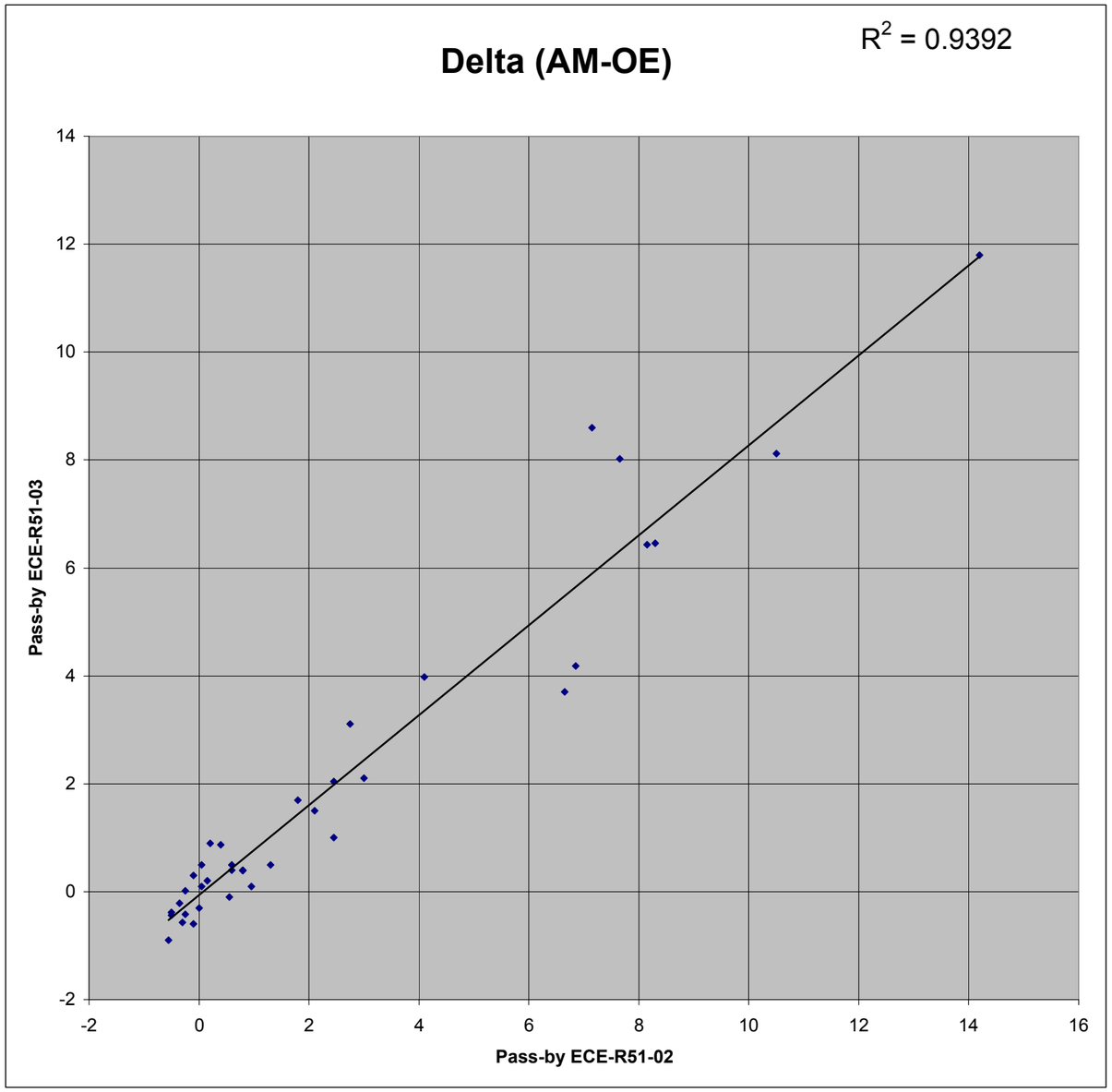
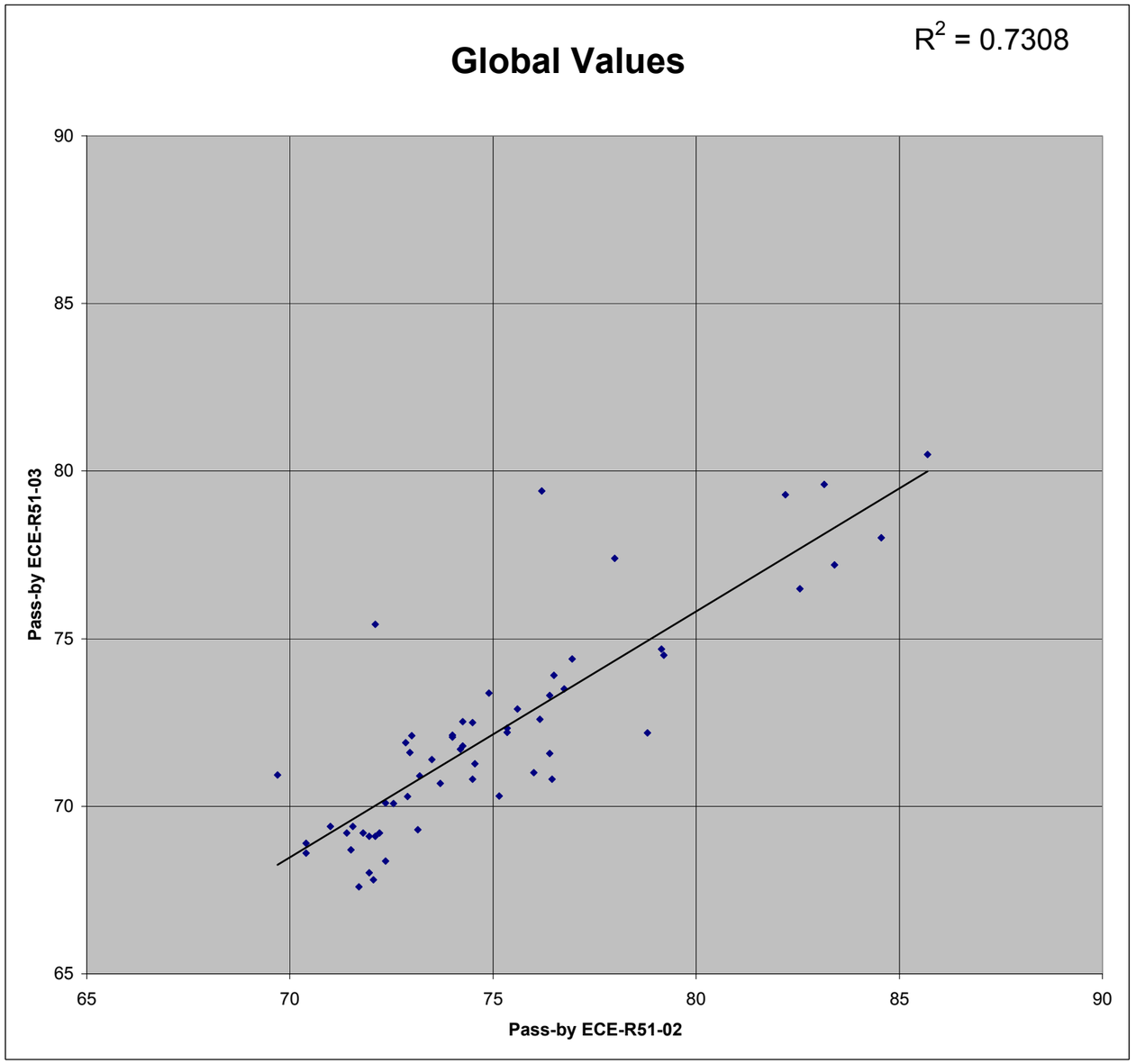
Comparison of noise test results according to ECE R-51.02 and R-51.03

(Transmitted by CLEPA)

Informal document No. GRB-42-6
(42nd GRB, 5-7 September 2005,
agenda item 1.3.)

Vehicle data														ECE-R51-03															ECE-R51-02					
No	Vehicle brand	model	Class	Sub Class	Exhaust system	Engine	Engine capacity [l]	T/m	No Gear	Power kW	Mass kg	l veh m	Engine F/M/R	PMR kW/t	a urb m/s²	a wot ref m/s²	gears i	gears i+1	a i m/s²	a i+1 m/s²	L_gear_wot [dBA] i	L_gear_wot [dBA] i+1	L_gear_crs [dBA] i	L_gear_crs [dBA] i+1	Lwot dB(A)	Lcrs dB(A)	L urb dB(A)	Ltyp dB(A)	Delta dB(A)	L_gear [dBA] D	L_gear [dBA] 2.0	L_gear [dBA] 3.0	L_avg dB(A)	Ltyp dB(A)	Delta dB(A)
1	Ford	Fusion	M1	PC	OE	Petrol	1.4	manual	5	58	1045	4.02	F	52	0.99	1.32	2	3	1.72	1.00	70.9	68.8	69.2	66.8	69.7	67.8	69.2	69.0			73.2	69.6	71.4	70	
2	Ford	Fusion	M1	PC	AM1	Petrol	1.4	manual	5	58	1045	4.02	F	52	0.99	1.32	2	3	1.83	1.11	73.2	71.1	67.5	68.9	71.8	68.5	70.9	71.0	1.7		74.9	71.5	73.2	72	1.8
3	Ford	Fusion	M1	PC	AM2	Petrol	1.4	manual	5	58	1045	4.02	F	52	0.99	1.32	2	3	1.60	0.96	70.0	69.1	68.2	66.6	69.6	67.5	69.1	69.0	-0.1		73.5	70.4	72.0	71	0.5
4	Ford	Fusion	M1	PC	AM3	Petrol	1.4	manual	5	58	1045	4.02	F	52	0.99	1.32	2	3	1.74	1.03	70.6	69.5	69.2	66.8	69.9	67.8	69.4	69.0	0.2		72.8	70.3	71.6	71	0.1
5	Suzuki	Alto	M1	PC	OE	Petrol	1.0	manual	5	39	660	3.40	F	53	1.00	1.33	2	3	1.64	1.06	73.8	70.2	71.6	68.9	71.9	70.1	71.6	72.0			74.2	71.7	73.0	72	
6	Suzuki	Alto	M1	PC	AM1	Petrol	1.0	manual	5	39	660	3.40	F	53	1.00	1.33	2	3	1.57	1.04	74.4	70.0	71.7	68.5	72.4	70.3	71.9	72.0	0.3		74.2	71.5	72.9	72	-0.1
7	Suzuki	Alto	M1	PC	AM2	Petrol	1.0	manual	5	39	660	3.40	F	53	1.00	1.33	2	3	1.53	1.00	74.0	70.3	71.9	68.5	72.6	70.6	72.1	72.0	0.5		74.5	71.5	73.0	72	0.0
8	Nissan	Almera	M1	PC	OE	Petrol	1.5	manual	5	66	1165	4.18	F	53	1.00	1.33	2	3	1.75	1.09	72.2	69.8	69.0	67.8	70.7	68.2	70.1	70.0			74.3	70.4	72.4	71	
9	Nissan	Almera	M1	PC	AM1	Petrol	1.5	manual	5	66	1165	4.18	F	53	1.00	1.33	2	3	1.61	1.09	71.7	68.6	67.7	66.2	70.0	66.9	69.2	69.0	-0.9		73.8	69.8	71.8	71	-0.5
10	Fiat	Marea	M1	PC	OE	Petrol	1.6	manual	5	76	1140	4.36	F	63	1.04	1.45		3		1.27		70.7		68.2	70.7	68.2	70.3	70.0			79.9	70.4	75.2	74	
11	Fiat	Marea	M1	PC	AM1	Petrol	1.6	manual	5	76	1140	4.36	F	63	1.04	1.45		3		1.32		71.4		68.7	71.4	68.7	70.8	71.0	0.5		80.9	72.0	76.5	75	1.3
12	Audi	A4	M1	PC	OE	Petrol	2.0	manual	5	96	1285	4.55	F	71	1.07	1.53		3		1.34		71.5		68.9	71.5	68.9	71.0	71.0			79.4	72.6	76.0	75	
13	Audi	A4	M1	PC	AM1	Petrol	2.0	manual	5	96	1285	4.55	F	71	1.07	1.53		3		1.23		81.2		68.7	81.2	68.7	79.6	80.0	8.6		85.4	80.9	83.2	82	7.2
14	Mitsubischi	Pajero	M1	PC	OE	Diesel	2.5	manual	5	85	1780	4.61	F	46	0.96	1.23		3		1.31		72.5		71.5	72.5	71.5	72.2	72.0			77.1	73.6	75.4	74	
15	Mitsubischi	Pajero	M1	PC	AM1	Diesel	2.5	manual	5	85	1780	4.61	F	46	0.96	1.23		3		1.27		73.1		71.1	73.1	71.1	72.6	73.0	0.4		77.7	74.6	76.2	75	0.8
16	Nissan	Micra	M1	PC	OE	Diesel	1.5	manual	5	48	945	3.72	F	47	0.96	1.25	3	4	1.41	0.92	70.1	68.8	67.7	66.9	69.7	67.4	69.2	69.0			73.7	70.7	72.2	71	
17	Nissan	Micra	M1	PC	AM1	Diesel	1.5	manual	5	48	945	3.72	F	47	0.96	1.25	3	4	1.38	0.90	70.5	68.0	68.0	66.7	69.8	67.6	69.3	69.0	0.1		74.5	71.8	73.2	72	1.0
18	Landrover	Discovery	M1	PC	OE	Diesel	2.5	manual	5	102	2075	4.71	F	47	0.97	1.26	3	4	1.37	0.58	72.5	70.4	69.7	68.8	72.2	69.6	71.6	72.0			79.1	73.7	76.4	75	
19	Landrover	Discovery	M1	PC	AM1	Diesel	2.5	manual	5	102	2075	4.71	F	47	0.97	1.26	3	4	1.37	0.61	81.2	74.7	70.8	70.6	80.2	70.8	78.0	78.0	6.4		88.3	80.8	84.6	84	8.1
20	Landrover	Discovery	M1	PC	AM2	Diesel	2.5	manual	5	102	2075	4.71	F	47	0.97	1.26	3	4	1.39	0.55	76.5	71.6	71.6	70.6	75.7	71.4	74.7	75.0	3.1		81.5	76.8	79.2	78	2.8
21	Peugeot	Expert	M1		OE	Diesel	1.9	manual	5	51	1520	4.32	F	32	0.86	0.98		3		0.97		72.6		72.1	72.6	72.1	72.5	73.0			75.2	73.8	74.5	74	
22	Peugeot	Expert	M1		AM1	Diesel	1.9	manual	5	51	1520	4.32	F	32	0.86	0.98		3		0.94		72.2		71.6	72.2	71.6	72.1	72.0	-0.4		75.0	73.0	74.0	73	-0.5
23	Peugeot	Expert	M1		AM2	Diesel	1.9	manual	5	51	1520	4.32	F	32	0.86	0.98		3		0.96		72.1		71.6	72.1	71.6	72.1	72.0	-0.4		75.2	72.8	74.0	73	-0.5
24	Peugeot	Expert	M1		AM3	Diesel	1.9	manual	5	51	1520	4.32	F	32	0.86	0.98		3		0.96		72.6		71.7	72.6	71.7	72.5	73.0	0.0		75.3	73.2	74.3	73	-0.3
25	Peugeot	Expert	M1		AM4	Diesel	1.9	manual	5	51	1520	4.32	F	32	0.86	0.98		3		0.95		73.5		71.9	73.5	71.9	73.4	73.0	0.9		75.6	74.2	74.9	74	0.4
26	Ford	Fiesta	M1	PC	OE	Petrol	1.6	manual	5	74	1051	3.83	F	66	1.06	1.48		3		1.40		69.1		66.2	69.1	66.2	68.4	68.0			74.4	70.3	72.4	71	
27	Ford	Fiesta	M1	PC	AM1	Petrol	1.6	manual	5	74	1051	3.83	F	66	1.06	1.48		3		1.36		68.5		65.3	68.5	65.3	67.8	68.0	-0.6		74.3	69.8	72.1	71	-0.3
28	Ford	Fiesta	M1	PC	AM2	Petrol	1.6	manual	5	74	1051	3.83	F	66	1.06	1.48		3		1.36		78.3		70.3	78.3	70.3	76.5	76.0	8.1		83.3	81.8	82.6	82	10.5
29	BMW	318d	M1	PC	OE	Diesel	1.8	manual	5	85	1370	4.47	F	59	1.02	1.40		3		1.10		68.1		66.5	68.1	66.5	68.0	68.0			73.2	70.7	72.0	71	
30	BMW	318d	M1	PC	AM1	Diesel	1.8	manual	5	85	1370	4.47	F	59	1.02	1.40		3		1.04		67.6		66.6	67.6	66.6	67.6	68.0	-0.4		74.5	68.9	71.7	71	-0.3
31	BMW	318d	M1	PC	AM2	Diesel	1.8	manual	5	85	1370	4.47	F	59	1.02	1.40		3		1.12		72.7		67.1	72.7	67.1	72.2	72.0	4.2		82.6	75.0	78.8	78	6.8
32	Mercedes	E300	M1	PC	OE	Diesel	3.0	auto		130	1460	4.80	F	85	1.12	1.66		D		1.34		76.9		67.6	76.9	67.6	75.4	75.0		72.1			72.1	71	
33	Mercedes	E300	M1	PC	AM1	Diesel	3.0	auto		130	1460	4.80	F	85	1.12	1.66		D		1.25		80.7		67.7	80.7	67.7	79.4	79.0	4.0	76.2			76.2	75	4.1
34	Mercedes	A190	M1	PC	OE	Petrol	1.9	auto		92	1080	3.61	F	80	1.11	1.61		D		1.98		75.9		64.7	75.9	64.7	70.9	71.0		69.7			69.7	69	
35	Mercedes	A190	M1	PC	AM1	Petrol	1.9	auto		92	1080	3.61	F	80	1.11	1.61		D		1.69		83.5		65.6	83.5	65.6	77.4	77.0	6.5	78			78.0	77	8.3
36	Ford	Connect	M1	PC	OE	Diesel	1.8	manual	5	66	1410	4.53	F	44	0.95	1.21	3	4	1.30	0.70	71.0	68.4	69.9	67.8	70.5	69.5	70.3	70.0			74.4	71.4	72.9	72	
37	Ford	Connect	M1	PC	AM1	Diesel	1.8	manual	5	66	1410	4.53	F	44	0.95	1.21	3	4	1.27	0.68	70.6	68.5	69.5	67.4	70.3	69.2	70.1	70.0	-0.2		73.9	71.2	72.6	72	-0.3
38	Ford	Connect	M1	PC	AM2	Diesel	1.8	manual	5	66	1410	4.53	F	44	0.95	1.21	3	4	1.30	0.70	71.6	69.1	69.5	67.4	71.1	69.1	70.7	71.0	0.4		75.1	72.3	73.7	73	0.8
39	Ford	Connect	M1	PC	AM3	Diesel	1.8	manual	5	66	1410	4.53	F	44	0.95	1.21	3	4	1.30	0.70	73.6	72.0	69.1	67.5	73.3	68.8	72.3	72.0	2.0		76.9	73.8	75.4	74	2.4
40	Renault	Mégane	M1	PC	OE	Petrol	1.6	manual	5	55	1035	4.44	F	50	0.98	1.29	2	3	1.70	1.15	74.3	71.1	71.7	68.7	71.9	69.4	71.3	71.0			76.6	72.5	74.6	74	
41	Renault	Mégane	M1	PC	AM1	Petrol	1.6	manual	5	55	1035	4.44	F	50	0.98	1.29	2	3	1.66	1.13	78.3	82.7	73.3	72.4	81.4	72.6	79.3	79.0	8.0		81.3	83.1	82.2	81	7.6
42	Nissan	Almeria	M1	PC	OE	Petrol	1.5	manual	5	66	1260	4.18	F	49	0.98	1.28	2	3	1.94	1.01	71.9	68.9	66.8	65.7	69.8	66.0	68.9	69.0			71.9	68.9	70.4	69	
43	Nissan	Almeria	M1	PC	AM1	Petrol	1.5	manual	5	66	1260	4.18	F	49	0.98	1.28	2	3	1.94	1.01	72.3	68.5	66.6	65.1	69.6	65.5	68.6	69.0	-0.3		72.3	68.5	70.4	69	0
44	Nissan	Almeria	M1	PC	AM2	Petrol	1.5	manual	5	66	1260	4.18	F	49	0.98	1.28	2	3	1.94	1.01	71.9	70.0	66.5	65.6	70.6	65.9	69.4	69.0	0.5		71.9	70.0	71.0	70	0.6
45	Vauxhall	Aguila	M1	PC	OE	Petrol	1.2	manual	5	55	960	3.50	F	53	1.00	1.33		3		1.41		69.7		66.3	69.7	66.3	68.7	69.0			73.3	69.7	71.5	71	
46	Vauxhall	Aguila	M1	PC	AM1	Petrol	1.2	manual	5	55	960	3.50	F	53	1.00	1.33		3		1.41		70.7		65.2	70.7	65.2	69.1	69.0	0.4		73.4	70.7	72.1	71	0.6
47	Vauxhall	Aguila	M1	PC	AM2	Petrol	1.2	manual	5	55	960	3.50	F	53	1.00	1.33		3		1.41		83.0		74.6	83.0	74.6	80.5	81.0	11.8		88.4	83.0	85.7	85	14.2
48	Vauxhall	Aguila	M1	PC	AM3	Petrol	1.2	manual	5	55	960	3.50	F	53	1.00	1.33		3		1.41		72.0		67.8	72.0	67.8	70.8	71.0	2.1		76.9	72.0	74.5	73	3
49	Peugeot	307	M1	PC	OE	Petrol	1.6	manual	5	80	1219	4.20	F	62	1.04	1.44	2	3	1.89	1.31	73.7	71.6	71.7	70.4	72.1	70.7	71.7	72.0			75.8	72.6	74.2	73	
50	Peugeot	307	M1	PC	AM1	Petrol	1.6	manual	5	80	1219	4.20	F	62	1.04	1.44		3		1.44		72.2		70.9	72.2	70.9	71.8	72.0	0.1		75.9	72.6	74.3	73	0.1
51	Renault	Mégane	M1	PC	OE	Petrol	1.6	manual	5	66	1072	4.10	F	58	1.02	1.39		3		1.41		74.2		71.7	74.2	71.7	73.5	74.0			77.7	75.8	76.8	76	
52	Renault	Mégane	M1	PC	AM1	Petrol	1.6	manual	5	66	1072	4.10	F	58	1.02	1.39		3		1.44		75.4		71.9	75.4	71.9	74.4	74.0	0.9		77.0	76.9	77.0	76	0.2
53	Renault	Mégane	M1	PC	AM2	Petrol	1.6	manual	5	66	1072	4.10	F	58	1.02	1.39		3		1.38		75.4		72.1	75.4	72.1	74.5	75.0	1.0		81.8	76.6	79.2	78	2.4
54	Renault	Mégane	M1	PC	AM3	Petrol	1.6	manual	5	66	1072	4.10	F	58	1.02	1.39		3		1.44		79.3		72.3	79.3	72.3	77.2	77.0	3.7		86.6	80.2	83.4	82	6.7
55	Renault	Mégane	M1	PC	OE	Petrol	1.6	manual	5	66	1072	4.10	F	58	1.02	1.39		3		1.33		74.5		71.8	74.5	71.8	73.9	74.0			77.3	75.7	76.5	76	
56	Renault	Mégane	M1	PC	AM1	Petrol	1.6	manual	5	66	1072	4.10	F	58	1.02	1.39	3	4	1.50	0.97	74.4	72.9	71.3	71.2	74.1	71.3	73.3	73.0	-0.6		77.4	75.4	76.4	75	-0.1
57	BMW	323i	M1	PC	OE	Petrol	2.5	Auto		125	1425	4.00	F	83	1.12	1.64	4		1.82		73.2		68.6		73.2	68.6	71.4	71.0		73.5			73.5	73	
58	BMW	323i	M1	PC	AM1	Petrol	2.5	Auto		125	1425	4.00	F	83	1.12	1.64	4		1.84		75.3		69.0		75.3	69.0	72.9	73.0	1.5	75.6			75.6	75	2.1

Comparison of noise test results according to ECE R-51.02 and R-51.03
(Transmitted by CLEPA)

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