REGULATION No. 51 (Noise of M and N categories of vehicles)

Japanese Position on new limit values for 03 series of amendments to Regulation No. 51

Submitted by the experts from Japan

The following table shows the proposal on new limit values for 03 series of amendments to Regulation No.51 in the formal document submitted by the expert from Japan.

Japanese position on limit values, sub-categories and transitional provisions for ECE R51.03, new vehicle types						
		Stage 1 Stage 2		Stage 3 ³		
		2 years after entry into force of ECE R51.03	4 years after stage 1	6 years after stage 1	[4] years after stage 2	[6] years after stage 2
		Limit [dB(A)]	Limit [dB(A)]	Limit [dB(A)]	Limit [dB(A)]	Limit [dB(A)]
M1	PMR ≤ 120 kW/t	72	70	-	[68]	-
	120 < PMR ≤ 160 kW/t	73	-	71	[70]	-
	PMR > 160 kW/t	75	73	-	[72]	-
M2	GVW ≤ 2.5 ton	72	70	-	[69]	-
	2.5 ton < GVW ≤ 3.5 ton	74	72	-	[71]	-
	3.5 ton < GVW	75	-	73	-	[71]
М3	P ≤ 135 kW	76	-	74	-	[73]
	135 < P ≤ 250 kW	79	-	78	-	[76]
	P > 250 kW	80	-	78	-	[76]
N1	GVW \leq 2.5 ton and PMR(GVW) ¹ \leq 35kW/t	74	-	72	-	[70]
	GVW \leq 2.5 ton and 35kW/t $<$ PMR(GVW) ¹	72	70	-	[68]	-
	2.5 ton < GVW ≤ 3.5 ton	74	72	-	[71]	-
N2	P ≤ 135 kW	77	-	76	-	[73]
	P > 135 kW	78	-	77	-	[75]
N3	P ≤ 250 kW	80	-	78	-	[76]
	P > 250 kW	82	-	80 ²	-	[78]

Off-Road vehicles "G" for all categories +1 dB(A) for stage 1, wading depth 50 cm, hill climbing ability 30% as additional requirement for M1G

Off-Road vehicles "G" for N3, M3 +2 dB(A) for stage 2 and later, all other categories +1 dB(A) for stage 2 and later

M3 with an engine having rated engine speed exceeding 4000rpm +2 dB(A) for Stage 1

- 1 "PMR(GVW)" means PMR calculated by using the maximum authorized vehicle mass.
- 2 Entry-into-force date of N3 with an engine power exceeding 250 kW for stage 2 is 8 years after stage 1.
- 3 Limit values and entry-into-force dates of "Stage 3" shall be reviewed and fixed until the entry-into-force date of "Stage 2".

Justification

Based on the Informal document GRB 54-03 and GRB 55-01, the noise limit values are proposed with some modification of threshold of sub-categories, which could be the basis of the common position.