

Transmitted by the expert from China

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agenda item 3(b))

Comments on Japanese limit value suggestion of commercial vehicles

N1 category

“For vehicle types of category N1 having a PMR (power to mass ratio) of GVM less than or equal to 35kW/t and distance “d” between the front axle and the driver’s seat R-point is less than 1,100 mm , the limits of vehicles types of category N1 having a maximum authorized mass above 2.5 tons apply.”

China can partly support the suggestion of Japan, and we require to enlarge the range of this sub-category from N1 to M1 category because of the M1 mini-bus of China has the same structure with Kei-truck of Japan.

We can consider the suggestion: ““d” between the front axle and the driver’s seat R-point is less than 1,100 mm”.

But China can only partly support the suggestion of PMR (GVW) less than or equal to 35kW/t, and our suggestion is not to keep this item cause it’s going against the basically theory of ECE R51 / 03 series, but if Japan insist the PMR(GVW) we suggest PMR (GVW) less than or equal to 40kW/t. the reason is as follows:

No.	PMR (GVW)	
	Mini-bus and mini-truck of China which have same structure to Kei-truck of Japan	Saloon car (ordinary passenger car)
1	21.63	33.88 (old style which has stopped production)
2	22.39	37.88 (Nissan March which can easy been divided by “d” less than 1,100 mm)
3	23.34	40.22
4	23.84	41.73
5	24.84	43.22
6	25.28	44.59
7	26.81	45.92
8	27.25	46.01
9	27.78	46.34





10	27.78	47.83
11	28.09	48
12	29.03	48
13	30.71	48.02
14	30.86	48.57
15	31.39	48.88
16	32.26	50
17	33.62	51.71
18	33.62	51.79
19	33.71	51.87
20	33.93	52.93
21	34.10	52.93
22	35.00	53.47
23	35.28	53.75
24	35.39	54.2
25	36.50	54.74
26	37.39	55.08
27	38.71	55.68
28	38.89	57.06
29	39.01	57.14
30	39.20	58.14
31	40.65

M3 category

Only consider the engine power is not enough, that's also why China chooses the GVW for the sub-category for M3, and we think it's much more fair and equal for different products to choose the GVW for M3 as the sub-category.

We wish GRB can consider the condition all over the world, and finally make a proper decision.

The engine power is really not a proper choose for M3 category, For example:

Items	Toyota 	Yutong 
Vehicle model	Coaster 4.0L	ZK6932
Energy	Gasoline	Diesel
Engine displacement	3956cc	6500cc
Engine power	171kW	147kW
Torque	345N.m	730N.m
Exhausted	Europe 5 (4)	Europe 3
Length	7005mm	9300mm
Kerb mass	3490kg	9200kg
GVW	5500kg	12700kg
Seats number	20	43
Limit value of GRB draft and Japanese suggestion	78+2=80 dB(A)	76 dB(A)
Figure of product		
Conclusion	For the ZK6932, even it's two times size larger than Coaster 4.0L, but should carry out 4 dB(A) lower limit value than Coaster. It's impossible to fulfil the requirement 76 dB(A) even we use the electric power drive for this vehicle.	

N3 category

There is no need to set a sub-category using the border line of 150kW for N3 category. China has found no proof shows that vehicle has engine power lower than 150kW is quieter than vehicle has engine power between 150 and 250 kW.

So we think only two sub-category is enough for N3 category.

N3	Pn≤250 kW	81	80
	Pn>250 kW	82	81

The reason is as follows:

No.	Pn (kW)	Lurban (dB(A))	Average value(dB(A))
1	117	82.4	79.8
2	118	79.7	
3	118	80.7	
4	136	76.2	
150kW			
5	175	78.6	77.6
6	184	76.7	

N2 category

The engine power range of N2 category of China is very narrow (66-118kW) and much lower than Europe, that means in the system of ECE R51 / 03 series, all Chinese products must carry out the most strict limit value even it's a heavy N2 category with GVW very close to 12 000kg.

No.	Pn (kW)	GVW(kg)
1	76	4490
2	110	4500
3	66	4500
4	88	4960
5	85	5500
6	100	6485
7	115	6500
8	90	7300
9	96	8450
10	103	8510
11	115	9000
12	103	11320
13	118	11610
Range	66-118kW	4,490-11,610kg