

Informal document No. GRB-50-12

(50th GRB, 1 – 3 September, 2009, agenda item 3(c))

ASEP N1 Kei-car

50th GRB

1-3 September 2009

JASIC

Kei Car



N1 category

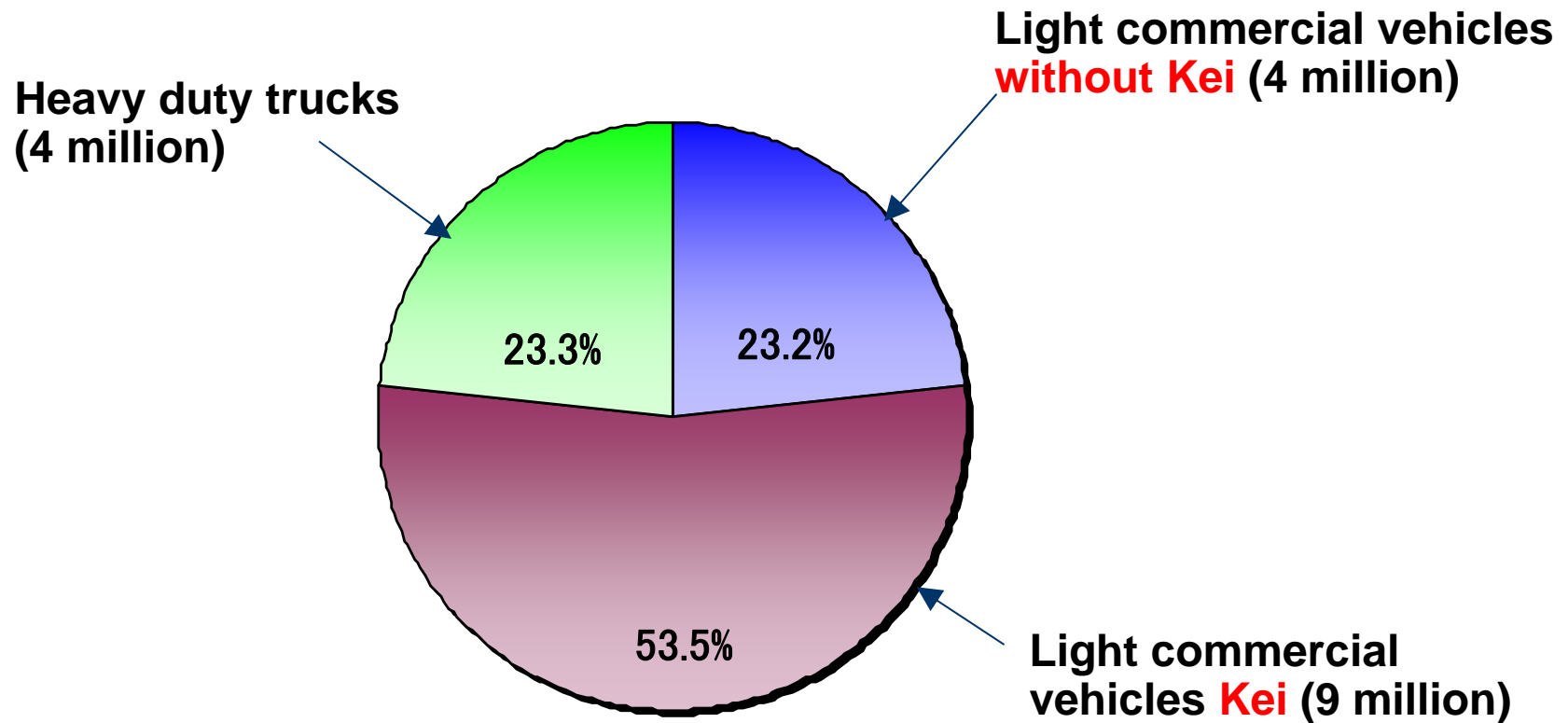


Specification for Kei car

Limited specification

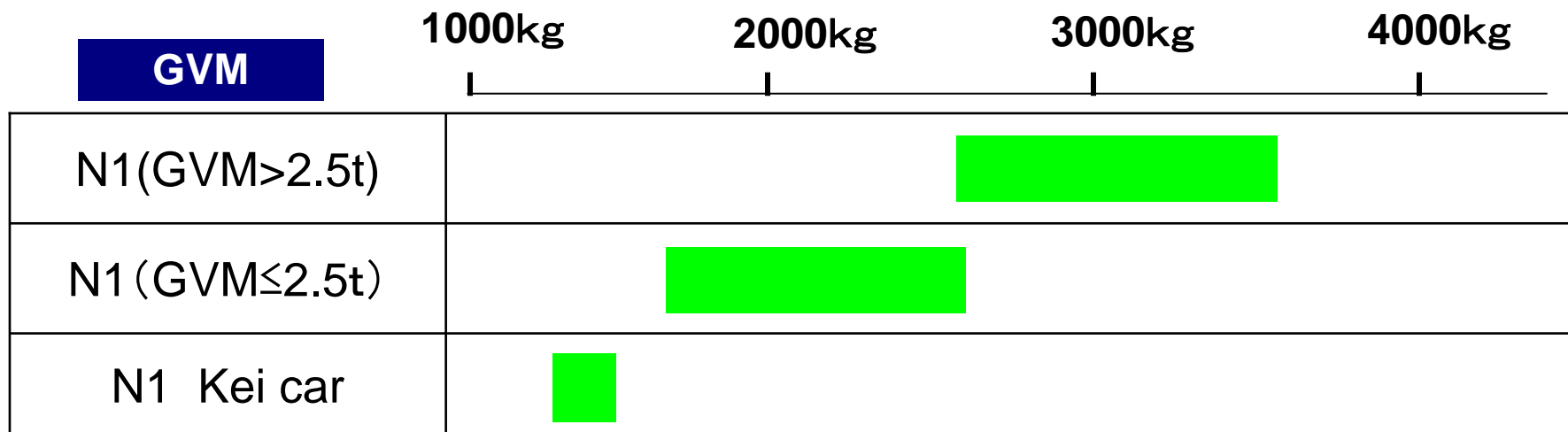
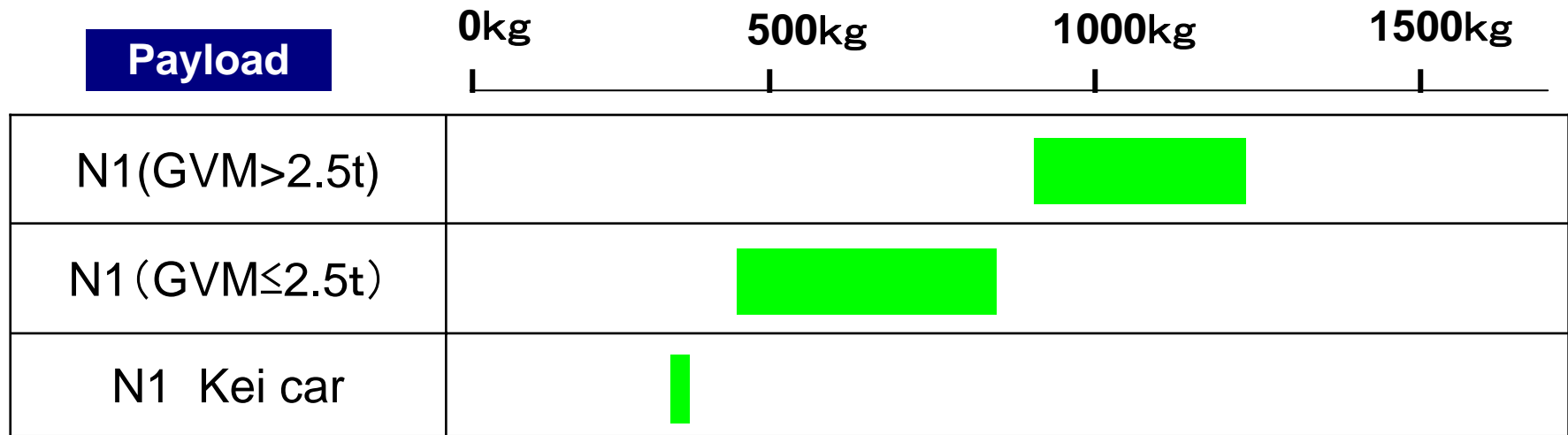
- **Vehicle length:** < 3.40 m
- **Vehicle width:** < 1.48 m
- **Vehicle height:** < 2.00 m
- **Engine displacement:** < 660 cc

The number of vehicles owned of commercial vehicles in Japan



Payload for N1

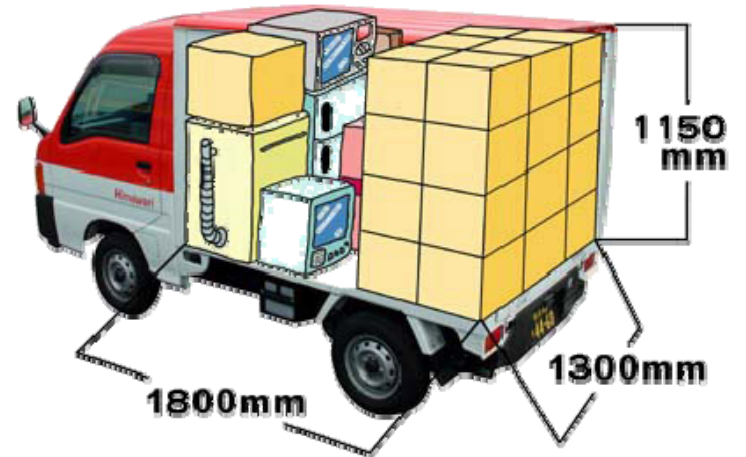
The payload for N1 Kei cars are less than normal N1 because of small car.



•Kei specially-equipped



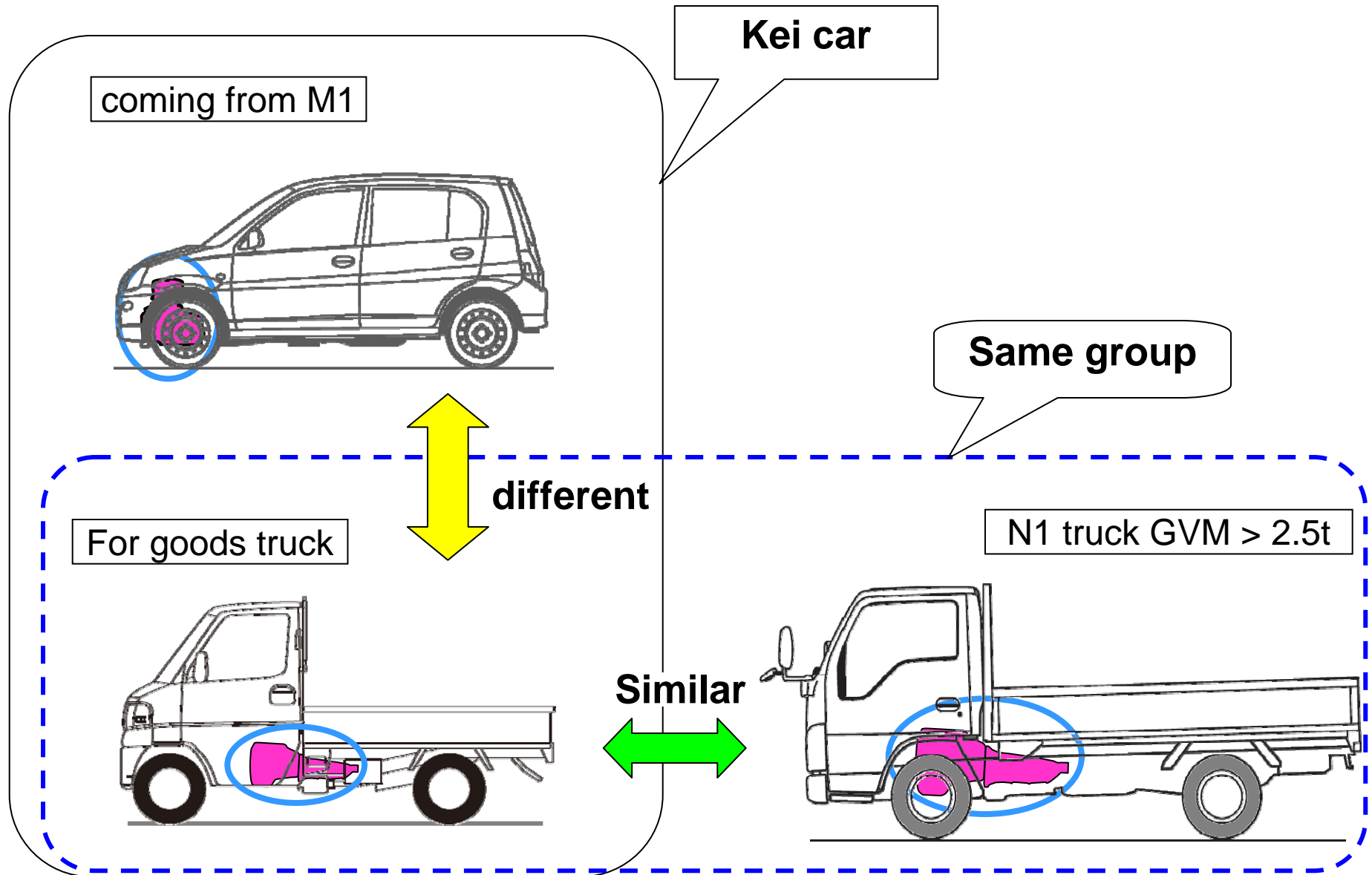
•express delivery



•Kei truck in use



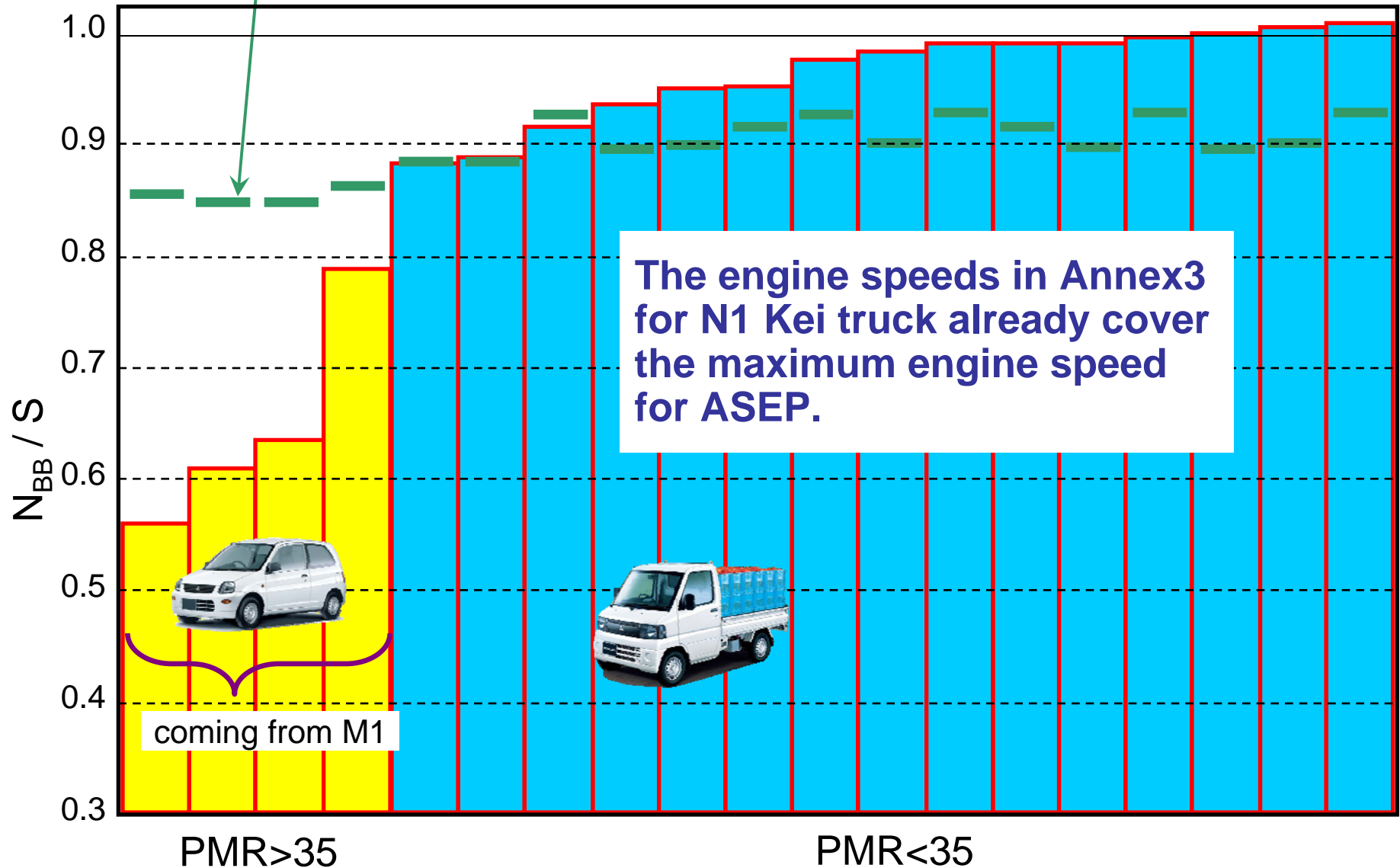
Difference between van and truck



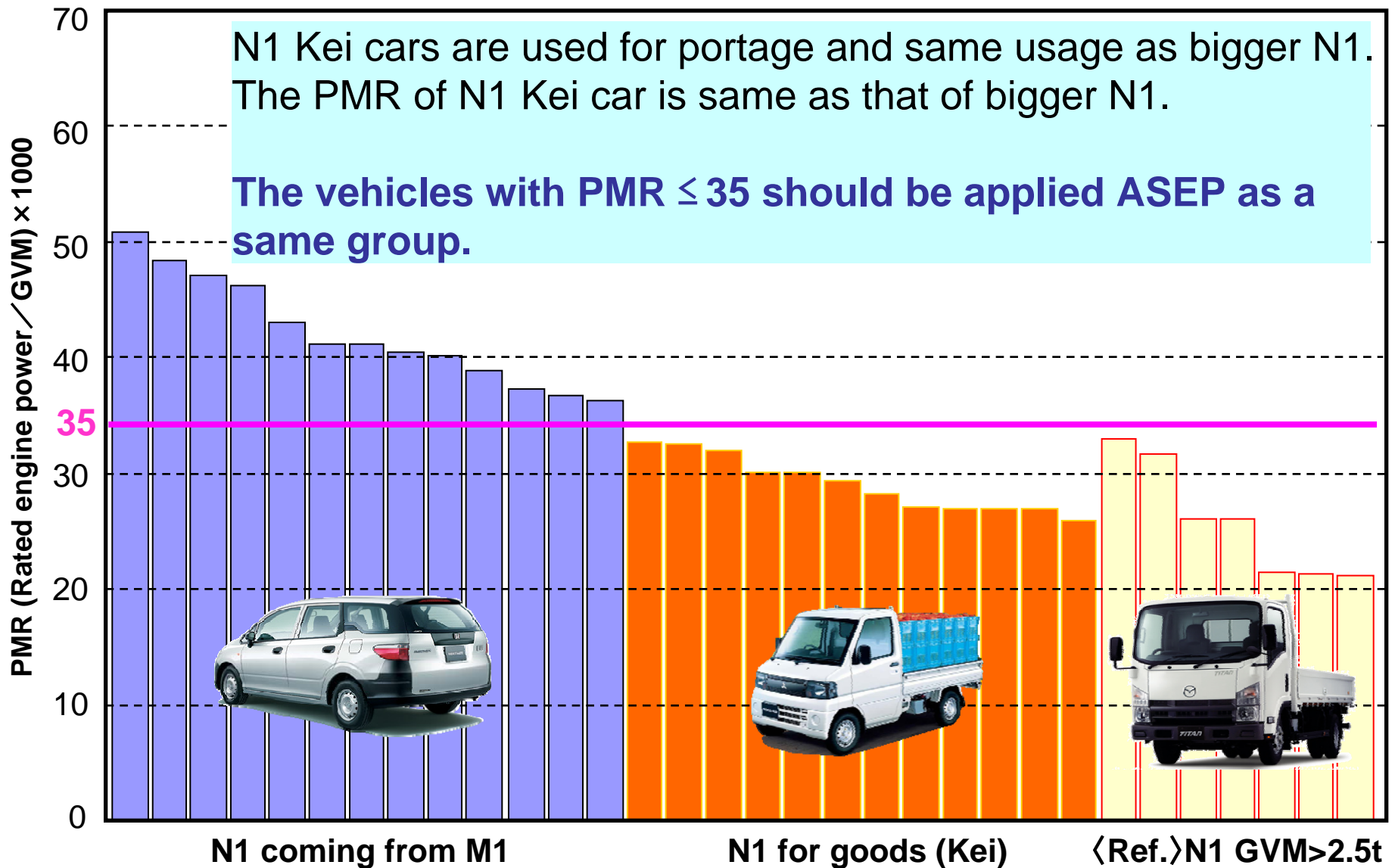
Engine speed at BB in Annex3

Maximum engine speed for ASEP

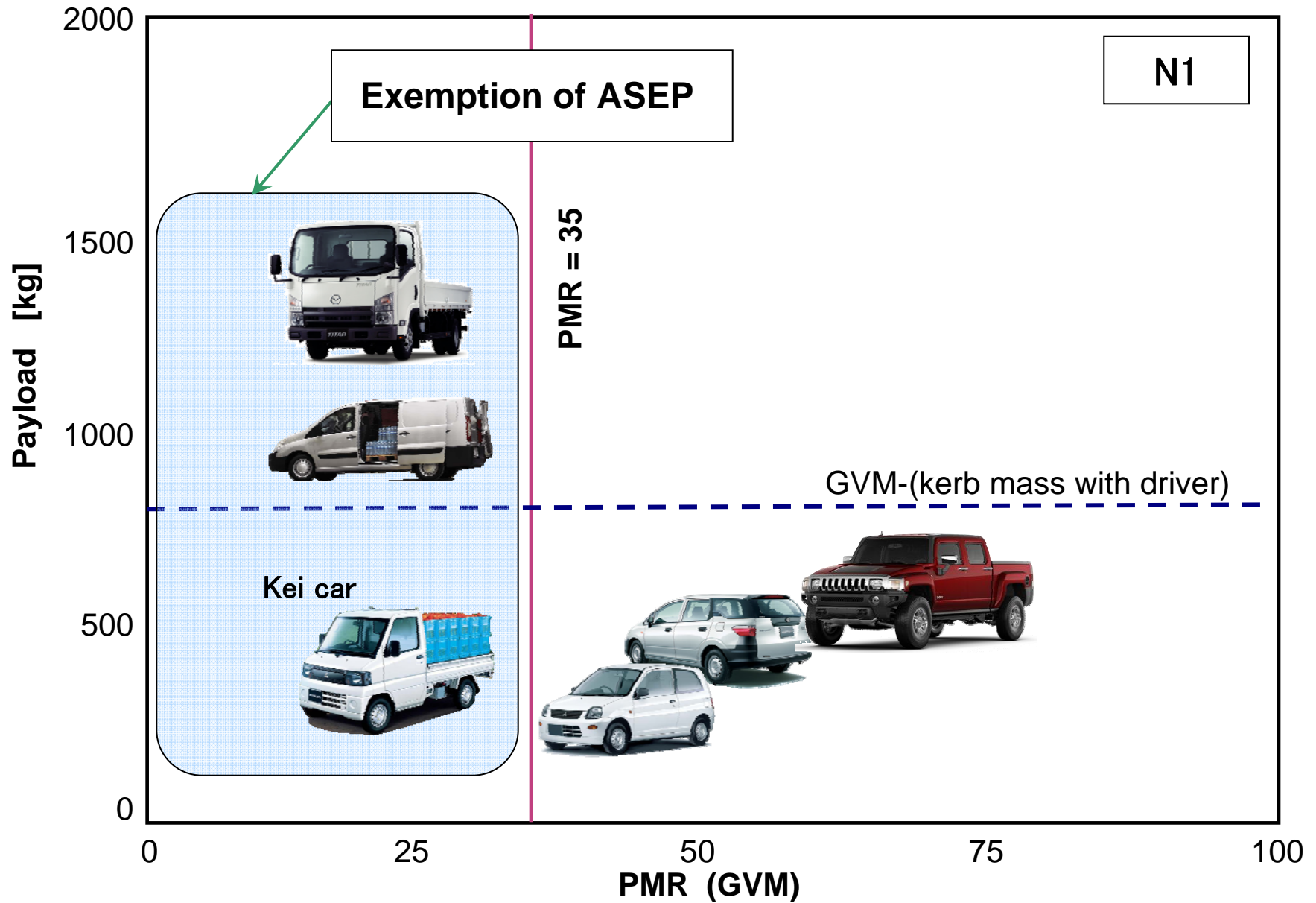
$$(2.6 \times \text{PMR}^{(-0.29)} \times (S - n_{\text{idle}}) + n_{\text{idle}}) / S$$



Power to Mass(GVM) Ratio



Payload (GVM-(Kerb weight+75)) vs. PMR (Rated engine power / GVM x 1000)



Conclusion

- N1 Kei car should be same group as bigger N1 because of same usage, same vehicle construction, and same performance.
- The payload of N1 Kei car is 300kg which is much less than the payload of bigger N1. But vehicle size/mass (GVM) and engine power are also small. Both of PMR(GVM) are same range.
- The engine speed in new Annex3 for such vehicles already covers the maximum engine speed for ASEP.

Therefore, it is not necessary to do ASEP test for the vehicles with PMR(GVM) ≤ 35 of N1.

They can be excluded.