

Informal document **GRSG-106-33**
(106th GRSG, 5-9 May 2014,
agenda item 3)

Submitted by the expert from Japan

Proposal for amendment of UNR34

1. Purpose of this amendment
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1. Purpose for the amendment



There are two main purposes for this amendment proposal;

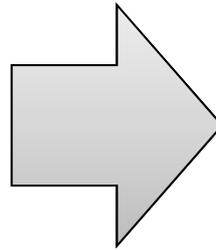
- ① Prevention and mitigation of vehicle fire breaking out by rear-end collision (**enhancing safety**).
- ② Considering establishment of IWVTA at the end of 2016, we would like to make it easier to adopt UNR34 for countries who haven't yet (**harmonization**).

Japan thinks not only ① but also ② are important.

2. Contents of the amendment

Present

- ① collision speed : 34Km/h
- ② Manufacturers' selection



After amendment

- ① collision speed : 50Km/h
- ② Mandatory

3. Justification

① Present UNR34 can be said lax comparing other countries' regulations for vehicle fire risks, because of it's lower Impact speed and the test is optional.

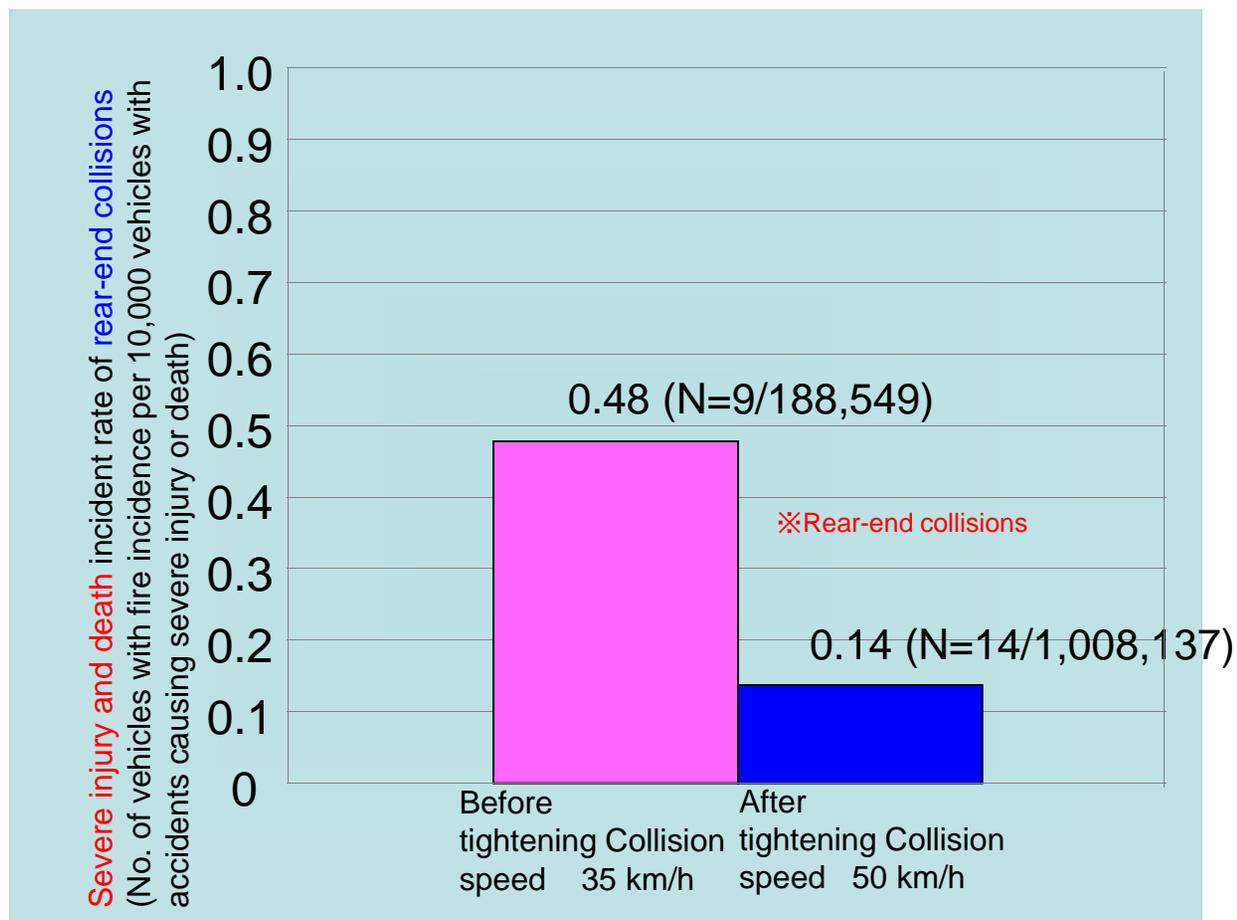
Therefore, Impact speed and test option should be amended to be higher and as mandatory.

	Impact speed	Collision type	Option/mandatory
USA	80km/h ※implement rollover test after the test.	Off set	mandatory
Canada	80km/h ※implement rollover test after the test.	Off set	mandatory
Japan	50km/h	Full wrap	mandatory
China	50km/h	Full wrap	mandatory
Korea	46.8~48.2km/h	Full wrap	Mandatory
UNECE R34	35~38km/h	Full wrap	Option (manufacture's option)

3. Justification

② We can see a certain effect by raising the speed.

In Japan, after the tightening of the rear-end collision regulation (collision speed 35 km/h → 50 km/h), the severe injury and death incidence rate of rear-end collisions by fire has reduced to about 1/3, indicating that the regulatory tightening is effective.



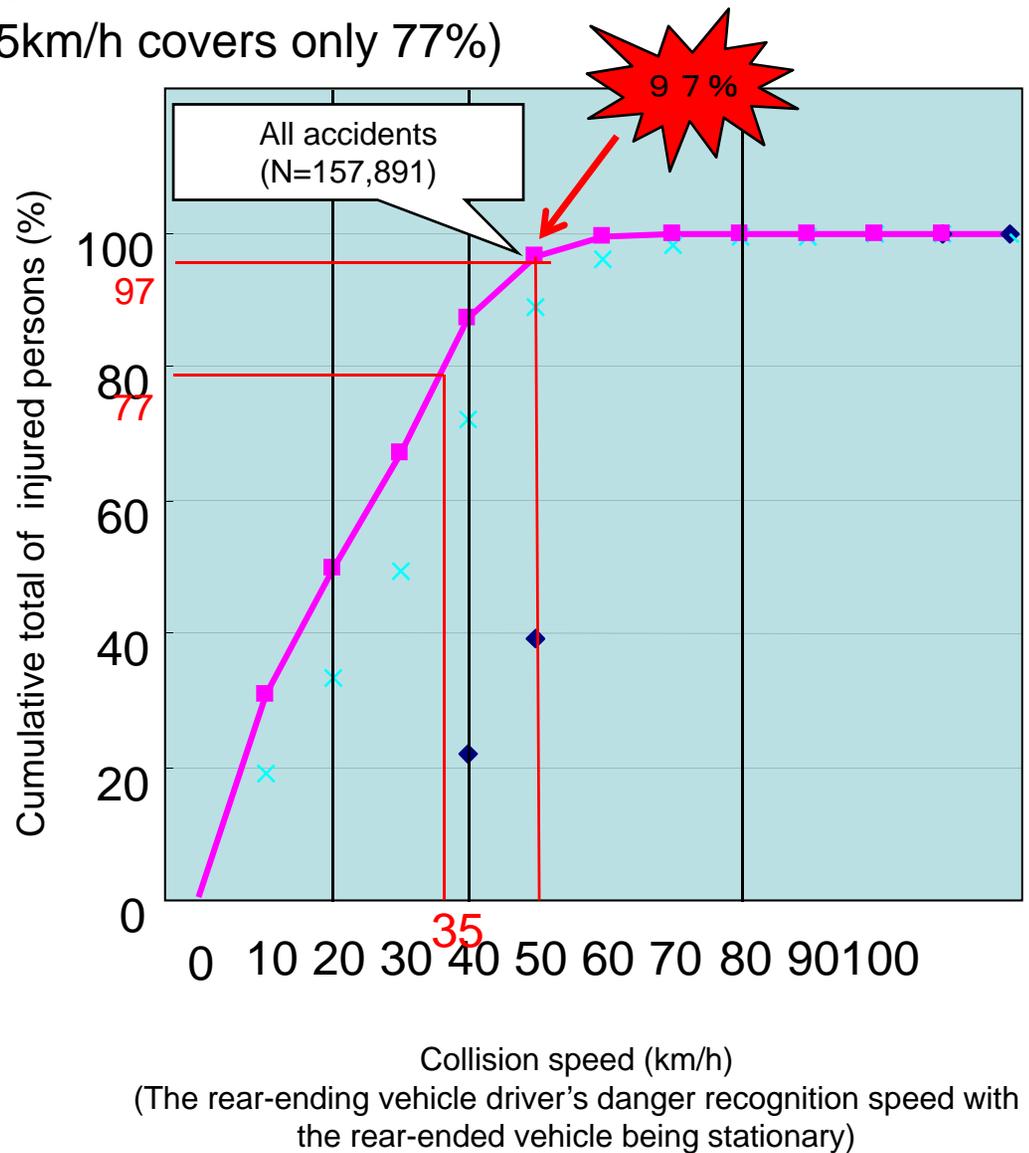
Survey Conditions

- * Years of data: 2001-2006
- Subject vehicles: Ordinary & light passenger cars
- Accident type: Vehicle-to-vehicle rear-end collision
- Subject accidents: Accidents causing injury or death by fire
- Years of first registration: Before & after rear-end collision regulation tightening
- * Number of vehicles: 1,196,686

3. Justification

③ The speed by 50km/h will cover 97% of the whole accidents of rear-end collision.

(35km/h covers only 77%)



Survey Conditions

- * Years of data: 2010
- * Subject vehicles: Ordinary & light passenger cars
- * Accident type: Vehicle-to-vehicle rear-end collision
- * Subject accidents: Accidents causing death, serious injury or minor injury
- * Subject occupants: Occupants in rear-ending & rear-ended vehicles
- All accidents:
No. of persons: 157,891

4. Summary

- Purpose of Japan's proposal of amendment are:

- ① Not only prevention and mitigation of vehicle fire by rear-end collision(**enhancing safety**),
- ② But also making it easier for countries who haven't adopted UNR34 yet, on the basis of establishment of IWVTA(**harmonization**),

Therefore,

- we would like to propose to raise the collision speed' and ' to make it mandatory'

- comparison with other regulations and analysis of decline of numbers of accidents in Japan showed it's efficiency.

- We would like your understanding and supporting our proposal.

Thank you for your attention!