Announcement on Revision of Reference Loss Cost Rates for Voluntary Automobile Insurance

(The GIROJ filed the revision with the Commissioner of the Financial Services Agency on November 24, 2016, and was notified the result of the conformance examination on December 9, 2016.)

The General Insurance Rating Organization of Japan (GIROJ) revised the Reference Loss Cost Rates for voluntary automobile insurance. The outline of the revision is as follows:

1. Outline of the revision

➤ There are many private standard- and small-size passenger automobiles in the market, and there are various kinds of automobiles in terms of body style, structure, equipment, and performance. Therefore, the Reference Loss Cost Rates are differentiated according to the model-based group rating class.

From January 1, 2018, onwards, the GIROJ will introduce new premium coefficients¹ to improve part of the model-based group rating and further differentiate premiums according to whether vehicles have an autonomous emergency braking (AEB) system (coefficient of 0.91 or a 9% discount for models equipped with AEB and coefficient of 1.00 or no discount for those not equipped with AEB).

- The premium coefficients will be applied to models for which about three years or less have passed since their launch.
- ➤ With this revision, the same premium coefficients will be introduced for private light four-wheeled passenger automobiles as well*2.

This revision assumes that by January 1, 2020, a model-based group rating will be introduced for private light four-wheeled passenger automobiles as well.

^{*2} The premium coefficients will be applied to all vehicle models until a model-based group rating is introduced.

Keyword 1 Model-based group rating class

In order to comprehensively assess differences in risks based on factors such as user groups and the characteristics of automobiles that vary according to body style, structure, equipment, and performance, premiums are differentiated (by nine classes in the case of private standard- and small-size passenger automobiles) according to the underwriting result of each vehicle model. The vehicle model is the public unit used to classify motor vehicles based on factors such as basic vehicle structure, and written in the vehicle inspection certificate. For details, refer to the Outline of Model-Based Group Rating for Voluntary Automobile Insurance, which is posted on the GIROJ's website. Details of the model-based group rating, which the GIROJ plans to introduce for private light four-wheeled passenger automobiles by January 1, 2020, are being considered.

Keyword 2 Autonomous emergency braking (AEB)

AEB is a system to automatically apply the brakes to avoid a collision with an obstacle in front of the car or reduce the collision speed.

- Note 1: Private standard- and small-size passenger automobiles refer to motor vehicles with the number 3, 5, or 7 printed in green on their white license plate, and private light four-wheeled passenger automobiles refer to motor vehicles with the number Kei(軽) 5 or Kei(軽) 7 printed in black on their yellow license plate or the number Kei(軽) 8 printed in green on their white license plate.
- Note 2: For details of contracts to which premium coefficients are applied, refer to Section 3 "Details of the Revision."
- Note 3: It should be noted that the current "driving assistance technology" such as AEB is not intended to ensure that the motor vehicle will take responsibility for safe driving on behalf of the driver

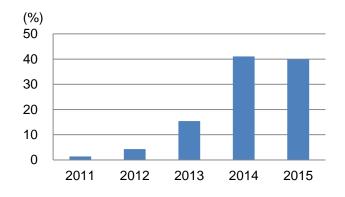
2. Background of the revision

(1) The development and proliferation of AEB-equipped motor vehicles are progressing, and the risk reduction effects of AEB are highly evaluated.

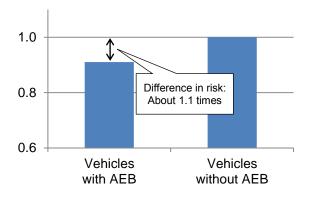
In recent years, the Ministry of Land, Infrastructure, Transport and Tourism has pushed an ASV^{*1} promotion plan aimed at reducing traffic accidents, and automobile manufacturers have also advanced the development and promotion of motor vehicles with ASV technologies to support drivers in driving safely. Among the ASV technologies, the popularity of AEB is growing in particular (see Graph 1), and this technology is believed to be highly effective in reducing traffic accidents^{*2}.

In addition, underwriting results indicate that motor vehicles with AEB have lower risks than those without (see Graph 2).

Graph 1: Changes in the ratio of AEB-equipped vehicles



Graph 2: Comparison of risks between vehicles with AEB and those without



Note 1: This graph has been created based on the ASV Technology Proliferation Survey by the Ministry of Land, Infrastructure, Transport and Tourism.

Note 3: Difference with the risk for vehicles without AEB at 1.0.

Note 4: Analyzed based on underwriting results from FY2012-2014.

Note 2: Ratio of AEB-equipped vehicles = Number of equipped vehicles / Total number of vehicles produced

(2) In some aspects, the current model-based group rating cannot fully assess the risk reduction effects of AEB.

In the Reference Loss Cost Rates, premiums are classified according to the uses and types of motor vehicles. However, various motor vehicles have different body styles, structures, equipment, and performances even though they are of the same type or employed for the same use. Therefore, it is important to assess differences in risks based on factors such as vehicle characteristics and user groups, and reflect the result of the assessment on premiums in order to ensure the fairness of premiums paid by policyholders. To that end, with regard to private standard- and small-size passenger automobiles, the model-based rating system is introduced. In this system, applicable premiums are differentiated by underwriting results of vehicle models, which are the public units of automobile classification based on factors such as basic vehicle structure.

In January of each year, the rating class applied to each vehicle model is reviewed to confirm whether it corresponds to the most recent actual risks based on underwriting results. If, as a result, the applicable class to each model in the previous year is considered as not corresponding to the most recent actual risks, the class is downed one rank in the following year if the risks are lower, and raised one rank if the risks are higher. Hence, through this reclassification, vehicle models with sufficient historical data are given a class that matches their actual risks, and in each class, the risk reduction effects of AEB are also assessed based on underwriting results.

On the other hand, with respect to recently launched vehicle models for which there is insufficient or no historical data, the risk reduction effects of AEB are not fully assessed in each class.

^{*1} Advanced safety vehicles (ASV) refer to motor vehicles equipped with AEB and other systems to assist the driver in driving safely.

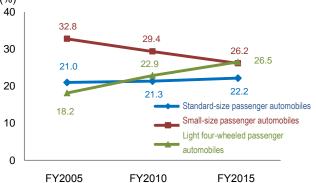
^{*2} From the FY2013 Second Meeting to Review Automobile Assessments (Ministry of Land, Infrastructure, Transport and Tourism)

Reason for introducing the model-based group rating for private light four-wheeled passenger automobiles by January 1, 2020

The percentage of private light four-wheeled passenger automobiles to total automobiles in the market has expanded, reaching the same level as that of private standard- or small-size passenger automobiles (see Graph 3), and there are various kinds of private light four-wheeled passenger automobiles in terms of body style, structure, equipment, and performance.

As a result, there are differences in underwriting result among the models of private light four-wheeled passenger automobiles as well, and such differences exceed risk differences between vehicles with AEB and those without AEB.

Graph 3: Changes in the percentage of private light four-wheeled passenger automobiles to total automobiles owned (%) 40 32.8 29.4



Source: Monthly Report on the Number of Motor Vehicles Owned (at the End of March Each Year) by the Automobile Inspection and Registration Information Association.

3. Details of the revision

The current model-based group rating cannot fully assess the risk reduction effects of AEB. In order to complement this deficiency, new premium coefficients corresponding to whether vehicles are equipped with AEB or not will be introduced. The coefficients will be applied for vehicle models for which about three years or less have passed since their launch*.

- Private standard- and small-size passenger automobiles that will be covered by such coefficients are as specified above.
- > Private light four-wheel passenger automobiles that will be covered by such coefficients are as follows:

Until the model-based rating is introduced;

All models (regardless of when they are launched.)

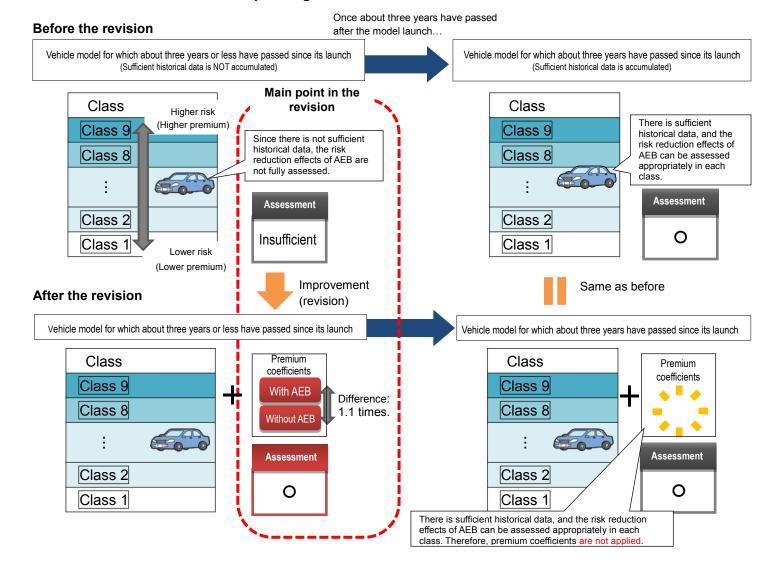
After the model-based rating is introduced;

Same as for private standard- and small-size passenger automobiles (vehicles models for which about three years or less have passed since their launch)

* "About three years or less have passed since their launch" refers to the period up to the end of December in the (calendar) year, which is obtained by adding three (3) to the fiscal year when the model is launched. For example, if a vehicle model is launched in FY2017, the period refers to the end of December 2020 (2017 + 3).

The GIROJ plans to separately provide information at its website that allows visitors to confirm whether their motor vehicle is of the model for which about three years or less have passed since its launch (whether it is covered by premium coefficients corresponding to whether vehicles are equipped with AEB or not).

■ Private standard- or small-size passenger automobiles



■ Private light four-wheeled passenger automobiles

Until the model-based group rating is introduced, the risk reduction effects of AEB are not assessed in each class for private light four-wheeled passenger automobiles at all. Therefore, premium coefficients are applied to these automobiles according to whether they are equipped with AEB or not, regardless of when they are launched.

With respect to models for which about three years have passed since their launch, the risk reduction effects of AEB can be assessed in each class in the same way as private standard- and small-size passenger automobiles after the model-based group rating is introduced to private light four-wheeled passenger automobiles. Therefore, premium coefficients are not applied to those models.

Before the model-based group rating is introduced

