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

General Insurance Rating Organization of Japan, GIROJ for short, revised Reference Loss Cost Rates for voluntary automobile insurance. For the outline of "Reference Loss Cost Rates" and "GIROJ," refer to Page 6 and 7.

1. Outline of revision

In Reference Loss Cost Rates for voluntary automobile insurance, the "model-based group rating system" will be restructured as below. The new system will be applied for voluntary automobile insurance policies, which will commence on and after January 1, 2020.

- (1) For private standard- and small-size passenger automobiles^{*1}, the existing nine classes under the "model-based group rating system" will be subdivided into 17 classes.
- (2) For private light four-wheeled passenger automobiles^{*1}, the "model-based group rating system" will be newly introduced and their models will be divided into three classes.

Keyword 1 Model-based group rating system

The model-based group rating system is a scheme for classifying automobiles to be insured according to their risks. From the perspective of voluntary automobile insurance, the risk of each automobile varies with its characteristics, such as body style, structure, equipment, and performance, as well as the characteristics of drivers. To reflect the risk differentials in the premiums, risks of automobiles are assessed in accordance with the models, which are divided into several classes. The model is an official unit of automobiles that classifies them based on their basic structure and other factors. The model is indicated in the vehicle inspection certificate.

The classes are allocated separately for each coverage type, such as bodily injury liability, property damage liability, passengers' personal accident, and physical damage.

*1 "Private standard- and small-size passenger automobile" refers to automobiles with the "3, 5, or 7 number" in their license plates. "Private light four-wheeled passenger automobile" refers to automobiles with the "kei(1)5, kei(1)7, or kei(1)8 number" in their license plates.

2. Objective and details of revision

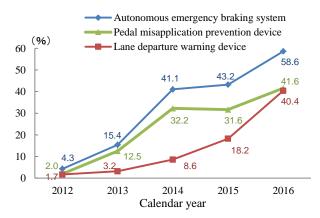
Objective: To reflect the risk differentials between models in premiums in a more appropriate manner

These days, ASV (Advanced Safety Vehicle) technology has been developing for Safety Support Cars. (Graph 1).

In Reference Loss Cost Rates for voluntary automobile insurance, the risk reduction effects of such new technologies are assessed through the "model-based group rating system."

For private standard- and small-size passenger automobiles, existing classes under the "model-based group rating system" will be subdivided to reflect the risk differentials between models in premiums in a more appropriate manner.

Graph 1 : Trend in the percentage of automobiles equipped with ASV technology among the automobiles manufactured



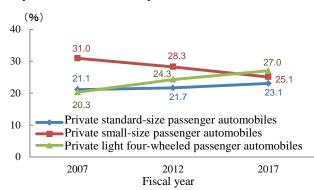
Note1: Based on the "Survey on Prevalence of ASV Technology" issued by the Ministry of Land, Infrastructure, Transport and Tourism

Note2: Percentages are calculated by dividing "the number of automobiles equipped with ASV technology" by "the total number of automobiles manufactured"

Graph 2 : Trend in component of automobiles owned

Besides, for private light four-wheeled passenger automobiles, the "model-based group rating system" will be newly introduced to reflect the risk differentials between models in premiums.

In the background, as shown in Graph 2, the number of private light four-wheeled passenger automobiles has been increasing. Their features, such as body style, structure, equipment, and performance, have also diversified. Accordingly, the difference between underwriting results of models have come to the surface



Note: Based on "Monthly Report on the Number of Motor Vehicles Owned (at the End of March in Each Fiscal Year)" by Automobile Inspection and Registration Information Association

Keyword 2 Safety Support Car

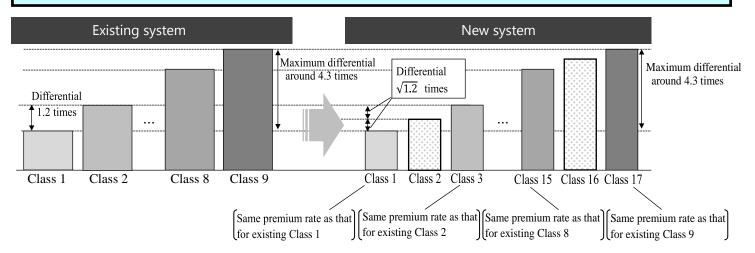
To prevent road accidents caused by elderly drivers, the Government of Japan has been promoting "Safety Support Cars," which are automobiles equipped with an autonomous emergency braking system, pedal misapplication prevention device, and/or other safety functions.

Keyword 3 Advanced Safety Vehicle

Advanced Safety Vehicles, ASVs for short, refer to automobiles equipped with systems for supporting safe driving. The systems with which Safety Support Cars are equipped are derived from the ASV technology.

Details: (1) For private standard- and small-size passenger automobiles, the existing nine classes under the "model-based group rating system" will be subdivided into 17 classes.

The differentials of premium rates between two adjacent classes will be changed to $\sqrt{1.2}$ times (= around 1.1 times) from 1.2 times.



For private standard- and small-size passenger automobiles, the existing nine classes under the "model-based group rating system" will be subdivided into 17 classes by adding new classes between adjacent classes. As a result, the differentials of premium rates between two adjacent classes will be changed to $\sqrt{1.2}$ times (= around 1.1 times) from 1.2 times.

As shown in the picture above, the differential of premium rates (around 4.3 times) between the lowest and the highest class will be unchanged.

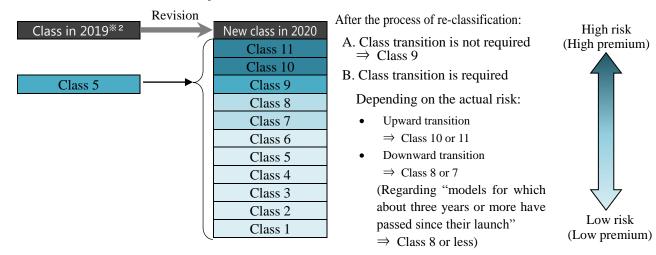
Respective classes under the existing system correspond to odd classes under the new system. (Example: existing Class $1 \rightarrow$ new Class 1, existing Class $2 \rightarrow$ new Class 3).

Every year in January, GIROJ reviews whether the most recent actual risk of each model corresponds to the allocated class, and re-allocates the class if required (i.e. Re-classification). In case the class allocated to each model corresponds to the most recent actual risk, the class will stay the same. In contrast, in case the class does not correspond to the most recent actual risk, the class will go up or go down.

Under the existing system, when the actual risk of a model is assessed to be lower (higher), the class will go down (up) one grade. Following the subdivision of classes, in case the actual risk of a model is assessed to be lower (higher), the class will go down (up) one or two grades in accordance with the degree of risk.

Exceptionally, regarding "models for which about three years or more have passed since their launch," the range of class transition will be differentiated from the other models in order to promptly adjust premiums. Specifically, in case the actual risk of a model is assessed to be lower, the class may go down three grades or more in accordance with the degree of risk.

A degree of increase (decrease) in the premium rate by going up (down) two grades under the new system is equivalent to a degree of increase (decrease) in the premium rate by going up (down) one grade under the existing system.



<Re-classification under the new system (Assumed class in 2019: Class 5)>

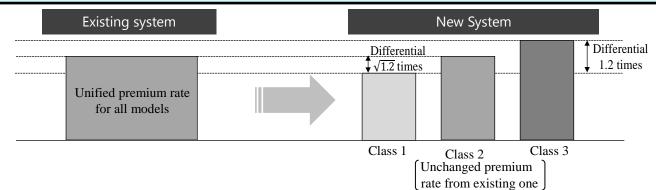
*2 "Class in 2019" is the class applied to policies that will come into effect between January 1, 2019 and December 31, 2019. It should be noted that it may differ from the class applied as of 2018.

As described in A. in the above picture, even if the class applied to a certain policy would transit from "Class 5" in 2019 to "Class 9" in 2020, there would be no change in the premium rates because class transition would not occurred virtually.

Details: (2) For private light four-wheeled passenger automobiles, the "model-based group rating system" will be introduced for each coverage type, such as bodily injury liability, property damage liability, passengers' personal accident, and physical damage, in order to reflect the risk differentials between models in the premiums. The models will be divided into three classes.

After the revision, the premium rates will differ according to the model; the rates are currently unified regardless of the model.

At the same time, the scope of "9% of the premium discount" for autonomous emergency braking system-equipped (AEB) vehicles, which currently covers all the models, will be limited to "models for which about three years or less have passed since their launch."



In the existing Reference Loss Cost Rates, the "model-based group rating system" will be newly introduced to set premiums according to underwriting results of models of insured automobiles, instead of the existing system, wherein the unified premium rate is applied for private light four-wheeled passenger automobiles regardless of their models.

The models will be divided into three classes only (Class 1, 2, and 3) to prevent sudden increase in premiums owing to the introduction of the system.

<Change in the scope of the premium discount for AEB-equipped vehicles along with introduction of the "model-based group rating system">

After the introduction of the "model-based group rating system," the risk reduction effects of AEB for "models for which about three years or more have passed since their launch" (for which sufficient historical data are available) will be assessed through the system.

In response to this, the scope of 9% of the premium discount for AEB-equipped vehicles, which currently covers all the models, will be limited to "models for which about three years or less have passed since their launch." The scope will be the same as that for private standard- and small-size passenger automobiles. ^{*3}

Existing system New System All models Models for which about three years or Models for which about three years or (without exception by the date of launch) less have passed since their launch more have passed since their launch Classification Classification Classification Premium discount Premium discount Premium discount With AEB Class 3 Class 3 With AEB ₩9% 4 ╈ 9% None T None Class 2 Class 2 Without AEB Without AEB None Class 1 Class 1 4 None The risk reduction effects of AEB The risk reduction effect of AEB is The risk reduction effects of AEB can cannot be assessed properly through assessed only by the application of the be assessed properly through the the "model-based group rating premium discount, which is a tentative "model-based group rating system" system," because historical data of because historical data of these measure taken before the introduction of these models will have not been the "model-based group rating system." models will have been accumulated accumulated sufficiently. Accordingly, Accordingly, premium discounts are sufficiently. Accordingly, the the premium discount will be applied premium discount will not be applied to all AEB-equipped models. to fill the gap in the system. applied.

<Relationship between the "model-based group rating system" and premium discount for AEB-equipped vehicles>

Keyword 4 Autonomous emergency braking system
Autonomous emergency braking system, AEB for short, is a system to automatically operate brakes in order to avoid a collision with an obstacle in front of the car or reduce the collision speed.
(Note) It is important to note that existing "driving assistance technologies," such as AEB, do not take full responsibility for safety driving away from the driver.

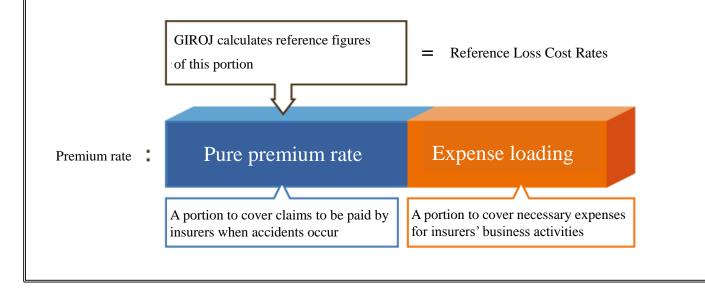
*3 For private light four-wheeled passenger automobiles, the premium discount for AEB-equipped vehicles was introduced on the premise that the "model-based group rating system" would be introduced no later than January 1, 2020. As for the change in the scope of the premium discount for AEB-equipped vehicles along with the "model-based group rating system," please refer to our news release on January 24, 2017: "GIROJ has revised Reference Loss Cost Rates for Voluntary Automobile Insurance"

<Outline of Reference Loss Cost Rates>

The premium rate consists of the pure premium rate and expense loading. The pure premium rates that GIROJ calculates are called Reference Loss Cost Rates.

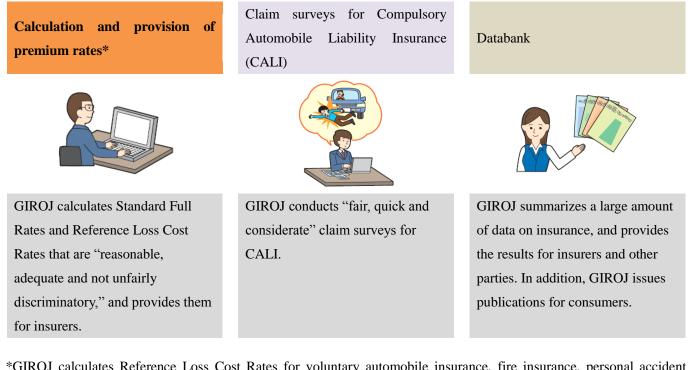
Any member insurers of GIROJ can use Reference Loss Cost Rates directly. They are also allowed to use the rates with some modification corresponding to the characteristics of their own products (Reference Loss Cost Rates are only reference figures with no obligation to be used, and insurers are allowed to set their own pure premium rates without using them.). The premium rate that applies to each policy consists of the pure premium rate and expense loading which is calculated by an insurer.

The insurer decides whether or not it adopts the revised Reference Loss Cost Rates. Please note that actual premiums are determined by the discretion of an insurer.



<Outline of GIROJ>

GIROJ is a legal entity incorporated in accordance with the Act on Non-Life Insurance Rating Organizations. The members of GIROJ are general insurance companies. It has three main operations:



*GIROJ calculates Reference Loss Cost Rates for voluntary automobile insurance, fire insurance, personal accident insurance, and nursing care expenses insurance; and Standard Full Rates for CALI and earthquake insurance.