(ii) Support for project cost for general safety measures for railway facilities, project to improve level crossing security facilities

(Outlines)

To subsidize a part of the expenses of developing level crossing security facilities for the purpose of preventing traffic accidents and contributing to smooth traffic under the Act on Promotion of Railway Crossings.

- [Operators to be supported] (i) Railway and tramway operators other than local public bodies A railway and tramway operator that meets any of the following. It has

 - an operating loss; or
 - fixed assets for business which are 7% or less of operating margins and, in all its businesses, has
 - a deficit;
 - an operating loss; or
 - fixed assets for business which are 10% or less of operating margins.
 - (ii) Railway operators that are local public bodies A railway and tramway operator that has a deficit.

[Ratio of support] Within one half of the expense subjected to be supported (one third in cases where current profits are marked in the railway and tramway business)

[Facilities to be supported *] Crossing gates, road warning devices (including omni-directional alarms), road warning device time control devices, two-phase crossing gates, large crossing gates, over-hung alarming devices, crossing trouble detectors (limited to high-spec detectors or control devices among obstacle detection devices and crossing obstacle detection devices), and crossing security cameras

(※) Only level crossings designated under the Act on Promotion of Railway Crossings (level crossings on roads specified in the Road Act) are applicable to the subsidy.

5. Summary (Conclusion)

The accidents and serious incidents in local railway operators have the following characteristics based on the status of accidents occurred in the past.

- About 90% of the accidents and serious incidents in local railway operators are "train derailment accidents" and "level crossing accidents".
- The common cause of train derailment accidents is "Track: related to maintained status of ground facilities such as track". The number of this type of accidents does not show a declining trend after the Japan Transport Safety Board issued an opinion on June 28, 2018.
- The number of train derailment accidents caused by "level crossing accident", "natural disaster", and "operation" has been decreasing in recent years, but these types of accidents occur once every few years.
- The ratio of class 3 and class 4 level crossings is high in the local railway operators that require specific measures such as the urgent abolition. The ratio of level crossings for which measures have been taken after accidents occurred is also low compared to the JR and the major private railway companies.

Based on the above data, we verified the characteristics and issues of the train derailment accidents caused by "track" and the level crossing accidents at class 3 and class 4 level crossings which characterize the accidents in local railway operators and the following points were found out.

Train derailment accidents (caused by track)

[Characteristics of the factors of accidents]

- The proper maintenance management of tracks is not carried out, the proper maintenance management standard values have not been set, and the replacement to PC sleepers, etc. has not been made, based on the opinion issued by the JTSB on June 28, 2018.
- The lack of technical abilities of the local railway operators is pointed out to be an underlying factor of the improper maintenance management of tracks.

(Important points to prevent accidents)

- The proper maintenance management of tracks should be implemented based on the opinion of the JTSB.
- In cases where it is difficult for a local railway operator to take measures on its own for economic or technical reasons, it is desirable to work on the "partial replacement to PC sleepers" or "priority-based installation" using the technical supports provided by various corporations and the national subsidy systems. (the proper maintenance management of tracks is required on a continuous basis even after the replacement to PC sleepers completes).

Level crossing accidents at class 3 and class 4 level crossings

[Issues concerning the prevention of accidents]

- In many cases, discussions and consensus building in local communities toward the abolition of level crossings or their conversion into class 1 level crossings do not progress.
- It is required that the relevant parties make an effort for building consensus through discussions. However, <u>the local railway operator does not have discussions with the local government and relevant parties</u> in many cases where no measures have been taken.

[Important points to prevent accidents]

• It is required to continuously work on to gain an understanding of the local residents by repeating discussions between the relevant parties including the consideration of alternatives with reference to the actual cases where the level crossings were abolished.

We expect that accident prevention measures will be taken by the local railway operators using the technical supports and the national subsidy system presented in this digest.

Comment from the Director of the Analysis, Recommendation and Opinion Office

Local railways play an important role as a mode of transportation for the local residents and is the base of economic activities in each region. On the other hand, the local railway operators face various issues such as how to ensure safe transportation and the lack of young engineers under severe business conditions. It is our desire that the local railway operators can refer to the measures to prevent the recurrence presented in this digest to ensure safe railway transportation. Moreover, we expect accident prevention measures to be taken smoothly by effectively using the national subsidy system and the technical supports.

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