Railway operator :  Tosaden Traffic Co., Ltd.

Serious incident type : Incorrect management of safety block, the railway serious incident related with the situation that train ran in the main track to operate in the safety section, before the completion of the procedures for safety system, prescribed in Clause 1, Article 2 of the Ordinance on Report on Tramway Accidents, etc.

Date and time : About 11:47, March 25, 2019

Location : Around 5,576 m from the origin in Harimayabashi stop, between Asakura stop and Yashiro stop, single track, Ino Line, Kochi City, Kochi Prefecture

<SUMMARY>

At about 11:47, on Monday, March 25, 2019, the driver of the outbound 333 vehicle, composed of one vehicle started from Monjudori stop bound for Ino stop, Ino Line of Tosaden Traffic Co., Ltd., operated the vehicle to depart from Asakura stop, located in the single track section, without carrying the tablet in the situation that vehicles should be operated in the tablet instrument block system instead of the pilot system that had been enforced temporary between Kagamigawabashi stop and Asakura stop.

After that, while the concerned driver moved the vehicle to about 6 m before Asakuraeki-mae stop, he found the facing outbound 332 vehicle, composed of one vehicle started from Ino stop bound for Monjudori stop, in ahead, then he stopped the 333 vehicle immediately.

On the other hand, the driver of the 332 vehicle, while running in Asakura intersection, located between Asakurajinja-mae stop and Asakuraeki-mae stop, noticed the 333 vehicle halting in ahead, then stopped the 332 vehicle at about 5 m before Asakuraeki-mae stop after passed the concerned intersection.

There were 8 passengers and the driver boarded on the 333 vehicle, and 5 passengers and the driver boarded on the 332 vehicle, but there was no injured person.
<MOTION OF THE CONCERNED VEHICLE AND THE FACING VEHICLE>

Safety system

Tablet system

Pilot system

Enforced the substitute block system by the pilot system instead of usual peculiar automatic block for single lines due to construction works.

Asakura intersection

(3) 332 vehicle

(4) 332 vehicle

(2) 333 vehicle

Tablet

Asakura-MAE stop
5,830 m

Asakura stop
5,576 m

Pilot label

(1) 333 vehicle

(0) 332 vehicle

(5) 332 vehicle

(4) Passed Asakura intersection and stopped at about 6 m before Asakura-MAE stop.

(2) Noticed the 332 vehicle about 135 m ahead at about 6 m before Asakura-MAE stop, then stopped.

(1) Departed at about 11:47, without exchanged the tablet of the 332 vehicle and the pilot label of the 333 vehicle.

(0) Original operations were exchange tablet of 332 vehicle and pilot label of 333 vehicle, communicate with Kagamigawabashi using the radio device attached to the tablet, and received the permission, then started the vehicle.

<PROBABLE CAUSES>

It is certain that the concerned serious incident occurred because the driver of the 333 vehicle started the 333 vehicle from Asakura stop, in the single track section between Asakura stop and Yashiro stop where the tablet instrument block system was enforcing, without carrying the tablet by himself and entered the safety section where the 332 vehicle was existed.

It is probable that the driver started the 333 vehicle from Asakura stop without carrying the tablet by himself, related to that the mutual confirmation on the noticed contents, such as to let the driver of the 333 vehicle recite the notified contents which is the fundamental procedure, was not implemented after the stationmaster of Kagamigawabashi stop notified the safety block system to the driver of the 333 vehicle, in addition to that the driver could not judge and apply, responding to the situation, the contents that the drivers were educated on the pilot system and the tablet instrument block system.

As for that the driver could not judge and apply the educated contents on the pilot system and the tablet instrument block system responding to the situation and that the mutual confirmation on the noticed contents by the stationmaster of Kagamigawabashi stop was not implemented, it is somewhat likely that the system and the contents of the education for the drivers and the stationmasters on the handling of train operation in the concerned company had been insufficient.
<MEASURES TO PREVENT THE RECURRENCE CONSIDERED AS NECESSARY>

(1) It is necessary to prepare the detailed manuals on the proper communication system, notification methods, confirming procedures, operating methods, etc., on the handling operations for the case that the safety system was changed to the pilot system.

(2) It is necessary to implement the training and the education properly for the company staffs involved in the train operation, and to construct the system and the structure to confirm sufficiently that the educated contents had been understood, after prepared the previous item (1).

(3) The railway serious incident had occurred in the concerned company on November 2016 and the concerned company had been pointed out the necessity to study on the measures to prevent the recurrence including the transfer of the tablet by posting the stationmaster, from the Japan Transport Safety Board, JTSB. Therefore, it is necessary to verify the grappling status in the company on the measures to prevent the recurrence pointed by the JTSB, and implement definitely the effective measures to prevent the recurrence.

In addition, it is necessary to secure the safety of the safety section definitely even in the case that the safety system was changed. Therefore, it is necessary to implement the measures to transfer tablets definitely such as to post the stationmaster and implement the transfer of the pilot labels, not the transfer between drivers, including the transfer of the pilot label and the tablet, when enforced the safety system by the pilot system without boarding the director in the section where the pilot system was enforced.

Details can be obtained by the railway serious incident investigation report in the home page of the Japan Transport Safety Board, i.e., http://www.mlit.go.jp/jtsb