MINISTRY OF
CONSTRUCTION AND TRANSPORT
TRANSPORTATION SAFETY BUREAU

FINAL REPORT (EXTRACTION)

2021-0059-5
(HU-10009)

Railway Accident / Collision with an Object
Kerta - Boba (Kerta junction), 25th January 2021

Translation

This document is the translation of Points 1, 5 and 6 of Hungarian version of the Final Report. Although efforts have been made to translate the mentioned parts of the Final Report as accurately as possible, discrepancies may occur. In this case, the Hungarian Final Report is the authentic, official version.

Basic principles of the safety investigation

The purpose of the safety investigation fulfilled by Transportation Safety Bureau (TSB) as National Investigation Body of Hungary is to reveal the causes and circumstances of serious railway accidents, railway accidents and railway incidents and propose recommendations in order to prevent similar incidents. The safety investigation is not intended to examine and determine fault, blame or liability in any form.

The findings of the safety investigation are based on an assessment of the evidence available and obtained by TSB in the course of the investigation, taking into account the principles of a fair and impartial procedure. In the Final Report, the persons involved in the occurrence shall be referred to by the positions and duties they had at the time of the occurrence.

The Final Report shall not have binding force and no appeal proceedings may be initiated against it.

This safety investigation has been carried out by TSB pursuant to relevant provisions of

- Act CLXXXIV of 2005 on the safety investigation of aviation, railway and marine accidents and incidents;
- Commission Implementing Regulation (EU) 2020/572 of 24 April 2020 on the reporting structure to be followed for railway accident and incident investigation reports;
- in the absence of other related regulation of the Act CLXXXIV of 2005, the TSB conducts the investigation in accordance with Act CL of 2016 on General Public Administration Procedures.

Act CLXXXIV of 2005 is to serve compliance with Directive (EU) 2016/798 of the European Parliament and of the Council of 11 May 2016 on railway safety.

The competence of the TSB is based on Government Regulation № 230/2016. (VII.29.) on the assignment of a transportation safety body and on the dissolution of Transportation Safety Bureau with legal succession.

The safety investigation is independent of other investigations, administrative infringement or criminal proceedings, as well as proceedings initiated by employers in connection with the accident or incident.

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1. SUMMARY

On 25 January 2021, at 9:45 a.m., the freight train No. 42002-1, travelling from Őrihodos[1] station to Soroksári út marshalling station on the delta track connecting railway lines 20 and 25, on the switch № X1 of Kerta junction collided with a sleeper-screw driver machine which was situated inside the shunting limit signal and projecting into the track gauge. The trackmen working with the machine attempted to remove the machine from the gauge after the train was detected, but were unsuccessful due to the short time available. The incident did not result in any personal injury, but both the machine and the tractor unit involved were damaged.

No watchman was provided for the work, the team only left a traffic liaison officer with the chief traffic manager at Boba station, whom they explicitly said that they would not need notification about trains running between Kerta junction - Jánosháza junction, as they would not be interfere with that track section during their work. Even after the work had actually started, the track workers did not inform the chief traffic manager that, contrary to what had been agreed beforehand, their work area in the section of the Kerta junction covered by the entry signals also affected the said delta track.

Since neither the chief traffic manager nor the traffic liaison officer knew the actual location of the work, in the light of their knowledge the chief traffic manager did not inform the traffic manager of Ukk station of the work when he asked for his consent to run train 42002-1 on the delta track, nor did he inform the workers about the train's movement.

In the course of the investigation, the IC found that, from the ordering of the work to the reservation of the work area before the occurrence, inaccurate data was transmitted regarding the actual location of the work area, and that the procedures to ensure the safety of the work were also violated at several points. Since the accident could have been avoided if the work area had been marked out with sufficient accuracy and the work rules had been fully observed, the IC does not consider it justified to issue a safety recommendation.

[1] Hodoš, Slovenia

5. CONCLUSIONS

5.1 Summary

5.1.1 Direct causes

Acts, mistakes, events or conditions or a combination thereof the elimination or avoiding of which could probably have prevented the accident or incident:

a) when the freight train arrived, the sleeper-screw driver machine was working within the gauge of the train's track, and since no watchman was employed,...
b) ...when the train was detected, the people working on the track did not have enough time to remove the machine from the track gauge;
c) the track workers were not aware of the arrival of the freight train, so they did not expect it, because ...,
d) ...no notification had previously been requested for trains running between Kerta junction - Jánosháza junction;
e) the trackmen did not inform the traffic liaison officer that they were working inside the entry signal "YK3",
f) the locomotive driver was not notified of the work within the drift limit,
g) there was no caution sign "Working on the track!" on the delta track, so the driver did not expect the presence of trackmen.

5.1.2 Indirect causes

Acts, mistakes, events or conditions which influenced the occurrence by increasing its probability, accelerating the effects or the severity of the consequences, but the elimination of which would not have prevented the occurrence:

a) from the driver's point of view, the visibility of the trackmen was impaired by the curve of the delta track and the low sun altitude due to which he viewed the area against the light.
b) The chief traffic manager at Boba station did not notify the traffic liaison officer of the arrival of the freight train, as previously agreed;

5.1.3 Systemic factors

Causal or contributing factors of organisational, management, social or regulatory nature which are likely to have an effect on similar or related occurrences, particularly including regulatory framework conditions, the design and use of the safety management systems, the skills of the personnel, the procedures and maintenance:

a) the place of work had already been designated inaccurately and inconsistently when the work was ordered, and this was not discovered until the accident occurred;

5.2 Lessons learnt

The incident offers a lesson in the importance of having an adequate number of watchmen at the work site, depending on the location of the work area, when working without track possession, in order to ensure that a railway vehicle approaching the work area can be detected in time in case of inattention or error by traffic management staff or train crews.

It is also important to stress that the person who designates the work area also has a very important role in ensuring safe working conditions.

6. SAFETY RECOMMENDATION

Such incidents can be avoided by observing the rules and by exercising due care and attention from the staff, and the IC therefore does not consider it justified to issue a safety recommendation.