



MINISTRY OF
CONSTRUCTION AND TRANSPORT
TRANSPORTATION SAFETY BUREAU

FINAL REPORT (EXTRACTION)



2024-0488-5
(HU-10548)

Railway incident / Other
Kaposmérő, 8th May 2024

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 May 8, 2024, at 23:03, at Kaposmérő station, train no. 8251, passing through according to schedule, was accepted onto track III, which was occupied by freight train no. 45991-2, without prior notification. The locomotive driver of the passenger train stopped his train approximately 100 meters in front of the freight train.

Train No. 8251 was scheduled to pass through track III, but this time it had to be stopped for a train crossing, and track III was occupied by a freight train that had been waiting for about an hour due to traffic reasons.

However, due to an error by the traffic controller, the train was directed to the usual track III instead of the free track II.

The safety equipment operating at the station does not check the occupancy of the tracks, so there is a high risk of human error. In this case, the similarity of the train numbers to those of previous trains and the visibility of the traffic situation at the station may have contributed to the error. The switch operator also failed to recognize the error. The memory aids and safety devices installed at the station were not used in relation to track III.

The collision was avoided because the train entered the station at low speed due to the speed restriction in the entry switching zone.

The TSB issues a safety recommendation for a review of rules and procedures related to the monitoring of track occupancy.

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) the traffic controller incorrectly assigned the train's entry route to the occupied track III instead of track II;
- b) the traffic personnel did not check whether the track was clear before setting the train's route;
- c) the safety equipment does not check the occupancy of the receiving tracks.

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) A device for indicating track occupancy was installed at Kaposmérő station, but it was not used in relation to track III on this occasion, and its use is not included in the operating rules.

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 station's safety equipment meets the safety standards of the first half of the 20th century and relies heavily on human intervention to ensure safety.

5.2 Actions taken

The railway network operator did not take any substantive measures in relation to the incident but reinforced the requirements for operating personnel.

5.3 Additional notes

Risk increasing factors that are unrelated to the occurrence of the incident:

- a) The front of the train on track III was not marked in accordance with the regulations;
- b) The distant signals connected to the entrance signals at Kaposmérő station are not working;
- c) The operating rules for the safety equipment at Kaposmérő station are outdated and do not contain many amendments at all or do not contain them in a uniform structure;
- d) The station staff attempted to conceal the incident.

5.4 Proven procedures, good practices

The consequences of the incident were mitigated and more serious outcomes were avoided because the driver of train 8251 noticed that the track was occupied and stopped his train before the obstacle.

5.5 Lessons learnt

Stations equipped with outdated safety equipment are at high risk of accidents caused by human error. This risk can be mitigated by introducing easy-to-use memory aids or by developing a culture of using existing aids of this kind.

6. SAFETY RECOMMENDATION

Safety recommendations, together with the findings and conclusions in the final investigation report, represent important information for the further improvement of railway safety. Accordingly,

- The authorities responsible for safety shall take action as necessary to ensure that safety recommendations are duly taken into consideration and applied where appropriate.
- The organisations responsible for introducing such safety recommendations shall start, with no delay, the risk assessment and risk management activities related to the contents of such safety recommendation within the procedural framework of their safety management system.

Within 90 days of the issue of the safety recommendation, they shall report back to the IC on the actions taken or planned or on their non-acceptance (with justification) of such safety recommendation.

6.1 BA2024-0488-5-01

During the investigation, the IC found that the station safety equipment was not suitable for checking track occupancy and that devices to support human control were not used, and the latter are not even specified in the operating rules. While in the event of a train encounter, the traffic control staff can monitor the position of the two trains with a high degree of safety, there is a greater risk of forgetfulness or error in the case of trains that remain stationary for longer periods of time. The TSB therefore issues the following safety recommendation:

Number: **BA2024-0488-5-01**

Addressed to: **Railway Authority Department, Ministry of Construction and Transport**

Responsible for introduction: **MÁV Pályaműködtetési Zrt.**

The TSB recommends reviewing and, if necessary, amending the rules and procedures relating to the operation of safety devices that do not check track occupancy, with a view to providing more reliable support for the attention and memory of traffic personnel with regard to track occupancy.

If the recommendation is accepted and implemented, the risk of trains being unintentionally received onto occupied tracks due to crew error can be reduced.