MINISTRY OF
CONSTRUCTION AND TRANSPORT

TRANSPORTATION SAFETY BUREAU

FINAL REPORT (EXTRACTION)

2022-0629-5
(HU-10242)

Railway Incident / Movements Approaching Each Other
Medgyesegyháza - Magyarbánhegyes, 14th June 2022

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

At 18:35 on 14 June 2022, the passenger train № 37011, operating on the Mezőhegyes - Békéscsaba route, left Magyarbánhegyes station without authorization. As a result, it collided with the passenger train № 37036, which had already departed from neighbouring Medgyesegyháza with a valid run authorization and was on its way.

The MERÁFI (secondary line radio-based traffic control) traffic controller, who was in charge of the traffic control of the line section, gave the train № 37011 permission to run to Magyarbánhegyes station, where it intended to perform a scheduled crossing with the passenger train № 37036 (Békéscsaba – Mezőhegyes) running opposite to it. Due to the delay of the train № 37036, the train № 37011 arrived at Magyarbánhegyes station first, which the driver should have reported back to the MERÁFI controller. As this did not happen, the controller called the driver of the train № 37011 to ask about their whereabouts. The locomotive driver informed him that they had already left Magyarbánhegyes, which the controller had detected via the EMIG system in the meantime. He immediately ordered the train to stop and told the locomotive driver that they only had authorization to Magyarbánhegyes. Aware of this, the locomotive driver stopped, while informing the MERÁFI controller that he would move his train back to Magyarbánhegyes station. The controller took note of this and urged him to do so. The controller then ordered the driver of the train № 37036 (which was running opposite the other train) to stop.

At Magyarbánhegyes, the returning train № 37011 passed the main through track № II, determined by the spring switches, and crossed the open line, pulling back to track № III from the end down side end, performing a reversing operation in the station area, without the conditions for passenger protection being met. Once the MERÁFI controller was satisfied that the train 37011 № had entered the station, he authorized the train № 37036 to continue its journey from the open line and to enter Magyarbánhegyes.

The IC attributed the occurrence to a human factor related to the locomotive driver of the train № 37011, who, despite the train’s running authorization to Magyarbánhegyes (indicated on the Train Data Sheet), went on and departed from the station and thus ended up in the same station as the train № 37036 which had already departed from the neighbouring station with a valid authorization.

The IC does not issue a safety recommendation in relation to this case.

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 locomotive driver of the train № 37011 left Magyarbánhegyes station without a valid authorization, because he did not check the actual content of the data on the Train Data Sheet when he received the documents at the departure station.

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) The chief ticket inspector of the train № 37011, on receiving the Train Information Sheet issued by the MERÁFI controller for their train, also did not check the actual content of data on the Train Data Sheet.

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 failure of staff to report the incident as instructed indicates a lack of understanding of the relationship between the possibility of accident investigations and the level of operational safety on the part of the staff concerned and a low level of organisational safety culture in the railway companies involved in the incident in general.

5.2 Actions taken

At the network level, MÁV Zrt. has reminded its employees to observe the instructions for the transmission and receipt of notices.

5.3 Additional notes

The IC identified no risk-increasing factors that could not be linked to the occurrence of the incident.

5.4 Proven procedures, good practices

a) In order to reduce the consequences of the incident and to avoid a more serious outcome, the MERÁFI controller, upon noticing the unauthorised departure of the train № 37011, ordered the locomotive driver of the train to stop by mobile phone, and immediately afterwards also the driver of the train № 37036 was running opposite the other train, thus preventing a collision of the trains.

It helped to explore the incident, learn lessons and improve the safety culture within the company that, on the basis of the incomplete content of the telegram announcing the incident, the staff of the Szeged Regional Railway Safety Department of MÁV Zrt. started further data collection and began to investigate the incident.

5.5 Lessons learnt

The development of an appropriate regulatory framework, i.e. the provisions in the instructions, does not in itself ensure rail safety. The basis for avoiding similar occurrences is, on the one hand, compliance with and application of the rules and, on the other hand, the maintenance of vigilance by the station and train crews involved. In the event of an incident, it is of paramount importance to identify the causes, draw lessons and learn from them. In order to do this, it is essential that the designated investigating bodies are made aware of it. Fear of punishment may play a role in the failure to do so in many cases, so building a 'culture of fairness' within the organisation can help to improve safety. If there is trust between the stakeholders and the employees are not afraid to cooperate with the safety organisation, this can have a significant positive impact on overall railway safety in the long term, by ensuring that the railway company has access to the information it needs to improve safety.

6. SAFETY RECOMMENDATION

Before the investigation was closed, MÁV Zrt.'s instructions were amended, which also affected the traffic regulation of lines equipped for the provision of simplified traffic services. Accordingly, from 1 April 2023, the chief ticket inspector will no longer be considered a traffic manager. With the application of the rules in force and appropriate attention on the driver's part, unauthorised entry to the open line can be avoided, and the IC therefore did not consider it justified to issue a safety recommendation.