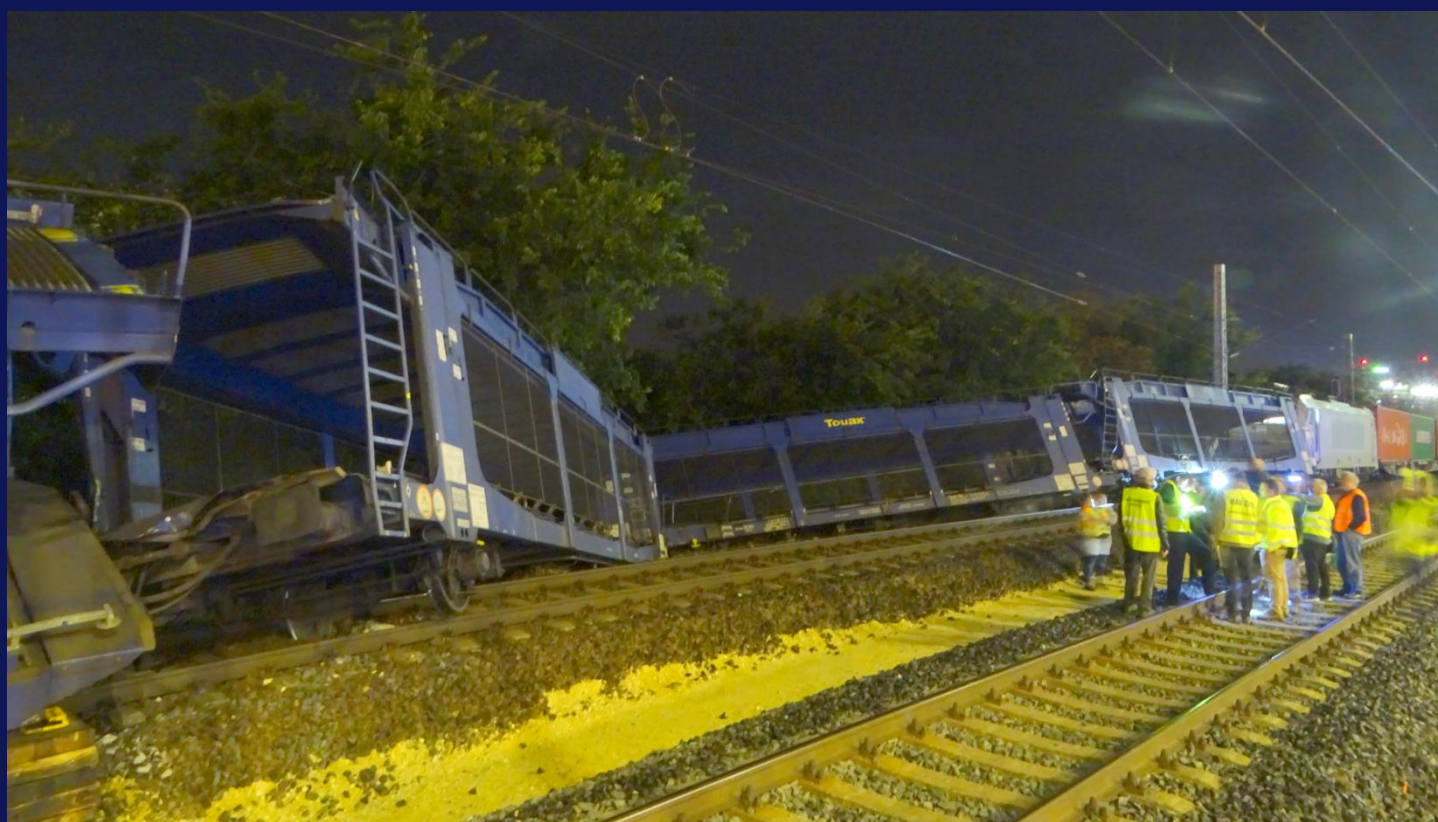




MINISTRY FOR
INNOVATION AND TECHNOLOGY

TRANSPORTATION SAFETY BUREAU

FINAL REPORT (EXTRACTION)



2020-0987-5
(HU-6352)

Railway Accident / Collision
Ferencváros - Kelenföld, 7 October 2020

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.

Copyright Notice

The original Final Report and this extraction of it were issued by:

Transportation Safety Bureau, Ministry for Innovation and Technology
2/A. Kőér str. Budapest H-1103, Hungary
www.kbsz.hu
kbszvasut@itm.gov.hu

The Final Report or any part of thereof may be used in any form, taking into account the exceptions specified by law, provided that consistency of the contents of such parts is maintained and clear references are made to the source.

1. SUMMARY

In breach of applicable rules, the freight train № 42000-1 overran the block signal 83a at danger at a speed of 28 km/h and bumped into the freight train № 47141 which was staying ahead of it, a few metres behind the block signal. The two rear articulated coaches of the train at the front derailed as a result of the collision. No one was injured.

According to investigation findings, an error message appeared in the locomotive as a result of the switching off and on of a main circuit breaker in front of the location of the collision, which diverted the locomotive driver's attention as he had to deal with it therefore he realised the signal at danger and the freight train behind it too late.

The occurrence can be attributed directly to the locomotive driver's activity, as he inappropriately managed the situation which required division of attention, but the appearing and complicated language of the error message also contributed. Not even the train control system in use on the line provides protection against this type of driving error.

The IC found no grounds to issue a safety recommendation.

5. CONCLUSIONS

5.1 Summary

5.1.1 Causal factors

Any action, omission, event or condition, or a combination thereof that if corrected, eliminated, or avoided would have prevented the occurrence, in all likelihood:

- a) The locomotive driver did not apply the brake in due time because he did not scan the signal he was approaching;
- b) The locomotive driver was occupied by handling an error message which had appeared on the display when the driver ought to have been prepared for stopping the train;
- c) The train control system in use at the time of the occurrence is not suitable for avoiding similar cases.

5.1.2 Contributing factors

Any action, omission, event or condition that affects an occurrence by increasing its likelihood, accelerating the effect in time or increasing the severity of the consequences, but the elimination of which would not have prevented the occurrence:

- a) While the vehicle was in motion, the locomotive driver opened a description of tasks to do at standstill, related to the error message,
- b) The description was unprofessional;
- c) The error message occurs frequently, and if it is handled inappropriately, it may be necessary to restart the locomotive, which is a time-consuming process; the locomotive driver was aware of it, which resulted in a stressful situation;
- d) The use of short blocks increases the risk of collision in cases of signal overrun.

5.1.3 Systemic factors

The IC identified no causal or contributing factor of an organisational, managerial, societal or regulatory nature.

5.2 Actions taken

METRANS Danubia Kft. provided out-of-turn training for the driver of the locomotive № 42000-1 before letting him continue his work, and held internal training for all locomotive drivers in the subject "Prioritisation of tasks to do during service".

The infrastructure manager found no grounds for taking action relating to the occurrence.

5.3 Other factors

The IC identified no other factors which cannot be linked to the case but increase risk.

5.4 Proven procedures, good practices

The IC identified no factors or acts which would have mitigated the consequences of the occurrence or would have helped avoiding more a serious outcome.

5.5 Lessons learnt

Similar occurrences can be avoided by the locomotive driver's maintaining their attention, but digressing factors (such as long and difficult error messages in this case) need to be excluded.

6. SAFETY RECOMMENDATION

Similar occurrences can be avoided if the crew pays due attention therefore the IC found no grounds to issue a safety recommendation.