Rail Accident and Incident Investigation Unit

Summary
Safety Investigation Report
Train mistakenly shunted onto an occupied track
Zeebrugge Pelikaan fan of sidings - 20/08/2024

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February 2026

REPORT VERSION TABLE

Version number	Subject of revision	Date
1.0	First version	10/02/2026

Any use of this report with a different aim than of accident prevention - for example in order to attribute liability - individual or collective blame in particular - would be a complete distortion of the aims of this report, the methods used to assemble it, the selection of facts collected, the nature of questions posed and the ideas organising it, to which the notion of liability is unknown. The conclusions which could be deduced from this would therefore be abusive in the literal sense of the term.
In case of contradiction between certain words and terms, it is necessary to refer to the Dutch version.

SUMMARY

On Thursday 20 August 2024 at 01:58 p.m., freight train E47576 arrives at track 869 in the Zeebrugge Pelikaan fan of sidings. The train driver notices several wagons on this track and performs a braking which avoids a collision. The train driver continues on track 869 by driving at a walking pace in order to clear level crossing 6. E47576 comes to a standstill 5 metres in rear of the wagons involved. There are no victims. There is no damage to the railway infrastructure and rolling stock. There is no traffic possible to and from the Pelikaan fan of sidings until about 03:30 p.m.

Overview Zeebrugge Pelikaan fan of sidings

The Rail Accident and Incident Investigation Unit (RAIIU) has decided to open an investigation into the incident as well as into the underlying processes of the RMI/VRG (Contact person Responsible for Shunting Infrastructure Manager) operation in general.

RMI/VRG operation: The Pelikaan fan of sidings is operated according to the RMI/VRG principle. This originated in response to the split of the SNCB/NMBS in 2005 that saw Infrabel established as the infrastructure manager. The position of assistant station manager was then split: the assistant station managers on the platforms were employed by the SNCB/NMBS, those in the signal boxes by Infrabel and those in the freight fans of sidings by B-Cargo. This restructuring meant that Infrabel no longer had its own staff in the freight fans of sidings, and the RMI/VRG operation was developed to be able to continue performing certain tasks in these fans of sidings. This allowed the assistant station managers who were transferred to B-Cargo to continue their work in freight fans of sidings based on a Local Protocol signed between a railway undertaking and Infrabel. The introduction of the RMI/VRG operation in a fan of sidings by Infrabel means a transfer of tasks and competences from the infrastructure manager to the railway undertaking currently operating in the relevant fan of sidings.

The direct cause is the assignment of an occupied track to a freight train based on incorrect track information.

On termination of the RMI/VRG operation, a track is reported as being clear by the infrastructure user, whereas in reality it is occupied.

A contributing factor is that the transfer of the RMI/VRG operation is done manually via telegram, without mandatory validation or verification.

The incorrect track status is not noticed by either the infrastructure manager or the new RMI/VRG holder.

The RMI/VRG procedure is based on an administrative trust between successive RMI/VRG holders and does not hereby provide for mandatory validation or double-checking of track status upon transfer or assignment. The lack of verification upon RMI/VRG transfer allows erroneous information to pass without being intercepted.

A systemic factor is the absence of technical detection tools in RMI/VRG fans of sidings, which prevents the infrastructure manager from verifying track occupation.

The Pelikaan RMI/VRG fan of sidings is half-signalled which means there are no detection tools in the installation where the RMI/VRG holder is operating to determine the actual track occupation.

The RAIIU recommends the DRSI to ensure that the infrastructure manager assesses whether there is a need for transitional measures before the phasing out of the RMI/VRG process in the affected fans of sidings, in order to ensure a safe and verifiable follow-up of the track occupation.

A systemic factor is the inadequate integration of the RMI/VRG principle into the safety management system (risk analyses, monitoring, etc.) of the railway undertakings involved.

Inspections show that the RMI/VRG principle has historically been insufficiently integrated into safety management systems of railway undertakings, meaning that risks associated with local operational activities are not always identified and managed in a timely manner.

The RAIIU recommends the DRSI to ensure that railway undertakings structurally embed the RMI/VRG principle in their safety management system and take human and organisational factors into account in the analysis, especially when RMI/VRG tasks are combined with safety-critical tasks.

A systemic factor is that the joint identification and management of task-related risks is currently lacking in the management of the RMI/VRG operation.

The lack of joint monitoring between the infrastructure manager and railway undertakings and explicit risk analysis means that task competition and cognitive load remain insufficiently visible, which may reduce the manageability of safety-critical tasks in combination with the RMI/VRG operation.


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