



Translation of an excerpt of the investigation report

“Train derailment Anst Dyckerhoff – Bf Geseke on 10/09/2023”

Status as of 17/08/2026, version 1.0.

Note:

In accordance with Article 3 of Implementing Regulation (EU) 2020/572, points 1, 5 and 6 of Annex I of an investigation report shall be written in a second official European language. This translation should be available no later than three months after the delivery of the report.

The following English translation is a corresponding excerpt of the investigation report. The German language version is authoritative.

Excerpt translation:

1 Summary

The first section contains a brief description of the event, as well as information on the consequences, primary causes and safety recommendations provided in the individual case.

1.1 Brief description of the event

At about 3:28 p.m. on 10 September 23, the blocking journey 59759 derailed on the journey from the junction (Anst) Dyckerhoff to the station (Bf) Geseke with the locomotive (Tfz) and 13 wagons.

1.2 Consequences

One person was killed in the incident. Property damage of approximately €7,000,000 was caused to the railway vehicles involved, the superstructure, the control and safety technology as well as difficulties in railway traffic.

1.3 Causes

In the course of the investigation of the event, the following acts, omissions, incidents or circumstances were identified as safety-critical factors. These are differentiated into causal,

contributing and systemic factors in accordance with Implementing Regulation (EU) 2020/572.

In addition, identified deficiencies in emergency management are addressed.

For better clarity of the factors and aspects of emergency management, a classification with markings in square brackets is used.

A detailed evaluation of the event under classification as safety-critical factors is given in the following chapters.

Done at: date/time, and Action / omission / circumstance / incident	More causal factor	Contributor factor	Systemic factor
10.09.2023/from 14:12 omission Train formation not performed in the Anst Dyckerhoff	Procedure for train formation for blocked journey 59759 [F1]	-	Driver monitoring process [S1]
10.09.2023/from 14:12 storyline Configuration of blockade 59759 by train driver	-	Failure to test for the detection of work errors and non-compliance with train characteristics [F2]	Safety culture Company [S2]
10.09.2023/from 15:07 storyline Operating procedures on the traction unit and wagon train for switching from radio remote control to manual operation	securing the train in the track against unintentional movement [F3]	-	-

1.4 Safety recommendations

In accordance with Section 6 TEU and Article 26(2) of Directive (EU) 2016/798, the following safety recommendation is made:

Lfd. No	Addressee and safety recommendation	Affects companies
03/2026	It is recommended to review the effectiveness of the implementation of the monitoring approaches set out in Regulation (EU) 2018/762, Annex I, criterion 5.3.3 and 6.1.1, with regard to contracted staff.	Rus

5 Conclusions

The following section contains a summary of the identified causal, contributing and systemic factors. In addition, two further subsections are provided containing information about measures already taken, and additional comments

5.1 Summary and conclusion

The acts, omissions, incidents or circumstances in this investigation report prior to the event led to the train derailment in km 0.5 of route 2963, immediately before the vinegar of the Bf Geseke. Two causal, one contributing and two systemic factors affecting the event were identified by the BEU.

The causal factor: 'Train formation procedure for blocked journey 59759' [F1]

From the outset, the shunting movements, which can be traced after the evaluation of the ERA data, were designed to transport a total of 28 wagons from Anst Dyckerhoff to Geseke station with as few blocked journeys as possible. The Tf decided to carry out only two blocked journeys for these 28 wagons and to set up the train on the track instead of as required in the Anst Dyckerhoff. In an accompanying GSM-R conversation, he announced to the Fdl the planned trip of two blocked trips in the direction of Bf Geseke. In the event of a train formation at Anst Dyckerhoff and in compliance with the operational, technical and vehicle specifications of the relevant regulations, the event would in all likelihood have been prevented. The Tf's approach on the already formed train on a section with a gradient of around 15.49 ‰ led to a situation in which the risk of uncontrolled movement was significantly increased in the absence of a test procedure prior to departure of the train. The failure to comply with the rules for the operation of the Anst Dyckerhoff and the Fplo with regard to the train characteristics was initiated by the Tf itself and did not meet the requirements for the performance of a Tf. Activities carried out on a solo basis require a high level of responsibility, which should be reflected in strict compliance with the rules. An awareness of this should develop among employees in railway operations via a lived safety culture within the RU. See also conclusions on the systemic factor [S2].

Contributing factor: 'Abandoned test procedure for the detection of work errors and non-compliance with train characteristics' [F2]

With the implementation of valid requirements, which included the formation of the train including the complete brake test in the Anst Dyckerhoff and the Fplo information on the wagon train, the conditions for the safe execution of the barricades would have been created by the Anst Dyckerhoff in the Bf Geseke. All procedures carried out by the Tf, from the formation of the train on the track to the full brake test not carried out, revealed significant deviations from existing target specifications. Exceeding both the predetermined wagon train load and the train length was obviously accepted in order to be able to achieve an early termination of the service shift, through supposedly simplified and compressed work processes.

The rules for carrying out a simplified brake test on locomotive-loaded freight trains were described in Ril 915. The examination on the basis of the ERA data showed that no brake test was carried out by the Tf. On the basis of a brake test, the correct effectiveness of the compressed air brake could have been established on the wagon train and measures could have been taken by the Tf before the train departed.

In 2014, the Federal Railway Accident Investigation Office issued Safety Recommendation No 2014/06:

“In the medium and long term, technical facilities for the safe performance of brake tests in pan-European freight transport should be used to minimise the human error rate.”¹

This safety recommendation remains relevant with regard to factor [F2]. For this reason, no further safety recommendation is issued in this case with regard to the non-performance of a brake sample.

¹ ESA Safety Recommendation No 2014/06

The causal factor: 'Safeguarding the track train against unintentional movement' [F3]

For the Tf, as can be seen from the timetable, there was an assumed inclination of up to 20‰ in the area of the track it used for train formation, characterised by a saw line in the timetable. The Tf did not secure the train against unintentional movement, so that the train could move uncontrollably after the braking failure occurred. Securing the train against unintentional movement in accordance with the applicable regulations would have been a suitable means of preventing an uncontrolled start of the train.

The situation brought about by the Tf was favoured by the disregard of the relevant regulations due to a lack of security awareness. Therefore, a safety recommendation for the systemic factor [S1] is made.

On the systemic factor: 'Driver monitoring process' [S1]

Taking into account factor [F3], it was found that the review of the provision of services at the workplace for the Tf in the period from 2021 to 2023 consisted exclusively of simulator rides. Despite a formally compliant simulator ride, the performance assessment, due to a number of activities of the Tf in the shunting service, did not meet the requirements for the specific field of action. Such a comprehensive review of the provision of services at the workplace is essential, particularly in the case of risk-prone activities requiring a wide range of expertise and performed on a solo basis. Supervision of these activities by a supervisor took place exclusively on 02.07.2023, on an ad hoc basis due to the derailment of the Tzf WLE 72 at Anst Dyckerhoff. No further reviews of the provision of services at the workplace were documented either before or after this event. Monitoring and regular training are fundamentally necessary in order to train the operational reliability of the employees and to convey care in the execution of the service. Despite the apparent lack of an electronic work order, the Tf, who was aware of the activities from previous shifts, carried out the work. A framework for non-compliance was created in connection with the lack of research on the whereabouts of the Tf at the start of service on 10.09.2023 and the rudimentary review of the provision of services at the workplace by the EGP RU. The non-executed monitoring of the Tf under real operating conditions created a working environment in which the Tf felt unobserved and in which he took his actions, systematically deviating from existing regulations. Due to the monitoring of the Tf not carried out here, the BEU considers it necessary for the RU to review the effectiveness of the implementation of its monitoring concepts in accordance with Regulation

(EU) 2018/762, Annex I, Criterion 5.3.3 and 6.1.1, with regard to delegated staff, and to this end recommends safety recommendation No 02/2026. The aim of this is to ensure that employees are aware of and comply with rules that have an impact on railway safety.

On the systemic factor: 'Safety culture enterprise' [S2]

As a result, it was found that the Tf, who was responsible at the time of the event, deliberately disregarded existing work requirements and did not have a situational awareness of the potential dangers of his actions. This was shown from the start of the service without an order, via the train formation in the track with a self-chosen, deviating from the path order, train characteristics and a failure to carry out the obligatory brake test before departure of the train. The motives of the Tf for the chosen approach could not be clarified. It can be assumed that his actions were driven, among other things, by the idea of seeking an untimely end to his service. This intention was confirmed by the entry in the handover book on a completed closing service on Tfz WLE 05 at 4:00 p.m., which had already been made well before the end of the service.

The Tf concerned was handed over to EGP as part of a staff transfer. The underlying AÜG requires that transferred employees are adequately qualified for the intended employment. Due to the lack of contractual agreements, the borrower, the RU EGP, was responsible for ensuring regular training and monitoring.

It is true that the documents provided by the RU EGP demonstrated the TF's participation in regular training and monitoring of the driving simulator. The content of these training courses focused on topics such as general operational procedures, train formation, train preparation and brake tests. There were no indications for a training or review of relevant topics on vehicle technology and the use of radio remote control. It was possible that due to the lack of further training in the field of vehicle technology of the Tfz WLE 05, the hissing noises perceived by the Tfz were misinterpreted in the air framework of the Tfz and the basis for downstream or possibly planned actions were for a possible troubleshooting. From this it can be established that monitoring and regular training are in principle necessary and suitable to train the operational reliability of the employees and to convey care in the performance of the service, as well as to intervene in a corrective manner if necessary.

However, it was also noted that the security awareness was also incomplete in the organization of the company. This is demonstrated by the findings about the lack of

monitoring by the Tf and incomplete processes regarding the service order to the Tf with the effect on his work situation. Without addressee-oriented monitoring, there was no structural and systematic way to detect uncertainties, misunderstandings or other abnormalities and patterns. So-called coronavirus protective measures did not prevent comprehensive surveillance.

In addition, there was the conflict of objectives of the Tf, which resulted on the day of the event from the overlapping service shifts at the RU EGP and DB Regio AG. If the shift planned by the RU EGP had been completed in accordance with the rules, it would not have been possible for the RU DB Regio AG to start work on time.

With regard to the safety culture found, there are, in principle, concretising requirements for the RU, which could have had a supporting effect on the development and implementation of the processes of monitoring and declaration of entry into service, which were significantly inadequate in the event. A need for optimisation of the safety culture of the RU was communicated to the RU in the EBA letter of 15 January 2024.

The establishment of a positive safety culture and an associated strategy is a legal requirement for the RU and is incumbent on it as an element for the exercise of its operator responsibility. A strengthened positive safety culture can be expressed in the daily operations of the RU, for example in the associated attitudes and values of the employees, by living up to the rules and avoiding the advent of time pressure and performing safety-relevant testing activities such as a brake test out of a conscious conviction.

From the BEU's point of view, a corresponding safety recommendation can therefore be dispensed with.

5.2 Measures taken since the event

Following the event, the EGP RU took the following measures:

- The EGP RU withdrew the special stage 2 roadworthiness test scheme after the event and changed it back to level 3. In addition, all shifts of the RU EGP have been checked and the internally defined level 2 roadworthiness test has been changed to level 3 and level 4 respectively.

- The EGP RU announced that for all routes ordered under the EGP RU's safety responsibility, the following points must be checked with regard to the design of the train configuration (order details, operating programme, etc.): Tfx (series-specific), train length, train weight, minimum brake hundredths, line class, if applicable, information on dangerous goods, if applicable, information on KV profiles.
- The process 05PB003 Planning of transport services Freight transport has been adapted and the immediate measures initiated have been included in the process.
- With regard to supplier management, training of the relevant employees was carried out and processes for supplier approval and supplier monitoring were developed.
- The RU revised process 06PB001 to monitor the requirements of Delegated Regulation (EU) 1078/2012. Among other things, the strategies and plans for the control of operational personnel with safety-related tasks have been revised.
- In the area of competence management, adjustments were made by revising the 04PB007 process.
- In 2024, the EGP introduced a modified document management, which changed some of the above process descriptions, in contrast to the mention of the processes in this investigation report.
- The EGP RU has initiated the conclusion of supplementary agreements to the existing framework contracts for temporary employment and to all contracts with service providers. These additional agreements contain, in particular, provisions on working hours already worked by other clients, on existing deployment plans, as well as on working time restrictions and available deployment times.
- The EGP RU has appointed another member of staff responsible for the continuous implementation of direct monitoring of the operational staff deployed at the workplace.

5.3 Additional observations

Not applicable.

6 Safety recommendations

In accordance with Section 6 EUV and Article 26(2) of Directive (EU) 2016/798, the following safety recommendation is made:

Lfd. No	Addressee and safety recommendation	Affects companies
03/2026	It is recommended to review the effectiveness of the implementation of the monitoring approaches set out in Regulation (EU) 2018/762, Annex I, criterion 5.3.3 and 6.1.1, with regard to contracted staff.	Rus