



## NOTE

Date 04-09-2024  
Casenr. 2023-452

### **2023-452, Near miss of track workers at Vigerslev on 06/09/2023. Resume, conclusion and recommendation**

#### 1. Summary

On the night between 09/05 and 09/06/2023, a work was planned, where a controller of site safety (COSS), a machine operator and four track workers had to place transformer boxes for heating at the points between tracks 21 and 22 in Vigerslev. For the work, track blocking was ordered in track 22, but it was also necessary to block track 21, because the work would take place within the safety distance here. Therefore, the COSS, in collaboration with the Signaler, established a short-term track blocking in track 21 at 00:59. Initially, it was agreed that the short-term track blocking would last an hour, but later it was extended to 03:00. Approx. at 02:35 the Signaler called the COSS to have the short-term track blocking suspended briefly, because there was a train on the way which had to pass through track 21. During the telephone conversation, the COSS was brought out of his normal routine of ending track blockings. This resulted in the short-term track blocking being suspended before the COSS had ensured that the work in the track had ceased, as well as the track workers being outside the safety distance and instructed that the short-term track blocking would be suspended. After a short while, a train entered into track 21, where three track workers were in the process of pulling cables out in the middle of the track. The train performed emergency braking and sounded the horn. The three track workers managed to jump aside before the train ran over the cables and stopped where they had just been working.

The use of the short-term track blocking was not found to be in accordance with the intentions behind short-term track blockings, which had been communicated in 'SR information EKSTRA' [Newsletter of changes in regulations] in 2011.

AIB Denmark assessed that the incident under slightly different circumstances could have led to a serious accident and decided to carry out an investigation into the incident.

The investigation, which was carried out on the basis of interviews and supplied materials from the parties involved, has uncovered safety deficiencies regarding the planning of track work and the use of short-term track blockings.

AIB Denmark made two recommendations.

#### 5. Conclusion

The reason for the incident, which was a near miss of three track workers, was that they were working on the track as the train entered the track. The three track workers thought the track was blocked. A short time before, immediately before the incident a COSS had removed the protection [short

circuiting cable] and suspended the short-term track blocking, without making sure that the work was finished and that the track workers were outside the safety distance and instructed that the short-term track blocking would be suspended. The suspension of the short-term track blocking had been done in a manner and in a hurry, that did not allow the COSS to follow his normal routine.

The time pressure in relation to the suspension had arisen because the COSS as he was asking the Signaler about the possibility of having an (unplanned) short-term track blocking, had indicated that the short-term track blocking could be suspended with very short notice. The Signaler did not want to disturb the track workers more than absolutely necessary, and therefore arranged the signaling so that the suspension could be as short as possible.

The planning of the work was generic, and the specific task of placing transformer boxes for point heating was not described in detail in the Railway Safety Plan. Thus, the need for track blocking in track 21 was not recognized in advance. The COSS and the track workers were thus dependent on the possibility of a short-term track blocking in order to complete the night's task. The Signaller accepted the request for a short-term track blocking, although there was no prior agreement as required. The Signaler did not consider this as a violation.

The use of short-term track blockings in relation to the planned work, led to a lower level of safety than intended. The contractor's preparation of the work was characterized by the fact that it was easier to simply ask for a short-term track blocking, rather than carry out the necessary planning required for application of normal track blockings.

The Infrastructure Manager's review and approval process did not identify the need for more detailed planning of the work, and thus the safety of the project.

The original intentions regarding short-term track blockings (which could, for example, be used in situations where the track work task itself, which required track blocking, would take less time than applying the risk control measures required with normal track blockings) was not described in the infrastructure manager's rules, which were applicable at the time of the incident.

Despite the COSS's in-depth knowledge of the intentions behind short-term track blockings, he did not consider it to be in contradiction to the use of short-term track blockings for longer periods, even if it had not been planned, described and agreed in advance.

## 7. Recommendations

AIB Denmark assessed that knowledge of the intentions behind short-term track blockings had been lost since the publication of 'SR information EXTRA' on the subject in 2011. The required prior agreement between the responsible traffic manager and the contractor and/or agreement with the Signaler before 08.00 am. was not made.

### **DK-2024 R 5 of 05-09-2024.**

AIB Denmark recommends that the Trafikstyrelsen (Danish NSA) ensures that Banedanmark (Infrastructure manager) introduces measures which ensure that the rules on short-term track blockings contain the limiting factors that were communicated in 'SR information EXTRA No. 4 of December 2011'. Including that the use of short-term track blockings does not lead to a lower level of planning of infrastructure work compared to infrastructure work carried out in planned track

blockings, and that internal and external employees with responsibilities in connection with short-term track blockings have sufficient awareness of the importance of operating in accordance with the Safety Management System for these rules to be complied with.

The investigation has revealed that the planning of the work (placing transformer boxes for point heating) was insufficient, as the Railway Safety Plan did not contain necessary track blockings for the work in question. This was because in reality the possibility of asking for short-term track blockings, sometimes for extended periods, was expected.

**DK-2024 R 6 of 05-09-2024.**

AIB Denmark recommends that the Trafikstyrelsen (Danish NSA) ensures that Banedanmark reviews rules and guidelines for Railway Safety Plans, including Banedanmark's review of these plans, so that it is ensured that these act as effective barriers to the relevant dangers, including that Banedanmark ensures that Railway Safety Plans that are used comply with the rules and the guidelines.

