

Summary

On the 9th February 2017 at 22.50 the section “B” of diesel locomotive 2TE10M No.3424 (hereinafter- diesel locomotive) caught on fire on the route No.10 at Jelgava station.

Diesel engine of section “B” of diesel locomotive was put in motion with the help by moving high pressure fuel pump barell to the fuel supply increase direction. After a short while diesel engine started to operate in abnormal regime. All the efforts of locomotive brigade to disrupt the operation of diesel engine failed. Diesel engine room heavily filled with smoke and fire started at turbo compressor area. Locomotive brigade was trying to extinguish the fire, by using stationary fire fighting foam of section “A” of diesel, but due to the smoke and the threat to the health, it failed.

The cause of fire of diesel locomotive was the operation of engine of section “B” of this diesel locomotive in abnormal regime.

Meanwhile the operation of diesel engine in abnormal regime (overspeed) was caused by turning around the axis of high pressure fuel pump barell, as a result of it leads of barell lost connection with high pressure fuel pump toothed rack, which were at maximum fuel supply condition.

During the investigation three safety recommendations were elaborated, which contains the following areas:

- Inventory for the shift of components of diesel engine of the diesel locomotive;
- Control of maintenance and repair of diesel locomotive;
- Amendments to the legislation in relation with the investigation of fire of rolling stock.

Safety recommendations

Recommendation 2018-1

LDZ Rolling Stock Service, Ltd, to implement procedures in order for the shifted component for every diesel locomotive to be listed during the technical maintenance and renovation repair, including barell and bracket detail, in order to control the amount of repair and the duration of component exploitation.

Recommendation 2018-2

LDZ Rolling Stock Service, Ltd, to implement procedures, in order the performance of technical maintenance and renovation repair of diesel locomotive to be examined and examination to be documented in order to control the scope and quality of performed works.

Recommendation 2018-3

State Railway technical inspectorate to provide proposals to the amendments to legal enactments, in order to provide in the future in the legislation the norm to investigate the fire of rolling stock, which are not serious accidents.