

EXTRACT FROM THE PRELIMINARY REPORT WITH IMMEDIATE SAFETY RECOMMENDATION

OUTBREAKS OF FIRE RELATED TO CURRENT COLLECTORS IN TYPE MX 3000 METRO TRAINS

ISSUED 23 FEBRUARY 2010

INTRODUCTION

On the basis of three fires in the new subway trains of the type MX-3000 the Accident Investigation Board Norway (AIBN) has initiated an investigation. One occurred in the tunnel on the Common Stretch, while the other two occurred on the line in the open air. The near misses have occurred in the period from October 2009 to January 2010. The frequency and the large damage potential have led the AIBN to issue a preliminary report with one immediate safety recommendation.

Accident Investigation Board Norway has carried out technical investigations and had meetings with Oslo T-banedrift AS, the workshop on Ryen, Oslo Vognselskap AS and representative of the manufacturer of the subway trains.

SUMMARY

The preliminary investigation has identified three areas that require further investigation. These comprise:

1. Technical examination of the location and construction of the current collectors.
2. Maintenance follow-up procedures.
3. The 750 volt DC power supply system.

This is a preliminary report, and our further investigation may include other elements of safety. We do not plan to publish further details relating to this case until the final report containing an analysis of the course of events and the conclusions of the Accident Investigation Board Norway (AIBN) is published.

IMMEDIATE SAFETY RECOMMENDATION

There have been repeated incidents of flashovers in the current collector system, which have led to outbreaks of fire and smoke. Today's technical solution with respect to current collectors and current rail gaps make it possible for flashovers and electric arcing to occur, and these are a potential fire hazard. Because the current is not automatically disconnected, an outbreak of fire can escalate into a serious situation. This carries a major risk potential, particularly in tunnels.

The AIBN recommends that the Norwegian Railway Authority order Oslo T-banedrift AS to evaluate and install solutions that will prevent electrical flashovers leading to outbreaks of fire.