



Safety recommendation no. 83

Date of the publication	21.03.2017
Number of the final report	2014071701
Safety deficit	<p>On 17 July 2014 at 19:45, the development of heavy smoke was noticed on a Zentralbahn locomotive which was coupled to the end of a shuttle train. The air conditioning unit in the rear driver's cab, which was not occupied, caught fire.</p> <p>The fire can be attributed to the fact that the electric motor for the radial fan set in the air conditioning unit located in the unoccupied rear driver's cab first jammed, continued to be fed by its power source because there was no protective device and then heated up until it ignited. The electric motor was powered directly from the power supply, without overcurrent protection, which is permissible for electric motors of this power class. However, this incident demonstrates that it may lead to fire breaking out. The consequences could be devastating, in particular if fire breaks out whilst travelling through long tunnels.</p>
Safety recommendation	The FOT should examine standards for monitoring electric motors with regard to separation from the power supply in the event of technical problems, and amend them if necessary.
Addressees	Bundesamt für Verkehr
Stage of the implementation	In the Implementing Provisions to the Railways Ordinance (IP-RailO), the FOT sets out the protection objective, and refers to the EN standards that must be observed in this regard. In the FOT's view, the regulations are clearly defined and do not require additional supplementation. The correct application of the standards is railway undertaking's responsibility. The FOT has examined the necessity of amending the regulations and concluded that this is not necessary.
Investigation report concerning the safety recommendation	<u>Schlussbericht</u>