



Safety recommendation no. 88

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Safety deficit	<p>On Friday 2 October 2015, at around 08:20, service train 8008 consisting of control carriage BDt no. 53 at the head and self-propelled engine Be 4/4 n°2 at the rear, ran away just after Sainte Croix at 21,300 km, on a line with a gradient of up to 44 ‰, derailling on open track on a lefthand bend at 17,900 km between the Trois-Villes and Six-Fon- taines stops. As part of the inquiry, anomalies relating to safety were found in the area of the brakes on type Be 4/4 self-propelled engines and type Bt and BDt control carriages. Such carriages are in operation both with the Transports Vallée de Joux, Yverdon-les-Bains, Sainte Croix SA (TRAVYS) company and the Transport Morges-Bière-Cossonay (MBC) company. Drainage of the supply duct during emergency braking triggered by a safety device prevents compressed-air recharging throughout the train. The engine's whistle then becomes immediately unusable. The design of type Be 4/4 engines manufactured by TRAVYS and MBC with the assembly of electrovalve A14 at the exit of the main reservoirs represents a major safety deficit.</p>
Safety recommendation	<p>SESE recommends that OFT should adapt the pneumatic installation of the TRAVYS and MBC engines concerned in order to ensure at all times the recharging of the carriage's supply duct – in the event of triggering caused by one or other of the safety systems – by replacing the A14 solenoid valve with BV solenoid valves. SESE recommends that OFT adapts the pneumatic system of the TRAVYS and MBC motor carriages concerned in order to ensure at all times the recharging of the carriage's supply duct in the event of actuation caused by one or other safety system, by replacing the A14 electrovalve with BV electrovalves.</p>
Stage of the implementation	Implemented
Investigation report concerning the safety recommendation	Rapport final