Extract from the investigation report BMVIT-795.122-II/BAV/UUB/SCH/2008 on the derailment of train 44852 on 20/12/2008

17. Recommendations

Point	Safety recommendation	Addressed to
17.1	Check if at all Austrian HOA/FOA/SOA the distance of the defined stopping point from the installation has been kept as short as possible. Reason: Had train 44852 stopped at a previously (yet to be defined) designated point, the consequences of the accident could, most probably, have been reduced.	IM
17.2	Check the process instructions to see if the envisaged stopping points for the investigation of the causes in the light of point 17.1 could be brought forward by the traction unit driver. Reason: Had train 44852 stopped at a previously (yet to be defined) designated point the consequences of the accident could, most probably, have been reduced.	IM
17.3	Check if electronic signalling to notify the traction unit driver of hot boxes is possible. Here it is necessary to check how this information can be transmitted with ETCS. Reason: Had train 44852 stopped at a previously (yet to be defined) designated point, the consequences of the accident could, most probably, have been reduced.	IM
17.4	Include Annex 1 of the process instructions HOA/FOA/SOA, 'List of defined absolute stop signals, train handling yards, wagon investigation yards, HOA/FOA/SOA in rear, train observation points and safety measures for the traction unit driver on multiple-track lines on the open track' in the Bsb of the Hallwang – Elixhausen yard. Reason: These failings have already been acknowledged by ÖBB Infrastruktur AG and remedied.	IM
17.5	Record and clear defects on all vehicles derailed during shunting in order to avoid or be able to understand subsequent wheelset damage. Reason: Wheelset damage that is not dealt with can lead to serious accidents.	RU
17.6	In order to avoid a repeat of such an event in the future, the following measures have been implemented by Technical Services: • increase the dimensional overlap of components with a press fit between the bearing inner race and axle stub when reconditioning wheelsets in the Knittelfeld works; • increase the quality of the bearing grease used; • check if meaningful investigations of the grease quality prior to a wheelset refurbishment are possible for IS 3. Reason: Improvements in production processes.	RU Vehicle maintenance provider
17.7	Check if the HOA/FOA/SOA process instructions should be subject to approval by the authorities. Reason: The process instructions to some extent determine the behaviour of employees.	Rail safety authority