Safety recommendation no. 146

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Safety deficit	On 16 September 2016 at 16:38 a near miss occurred between a city train (S-Bahn) and a shunting locomotive at St. Margrethen. A shunting locomotive travelling from St. Margrethen to Au SG remained briefly at a standstill in Au station due to a fault. This prevented a city train (S-Bahn), which was travelling in the opposite direction to St. Margrethen, from continuing its journey and the train had to wait at Au SG station before continuing its journey. As a remedial measure, the faulty shunting locomotive was pushed into Au SG station with the aid of a second shunting locomotive stationed at St. Margrethen, whose movement from St. Margrethen to Au should have been carried out as a shunting movement along the line. In the meantime, the fault in the stranded shunting locomotive was rectified, whereupon it continued its journey. The city train (S-Bahn) was then given the all-clear to continue to St. Margrethen. Shortly before St. Margrethen the driver of the city train (S-Bahn) saw a shunting locomotive standing on his line and carried out emergency braking, stopping just short of the shunting locomotive. Lack of clarity and misunderstandings between the two shunting teams and the dispatcher in resolving the disruption to operations resulted in the shunting locomotive travelling along the line beyond the shunting limit, which was prohibited, while the city train (S-Bahn) travelled along the same line in compliance with the signals, almost causing a collision. The following contributed to the course of events: • Partial hesitation in handing over and accepting managerial responsibility respectively for the movement between young inexperienced employees in charge and older, more experienced colleagues with lesser authorisations or competences. • The handling of safety-relevant aspects by the parties involved, who accepted uncertainties and a lack of clarity without actively determining the facts. • The lack of awareness by the parties involved that they were caught between two sets of duties: the duty on the one hand to follow procedures, and on the other to question instructions, which required them to use their own judgement and perceptions constantly, and act accordingly. The duty to follow instructions was given too much weight by the parties involved. Even persons exceeding their competences were tolerated. • The parties involved were too intensely focused on remedying the disruption to normal operation as quickly as possible in order to minimise any effects on (passenger) traffic and their other duties, and gave too much priority to the time factor in the conflict between ensuring safety and time pressure. • The parties involved had different levels of knowledge of the situation and how to resolve it but were unaware of this, since there were no means of common simultaneous communication available.

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	• With the advance information from shunting supervisor 1 and the instructions passed on before the movement, shunting supervisor 2 mistakenly thought himself entitled to carry out the shunting movement on the line when the signals transmitted the movement authority. • Confusion regarding the phone number of a called party, which was not clarified by the party called in error. • The plan laid down in advance for resolving disruption was not cancelled clearly enough for all the parties involved before normal operation was restored. In order to gain time, the schedule for shunting movements on the line was communicated before it was due to be executed. A shunting movement was then initiated within the station. The early receipt of the movement authority led to incorrect expectations. The existing rules, whereby items are communicated subject to a receipt and recorded individually on a form, does not lead to all the parties involved having the same level of information, and does not protect against different states of knowledge amongst the parties involved. Communicating items early should be avoided so as not to give rise to any incorrect expectations. A common information status reduces potential misunderstandings considerably.
Safety recommendation	The Federal Office of Transport (FOT) should examine whether the procedure, whereby items are communicated subject to a receipt and forms are filled in, meets the objective of an unambiguous unequivocal agreement between the parties involved which meets both the time requirements and the safety aspects at all times and does not entail additional safety risks of its own. This examination should take account in particular of the possible means of communications available today.
Addressees	Bundesamt für Verkehr
Stage of the implementation	Implemented. The FOT is of the view that with the adoption of the requirement that “The orders are to be passed on to the body carrying them out as rapidly as practicable” in accordance with TSI OPE in the FDV 2020 (R 300.3, Section, 6.2.1) , the recommendation has been met and the time of passing on an item should be as early as possible.
Investigation report concerning the safety recommendation	Schlussbericht

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