Czech Republic

The Rail Safety Inspection Office

NIB ANNUAL REPORT 2008

according to Article 23(3) of Directive 2004/49/EC

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September 2009

PREFACE TO THE REPORT

A National Investigation Body operates in the Czech Republic – The Rail Safety Inspection Office – conducting independent investigation of the causes and circumstances of railway accidents and incidents according to Directive 2004/49/EC, the principles and requirements of which have been implemented into the national legislation. The objective of the investigation of the causes and circumstances of railway accidents and incidents is to increase the safety of railways.

This Annual Report is an annual report issued by the National Investigation Body of the Czech Republic, The Rail Safety Inspection Office, for 2008, pursuant to Art. 23(3) of Directive 2004/49/EC. It comprises information regarding:

- the National Investigation Body
- the system of investigation of railway accidents and incidents
- the investigations of accidents and incidents completed in 2008
- the safety recommendations issued

CONTENTS

1 INTRODUCTION TO THE INVESTIGATION BODY

1.1 Legal framework

The process of the implementation of Directive 2004/49/EC into the national legislation of the Czech Republic was completed on 1 July 2006 by Act 266/1994 Coll., on Railways, as amended, and the subsequent issue of implementing Decree 376/2006 Coll., on the System of Safe Railway Operation and Railway Transport Operation and Procedures Following Railway Accidents and Incidents.

Accidents and incidents are further divided into the following categories, reflecting their nature and consequences:

- serious accidents
- accidents
- incidents

The national legislation of the Czech Republic orders infrastructure managers and railway undertakings to investigate the causes and circumstances of railway accidents and incidents.

The accident and incident investigation performed by The Rail Safety Inspection Office is independent of any other party and independent of the investigation conducted by other bodies, especially police investigation and the investigation of the causes and circumstances of accidents and incidents conducted by infrastructure managers or railway undertakings.

1.2 Role and Mission

The National Investigation Body was established in the Czech Republic on 1 January 2003. The mission is to guarantee independent investigation of the causes and circumstances of railway accidents and incidents. The national legislation of the Czech Republic also authorizes the National Investigation Body to investigate accidents and incidents within trams, trolleybuses and cable-ways, because all these kinds of transport are included in the same legislation regime as the railways.

The main goal of the Office's work is to prevent the occurrence of accidents and incidents. Therefore, the Rail Safety Inspection Office:

- investigates the causes and circumstances of rail accidents and incidents,
- supervises investigations performed by infrastructure managers and railway undertakings,
- detects deficiencies compromising the safety of rail infrastructure and rail transport,

- evaluates development trends in accidents and incidents within the rail system and takes measures to improve the situation,
- issues safety recommendations to railway undertakings, infrastructure managers, to the National Safety Authority or other authorities and parties.

While performing the above listed activities, the Rail Safety Inspection Office checks and evaluates:

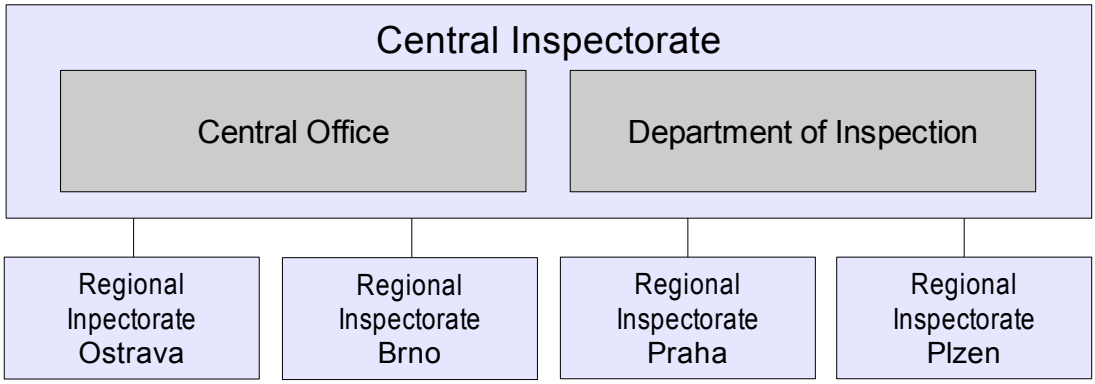
- technical condition of the infrastructure and rail vehicles,
- whether the management of operations is in accordance with valid safety regulations,
- whether the regulations are observed by rail staff.

1.3 Organisation

On 1 January 2003, the National Investigation Body – The Rail Safety Inspection Office – was established in the Czech Republic pursuant to the provisions of Act 77/2002 Coll. The Rail Safety Inspection Office is a national body investigation the causes of railway accidents and incidents independently of any other party and conducting state supervision of railways. As an investigation body it is independent of any infrastructure manager, transport operator and regulatory body. The competences of The Rail Safety Inspection Office include:

- railways (main lines, regional lines, sidings, underground)
- tram lines
- trolleybus lines
- cable-ways

The Rail Safety Inspection Office has a total of 55 employees in five cities of the Czech Republic (Ostrava, Brno, Praha, Plzen, Ceske Budejovice). It comprises of the Central Inspectorate and four regional inspectorates covering the area of the entire country. The Central Inspectorate consists of The Central Office and The Department of Inspection.



The Central Office plays supportive role for the Inspector General and the whole structure of The Rail Safety Inspection Office. It provides human-resource management, economic, IT and legal services and public relations.

The Department of Inspection maintains accident investigation and the state supervision systems, including the co-ordination of the regional inspectorates' activities. The department also manages staff training and mediates communication with EU bodies.

Regional Inspectorates investigate the causes of rail accidents and incidents with the aim of enabling lessons to be learned for improving the safety of railways. They also perform preventative state supervision focusing on accident and incident prevention.

1.4 Organisational flow

The arrangement of railway sector in the Czech Republic and relationships among the parties involved are defined in Act 266/1994 Coll., on Railways, as amended, and the implementing regulations thereto. The legislation applies to the following transport systems:

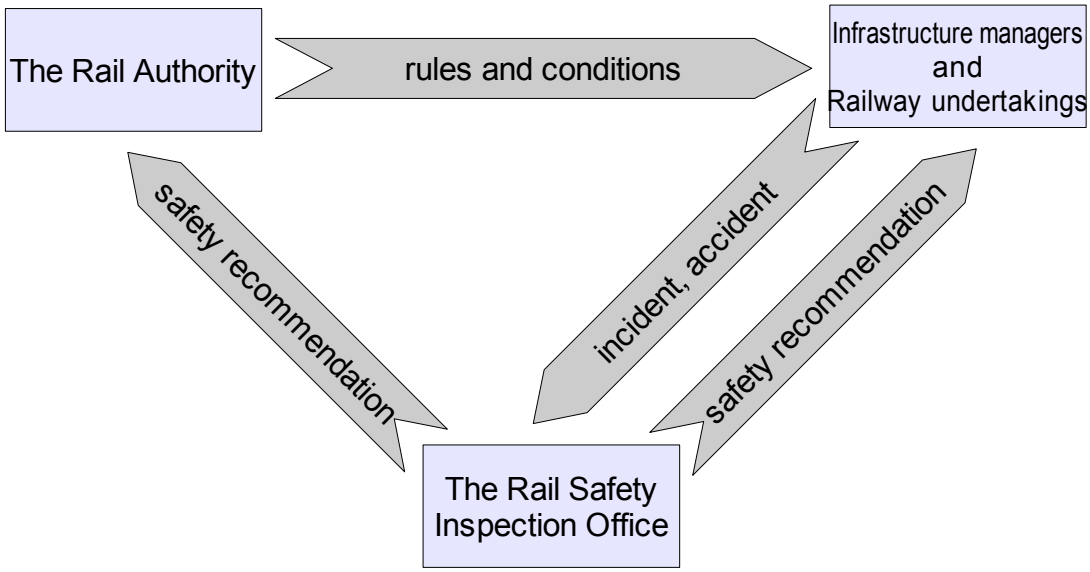
- railways (main lines, regional lines, sidings, underground)
- tram lines
- trolleybus lines
- cable-ways

The most important bodies in the railway sector include the Czech Ministry for Transportation, The Railway Office and The Rail Safety Inspection Office. The Czech Ministry for Transportation is in charge of the national railway legislation and takes care of the implementation of the EU railway legislation. The Railway Office is the National Safety Authority carrying out certification and regulation of railway and railway transport operation, according to the national legislation. The Rail Safety Inspection Office is the National Investigation Body independent of any party in the railway sector.

All these authorities are involved in the system of maintaining and improving safety of railways and railway transport:

- **The Czech Ministry for Transportation** sets basic rules via the railway legislation.
- **The Rail Safety Inspection Office (NIB)** investigates railway accidents and incident and issues safety recommendations to The Railway Office.

- **The Rail Authority (NSA)** sets and adjusts safety rules for infrastructure managers and railway undertakings.



2 INVESTIGATION PROCESSES

2.1 Cases to be investigated

The national legislation of the Czech Republic orders the National Investigation Body, The Rail Safety Inspection Office, in accordance with European principles – to investigate the causes and circumstances of serious accidents on main and regional lines, border railways and sidings. In addition, The Rail Safety Inspection Office may investigate, in cases defined by the respective law, other occurrences in the following cases:

- serious accidents regarding underground, trams, trolleybuses and cable-ways
- accidents and incidents on all types of guided transport

When making decision whether to investigate or not, The Rail Safety Inspection Office takes into account the above mentioned legal requirements, as well as possibility to learn safety relevant lessons from the accident.

2.2 Institutions involved in investigations

Following the occurrence of railway accident or incident, various parties may launch several independent investigations, depending on the occurrence's nature and consequences:

- **Infrastructure manager or railway undertaking** identifies the causes and circumstances of accident or incident, focusing on the adoption of preventative measures and the proposal of responsibility for the occurrence.
- **The Rail Safety Inspection Office** investigates the causes and circumstances of accident or incident with a focus on the determination of the causes and the issue of preventative safety recommendation.
- **Czech Police** investigate accident or incident with the aim of defining responsibility for the committing of offences or criminal acts.

2.3 Investigation process or approach of the IB

The objective of the investigation of the causes of railway accidents and incidents is to gain knowledge for the prevention of accidents and incidents, minimise the consequences and increase the safety of railways.

Investigation performed by the National Investigation Body of the Czech Republic, The Rail Safety Inspection Office, focuses on the following areas of each occurrence:

- independent investigation of the causes and circumstances of accident or incident (serious accidents and selected accidents and incidents only)

- meeting of the legal requirements for procedures following occurrence of railway accident or incident by infrastructure manager and transport operator
- supervision of the correctness and completeness of the procedures followed by infrastructure manager or transport operator when identifying the causes and circumstances of an accident or incident, in accordance with the national legislation.

When notified about the occurrence of accident or incident by an infrastructure manager or transport operator, The Rail Safety Inspection Office will decide whether it will immediately go to the accident-site or not. At the accident-site The Rail Safety Inspection Office will launch an independent investigation or just supervises the procedures performed by infrastructure managers and railway undertakings involved.

If The Rail Safety Inspection Office launches an investigation, it will notify The European Railway Agency within seven days. The investigation of accident or incident may be launched immediately after the occurrence and/or later, in reaction to specific circumstances.

The Rail Safety Inspection Office will publish the conclusions of its investigation in Investigation Report, the structure of which is based on the requirements of Directive 2004/49/EC. If the accident or incident occurred without any violation of legislation or internal regulations of infrastructure manager and/or transport operator, The Rail Safety Inspection Office issues safety recommendation with the aim of preventing reoccurrence of the accident or incident. Safety recommendation is issued also if there are other findings relevant for the safety.

3 INVESTIGATIONS

3.1 Overview of investigations completed in 2008, identifying key trends

Trends of completed investigations (last column of the table) are calculated as difference to previous year (2007).

Type of accidents investigated	**Number of accidents**	**Number of victims**		**Damages in €** (approx.)	**Trends in relation to previous year**
		Deaths	Ser.injury		
Collisions	9	5	22	1114764	+200%
Derailments	7	0	0	1552028	+75%
LC-accident	5	2	2	886738	-38%
Fire in RS	1	0	0	293061	none in 2007
Acc. to person	1	0	1	0	+0%
Other	2	0	0	0	none in 2007

3.2 Investigations completed and commenced in 2008

Investigations completed in 2008

Date of occurrence	**Title of the investigation** (Occurrence type, location)	**Legal basis**	**Comleted** (date)
20.02.2007	Train derailment: between Mnisek pod Brdy and Cisovice stations	i	25.02.2008
20.06.2007	Trains collision: Cerny Kriz station	i	28.03.2008
21.06.2007	Other: Chotoviny station	i	30.03.2008
04.07.2007	Level crossing accident: Veseli nad Luznici station	i	14.03.2008
14.07.2007	Trains collision: Cercany station	i	25.06.2008
01.09.2007	Trains collision: between Bavorov and Vodnany stations	i	18.04.2008
01.09.2007	Train derailment: between Tabor and Slapy stations	i	16.06.2008
10.09.2007	Other: between Praha-Modrany and Praha-Branik stations	i	28.05.2008
20.09.2007	Train collision: between Krasikov and Rudoltice v Cechach stations	i	20.03.2008
21.09.2007	Level crossing accident: between Jaromerice nad Rokytnou and Moravske Budejovice stations	i	25.05.2008
02.10.2007	Level crossing accident: between Varnsdorf and Seifhennersdorf stations	i	12.08.2008

Date of occurrence	**Title of the investigation** (Occurrence type, location)	**Legal basis**	**Comleted** (date)
30.10.2007	Level crossing accident: between Domasov nad Bystrici and Moravsky Beroun stations	i	07.04.2008
19.11.2007	Train derailment: Lestina u Svetle station	i	30.04.2008
27.11.2007	Train derailment: Bystrice nad Olsi station	i	06.06.2008
01.12.2007	Train derailment: between odbocka Kyje and Praha-Bechovice	i	28.08.2008
06.12.2007	Train derailment: Ostrava-Kuncice station	i	26.05.2008
09.01.2008	Trains collision: Nymburk hl. n. station	i	15.10.2008
23.01.2008	Train collision: Trebovice v Cechach station	i	19.12.2008
10.04.2008	Trams collision: Brno, Husova - Palackeho crossing	ii	21.11.2008
11.04.2008	Trams collision: between Poruba koupaliste and Vresina tram-stops	ii	31.07.2008
14.05.2008	Level crossing accident: between Neratovice and Uzice stations	i	21.10.2008
19.05.2008	Trains collision: Moravany station	i	26.09.2008
02.06.2008	Accident to person: Olomouc, Wolkerova tram-stop	ii	20.11.2008
06.06.2008	Train derailment: Celakovice station	i	19.12.2008
30.07.2008	Fire in rolling stock: between Pnovany and Vranov u Stribra stations	i	18.12.2008

Basis for investigation: **i** = According to the Safety Directive, **ii** = On national legal basis (covering possible areas excluded in Article 2, §2 of the Safety Directive), **iii** = Voluntary – other criteria (National rules/regulations not referred to the Safety Directive).

Investigations commenced in 2008

Date of occurrence	**Title of the investigation** (Occurrence type, location)	**Legal basis**
09.01.2008	Trains collision: Nymburk station	i
23.01.2008	Train collision with an obstacle: Trebovice v Cechach station	i
19.02.2008	Injury to passenger (cableway): Janske Lazne, Protez	iii
22.02.2008	Train derailment: between Zabreh na Morave and Lukavice stations	i
10.04.2008	Trains collision (tramway): Brno, Palackeho x Hudcova crossing	ii
11.04.2008	Trains collision (tramway): Ostrava, between Poruba koupaliste and Vresina tram-stops	ii

14.05.2008	Level-crossing accident: km 11.006, between Uzice and Neratovice stations	i
19.05.2008	Trains collision: Moravany station	i
02.06.2008	Injury to passenger (tramway): Olomouc, Wolkerova tram-stop	ii
06.06.2008	Train derailment: Celakovice station	i
30.07.2008	Fire in rolling stock: between Pnovany and Vranov u Stribra stations	i
08.08.2008	Train collision with an obstacle: Studenka station	i
13.09.2008	Trains collision: between Mohelnice and Moravicany stations	i
10.11.2008	Trains collision: between Hlinsko v Cechach and Zdirec nad Doubravou stations	i
23.11.2008	Level-crossing accident: km 20.285, between Horni Lipova and Ramzova stations	i
12.12.2008	Level-crossing accident: km 343.109, between Lysa nad Labem-Dvorce and Otradovice stations	i
17.12.2008	Level-crossing accident: km 4.981, between Branka u Opavy and Odbocka Moravice stations	i

Basis for investigation: **i** = According to the Safety Directive, **ii** = On national legal basis (covering possible areas excluded in Article 2, §2 of the Safety Directive), **iii** = Voluntary – other criteria (National rules/regulations not referred to the Safety Directive).

3.3 Research studies (or Safety Studies) commissioned and completed in 2008

Safety Studies completed in 2008

Date of commission	**Title of the Study** (Occurrence type, location)	**Legal basis**	**Comleted** (date)
	none		

Basis for investigation: **i** = According to the Safety Directive, **ii** = On national legal basis (covering possible areas excluded in Article 2, §2 of the Safety Directive), **iii** = Voluntary – other criteria (National rules/regulations not referred to the Safety Directive).

Safety Studies commenced in 2008

Date of commission	**Title of the Study** (Occurrence type, location)	**Legal basis**
	none	

Basis for investigation: **i** = According to the Safety Directive, **ii** = On national legal basis (covering possible areas excluded in Article 2, §2 of the Safety Directive), **iii** = Voluntary – other criteria (National rules/regulations not referred to the Safety Directive).

3.4 Summaries of investigations completed in 2008

See annex of this report.

3.5 Comment and introduction or background to the investigations

Despite all investigations commenced in 2008 brought (or are expected to bring) safety significant results, three of them are investigations of special importance:

Date of occurrence	**Title of the investigation** (Occurrence type, location)	**Legal basis**
11.04.2008	Trains collision (tramway): Ostrava, between Poruba koupaliste and Vresina tram-stops	ii
Investigation of frontal collision of two trams running on a single-track tramway line uncovered, that railway undertaking hadn't installed any technical interlocking system ensuring safety on this line, despite several incidents (dangerous situations) when a tram entered a track occupied with another tram running in the opposite direction occurred there in the past. An interlocking was installed according to safety recommendation issued as a result of the investigation.		
19.05.2008	Trains collision: Moravany station	i
Investigation of fatal collision of a solo running locomotive with a passenger train uncovered safety deficiency of an interlocking system as well as maintenance and vehicle-infrastructure compatibility issues. A safety recommendation was issued and the interlocking system was improved. This investigation was supported by European Railway Agency. *The investigation and consequent events clearly showed importance of independent accident investigation as well as importance of European railway safety structures.*		
08.08.2008	Train collision with an obstacle: Studenka station	i
A bridge collapsed just in front of approaching Eurocity train. This accident is exceptional for its nature, consequences and size. The investigation wasn't completed in 2008.		

Basis for investigation: **i** = According to the Safety Directive, **ii** = On national legal basis (covering possible areas excluded in Article 2, §2 of the Safety Directive), **iii** = Voluntary – other criteria (National rules/regulations not referred to the Safety Directive).

Investigations commenced in 2008 and not followed

Date of occurrence	**Title of the investigation** (Occurrence type, location)	**Legal basis**	**Reason of non following or suspension of investigations**	**Who, why, when (decision)**
	none			

Basis for investigation: **i** = According to the Safety Directive, **ii** = On national legal basis (covering possible areas excluded in Article 2, §2 of the Safety Directive), **iii** = Voluntary – other criteria (National rules/regulations not referred to the Safety Directive).

3.6 Accidents and incidents investigated during last five years (in 2004–2008)

Rail investigations completed in 2004–2008

The table groups investigations by year of their completion.

Accidents investigated		2004	2005	2006	2007	2008	TOT
Serious accidents (Art 19, 1 + 2)	Train collision	-	-	1	0	5	**6**
	Train collision with an obstacle	-	-	-	0	0	**0**
	Train derailment	-	-	-	1	2	**3**
	Level-crossing accident	-	-	-	0	-	**0**
	Accident to person caused by RS in motion	-	-	-	0	-	**0**
	Fire in rolling stock	-	-	-	0	-	**0**
	Involving dangerous goods	-	-	-	0	0	**0**
Other accidents (Art 21.6)	Train collision	-	-	1	2	2	**5**
	Train collision with an obstacle	-	-	-	1	2	**3**
	Train derailment	-	-	1	3	5	**9**
	Level-crossing accident	-	-	-	8	5	**13**
	Accident to person caused by RS in motion	-	-	-	1	1	**2**
	Fire in rolling stock	-	-	-	0	1	**1**
	Involving dangerous goods	-	-	-	0	0	**0**
Incidents		-	-	-	0	2	**2**
TOTAL		**0**	**0**	**3**	**16**	**25**	**44**

4 RECOMMENDATIONS

4.1 Short review and presentation of recommendations

A safety recommendation can be issued only on a basis of an independent investigation performed by The Rail Safety Inspection Office (NIB). Safety recommendation is usually issued when an accident occurred without any violation of legislation or internal regulations of infrastructure manager and/or transport operator, or if there are other findings relevant for the safety.

According to national legislation, safety recommendations are not legally binding. When a recommendation is issued, railway undertakings and infrastructure managers are obliged to adopt their own preventative safety measures based on the safety recommendation issued.

Implementation of recommendations during 2004 – 2008

Recommendations issued		**Recommendation implementation status**					
		Implemented		**In progress**		**Not to be implemented**	
Year	**[No.]**	**[No.]**	**[%]**	**[No.]**	**[%]**	**[No.]**	**[%]**
2004	-	-	-	-	-	-	-
2005	-	-	-	-	-	-	-
2006	-	-	-	-	-	-	-
2007	3	2,5	83	0	0	0,5	17
2008	16	9,5	59,4	2	12,5	4,5	28,1
TOTAL	**19**	**12**	**63,2**	**2**	**10,5**	**5**	**26,3**

Accidents with safety recommendations issued in 2004 - 2008

Date of occurrence	**Title of the investigation** (Occurrence type, location)	**Status of implem.**	**Completed** (date)
18.01.2007	Train collision: Between Dvur Kralove nad Labem and Bila Tremesna stations	implemented	17.08.2007
20.02.2007	Train derailment: between Mnisek pod Brdy and Cisovice stations	implemented	27.02.2008
19.03.2007	Level crossing accident: Between Dolni Berkovice and Vranany stations	implemented	11.07.2007
07.05.2007	Level crossing accident: Between Jablunka and Valasske Mezirici stations	partially implemented	01.11.2007
04.07.2007	Level crossing accident: Veseli nad Luznici station	not implemented	14.03.2008
14.07.2007	Trains collision: Cercany station	implemented	25.06.2008

Date of occurrence	**Title of the investigation** (Occurrence type, location)	**Status of implem.**	**Completed** (date)
01.09.2007	Trains collision: between Bavorov and Vodnany stations	implemented	18.04.2008
20.09.2007	Train collision: between Krasikov and Rudoltice v Cechach stations	in progress	20.03.2008
21.09.2007	Level crossing accident: between Jaromerice nad Rokytnou and Moravske Budejovice stations	not implemented	25.05.2008
30.10.2007	Level crossing accident: between Domasov nad Bystrici and Moravsky Beroun stations	implemented	07.04.2008
27.11.2007	Train derailment: Bystrice nad Olsi station	implemented	06.06.2008
01.12.2007	Train derailment: between odbocka Kyje and Praha-Bechovice	not implemented	28.08.2008
06.12.2007	Train derailment: Ostrava-Kuncice station	implemented	26.05.2008
23.01.2008	Train collision: Trebovice v Cechach station	in progress	12.12.2008
10.04.2008	Trams collision: Brno, Husova - Palackeho crossing	implemented	21.11.2008
11.04.2008	Trams collision: between Poruba koupaliste and Vresina tram-stops	implemented	31.08.2008
19.05.2008	Trains collision: Moravany station	partially implemented	26.09.2008
02.07.2008	Accident to person: Olomouc, Wolkerova tram-stop	implemented	20.11.2008
30.07.2008	Fire in rolling stock: between Pnovany and Vranov u Stribra stations	not implemented	18.12.2008

4.2 Recommendations issued in 2008

Date of occurrence	**Title of the investigation, Safety recommendation**
20.02.2007	Train derailment: between Mnisek pod Brdy and Cisovice stations
Addressed to infrastructure manager Ceske drahy a. s.: *1) It is recommended to develop safety rules focusing on infrastructure maintenance performed by external supplier (outsourced maintenance).* *2) It is recommended to supervise whether an external supplier observes safety rules.*	
04.07.2007	Level crossing accident: Veseli nad Luznici station
Addressed to infrastructure manager Ceske drahy, a. s., National Safety Authority and owner of the railway Sprava zeleznicni dopravni cesty, s. o.: *It is recommended to equip the level crossing with barriers or to replace it with graded crossing.*	

Date of occurrence	Title of the investigation, Safety recommendation
14.07.2007	Trains collision: Cercany station
Addressed to infrastructure manager Ceske drahy, a. s.: *1) It is recommended to perform regular psychological and neurological examination of station and dispatch personnel aged 50 and above.* *2) It is recommended to perform psychological and neurological examination of a member of station or dispatch personnel whenever their doctor recommends to do so.* Addressed to the National Safety Authority: *3) It is recommended to apply the above recommendations to all relevant railway infrastructure managers.*	
01.09.2007	Trains collision: between Bavorov and Vodnany stations
Addressed to infrastructure managers, railway undertakings and owners of railways: *It is recommended to equip busy regional lines without interlocking with an technical interlocking system ensuring that trains can't enter occupied part of line.*	
20.09.2007	Train collision: between Krasikov and Rudoltice v Cechach stations
Addressed to Ceske drahy, a. s., and CD Cargo, a. s., railway undertakings: *1) It is recommended to create procedure for loading and transporting switches secured by textile belts.* *2) It is recommended to revise contemporary way of transporting of oversized goods from DT Vyhybkarna a strojirna, a. s., Prostejov company, in order to ensure the safety, before the procedure for loading and transporting switches secured by textile belts is created.*	
21.09.2007	Level crossing accident: between Jaromerice nad Rokytnou and Moravske Budejovice stations
Addressed to infrastructure manager Ceske drahy, a. s.: *1) It is recommended to put internal rule ČD S4/3 into accordance with norm ČSN 736380.* *2) It is recommended to check visibility condition at all the level crossings, where visibility reduction has been applied by the internal rule ČD S4/3, and to modify these level crossings according to the norm ČSN 736380.*	
30.10.2007	Level crossing accident: between Domasov nad Bystrici and Moravsky Beroun stations
Addressed to infrastructure manager Ceske drahy, a. s., and owner of the railway Sprava zeleznicni dopravni cesty, s. o.: *It is recommended to equip each level crossing with visible ID-table with unique level crossing ID-number and an emergency telephone number, in order to avoid misunderstandings when alerting emergency services or infrastructure manager in*	

Date of occurrence	Title of the investigation, Safety recommendation
case of emergency (see safety recommendations issued within accidents Vranany 19th March 2007 and Jablunka 7th May 2007).	
27.11.2007	Train derailment: Bystrice nad Olsi station
Addressed to infrastructure manager Sprava zeleznicni dopravni cesty, s. o.: *1) It is recommended to create and regularly apply procedure for preventative checking of mechanisms of manually operated switches.* *2) It is recommended to modify maintenance procedure for mechanisms of manually operated switches in order to avoid rough manipulation with the mechanims.*	
01.12.2007	Train derailment: between odbocka Kyje and Praha-Bechovice
Addressed to infrastructure manager Sprava zeleznicni dopravni cesty, s. o. *1) It is recommended to improve training scheme of personnel performing non-destructive testing of rails.* *2) It is recommended to implement European technical norms into scheme of non-destructive testing of rails.* *3) It is recommended to carefully evaluate results of non-destructive testing of rails, especially when combined defect is detected.* *4) It is recommended to determine maximal life of rails according to frequency and character of their load.*	
06.12.2007	Train derailment: Ostrava-Kuncice station
Addressed to railway undertaking Ceske drahy, a. s., and to the National Safety Authority: *It is recommended to create maintenance scheme for electric unit class 460 based on regular monitoring of real technical condition of the vehicle.*	
23.01.2008	Train collision: Trebovice v Cechach station
Addressed to railway infrastructure managers: *1) It is recommended to require railway workers working on the track to declare, before they start working, time necessary for safe evacuation of the workplace (including removal of all their equipment).* *2) It is recommended to ensure that their regulations guarantee safety of track-workers with regard to train speed limit and time necessary for safe evacuation of the workplace.*	
10.04.2008	Trams collision: Brno, Husova - Palackeho crossing
Addressed to all railway undertakings running trams KT8D5 with TV3 traction equipment: *It is recommended to have regular check of connectors KP1 – KP4 included in*	

Date of occurrence	Title of the investigation, Safety recommendation
maintenance procedures. Addressed to the National Safety Authority: *It is recommended to consider improvement of all trams with TV3 traction equipment in order to ensure proper function of the brake pedal in case of false acting of ORJ relay.*	
11.04.2008	Trams collision: between Poruba koupaliste and Vresina tram-stops
Addressed to Dopravni podnik Ostrava a. s.: *1) It is recommended to equip bi-directional single-track tramway lines with interlocking system preventing tram from entering track occupied with another tram running in the opposite direction.* *2) It is recommended to equip bi-directional single-track tramway lines with interlocking system capable to switch off the power if a tram enters track already occupied with another tram running in the opposite direction.* *3) It is recommended on bi-directional single-track tramway lines to ensure that a tram immediately stops when the power supply is lost.* *4) It is recommended to to equip interlocking systems on bi-directional single-track tramway lines with a data recorder logging the operation.*	
19.05.2008	Trains collision: Moravany station
1) It is recommended to all infrastructure managers operating interlocking system ESA 11 to improve it, in order to process in the safe way change of station track status of occupation after track circuit re-activation. *2) It is recommended to The National Safety Authority to require implementation of the above mentioned recommendation for all existing devices of that type and of similar types.* *3) It is recommended to the new infrastructure manager Sprava zeleznicni dopravni cesty, s. o. to equip renewed main lines with system for emergency remote train stopping.* *4) It is recommended to all operators operating class 163 locomotives to improve sanding indicator in order to indicate real status of sanding device.* *5) It is recommended to The National Safety Authority to require all new locomotives to have sanding indicator according to paragraph 4 of thisrecommendation.* *6) It is recommended to all operators operating class 163 locomotives and similar to have regular check and maintenance of pneumatic sander valves included in maintenance procedures.* *7) It is recommended to The National Safety Authority to archive documentation of components, devices and sets they certify for accident investigation and other purposes.*	
02.06.2008	Accident to person: Olomouc, Wolkerova tram-stop
1) Addressed to all railway undertakings running T3 trams with DBR relay: It is	

Date of occurrence	Title of the investigation, Safety recommendation
recommended to check (and adjust) within maintenance procedures whether "door open" is indicated as soon as the distance between two doors is greater than 2 cm at the bottom. *2) Addressed to all railway undertakings running T3 trams with DBR relay: While performing regular maintenance it is recommended to adjust the doors in order to minimize possibility of opening the door at their bottom while their top is locked in "door closed" position.* *3) Addressed to all railway undertakings running T3 trams: It is recommended to equip all T3 trams with the emergency brake buttons placed above all entrance doors indoors.* *4) Addressed to all railway undertakings running trams: It is recommended to standardize form and labelling of emergency brake buttons within all types of trams.* *5) Addressed to Czech National Safety Authority (Drazni urad): It is recommended to force relevant railway undertakings to accept the above recommendations 1 – 4.*	
30.07.2008	Fire in rolling stock: between Pnovany and Vranov u Stribra stations
Addressed to railway undertaking Ceske drahy, a. s.: *1) In the interest of railway safety it is recommended to make maintenance organisation rules compliant with valid national legislation and rolling stock manufacturers' recommendations.* *2) It is recommended to take measures preventing managers from ordering staff to break the rules.* Addressed to the National Safety Authority: *3) It is recommended to check whether railway undertaking meets safety requirements each time they report any change to parameters which are relevant to safety certification process.*	

Annex

ACCIDENT SUMMARY

Grade:	accident
Date and time:	20th February 2007, 11:48 (10:48 GMT)
Occurrence type:	train derailment
Description:	derailment of locomotive and 6 wagons of freight train
Type of train:	freight train No. 85956
Location:	between Mnisek pod Brdy and Cisovice stations
Consequences:	no fatality no injury total cost CZK 1 009 120 (cca EUR 40 365)
Direct cause:	infrastructure (track failure)
Underlying cause:	maintenance planning, handover maintenance - operations
Root cause:	none
Recommendations:	addressed to infrastructure manager Ceske drahy, a. s.: 1) It is recommended to develop safety rules focusing on infrastructure maintenance performed by external supplier (outsourced maintenance). 2) It is recommended to supervise whether an external supplier observes safety rules.

Annex

ACCIDENT SUMMARY

Grade:	serious accident
Date and time:	20th June 2007, 08:40 (06:40 GMT)
Occurrence type:	trains collision
Description:	collision of passenger train No. 18544 with a shunting rail car occupied by passengers
Type of train:	passenger train No. 18544 shunting rail car
Location:	Cerny Kriz station, track No. 1
Consequences:	no fatality 4 serious injuries (3 passenger, 1 staff), 20 light injuries (passengers) total cost CZK 24 585 (cca EUR 983)
Direct cause:	operations (engine driver's violation)
Underlying cause:	none
Root cause:	none
Recommendations:	not issued

ACCIDENT SUMMARY

Grade:	incident
Date and time:	21st June 2007, 17:18 (15:18 GMT)
Occurrence type:	other
Description:	fast train No. 641 entered track occupied by another fast train (No. 644)
Type of train:	fast train No. 641
Location:	Chotoviny station
Consequences:	no fatality no injury no cost
Direct cause:	wrong side signalling failure
Underlying cause:	none
Root cause:	none
Recommendations:	not issued

Annex

ACCIDENT SUMMARY

Grade:	accident
Date and time:	4th July 2007, 18:44 (16:44 GMT)
Occurrence type:	level crossing accident
Description:	level crossing accident - collision of fast train No. 648 and a lorry
Type of train:	fast train No. 648
Location:	active level crossing in km 56,245 in Veseli nad Luznici station
Consequences:	no fatality 2 injuries (engine driver – light, lorry driver – serious) total cost CZK 2 491 265 (cca EUR 99 650)
Direct cause:	level crossing user (lorry driver violence)
Underlying cause:	none
Root cause:	none
Recommendations:	addressed to infrastructure manager Ceske drahy, a. s., National Safety Authority (Drazni urad) and owner of the railway Sprava zeleznicni dopravni cesty, s. o.: It is recommended to equip the level crossing with barriers or to replace it with graded crossing.

Annex

ACCIDENT SUMMARY

Grade:	serious accident
Date and time:	14th July 2007, 10:06 (08:06 GMT)
Occurrence type:	trains collision (with consequent derailment)
Description:	collision of fast train No. 633 with an empty passenger train No. 9122
Type of train:	fast train No. 633 passenger train No. 9122
Location:	Cercany station, track No. 1
Consequences:	1 fatality (engine driver of passenger train) 6 light injuries (1 engine driver and 5 passenger of fast train), total cost CZK 4 089 216 (cca EUR 163 569)
Direct cause:	operations (station and dispatch personnel violation + driver's operational error)
Underlying cause:	none
Root cause:	none
Recommendations:	1) addressed to infrastructure manager Ceske drahy, a. s.: ● It is recommended to perform regular psychological and neurological examination of station and dispatch personnel aged 50 and above. ● It is recommended to perform psychological and neurological examination of a member of station or dispatch personnel whenever their doctor recommends to do so. 2) addressed to the National Safety Authority (Drazni urad): ● It is recommended to apply the above recommendations to all relevant railway infrastructure managers.

Annex

ACCIDENT SUMMARY

Grade:	serious accident
Date and time:	1st September 2007, 08:10 (06:10 GMT)
Occurrence type:	trains collision
Description:	collision of passenger train No. 18003 with passenger train No. 18032
Type of train:	passenger train No. 18003 passenger train No. 18032
Location:	between Bavorov and Vodnany stations, km 9, 915
Consequences:	no fatality 13 injuries (7 passengers – serious, 5 passenger + 1 staff – light) total cost CZK 137 145 (cca EUR 5 486)
Direct cause:	operations (engine driver's violation)
Underlying cause:	none
Root cause:	none
Recommendations:	addressed to infrastructure managers, railway undertakings and owners of railways: It is recommended to equip busy regional lines without interlocking with an technical interlocking system ensuring that trains can't enter occupied part of line.

ACCIDENT SUMMARY

Grade:	accident
Date and time:	1st September 2007, 08:12 (06:12 GMT)
Occurrence type:	train derailment
Description:	derailment of last carriage of passenger train No. 28406
Type of train:	passenger train No. 28406
Location:	between Tabor and Slapy stations, km 0,600
Consequences:	no fatality no injury total cost CZK 61 040 (cca EUR 2 441)
Direct cause:	infrastructure (track – equipment failure)
Underlying cause:	none
Root cause:	none
Recommendations:	not issued

Annex

ACCIDENT SUMMARY

Grade:	incident
Date and time:	10th September 2007, 14:36 (12:36 GMT)
Occurrence type:	other (train entered track already occupied by another train)
Description:	passenger train No. 9009 entered track already occupied by another train (passenger train No. 19010)
Type of train:	passenger train No. 9009 passenger train No. 19010
Location:	between Praha-Modrany and Praha-Branik stations
Consequences:	no fatality no injury no cost
Direct cause:	operational failure (improper behaviour of station personnel)
Underlying cause:	inadequate safety procedure
Root cause:	inadequate supervision (supervisors hadn't recognised improper practise)
Recommendations:	not issued

Annex

ACCIDENT SUMMARY

Grade:	accident
Date and time:	20th September 2007, 4:43 (2:43 GMT)
Occurrence type:	train collision (collision with an obstacle within the clearance gauge with consequent derailment)
Description:	collision of freight train No. 51422 with an obstacle within the clearance gauge (load released and lost by freight train No. 61310)
Type of train:	freight train No. 51422 freight train No. 61310
Location:	between Krasikov and Rudoltice v Cechach stations
Consequences:	no fatality no injury total cost CZK 592 746 (cca EUR 23 709)
Direct cause:	rolling stock-freight-operations (load release and consequent loss)
Underlying cause:	procedure not available procedure incorrectly applied
Root cause:	none
Recommendations:	addressed to Ceske drahy, a. s. and CD Cargo, a. s. railway undertakings: 1) It is recommended to create procedure for loading and transporting switches secured by textile belts. 2) It is recommended to revise contemporary way of transporting of oversized goods from DT Vyhybkarna a strojirna, a. s., Prostejov company, in order to ensure the safety, before the procedure for loading and transporting switches secured by textile belts is created.

Annex

ACCIDENT SUMMARY

Grade:	accident
Date and time:	21st September 2007, 11:10 (09:02 GMT)
Occurrence type:	level crossing accident
Description:	level crossing accident of freight train No. 52241 and a car
Type of train:	freight train No. 52241
Location:	passive level crossing between Jaromerice nad Rokytnou and Moravske Budejovice stations
Consequences:	2 fatalities (in the car) no injury total cost CZK 558489 (cca EUR 22 339)
Direct cause:	level crossing user (car driver's violation)
Underlying cause:	none
Root cause:	none
Recommendations:	addressed to infrastructure manager Ceske drahy, a. s.: 1) It is recommended to put internal rule ČD S4/3 into accordance with norm ČSN 736380. 2) It is recommended to check visibility condition at all the level crossings, where visibility reduction has been applied by the internal rule ČD S4/3, and to modify these level crossings according to the norm ČSN 736380.

Annex

ACCIDENT SUMMARY

Grade:	accident
Date and time:	2nd October 2007, 09:47 (07:47 GMT)
Occurrence type:	level crossing accident
Description:	level crossing accident of passenger train No. 83077 and a lorry
Type of train:	passenger train No. 83077
Location:	active level crossing in km 11,454 between Varnsdorf and Seifhennersdorf stations
Consequences:	no fatality 2 light injuries (train driver and lorry driver) total cost CZK 3 108 000 (cca EUR 124 320)
Direct cause:	level crossing user (lorry driver's violation) operations (station and dispatch personnel violation)
Underlying cause:	maintenance (organisation)
Root cause:	none
Recommendations:	not issued

Annex

ACCIDENT SUMMARY

Grade:	accident
Date and time:	30th October 2007, 18:06 (17:06 GMT)
Occurrence type:	level crossing accident
Description:	level crossing accident - collision of fast train No. 827 with a truck stuck at the level crossing
Type of train:	fast train No. 827
Location:	active level crossing in km 32,212 between Domasov nad Bystrici and Moravsky Beroun stations
Consequences:	no fatality no injury total cost CZK 1 894 878 (cca EUR 75 795)
Direct cause:	level crossing user (truck driver 's behaviour) operations (station and dispatch personnel violation)
Underlying cause:	manufacture (level crossings are not equipped with ID-numbers for their unique identification)
Root cause:	organisation of work (management of external communication)
Recommendations:	addressed to infrastructure manager Ceske drahy, a. s. and owner of the railway Sprava zeleznicni dopravni cesty, s. o.: It is recommended to equip each level crossing with visible ID-table with unique level crossing ID-number and an emergency telephone number, in order to avoid misunderstandings when alerting emergency services or infrastructure manager in case of emergency (see safety recommendations issued within accidents Vranany 19th March 2007 and Jablunka 7th May 2007).

ACCIDENT SUMMARY

Grade:	serious accident
Date and time:	19th November 2007, 15:31 (14:31 GMT)
Occurrence type:	train derailment
Description:	derailment of 3 wagons of freight train No. 64203
Type of train:	freight train No. 64203
Location:	Lestina u Svetle station, km 251,103
Consequences:	no fatality no injury total cost CZK 5 269 080 (cca EUR 210 763)
Direct cause:	rolling stock
Underlying cause:	axle bearing failure
Root cause:	none
Recommendations:	not issued

Annex

ACCIDENT SUMMARY

Grade:	accident
Date and time:	27th November 2007, 19:01 (18:01 GMT)
Occurrence type:	train derailment
Description:	derailment of a locomotive of freight train No. 80 203
Type of train:	freight train No. 80 203
Location:	Bystrice nad Olsi station
Consequences:	no fatality no injury total cost CZK 1 443 720 (cca EUR 57 748)
Direct cause:	infrastructure (switch failure)
Underlying cause:	inadequate maintenance
Root cause:	procedure not available
Recommendations:	addressed to infrastructure manager Sprava zeleznicni dopravni cesty, s. o.: 1) It is recommended to create and regularly apply procedure for preventative checking of mechanisms of manually operated switches. 2) It is recommended to modify maintenance procedure for mechanisms of manually operated switches in order to avoid rough manipulation with the mechanism.

Annex

ACCIDENT SUMMARY

Grade:	serious accident
Date and time:	1st December 2007, 11:50 (10:50 GMT)
Occurrence type:	train derailment
Description:	derailment of seven carriages of supercity train No. 507
Type of train:	Supercity train No. 507 (Pendolino)
Location:	between odbocka Kyje and Praha-Bechovice
Consequences:	no fatality no injury total cost CZK 25 330 271 (cca EUR 1 013 211)
Direct cause:	infrastructure (track failure)
Underlying cause:	none
Root cause:	none
Recommendations:	addressed to infrastructure manager Sprava zeleznicni dopravni cesty, s. o.:

1) It is recommended to improve training scheme of personnel performing non-destructive testing of rails.

2) It is recommended to implement European technical norms into scheme of non-destructive testing of rails.

3) It is recommended to carefully evaluate results of non-destructive testing of rails, especially when combined defect is detected.

4) It is recommended to determine maximal life of rails according to frequency and character of their load.

Annex

ACCIDENT SUMMARY

Grade:	accident
Date and time:	6th December 2007, 18:31 (17:31 GMT)
Occurrence type:	train derailment
Description:	derailment of 4th carriage (1st boogie) of passengers train
Type of train:	passenger train No. 3425
Location:	Ostrava-Kuncice station, switch No. 89
Consequences:	no fatality no injury total cost CZK 1 460 000 (cca EUR 58 400)
Direct cause:	rolling stock (carriage boogie failure)
Underlying cause:	inadequate planning and organisation of maintenance
Root cause:	none
Recommendations:	addressed to railway undertaking Ceske drahy, a. s. and to the National Safety Authority (Drazni urad): It is recommended to create maintenance scheme for electric unit class 460 based on regular monitoring of real technical condition of the vehicle.

Annex

ACCIDENT SUMMARY

Grade:	accident
Date and time:	9th January 2008, 14:51 (13:51 GMT)
Occurrence type:	collision of shunting locomotive with another locomotive
Description:	A solo running shunting locomotive collided with a locomotive waiting on track No. 26. There was consequent leak of the fuel.
Type of train:	shunting locomotive solo locomotive
Location:	Nymburk hl. n. station, track No. 26
Parties:	Ceske Drahy, a. s. (IM) CD Cargo, a. s. (RU)
Consequences:	no fatality 2 light injuries (both the drivers) total cost CZK 4 700 000 (cca EUR 188 000) leak of 370 l of fuel
Direct cause:	operations (station and dispatch personnel violation) operations (locomotive driver's violation)
Underlying cause:	none
Root cause:	none
Recommendations:	not issued

Annex

ACCIDENT SUMMARY

Grade:	accident
Date and time:	23rd January 2008, 09:57 (08:57 GMT)
Occurrence type:	train collision with an obstacle (collision of long distance passenger train with rail grinder)
Description:	Long distance passenger train No. IC 540 collided with a rail grinder working on switch No. 5 at Trebovice v Cechach station. Track workers managed to escape in time. Despite they were warned via radio, they didn't have time enough to clear the track. The train didn't derail.
Type of train:	long distance passenger train No. IC 540
Location:	Trebovice v Cechach station, switch No. 5
Consequences:	no fatality no injury total cost CZK 69 090 (cca EUR 2 764)
Direct cause:	operations (trackside personnel violation) procedures (inadequate procedures)
Underlying cause:	none
Root cause:	none
Recommendations:	addressed to railway infrastructure managers: 1) It is recommended to require railway workers working on the track to declare, before they start working, time necessary for safe evacuation of the workplace (including removal of all their equipment). 2) It is recommended to ensure that their regulations guarantee safety of track-workers with regard to train speed limit and time necessary for safe evacuation of the workplace.

Annex

ACCIDENT SUMMARY

Grade:	accident
Date and time:	10th April 2008, 6:34 (04:34 GMT)
Occurrence type:	tram collision (collision of an uncontrolled empty tram with another tram)
Type of train:	tram (uncontrolled movement)
Location:	Brno, Husova - Palackeho crossing
Consequences:	no fatality no injury total cost CZK 3 000 000 (cca EUR 120 000) disruption to traffic 3 hours and 53 minutes
Direct cause:	rolling stock (on board control-command system failure)
Underlying cause:	maintenance insufficiency weakness of on board control-command system design
Root cause:	none
Recommendations:	1) Addressed to all railway undertakings running trams KT8D5 with TV3 traction equipment: ● It is recommended to have regular check of connectors KP1 – KP4 included in maintenance procedures. 2) Addressed to the National Safety Authority (Drazni urad): ● It is recommended to consider improvement of all trams with TV3 traction equipment in order to ensure proper function of the brake pedal in case of false acting of ORJ relay.

ACCIDENT SUMMARY

Grade:	serious accident
Date and time:	11th April 2008, 17:51 (15:51 GMT)
Occurrence type:	trams collision
Description:	A pair of tramways collided with an other pair of tramways running in the opposite direction on single-track tramway line.
Type of train:	tramway
Location:	between Poruba koupaliste and Vresina tram-stops (single-track tramway line)
Parties:	Dopravni podnik Ostrava, a. s. (RU + IM)
Consequences:	3 fatalities (passengers) 11 serious injuries (passengers), 23 half-serious injuries, (21 passengers + 2 tram-drivers), 22 light injuries (passengers), total cost CZK 2 613 220 (cca EUR 104 529)
Direct cause:	operations (tram-driver) – violation
Underlying cause:	procedure inadequate
Root cause:	organisation of work and SMS (accidents of the same type not investigated)
Recommendations:	Addressed to Dopravni podnik Ostrava a. s.:

1) It is recommended to equip bi-directional single-track tramway lines with interlocking system preventing tram from entering track occupied with another tram running in the opposite direction.

2) It is recommended to equip bi-directional single-track tramway lines with interlocking system capable to switch off the power if a tram enters track already occupied with another tram running in the opposite direction.

3) It is recommended on bi-directional single-track tramway lines to ensure that a tram immediately stops when the power supply is lost.

4) It is recommended to to equip interlocking systems on bi-directional single-track tramway lines with a data recorder logging the operation.

Annex

ACCIDENT SUMMARY

Grade:	accident
Date and time:	14th May 2008, 20:29 (18:29 GMT)
Occurrence type:	level crossing accident (collision of freight train No. 60750 with a truck at the level crossing) with consequent derailment of locomotive and 3 wagons and leak of 500 litres of fuel
Type of train:	freight train No. 60570
Location:	active level crossing without barriers in km 11,006 between Neratovice and Uzice stations
Parties:	Ceske Drahy, a. s. (IM) CD Cargo, a. s. (RU)
Consequences:	0 fatalities 1 serious injury (engine driver) total cost CZK 14 115 844 (cca EUR 564 634)
Direct cause:	level crossing user (truck driver's violation)
Underlying cause:	none
Root causes:	none
Recommendation:	not issued

Annex

ACCIDENT SUMMARY

Grade:	serious accident
Date and time:	19th May 2008, 4:48 (2:48 GMT)
Occurrence type:	trains collision with consequent derailment (associated with wrong side signalling failure)
Description:	A solo running locomotive (train No. 72461) was given allowance to enter the station (green signal), despite the track was occupied with passenger train. The locomotive consequently crushed into rear carriage of passenger train (No. 5011) departing from Moravany station.
Type of train:	solo running locomotive - train No. 72461 passenger train No. 5011
Location:	Moravany station, track No. 1 (Ceska Trebova – Praha-Liben main line)
Consequences:	1 fatality (train driver of the solo running locomotive) 4 light injuries (3 passengers and train driver of train No. 5011) total cost CZK 12 643 092 (cca EUR 505 724)
Direct cause:	1) track circuit contact loss between train No. 5011 and track circuit 1K 2) reaction of interlocking system ESA 11 on unexpected change of station track No. 1 status of occupation
Underlying cause:	1) incompatibility of railway vehicles and track circuits as far as sanding is concerned 2) internal logic of interlocking system ESA 11, as far as processing of information about station track occupation received after track circuit re-activation is concerned
Root cause:	operation of railway vehicles incompatible with track circuits without adequate safety measures
Recommendations:	1) It is recommended to all infrastructure managers operating interlocking system ESA 11 to improve it, in order to process in the safe way change of station track status of occupation after track circuit re-activation. 2) It is recommended to The National Safety Authority (Drazni urad) to require implementation of the above mentioned recommendation for all existing devices of that type and of similar types. 3) It is recommended to the new infrastructure manager Sprava zeleznicni dopravni cesty, s. o. to equip renewed main lines with system for emergency remote train stopping. 4) It is recommended to all operators operating class 163 locomotives to improve sanding indicator in order to indicate real status of sanding device. 5) It is recommended to The National Safety Authority (Drazni urad) to require all new locomotives to have sanding indicator according to paragraph 4 of this recommendation.

6) It is recommended to all operators operating class 163 locomotives and similar to have regular check and maintenance of pneumatic sander valves included in maintenance procedures.

7) It is recommended to The National Safety Authority (Drazni urad) to archive documentation of components, devices and sets they certify for accident investigation and other purposes.

ACCIDENT SUMMARY

Grade:	accident
Date and time:	2nd June 2008, 16:01:13 (14:01:13 GMT)
Occurrence type:	accident to person caused by rolling stock in motion
Description:	a child's right leg was locked into the doors and the tram was towing the child for 100,5 m
Type of train:	tramway
Location:	Olomouc, Wolkerova street, Wolkerova tram-stop
Parties:	Dopravni podnik mesta Olomouce, a. s., (RU + IM)
Consequences:	no fatality 1 serious injury (the child) no cost
Direct cause:	operations – tram driver's violation (unsafe departure)
Underlying cause:	procedures incorrectly applied
Root causes:	none
Recommendation:	1) Addressed to all railway undertakings running T3 trams with DBR relay: It is recommended to check (and adjust) within maintenance procedures whether “door open” is indicated as soon as the distance between two doors is greater than 2 cm at the bottom. 2) Addressed to all railway undertakings running T3 trams with DBR relay: While performing regular maintenance it is recommended to adjust the doors in order to minimize possibility of opening the door at their bottom- while their top is locked in “door closed” position. 3) Addressed to all railway undertakings running T3 trams: It is recommended to equip all T3 trams with the emergency brake buttons placed above all entrance doors indoors. 4) Addressed to all railway undertakings running trams: It is recommended to standardize form and labelling of emergency brake buttons within all types of trams. 5) Addressed to The National Safety Authority (Drazni urad): It is recommended to force relevant railway undertakings to accept the above recommendations 1 – 4.

ACCIDENT SUMMARY

Grade:	accident
Date and time:	6th June 2008, 07:33 (05:33 GMT)
Occurrence type:	train derailment
Description:	derailment of an electric unit (passenger train No. 9407)
Type of train:	regional passenger train No. 9407
Location:	Celakovice station, switch No. 22, km 8,713
Parties:	Ceske drahy, a. s. (RU+IM)
Consequences:	no fatality no injury total cost CZK 4 227 500 (cca EUR 169 100)
Direct cause:	operations - signaller's violation (switch was operated while a train was passing)
Underlying cause:	procedures - procedure incorrectly applied
Root cause:	none
Recommendations:	not issued

Annex

ACCIDENT SUMMARY

Grade:	accident
Date and time:	30th July 2008, 22:29 (20:29 GMT)
Occurrence type:	fire in rolling stock of fast train No. 766
Description:	fire of fast train No. 766 (locomotive + first carriage) within the run
Type of train:	fast train No. 766
Location:	open line between Pnovany and Vranov u Stribra stations, km 374,100
Parties:	Ceske drahy, a. s. (RU) Sprava zeleznicni dopravni cesty, s. o. (IM)
Consequences:	no fatality no injury total cost CZK 7 326 528,40 (cca EUR 293 061)
Direct cause:	rolling stock (locomotive) / on train equipment / equipment failure
Underlying cause:	maintenance planning and organisation
Root cause:	organisation of work / safety policy
Recommendations:	1) Addressed to Ceske drahy, a. s.: ● In the interest of railway safety it is recommended to make maintenance organisation rules compliant with valid national legislation and rolling stock manufacturers' recommendations. ● It is recommended to take measures preventing managers from ordering staff to break the rules. 2) Addressed to The National Safety Authority (Drazni urad): ● It is recommended to check whether railway undertaking meets safety requirements each time they report any change to parameters which are relevant to safety certification process.