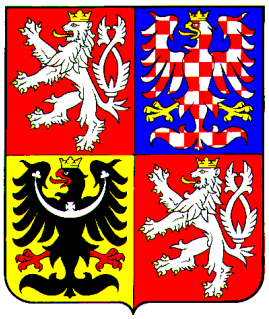
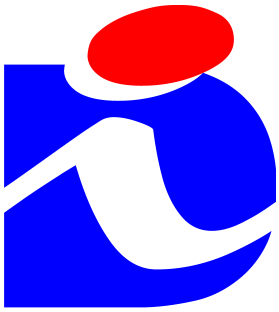


Czech Republic



The Rail Safety
Inspection Office

NIB ANNUAL REPORT 2010

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

The Rail Safety Inspection Office

Czech Republic

August 2011

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 2010, 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 2010
- 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 1st 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.

Directive 2009/149/EC amending Annex I of Directive 2004/49/EC was implemented into the national legislation on 30th August 2010.

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 1st 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,

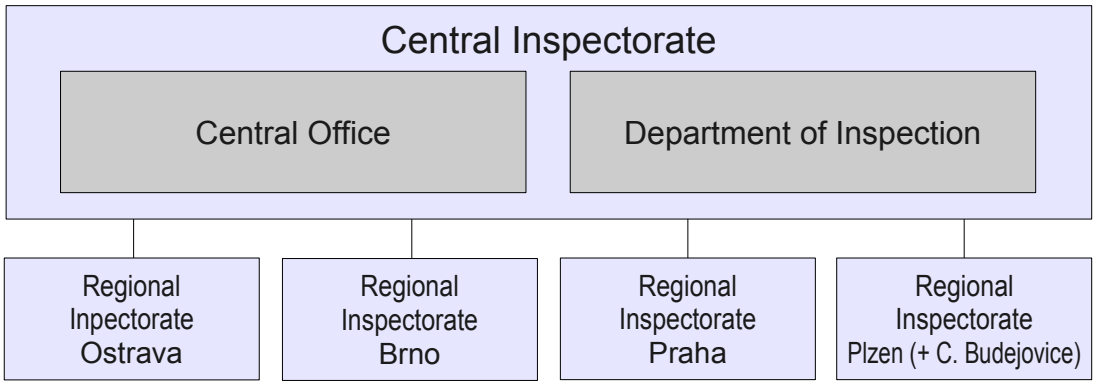
- detects deficiencies compromising the safety of rail infrastructure and rail transport,
- evaluates development trends in accidents and incidents within the rail system and takes measures to improve the situation,
- issues safety recommendations to railway undertakings, infrastructure managers, to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

1.3 Organisation

On 1st 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 investigating the causes of railway accidents and incidents independently of any other party and performing preventative inspections of railway safety. As an investigation body it is independent of any infrastructure manager, railway undertaking 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 50 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 preventative safety inspection 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 safety inspection focusing on accident and incident prevention.

1.4 Organisational flow

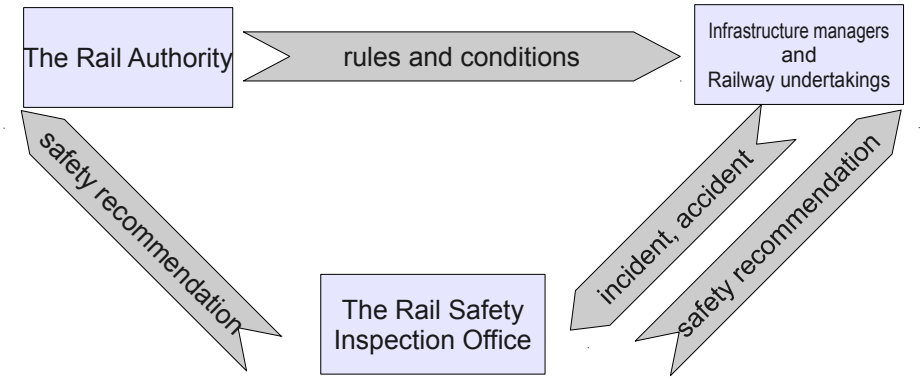
The structure of railway sector in the Czech Republic and relationships among the parties involved are defined in Act 266/1994 Coll., on Railways, as amended, and its implementing regulations. The legislation applies to the following transport systems:

- 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, including 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 the framework by developing railway legislation.
- **The Rail Safety Inspection Office (NIB)** investigates railway accidents and incidents 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 or incident.

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 drafting 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 issue of preventative safety recommendation.
- **Czech Police** investigate accident or incident with the aim of defining responsibility for the committing of offenses 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, minimize 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 aspects of each occurrence:

- independent investigation of the causes and circumstances of accident or incident (serious accidents and selected accidents and incidents only)
- meeting legal requirements for procedures following railway accident or incident by infrastructure manager and railway undertaking

- verification of the correctness and completeness of the procedures followed by infrastructure manager or railway undertaking 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 railway undertaking, 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 verifies the steps 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 railway undertaking, 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 2010, identifying key trends

Trends of completed investigations (last column of the table) are calculated as difference to previous year (2009).

Type of accidents investigated	Number of accidents	Number of victims		Damages in € (approx.)	Trends in relation to previous year
		Deaths	Ser.injury		
Collisions	7	7	88	3712989	+250%
Derailments	5	0	0	911600	n/a (was 0)
LC-accident	4	2	0	1021269	+0%
Fire in RS	0	0	0	0	+0%
Acc. to person	2	0	1	0	+100%
Other	1	0	0	0	n/a (was 0)

3.2 Investigations completed and commenced in 2010

Investigations completed in 2010

Date of occurrence	Title of the investigation (Occurrence type, location)	Legal basis	Completed (date)
22.02.2008	Train derailment: Lukavice station	i	19.01.2010
08.08.2008	Train collision with an obstacle: Studenka station	i	31.05.2010
16.02.2009	Trains collision: between Paskov and Vratimov stations	i	17.03.2010
01.04.2009	Train derailment: derailment during shunting operation in Brno hl. n. station	i	19.04.2010
24.04.2009	Train derailment: Cercany station	i	14.01.2010
16.05.2009	Trains collision: collision of run-away wagons in Ceska Trebova station	i	05.10.2010
23.06.2009	Trains collision: collision during shunting operation in Brno hl. n. station	i	16.03.2010
27.06.2009	Uncontrolled movement: Rajec-Jestrebi station	i	01.07.2010
01.07.2009	Level-crossing accident: km 2.067 between Hodonin-statni hranice and Holic nad Moravou (Slovak Republic) stations	i	22.07.2010
17.08.2009	Injury to passenger: Brno, between Porici and Nemocnice Milosrdnych Bratri tram stops	ii	04.06.2010
01.09.2009	Trains collision: between Horni Lipova and Lipova Lazne stations	i	13.04.2010

Date of occurrence	**Title of the investigation** (Occurrence type, location)	**Legal basis**	**Completed** (date)
15.09.2009	Level-crossing accident: km 79.532, Omlenice station	i	15.02.2010
16.10.2009	Trains collision: Prerov station	i	18.10.2010
10.11.2009	Level-crossing accident: during shunting operation on Kamenolom Zarubka siding (near Zdarec u Skutce station)	ii	25.08.2010
21.01.2010	Train derailment: between Prerov and Prosenice stations	i	22.11.2010
29.01.2010	Level-crossing accident: km 1,556 in Kolin station with consequent derailment	i	24.06.2010
07.03.2010	Injury to passenger: in Ostrava hl. n. station	i	10.11.2010
16.04.2010	Train collision with an obstacle: in Golcuv Jenikov station with consequent derailment	i	28.12.2010
03.07.2010	Trains collision: in Olomouc hl. n. station with consequent derailment	i	27.12.2010

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 2010

Date of occurrence	**Title of the investigation** (Occurrence type, location)	**Legal basis**
01.07.2009	Train derailment: between Senohraby and Strancice stations	i
21.01.2010	Train derailment: between Prerov and Prosenice stations	i
29.01.2010	Level-crossing accident: km 1.556 in Kolin station with consequent derailment	i
07.03.2010	Injury to passenger: in Ostrava hl. n. station	i
09.03.2010	Train derailment: between Lovosice and Prackovice nad Labem stations	i
11.03.2010	Other: intrusion on train by brake-shoe between Brodek u Prerova and Dluhonice stations	i
16.04.2010	Train collision with an obstacle: in Golcuv Jenikov station with consequent derailment	i
29.05.2010	Level-crossing accident: km 3.835 between Cervena Voda and Kraliky stations	i
28.06.2010	Train derailment: in Usti nad Labem-jih station	i
03.07.2010	Trains collision: in Olomouc hl. n. station with consequent derailment	i
13.08.2010	Level-crossing accident: during shunting operation in km 0.588 of FOSFA, a. s., siding	ii

31.08.2010	Level-crossing accident: in km 0,535 (P10627) of siding: Vleckova sit OKD, Doprava, a. s.	ii
07.12.2010	Train derailment: between Jesenik and Lipova Lazne stations	i
08.12.2010	Train derailment: between Prerov and Prosenice stations (similar accident occurred on 21. 01. 2010)	i
20.12.2010	Trains collision: in Kamenne Zehrovice station	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 2009

Safety Studies completed in 2010

Date of commission	**Title of the Study** (Occurrence type, location)	**Legal basis**	**Completed** (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 2010

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 2010

See annex of this report.

3.5 Comment and introduction or background to the investigations

Date of occurrence	**Title of the investigation** (Occurrence type, location)	**Legal basis**
08.08.2008	Train collision with an obstacle: Studenka station	i
NIB CZ didn't investigate cause of bridge collapse, as reconstruction of road bridge is out of NIB's scope. The investigation was focusing on: • the causes of a collision of the train with an obstacle (fallen bridge) • deficiencies in system ensuring safety during the construction works The investigation found that no effective measures eliminating safety risks originating from interaction of reconstruction works and railway traffic were required by results of mandatory procedures performed during preparations of the reconstruction.		

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 2010 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 2006–2010)

Rail investigations completed in 2006–2010

The table groups investigations by year of their completion.

Accidents investigated		2006	2007	2008	2009	2010	TOT
Serious accidents (Art 19, 1 + 2)	Train collision	1	0	5	1	1	**8**
	Train collision with an obstacle	0	0	0	0	1	**1**
	Train derailment	0	1	2	0	1	**4**
	Level-crossing accident	-	-	-	-	-	**-**
	Accident to person caused by RS in motion	-	-	-	-	-	**-**
	Fire in rolling stock	-	-	-	-	-	**-**
	Involving dangerous goods	-	0	0	0	0	**0**
Other accidents (Art 21.6)	Train collision	1	2	2	1	5	**11**
	Train collision with an obstacle	0	1	2	0	0	**3**
	Train derailment	1	3	5	0	4	**13**
	Level-crossing accident	0	8	5	4	4	**21**
	Accident to person caused by RS in motion	0	1	1	1	2	**5**
	Fire in rolling stock	0	0	1	0	0	**1**
	Involving dangerous goods	0	0	0	0	0	**0**
Incidents		0	0	2	0	1	**3**
TOTAL		**3**	**16**	**25**	**7**	**19**	**70**

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 railway undertaking, 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 2006 – 2010

Recommendations issued		**Recommendation implementation status**					
		Implemented		**In progress**		**Not to be implemented**	
Year	**[No.]**	**[No.]**	**[%]**	**[No.]**	**[%]**	**[No.]**	**[%]**
2006	-	-	-	-	-	-	-
2007	**3**	2,5	83	0	0	0,5	17
2008	**16**	9,5	59,4	2	12,5	4,5	28,1
2009	**5**	2	40	0	0	3	60
2010	**11**	6,5	59	2	18	2,5	23
TOTAL	**35**	**20,5**	**59**	**4**	**11**	**10,5**	**30**

Accidents with safety recommendations issued in 2006 – 2010

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	implemented	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	implemented	12.12.2008
19.02.2008	Injury to passenger (cableway): Janske Lazne, Protez	not implemented	31.08.2009
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
02.06.2008	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
08.08.2008	Train collision with an obstacle: Studenka station	partially implemented	31.05.2010
10.11.2008	Trains collision: between Hlinsko v Cechach and Zdirec nad Doubravou stations	not implemented	02.07.2009
23.11.2008	Level-crossing accident: km 20.285, between Horni Lipova and Ramzova stations	partially implemented	30.06.2009
17.12.2008	Level-crossing accident: km 4.981, between Branka u Opavy and Odbocka Moravice stations	partially implemented	26.08.2009
08.01.2009	Level-crossing accident: km 222.975, between Hluboka nad Vltavou and Zliv stations	implemented	07.07.2009
16.02.2009	Trains collision: between Paskov and Vratimov stations	in progress	17.03.2010
01.04.2009	Train derailment: derailment during shunting operation in Brno hl. n. station	implemented	19.04.2010
24.04.2009	Train derailment: Cercany station	implemented	14.01.2010

Date of occurrence	**Title of the investigation** (Occurrence type, location)	**Status of implem.**	**Completed** (date)
16.05.2009	Trains collision: collision of run-away wagons in Ceska Trebova station	implemented	05.10.2010
23.06.2009	Trains collision: collision during shunting operation in Brno hl. n. station	implemented	16.03.2010
17.08.2009	Injury to passenger: Brno, between Porici and Nemocnice Milosrdnych Bratri tram stops	partially implemented	04.06.2010
01.09.2009	Trains collision: between Horni Lipova and Lipova Lazne stations	partially implemented	13.04.2010
16.10.2009	Trains collision: Prerov station	not implemented	18.10.2010
07.03.2010	Injury to passenger: in Ostrava hl. n. station	in progress	10.11.2010
16.04.2010	Train collision with an obstacle: in Golcuv Jenikov station with consequent derailment	implemented	28.12.2010

4.2 Recommendations issued in 2010

Date of occurrence	**Title of the investigation, Safety recommendation**
08.08.2008	Train collision with an obstacle: Studenka station

1) Addressed to the Czech National Safety Authority (Drazni urad):

- *It is recommended to ensure that the analysis of interaction of construction works and railway traffic is part of mandatory procedures required for obtaining allowance to start the works.*
- *It is recommended to ensure that the allowance to start the works is issued only when effective measures are required in order to eliminate risks identify by the above analysis.*
- *It is recommended to require presence of authorized specialist at the site (according to §149 Act No. 183/2006 Coll.) during construction operations identified by the above analysis as operations with higher level of risk; this specialist must be equipped with direct communication connection to person dispatching railway traffic in order to be able to require immediate cancel of traffic in case of emergency.*
- *It is recommended to take own measure to ensure implementation of the below recommendation by IM.*

2) Addressed to Sprava zeleznicni dopravni cesty, statni organizace:

- *It is recommended to ensure that person dispatching railway traffic can immediately take effective measures to ensure railway safety when canceling of railway traffic is requested by authorized specialist via designated communication channel (according to the above recommendation addressed to NSA).*

Date of occurrence	Title of the investigation, Safety recommendation
16.02.2009	Trains collision: between Paskov and Vratimov stations
1) Addressed to Sprava zeleznicni dopravni cesty, statni organizace (IM): • *It is recommended to hurry on introduction of ETCS to both main and regional lines.* 2) Addressed to railway undertaking and operator of IM Ceske drahy, a. s.: • *It is recommended to hurry on installation of mobile components of ETCS into railway vehicles in order to allow use of full functionality of ETCS as soon as the infrastructure is ready.* • *It is recommended to improve procedures in stations where passenger trains are dispatched by signals only, in order to prevent train on departure from passing signal at danger.* 3) Addressed to Czech National Safety Authority (Drazni urad): • *It is recommended to take own measure forcing implementation of the above recommendation.*	
01.04.2009	Train derailment: derailment during shunting operation in Brno hl. n. station
Addressed to Sprava zeleznicni dopravni cesty, statni organizace (IM): • *It is recommended to verify track layouts within the whole railway network whether length of straight track in between two reverse curves and radii of these curves are in line with technical norm CSN 73 6360-1 „Konstrukcni a geometricke usporadani koleje zeleznicnich drah a jeji prostorova poloha – Cast 1: Projektovani“ (Paragraph 8.4.2 and Table C.3.1) with regard to operation of carriages 26.4 m long and longer.*	
24.04.2009	Train derailment: Cercany station
Addressed to railway undertaking OKD Doprava, akciova spolecnost: • *It is recommended to modify procedure for visual inspection of freight in order to ensure that wagons with unbalanced freight are prevented from running.*	
16.05.2009	Trains collision: collision of run-away wagons in Ceska Trebova station
Addressed to railway undertaking CD Cargo, a. s.: • *It is recommended to take safety measures preventing wagons from running away from shunting yard of Ceska Trebova station with regard to situations, when stop-shoes situated at the bottom of the yard are not effective due to mass of wagons and their distance from the stop-shoes.*	

Date of occurrence	Title of the investigation, Safety recommendation
23.06.2009	Trains collision: collision during shunting operation in Brno hl. n. station
1) Addressed to Ceske drahy, a. s., and to all railway undertakings running electric locomotives "Skoda" types: 69E1, 69E2, 69E3, 69E4, 69E5, 71E1, 71E2, 71E3, 98E1 and 99E1.: • *It is recommended to have regular check of card configuration included in maintenance procedures (including card No. A0311).* • *It is recommended to prevent unauthorized change of position of card No. A0311.* • *It is recommended to prevent connector sets No. XK 21 to XK 36 from water and dust.* • *It is recommended to include emergency procedures for situations when locomotive doesn't react properly (including spontaneous acceleration of locomotive) into regular training of train drivers.* 2) Addressed to Czech National Safety Authority (Drazni urad): • *It is recommended to require implementation of the above recommendation by all railway undertakings running electric locomotives "Skoda" types: 69E1, 69E2, 69E3, 69E4, 69E5, 71E1, 71E2, 71E3, 98E1 and 99E1 in Czech Republic.*	
17.08.2009	Injury to passenger: Brno, between Porici and Nemocnice Milosrdnych Bratri tram stops
1) Addressed to Dopravni podnik mesta Brna, a. s. (RU): • *It is recommended to develop procedure for proper adjustment of first roof-vent and include it into maintenance manual for trams of K2R.03 type.* 2) Addressed to NSA (Drazni urad): • *It is recommended to disseminate the above recommendation to all undertakings running trams of K2R.03 type.* 3) Addressed to Pars nova, a. s., Sumperk (manufacturer of trams of K2R.03 type): • *It is recommended to develop internal regulation for exchange of safety-relevant information regarding inspections and maintenance of railway vehicles they produce, renew or maintain.*	
01.09.2009	Trains collision: between Horni Lipova and Lipova Lazne stations
1) Addressed to Sprava zeleznicni dopravni cesty, statni organizace (IM): • *It is recommended to develop procedure for shunting beyond the allowed point during shunting between stations and include it into their internal regulations.* 2) Addressed to Sprava zeleznicni dopravni cesty, statni organizace (IM) and to railway undertaking and operator of infrastructure manager Ceske drahy, a. s.: • *It is recommended to develop internal regulation banning use of railway vehicle occupied with passengers for shunting between stations to tow defective train.* 3) Addressed to Czech National Safety Authority (Drazni urad): • *It is recommended to take own measure forcing implementation of the above recommendation.*	

Date of occurrence	Title of the investigation, Safety recommendation
16.10.2009	Trains collision: Prerov station
1) Addressed to IM Sprava zeleznicni dopravni cesty, statni organizace: • *It is recommended to hurry on introduction of ETCS to both main and regional lines (according to recommendation in Report from 16th February 2009 between Vratimov and Paskov stations).* • *It is recommended to equip busy regional lines without interlocking or ETCS with an technical interlocking system ensuring that trains can't enter beyond the stop signal.* 2) Addressed to RU and operator of infrastructure manager CD Cargo, a. s.: • *It is recommended to hurry on installation of mobile components of ETCS into railway vehicles in order to allow use of full functionality of ETCS as soon as the infrastructure is ready (according to recommendation in Report from 16th February 2009 between Vratimov and Paskov stations).* 3) Addressed to Czech National Safety Authority (Drazni urad): • *It is recommended to take own measure forcing implementation of the above recommendation.*	
07.03.2010	Injury to passenger: in Ostrava hl. n. station
Addressed to RU and operator of infrastructure manager Ceske drahy, a. s.: • *It is recommended to establish the limit of the allowance between the frame and the door of railcars class 842 to minimize the possibility of false door-closed indication when a passenger's hand is locked between the doors.* • *It is recommended to include regular check of the above mentioned allowance into railcar class 842 maintenance procedures.* • *It is recommended to improve door-closed detection system to indicate door-closed status only when doors are tightly closed along the full length of their edge.* • *It is recommended to modify door control system of railcar class 842 to disable initiation of pneumatic door-closing by door handle when driver's door-control switch is in "open left" or "open right" positions. This should prevent unwanted door-closing when a door handle is accidentally operated by boarding passenger.*	
16.04.2010	Train collision with an obstacle: in Golcuv Jenikov station with consequent derailment
1) Addressed to CD Cargo, a. s., railway undertaking: • *It is recommended to define upper limit of service kilometers for level „V“ maintenance in „Kvsl-B-2009“ regulation.* 2) Addressed to railway undertakings running class 230, 240 or 242 locomotives: • *It is recommended to include regular inspection of traction force transmission backup hangers into maintenance procedure of such level, that respects service kilometers limit recommended by manufacturer for this type of inspection.*	

Date of occurrence	Title of the investigation, Safety recommendation
	• *According to causes of this accident it is recommended to perform exceptional inspection of condition and parameters of traction force transmission system, including backup hangers, sliders' box and its screws.*

ACCIDENT SUMMARY

Grade:	accident
Date and time:	22nd June 2008, 11:40 (09:33 GMT)
Occurrence type:	train derailment
Description:	a wagon of freight train No. Nex 1.nsl 47315 derailed while running on an open line. Consequently another wagon of this train derailed on switch No. 10 when entering station Lukavice na Morave. Moreover, fast train No. EC 108 was hit by ballast thrown by derailed wagons.
Type of train:	freight train No. Nex 1.nsl 47315
Location:	between Zabreh na Morave and Lukavice na Morave stations km 45,892
Parties:	CD Cargo, a. s. (RU of train No. Nex 1.nsl 47315) Ceske drahy, a. s. (IM and RU of train No. EC 108) TOUAX RAIL LTD, Chez TOUAX SA, 5, rue Bellini, 92800 Puteaux la Defeuse (owner of derailed wagon Laaers No. 23 87 436 3643-9)
Consequences:	no fatality, no injury total cost CZK 9 449 727,04 (excluding damage of derailed carriages, which is unknown yet)
Direct cause:	rolling stock (vibration of freight wagon SNCF Laaers 23 87 436 3643-9)
Underlying cause:	track maintenance (track condition not in line with specifications)
Root cause:	not investigated
Recommendations:	not issued

ACCIDENT SUMMARY

Grade:	serious accident
Date and time:	8th August 2008, 10:30:27 (08:30:27 GMT)
Occurrence type:	train collision with an obstacle
Description:	Collision of Eurocity train No. 108 with an obstacle (fallen bridge structure), consequent derailment of locomotive and 7 carriages, collision with stationary freight train
Type of train:	Eurocity train No. 108
Location:	Studenka station, track No. 101, km 243,576
Parties:	Sprava zeleznicni dopravni cesty, statni organizace (IM) Ceske drahy, a. s. (RU of train No. EC 108) Tratova strojni spolecnost, a. s. (RU of freight train) Moravskoslezsky kraj (owner of the bridge)
Consequences:	7 fatalities, 88 injuries, total cost CZK 62 458 840,11
Direct cause:	disruption to clearance gauge of tracks No. 101 – 105b of Studenka station by bridge structure collapsing when EC train No. 108 was approaching (third parties)
Underlying cause:	Drazni inspekce (NIB) didn't investigate causes of collapse of the bridge. The investigation was focusing on ensuring safety of railway operations during reconstruction of the bridge. There was identified the following underlying cause in this field: No effective measures eliminating safety risks originating from interaction of reconstruction works and railway traffic were required by results of mandatory procedures performed during preparations of the reconstruction.
Root cause:	none
Recommendation:	1) Addressed to the Czech National Safety Authority (Drazni urad): • It is recommended to ensure that the analysis of interaction of construction works and railway traffic is part of mandatory procedures required for obtaining allowance to start the works. • It is recommended to ensure that the allowance to start the works is issued only when effective measures are required in order to eliminate risks identify by the above analysis. • It is recommended to require presence of authorized specialist at the site (according to §149 Act No. 183/2006 Coll.) during construction operations identified by the above analysis as operations with higher level of risk; this specialist must be equipped with direct communica-

tion connection to person dispatching railway traffic in order to be able to require immediate cancel of traffic in case of emergency.

- It is recommended to take own measure to ensure implementation of the below recommendation by IM.

2) Addressed to Sprava zeleznicni dopravni cesty, statni organizace:

- It is recommended to ensure that person dispatching railway traffic can immediately take effective measures to ensure railway safety when canceling of railway traffic is requested by authorized specialist via designated communication channel (according to the above recommendation addressed to NSA).

ACCIDENT SUMMARY

Grade:	serious accident
Date and time:	16th February 2009, 09:02 (08:02 GMT)
Occurrence type:	trains collision
Description:	regional passenger train No. 3101 passed a signal at danger and collided with regional passenger train No. 3116.
Type of train:	regional passenger train No. 3101 regional passenger train No. 3116
Location:	open line between Vratimov and Paskov stations, km 13,459 (Ostrava hl. n. – Valasske Mezirici main line)
Parties:	Sprava zeleznicni dopravni cesty, statni organizace (IM) Ceske drahy, a. s. (RU)
Consequences:	no fatality, 57 injuries total cost CZK 14 073 507,61
Direct cause:	train driver's operational error (didn't respect red signal)
Contributing factor:	absence of technical equipment preventing train from passing signal at danger
Underlying cause:	no measures taken despite a series of similar accidents occurred before
Root cause:	none

Recommendations:

1) Addressed to infrastructure manager Sprava zeleznicni dopravni cesty, statni organizace:

- It is recommended to hurry on introduction of ETCS to both main and regional lines.

2) Addressed to railway undertaking and operator of infrastructure manager Ceske drahy, a. s.:

- It is recommended to hurry on installation of mobile components of ETCS into railway vehicles in order to allow use of full functionality of ETCS as soon as the infrastructure is ready.
- It is recommended to improve procedures in stations where passenger trains are dispatched by signals only, in order to prevent train on departure from passing signal at danger.

3) Addressed to Czech National Safety Authority (Drazni urad):

- It is recommended to take own measure forcing implementation of the above recommendation.

ACCIDENT SUMMARY

Grade:	accident (according to our national law it is serious accident due to damage which is more than 5 000 000,- CZK)
Date and time:	1st April 2009, 07:02 (05:02 GMT)
Occurrence type:	train derailment
Description:	derailment of 3 carriages of shunting train set during shunting operation in Brno hl. n. station
Type of train:	shunting movement
Location:	Brno hl. n. station, switch No. 29, km 142.352
Parties:	Sprava zeleznicni dopravni cesty, statni organizace (IM) Ceske drahy, a. s. (RU)
Consequences:	no fatality, no injury total cost: 7 481 228,- CZK
Direct cause:	improper track layout (insufficient length (2.479 m) of straight track in between two reverse curves)
Underlying cause:	track layout parameters not verified after reconstruction of switches No. 28 and 26 nor before bringing carriages of length of 26.4 m into operation
Root cause:	systemic and continuous registration, evaluation and verification of track layout parameters not performed nor before allowing operation of carriages of length of 26.4 m

Recommendations: 1) Addressed to Sprava zeleznicni dopravni cesty, statni organizace (IM):

It is recommended to verify track layouts within the whole railway network whether length of straight track in between two reverse curves and radii of these curves are in line with technical norm CSN 73 6360-1 „Konstrukcni a geometricke usporadani koleje zeleznicnich drah a jeji prostorova poloha – Cast 1: Projektovani“ (Paragraph 8.4.2 and Table C.3.1) with regard to operation of carriages 26.4 m long and longer.

ACCIDENT SUMMARY

Grade:	accident
Date and time:	24th April 2009, 4:10 (2:10 GMT)
Occurrence type:	train derailment
Description:	derailment of 4 loaded wagons of freight train No. 1.nsl Pn 69911
Type of train:	freight train No. 1.nsl Pn 69911
Location:	Cercany station, track No. 2a, km 144,478
Parties:	Sprava zeleznicni dopravni cesty, statni organizace (IM) OKD Doprava, akciova spolecnost (RU)
Consequences:	no fatality, no injury total cost CZK 1 530 000,- (EUR 58 000,-)
Direct cause:	improperly loaded wagon – unbalanced freight (rolling stock / freight / operational failure)
Underlying cause:	method for verification of freight's balance not specified (procedure inadequate)
Root cause:	risk caused by unbalanced freight not recognized (SMS / safety targets)
Recommendations:	Addressed to railway undertaking OKD Doprava, akciova spolecnost: It is recommended to modify procedure for visual inspection of freight in order to ensure that wagons with unbalanced freight are prevented from running.

ACCIDENT SUMMARY

Grade:	accident
Date and time:	16th May 2009, 21:50 (19:50 GMT)
Occurrence type:	trains collision with consequent derailment
Description:	group of 5 wagons run away from track No. 233. The group passed whole station and collided with stationary locomotive on track No. T 408. Wagons and the locomotive consequently derailed.
Type of train:	shunting movement
Location:	Ceska Trebova station, track No. 233
Parties:	CD Cargo, a. s. (RU) ODOS, a. s. (owner of the locomotive) Sprava zeleznicni dopravni cesty, statni organizace (IM)
Consequences:	no fatality, no injury total cost CZK 3 684 000,-
Direct cause:	rolling stock (handbrake failure)
Underlying cause:	maintenance (improper)
Root cause:	none

Recommendations: Addressed to railway undertaking CD Cargo, a. s.:

- It is recommended to take safety measures preventing wagons from running away from shunting yard of Ceska Trebova station with regard to situations, when stop-shoes situated at the bottom of the yard are not effective due to mass of wagons and their distance from the stop-shoes.

ACCIDENT SUMMARY

Grade:	accident
Date and time:	23rd June 2009, 04:31:32 h (02:31:32 GMT)
Occurrence type:	trains collision
Description:	collision of shunting locomotive 362.171-1 with an empty carriages
Type of train:	shunting movement + empty standing carriages
Location:	Brno station (hold yard), track No. 512, km 0,564
Parties:	Sprava zeleznicni dopravni cesty, statni organizace (IM) Ceske drahy, a. s. (RU)
Consequences:	no fatality, no injury total cost: 3 280 053,- CZK
Direct cause:	rolling stock (spontaneous acceleration due to faulty electric signal)
Underlying cause:	maintenance organization and planning (card No. A0311 (Supervisory card) installed in improper slot)
Root cause:	organization of work and SMS (card configuration check not required)
Recommendations:	1) Addressed to Ceske drahy, a. s., and to all railway undertakings running electric locomotives "Skoda" types: 69E1, 69E2, 69E3, 69E4, 69E5, 71E1, 71E2, 71E3, 98E1 and 99E1.:

- It is recommended to have regular check of card configuration included in maintenance procedures (including card No. A0311).
- It is recommended to prevent unauthorized change of position of card No. A0311.
- It is recommended to prevent connector sets No. XK 21 to XK 36 from water and dust.
- It is recommended to include emergency procedures for situations when locomotive doesn't react properly (including spontaneous acceleration of locomotive) into regular training of train drivers.

2) Addressed to Czech National Safety Authority (Drazni urad):

- It is recommended to require implementation of the above recommendation by all railway undertakings running electric locomotives "Skoda" types: 69E1, 69E2, 69E3, 69E4, 69E5, 71E1, 71E2, 71E3, 98E1 and 99E1 in Czech Republic.

ACCIDENT SUMMARY

Grade:	incident
Date and time:	27th June 2009, 11:51 (09:51 GMT)
Occurrence type:	uncontrolled movement (collision of passenger train with shunting freight train)
Description:	Eurocity train No. 174 stopped at Rajec-Jestrebi station due to engine fault. Later on the train started to move downhill backwards without its driver and was stopped by emergency brake after several hundreds meters. During its uncontrolled ride it passed "red" signal.
Type of train:	long distance passenger train
Location:	Rajec-Jestrebi station
Parties:	Ceske drahy, a. s. (RU) Sprava zeleznicni dopravni cesty, statni organizace (IM) Zeleznicna spolocnost Slovensko, a. s.
Consequences:	no fatality, no injury no cost
Direct cause:	operations (driver's violation)
Contr. factor:	operations (runaway train wasn't stopped immediately)
Underlying cause:	none
Root cause:	none
Recommendations:	not issued

ACCIDENT SUMMARY

Grade:	accident
Date and time:	1st July 2009, 10:20 (08:20 GMT)
Occurrence type:	level crossing accident
Description:	Eurocity train No. 30276 collided with rear part of a lorry passing the crossing
Type of train:	Eurocity train No. 30276
Location:	passive level crossing in km 2,067 between Hodonin-zastavka stop and Hodonin station
Parties:	Ceske drahy, a. s. (RU) Sprava zeleznicni dopravni cesty, statni organizace (IM) Vodovody a kanalizace Hodonin, akciova spolecnost (owner of the lorry)
Consequences:	no fatality, no injury total cost CZK 1 244 209,-
Direct cause:	poor level crossing condition (insufficient visibility)
Underlying cause:	1. improperly calculated visibility 2. improper procedure for level crossing inspection and maintenance
Root cause:	safety management system didn't prevent use of IM's internal regulation No. SZDC (CSD) S 4/3, which is not in line with valid legislations and technical norms
Recommendations:	not issued

ACCIDENT SUMMARY

Grade:	accident
Date and time:	17th August 2009, 16:11 (14:11 GMT)
Occurrence type:	accident caused by rolling stock in motion
Description:	two passengers were slightly injured by nearby electric arc when operating defective vent which touched the pantograph.
Type of train:	tram K2R.03 type
Location:	the City of Brno, between Porici and Nemocnice Milosrdnych bratri tram stops
Parties:	Dopravni podnik mesta Brna, a. s. (IM + RU)
Consequences:	0 fatalities, 2 light injuries, total cost CZK 0.- disruption to traffic 0 hours
Direct cause:	an electrical short-circuit initiated when the vent touched the pantograph
Underlying cause:	improperly adjusted mechanism of the vent due to insufficient maintenance procedure
Root cause:	none
Recommendations:	1) Addressed to Dopravni podnik mesta Brna, a. s. (RU): It is recommended to develop procedure for proper adjustment of first roof-vent and include it into maintenance manual for trams of K2R.03 type. 2) Addressed to NSA (Drazni urad): It is recommended to disseminate the above recommendation to all undertakings running trams of K2R.03 type. 3) Addressed to Pars nova, a. s., Sumperk (manufacturer of trams of K2R.03 type): It is recommended to develop internal regulation for exchange of safety-relevant information regarding inspections and maintenance of railway vehicles they produce, renew or maintain.

ACCIDENT SUMMARY

Grade:	accident (according to our national law: serious accident)
Date and time:	1st September 2009, 16:10 (14:10 GMT)
Occurrence type:	trains collision
Description:	collision of a railcar (occupied by passengers) shunting between Horni Lipova and Ostruzna stations in km 24,886 where a defective railcar (regional passenger train No. 3613 occupied by passengers) was waiting for towing.
Type of train:	shunting operation – solo running railcar occupied by passengers regional passenger train No. 3613
Location:	open single-track line between Horni Lipova and Ostruzna stations, km 24,886 (Mikulovice st. hr. – Hanusovice main line)
Parties:	Sprava zeleznicni dopravni cesty, statni organizace (IM) Ceske drahy, a. s. (RU)
Consequences:	no fatality, 11 light injuries (all passengers) total cost CZK 1 681 956,50,-
Direct cause:	unauthorized shunting beyond km 24,886
Contributing factor:	station and dispatch personnel – communicational failure between station master and engine driver
Underlying cause:	none
Root cause:	none

Recommendations:

1) Addressed to infrastructure manager Sprava zeleznicni dopravni cesty, statni organizace:

- It is recommended to develop procedure for shunting beyond the allowed point during shunting between stations and include it into their internal regulations.

2) Addressed to infrastructure manager Sprava zeleznicni dopravni cesty, statni organizace and to railway undertaking and operator of infrastructure manager Ceske drahy, a. s.:

- It is recommended to develop internal regulation banning use of railway vehicle occupied with passengers for shunting between stations to tow defective train.

3) Addressed to Czech National Safety Authority (Drazni urad):

- It is recommended to take own measure forcing implementation of the above recommendation.

ACCIDENT SUMMARY

Grade:	accident
Date and time:	15th September 2009, 14:42 (12:42 GMT)
Occurrence type:	level crossing accident
Description:	collision of freight train No. 48162 with a passenger car at the level crossing with consequent derailment (active level crossing equipped with warning lights only)
Type of train:	freight train No. 48162
Location:	Omlenice station, level crossing in km 79,532 (Ceske Budejovice – Horni Dvoriste statni hranice main line)
Parties:	Sprava zeleznicni dopravni cesty, statni organizace (IM) CD Cargo, a. s. (RU) GEFCO TLA/GMO/WAG (owner of wagons) level crossing user
Consequences:	1 fatality (car driver) total cost: 16 159 394,- CZK
Direct cause:	third party (level crossing user)
Underlying cause:	none
Root cause:	none

Recommendations: not issued

ACCIDENT SUMMARY

Grade:	accident
Date and time:	16th October 2009, 22:46 (20:46 GMT)
Occurrence type:	trains collision caused by signal passed at danger and consequence derailment
Description:	freight train No. 50238 passed signal at danger and collided with standing freight train No. 61121. One wagon of the freight train No. 50238 derailed of one bogie.
Type of train:	freight train No. 50238 freight train No. 61121
Location:	Prerov station, track No. 402A, km 181,338; (Breclav – Prerov main line)
Parties:	Sprava zeleznicni dopravni cesty, statni organizace (IM) CD Cargo, a. s. (RU)
Consequences:	1 light injury (train driver of the freight train No. 61121) total cost CZK 4 348 036,23,-
Direct cause:	train driver's operational error (didn't respect red signal)
Contributing factor:	absence of technical equipment preventing train from passing signal at danger
Underlying cause:	none
Root cause:	none
Recommendations:	1) Addressed to infrastructure manager Sprava zeleznicni dopravni cesty, statni organizace: ● It is recommended to hurry on introduction of ETCS to both main and regional lines (according to recommendation in Report from 16th February 2009 between Vratimov and Paskov stations). ● It is recommended to equip busy regional lines without interlocking or ETCS with an technical interlocking system ensuring that trains can't enter beyond the stop signal. 2) Addressed to railway undertaking and operator of infrastructure manager CD Cargo, a. s.: ● It is recommended to hurry on installation of mobile components of ETCS into railway vehicles in order to allow use of full functionality of ETCS as soon as the infrastructure is ready (according to recommendation in Report from 16th February 2009 between Vratimov and Paskov stations) 3) Addressed to Czech National Safety Authority (Drazni urad): ● It is recommended to take own measure forcing implementation of the above recommendation.

ACCIDENT SUMMARY

Grade:	accident
Date and time:	10th November 2009, 11:10 (10:10 GMT)
Occurrence type:	level crossing accident
Description:	level crossing accident (collision of shunting wagons with a lorry) with consequent derailment
Type of train:	shunting movement
Location:	passive level crossing in km 0,070 of Kamenolom Zarubka siding (originating in km 57,898 of 507A Havlickuv Brod – Pardubice main line)
Parties:	Ceskomoravsky sterk, a. s. (owner of the siding) Ceskomoravsky cement, a. s. (infrastructure manager of the siding) OKD, Doprava, akciova spolecnost (railway undertaking) Sprava zeleznicni dopravni cesty, statni organizace (main line infrastructure manager) Ceske drahy, a. s. (operator of the main line infrastructure manager)
Consequences:	1 fatality (lorry driver), no injury total cost CZK 320 000.-
Direct cause:	1) Gravity shunting across passive level crossing not secured by responsible staff (operations) 2) Way not given to railway vehicles at level crossing (third party)
Contributory factor:	gravity shunting without engine performed on 16‰ descend (procedures not followed – violation)
Underlying cause:	none
Root cause:	none

Recommendations: not issued

ACCIDENT SUMMARY

Grade:	accident
Date and time:	21st January 2010, 23:55:30 (22:55:30 GMT)
Occurrence type:	train derailment
Description:	Derailment of 1 wagons (13rd wagon) of freight train No. 46723 while running between Prerov and Prosenice stations
Type of train:	freight train No. 46723
Location:	Open line between Prerov and Prosenice stations, track No. 2, km 186,780; (Bohumin – Prerov main line)
Parties:	Sprava zeleznicni dopravni cesty, statni organizace (IM) CD Cargo, a. s. (RU) Società Italiana Transporti Ferroviari Autoveicoli S. p. A. (SITFA), Via Bruno Buozzi 28, 10024 Moncalieri (owner of the wagons)
Consequences:	no fatality, no injury total cost CZK 4 140 292,33,-
Direct cause:	technology – rolling stock (technical failure – missing components in the bogie)
Underlying cause:	none
Root cause:	none

Recommendations: not issued

ACCIDENT SUMMARY

Grade:	accident
Date and time:	29th January 2010, 04:15 (03:15 GMT)
Occurrence type:	level crossing accident
Description:	collision of the passenger train No. 22200 with a lorry at the level crossing with consequent derailment. Active level crossing (equipped with warning lights).
Type of train:	regional passenger train No. 22200
Location:	Kolin station, level crossing in km 1,556 (Kolin – Ledecko regional line)
Parties:	Sprava zeleznicni dopravni cesty, statni organizace (IM) Ceske drahy, a. s. (RU) LITRA AUTOTRANSPORT, s. r. o., Liberec (owner of the lorry)
Consequences:	1 light injury (driver of lorry) total cost CZK 7 808 163,-
Direct cause:	third party (truck driver's violation)
Underlying cause:	none
Root cause:	none

Recommendations: not issued

ACCIDENT SUMMARY

Grade:	accident
Date and time:	7th March 2010, 04:02 (03:02 GMT)
Occurrence type:	accident to person caused by rolling stock in motion
Description:	a person was locked into the doors by the ankle (during the getting out) and towed him during the shunting operation
Type of train:	shunting movement
Location:	Ostrava hlavni nadrazi–banske nadrazi, station track No. 804, platform No. 5, km 0,247; (Ostrava hl. n. – Valasske Mezirici main line)
Parties:	Sprava zeleznicni dopravni cesty, statni organizace (IM) Ceske drahy, a. s. (RU)
Consequences:	1 serious injury total cost CZK 0,-
Direct cause:	third parties – passenger didn't clear the door of railcar class 842, despite light and acoustic warning was given
Contributing factor:	passenger's behavior affected by addictive substance (alcohol)
Underlying cause:	class 842 railcar not equipped with reliable detection of fully closed doors
Root cause:	none

Recommendations: 1) Addressed to railway undertaking and operator of infrastructure manager Ceske drahy, a. s.:

- It is recommended to establish the limit of the allowance between the frame and the door of railcars class 842 to minimize the possibility of false door-closed indication when a passenger's hand is locked between the doors.
- It is recommended to include regular check of the above mentioned allowance into railcar class 842 maintenance procedures.
- It is recommended to improve door-closed detection system to indicate door-closed status only when doors are tightly closed along the full length of their edge.
- It is recommended to modify door control system of railcar class 842 to disable initiation of pneumatic door-closing by door handle when driver's door-control switch is in "open left" or "open right" positions. This should prevent unwanted door-closing when a door handle is accidentally operated by boarding passenger.

ACCIDENT SUMMARY

Grade:	accident
Date and time:	16th April 2010, 11:01 (09:01 GMT)
Occurrence type:	train collision with an obstacle
Description:	collision of defective part of locomotive No. 230.103-4 with switch No. 5, wooden level crossing and switch No. 3, consequent derailment of rear boogie and its re-railment.
Type of train:	freight train No. Nex 40737
Location:	Golcuv Jenikov station, track No. 1
Parties:	CD Cargo, a. s. (RU) Sprava zeleznicni dopravni cesty, statni organizace (IM) Ceske drahy, a. s. (RU)
Consequences:	no fatality, no injury total cost: CZK 400 000.-
Direct cause:	1. traction force transmission box screws release and loss (rolling stock/ locomotive/boogie) 2. traction force transmission backup hangers failure (rolling stock/ locomotive/boogie)
Underlying cause:	1. improper level “M” maintenance (maintenance processes) 2. improper level “V” maintenance (maintenance processes)
Root cause:	none

Recommendations:

1) Addressed to CD Cargo, a. s., railway undertaking:
   - It is recommended to define upper limit of service kilometers for level „V“ maintenance in „Kvsl-B-2009“ regulation.

2) Addressed to railway undertakings running class 230, 240 or 242 locomotives:
   - It is recommended to include regular inspection of traction force transmission backup hangers into maintenance procedure of such level, that respects service kilometers limit recommended by manufacturer for this type of inspection.
   - According to causes of this accident it is recommended to perform exceptional inspection of condition and parameters of traction force transmission system, including backup hangers, sliders' box and its screws.

ACCIDENT SUMMARY

Grade:	accident (according to our national law it is serious accident due to damage which is more than 5 000 000,- CZK)
Date and time:	3rd July 2010, 13:04:30 (11:04:30 GMT)
Occurrence type:	trains collision (associated with SPAD and derailment)
Description:	the shunting train SPADed, collided with the freight train No. 53033 in Olomouc main station. Both trains derailed.
Type of train:	freight train No. 53033 shunting train (consist of locomotive + 5 empty passenger carriages)
Location:	Olomouc hlavni nadrazi, switch No. 9, km 205,248 (Prerov – Ceska Trebova main line)
Parties:	CD Cargo, a. s. (RU of the freight train No. 53033) Sprava zeleznicni dopravni cesty, statni organizace (IM) Ceske drahy, a. s. (RU of the shunting train)
Consequences:	no fatality, no injury total cost CZK 6 086 243,07
Direct cause:	train driver's operational error (driver of the shunting train didn't respect stop signal)
Underlying cause:	human factor – immediate situation
Root cause:	none
Recommendations:	not issued