





The Rail Safety Inspection Office

NIB ANNUAL REPORT 2023

according to Article 24(3) of Directive (EU) 2016/798

The Rail Safety Inspection Office Czech Republic



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 (EU) 2016/798, 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 2023, pursuant to Art. 24(3) of Directive (EU) 2016/798. 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 2023
- the safety recommendations issued



CONTENTS

PREFACE TO THE REPORT	
1 INTRODUCTION TO THE INVESTIGATION BODY	1
1.1 Legal framework	1
1.2 Role and Mission	1
1.3 Organisation	2
1.4 Organisational flow	3
2 INVESTIGATION PROCESSES	4
2.1 Cases to be investigated	4
2.2 Institutions involved in investigations	4
2.3 Investigation process or approach of the NIB	4
3 INVESTIGATIONS	6
3.1 Overview of investigations completed in 2023 identifying key trends	6
3.2 Investigations completed and commenced in 2023	
3.3 Research studies (or Safety Studies) commissioned and completed in 2023	g
3.4 Summaries of investigations completed in 2023	
3.5 Comment and introduction or background to the investigations	
3.6 Accidents and incidents investigated during last five years (in 2019–2023)	
4 RECOMMENDATIONS	12
4.1 Short review and presentation of recommendations	12
4.2 Recommendations issued in 2023	18

ANNEXES

Summaries of investigations completed in 2023



1 INTRODUCTION TO THE INVESTIGATION BODY

1.1 Legal framework

Directive (EU) 2016/798 was implemented into the national legislation of the Czech Republic 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, as amended.

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 (IM) and railway undertakings (RU) 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 (NIB) 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,
- issues safety recommendations to the National Safety Authority (NSA) and where needed by reason of the character of the recommendation, to the European Union Agency for Railways, other administration bodies and authorities or other relevant bodies of different member states.



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. 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

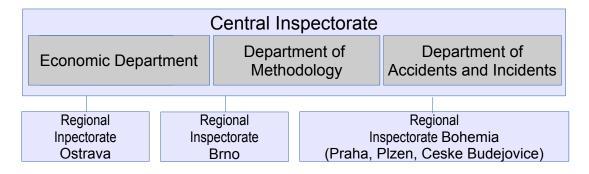
The Rail Safety Inspection Office has a total of **38 employees** in five cities of the Czech Republic (Ostrava, Brno, Praha, Plzen, Ceske Budejovice). It comprises of the Central Inspectorate and three regional inspectorates covering the area of the entire country. The Central Inspectorate consists of the Economic department, the Department of methodology and international cooperation and the Department of accidents and incidents and the central reporting work place.

The Economic department 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 methodology and international cooperation creates and improves methodology for investigations, manages staff training and mediates communication with EU bodies.

The Department of accidents and incidents and the central reporting work place maintain accident investigation including the co-ordination of the regional inspectorates' activities and provide 24/7 reporting office for notification of accidents and incidents.

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.





1.4 Organisational flow

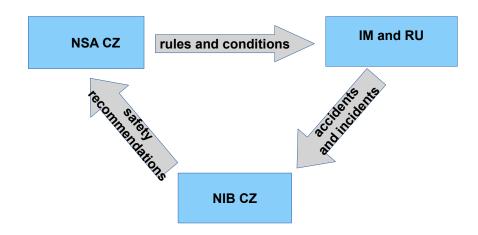
The structure of railway sector in the Czech Republic and relationships among the parties involved are defined in Act 266/1994 Coll., on Railways, as amended, and its implementing regulations. The legislation applies to the following transport systems:

- 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, authorization and regulation of railway and railway transport operation and performing state supervision of railways, 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 can 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 set legal requirements (seriousness, repeating, impact on railway safety, requests from infrastructure managers, railway undertakings, the national safety authority or the Member States) 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 contribution factors and issue of preventative safety recommendation. The investigation shall in no case be concerned with apportioning blame or liability.
- 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 NIB

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 (for example notification without any delay, securing of accident site, etc.)

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

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 Regulation (EU) 2020/572. 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 2023 identifying key trends

Trends of completed investigations (last column of the table) are calculated as difference to previous year (2021).

Type of	Number	Number of victims		Damages	Trends	
accidents	of	Deaths	Injury *	in €	in relation to	
investigated	accidents			(approx.)	previous year	
Collisions	5	1	7	10.928.844,-	-38 %	
Derailments	7	1	1	1.718.327,-	-42 %	
LC-accident	9	6	26	3.482.489,-	+80 %	
Fire in RS	0	0	0	0	0 %	
Acc. to person	0	0	0	0	-100 %	
Other	8	0	2	1.826.759,-	+100 %	

^{*} In the national legislation of the Czech Republic in Act 266/1994 Coll., on Railways, as amended, is already mentioned only term harm to health (there is no definition of serious injury or any other classification of injuries).

3.2 Investigations completed and commenced in 2023

Investigations completed in 2023

Date of occurrence	Title of the investigation (Occurrence type, location)	Legal basis	Completed (date)
17. 5. 2019	Train derailment: between Domousice - Hrivice stations	i	15. 11. 2023
14. 8. 2020	Other: Uncontrolled movement of rolling stocks from Keraclay Nehvizdy siding with consequent derailment and collisions with an obstacle in Mstetice station	i	8. 8. 2023
14. 7. 2021	14. 7. 2021 Other: SPAD in Poricany station		10. 1. 2023
13. 1. 2022	Trains collision: in Prosenice station	i	9. 1. 2023
29. 1. 2022	Train derailment: in Teplice v Cechach station	i	16. 2. 2023
18. 3. 2022	Other: Derailment of rolling stock during shunting operation with consequent Accident to person caused by RS in motion, collision with standing rolling stock, collision with an obstacle and other derailment in Obrnice station	i	12. 4. 2023
23. 4. 2022	23. 4. 2022 Other: SPAD in Jihlava station		14. 3. 2023
19. 5. 2022	Other: Injury of the employee of IM by electric current during repair of damaged contact line in Kolin station	i	29. 5. 2023



Date of occurrence	Title of the investigation (Occurrence type, location)	Legal basis	Completed (date)
7. 6. 2022	Other: Damage of contact line during ride of the train in Otrokovice station	i	19. 6. 2023
27. 6. 2022	Trains collision: in Bohumin station	i	16. 6. 2023
27. 6. 2022	Other: Injury of the employee of contractor by electric current during unauthorized work at the contact line in Pardubice station	i	22. 6. 2023
13. 7. 2022	Train derailment: in Bohumin station	i	13. 9. 2023
24. 7. 2022	Level-crossing accident: km 6,557 between Zlin Malenovice – Zlin stred stations	i	1. 8. 2023
10. 8. 2022	Level-crossing accident: km 19,684 in Liskovec u Frydku station	i	27. 2. 2023
20. 8. 2022	Trains collision: in Cesky Tesin station	i	11. 9. 2023
15. 9. 2022	Other: Unauthorised train movement other than SPAD in Hostejn station	i	29. 8. 2023
11. 10. 2022	Level-crossing accident: km 3,779 between Stritez nad Becvou – Valasske Mezirici stations	i	7. 6. 2023
26. 10. 2022	Level-crossing accident: km 11,019 between Malsice – Sudomerice u Bechyne stations	i	12. 5. 2023
27. 10. 2022	Other: SPAD in Zatec, obvod zapad station	i	18. 4. 2023
30. 10. 2022	Other: SPAD in Vlastec station	i	5. 6. 2023
9. 11. 2022	Trains collision: Collision of shunting operation with freight train in Melnik station	i	6. 11. 2023
8. 12. 2022	Train derailment: in Brno Malomerice station	i	15. 11. 2023
8. 12. 2022	Level-crossing accident: km 122,412 between Moravsky Pisek – Bzenec privoz stations	i	6. 10. 2023
18. 1. 2023	Level-crossing accident: km 41,179 between Cimelice - Mirovice stations	i	31. 7. 2023
21. 1. 2023	Level-crossing accident: km 263,911 in Ostrava Trebovice station	i	27. 7. 2023
7. 2. 2023	Trains collision with an obstacle with consequent derailment: in Cesky Tesin station	i	9. 11. 2023
22. 2. 2023	Train derailment: in Malsice station	i	20. 7. 2023
28. 5. 2023	Level-crossing accident: km 89,133 between Krasna Lipa - Rumburk stations	i	24. 11. 2023



Date of occurrence	Title of the investigation (Occurrence type, location)	Legal basis	Completed (date)
5. 6. 2023	Level-crossing accident: km 26,819 between Bystrice pod Hostynem - Holesov stations	i	19. 12. 2023

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 2023

Date of occurrence	Title of the investigation (Occurrence type, location)	Legal basis
18. 1. 2023	Level-crossing accident: km 41,179 between Cimelice - Mirovice stations	i
21. 1. 2023	Level-crossing accident: km 263,911 in Ostrava Trebovice station	i
7. 2. 2023	Trains collision with an obstacle with consequent derailment: in Cesky Tesin station	i
13. 2. 2023	Trains collision with an obstacle: between Cervenka - Stepanov stations	i
16. 2. 2023	Other: Accident to person caused by RS in motion: in "LASSELSBERGER Chlumcany u Dobran" siding	ii
22. 2. 2023	Train derailment: in Malsice station	i
28. 3. 2023	Other: SPAD in Vlastec station	i
28. 5. 2023	Level-crossing accident: km 89,133 between Krasna Lipa - Rumburk stations	i
5. 6. 2023	Level-crossing accident: km 26,819 between Bystrice pod Hostynem - Holesov stations	i
8. 6. 2023	Train derailment: between Kolin – Kutna Hora stations	i
21. 6. 2023	Level-crossing accident: km 164,187 between Liberec – Mnisek u Liberce stations	i
6. 7. 2023	Other: SPAD in Usti nad Labem hlavni nadrazi station	i
10. 7. 2023	Level-crossing accident: km 7,491 in Bozice u Znojma station	i
18. 7. 2023	Other: Collision of shunting operation with standing roling stock with consequent derailment in Cerhenice railway test circuit	ii
4. 8. 2023	Other: SPAD in Dluhonice station	i
14. 9. 2023	Trains collision: in Bezdecin station	i
3. 10. 2023	Accident to person caused by RS in motion: between Belcice - Blatna stations	i
6. 10. 2023	Accident to person caused by RS in motion: in Odbocka Brno Zidenice station	i
16. 10. 2023	Accident to person caused by RS in motion: between Moravsky Pisek - Nedakonice stations	i



17. 10. 2023	Level-crossing accident: km 0,580 in Olomouc hlavni nadrazi station	i
19. 10. 2023	Other: Tram trains collision in The City of Plzen – behind the stop Pod Zahorskem	ii
9. 11. 2023	Level-crossing accident: km 18,441 in Pelhrimov station	i
3. 12. 2023	3. 12. 2023 Trains collision: in Ceska Trebova station	
13. 12. 2023	Train derailment: in Brumov station	i
18. 12. 2023	Train derailment: in Stupno station	i
22. 12. 2023 Other: Unauthorised train movement other than SPAD in Praha Malesice 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 2023

Safety Studies completed in 2023

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 2023

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 2023

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
	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).



Investigations commenced in 2023 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 2019–2023)

Rail investigations completed in 2019–2023

The table groups investigations by year of their completion.

	Accidents investigated	2019	2020	2021	2022	2023	тот
.1)	Train collision	0	0	3	1	1	5
1 20	Train collision with an obstacle	0	0	0	0	0	1
\ <u>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</u>	Train derailment	0	0	0	0	1	1
ents	Level-crossing accident	0	0	2	1	3	3
Serious accidents (Art 20.1)	Accident to person caused by RS in motion	-	-	-	-	-	-
sno	Fire in rolling stock	-	-	-	-	-	-
Seri	Involving dangerous goods	0	0	0	0	0	0
.2)	Train collision	6	5	6	4	3	24
t 20	Train collision with an obstacle	3	1	3	3	1	11
₹	Train derailment	8	8	7	12	6	41
ents	Level-crossing accident	10	14	9	4	6	43
Accidents (Art 20.2)	Accident to person caused by RS in motion	2	6	1	1	0	10
	Fire in rolling stock	0	0	0	0	0	0
	Involving dangerous goods		0	0	0	0	0
Incide	nts	9	7	3	4	2	25
	TOTAL	38	41	34	30	23	166



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, all relevant parties (for example National Safety Authority, another administration body, etc.) are obliged to adopt their own preventative safety measures based on the safety recommendation issued.

Implementation of recommendations during 2019 - 2023

Recommendations issued		Recomm	endation	n implementation status			
		Implemen	nted	In progress		Not to be implemented	
Year	[No.]	[No.]	[%]	[No.]	[%]	[No.]	[%]
2019	19	12	63	6	32	1	5
2020	25	8	32	15	60	2	8
2021	21	9	43	10	48	2	9
2022	16	5	31	10	63	1	6
2023	16	1	6	9	56	6	38
TOTAL	97	35	36	50	52	12	12

Accidents with safety recommendations issued in 2019 – 2023

Date of occurrence	Title of the investigation (Occurrence type, location)	Status of implem.	Completed (date)
17. 3. 2017	Level-crossing accident: km 3,438 between Teplice Zamecka zahrada – Prosetice stations	implemented	21. 2. 2019
15. 12. 2017	Other: SPAD of shunting operation in Kolin station	implemented	17. 1. 2019
18. 1. 2018	Other: SPAD in Smrzovka station with consequent collision with an obstacle	in progress	5. 4. 2019
3. 2. 2018	Other: Unauthorised movement of shunting operation other than SPAD in Melnik station with consequent collision with standing locomotive	implemented	7. 6. 2019



Date of occurrence	Title of the investigation (Occurrence type, location)	Status of implem.	Completed (date)
26. 3. 2018	Accident to person caused by RS in motion: in Rudoltice v Cechach station	implemented	3. 4. 2019
29. 4. 2018	Train derailment: in Lhotka u Melnika station	implemented	5. 3. 2019
3. 5. 2018	Trains collision: between Kremze – Borsov nad Vltavou station with consequent derailment	implemented	12. 6. 2019
11. 6. 2018	Level-crossing accident: km 87,149 between Lochovice - Jince stations	implemented	28. 1. 2019
16. 7. 2018	Level-crossing accident: km 108,734 between Kamenny Ujezd u Ceskych Budejovic - Vcelna stations	implemented	11. 1. 2019
31. 7. 2018	Level-crossing accident: km 10,934 between Putim - Pisek stations	partially implemented	4. 4. 2019
16. 8. 2018	Level-crossing accident: km 20,786 in Cizova station	partially implemented	26. 3. 2019
7. 9. 2018	Train derailment: in Kolin station	implemented	25. 11. 2019
18. 9. 2018	Level-crossing accident: km 0,263 in Kralupy nad Vltavou predmesti station	implemented	4. 10. 2019
21. 9. 2018	Trains collision with an obstacle: between Holysov - Stankov stations	implemented	30. 9. 2019
23. 10. 2018	Other: SPAD in Studenec station	not implemented	28. 5. 2019
5. 11. 2018	Level-crossing accident: km 127,065 between Turnov - Sychrov stations	in progress	15. 5. 2019
18. 11. 2018	Train derailment: in Studenka station	in progress	30. 4. 2019
21. 11. 2018	Other: Derailment during shunting operation in Strakonice station	implemented	20. 5. 2019
13. 7. 2019	Level-crossing accident: km 8,544 between Lubna - Zavidov stations	partially implemented	27. 11. 2019
6. 1. 2018	Trains collision: in Ceska Lipa station with consequent derailment	implemented	3. 9. 2020
2. 12. 2018	Level-crossing accident: km 434,211 between Velke Brezno - Usti nad Labem Strekov stations	partially implemented	21. 2. 2020
23. 2. 2019	Other: Collision of rolling stocks during shunting operation in Ceske Budejovice station	implemented	7. 4. 2020
4. 3. 2019	Trains collision: between Ronov nad Doubravou – Zleby stations	implemented	17. 4. 2020
29. 3. 2019	Train derailment: in Kostelec u Hermanova Mestce station	partially implemented	22. 4. 2020
29. 3. 2019	Other: Uncontrolled movement of rolling stock with consequent collision with an obstacle and derailment in Veseli nad Moravou station	partially implemented	9. 4. 2020



Date of occurrence	Title of the investigation (Occurrence type, location)	Status of implem.	Completed (date)
28. 6. 2019	Train derailment: in Vysoke Myto station	partially implemented	30. 1. 2020
16. 7. 2019	Level-crossing accident: km 108,978 in Horetice station	implemented	15. 2. 2020
21. 7. 2019	Other: Tram trains collision with an obstacle in The City of Praha – between Trojska – Nad Trojou stops	partially implemented	30. 7. 2020
24. 7. 2019	Trains collision with an obstacle with consequent derailment: between Nova Paka – Lazne Belohrad stations	partially implemented	8. 2. 2020
28. 7. 2019	Train derailment: between Chodova Plana – Marianske Lazne stations	partially implemented	29. 5. 2020
30. 7. 2019	Level-crossing accident: km 4,981 between branch Moravice – Hradec nad Moravici station	partially implemented	26. 2. 2020
20. 8. 2019	Other: Unauthorised movement of shunting operation other than SPAD with consequent collision with an obstacles, other rolling stock and derailment in Lovosice station	in progress	10. 8. 2020
21. 8. 2019	Level-crossing accident: km 16,382 between Ronov nad Doubravou – Tremosnice stations	in progress	13. 5. 2020
23. 8. 2019	Level-crossing accident: km 94,631 between Zakupy - Mimon stations	implemented	2. 10. 2020
25. 8. 2019	Other: Uncontrolled movement of tram train with consequent collision with an obstacle in The City of Olomouc – in U Domu stop	implemented	16. 4. 2020
6. 9. 2019	Level-crossing accident: km 169,968 in Praha Uhrineves station	in progress	28. 4. 2020
12. 9. 2019	Level-crossing accident: km 16,178 between Hnevceves - Vsestary stations	partially implemented	17. 2. 2020
1. 10. 2019	Level-crossing accident: km 0.645 in Hrusovany nad Jevisovkou Sanov station	not implemented	30. 4. 2020
20. 10. 2019	Level-crossing accident: km 182,324 between Blansko - Rajec Jestrebi stations	implemented	5. 5. 2020
27. 11. 2019	Other: SPAD in Praha Bechovice station	not implemented	5. 10. 2020
17. 1. 2020	Train derailment: in Krasny Jez station	implemented	15. 6. 2020
21. 2. 2020	Level-crossing accident: km 9,040 between Mestec Kralove – Chlumec nad Cidlinou stations	partially implemented	14. 8. 2020
27. 4. 2020	Level-crossing accident: km 1,856 between Hermanova Hut – Nyrany stations	partially implemented	14. 9. 2020
16. 5. 2020	Level-crossing accident: km 125,250 between Hnojnik – Dobra u Frydku Mistku stations	partially implemented	29. 9. 2020



Date of occurrence	Title of the investigation (Occurrence type, location)	Status of implem.	Completed (date)
22. 1. 2019	Level-crossing accident: km 5,446 between Vesec u Liberce – Jablonec nad Nisou stations	partially implemented	12. 2. 2021
1. 4. 2019	Other: Collision of the trolleybus with the tram in The City of Brno – in the area of the road crossing Masna, Krenova and Kozeluzska streets	implemented	10. 3. 2021
3. 11. 2019	Train derailment: in Praha Malesice station	implemented	17. 2. 2021
5. 11. 2019	Other: Unauthorised train movement other than SPAD between Cachnov – Skutec stations	not implemented	6. 1. 2021
9. 12. 2019	Trains collision with an obstacle: in Zamrsk station	implemented	16. 4. 2021
21. 2. 2020	Level-crossing accident: km 3,119 between Dobris – Mala Hrastice stations	partially implemented	14. 1. 2021
20. 3. 2020	Other: Collision of rolling stocks during shunting operation in Kolin station	implemented	15. 3. 2021
7. 5. 2020	Unauthorised movement of shunting operation other than SPAD with consequent collision with other rolling stock and derailment between Decin Prostredni Zleb - Decin vychod stations	in progress	28. 5. 2021
12. 6. 2020	Train derailment: between Jindris – Blazejov stations	implemented	1. 2. 2021
29. 6. 2020	Other: Unauthorised train movement other than SPAD in Svetla nad Sazavou station	partially implemented	22. 2. 2021
7. 7. 2020	Trains collision: between Pernink – Nove Hamry stations	implemented	18. 1. 2021
10. 7. 2020	Trains collision: in Praha Bechovice station	partially implemented	16. 12. 2021
14. 7. 2020	Trains collision: between Uvaly – Cesky Brod stations	partially implemented	25. 11. 2021
15. 7. 2020	Level-crossing accident: km 12,688 between Velke Opatovice - Sebetov stations	not implemented	26. 3. 2021
21. 7. 2020	Level-crossing accident: km 14,025 between Cermna nad Orlici - Borohradek stations	partially implemented	30. 6. 2021
22. 7. 2020	Train derailment: in Lazne Kynzvart station	implemented	14. 7. 2021
9. 9. 2020	Trains collision: in Kdyne station	partially implemented	29. 11. 2021
18. 9. 2020	Level-crossing accident: km 100,674 in Kunovice station	in progress	1. 7. 2021
19. 12. 2020	Train derailment: in Hluboka nad Vltavou Zamosti station	partially implemented	18. 10. 2021
15. 1. 2021	Other: Tram trains collision in The City of Ostrava - between Elektra – Karolina stops	implemented	24. 6. 2021



Date of occurrence	Title of the investigation (Occurrence type, location)	Status of implem.	Completed (date)
4. 3. 2021	Level-crossing accident: km 71,113 between Slatinany – Chrast u Chrudimi stations	implemented	14. 10. 2021
6. 11. 2020	Derailment during shunting operation in Kolin station	in progress	21. 1. 2022
3. 3. 2021	Train derailment: in Namest nad Oslavou station	implemented	14. 4. 2022
5. 5. 2021	Trains collision with an obstacle: between Trebovice v Cechach – Ceska Trebova stations	partially implemented	24. 5. 2022
6. 5. 2021	Other: SPAD in Roztoky u Prahy station	in progress	1. 4. 2022
10. 5. 2021	Other: SPAD in Praha Masarykovo nadrazi station	in progress	10. 1. 2022
5. 6. 2021	Trains collision with an obstacle: in Trinec station	in progress	12. 7. 2022
18. 6. 2021	Trains collision: Collision of shunting operation with standing passenger train in Cercany station	in progress	16. 9. 2022
15. 7. 2021	Train derailment: between Chvalkov – Vcelnicka stations	implemented	22. 4. 2022
31. 7. 2021	Trains collision: in Nemcice nad Hanou station	implemented	21. 4. 2022
4. 8. 2021	Train derailment: in Kralupy nad Vltavou station	partially implemented	15. 12. 2022
22. 9. 2021	Accident to person caused by RS in motion: in Bori les station	implemented	15. 8. 2022
28. 10. 2021	Level-crossing accident: km 18,495 between Sedlejov - Telc	partially implemented	14. 7. 2022
31. 10. 2021	Trains collision: Collision of shunting operation with standing freight train between Cesky Tesin – Albrechtice u Ceskeho Tesina stations	in progress	7. 6. 2022
29. 12. 2021	Level-crossing accident: km 69,846 between Rozna – Bystrice nad Pernstejnem stations	not implemented	13. 9. 2022
1. 4. 2022	Train derailment: in Bavorov station	implemented	31. 10. 2022
4. 7. 2022	Level-crossing accident: km 44,499 between Klatovy – Janovice nad Uhlavou stations	partially implemented	23. 12. 2022
14. 8. 2020	Other: Uncontrolled movement of rolling stocks from Keraclay Nehvizdy siding with consequent derailment and collisions with an obstacle in Mstetice station	not implemented	8. 8. 2023
14. 7. 2021	Other: SPAD in Poricany station	in progress	10. 1. 2023
13. 1. 2022	Trains collision: in Prosenice station	partially implemented	9. 1. 2023
29. 1. 2022	Train derailment: in Teplice v Cechach station	in progress	16. 2. 2023



Date of occurrence	Title of the investigation (Occurrence type, location)	Status of implem.	Completed (date)
18. 3. 2022	Other: Derailment of rolling stock during shunting operation with consequent Accident to person caused by RS in motion, collision with standing rolling stock, collision with an obstacle and other derailment in Obrnice station	implemented	12. 4. 2023
19. 5. 2022	Other: Injury of the employee of IM by electric current during repair of damaged contact line in Kolin station	in progress	29. 5. 2023
7. 6. 2022	Other: Damage of contact line during ride of the train in Otrokovice station	in progress	19. 6. 2023
27. 6. 2022	Trains collision: in Bohumin station	not implemented	16. 6. 2023
24. 7. 2022	Level-crossing accident: km 6,557 between Zlin Malenovice – Zlin stred stations	not implemented	1. 8. 2023
15. 9. 2022	Other: Unauthorised train movement other than SPAD in Hostejn station	not implemented	29. 8. 2023
11. 10. 2022	Level-crossing accident: km 3,779 between Stritez nad Becvou – Valasske Mezirici stations	in progress	7. 6. 2023
26. 10. 2022	Level-crossing accident: km 11,019 between Malsice – Sudomerice u Bechyne stations	partially implemented	12. 5. 2023
9. 11. 2022	Trains collision: Collision of shunting operation with freight train in Melnik station	not implemented	6. 11. 2023
8. 12. 2022	Train derailment: in Brno Malomerice station	not implemented	15. 11. 2023
28. 5. 2023	Level-crossing accident: km 89,133 between Krasna Lipa - Rumburk stations	partially implemented	24. 11. 2023
5. 6. 2023	Level-crossing accident: km 26,819 between Bystrice pod Hostynem - Holesov stations	in progress	19. 12. 2023

4.2 Recommendations issued in 2022

Date of occurrence	Title of the investigation, Safety recommendation	
14. 8. 2020	Other: Uncontrolled movement of rolling stocks from Keraclay Nehvizdy siding with consequent derailment and collisions with an obstacle in Mstetice station	

Addressed to The Czech National Safety Authority (NSA):

 to ensure that the procedure of securing rolling stocks against uncontrolled movement by a brake weight was eliminated from the applicable regulations of infrastructure managers to the maximum extent possible, at least that the required braking percentages for individual intervals of track inclination was re-evaluated, while we recommend specify these values on the basis of a wider investigation of



Date of occurrence	Title of the investigation, Safety recommendation

the given problematics;

- to ensure that a demonstrable reduction in the braking effect was compensated by uniform technological procedures of the railway undertaking in the case of longterm detached rolling stocks, while we recommended define specific values on the basis of a wider investigation of the given problematics;
- to ensure that the railway undertaking has information about whether the rolling stocks are put into service after a long-term detached, even when it comes to rolling stocks taken over from another railway undertaking, even a foreign one, and when the railway undertaking does not have information about this rolling stocks, it treated the rolling stocks as long-term detached rolling stocks (see the previous point of the safety recommendation).

14. 7. 2021 Other: SPAD in Poricany station

Addressed to The Czech National Safety Authority (NSA):

- systematically register the software versions of the systems which have an effect the control and safety driving of the rolling stock in serviceability certificate of a track-guided vehicle;
- to take measure which will ensure at railway undertakings a duty to register software versions of rolling stock systems which have an effect the control and safety driving of the rolling stock. For individual versions of the software, to register changes in functions and in the case of more significant changes to these functions that effect the indication, operation and working of the rolling stock, to carry out demonstrable training for operating and maintenance employees;
- to take measure to ensure that railway owners and infrastructure managers, during
 infrastructure reconstructions, preserve to the maximum extent possible preserve
 the transmission of the code of the LS type automatic train control (in the original
 scope) until the instalation of exclusive operation under the supervision of the
 automatic train control ETCS;
- to take measure to ensure that railway owners and and infrastructure managers expand the implementation of the track part of the ETCS system to the maximum extent possible. At least on the TEN-T network, NIB recommends implementing ETCS L2 enabling Full supervision mode as soon as possible and continuously. To use this full supervision to the maximum extent possible so that even defaults trains pass the departure signal devices of stations already in this mode;
- to take measure to ensure that railway undertakings reduce the time of equipping the relevant rolling stocks with on-board parts of the ETCS system to the maximum extent possible (shorten the so-called migration period).

13. 1. 2022 Trains collision: in Prosenice station

Addressed to the Czech National Safety Authority (NSA) in cooperation with Czech Ministry of Transport:



Date of	Title of the investigation,					
occurrence	Safety recommendation					
content of professional cases imulator to the signaling way of driven	 to create a legal framework and system, by which will expand the scope and content of knowledge and skills and procedures necessary to demonstrate special professional competence for driving a rolling stock on a railway, national and regional categories, about verify the practical ability of driver on a locomotive simulator to adequately solve situations that can occur only rarely, incl. monitoring the signaling, its correct interpretation and the corresponding way of acting, the way of driving and the maximum speed given the characteristics of the track and variable data, such as speed limits or weather conditions; 					
professiona acquire the content, in individuals	at railway undertakings whether the exam demonstrating a special competence pass only applicants who have completed training to e relevant knowledge, skills and procedures in the specified scope and conjunction with the control of the observance of the obligations of or legal persons accredited for training according to § 46j par. 4 of Act 94 Coll., on rail systems, as amended;					
Addressed to the	Czech Ministry of Transport:					
of the train special pro and type, we competence inspections of Decree of the Order of railways are precision we obligation we special procession we contain the order of the	tion with the NSA, more specify the minimum length of the practical parting to acquire detailed knowledge, skills and procedures to demonstrate fessional competence for driving a rolling stock of the relevant category which is Annex No. 2 to Decree No. 16/2012 Coll., about the professional te of persons driving a rolling stock and persons carrying out revisions, and tests of specified technical equipment and about the amendment of the Czech Ministry of Transport No. 101/1995 Coll., which is issued by on the health and professional competence of persons in the operation of the railway transport, determine for 12 weeks so that the requirement of will be fulfilled, incl. legal certainty, and the addressees of the given legal were not hindered by practice in its consistent application, similar to the theoretical part of the given training.					
29. 1. 2022	Train derailment: in Teplice v Cechach station					
	Czech National Safety Authority (NSA), alternatively in cooperation with dministration authority, Municipality of the city of Teplice:					
 due to improvement work conditions and elimination possible inadvertent faults (mistakes) of train drivers to adopt own measure which will ensure elimination (by for example properly bulding-technical measures) of light source, which could be interchangeable with signal aspects in meaning of section 9, paragraph 1 of Act No. 266/1994 Coll., specifically traffic light on crossroad Na Hrázi and Dubská in Teplice. 						
18. 3. 2022	Other: Derailment of rolling stock during shunting operation with consequent Accident to person caused by RS in motion, collision with standing rolling stock, collision with an obstacle and other derailment in Obrnice station					
Addressed to the Czech National Safety Authority (NSA):						



Date of occurrence	Title of the investigation, Safety recommendation
 as a part of its activities as a national safety authority to take mea ensure at: 	
o IM Sprá	áva železnic, státní organizace:
permanene	ition and specification part of internal regulation "Provision diagnostic et way and railway substructure by measuring devices with continual calculation of synthetic signal of change in cross level;
coopera	RLEN Unipetrol Doprava s.r.o. within the framework of contractual ation with the logistics company M+L LOGISTIK, s.r.o. and consignor I Unipetrol RPA s.r.o.:
procedure Loading d illustration	ernal regulation of consignor RPA "Working procedure No. 1B – Working for storing, loading and restocking" about technological procedures from irective UIC. part 3.3 "Arrangement of loads" including graphic of ordering loads in container, to it was not to unevenly arrangement and allowed limit values.
19. 5. 2022	Other: Injury of the employee of IM by electric current during repair of damaged contact line in Kolin station
Addressed to the	Czech National Safety Authority (NSA):
	of its activities as a national safety authority, to take own measure to M Správa železnic, státní organizace:
electrodispoint directing of order), but and next no of content	nent of the internal regulation "SŽDC E6 Regulation for activity of atching", alternatively by next related internal regulations, about f structure guidances given by separate electrodispatcher (dispatcher also by guidances and conditions for ride rolling stocks electric traction eccessary traffic measures, their exaxt defining and frame determanition of the message, alternatively determination of fixed of content of the obligatory wording).

Addressed to the Czech National Safety Authority (NSA):

station

7. 6. 2022

within framework of its activity, to ensure, with appropriate tools, minimization of
cases where will be ordered to pulled down the current collectors of rolling stocks
by portable signal devices for electric operation, especially during constructions
(reconstructions, modernization) carried out on railways where this minimization
should already be taken into account during preparation of construction and
specific construction procedures by IM of national and regional railways. For this
purpose, use both purely administrative and technical measures – for example
insert (temporarily insert) section insulator into overhead contact circuit at suitable
places of station heads;

Other: Damage of contact line during ride of the train in Otrokovice



Date of Title of the investigation, occurrence Safety recommendation			
occurrence IMs, that is electric ope	evant available options of the ETCS in relation to prevention of its related with failure to respect of signal devices for electric operation by above all possibility of transmitting information about signal devices for eration, including portable signal devices, from trackside to mobile parts S and their subsequent processing and application.		
27. 6. 2022 Trains collision: in Bohumin station			

Addressed to the Czech National Safety Authority (NSA):

- to take measure to ensure that:
 - railway owners and infrastructure managers expand implementation of track part of ETCS to the maximum extent possible. At least on the TEN-T network, NIB recommends implementing ETCS L2

enabling Full supervision mode as soon as possible and continuously. To use this full supervision to maximum extent possible so that even defaults trains pass departure signal devices of stations already in this mode;

- ride of rolling stocks equipped compatible mobile part train control system of ETCS with track part of ETCS, which infrastructure is equip, will be realise too at initial trains and trains which become to change in its formation, in maximum extent with active mobile part of ETCS in relevant mode (without mode isolation);
- to minimize way of the operation of the mobile part of the European Train Control System ETCS (restart of the ETCS mobile part, switching it to Isolation mode, etc.) which would cause the loss of its position information. To achieve this state through the reliability of the equipment, but also through the technological procedures of RUs and uniform technological procedures of IMs and consistent control over their compliance.
- to take measure, which ensure to complete missing safety measure (station dispatcher in past) until to installation operation trains under sight ETCS, when station dispatcher dispatched trains with passengers which stood by platform by signal "Departure" (written order, telecommunication equipment or audio order), by technical equipment or other way, when as advantageous and simple way in present system guideway operating and guided transport operating is in cooperation with Czech Ministry of Transport, integrate to Decree No. 173/1995 Coll., traffic rules of railway, to obligation of head of train attending crew with train with passenger transport or first person of train attending crew from front forefront of train, which does not go by full supervision of ETCS, give to driver of train signal "Consent with departure" after fulfilment one of low stated conditions, when:
 - makes sure by look or other way (e.g. by question at train driver), that relevant main signal device valid for departure train permits ride of train, or
 - by question at train driver find out, that ride of train behind main signal device with signal "Stop" was allowed other way including set conditions, or that train driver get permission for shunting from station dispatcher (e.g. ride train as shunting operation), or;
 - by question at train driver verify way of permission ride train behind main signal



Date of Title of the investigation, occurrence Safety recommendation			
	e including set conditions by IM in case, when its signal aspects does not om platform,		
(next to t	if IM allows ride (departure) train, carry out next qualified person of RU rain driver), thereby it will be make safety measure who reduces risk of f train driver.		
24. 7. 2022 Level-crossing accident: km 6,557 between Zlin Malenovice – Zlin s stations			

- to adopt effective measures to eliminate the risk of the occurrence at the level crossing No. P8232 in time when the traffic signal control equipment of the crossroad (as a basic safety element for ensure safety) is not in service;
- performance of inspection at all level crossings with level crossing signaling plant
 without barriers with electric dependence on traffic signal control equipment of
 crossroad and concentrate on finding out state the most important safety
 parameters according to Section 6 paragraph 1 of Act No 266/1994 Coll. and
 Section 4 paragraph 7 appendix 5 of Decree No. 177/1995 Coll., which are
 important for ensure safety at level crossings in time when the traffic signal control
 equipment of crossroad is not in service.

Addressed to Municipality of Zlín:

- take internal measure as the owner of traffic signal control equipments of crossroads which are adjacent with level crossings at Zlín city, and which will ensure to inform about state of traffic signal control equipments of crossroads by all accessible technical resources and enables remote access to technology of traffic signal control equipments of crossroad to an employee of service organization;
- performance of risk analysis on traffic signal control equipments of crossroads which are adjacent with level crossings at Zlín city and determination procedures for quick elimination of failure of traffic signal control equipments of crossroads;
- to establish cooperation with the Regional Directorate of the Police of Zlín Region, the Municipal Police of Zlín city and the Zlín-Otrokovice Transport Company, regarding possibility of immediate notification of failure of traffic signal control equipments of crossroads for service organization on base the analysis of the risks of traffic signal control equipments of crossroads which are adjacent with level crossings at Zlín city, detected through their own technology informing about state of traffic signal control equipments of crossroads or during patrol of Police or during driving vehicles of public transport.

15. 9. 2022	Other:	Unauthorised	train	movement	other	than	SPAD	in	Hostejn
	station								

Addressed to the Czech National Safety Authority (NSA):

• in a reasonable time (with regard to the duration of the development and approval process) ensure, for station interlocking plant controlled through a unified service



Date of	of
occurre	nce

Title of the investigation, Safety recommendation

workplace, that the operator cannot set up the specified emergency train route and inform about the conditions preventing the creation of the emergency train route (e.g. with a label warning about incorrect operation), in cases where:

- o to movement of train on an other track than operating employee selected or,
- to movement a rolling stocks against to each other on the same track,
- or also in other justified cases based on the analysis carried out by the IM (e.g. when the rolling stock should arrive to the level crossing before the approach time expires);
- to ensure at the same time for these devices prevent the creation of a train route on a track on which is also create an opposite emergency train route or an emergency shunting route as an adequate addition to the previous safety recommendation for the opposite sequence of creation of train routes;
- until the implementation of the first safety recommendation mentioned above, for
 these devices, to consider setting the display priority on the entry computer of the
 unified service workplace so that during the display of the risk page in the relief of
 trackage were not highlighted with a dashed red tint such elements from this risk
 page which are marked with a warning label (introduce and cancel by the
 command "STIT") or with a track possession label (introduce and cancel by the
 command "VYL") and the serving employee is alerted in a different way (the
 serving employee marked these elements with the knowledge of the need to
 ensure fulfillment of the unfulfilled conditions in an alternative way);
- to ensure at IM (Správa železnic, státní organizace):
 - to amend wording of Article 404 of the internal regulation SŽ D1 about the addition of the text imposing the authorized station dispatcher to start a track possession on lines and in operating points remotely controlled with remote control of interlocking plant the obligation to announce the start of the track possession also to the employees of the transport service affected by the track possession in occupied operating points;
 - to adopt of a measure which prevents the unauthorized use of employee personal identification cards (i.e. a security element necessary for the operation of the interlocking plant) by persons other than holders of this cards.

11. 10. 2022

Level-crossing accident: km 3,779 between Stritez nad Becvou - Valasske Mezirici stations

Addressed to the Czech National Safety Authority (NSA):

 to take own measure to ensure addition of the level crossing No. P7414 which is secure by flashing light level crossing warning system to a level crossing system equipped with barriers which with regard to point of view of optical and manual barrier will reduce probability of the driver's entrance at the level crossing when he does not respond to light signalization in the warning state.



Date of occurrence	Title of the investigation, Safety recommendation
26. 10. 2022	Level-crossing accident: km 11,019 between Malsice – Sudomerice u Bechyne stations

Addressed to the Czech National Safety Authority (NSA):

• it is recommended to adopt own measure which ensure safeguarding of the level crossing No. P6309 by level crossing safety equipment with warning lights and barriers.

Addressed to the road administration office of Tábor Municipal Office and Malšice town:

- to install the traffic device Z 4a Directional board with slanted lanes to left, supplemented with delta blocks for physicall moving the crossing roads point to a greater distance from the level crossing No. P6309, thereby creating the possibility of a view of traffic participants on the purpose-built road to the regional railway and to right in the direction of their driving to the level crossing;
- the possible addition of other traffic sign in front of the level crossing No. P6309 leading to increase safety and thereby reduce the possibility of accidents at the level crossing.

	Trains collision:	Collision of	of shunting	operation	with	freight	train	in
9. 11. 2022	Melnik station							

Addressed to the Czech National Safety Authority (NSA):

- as a part of its activities as a national safety authority, to take own measure to ensure at IM Správa železnic, státní organizace:
 - to adjust the internal regulation SŽ D1 so that obligations of the train driver in meaning Section 35 (1, f) of Decree No. 173/1995 Coll. were not determine only to employee in forehead of the shunting operation during shunting with shunting gang;
 - to adjust the internal regulation SŽ D1 in the case of condition to giving guidance to set the drawn shunting operation in motion by head of the shunting operation;
 - to adjust the internal regulation SŽ D1 in the case of definition of running at sight.

The Rail Safety Inspection Office does not issue next safety recommendation due to the entrusted powers according to the Act No. 266/1994 Coll., however we consider it necessary to draw attention NSA, infrastructure manager SŽ and railway undertaking ČDC on existing state and issued safety recommendations of NIB in case of obligations observance of technological procedures for shunting including obligations for radio communication and consistent checks their observance and be aimed to total simplification of technological procedures for shunting. It was repeated found out that long-term state (observance of technological procedures for shunting) is not changing, it is tolerate and potential of inspection activities is not use, although it exists risk of origins of occurrence with serious consequences.

8. 12. 2022	Train derailment: in Brno Malomerice station



Date of Title of the investigation, occurrence Safety recommendation					
Addressed to the Czech National Safety Authority (NSA):					
of jaw locks with operat undesirable (stock rail)	f its activities as a national safety authority in cooperation with producer is (AŽD Praha), producer of switches (DT – Výhybkárna a strojírna) and ors of double switches with jaw locks, to solve problems repeated and a non-standard contacts of locking hooks with next switch components and definitive remove this contacts which it will prevent undesirable is locking hooks.				
28. 5. 2023	Level-crossing accident: km 89,133 between Krasna Lipa - Rumburk stations				
Addressed to the	Czech National Safety Authority (NSA):				
secure by t equipped v barrier will	n measure to ensure addition of the level crossing No. P3277 which is flashing light level crossing warning system to a level crossing system with barriers which with regard to point of view of optical and manual reduce probability of the driver's entrance at the level crossing when he spond to light signalization in the warning state.				
municipal roads in	nicipality of Rumburk, as the road administrative office in matters of the administrative territory of the municipality with extended powers administrator of the road:				
check and in front of t	beyond the scope of legal obligations, regular (several times a year) maintenance of vertical road markings and greenery (trees and bushes) the level crossing No. P3277 so that the road markings will be clearly ble and not to be confused with other road markings;				
"Level cros (160 m)" a conditions	that the existing traffic signing A 31c "Signal board (80 m)" and A 30 sing without barriers" will be added by traffic signing A 31b "Signal board and A 31a "Signal board (240 m)" in accordance with the technical of TP 169 Principles for marking traffic situations on roads and TP 65 or road markings on roads.				
 to initiate a "Signal boa with barrier in justified 	Czech Ministry of Transport: a change of a legal regulations so that the vertical traffic signing A 31 ard" and A 30 "Level crossing without barriers" or A 29 "Level crossing s" will be mandatory installed, with the exception of service road, while cases may be allowed an exception upon fulfillment of the condition to bility of traffic signs A 32 "Warning cross for level crossing" outside the				

Addressed to the Czech National Safety Authority (NSA):

Holesov stations

5. 6. 2023

 to adopt measure which ensure change of the level crossing No. P7263 safeguarding (which make use of above all lorries) by level crossing safety equipment with warning lights and barriers due to big traffic moment (bigger than

Level-crossing accident: km 26,819 between Bystrice pod Hostynem -

village at least from a distance of 100 m, in the village at least 50 m.



NIB ANNUAL REPORT 2023 The Rail Safety Inspection Office CZECH REPUBLIC

Date of occurrence	Title of the investigation, Safety recommendation
40.000\	

10 000);

 to adopt measure which immediately ensure that at current safeguarding of the level crossing No. P7263 will be road markings A 32a "Warning cross for single rail level crossing" highlighted by a retroreflective yellow-green fluorescence base to emphasize their importance, which will significantly eliminate the possibility of their oversight while driving over the level crossing.

Grade: incident.

Date and time: 17th May 2019, 20:30 (18:30 GMT).

Occurrence type: train derailment.

Description: derailment of one rolling stock of the service train No. 54500 with

consequent break of a train and derailment of another 3 rolling stocks at

Hřivice station.

Type of train: the service train No. 54500.

Location: open line between Domoušice and Hřivice stations, km 27,917. Place of

consequent derailment of another 3 rolling stocks was at Hřivice station,

km 36,0.

Parties: Správa železniční dopravní cesty, státní organizace (IM);

Traťová strojní společnost, a. s. (RU of the service train No. 54500).

Consequences: 0 fatality, 0 injury;

total damage CZK 4 516 630,-

Direct cause:

 loss of the vertical wheel effort of first wheelset of 17th rolling stock of the service train No. 54500.

It was not possible to demonstrably determine the source of the initiation of the above-mentioned loss of vertical wheel effort due to the impossibility of verifying the overall technical condition of the rolling stock Ua 418 CZ-TSSC 83 54 9200 794-2 and the impossibility of verifying the wheel pressures in connection with layout of cargo at the time of the derailment, and the impossibility of assessment of this rolling stock with geometric parameters of the track at the point of derailment.

Contributory factor: none.

Underlying cause: none.

Root cause: none.

Recommendation: not issued.





Date and time: 14th August 2020, 8:58 (6:58 GMT).

Occurrence type: train derailment.

Description: uncontrolled movement of the 32 rolling stocks from KERACLAY Nehvizdy

siding to Mstětice station with consequent derailment, collision with the car at the level crossing No. P3613 and collision with building of the signal

box St. 1 and supports of traction catenary lines.

Type of train: 32 detached rolling stocks.

Location: KERACLAY Nehvizdy siding, km 1,306 - place of the beginning of

uncontrolled movement; km 0,105 – place of derailment of rolling stocks; km 0,070 – the level crossing No. P3613 at Mstětice station; km 0,057 – signal box St. 1; km 0,039 damaged catenary support No. 11; km 0,012 –

damaged catenary support No. 11A.

Parties: DBV-ITL, s. r. o. (IM);

ČD Cargo, a. s. (RU of the detached rolling stocks);

driver of the car (level crossing user);

Správa železnic, státní organizace (third side).

Consequences: 0 fatality, 1 injury;

total damage CZK 3 569 903,-

Causal factor:

• insufficient securing of the rolling stocks against uncontrolled movement.

Contributing factor: none.

Systemic factors:

- failure to ensure by safety technological procedures by infrastructure manager DBV-ITL, when specific number of required braking percentages for a given track gradient did not guarantee securing rolling stocks against uncontrolled movement;
- failure to respond the reduction in the braking effect of the hand brake of long-term detached rolling stocks in the technological procedures of railway undertaking ČD Cargo, a. s..

Recommendations:

Addressed to the Czech National Safety Authority (NSA):

- to ensure that the procedure of securing rolling stocks against uncontrolled movement by a brake weight was eliminated from the applicable regulations of infrastructure managers to the maximum extent possible, at least that the required braking percentages for individual intervals of track inclination was re-evaluated, while we recommend specify these values on the basis of a wider investigation of the given problematics;
- to ensure that a demonstrable reduction in the braking effect was compensated by uniform technological procedures of the railway undertaking in the case of long-term detached rolling stocks, while we recommended define specific values on the basis of a wider investigation of the given problematics;
- to ensure that the railway undertaking has information about whether the rolling stocks are put into service after a long-term detached, even when it comes to rolling stocks taken over from another railway undertaking, even a foreign one, and when the railway undertaking does not have information about this rolling stocks, it treated the rolling stocks as long-term detached rolling stocks (see the previous point of the safety recommendation).

Annex – Summaries of investigations completed in 2023





Date and time: 14th July 2021, 17:23 (15:23 GMT).

Occurrence type: unauthorized movement.

Description: unauthorized movement of the regional passenger train No. 9344 behind

the main (departure) signal device L6 with consequent violation of the

train route for the long distance passenger train No. 924.

Type of train: the regional passenger train No. 9344;

the long distance passenger train No. 924.

Location: Poříčany station, main (departure) signal device L6, km 371,398.

Parties: Správa železnic, státní organizace (IM);

České dráhy, a. s. (RU of the regional passenger train No. 9344 and the

long distance passenger train No. 924).

Consequences: 0 fatality, 0 injury;

total damage CZK 3 425,-

Causal factor:

 failure to respect the signal "Stop" of the main (departure) signal device L6 at Poříčany station by the train driver of the regional passenger train No. 9344, who illegally set the train in motion at the time when the signal which allow the train movement was on the departure signal valid for other track.

Contributing factor:

none.

Systemic factor:

none.

Recommendations:

Addressed to the Czech National Safety Authority (NSA):

- systematically register the software versions of the systems which have an effect the control and safety driving of the rolling stock in serviceability certificate of a track-guided vehicle;
- to take measure which will ensure at railway undertakings a duty to register software versions of rolling stock systems which have an effect the control and safety driving of the rolling stock. For individual versions of the software, to register changes in functions and in the case of more significant changes to these functions that effect the indication, operation and working of the rolling stock, to carry out demonstrable training for operating and maintenance employees;
- to take measure to ensure that railway owners and infrastructure managers, during
 infrastructure reconstructions, preserve to the maximum extent possible preserve the
 transmission of the code of the LS type automatic train control (in the original scope) until
 the installation of exclusive operation under the supervision of the automatic train control
 ETCS;
- to take measure to ensure that railway owners and and infrastructure managers expand
 the implementation of the track part of the ETCS system to the maximum extent possible.
 At least on the TEN-T network, NIB recommends implementing ETCS L2 enabling Full
 supervision mode as soon as possible and continuously. To use this full supervision to the
 maximum extent possible so that even defaults trains pass the departure signal devices
 of stations already in this mode;

Annex – Summaries of investigations completed in 2023

• to take measure to ensure that railway undertakings reduce the time of equipping the relevant rolling stocks with on-board parts of the ETCS system to the maximum extent possible (shorten the so-called migration period).





Date and time: 13th January 2022, 22:54 (21:54 GMT).

Occurrence type: trains collision.

Description: unauthorized movement of the freight train No. 43404 and collision with

the freight train No. 52479 with consequent derailment.

Type of train: the freight train No. 43404;

the freight train No. 52479.

Location: Prosenice station, km 191,808 (place of the collision), the main

(departure) signal device S1, km 191,768 (place of the unauthorized

movement).

Parties: Správa železnic, státní organizace (IM);

Rail Cargo Carrier - Czech Republic, s. r. o. (RU of the freight train No.

43404);

ČD Cargo, a. s. (RU of the freight train No. 52479).

Consequences: 0 fatality, 0 injury;

total damage CZK 28 479 130,-

Causal factors:

the train driver of the freight train No. 43404 incorrectly evaluated information which was provide him before departure of the train;

- incorrect way of driving exceeding the maximum permitted speed when the freight train No. 43404 moved at calling-on signal which it signaled by the main (entrance) signal device 1S of Prosenice station:
- failure to stop of the freight train No. 43404 in front of the main (departure) signal S1 of Prosenice station which signaled the signal "Stop".

Contributing factor:

unpreparedness (incompetence) of the train driver of the freight train No. 43404 to
correctly analyze the information which was provide him before departure of the train and
correctly interpretation calling-on signal which it signaled by the main (entrance) signal
device and to act on its accordingly, affected by failure to graduate the training (practical
part of the training – driving training) to the specified extent before passing the special
professional competence exam.

Systemic factor:

 the content and method of carrying out test of special professional competence set by legislation, in conjunction with the unified technological procedures of RU Rail Cargo Carrier – Czech Republic, s.r.o. did not capture an applicant (the train driver) who did not apply the knowledge which it acquired through training – he was not prepared for the independent performance of the work of a train driver in practice.

Recommendation:

Addressed to the Czech National Safety Authority (NSA) in cooperation with Czech Ministry of Transport:

to create a legal framework and system, by which will expand the scope and content of
knowledge and skills and procedures necessary to demonstrate special professional
competence for driving a rolling stock on a railway, national and regional categories,
about verify the practical ability of driver on a locomotive simulator to adequately solve
situations that can occur only rarely, incl. monitoring the signaling, its correct
interpretation and the corresponding way of acting, the way of driving and the maximum

speed given the characteristics of the track and variable data, such as speed limits or weather conditions:

 to verify at railway undertakings whether the exam demonstrating a special professional competence pass only applicants who have completed training to acquire the relevant knowledge, skills and procedures in the specified scope and content, in conjunction with the control of the observance of the obligations of individuals or legal persons accredited for training according to § 46j par. 4 of Act No. 266/1994 Coll., on rail systems, as amended:

Addressed to the Czech Ministry of Transport:

• in cooperation with the NSA, more specify the minimum length of the practical part of the training to acquire detailed knowledge, skills and procedures to demonstrate special professional competence for driving a rolling stock of the relevant category and type, which is Annex No. 2 to Decree No. 16/2012 Coll., about the professional competence of persons driving a rolling stock and persons carrying out revisions, inspections and tests of specified technical equipment and about the amendment of Decree of the Czech Ministry of Transport No. 101/1995 Coll., which is issued by the Order on the health and professional competence of persons in the operation of railways and railway transport, determine for 12 weeks so that the requirement of precision will be fulfilled, incl. legal certainty, and the addressees of the given legal obligation were not hindered by practice in its consistent application, similar to the case of the theoretical part of the given training.





Date and time: 29th January 2022, 13:12 (12:12 GMT).

Occurrence type: train derailment.

Description: unauthorized movement of the regional passenger train No. 16936 behind

the main (departure) signal device and consequent derailment at switch.

Type of train: the regional passenger train No. 16936.

Location: Teplice v Čechách station, the station track No. 3, the main (departure)

signal device L3, km 18,374. Place of train derailment was at the switch

No. 12, km 18,384.

Parties: Správa železnic, státní organizace (IM);

České dráhy, a. s. (RU of the regional passenger train No. 16936).

Consequences: 0 fatality, 0 injury;

total damage CZK 38 462,-

Causal factor:

 failure to respect the signal "Stop" of the main (departure) signal device L3 at Teplice v Čechách station by the train driver of the regional passenger train No. 16936 after previous unauthorized set the train in motion without dispatching of train by allowed signal due:

- the train driver did not pay sufficient attention to observe this signal device;
- the train driver did not observe indication of cab signalling of automatic train control although he had to non-standard operated dead-man button.

Contributing factor: none.

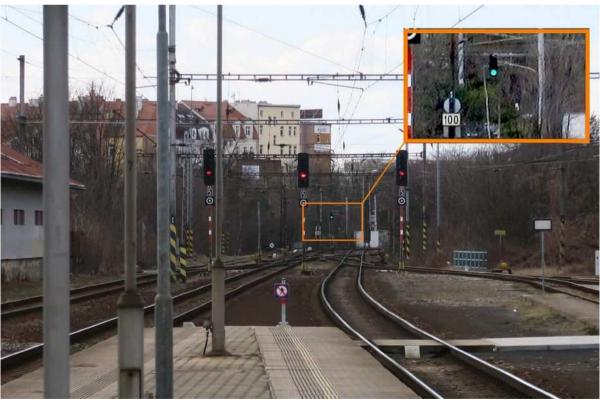
Systemic factor: none.

Recommendation:

Addressed to the Czech National Safety Authority (NSA), alternatively in cooperation with the relevant road administration authority, Municipality of the city of Teplice:

due to improvement work conditions and elimination possible inadvertent faults (mistakes) of train drivers to adopt own measure which will ensure elimination (by for example properly bulding-technical measures) of light source, which could be interchangeable with signal aspects in meaning of section 9, paragraph 1 of Act No. 266/1994 Coll., specifically traffic light on crossroad Na Hrázi and Dubská in Teplice.





Date and time: 18th March 2022, 16:10 (15:10 GMT).

Occurrence type: train derailment.

Description: derailment of 1 rolling stock of the shunting operation with consequent

falling of supervisor of shunting, his collision with rolling stock, consequent collision the shunting operation with detached rolling stock, its derailment

and collision with rail buffer stop.

Type of train: the shunting operation.

Location: Obrnice station, service area between switches No. 214 and 216, km

232,985. Place of collision the shunting operation with detached rolling

stock was at station track No. 102, km 233,182.

Parties: Správa železnic, státní organizace (IM);

ORLEN Unipetrol Doprava s.r.o. (RU of the shunting operation).

Consequences: 1 fatality;

total damage CZK 445 046,-

Causal factor:

• loss of the vertical wheel effort of the right wheel of front axle the first shunting rolling stock and consequent climbs up to top of rail.

As a part of the investigation, the Czech National Investigation Body (NIB) dealt with following factors, including the effect of their mutual interaction:

- 1. dynamic centrifugal forces which made at moving off the shunting operation in left-hand curve and vertical wheel efforts which made to rolling stock with spread cargo, where ratio of axle load was approaching to limit value:
 - location of container in rear part of two-axles rolling stock and thereby reduce the load of front axle of the rolling stock;
 - location of cargo in rear part of container and thereby next reduce the load of front axle of the rolling stock;
 - location of cargo in left part of container and thereby reduce the load of right wheel
 of front axle of the rolling stock.
- 2. differences in track geometry parameters in the surroundings point of derailment in:
 - change in cross level operation limit (over repair limit);
 - direction of right-hand rail string (without over limit);
 - height of right-hand rail string (without over limit);
 - height of left-hand rail string (over observation limit).

Rate of impact individual factors to the occurrence, in which a state approaching the limits values was found, or in which deviations were found, was not possible to determine in a demonstrable way.

Contributing factor: none. Systemic factor: none.

Recommendation:

- as a part of its activities as a national safety authority to take measure which ensure at:
 - IM Správa železnic, státní organizace:

repair, addition and specification part of internal regulation "Provision diagnostic permanenet way and railway substructure by measuring devices with continual record" for calculation of synthetic signal of change in cross level;

RU ORLEN Unipetrol Doprava s.r.o. within the framework of contractual cooperation with the logistics company M+L LOGISTIK, s.r.o. and consignor ORLEN Unipetrol RPA s.r.o.:

addition internal regulation of consignor RPA "Working procedure No. 1B — Working procedure for storing, loading and restocking" about technological procedures from Loading directive UIC. part 3.3 "Arrangement of loads" including graphic illustration of ordering loads in container, to it was not to unevenly arrangement and exceeding allowed limit values.





Date and time: 23rd April 2022, 22:39 (20:39 GMT).

Occurrence type: unauthorized movement.

Description: unauthorized movement of the regional passenger train No. 8376 behind

the main (departure) signal device L5 with consequent entry into the train

route of the regional passenger train No. 28305.

Type of train: the regional passenger train No. 8376;

the regional passenger train No. 28305.

Location: Jihlava station, main (departure) signal device L5, km 199,152.

Parties: Správa železnic, státní organizace (IM);

České dráhy, a. s. (RU of the regional passenger trains No. 8376 and No.

28305).

Consequences: 0 fatality, 0 injury;

total damage CZK 0,-

Causal factor:

 failure to respect signal "Stop" at the main (departure) signal device L5 at Jihlava station by the train driver of the regional passenger train No. 8376 caused by the driver's unconscious mistake, who did not notice the signal "Stop" while driving to the signal device L5.

Contributing factor: none. Systemic factor: none.

Annex – Summaries of investigations completed in 2023





Date and time: 19th May 2022, 7:54 (5:54 GMT).

Occurrence type: electric shock.

Description: injury of the employee of IM by electric current at repair of damaged

contact line which originated in connection with ride of the regional

passenger train No. 5005.

Type of train: the regional passenger train No. 5005.

Location: Kolín station, the station track No. 101a, km 348,152.

Parties: Správa železnic, státní organizace (IM);

České dráhy, a. s. (RU of the regional passenger train No. 5005).

Consequences: 1 injury;

total damage CZK 746,-

Causal factors:

- ride of the regional passenger train No. 5005 with raised the current collector over the section insulator No. 54 at Kolín station with connection of section contact line under voltage with disconnecting section of contact line without voltage, where it was perform work at device (repair of damaged contact line on the station track No. 101a), caused by series failures, when:
 - the leader of work of Administration of electrotechnics and energetics Praha started work at device (contact line on the station track No. 101a) and he did not inform the line dispatcher 114 of Central dispatcher workplace Praha for requirement work at device and he did not arrange of conditions of work at device with him,
 - the separate electrodispatcher ED3 of Administration of electrotechnics and energetics Praha did not inform the line dispatcher 114 of Central dispatcher workplace Praha directly about no entry ride of rolling stocks along the station tracks No. 100, 101, 101a and from the station tracks No. 103 to 109 at Kolín station, but he informed about this the operating dispatcher PD1 of Central dispatcher workplace Praha, who could not perform this guidance, but he did not bring up objection, which it had behind consequence distorted this guidance,
 - the separate electrodispatcher ED3 of Administration of electrotechnics and energetics Praha did not give guidance the line dispatcher 114 of Central dispatcher workplace Praha (nor across mediator) about no entry ride of rolling stocks with raised the current collector along the station track No. 1d and part of central head of the first part of classification yard at Kolín station whose contact line was electric connected with contact line at place of work at device contact line on the station track No. 101a;
- wrong securing of contact line at place of work at device (repair of damaged contact line on the station track No. 101a at Kolín station).

Contributing factor: none.

Systemic factor: none.

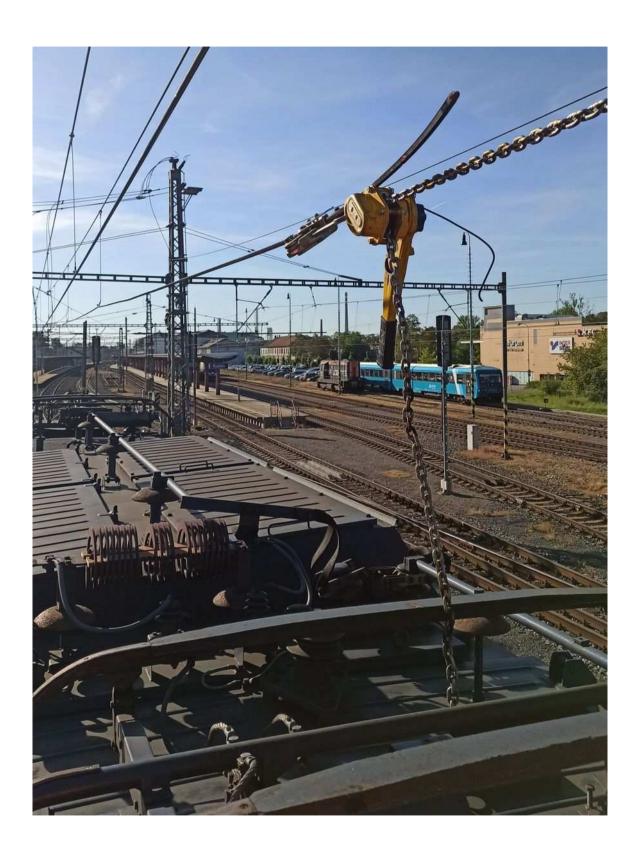
Recommendation:

Addressed to the Czech National Safety Authority (NSA):

• as a part of its activities as a national safety authority, to take own measure to ensure at IM Správa železnic, státní organizace:

by adjustment of the internal regulation "SŽDC E6 Regulation for activity of electrodispatching", alternatively by next related internal regulations, about directing of structure guidances given by separate electrodispatcher (dispatcher order), but also by guidances and conditions for ride rolling stocks electric traction and next necessary traffic

measures, their exaxt defining and frame determanition of content of the message, alternatively determination of fixed of content of the message (obligatory wording).



Date and time: 7th June 2022, 17:19 (15:19 GMT).

Occurrence type: other.

Description: damage of contact line during movement of the freight train No. 53742

with consequent fire of railway infrastructure equipment.

Type of train: the freight train No. 53742.

Location: Otrokovice station, km 154,109; place of damage of infrastructure

equipment - Otrokovice and Tlumačov stations and Otrokovice -

Tlumačov track section.

Parties: Správa železnic, státní organizace (IM);

PKP CARGO INTERNATIONAL a. s. (RU of the freight train No. 53742);

Consequences: 0 fatality, 0 injury;

total damage CZK 45 635 222,-

Causal factor:

 movement of the freight train No. 53742 with raised the current collector in place of ordered ride with pulled down the current collector caused by failure to respect of portable signal device for electric operation which sign the signal "pull down the current collector".

Causal factor of consequent fire of railway infrastructure equipment:

• failure to turn off the quick-switches in Nedakonice traction power station affected by a high setting value of their action (breaking current values).

Contributing factor: none.

Systemic factor: none.

Recommendation:

Addressed to Government Office of the Czech Republic:

- adjust Government Regulation No. 589/2006 Coll., which establish the different regulation
 of working hours and rest periods of employees in transport, which contains different
 conditions between employees of rail transport and employees of international rail
 transport contains in:
 - § 14, § 15b and § 15c of this regulation, which establish the rest period,
 - § 3 letter f) and § 15e of this regulation, which stipulates driving times of rail vehicles only for employees of international rail transport.

so that it should not distinguished whether or not it is an employee (the train driver) of international rail transport, because the risks of the influence of fatigue, in connection with the monotonous work of driving a rail vehicle and the physiological processes of human biorhythms are the same for the behavior of all employees (the train drivers).

- within framework of its activity, to ensure, with appropriate tools, minimization of cases where will be ordered to pulled down the current collectors of rolling stocks by portable signal devices for electric operation, especially during constructions (reconstructions, modernization) carried out on railways where this minimization should already be taken into account during preparation of construction and specific construction procedures by IM of national and regional railways. For this purpose, use both purely administrative and technical measures for example insert (temporarily insert) section insulator into overhead contact circuit at suitable places of station heads:
- check relevant available options of the ETCS in relation to prevention of occurrences related with failure to respect of signal devices for electric operation by IMs, that is above

all possibility of transmitting information about signal devices for electric operation, including portable signal devices, from trackside to mobile parts of the ETCS and their subsequent processing and application.





Date and time: 27th June 2022, 5:03 (3:03 GMT).

Occurrence type: train collision.

Description: unauthorized movement (spad) of the express train No. 516 behind the

main (departure) signal device L2, collision with the shunting operation and consequent derailment of 2 rolling stocks of the express train No. 516.

Type of train: the express train No. 516;

the shunting operation.

Location: Bohumín station, central station head, km 275,453 (place of collision).

Place of unauthorized movement was at the the main (departure) signal

device L2, km 275,613.

Parties: Správa železnic, státní organizace (IM);

České dráhy, a. s. (RU of the express train No. 516);

ČD Cargo, a. s. (RU of the shunting operation).

Consequences: 1 fatality, 7 injuries;

total damage CZK 238 949 819,-

Causal factors:

• failure to respect the signal "Stop" of the main (departure) signal device L2 at Bohumín station by the train driver of the express train No. 516 due to unconscious mistake of the train driver which manifested in the unauthorized movement of this train without dispatched from Bohumín station;

• it was not ensure to provide orientation breathing test on ingestion alcohol of the train driver of the express train No. 516 which got on to work (shift) late, by his superior employee in shift.

Contributing factor:

• the train driver of the express train No. 516 got on to work (shift) under the influence (of alcohol) in condition of middle drunkenness.

Systemic factor: none.

Recommendations:

- · to take measure to ensure that:
 - railway owners and infrastructure managers expand implementation of track part of ETCS to the maximum extent possible.
 - At least on the TEN-T network, NIB recommends implementing ETCS L2 enabling Full supervision mode as soon as possible and continuously. To use this full supervision to maximum extent possible so that even defaults trains pass departure signal devices of stations already in this mode;
 - ride of rolling stocks equipped compatible mobile part train control system of ETCS with track part of ETCS, which infrastructure is equip, will be realise too at initial trains and trains which become to change in its formation, in maximum extent with active mobile part of ETCS in relevant mode (without mode isolation);
 - to minimize way of the operation of the mobile part of the European Train Control System ETCS (restart of the ETCS mobile part, switching it to Isolation mode, etc.) which would cause the loss of its position information. To achieve this state through the reliability of the equipment, but also through the technological procedures of RUs and uniform technological procedures of IMs and consistent control over their compliance.

- to take measure, which ensure to complete missing safety measure (station dispatcher in past) until to installation operation trains under sight ETCS, when station dispatcher dispatched trains with passengers which stood by platform by signal "Departure" (written order, telecommunication equipment or audio order), by technical equipment or other way, when as advantageous and simple way in present system guideway operating and guided transport operating is in cooperation with Czech Ministry of Transport, integrate to Decree No. 173/1995 Coll., traffic rules of railway, to obligation of head of train attending crew with train with passenger transport or first person of train attending crew from front forefront of train, which does not go by full supervision of ETCS, give to driver of train signal "Consent with departure" after fulfilment one of low stated conditions, when:
 - makes sure by look or other way (e.g. by question at train driver), that relevant main signal device valid for departure train permits ride of train, or
 - by question at train driver find out, that ride of train behind main signal device with signal "Stop" was allowed other way including set conditions, or that train driver get permission for shunting from station dispatcher (e.g. ride train as shunting operation), or;
 - by question at train driver verify way of permission ride train behind main signal device including set conditions by IM in case, when its signal aspects does not see from platform,

so verify, if IM allows ride (departure) train, carry out next qualified person of RU (next to train driver), thereby it will be make safety measure who reduces risk of mistake of train driver.





Date and time: 27th June 2022, 9:56 (7:56 GMT).

Occurrence type: electric shock.

Description: injury of an employee in the working basket of a rail crane by electric

current during unauthorized work at the contact line.

Type of train: the shunting operation.

Location: Pardubice hl. n. station, the connecting track between switch No. 12 and

No. 20, km 304,966.

Parties: Správa železnic, státní organizace (IM and client of building

"Modernization railway junction Pardubice");

Elektrizace železnic Praha a. s. (RU of the shunting operation, external subject and business partner of representative of the contractor

"Modernization railway junction Pardubice").

Consequences: 1 injury;

total damage CZK 13 788,-

Causal factor:

 initiation work of the external subject at the time of an electrically unsecured workplace and failure to comply conditions for ensuring the safety and health protection of the employee in the working basket of a railway rail crane under the voltage-operated part of the contact line.

Contributing factor: none.

Systemic factor: none.





Date and time: 13th July 2022, 13:55 (11:55 GMT).

Description: derailment of the freight train No. 62066.

Type of train: the freight train No. 62066.

Location: Bohumín station, site of technical and hygienic maintenance, track No. 27,

km 275,930.

The consequences of the occurrence had an impact also at national railway, Bohumín – Prosenice, at Bohumín station, on the middle station

head, km 275,870 - 275,580.

Parties: České dráhy, a. s. (IM);

ČD Cargo, a. s. (RU of the freight train No. 62066);

Správa železnic, státní organizace (IM of the railway Bohumín -

Prosenice) – third side.

Consequences: 0 fatality, 0 injury;

total damage CZK 27 112 000,-*)

*) The amount of damage was not final at the date of the report publishing.

Causal factor:

a set of defects on the railway superstructure of track No. 27 affecting the operation of the rolling stocks – exceeding the permitted positional deviations from the designed track position, insufficient frame rigidity of the rail grating, incl. failure to ensure the necessary frame rigidity and stability of the continuous welded rail and exceeding the limit operational deviations of the track geometry parameters, in conjunction with the defect of the right front bumper at position 2L, No. 3350, of the derailed towed rolling stock 31 54 3937 473-9 of the Res³²⁰ series, whose higher suspension stiffness caused a reduction of safety against derailment at movement on right curves.

Contributing factor: none. Systemic factor: none.





Date and time: 24th July 2022, 17:31 (15:31 GMT).

Occurrence type: level crossing accident.

Description: collision of the regional passenger train No. 14269 with the car at the level

crossing No. P8232 with consequent derailment.

Type of train: the regional passenger train No. 14269.

Location: open line between Zlín-Malenovice and Zlín střed stations, the level

crossing No. P8232, km 6,557.

Parties: Správa železnic, státní organizace (IM);

České dráhy, a. s. (RU of the regional passenger train No. 14269);

driver of the car (level crossing user).

Consequences: 1 fatality, 0 injury;

total damage CZK 2 315 301,-

Causal factors:

 failure of the traffic signal control equipment of crossroad when this crossroad was not control by light signals, as a basic safety element for ensure safety at the level crossing No. P8232 which was located in the crossroad;

 behavior of the car driver who had to at the same time fulfill several obligations for safe turning left in consequence with failure of the traffic signal control equipment and not controlled of the crossroad by light signals and he did not notice and react in time on limited visible warning of a level crossing signalling plant.

Contributing factors:

- The Czech Ministry of Transport gave an exception from binding article 4.2.1 of norm ČSN 73 6380 Railway level crossings and pedestrian crossings which was valid from February 1993, in version of change 1 from April 1996, on which basis was allowed use of building of the level crossing No. P8232 to builder. Wording of this exception is incorrect and not respect fact, that place of crossing roads is transport construction unit "crossroad" and "border of crossroad" must be distant from dangerous zone at level crossing approach on norm required or exception adjustable distance;
- an unreliable way of transmission information about failure of the traffic signal control
 equipment of crossroad to an employee of service organization, including absence of
 priorities for their elimination from the point of view of the danger to drivers of road
 vehicles at the level crossing No. P8232 during duration of the failure.

Systemic factor:

permission to use of building of the level crossing No. P8232 to builder on basis of the
exception by the Czech Ministry of Transport, which contains unrealizable condition that
the traffic signal control equipment of crossroad will be permanently in service and the
yellow discontinuous light wont be use. This permission does not solve performance of
transmission information about failure of the traffic signal control equipment of the
crossroad to IM for adopt measure for ensure safety at the level crossing No. P8232.

Recommendations:

- to adopt effective measures to eliminate the risk of the occurrence at the level crossing No. P8232 in time when the traffic signal control equipment of the crossroad (as a basic safety element for ensure safety) is not in service;
- performance of inspection at all level crossings with level crossing signaling plant without barriers with electric dependence on traffic signal control equipment of crossroad and concentrate on finding out state the most important safety parameters according to

Section 6 paragraph 1 of Act No 266/1994 Coll. and Section 4 paragraph 7 appendix 5 of Decree No. 177/1995 Coll., which are important for ensure safety at level crossings in time when the traffic signal control equipment of crossroad is not in service.

Addressed to Municipality of Zlín:

- take internal measure as the owner of traffic signal control equipments of crossroads which are adjacent with level crossings at Zlín city, and which will ensure to inform about state of traffic signal control equipments of crossroads by all accessible technical resources and enables remote access to technology of traffic signal control equipments of crossroad to an employee of service organization;
- performance of risk analysis on traffic signal control equipments of crossroads which are adjacent with level crossings at Zlín city and determination procedures for quick elimination of failure of traffic signal control equipments of crossroads;
- to establish cooperation with the Regional Directorate of the Police of Zlín Region, the Municipal Police of Zlín city and the Zlín-Otrokovice Transport Company, regarding possibility of immediate notification of failure of traffic signal control equipments of crossroads for service organization on base the analysis of the risks of traffic signal control equipments of crossroads which are adjacent with level crossings at Zlín city, detected through their own technology informing about state of traffic signal control equipments of crossroads or during patrol of Police or during driving vehicles of public transport.





Date and time: 10th August 2022, 14:05 (12:05 GMT).

Occurrence type: level crossing accident.

Description: collision of the regional passenger train No. 20119 with the lorry at the

level crossing No. P7405.

Type of train: the regional passenger train No. 20119.

Location: Lískovec u Frýdku station, the level crossing No. P7405, km 19,684.

Parties: Správa železnic, státní organizace (IM);

České dráhy, a. s. (RU of the regional passenger train No. 20119);

driver of the lorry (level crossing user).

Consequences: 0 fatality, 2 injuries;

total damage CZK 26 249 950,-

Causal factor:

an unauthorized entrance of the lorry at the level crossing No. P7405 at the time when the
regional passenger train No. 20119 was arriving, caused by behavior of the lorry driver,
who did not respect the light and acoustic warning of the level crossing safety equipment
and did not make sure whether he could safely pass the level crossing.

Contributing factor: none. Systemic factor: none.

Annex – Summaries of investigations completed in 2023





Date and time: 20th August 2022, 7:17 (5:17 GMT).

Description: collision of the uncoupled banking with the freight train No. 55077 and

consequent derailment.

Type of train: the freight train No. 55077;

the uncoupled banking.

Location: Český Těšín station, district freight station, station track No. 103, km

318,559. Place of derailment was on station track No. 103, km 318,549.

Parties: Správa železnic, státní organizace (IM);

LOKORAIL, a. s. (RU of the freight train No. 55077).

Consequences: 0 fatality, 0 injury;

total damage CZK 1 419 253,-

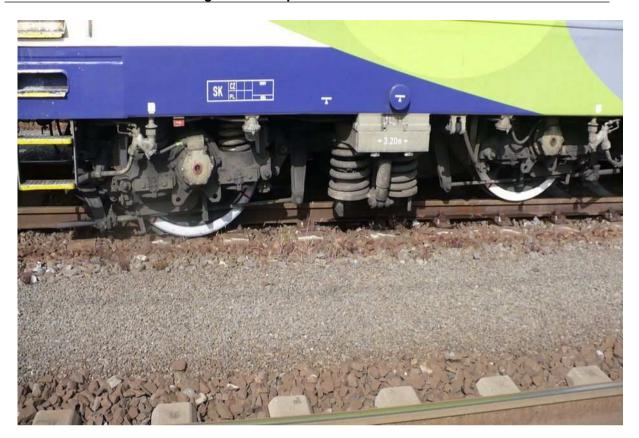
Causal factors:

non attaching of the uncoupled banking to the freight train No. 55077, its not connecting
to the continuous automatic train brake of the train and allowing movement of the train
with uncoupled banking;

 failure to verify of correct connection and pipeline integrity of the continuous automatic train brake of the freight train No. 55077 with the uncoupled banking by perform a simple brake test on the uncoupled banking (last rolling stock of the train).

Contributing factor: none.

Systemic factor: none.





Date and time: 15th September 2022, 8:39 (6:39 GMT).

Description: unsecured movement of the long distance passenger train No. 512 on an

incorrect train route to track line occupied by oncoming regional

passenger train No. 3775.

Type of train: the long distance passenger train No. 512;

the regional passenger train No. 3775.

Location: Hoštejn station, the main (departure) signal device L2, km 31,257.

Parties: Správa železnic, státní organizace (IM);

České dráhy, a. s. (RU of the long distance passenger train No. 512 and

the regional passenger train No. 3775).

Consequences: 0 fatality, 0 injury;

total damage CZK 9 097.-

Causal factor:

• permission to drive for train No. 512 at Hoštejn station at the calling-on signal along an incorrect train route from 2. station track towards the 1. track line to Krasíkov station occupied by the oncoming regional passenger train No 3775.

Contributing factor:

• failure to cancel the emergency locking of switches No. 15 and 16 at Hoštejn station placed in the turning direction after the previous train ride.

Systemic factor: none.

Recommendations:

- in a reasonable time (with regard to the duration of the development and approval process) ensure, for station interlocking plant controlled through a unified service workplace, that the operator cannot set up the specified emergency train route and inform about the conditions preventing the creation of the emergency train route (e.g. with a label warning about incorrect operation), in cases where:
 - to movement of train on an other track than operating employee selected or,
 - to movement a rolling stocks against to each other on the same track,
 - or also in other justified cases based on the analysis carried out by the IM (e.g. when the rolling stock should arrive to the level crossing before the approach time expires);
- to ensure at the same time for these devices prevent the creation of a train route on a track on which is also create an opposite emergency train route or an emergency shunting route as an adequate addition to the previous safety recommendation for the opposite sequence of creation of train routes;
- until the implementation of the first safety recommendation mentioned above, for these devices, to consider setting the display priority on the entry computer of the unified service workplace so that during the display of the risk page in the relief of trackage were not highlighted with a dashed red tint such elements from this risk page which are marked with a warning label (introduce and cancel by the command "STIT") or with a track possession label (introduce and cancel by the command "VYL") and the serving employee is alerted in a different way (the serving employee marked these elements with the knowledge of the need to ensure fulfillment of the unfulfilled conditions in an alternative way);
- to ensure at IM (Správa železnic, státní organizace):

- to amend wording of Article 404 of the internal regulation SŽ D1 about the addition of the text imposing the authorized station dispatcher to start a track possession on lines and in operating points remotely controlled with remote control of interlocking plant the obligation to announce the start of the track possession also to the employees of the transport service affected by the track possession in occupied operating points;
- to adopt of a measure which prevents the unauthorized use of employee personal identification cards (i.e. a security element necessary for the operation of the interlocking plant) by persons other than holders of this cards.





Date and time: 11nd October 2022, 14:50 (13:50 GMT).

Occurrence type: level crossing accident.

Description: collision of the regional passenger train No. 14342 with the lorry at level

crossing No. P7414 with consequent derailment.

Type of train: the regional passenger train No. 14342.

Location: open line between Střítež nad Bečvou operating control point and

Valašské Meziříčí statiton, level crossing No. P7414, km 3,779.

Parties: Správa železnic, státní organizace (IM);

České dráhy, a. s. (RU of the regional passenger train No.14342);

driver of the lorry (level crossing user).

Consequences: 0 fatality, 6 injuries;

total damage CZK 19 548 932,-

Causal factor:

an unauthorized entrance of the lorry at the level crossing No. P7414 at the time when the
train No. 14342 was driving through the level crossing, caused by behavior of the lorry
driver, who did not respect the light and acoustic warning of the level crossing safety
equipment and did not make sure whether he could safely pass the level crossing.

Contributing factor: none.

Systemic factor: none.

Recommendation:

Addressed to the Czech National Safety Authority (NSA):

to take own measure to ensure addition of the level crossing No. P7414 which is secure
by flashing light level crossing warning system to a level crossing system equipped with
barriers which with regard to point of view of optical and manual barrier will reduce
probability of the driver's entrance at the level crossing when he does not respond to light
signalization in the warning state.

Annex – Summaries of investigations completed in 2023





Date and time: 26th October 2022, 19:32 (18:32 GMT).

Occurrence type: level crossing accident.

Description: collision of the regional passenger train No. 28422 with a car at the level

crossing.

Type of train: the regional passenger train No. 28422.

Location: open line between Malšice and Sudoměřice u Bechyně operating control

points, the level crossing No. P6309, km 11,019.

Parties: Správa železnic, státní organizace (IM);

České dráhy, a. s. (RU of the regional passenger train No. 28422);

driver of the car (level crossing user).

Consequences: 1 fatality, 0 injury;

total damage CZK 311 398,-

Causal factor:

 an unauthorized entrance of the car at the level crossing No. P6309 at the time when the train No. 28422 was arriving, caused by behavior of the driver of the car, who did not make sure whether he could safely pass the level crossing.

Contributing factor: none.

Systemic factor: none.

Recommendation:

Addressed to the Czech National Safety Authority (NSA):

• it is recommended to adopt own measure which ensure safeguarding of the level crossing No. P6309 by level crossing safety equipment with warning lights and barriers.

Addressed to the road administration office of Tábor Municipal Office and Malšice town:

- to install the traffic device Z 4a Directional board with slanted lanes to left, supplemented
 with delta blocks for physicall moving the crossing roads point to a greater distance from
 the level crossing No. P6309, thereby creating the possibility of a view of traffic
 participants on the purpose-built road to the regional railway and to right in the direction of
 their driving to the level crossing;
- the possible addition of other traffic sign in front of the level crossing No. P6309 leading to increase safety and thereby reduce the possibility of accidents at the level crossing.





Date and time: 27th October 2022, 19:34 (17:34 GMT).

Occurrence type: unauthorized movement (SPAD).

Description: unauthorized movement (SPAD) of the service train No. 52519 behind the

main (route) signal device Sc201 with signal "Stop" and entry to the train

route for the regional passenger train No. 6526.

Type of train: the service train No. 52519;

the regional passenger train No. 6526.

Location: Žatec station, západ, the main (route) signal device Sc201, km 202,765.

Parties: Správa železnic, státní organizace (IM);

STRABAG Rail a.s. (RU of the service train No. 52519);

RegioJet ÚK a.s. (RU of the regional passenger train No. 6526).

Consequences: 0 fatality, 0 injury;

total damage CZK 0,-.

Causal factor:

failure to respect the signal "Stop" of the main (route) signal device Sc201 at Žatec station, section západ by the train driver of the service train No. 52519 due to unconscious mistake of the train driver which manifested in the unauthorized movement of this train without dispatching when the train driver acceptanced instruction which was not determine for him.

Contributing factor: none. Systemic factor: none.



Date and time: 30th October 2022, 20:02 (18:02 GMT).

Occurrence type: unauthorized movement (SPAD).

Description: unauthorized movement (SPAD) of the regional passenger train No. 8415

behind the main (departure) signal device S1 and entry to the train route

for the regional passenger train No. 8416.

Type of train: the regional passenger train No. 8415;

the regional passenger train No. 8416.

Location: Vlastec station, the main (departure) signal device S1, km 44,791.

Parties: Správa železnic, státní organizace (IM);

České dráhy, a. s. (RU of the regional passenger trains No. 8415 and

8416).

Consequences: 0 fatality, 0 injury;

total damage CZK 6 703,-

Causal factor:

• setting the regional passenger train No. 8415 in motion without instruction by IM and failure to respect the signal "Stop" of the main (departure) signal device S1 by the train driver of this train.

Contributing factor: none.

Systemic factor: none.



Date and time: 9th November 2022, 20:14 (19:14 GMT).

Occurrence type: train collision.

Description: unauthorized movement of the shunting operation behind the main

(departure) signal device S10 and consequent collision with the freight

train No. 55530.

Type of train: the freight train No. 55530;

the shunting operation.

Location: Mělník station, the main (departure) signal device S10, km 371,637. Place

of the collision was at the switch No. 11, km 371,477.

Parties: Správa železnic, státní organizace (IM);

ČD Cargo, a. s. (RU of the freight train No. 55530 and the shunting

operation).

Consequences: 0 fatality, 0 injury;

total damage CZK 105 400,-

Causal factor:

 unauthorized shunting behind the main (departure) signal device S10 with signal "Stop", which preceded:

- the train driver of the drawn shunting operation did not find out signal code of the signal device S10 directly, although it was possible to verify the signal from train driver's footplate by several ways;
- faults in communication between the train driver of the drawn shunting operation and the head of the shunting operation during finding out of signal code of the signal device S10 over mediator, which leaded to set the drawn shunting operation in motion at failure guidance and continue in driving, although the train driver of the drawn shunting operation did not know signal of the signal device S10;
- unauthorized giving guidance to set the drawn shunting operation in motion by the head of the shunting operation to the train driver of the drawn shunting operation without arrange of shunting with the station dispatcher and without permission to shunting.

Causes of continuance the accident plot (collision):

- the train driver of the drawn shunting operation continued in driving over 150 meters behind the signal device S10 only based on guidance "pull out", which it did not entitle him for this ride;
- the signal man did not observe unoccupied settings train route for the freight train No. 55530 and he did not prevent danger ride of the drawn shunting operation.

Contributing factor: none.

Systemic factor: none.

Recommendation:

Addressed to the Czech National Safety Authority (NSA):

- as a part of its activities as a national safety authority, to take own measure to ensure at IM Správa železnic, státní organizace:
 - to adjust the internal regulation SŽ D1 so that obligations of the train driver in meaning Section 35 (1, f) of Decree No. 173/1995 Coll. were not determine only to employee in forehead of the shunting operation during shunting with shunting gang;

Annex – Summaries of investigations completed in 2023

- o to adjust the internal regulation SŽ D1 in the case of condition to giving guidance to set the drawn shunting operation in motion by head of the shunting operation;
- to adjust the internal regulation SŽ D1 in the case of definition of running at sight.

Annex – Summaries of investigations completed in 2023





Date and time: 8th December 2022, 2:15 (1:15 GMT).

Occurrence type: train derailment.

Description: derailment of 3 rolling stocks of the freight train No. 60310 on the switch

No. 48a.

Type of train: the freight train No. 60310.

Location: Brno-Maloměřice station, the switch No. 48a, km 2,838.

Parties: Správa železnic, státní organizace (IM);

ČD Cargo, a. s. (RU of the freight train No. 60310).

Consequences: 0 fatality, 0 injury;

total damage CZK 6 558 249,-

Causal factor:

• a fracture of the locking hook and opening of the unheld switch tongue of the switch No. 48a from the stock rail while the freight train No. 60310 was moving over the switch.

Contributing factor: none.

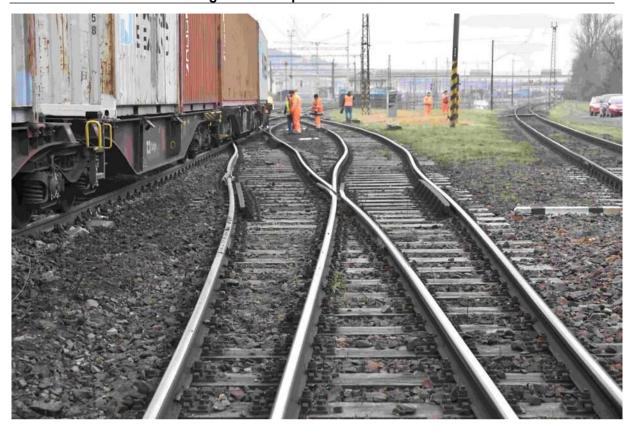
Systemic factor: none.

Recommendation:

Addressed to the Czech National Safety Authority (NSA):

as a part of its activities as a national safety authority in cooperation with producer of jaw locks (AŽD Praha), producer of switches (DT – Výhybkárna a strojírna) and with operators of double switches with jaw locks, to solve problems repeated and undesirable non-standard contacts of locking hooks with next switch components (stock rail) and definitive remove this contacts which it will prevent undesirable stress of this locking hooks.

Annex – Summaries of investigations completed in 2023





Date and time: 8th December 2022, 6:09 (5:09 GMT).

Occurrence type: level crossing accident.

Description: collision of the regional passenger train No. 4203 with the car at the level

crossing No. P8156 with consequent derailment.

Type of train: the regional passenger train No. 4203.

Location: open line between Bzenec přívoz and Moravský Písek stations, the level

crossing No. P8156, km 122,412.

Parties: Správa železnic, státní organizace (IM);

České dráhy, a. s. (RU of the regional passenger train No. 4203);

driver of the car (level crossing user).

Consequences: 0 fatality, 0 injury;*)

total damage CZK 19 471 669,-

*) Injury of the driver of the car was not possible to prove at this occurrence, because it happened consequent occurrence at the same level crossing (collision of the freight train No. 41723 with driver of the car at 6:14) when the driver of the car was death.

Causal factor:

an unauthorized entrance of the car at the level crossing No. P8156 at the time when the
regional passenger train No. 4203 was arriving, caused by behavior of the car driver, who
did not respect the light and acoustic warning of the level crossing safety equipment with
barriers.

Contributing factor: none.

Systemic factor: none.

Annex – Summaries of investigations completed in 2023





Date and time: 18th January 2023, 9:20 (8:20 GMT).

Occurrence type: level crossing accident.

Description: collision of the regional passenger train No. 7947 with the lorry at the

active level crossing.

Type of train: the regional passenger train No. 7947.

Location: open line between Čimelice and Mirovice stations, the level crossing No.

P509, km 41,179.

Parties: Správa železnic, státní organizace (IM);

České dráhy, a. s. (RU of the regional passenger train No. 7947);

driver of the lorry (level crossing user).

Consequences: 0 fatality, 6 injuries;

total damage CZK 10 690 540,-

Causal factor:

 a deadlock of the lorry in the level crossing area caused by behavior of the driver of the lorry who reversed on slippery road.

Contributing factor: none Systemic factor: none.





Date and time: 21st January 2023, 10:08 (9:08 GMT).

Occurrence type: level crossing accident.

Description: collision of the long distance passenger train No. 843 with the car at the

level crossing.

Type of train: the long distance passenger train No. 843.

Location: Ostrava-Třebovice station, the level crossing No. P7724, km 263,911.

Parties: Správa železnic, státní organizace (IM);

České dráhy, a. s. (RU of the long distance passenger train No. 843);

driver of the car (level crossing user).

Consequences: 2 fatalities, 1 injury;

total damage CZK 492 119,-*)

*) The amount of damage was not final at the date of the report publishing.

Causal factor:

 an unauthorized entrance of the car at the level crossing No. P7724 at the time when the long distance passenger train No. 843 was arriving, caused by behavior of the car driver, who did not respect the light and acoustic warning of the level crossing safety equipment and did not make sure whether he could safely pass the level crossing.

Contributing factor: none.

Systemic factor: none.

Annex – Summaries of investigations completed in 2023





Date and time: 7th February 2023, 23:51 (22:51 GMT).

Occurrence type: train collision with a railway technical device.

Description: unauthorized movement of the regional passenger train No. 12853 behind

the main (route) signal device Lc238 with consequent collision with a rail

buffer stop and derailment.

Type of train: the regional passenger train No. 12853.

Location: Český Těšín station, station track No. 238, rail buffer stop, km 319,112 (=

km 137,921 of the regional railway Český Těšín – Frýdek-Místek); place of the unauthorized movement was the main (route) signal device Lc238, km 319,111 (= km 137,921 of the regional railway Český Těšín – Frýdek-

Místek).

Parties: Správa železnic, státní organizace (IM);

České dráhy, a. s. (RU of the regional passenger train No. 12853).

Consequences: 0 fatality, 0 injury;

total damage CZK 4 267 500,-*

*The amount of damage was not final as of the date of publication of the final report.

Causal factor:

• failure to stop of the regional passenger train No. 12853 in front of the main (route) signal device Lc238 at Český Těšín station with signal "Stop", due to by incorrect driving style of the train driver of the regional passenger train No. 12853 to the signal "Speed 40 km/h and repetition of the warning signal" signaled by the main (route) signal device Lc236, which among others warning signalling the signal "Stop" at the following main signal, located at an insufficient braking distance, in conjunction with its incorrect determination of where he was with the train during movement on and along station track No. 238.

Contributing factor: none.

Systemic factor: none.





Date and time: 22nd February 2023, 18:26 (17:26 GMT).

Occurrence type: train derailment.

Description: unsecured movement with consequent derailment of the regional

passenger train No. 28424.

Type of train: the regional passenger train No. 28424.

Location: Malšice operating control point, the spring switch No. 2sv, km 10,195.

Parties: Správa železnic, státní organizace (IM):

České dráhy, a. s. (RU of the regional passenger train No. 28424).

Consequences: 0 fatality, 0 injury;

total damage CZK 717 897,-

Causal factor:

• the spring switch No. 2sv with resetting point operating mechanism at Malšice operating control point was not transfer to preferential end position and subsequently entry the regional passenger train No. 28424 on this switch.

It was not possible determined potential causation regarding roles and obligations of IM and RU by verifiably way due to absence of diagnostic system of transmission indication of resetting point operating mechanism, i.e. information about state preferential end position of the spring switch No. 2sv with resetting point operating mechanism.

Contributing factor: none.

Systemic factor: none.





Date and time: 28th May 2023, 17:46 (15:46 GMT).

Occurrence type: level crossing accident.

Description: collision of the regional passenger train No. 6660 with the car at the level

crossing.

Type of train: the regional passenger train No. 6660.

Location: open line between Krásná Lípa and Rumburk stations, the level crossing

No. P3277, km 89,133.

Parties: Správa železnic, státní organizace (IM);

České dráhy, a. s. (RU of the regional passenger train No. 6660);

driver of the car (level crossing user).

Consequences: 2 fatalities, 1 injury;

total damage CZK 3 081 565,-

Causal factor:

an unauthorized entrance of the car at the level crossing No. P3277 at the time when the
regional passenger train No. 6660 was arriving, caused by behavior of the car driver, who
did not respect the light and acoustic warning of the level crossing safety equipment and
did not make sure whether she could safely pass the level crossing.

Contributing factor: none.

Systemic factor: none.

Recommendations:

Addressed to the Czech National Safety Authority (NSA):

to take own measure to ensure addition of the level crossing No. P3277 which is secure
by flashing light level crossing warning system to a level crossing system equipped with
barriers which with regard to point of view of optical and manual barrier will reduce
probability of the driver's entrance at the level crossing when he does not respond to light
signalization in the warning state.

Addressed to Municipality of Rumburk, as the road administrative office in matters of municipal roads in the administrative territory of the municipality with extended powers Rumburk and the administrator of the road:

- to ensure, beyond the scope of legal obligations, regular (several times a year) check and maintenance of vertical road markings and greenery (trees and bushes) in front of the level crossing No. P3277 so that the road markings will be clearly visible, legible and not to be confused with other road markings;
- to ensure that the existing traffic signing A 31c "Signal board (80 m)" and A 30 "Level crossing without barriers" will be added by traffic signing A 31b "Signal board (160 m)" and A 31a "Signal board (240 m)" in accordance with the technical conditions of TP 169 Principles for marking traffic situations on roads and TP 65 Principles for road markings on roads.

Addressed to the Czech Ministry of Transport:

• to initiate a change of a legal regulations so that the vertical traffic signing A 31 "Signal board" and A 30 "Level crossing without barriers" or A 29 "Level crossing with barriers" will be mandatory installed, with the exception of service road, while in justified cases may be allowed an exception upon fulfillment of the condition to ensure visibility of traffic signs A 32 "Warning cross for level crossing" outside the village at least from a distance of 100 m, in the village at least 50 m.

Annex – Summaries of investigations completed in 2023





Date and time: 5th June 2023, 7:13 (5:13 GMT).

Occurrence type: level crossing accident.

Description: collision of the regional passenger train No. 3902 with the lorry at the level

crossing No. P7263 with consequent derailment.

Type of train: the regional passenger train No. 3902.

Location: railway track Valašské Meziříčí – Kojetín, open line between Bystřice pod

Hostýnem and Holešov stations, the level crossing No. P7263, km 26,819.

Parties: Správa železnic, státní organizace (IM);

České dráhy, a. s. (RU of the regional passenger train No. 3902);

driver of the lorry (level crossing user).

Consequences: 10 injuries;

total damage CZK 4 900 742,-

*) The amount of damage was not final at the date of the report publishing.

Causal factor:

• an unauthorized entrance of the lorry at the level crossing No. P7263 at the time when the train No. 3902 was arriving, caused by behavior of the driver of the lorry, who did not make sure whether he could safely pass the level crossing.

Contributing factor: none.

Systemic factor: none.

Recommendation:

Addressed to the Czech National Safety Authority (NSA):

- to adopt measure which ensure change of the level crossing No. P7263 safeguarding (which make use of above all lorries) by level crossing safety equipment with warning lights and barriers due to big traffic moment (bigger than 10 000);
- to adopt measure which immediately ensure that at current safeguarding of the level crossing No. P7263 will be road markings A 32a "Warning cross for single rail level crossing" highlighted by a retroreflective yellow-green fluorescence base to emphasize their importance, which will significantly eliminate the possibility of their oversight while driving over the level crossing.



