

# **NIB ANNUAL REPORT 2017**

Ministry of transport and construction of the Slovak republic

SLOVAKIA

## PREFACE TO THE REPORT

In Slovak republic the Unit responsible for Investigation of Railway Accidents is an integral part of the Ministry of transport and construction of the Slovak republic. The Ministry is an investigation body in case of accidents and extraordinary events occurred on railroads. The aim of this unit is the investigation of the causes and circumstances of railway accidents and incidents. This investigation leads to the development of the safety on railways.

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## 1 INTRODUCTION TO THE INVESTIGATION BODY

#### 1.1 Legal Basis (or Legal framework)

In Slovakia the investigation of rail serious accidents, minor accidents and incidents is based on the EU Railway Safety Directive and on the national law 513/2009 Coll.

The investigating body shall investigate the causes of circumstance of serious accidents occurred in the railway infrastructure and affecting the safety of the system. The accident or extraordinary event investigations shall be without prejudice to the obligation of the infrastructure manager and the railway undertaking to determine their causes in their own operation and among their own employees with the aim to take measures to prevent from the accident repeating or to improve globally the railway system safety. They shall inform the investigating body and the safety authority about taken measures.

#### 1.2 Role and Aim

The NIB in Slovak republic was founded in 1.1.2010, and the objective of investigation shall be accident prevention and options concerning the further improvement of the safety of the existing railway system and in no case the questions associated with apportioning blame or legal liability of particular persons.

#### 1.3 Organisation

NIB of Slovak republic is independent in its organisation and legal structure from any infrastructure manager, railway undertakings, bodies and other persons whose interests could conflict with the tasks entrusted to the investigating body. The Unit for Investigation of Railway Accidents is a structural unit at the Ministry of transport and construction of the Slovak republic set up by the Government of the Republic. The NIB has totaly 3 employees. All costs of the unit are covered from the budget of the Ministry of transport and construction of the Slovak republic. The Unit for Investigation of Railway Accidents does not have its own budget.

The employees who are responsible for investigation of the causes and circumstances of railway accidents and incidents are members of Section of railways transport and railroads. The function of the national investigation body is performed by three employees of this section.

### 2 INVESTIGATION PROCESSES

#### 2.1 Cases to be investigated

The investigating body shall investigate the causes of circumstance of serious accidents occurred in the railway infrastructure and affecting the safety of the system.

The investigating body shall investigate also the minor accident or the extraordinary event, including technical failures in the structural subsystems or components, which when repeating and under slightly different conditions might have led to serious accident. It shall take into account:

- a) the seriousness of the accident or extraordinary event,
- b) whether the accident or extraordinary event forms part of a series of events or a chain of associated events which might endanger the whole existing railway system,
- c) whether the accident or extraordinary event has an impact also on the safety of the European Community railway system, and
- d) requests and suggestions of the infrastructure manager, railway undertakings, the safety authority or authorities of the Member States.

The accident or extraordinary event investigations shall be without prejudice to the obligation of the infrastructure manager and the railway undertaking to determine their causes in their own operation and among their own employees with the aim to take measures to prevent from the accident repeating or to improve globally the railway system safety. They shall inform the investigating body and the safety authority about taken measures.

#### 2.2 Institutions involved in investigations

The extent of investigations, the person of investigator or the composition of the investigation commission as well as the procedure to be followed in carrying out such investigations shall be determined by the investigating body, taking into account the objective and principles of the accident prevention and the lessons which may be used to improve the safety of the existing railway system

The investigation shall be conducted independently of any investigation carried out by the Police Corps or other body concerning the questions of the blame and liability of particular persons (hereinafter referred to as the "police inquiry") and of the investigation conducted by the infrastructure manager or the railway undertaking.

The police inquire executor may apply the investigating body for investigation of the case other than the accident in the railway infrastructure. The investigating body may satisfy this requirement if such an investigation does not endanger the investigation of a serious accident or the independence of its investigation. The same apply if the other state authority applies for investigation.

#### 2.3 Investigation process or approach of the NIB

The infrastructure manager and railway undertaking shall be obliged immediately after finding to report an accident or an extraordinary event to the coordination centre of Integrated Rescue System, the investigating body and the Railway Police; this shall not apply in case of an incident and an extraordinary event of the incident importance. An extraordinary event of the incident importance shall be report to the Railway Police only when it is results from the human activity.

The report pursuant to previous paragraph shall include all data necessary to start the rescue works in particular the site, time, type, consequences and other known circumstances.

The investigation shall mean a procedure prevention which includes the gathering and analysis of information about the accident or the extraordinary event, the preparing the final report containing the conclusions and the determination of causes of the accident or the origin of an extraordinary event as well as the making of safety recommendations for the infrastructure manager and the railway undertaking. The objective of investigation shall be accident prevention and options concerning the further improvement of the safety of the existing railway system and in no case the questions associated with apportioning blame or legal liability of particular persons.

The investigating body shall conclude its examinations at the accident site within the shortest possible time in order to enable the railway undertaking to remove damaged railway vehicle and the infrastructure manager to restore the infrastructure operation for the railway transport.

The investigating body shall be obliged to inform the European railway agency about the investigation beginning within one week of such beginning. Such information shall include the date, time and accident site, as well as its type and its consequences as regards the number of fatalities and injuries and extent of the damage.

## **3** INVESTIGATIONS

#### 3.1 Overview of investigations completed, identifying key trends

Type of ac-	Number	Number of victims		Damages in €	Trends in relation to
cidents in- vestigated	of acci- dents	Deaths	Ser.Injur	(approxima- tion)	previous years
Trains collision with an obstacle	1	0	0	61 951,11	-
Level crossing accident	1	0	1	13 544,40	
Train derailment	1	0	0	77 351,97	
SPAD	1	0	0	17 511,52	

#### 3.2 Investigations commenced in 2017

Date of oc- currence	<b>Title of the investigation</b> (Occurrence type, location)	Legal basis		
19. 12. 2017	Level crossing accident	ii		
<b>Basis for investigation:</b> i = According to the Safety Directive, ii = On national legal basis (covering				

**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 2017

#### Safety Studies completed in 2017

Date of commission	Title of the Study (Occurrence type, location)	Legal basis	Comleted (date)			
	none					
<b>Basis for investigation</b> : <b>i</b> = According to the Safety Directive, <b>ii</b> = On national legal basis (covering possible areas excluded in Article 2, §2 of the Safety Directive), <b>iii</b> = Voluntary – other criteria (National						

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 2017

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 2017

NIB SK completed 4 investigations in 2017. It were investigated and closed 2 cases which occurred in 2016 and started and closed another 2 cases occurred in 2017.

#### 3.5 Summaries of investigations commenced in 2017

One investigation accident commenced in 2017 and it were not closed and it is carried over to the next year.

#### 3.6 Comment and introduction or background to the investigations

Investigatior	Investigations commenced in 2017 and not followed					
Date of	Title of the investigation	Legal ba-	Reason o			

Date of occurrence	<b>Title of the investigation</b> (Occurrence type, location)	Legal ba- sis	Reason of non following or suspen- sion of inves- tigations	Who, why, when (de- cision)	
	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).

#### 3.7 Accidents and incidents investigated during last five years (in 2013–2017)

#### Rail investigations by NIB SK in 2013–2017

Accidents investigated		2013	2014	2015	2016	2017	тот
	Train collision	0	0	0	0	0	0
Art	Train collision with an obstacle	1	0	0	0	1	2
its (	Train derailment	0	1	1	0	1	3
den	Level-crossing accident	1	1	1	1	1	5
Serious accidents (Art 19, 1 + 2)	Accident to person caused by RS in motion	0	0	0	0	0	0
riou	Fire in rolling stock	0	0	0	0	0	0
Seri 19,	Involving dangerous goods	0	0	0	0	0	0
	Train collision	-	-	0	0	0	0
t	Train collision with an obstacle	-	-	0	0	0	0
(Ar	Train derailment	-	-	0	0	0	0
ents	Level-crossing accident	-	-	0	0	0	0
accidents (Art	Accident to person caused by RS in motion	-	-	0	0	0	0
Other 21.6)	Fire in rolling stock	-	-	0	0	0	0
3 Q	Involving dangerous goods	-	-	0	0	0	0
Incider	nts	-	-	3	0	1	4
	TOTAL	2	2	5	1	4	14

## 4 **RECOMMENDATIONS**

## 4.1 Short review and presentation of recommendations

NIB SK made recommendations which may be used to improve the safety of the existing railway system separately for each cause.

## 4.2 Recommendations 2017

Date of occurrence	Title of the investigation, Safety recommendations
	Trains collision with an obstacle: between stations Východná and Kráľova Lehota
2. 12. 2016	<ul> <li>Addressee to IM and RU:</li> <li>IM and RU check the possibility how to make better connection between engine-driver and train dispatcher by mobile phone or walkie-talkie</li> </ul>
	Level crossing accident: Poprad-Tatry station
7. 1. 2017	<ul> <li>Addressee to IM:</li> <li>IM check the possibility for obtain funds for the purpose of increasing safety on railways by swapping crossing on grade-separated junction or by establishing system of crossing monitoring by camera</li> <li>IM check the conditions of crossings and connected roads and discuss eventual failings with steward of roads</li> <li>Addressee to NSA:</li> <li>NSA check the progress of implementation an appointed task to IM and RU to make better connection between engine-driver and train dispatcher by mobile phone or walkie-talkie</li> <li>NSA check the possibility to modify the rules with the aim to create only grade-separated junction and disturb grade crossing</li> </ul>
	Train derailment: Žilina station
26. 11.2016	<ul> <li>Addressee to IM:</li> <li>IM check the possibility of more frequently controls of switches and rail tracks with not only the time factor since the last inspection but also with emphasis on age and frequency of use with the aim to prevent the accident</li> <li>IM check the possibility to create analyse of causes of breaking tracks and switches not only with the time factor but also with emphasis on frequency of use or in context of producer and the defects in the same delivery, with the aim to prevent the serious accident like a derailment or collisions</li> <li>Addressee to NSA:</li> <li>NSA check the possibility of corporations with another NSA in assessing the safety policy and safety management system by other infrastructure managers in order to prevent defects</li> </ul>

	Spad: Trenčín station
08. 03.2017	<ul> <li>Addressee to NSA:</li> <li>NSA shall examine the effectiveness of the training, examinations and checks and shall keep a list of drivers so that it is clear to whom the driver's license has been withdrawn and who have made an accident and when they have taken a new professional examination</li> </ul>