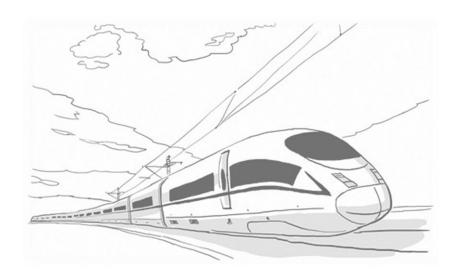


REPUBLIC OF CROATIA AIR, MARITIME AND RAILWAY TRAFFIC ACCIDENTS INVESTIGATION AGENCY Department for Railway Traffic Accidents Investigation

NIB CROATIA ANNUAL REPORT 2019

according to Article 24(3) of Directive (EU) 2016/798 of the European Parliament and of the Council of 11 May 2016 on railway safety (recast)



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- Art. 24(3) of Directive (EU) 2016/798 of the European Parliament and of the Council of 11 May 2016 on railway safety (recast),
- Art. 6(4) of the Act of establishing the Air, Maritime and Railway Traffic Accidents Investigation Agency (Official Gazette Nos. 54/2013 and 96/2018) and
- Art. 132(7) of the Act on Safety and Interoperability of the Railway System (Official Gazette No. 63/2020) (Art. 115(6) of previous Act on Safety and Interoperability of the Railway System (Official Gazette Nos. 82/2013, 18/2015, 110/2015 and 70/2017)).

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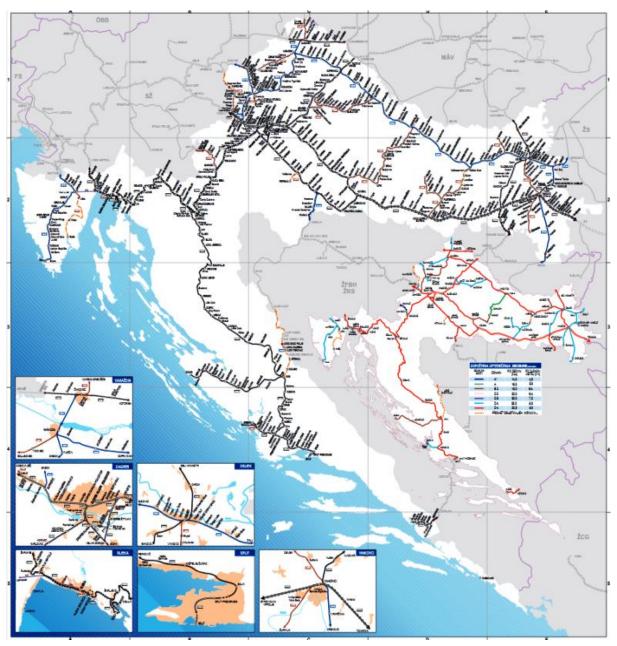


ABBREVIATIONS

AIA	Air, Maritime and Railway Traffic Accidents Investigation Agency
NIB	National Investigating Body
NSA	National Safety Authority
IIC	Investigator-In-Charge
CI	Chief Investigator
MMPI	Ministry of The Sea, Transport and Infrastructure
ERA	European Union Agency for Railways
LC Level crossing	
RS	Rolling stock
SP	Safety Recommendation
IM	Infrastructure Manager
RU Railway Undertaking	
HŽI Croatian Railways Infrastructure	
HŽ CARGO	Croatian Railways Undertaking for Cargo Transport



CROATIAN RAILWAY NETWORK



Source: https://www.hzinfra.hr/naslovna/mreza-hrvatskih-pruga/

The construction length of the Croatian railway network is 2.617 km, of which:

- 2.343 km of single-track,
- 274 km of double-track lines.

The railway network contains 536 stations and stops, 1505 level crossings, 109 tunnels and 544 bridges.

INTRODUCTION TO THE REPORT

A National Investigating Body operates in the Republic of Croatia as the Air, Maritime and Railway Traffic Accidents Investigation Agency (hereinafter: AIA), Department for Railway Traffic Accidents Investigation for conducting independent investigations of the causes and circumstances of railway accidents and incidents according to Directive (EU) 2016/798 of the European Parliament and of the Council of 11 May 2016 on railway safety (recast), the principles and requirements of which have been implemented into the Croatian 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 issued by the AIA, Department for Railway Traffic Accidents Investigation for 2019, in accordance with Article 24(3) of Directive (EU) 2016/798 of the European Parliament and of the Council of 11 May 2016 on railway safety (recast), Article 6(4) of the Act of establishing the Air, Maritime and Railway Traffic Accidents Investigation Agency (Official Gazette Nos. 54/2013 and 96/2018) and Article 132(7) of the Act on Safety and Interoperability of the Railway System (Official Gazette No. 63/2020) (Art. 115(6) of previous Act on Safety and Interoperability of the Railway System (Official Gazette Nos. 82/2013, 18/2015, 110/2015 and 70/2017)).

The annual report contains information regarding:

- the NIB,
- railway accidents and incidents investigation system,
- review of completed accidents and incidents investigations in 2019,
- issued safety recommendations.



1 INTRODUCTION TO THE INVESTIGATION BODY

1.1 Legal Basis

The process of the implementation of Directive (EU) 2016/798 of the European Parliament and of the Council of 11 May 2016 on railway safety (recast), into the national legislation of the Republic of Croatia was completed with two national legal Acts, the Act of establishing the Air, Maritime and Railway Traffic Accidents Investigation Agency (Official Gazette Nos. 54/2013 and 96/2018) and the Act on Safety and Interoperability of the Railway System (Official Gazette Nos. 63/2020) (previous Act on Safety and Interoperability of the Railway System (Official Gazette Nos. 82/2013, 18/2015, 110/2015 and 70/2017)).

The AIA investigates accidents and incidents, which are divided into the following categories, reflecting their nature and consequences:

- serious accidents,
- accidents,
- incidents.

The accidents and incidents investigation performed by the AIA are independent of any other party and independent of the investigation conducted by other bodies, especially judiciary investigation and the investigation of the causes and circumstances of accidents and incidents conducted by Infrastructure Manager (IM) or Railway Undertakings (RU).

1.2 Role and Aim

The AIA was established on 29 July 2013 by the Act on Establishing of the Air, Maritime and Railway Traffic Accidents Investigation Agency (Official Gazette No. 54/13, 96/18) as a legal person with public authorities. The founder of the Agency is the Republic of Croatia and the founder's rights are exercised by the Government of the Republic of Croatia. The Agency is functionally and organizationally independent of all authorities responsible for air, maritime and railway traffic and of all legal and natural persons. The mission is to guarantee independent investigation of the causes and circumstances of railway accidents and incidents. The national legislation of Republic of Croatia does not authorize the AIA to investigate accidents and incidents within trams, trolleybuses and cable-cars.

The main goal of the AIA work is to prevent the occurrence of accidents and incidents. Therefore, the AIA:

- investigates the causes and circumstances of rail accidents and incidents,
- issues final reports and safety recommendations to RUs, IM, to the National Safety Authority (NSA) or other authorities and parties.

1.3 Organisation

The AIA is a multimodal institution, it has tree independent departments for safety investigations. One of the departments is the Department for Railway Traffic Accidents Investigation, which was established in April 2014. The Department in 2019 had one Investigator-In-Charge (IIC) also acting as the Chief Investigator (CI). Other two departments are the Department for Air Traffic Accidents Investigation and Department for Maritime Traffic Accidents Investigation.

The Department for Railway Traffic Accidents Investigation investigates the causes of railway accidents and incidents independently of any other party and performing preventative inspections of railway safety. As an investigation body it is independent of any IM, RU and regulatory body.

Director of the **Governing Council** Agency Department of Joint Affairs Department for Air Traffic Accidents Investigation Department for Maritime Traffic Accidents Investigation Department for Railway Traffic Accidents Investigation

The AIA organogram

1.4 Organisational flow

The structure of railway sector in Republic of Croatia and relationships among the parties involved are defined in the Act on Safety and Interoperability of the Railway System (Official Gazette No. 63/2020) (previous Act on Safety and Interoperability of the Railway System (Official Gazette Nos. 82/2013, 18/2015, 110/2015 and 70/2017)).

The bodies in the railway sector include the Ministry of The Sea, Transport and Infrastructure (MMPI), NSA and AIA. The Ministry for Transport is in charge of the national railway legislation, including implementation of the EU railway legislation. The Railway Safety Agency is the National Safety Authority (NSA) which activities include tasks related to safety certificates, approvals, permits and other authorizations, as well as supervision and inspection in order to ensure continuous compliance with railway system safety requirements, keeping prescribed registers

and performing other tasks determined by national legislation and EU regulations. The AIA is independent of any party in the railway sector. Budget funds of the AIA are granted through

2 INVESTIGATION PROCESSES

MMPI budget system.

2.1 Occurrence to be investigated

The national legislation of Republic of Croatia orders the AIA, in accordance with European principles, to investigate the causes and circumstances of serious accidents on main and regional lines, border railways and sidings.

When making decision whether to investigate or not, the AIA takes into account the above mentioned legal requirements, as well as possibility to learn safety relevant lessons from the accident or incident.

2.2 Institutions involved in investigations

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

- **IM or RU** identifies the causes and circumstances of accident or incident, focusing on the drafting of preventative measures and the proposal of responsibility for the occurrence,
- **AIA** investigates the causes and circumstances of accident or incident with a focus on the determination of the causes and issue of preventative safety recommendation,
- State Attorney's Office and Police Directorate investigate accident or incident with the aim of defining responsibility for the committing of offenses or criminal acts.

In order to facilitate the work of the on-site investigation procedure, a Memorandum of Understanding between the Police Directorate, State Attorney's Office and NIB Croatia was signed on July 22, 2015.

2.3 Investigation process and approach of the AIA

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 Department for Railway Traffic Accident Investigation, 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).

When notified about an accident or incident by an IM or RU, the CI will decide whether it will immediately go to the accident-site or not. At the accident-site the Department for Railway Traffic Accidents Investigation will launch an independent investigation or just make onsite overview and make decision about launching an investigation later.

If the Department for Railway Traffic Accidents Investigation launches an investigation, it will notify The ERA within seven days, all parties involved in an event and the NSA. The investigation



of accident or incident may be launched immediately after the occurrence and/or later, in reaction to specific circumstances.

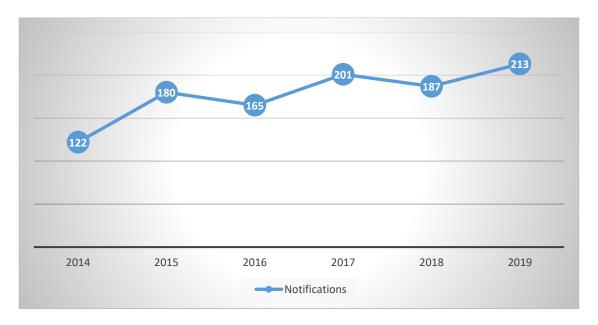
The Department for Railway Traffic Accidents Investigation will publish the conclusions of its investigation in Investigation Report, the structure of which is based on the requirements of Directive (EU) 2016/798 of the European Parliament and of the Council of 11 May 2016 on railway safety (recast) and Commission Implementing Regulation (EU) 2020/572 of 24 April 2020 on the reporting structure to be followed for railway accident and incident investigation reports. If an accident or incident occurred without any violation of legislation or internal regulations of IM and/or RU, the Department for Railway Traffic Accidents Investigation 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

The Department for Railway Traffic Accidents Investigation has ensured telephone availability of railway accident investigators at any time on the basis of 7/24/365, in order to be able to react as soon as possible and perform an immediate accident-site in accordance with the provisions of the Act on Safety and Interoperability of the Railway System (Official Gazette No. 63/2020) (previous Act on Safety and Interoperability of the Railway System (Official Gazette Nos. 82/2013, 18/2015, 110/2015 and 70/2017)). Also, the e-mail address railway.safety@ain.hr has been established in AIN as a central location where users of railway services can submit all reports of railway accidents and incidents, as well as all other relevant information relating to the field of railway traffic.

In 2019, we received a total of 213 notifications of occurrence in the railway system, of which 36 notifications referred to serious accidents, 72 to accidents and 105 to incidents. Of 36 serious railway accidents, 28 notifications related to suicides that the AIA does not investigate.

All notifications received in 2019 were entered into the Database of received notifications kept in the AIA, in which a total of 1,068 notifications were recorded from 2014 to the end of 2019:





Following the received notifications, in 2019, we decided to perform an immediate accident-site on 31 accidents/incidents, in accordance with national and EU Laws for the investigation of accidents and incidents.

From those 31 investigations, 6 were commenced in 2019 as it was determined that there were failures in the railway system in specific events.

In 2019, we completed with final reports and closed 6 investigations.

3.1 Overview of investigations completed in 2019, identifying key trends Trends of completed investigations in 2019.

Type of	Number of Number of victims		Damages	Trends	
accidents investigated	accidents	Deaths	Ser. injury	in € (approx.)	in relation to previous year
Collisions	0	0	0	<150.000	0%
Derailments	3	0	0	<150.000	-75%
LC-accident	1	0	0	<150.000	+100%
Accident to persons involving RS in motion	0	0	0	<150.000	0%
Fire in RS	0	0	0	<150.000	0%
Other	2	1	0	0	-50%

3.2 Investigations completed and commenced in 2019 Investigations completed in 2019

Date of occurrence	Title of the investigation (Occurrence type, location)	Type of occurrence	Completed (date)
17 October 2017	Derailment of passenger train No. 4063 at station Duga Resa	Α	28 February 2019
27 October 2017	Collision of passenger train No. 3229 with personal vehicle at LC Gornja Stubica	Α	22 March 2019
8 January 2018	During the climbing of an unauthorized person on freight wagon, an electric shock occurred at station Zagreb Zapadni	SA	24 May 2019
2 June 2018	Unauthorised movement of train No. 69327 at station Kutina	I	19 August 2019
27 June 2018	Derailment of 2 freight wagons which hit the parapet during maneuver at station Slavonski Brod	А	30 September 2019
11 July 2018	Derailment of 4 freight wagons when crossing switch No. 5 at station Dugo Selo	Α	31 December 2019

SA-Serious accident, A-Accident, I-Incident



Investigations commenced in 2019

Date of occurrence	Title of the investigation	Type of
	(Occurrence type, location)	occurrence
18 January 2019	January 2019 Derailment of maneuver locomotive when crossing switch	
	No. 43 at station Zagreb Glavni	
5 May 2019	Falling of two containers from train No. 62006 at station	1
	Škrljevo	
18 June 2019	Derailment of the freight wagon due to the fracture of the	Α
	axle at station Novoselec	
23 September 2019	Accident at LC Vartilen-Podrute	Α
19 October 2019	Broken wheels on locomotive 1141 of train No. 42811 at	1
	station Prečec	
3 December 2019	Derailment of the passenger train No. 2201 at station	Α
	Križevci	

SA-Serious accident, A-Accident, I-Incident

3.3 Research studies (or Safety Studies) commissioned and completed in 2019

Safety Studies completed in 2019

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

Safety Studies commenced in 2019

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

3.4 Summaries of investigations completed in 2019

See the Annex of the annual report.

3.5 Comment and introduction or background to the investigations

Investigations commenced in 2019 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			



3.6 Accidents and incidents investigated during last six years (in 2014-2019)

Rail investigations completed in 2014-2019

The Department for Railway Traffic Accidents Investigation has become operational in April 2014, so first investigation was opened in 2014.

The table groups investigations by year of their completion.

Accidents investigated			2015	2016	2017	2018	2019	TOTAL
	Train collision	0	0	0	0	0	0	0
S	Train collision with an obstacle	0	0	0	0	0	0	0
ent	Train derailment	0	0	0	0	0	0	0
cid	Level-crossing accident	0	0	1	1	0	0	2
Serious accidents	Accident to person caused by RS in motion	0	0	0	2	0	0	2
eri	Fire in RS	0	0	0	0	0	0	0
S	Involving dangerous goods	0	0	0	0	0	0	0
	Other	0	0	0	0	0	1	1
	Train collision	0	1	0	1	0	0	2
	Train collision with an obstacle	0	1	1	0	1	0	3
	Train derailment	1	3	2	4	4	3	17
uts	Level-crossing accident	0	2	1	1	0	1	5
Accidents	Accident to person caused by RS in motion	0	0	1	0	1	0	2
	Fire in RS	0	1	0	0	0	0	1
	Involving dangerous goods	0	0	0	0	0	0	0
	Other	0	0	0	0	0	0	0
Incidents		0	2	1	2	2	1	8
	TOTAL	1	10	7	11	8	6	43

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 AIA. Safety recommendation is usually issued when an accident occurred without any violation of legislation or internal regulations of IM and/or RU, 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, RUs and IM are obliged to adopt their own preventative safety measures based on issued safety recommendation.



Implementation of recommendations during 2014 – 2019

December detic	Passammandations issued		Recommendation implementation status						
Recommendations issued		Implemented		In progress		Not implemented			
Year	[No.]	[No.]	[%]	[No.]	[%]	[No.]	[%]		
2014	4	2	50%	2	50%	0	0%		
2015	7	4	58%	1	14%	2	28%		
2016	11	2	18%	9	82%	0	0%		
2017	11	8	72%	1	9%	2	19%		
2018	3	3	100%	0	0%	0	0%		
2019	3	3	100%	0	0%	0	0%		
TOTAL	39	22	56%	13	33%	4	11%		

Accidents with safety recommendations issued in 2014 – 2019

Date of occurrence	Title of the investigation (Occurrence type, location)	Status of implem.	Completed (date)
11 July 2014	Derailment of a RS near station Mađarevo SP/14	Implemented	22 December 2014
19 September 2014	Collision on LC in city Krapina SP 1/14	Implemented	02 April 2015
19 September 2014	Collision on LC in city Krapina SP 2/14	Accepted	02 April 2015
19 September 2014	Collision on LC in city Krapina SP 3/14	Accepted	02 April 2015
19 September 2014	Collision on LC in city Krapina SP 1/15	Not accepted	02 April 2015
4 September 2014	Fire in RS at station Varaždin, SP 2/15	Implemented	18 May 2015
22 June 2014	Trains collision was avoided at station Dugo Selo, SP 3/15	Accepted	23 October 2015
10 November 2014	Derailment of maneuver locomotive at station Sisak SP 4/15	Implemented	5 December 2016
11 November 2014	Accident caused by rolling stock in motion, Zdenčina SP 5/15	Implemented	02 November 2015
12 January 2015	Collision on LC at place Kupinec SP 6/15	Not implemented	22 December 2015
11 September 2014	Derailment of locomotive due to rock slide near station Kaštel Stari SP 7/15	Implemented	03 March 2016
27 February 2015	Accident on LC at place Kosovo SP 1/16	Accepted	07 March 2016
27 February 2015	Accident on LC at place Kosovo SP 2/16	Accepted	07 March 2016
27 February 2015	Accident on LC at place Kosovo SP 3/16	Accepted	07 March 2016
27 February 2015	Accident on LC at place Kosovo SP 4/16	Accepted	07 March 2016
27 February 2015	Accident on LC at place Kosovo SP 5/16	Accepted	07 March 2016
10 July 2015	Serious accident on LC at place Švogari SP 6/16	Implemented	12 September 2016
10 July 2015	Serious accident on LC at place Švogari SP 7/16	Accepted	12 September 2016

Date of occurrence	Title of the investigation (Occurrence type, location)	Status of implem.	Completed (date)
10 July 2015	Serious accident on LC at place Švogari SP 8/16	Accepted	12 September 2016
10 July 2015	Serious accident on LC at place Švogari SP 9/16	Accepted	12 September 2016
10 July 2015	Serious accident on LC at place Švogari SP 10/16	Accepted	12 September 2016
30 June 2015	Accident to person caused by RS in motion at station Split Predgrađe SP 11/16	Implemented	16 January 2017
28 December 2015	Collision on LC Male Sredice SR 1/17	Implemented	07 July 2017
28 December 2015	Collision on LC Male Sredice SR 2/17	Not implemented	07 July 2017
12 May 2016	Passenger train crossed an unprotected LC at station Vinkovci, SR 3/17	Implemented	28 June 2017
16 July 2016	Derailment of wagons at Sljeme Tunnel SR 4/17	Non information	31 August 2017
17 October 2016	Collision on LC Kuljevčica near town Ivanec, SR 5/17	Not implemented	11 October 2017
17 October 2016	Collision on LC Kuljevčica near town Ivanec, SR 6/17	Implemented	11 October 2017
05 September 2016	Collision of two special railway vehicles on the station Zagreb Ranžirni SR 7/17	Implemented	25 October 2017
05 October 2016	Trains crossed an unprotected LC Danica SR 8/17	Implemented	27 February 2018
05 October 2016	Trains crossed an unprotected LC Danica SR 9/17	Implemented	27 February 2018
05 October 2016	Trains crossed an unprotected LC Danica SR 10/17	Implemented	27 February 2018
05 October 2016	Trains crossed an unprotected LC Danica SR 11/17	Implemented	27 February 2018
27 March 2017	Derailment of wagons at station Zagreb Ranžirni SR 1/18	Implemented	12 February 2018
27 March 2017	Derailment of wagons at station Zagreb Ranžirni SR 2/18	Implemented	12 February 2018
04 April 2017	Passenger failing out of the wagon at station Križevci SR 3/18	Implemented	09 May 2018
02 June 2018	Unauthorised movement of train No. 69327 at station Kutina SR 1/19	Implemented	19 August 2019
02 June 2018	Unauthorised movement of train No. 69327 at station Kutina SR 2/19	Implemented	19 August 2019
27 June 2018	Derailment of 2 freight wagons which hit the parapet during maneuver at station Slavonski Brod SR 3/19	Implemented	30 September 2019



4.2 Safety Recommendations issued in 2019

No. of the recommendation: SR 1/19		
Date of	Title of the investigation	
occurrence		
02 June 2018	Unauthorised movement of train No. 69327 at station Kutina	
Addressed to the NSA		
The Infrastructure Manager should, when modernizing the Kutina TP Station, abolish the group		
output signal CT 6-9 and set the individual light signals for the 6, 7, 8 and 9 track.		
STATUS : Implemented (HŽI)		

No. of the recommendation: SR 2/19		
Date of	Title of the investigation	
occurrence		
02 June 2018	Unauthorised movement of train No. 69327 at station Kutina	
Addressed to the NSA		
The involved Railway undertaker should pay greater attention to the content related to business		
specifics within the technological process of operation at individual stations or railway sections		
within the Plan and the regular training program of the driver.		
STATUS : Implemented (HŽ CARGO)		

No. of the recommendation: SR 3/19		
Date of	Title of the investigation	
occurrence		
27 June 2018	Derailment of 2 freight wagons which hit the parapet during maneuver	
	at station Slavonski Brod	
Address data the SICA		

Addressed to the NSA

The Railway Undertaking should pay more attention to the workflows related to the coupling process in the Framework Plan and Executive Training Program, in accordance with the Rules on the Methods and Conditions for Performing the Safe Run of Rail Transport.

STATUS: Implemented (HŽ CARGO)

INVESTIGATIONS COMPLETED IN 2019 SUMMARY

Derailment of passenger train No. 4063 at station Duga Resa



Type of occurrence: Accident

Date and time: 17 October 2017, 09:23 p.m.

Occurrence type: Train derailment

Description: On October 17, 2017, at 9:23 p.m, at railway station Duga Resa passenger

train No. 4063 while driving on switch number 1, derailed with the 10th axle in direction of driving. There were no injuries in the accident, but

material damage was caused to RS and infrastructure.

Type of train: Passenger train

Location: Line No. M202, station Duga Resa, on the switch number 1

Parties: HŽ Infrastrukura Ltd. (IM) and HŽ Putnički prijevoz Ltd. (RU)

Consequences: Material damage to RS and infrastructure

Direct cause: Complete fracture of the translator on switch number 1, at railway station

Duga Resa.

Collision of passenger train No. 3229 with personal vehicle at LC Gornja Stubica



Type of occurrence: Accident

Date and time: 27 October 2017, 06:55 p.m.

Occurrence type: LC accident

Description: On October 27, 2017, at 06:55 p.m., at LC Gornja Stubica on line L202 Zabok

Gornja Stubica, there was a collision between passenger train No. 3229
 and personal vehicle. There were no injuries in the accident, but material

damage was caused to involved vehicles and infrastructure.

Type of train: Passenger train

Location: Line No. L202, LC Gornja Stubica

Parties: HŽ Infrastrukura Ltd. (IM) and HŽ Putnički prijevoz Ltd. (RU)

Consequences: Material damage on involved vehicles (RS and personal vehicle) and

infrastructure

Direct cause: The personal vehicle came out at the LC just before the passenger train

came on the LC.

During the climbing of an unauthorized person on freight wagon, an electric shock occurred at station Zagreb Zapadni



Type of occurrence: Serious accident

Date and time: 08 January 2018, 06:40 p.m.

Occurrence type: Electric shock

Description: On January 8, 2018, at 6:40 p.m., at station Zagreb Zapadni, on line M101

(Dobova) - DG - Savski Marof - Zagreb GK, an electric shock occurred while a juvenile male was climbing on the roof of freight wagon. The said wagon was part of train No. 45991 and was located on the 5th track. In a serious rail accident, juvenile male person deceased on site from suffered injuries as a result of an electric shock. There was no material damage to

infrastructure.

Type of train: Cargo train

Location: Line No. M101, station Zagreb Zapadni

Parties: HŽ Infrastrukura Ltd. (IM)

Consequences: Fatalities 1, no material damage

Direct cause: Climbing of a juvenile male person on the freight wagon, in which electrical

shock occurred.

Unauthorised movement of train No. 69327 at station Kutina



Type of occurrence: Incident

Date and time: 02 June 2018, 01:56 p.m.

Occurrence type: Unauthorised movement of train

Description: On 02 June 2018, at 01:56 p.m., on line M103 at station Kutina, train No.

69327 made unauthorized movement from the 6th track, during which it crossed switch number 9T. The traffic exit signal was set for train No. 81201 from the 9th track. The driver of train No. 81201 noticed the unauthorized departure of train No. 69327 and didn't even start movement. No one was injured in this incident, while minor material damage was caused on railway

infrastructure.

Type of train: Cargo train

Location: Line No. M103, station Kutina

Parties: HŽ Infrastrukura Ltd. (IM) and HŽ Cargo Ltd. (RU)

Consequences: Minor damage on railway infrastructure

Direct cause: Unauthorised movement of train No. 69327 from station Kutina

Safety recommendation: AIN/06 SR 1/2019: The Infrastructure Manager should, when modernizing

the Kutina TP Station, abolish the group output signal CT 6-9 and set the

individual light signals for the 6, 7, 8 and 9 track.

AIN/06 SR 2/2019: The involved Railway undertaker should pay greater attention to the content related to business specifics within the technological process of operation at individual stations or railway sections

within the Plan and the regular training program of the driver.

Derailment of 2 freight wagons which hit the parapet during maneuver at station Slavonski Brod



Type of occurrence: Accident

Date and time: 27 June 2018, 08:06 a.m.

Occurrence type: Train derailment

Description: On June 27, 2018 at 08:06 a.m., on line M104 at station Slavonski Brod,

during maneuver of nine freight wagons, the last two wagons separated and derailed while hitting the parapet at 35th track. One maneuver worker was slightly injured in the accident, there was less material damage to the

infrastructure and more damage to the freight wagons.

Type of train: Cargo train

Location: Line No. M104, station Slavonski Brod

Parties: HŽ Infrastrukura Ltd. (IM) and HŽ Cargo Ltd. (RU)

Consequences: Minor injuries 1, material damage on RS, minor damage on railway

infrastructure

Direct cause: Improper connection of the penultimate freight wagon in the direction of

pushing the coupling and hit the obstacle on the end of the track.

Safety recommendation: AIN/06 SR 3 /2019: The Railway Undertaking should pay more attention to

the workflows related to the coupling process in the Framework Plan and Executive Training Program, in accordance with the Rules on the Methods

and Conditions for Performing the Safe Run of Rail Transport.

Derailment of 4 freight wagons when crossing switch No. 5 at station Dugo Selo



Type of occurrence: Accident

Date and time: 11 July 2018, 08:38 a.m.

Occurrence type: Train derailment

Description: On July 11, 2018, at 08:38 a.m., during the entrance drive of train No. 48911

at the 6th track at station Dugo Selo, four freight wagons derailed on switch number 5 at km 445+562 on line M102. There were no casualties in the accident, but there was significant material damage to the infrastructure,

RS and freight.

Type of train: Cargo train

Location: Line No. M102, station Dugo Selo

Parties: HŽ Infrastrukura Ltd. (IM) and Rail Cargo Carrier Croatia Ltd. (RU)

Consequences: Material damage on RS, freight and infrastructure

Direct cause: Derailment of the tenth wagon with the second axle from the first bogie

immediately after crossing the switch number 5 at Dugo Selo railway

station.