



REPUBLIC OF SERBIA
CENTER FOR INVESTIGATION OF ACCIDENTS IN TRANSPORT
SECTOR FOR INVESTIGATION OF ACCIDENTS IN RAILWAY TRAFFIC
Belgrade

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ANNUAL REPORT
FOR 2024





Center for Investigation of Accidents in Transport (hereinafter referred to as: CINS) is independent in its work and conducts independent accident investigations. The aim of an investigation is to identify the causes and the possibility of improving safety on the railways and to prevent accidents by issuing safety recommendations.

In accordance with the Article 33 of the Law on Investigation of Air, Railway and Waterborne Traffic Accidents ("Official Gazette of RS" No. 66/15 and 83/18) and the Article 23 of the Directive 2004/49/EC of the European Parliament and of the Council of EU (Railway Safety Directive), CINS drafted and published the Annual Report.

Annual report for 2024 consists of:

- Information on CINS
- Investigative procedure in the field of railway transport
- Investigations opened in 2024
- Investigations closed in 2024
- Issued safety recommendations
- Measures taken on the basis of the issued safety recommendations



Glossary:

RS	Republic of Serbia
CINS	Center for Investigation of Accidents in Transport
MGSI	Ministry of Construction, Transport and Infrastructure
IŽS	Serbian Railways Infrastructure
a.d.	Joint-stock company
d.o.o.	Ltd.
US	Constitutional Court
JŽ	Yugoslav Railways
ZJŽ	Community of Yugoslav Railways
ŽS	Serbian Railways
EMV	Electro motor train
DMV	Diesel motor train
JP	Public Enterprise
EPS	Electrical Power Industry of Serbia
TENT	Thermo Power Plant “Nikola Tesla”
EU	European Union
MUP	Ministry of Interior
NIS	Petroleum Industry of Serbia
PU	Police Administration
SS	Safety - signalling
JP	Public Enterprise



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1. CINS

1.1. Legal framework

The implementation of Directive 2004/49/EC of the European Parliament and the Council in the legislation of the RS was carried out by the adoption of the Law on Investigation of Accidents in Air, Railway and Waterborne Traffic (“Official Gazette of RS” No. 66/15 and 83/18), and The Law on Railway System Interoperability (“Official Gazette of RS” No. 62/2023) and on the date of entry into force of the Law on Safety in Railway Traffic (“Official Gazette of RS” No. 41/18), that is, on June 8th, 2018 the Law on Railway Safety and Interoperability (“Official Gazette of RS” No. 104/13, 66/15 - other laws, 92/15 and 113/17 - other law) ceases to be valid, except for the provision of Article 78, paragraph 1 point 5) subpoint (1), which ceases to, be valid after three years from the date of entry into force of this Law, i.e. on June 8th, 2021.

CINS, which includes the Sector for Investigation of Accidents in Railway Traffic, is a special organization that carries out the investigation following the serious accidents on the railway system. In addition to serious accidents, CINS can investigate other accidents and incidents, which could lead to serious accidents, including technical failure of structural subsystems or interoperability factors in accordance with the Law on Investigation of Accidents in Air, Railway and Waterborne Traffic (“Official Gazette of RS” No. 66/15 and 83/18). The Center has the discretion to decide whether to open an investigation into other accidents and incidents.

According to the Law on Safety in Railway Traffic (“Official Gazette of RS” No. 41/18), the infrastructure manager and the railway undertaking must, independently of CINS, carry out tasks on investigating the causes and consequences of accidents and incidents in railway traffic, as well as the circumstances in which they have occurred.

According to the Law on Investigation of Accidents in Air, Railway and Waterborne Traffic (“Official Gazette of RS” No. 66/15 and 83/18), CINS, Sector for Investigation of Accidents in Railway Traffic, conducts investigation independently from all parties and organizations competent for railway traffic. CINS conducts investigation following the serious accidents on the railway system with the aim of possible improvement of safety on the railway and prevention of accident.

Professional work related to investigation is independent of criminal investigations or other parallel investigations that determine responsibility or the degree of guilt.

The investigation and determining the causes of accidents does not aim to establish criminal, economic, misdemeanour, disciplinary, civil, or other liability.

1.2. Role and purpose

According to the Law on the Investigation of Accidents in Air, Railway and Waterborne Traffic (“Official Gazette of the RS” No. 66/15 and 83/18), CINS was established, as of July 2015, as a special organization whose competence is the performance of professional work related to the investigation of accidents and serious accidents in air traffic, serious accidents, other accidents and incidents in railway traffic, very serious maritime accidents, serious maritime accidents, maritime accidents, maritime incidents, serious inland navigation incidents and inland navigation incidents in waterborne traffic. CINS has the status of a legal entity, and the headquarters of CINS is in Belgrade.

Sector for Investigation of Accidents in Railway Traffic carries out tasks that are within the competence of CINS, regarding railway traffic with the aim of possible improvement of safety on the railway by issuing safety recommendations.

According to Article 35 of the Law on Investigation of Accidents in Air, Railway and Waterborne Traffic (“Official Gazette of RS” No. 66/15 and 83/18), CINS issues safety recommendations based on data analysis and the results of the conducted investigation. Recommendations are sent to the Directorate for Railways, and in case it is necessary to other authorities and organizations in the RS, as well as to interested authorities and organizations of other countries and international organizations. The Directorate for Railways takes measures to take safety recommendations into account and to act on them. The Directorate for Railways and other authorities and organizations, except for the authorities and organizations of other countries and international organizations, are obliged to take the necessary measures in order to ensure that the safety recommendations of CINS are taken into account in an appropriate manner and, depending on the case, act on them. The Directorate for Railways and other authorities and organizations, except for the authorities and organizations of other countries and international organizations, are obliged to submit at least once a year a report to CINS on the measures taken or planned to be taken based on the safety recommendations issued in the previous year, and no later than July 31st of the current year.

Law on Investigation of Accidents in Air, Railway and Waterborne Traffic (“Official Gazette of RS” No. 66/15 and 83/18), does not apply to underground railways (metros), trams and other types of light railway.

Basic tasks of CINS, Sector for Investigation of Accidents in Railway Traffic, are:

- Investigation of serious accidents, other accidents and incidents occurring on the railways system
- Preparation of final reports on conducted specific investigations that may contain safety recommendations aiming to improve safety of railway traffic.

CINS performs other tasks stipulated by the Law on Investigation of Accidents in Air, Railway and Waterborne Traffic (“Official Gazette of RS” No. 66/15 and 83/18).

1.3. Organization of CINS

Within CINS, the following basic internal units are established: Sector for Investigation of Accidents in Air Traffic, Sector for Investigation of Accidents in Railway Traffic and Sector for Investigation of Accidents in Waterborne Traffic. Within CINS, a specific internal unit outside the Sectors, General Affairs Department, has been established.

CINS's structure has been presented in Figure 1.3.1.

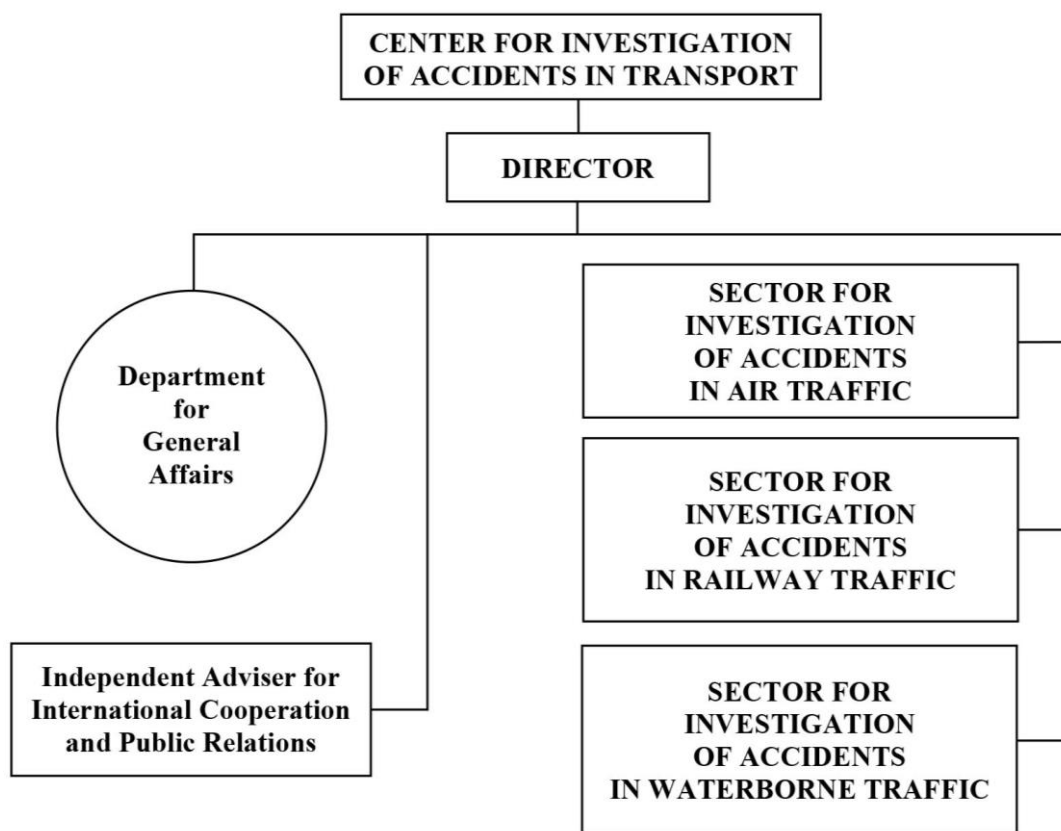


Figure 1.3.1: The structure of CINS

Sector for Investigations of Accidents in Railway Traffic has become operational since 26.06.2017. With the Rulebook on internal organization and systematization of workplaces No. 110-00-2/2022-04 of 13.12.2022, which came into force on 04.01.2023. within the Sector for Investigation of Accidents in Railway Traffic the following five work positions have been systematized: Head of the Sector for Investigation of Accidents in Railway Traffic - Main Investigator for Railway Traffic, Senior Adviser for Coordination of Investigation and Railway Accidents Analysis, Senior Adviser for Coordination of Investigation and Railway Accidents Analysis, Independent Adviser for Investigation and Railway Accidents Analysis and Independent Adviser for Investigation and Railway Accidents Analysis.



Sector for Investigation of Accidents in Railway Traffic in 2024 employed:

1. Head of the Sector for Investigation of Accidents in Railway Traffic - Main Investigator in Railway Traffic (until 20.12.2024, when he was dismissed from his duties by a decision of the Government of the Republic of Serbia),
2. Senior Adviser for Coordination of Investigation and Railway Accidents Analysis and
3. Senior Adviser for Coordination of Investigation and Railway Accidents Analysis (until 07.03.2024, when his agreement was terminated by mutual consent).

CINS, Sector for Investigations of Accidents in Railway Traffic, is independent in its work and independent of all other bodies and organisations competent for railway traffic (MGSI, the Directorate for Railways), as well as of all legal and natural persons whose interests may be in conflict with the tasks and entitlements of CINS.

1.4. Organisations competent for the railway system

Organisations competent for the railway system in RS are MGSI, the Directorate for Railways and CINS.

MGSI carries out state administration affairs related to the regulation and ensuring of the transport system. MGSI is in charge of drafting laws passed by a legislative body. The legislative body in the RS is the National Assembly. MGSI sets the legal framework by developing the railway regulations and implementing of EU legislation. MGSI also carries out supervision of internal and international transport and intermodal transport, regulation and safety of the technical and technological traffic system.

The Directorate for Railways carries out administration affairs in the field of railway determined by the Law on Railway ("Official Gazette of RS" No. 41/18 and 62/2023), Law on Railway Traffic Safety ("Official Gazette of RS" No. 41/18) and the Law on Railway System Interoperability ("Official Gazette of RS" No.62/2023). The Directorate for Railways carries out tasks of regulating the railway services market and activities in the field of regulation of safety and interoperability of railway traffic. The Directorate for Railways is competent to issue, suspend and withdraw the license for railway infrastructure management and the license for traffic, enact bylaws, participate in international cooperation in the field of railway traffic which is realized by MGSI.

CINS is a special organisation which performs state administration affairs in the field of investigation of accidents and incidents in accordance with the Law on Investigation of Accidents in Air, Railway and Waterborne Traffic ("Official Gazette of RS" No. 66/15 and 83/18). CINS is responsible for performing professional activities related to investigation of accidents and serious incidents in air traffic; serious accidents, other accidents and incidents in railway traffic; very serious maritime accidents, serious maritime accidents, maritime accidents, maritime incidents, serious inland navigation incidents and inland navigation incidents in waterborne traffic.

2. INVESTIGATIVE PROCEDURE IN THE FIELD OF RAILWAY TRAFFIC

2.1. Accidents and incidents being investigated

According to the Law on Investigation of Accidents in Air, Railway and Waterborne Traffic (“Official Gazette of RS” No. 66/15 and 83/18), CINS conducts investigation after serious accidents on the railway system with a view of possible improvement of railway safety and the prevention of new accidents caused by the same or similar causes.

In addition to serious accidents, CINS may also investigate other accidents and incidents that could lead to serious accidents, including the technical failure of structural subsystems or interoperability constituents.

CINS has discretion to decide whether to open investigation of other accidents and incidents. The scope of investigations and the procedure of conduction of these investigations is determined by CINS.

According to the Law on Investigation of Accidents in Air, Railway and Waterborne Traffic (“Official Gazette of RS” No. 66/15 and 83/18), accidents and incidents may be:

1. Serious accident in railway traffic is a collision or derailment of the train which results in the death of at least one person or serious injury to five or more persons or causing great material damage to the railway vehicles, railway infrastructure, or the environment, as well as other similar accident which has an obvious impact on railway safety or the safety management.
2. Accident in railway traffic is undesirable or unintended sudden event or a specific sequence of such events, which has detrimental effects (collisions, derailments, an overtaking of the train, level crossing accidents, accidents with the participation of individuals caused by railway vehicles in motion, fires, etc.).
3. Incident in the railway traffic is an event that is associated with the railway transportation or shunting composition and adversely affects the safety of the traffic.

Great damage in rail transport is the damage that CINS, upon accessing the accident site, assesses in the amount of at least two million euro.

Investigation refers to a process which includes the data collection and analysis, making conclusions, including the determination of causes and depending on the case, issuing safety recommendations with the aim of prevention of serious accidents in railway traffic.

Fatal injury is injury caused to a person in a serious accident in the railway traffic, resulting in the death of that person within 30 days from the injuries inflicted during serious accident in railway traffic.

Seriously injured person is any injured person who is hospitalized for more than 24 hours due to the consequences of an accident, excluding attempted suicides.

2.2. Organisations involved in investigative process

Investigation of serious accidents, other accidents and incidents on the railway system can be performed by different organizations and business entities in accordance with their legal obligations, as follows:

- Infrastructure Manager and Railway Undertakings, pursuant to the Law on Safety in the Railway Traffic (“Official Gazette of RS”, No. 41/18) and with their safety management systems (SMS) deal with determining the causes and taking measures based on the results of investigation.
- CINS investigates serious accidents, other accidents and incidents with the aim of determining the causes and issuing safety recommendations in order to improve safety of the railway system.
- The Public Prosecutor's Office and Police investigate an accident or incident in order to determine liability for committed infringement or criminal offense.

2.3. The approach of CINS to an investigation

CINS, that is, the Sector for Investigation of Accidents in Railway Traffic carries out an investigation to determine the causes in order to issue safety recommendations in terms of preventive actions aiming to reduce the number of accidents and incidents and improve safety of the railway system. Investigations carried out by the CINS do not seek to determine liability.

CINS is on standby 24 hours, 7 days a week.

For the purpose of the investigation of any accident or incident Director of CINS forms by the Decision a Working Group led by the Main Investigator in Railway Traffic and for the members of the working group other employees of CINS i.e. the Sector for Investigation of Accidents in Railway Traffic are appointed, which participate in the affairs of the investigation of accidents and incidents, as well as other professionals outside CINS, in accordance with the Law on Investigation of Accidents in Air, Railway and Waterborne Traffic (“Official Gazette of RS” No. 66/15 and 83/18).

Upon receiving notification of an accident or an incident on the railway system, CINS decides whether to go on the site of the accident or incident or not. At the site of the occurrence of the accident or incident, CINS will conduct an investigation and check the collected facts and procedures, undertaken by the Infrastructure Manager and Railway Undertaking (if in the investigation of the accident or incident one of them or both are involved).

The decision to launch an investigation can be made immediately after the reception of notification of accident or incident occurred or after all relevant facts necessary for making the decision to initiate the investigation of an accident or incident are collected.

After an investigation has been initiated, not later than seven days from the date of decision, CINS, Sector for Investigation of Accidents in Railway Traffic shall inform the MGSI and The European Union Agency for Railways (ERA) on initiated investigation, in accordance with the Law on Investigation of Accidents in Air, Railway and Waterborne Traffic (“Official Gazette of RS” No. 66/15 and 83/18).



Upon completion of the investigation, CINS publishes the Final Report and safety recommendation on its website www.cins.gov.rs. Also, the reports of the Center, i.e. the Sector for Investigation of Accidents in Railway Traffic, are published on the website of the European Union Agency for Railways (ERA) https://www.era.europa.eu/domains/accident-incident/rail-accident-investigation_en. The form of the report is in accordance with the Rulebook on the content of the final report on investigations of accidents and incidents in railway traffic ("Official Gazette of RS" No. 89/15).

3. INVESTIGATIONS OPENED IN 2024

The Sector for Investigation of Accidents in Railway Traffic initiated one investigation in 2024.

Basic data on the investigations initiated by the Sector for Investigation of Accidents in Railway Traffic in Railway Traffic in 2024 are shown in Table 3.1.

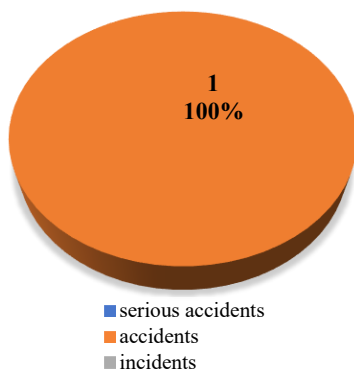
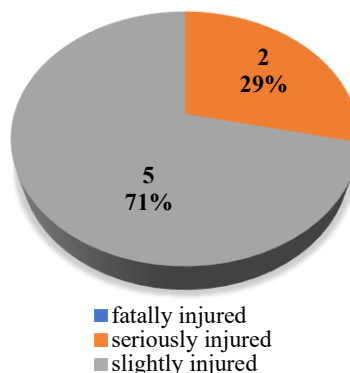
Table 3.1: Review of investigations initiated in 2024

TYPE OF ACCIDENT OR INCIDENT	No.	[%]
Serious accidents	0	0.0
Accidents	1	100.0
Incidents	0	0.0
TOTAL:	1	100.0

Basic data on fatally injured and injured people for investigations which Sector for Investigation of Accidents in Railway Traffic has initiated in 2024 are shown in Table 3.2.

Table 3.2: Review of fatally injured and injured people for investigations initiated in 2024

	Passengers	Railway staff	Third parties	Total
Fatally injured	-	-	-	-
Seriously injured	-	2	-	2
Slightly injured	4	1	-	5

**Figure 3.1:** Investigations initiated in 2024**Figure 3.2:** Fatally injured and injured in 2024

3.1. Collision of trains No 7112 and 52601

On 17.05.2024 at 18:24, on the main arterial route No 107 Beograd Centar - Pančevo Glavna - Vršac - state border - (Stamora Moravita) between the station Vukov spomenik and junction and stop Pančevački most, on the right track of the double-track line, at km 4+392 occurred overtaking and collision of the consecutive trains No 7112 (EMV 412/416-005/032, railway undertaking “Srbijavoz” a.d), which was moving, and 52601 (locomotive 193-912 and 28 (twenty-eight) empty wagons of the E series), railway undertaking “Srbija Kargo” a.d.), which was standing still. The collision occurred when the front of the train No 7112 (front part of the motor coach 412-005), which was moving, hit the end of the train No 52601 (the last wagon No 31 72 5959 453-7), which was standing in front of the protective signal To 2 of the station Pančevački most.

Upon impact, due to the kinetic energy of the train No 7112 in motion, the train No 52610 was displaced. After the impact, the trains continued to move for approximately 10 m and then stopped. On that occasion, the motor coach 412-005 of EMV 412/416-005/032 of the train No 7112 derailed with both bogies, while the last wagon No 31 72 5959 453-7 of the train No 52601 derailed with one bogie (the second bogie in the direction of travel).

In this accident there were no fatally injured. The total number of injured is seven (passengers and railway workers of “Srbijavoz” a.d. and “Srbija Kargo” a.d. who were on the trains Nos 7112 and 52601), out of which two persons were seriously injured and five persons were slightly injured

At the scene, to provide assistance to the injured, personnel from the Belgrade Institute for Emergency Medicine (emergency medical service), members of the RS Ministry of Interior, the Emergency Situations Sector, the Belgrade Emergency Situations Administration, the Zvezdara, Voždovac and Borča Fire and Rescue Units, as well as members of the RS Ministry of Interior, the PU Belgrade, were deployed.

The appearance of the scene of the serious accident is shown in figures 3.1.1, 3.1.2 and 3.1.3.



Figure 3.1.1: Appearance of the damage on the front part of the motor coach 412-005 of the train No. 7112 after the accident

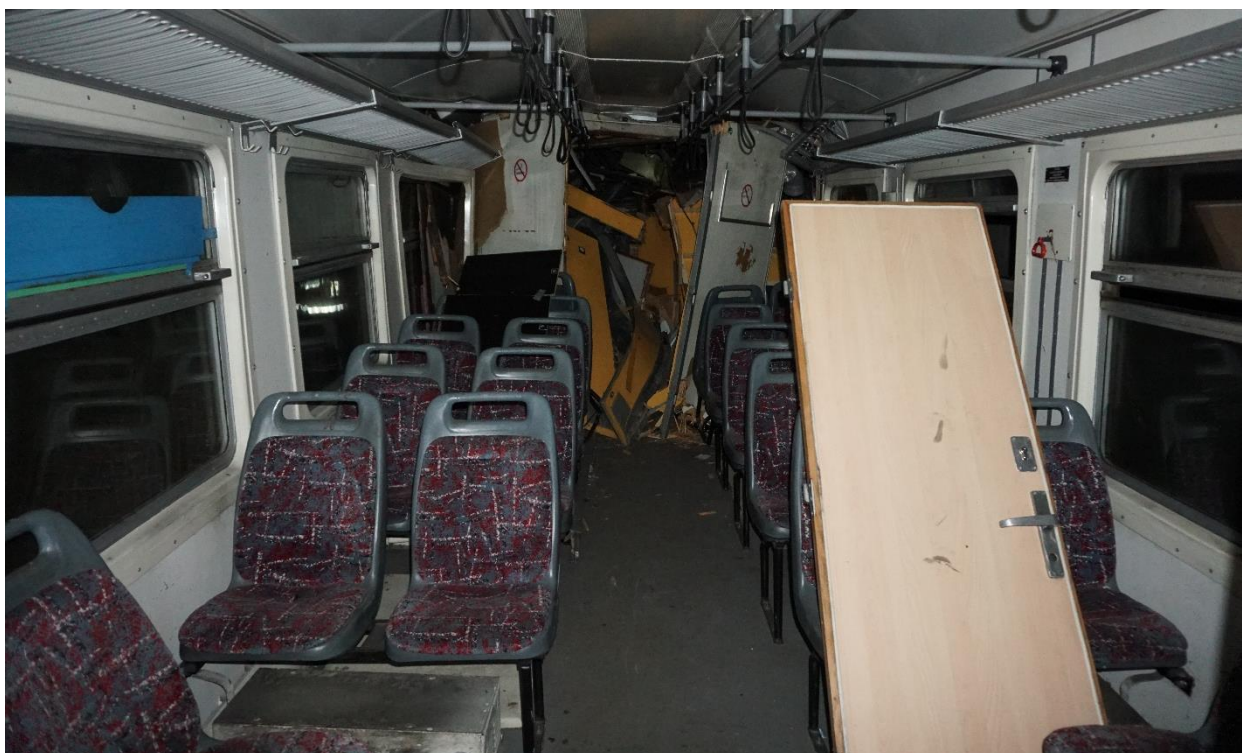


Figure 3.1.2: View of the deformations in the passenger compartment of the motor coach 412-005 of the train No. 7112 after the accident

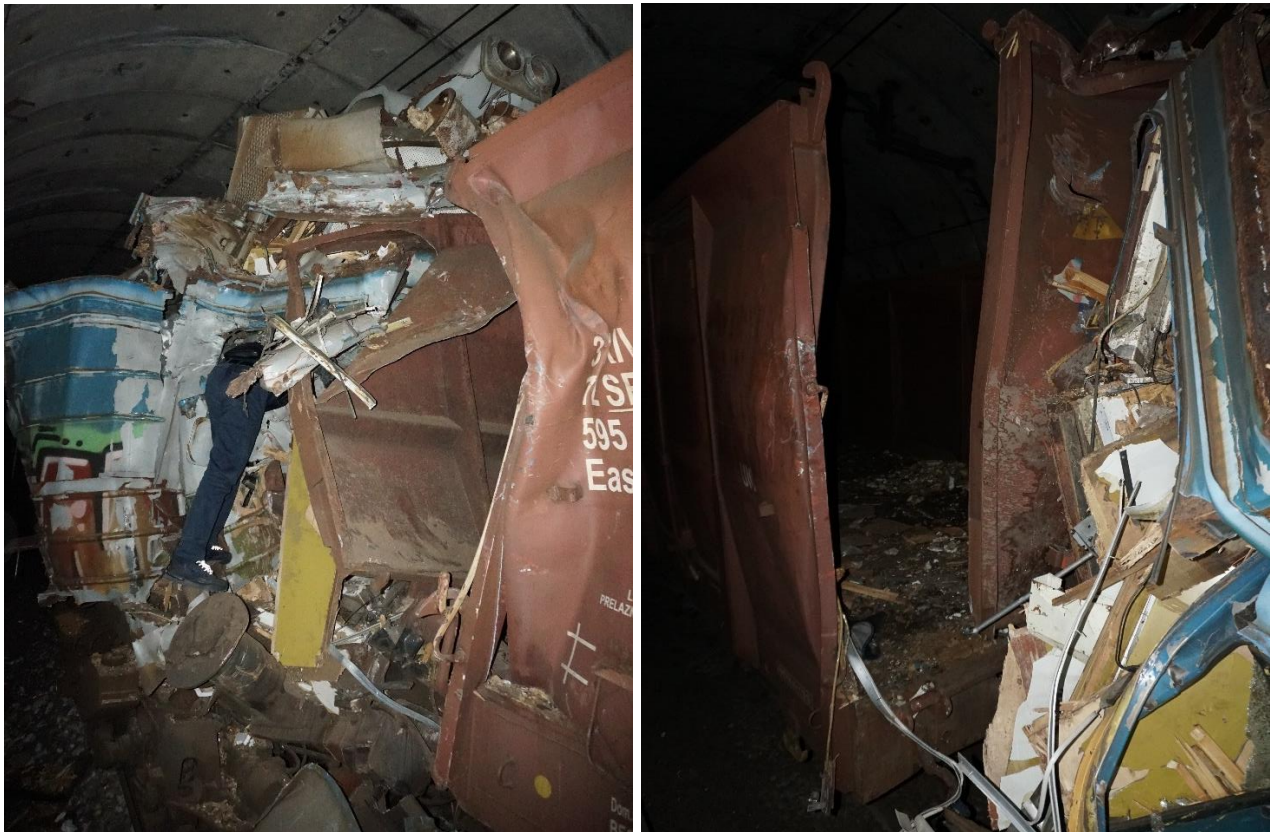


Figure 3.1.3: Appearance of the deformation of the wagon No. 31 72 5959 453-7 in the train No. 52601 after the accident

There is material damage on the infrastructure and railway vehicles.

The mitigation of the consequences of this serious accident was carried out by engaging the expertise and resources of “IŽS” a.d, “Srbijavoz” a.d. and “Srbija Kargo” a.d.

Due to this accident, railway traffic between the station Vukov spomenik and Pančevački most junction and stop was interrupted on both tracks of the double-track railway line. The traffic on the left track was interrupted until 18.05.2024 at 01:17. After removing the damaged vehicles from the track and repairing the damaged infrastructure, the right track was also opened to traffic on 20.05.2024 at 14:10.

Category:	Accident
Fatally injured and injured:	No fatalities, 2 (two) seriously and 5 (five) slightly injured
Material damage:	Exists on railway vehicles and infrastructure

4. INVESTIGATION REPORTS CLOSED IN 2024

4.1. Collision of trains No. 25412 and 49028/73478

4.1.1. Short description of the serious accident

On 17.11.2023 at 18:42 on the regional railway line No. 207 Novi Sad - Odžaci - Bogojevo, between the stations Ratkovo and Odžaci, while traveling in the direction from Ratkovo station towards Odžaci station, on the open track, at km 56+306, near the switching point (located at km 56+320) of the automatic level crossing at km 57+306, there occurred overtaking and collision of the trains No. 25412 (DMV 711-077/078, railway undertaking “Srbijavoz” a.d.) and the train No. 49028/73478, (locomotive 753-782 and nine S series wagons loaded with containers, railway undertaking “Transagent Operator” d.o.o.), which was standing.

The collision occurred when the front of train No. 25412 (the front part of DMV 711-078), which was moving, struck the end of train No. 49028/73478 (into the last wagon No. 33 68 4952 037-2), which was stationary due to a locomotive 753-782 failure.

Upon impact, due to the kinetic energy of train No. 25412 in motion, there was climbing of the front part of train No. 25412 (DMV 711-078) onto the rear part of the flat wagon No. 33 68 4952 037-2. After the collision, train No. 25412 continued to move for approximately 5 m, pushing ahead and deforming container CNEU 453486-3, which was loaded on the rear of flatcar No. 33 68 4952 037-2.

Except for the wheels on the first axle of the first bogie of DMV 711-078 (viewed in the direction of movement), which lifted above the tracks (approximately 30 cm from the top edge of the rail), all other wheels of the vehicles in both trains were on the rails (they did not derail).

The appearance of the serious accident site is shown in Figures 4.1.1.1, 4.1.1.2, 4.1.1.3, 4.1.1.4. and 4.1.1.5.



Figure 4.1.1.1: The appearance of the train collision



Figure 4.1.1.2: The appearance of the damages on the front box part of DMV 711-078
and on the container CNEU 453486-3



Figure 4.1.1.3: The appearance of the damages on the wagon No.33 68 4952 037-2

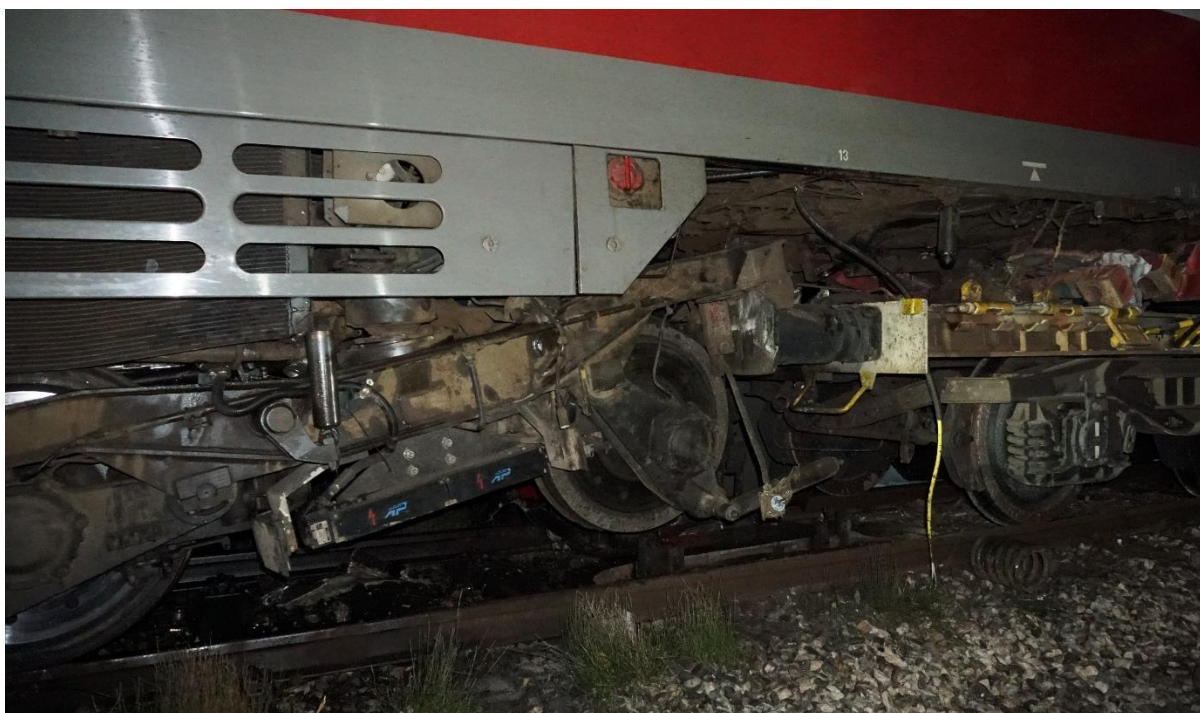


Figure 4.1.1.4: The appearance of the shifted bogie on DMV 711-078



Figure 4.1.1.5: Appearance of damages on the power unit DMV 711-078

The mitigation of the consequences of this serious accident was carried out by engaging the expertise and resources of “IŽS” a.d, and railway undertakings “Srbijavoz” a.d. and “Transagent Operator” d.o.o.

In this serious accident there were no fatally injured. The total number of injured is 58 (fifty-eight) persons, out of which 5 (five) persons were seriously injured (4 passengers and 1 railway worker), and 53 (fifty-three) persons were slightly injured (51 passengers and 2 railway workers). All the injured persons were in the train No. 25412.

At the scene, personnel from the Emergency Medical Service of the Health Center Odžaci, members of the MUP RS and PS Odžaci were deployed, to aid the injured.

On the railway vehicles and the goods there exists a material damage.

Due to this serious accident, the interruption of traffic between Ratkovo and Odžaci stations lasted until 18.11.2023, at 14:30 when the railway line was reopened for train traffic.

Category:	Serious accident
Fatally injured and injured:	No fatalities, 5 (five) seriously injured and 53 (fifty-three) slightly injured (All the injured persons were in the train No. 25412)
Material damage:	Exists on the railway vehicles and the goods

The total material damage to goods caused by this serious accident amounts to 1,755,328.32 dinars (RSD). According to the official average exchange rate of the National Bank of Serbia on 17.11.2023, which was 1 EUR (euro) = 117.1900 RSD (dinar), the total material damage to goods and other property caused by this serious accident amounts to 14,978.48 EUR (euro).



The structure of the incurred material damage to railway vehicles is given as follows:

Damage to DMV 711-077/078:	184 340 000.00 RSD
Cost of enabling of the wagon No. 33 68 4952 037-2 for transportation to the workshop:	225 138.00 RSD
Damage to wagon with individual No. 33 68 4952 037-2:	Data not provided
Total cost of the intervention of the breakdown train of “IŽS” a.d. including costs of hiring traction vehicles of “Srbija Kargo” a.d.	5 170 076.00 RSD
Total direct material damage:	189 735 214.00 RSD

The damage is expressed in the official currency of the RS (Dinar - RSD).

According to the official middle exchange rate of the National Bank of Serbia on 17.11.2023, which was 1 EUR (Euro) = 117.1900 RSD (Serbian Dinars), the total material damage incurred in the serious accident amounts to 1,619,039.28 euros (EUR).

4.1.2. The causes of the serious accident determined by investigation

The direct cause of the serious accident is that two trains were at the same time at one distance between the stations, where one train was stationary (train No. 49028/73478), while the other train was moving (train No. 25412), which is contrary to the provision of paragraph 3 of Article 122 of the Traffic Rulebook (“Official Gazette of RS” No. 34/22 and 107/22). The train dispatcher of the Ratkovo station dispatched train No. 25412 in the direction of the Odžaci station without the previously requested permission for the train No. 25412 from the train dispatcher of the Odžaci station, which is contrary to paragraphs 1 and 2 of Article 121 and paragraph 1 of Article 133 of the Traffic Rulebook (“Official Gazette of RS” Nos. 34/22 and 107/22).

Workers of the railway infrastructure manager and railway undertakings who perform their duties at the station confirm by their signature that they are familiar with the provisions of the station's Business Order in accordance with paragraph 5 of Article 27 of the Traffic Rulebook (“Official Gazette of the RS” Nos. 34/22 and 107/22). In the specific case, the train dispatcher at Ratkovo station who was involved in a serious accident was primarily required to be familiar with the Ratkovo Station Business Order Part I and Appendix IV of the Station Business Order (Instructions for Handling the Inter-Signal Dependency Device) by the employer “IŽS” a.d. before starting work at Ratkovo station, which was not done. An examination of the submitted investigation material shows that the train dispatcher at Ratkovo station who was involved in the serious accident started working at Ratkovo station on the night shift of April 9/10th, 2022, while he was only made familiar with the Ratkovo Station Business Order Part I after more than three months of work at Ratkovo station, which he confirmed by his signature on July 15th, 2022. According to the Letter No. 15/2024-12.13-125 dated May 8th, 2024, from the Station Manager of Odžaci (submitted by “IŽS” a.d. via email on May 8th, 2024), the train dispatcher did not confirm by his signature that he was familiar with the Instructions for Handling the Inter-Signal Dependency Device at Ratkovo station.

4.1.3. Additional remarks on deficiencies and defects found during the investigation, but not relevant to the conclusions about the causes

The train dispatcher at Odžaci station was obligated, according to the provisions of paragraph 10 of Article 141 of the Traffic Rulebook (“Official Gazette of RS” Nos. 34/2022 and 107/2022), to inform the previous station (Ratkovo station) immediately after five minutes from the estimated time of arrival (passing) of train No. 49028/73478 at Odžaci station that the train had not yet arrived, without waiting for a request check out from Ratkovo station, which he failed to do. He informed Ratkovo station shortly before the occurrence of a serious accident. If the train dispatcher at Odžaci station had acted in accordance with the aforementioned provision of the Traffic Rulebook (“Official Gazette of RS” Nos. 34/2022 and 107/2022), there would have been a possibility that the train dispatcher at Ratkovo station would not dispatch train No. 25412 to the inter-station distance where train No. 49028/73748 was stationary, thus potentially avoiding the serious accident. However, this does not diminish the obligation of the train dispatcher at Ratkovo station to have sought and obtained permission from the dispatcher at Odžaci station before dispatching train No. 25412.

During the investigation of the serious accident, it was determined that the stations on the regional railway line No. 207 Novi Sad - Odžaci - Bogojevo are equipped with SS and telecommunication devices that are technically outdated. The regular maintenance and operation of such devices after a long period of use are greatly hindered due to the wear and tear of certain parts and the limited availability of spare parts.

The SS devices at Ratkovo and Odžaci stations lack forced technical dependencies between switch positions and entry signals, as well as output signals that would be technically dependent on permission for train dispatch to the next station. Stations with such types of SS devices pose a higher risk of accidents and incidents in railway traffic due to increased human factor influence on train traffic regulation compared to devices with higher levels of forced technical dependencies.

The telecommunication devices of the proof of understanding system (radio communication system) at Ratkovo and Odžaci stations enable conference calls among all stations on the railway line 207 Novi Sad - Odžaci - Bogojevo, allowing transmission of only one message at a time that is broadcast to all stations. This type of communication, due to its limited technical capabilities compared to modern commercially available telecommunication devices, also carries an increased risk of human factor influence on train traffic regulation. This is due to additional workload on traffic staff from messages not intended for their station, as well as the inability to send a message to the neighboring station when another station is transmitting a message.

In the Instructions on the Organization and Operation of the Operational Service in the Area of “Infrastruktura Železnice Srbije” a.d. (“Official Gazette of the ŽS” Nos. 21/17, 21/18, 37/18, and 28/23), the railway infrastructure manager “IŽS” a.d. in Chapter I, Introductory Provisions, Article 3, defined the concept of “traction vehicle breakdown”, and in Chapter V, Operational Measures to Ensure Smooth Train Traffic, Article 34, part (b), point 4, defined the deadline for informing about the type of traction vehicle breakdown by the train driver, which must be given within no longer than 10 minutes on main lines or 30 minutes on regional and local lines. Given that a locomotive breakdown can represent a disturbance that may cause exceptional train stops, this defined time for informing by the train driver about the type of traction vehicle breakdown is not in accordance with Article 234 of the Traffic Rulebook (“Official Gazette of RS” Nos. 34/22, 107/22), which defines the obligation that if the train driver anticipates that the train will be delayed for more than 15 minutes, both neighboring

stations or the TK dispatcher must be informed and assistance requested if necessary. The Instructions on the Organization and Operation of the Operational Service in the Area of “Infrastruktura Železnice Srbije” a.d. (“Official Gazette of the ŽS” Nos. 21/17, 21/18, 37/18, and 28/23) was adopted during the period when Rulebook 2, Traffic Rulebook (“Official Gazette of the ZJŽ” Nos. 3/94, 4/94, 5/94, 4/96, and 6/03) was in force, in which the provision regarding the defined time for informing for all lines was identical to the provision in the current Traffic Rulebook.

The Instructions on the Organization and Operation of the Operational Service in the Area of “Infrastruktura Železnice Srbije” a.d. (“Official Gazette of the ŽS” Nos. 21/17, 21/18, 37/18, and 28/23) does not contain provisions on the obligation to apply and acquaint railway undertakings with the content of the Instructions. In the mentioned Instruction, provisions are prescribed regarding informing traffic staff about traction vehicle defects, which pertain to train drivers, considering transitional and final provisions. Railway undertakings “Transagent operator” d.o.o. and “Srbijavoz” a.d. have not adopted and do not have the aforementioned Instruction in their registers of regulations.

4.1.4. Issued safety recommendations

To the Directorate for Railways: SR_01/24, SR_02/24, SR_03/24, SR_04/24, SR_05/24, SR_06/24 SR_07/24 and SR_08/24:

SR_01/24 The Directorate for Railways, in accordance with Article 37 of the Law on Safety in Railway Traffic (“Official Gazette of the RS”, No. 41/18), should amend and supplement the Rulebook on Technical Conditions and Maintenance of the Railway Telecommunication Network (“Official Gazette of the RS”, No. 68/21), in part II. Technical conditions for the railway telecommunication network, where the minimum technical requirements for the equipment of railways with telecommunication devices should be unambiguously and precisely defined depending on the speed of train movement, railway categorization, volume of railway traffic, and similar factors.

SR_02/24 “IŽS” a.d. should, in terms of maintaining public railway infrastructure related to the elements of the control, management, and signaling subsystem, replace and supplement the missing and technically faulty elements of the SS devices and installations on the regional railway line 207 Novi Sad - Odžaci - Bogojevo, so as not to compromise the designed technical functionality of the elements of the control, management, and signalling subsystem, in accordance with the provisions of Articles 55 and 56 of the Law on Railways (“Official Gazette of the RS”, Nos. 41/18 and 62/23).

SR_03/24 “IŽS” a.d., in terms of maintaining the public railway infrastructure in relation to the elements of the control, management and signaling subsystem, to replace and supplement the missing telecommunications devices and facilities on the regional railway line 207 Novi Sad - Odžaci - Bogojevo, which are missing and have been switched off due to technical malfunctions, as the designed technical functionality of the elements of the control, management and signaling subsystem would not be impaired, in the sense of the provisions of Art. 55 and 56 of the Law on Railways (“Official Gazette of RS”, Nos. 41/18 and 62/23).



- SR_04/24** “IŽS” a.d. should consider the possibility of replacing the SS devices, on the railway line 207 Novi Sad - Odžaci - Bogojevo, that lack enforced technical dependencies between the positions of switches and entry signals, as well as the absence of exit signals with technical dependencies, and telecommunication devices with limited technical capabilities by installing SS devices with a higher level of enforced technical dependencies and more modern commercially available telecommunication devices. This is aimed at reducing the risk of human factor influence on train traffic regulation and increasing railway traffic safety.
- SR_05/24** “IŽS” a.d. to form a Team for the assessment of the elements of the human factor in the occurrence of accidents and incidents in order to create a critical elements model, making a classification of them according to their importance and a ranking list of representation (identification of all risks) in order to work on the expedient structuring of preventive measures and the prediction of human behavior in crisis situations in order to reduce the impact on the occurrence of new accidents and incidents.
- SR_06/24** “IŽS” a.d. should conduct professional training for the staff responsible for regulating traffic (train dispatchers) on the railway line 207 Novi Sad - Odžaci - Bogojevo regarding the regulation of train traffic in accordance with the provisions of Articles 121, 122, 133, and 141 of the Traffic Rulebook (“Official Gazette of the RS” Nos. 34/22, 107/22).
- SR_07/24** “IŽS” a.d. should make changes and additions to the Instructions on the Organization and Work of the Operational Service in the area of “Infrastructure of Railways of Serbia” a.d. (“Official Gazette of Railways” Nos. 21/17, 21/18, 37/18, and 28/23) and harmonize, in Articles 3 and 34, the deadline within which the train driver is obliged to inform the traffic staff about the type of fault of the traction vehicle, regardless of the category of the railway line, with the provision from Article 234 of the Traffic Rulebook (“Official Gazette of the RS” Nos. 34/22, 107/22).
- SR_08/24** “IŽS” a.d. should, considering that the provisions regarding informing the traffic staff about the fault of the traction vehicle relate to train drivers, who can be railway workers of railway undertakings, make changes and additions to the Instructions on the Organization and Work of the Operational Service in the area of “Infrastructure of Railways of Serbia” a.d. (“Official Gazette of Railways” No. 21/17, 21/18, 37/18, and 28/23), by providing provisions that railway undertakings should be familiar with the mentioned instructions.



5. SAFETY RECOMMENDATIONS AND MEASURES TAKEN

In order to potentially increase railway safety and prevent new accidents, CINS, the Railway Accident Investigation Department, issued 8 (eight) safety recommendations in 2024. In 2023, 10 (ten) safety recommendations were issued, in 2022, 8 (eight) safety recommendations were issued, in 2021, 32 (thirty-two) safety recommendations were issued, in 2020, 10 (ten) safety recommendations were issued, in 2019, 32 (thirty-two) safety recommendations were issued, in 2018, 33 (thirty-three) safety recommendations were issued, and in 2017, 7 (seven) safety recommendations were issued. Of the total of 140 (one hundred and forty) safety recommendations issued by CINS in 2017, 2018, 2019, 2020, 2021, 2022, 2023 and 2024. 107 (one hundred and seven) safety recommendations (76.43%) were issued to the Railway Directorate, and 33 (thirty-three) safety recommendations (23.57%) were issued to other bodies and organizations.

The Table 5.1. shows issued safety recommendations per years.

Table 5.1: Issued safety recommendations

Year	Directorate for Railways		Other bodies and organizations		Total	
	[No.]	[%]	[No.]	[%]	[No.]	[%]
2017.	6	85.71	1	14.29	7	100.00
2018.	28	84.85	5	15.15	33	100.00
2019.	24	75.00	8	25.00	32	100.00
2020.	7	70.00	3	30.00	10	100.00
2021.	19	59.38	13	40.62	32	100.00
2022.	8	100.00	-	-	8	100.00
2023.	7	70.00	3	30.00	10	100.00
2024.	8	100.00	-	-	8	100.00
Total	107	76.43	33	23.57	140	100.00

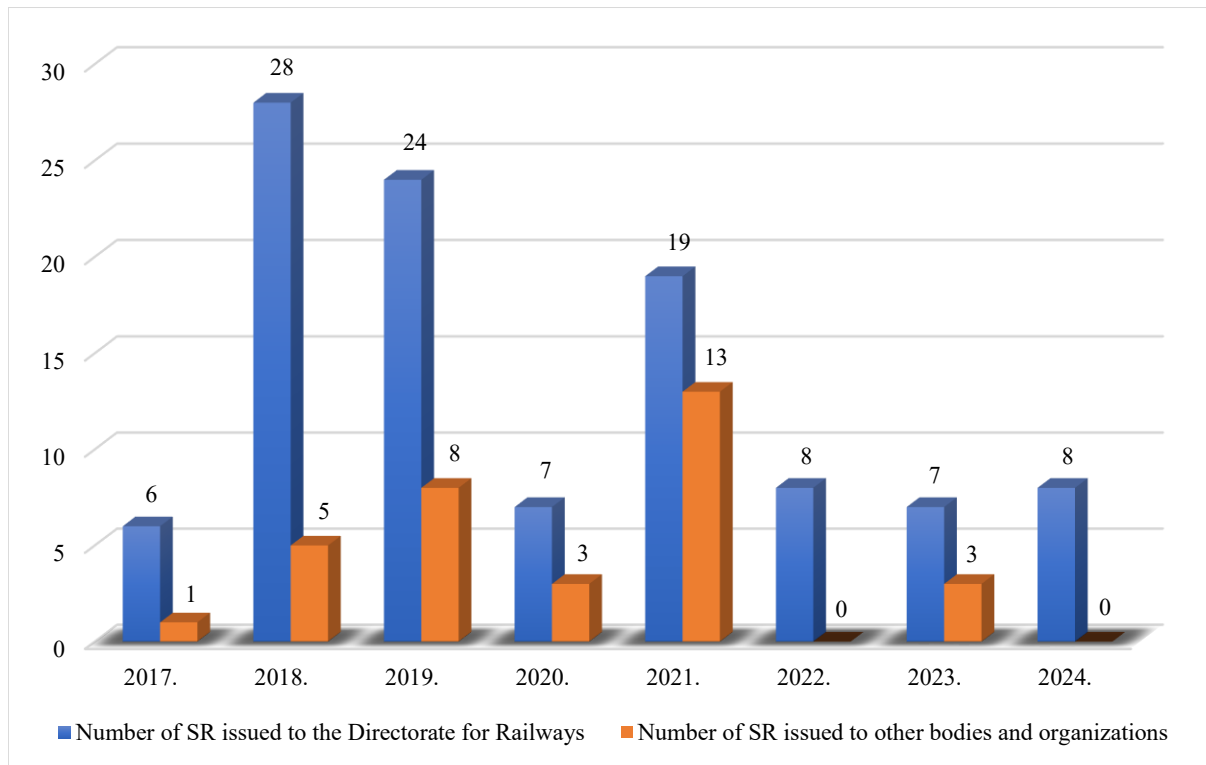


Figure 5.1: Graphic display of the number of issued safety recommendations per years

Table 5.2. shows the status of safety recommendations per years.

Table 5.2: Safety recommendations - status

Year	Accepted		Executed		Not accepted, no response has been submitted or it is not possible to determine the status from the submitted response		Total	
	[No.]	[%]	[No.]	[%]	[No.]	[%]	[No.]	[%]
2017.	-	-	2	28.57	5	71.43	7	100.00
2018.	8	24.24	14	42.43	11	33.33	33	100.00
2019.	8	25.00	9	28.12	15	46.88	32	100.00
2020.	1	10.00	8	80.00	1	10.00	10	100.00
2021.	14	43.75	10	31.25	8	25.00	32	100.00
2022.	1	12.50	6	75.00	1	12.50	8	100.00
2023.	6	60.00	2	20.00	2	20.00	10	100.00
2024.	4	50.00	2	25.00	2	25.00	8	100.00
Total	42	30.00	53	37.86	45	32.14	140	100.00

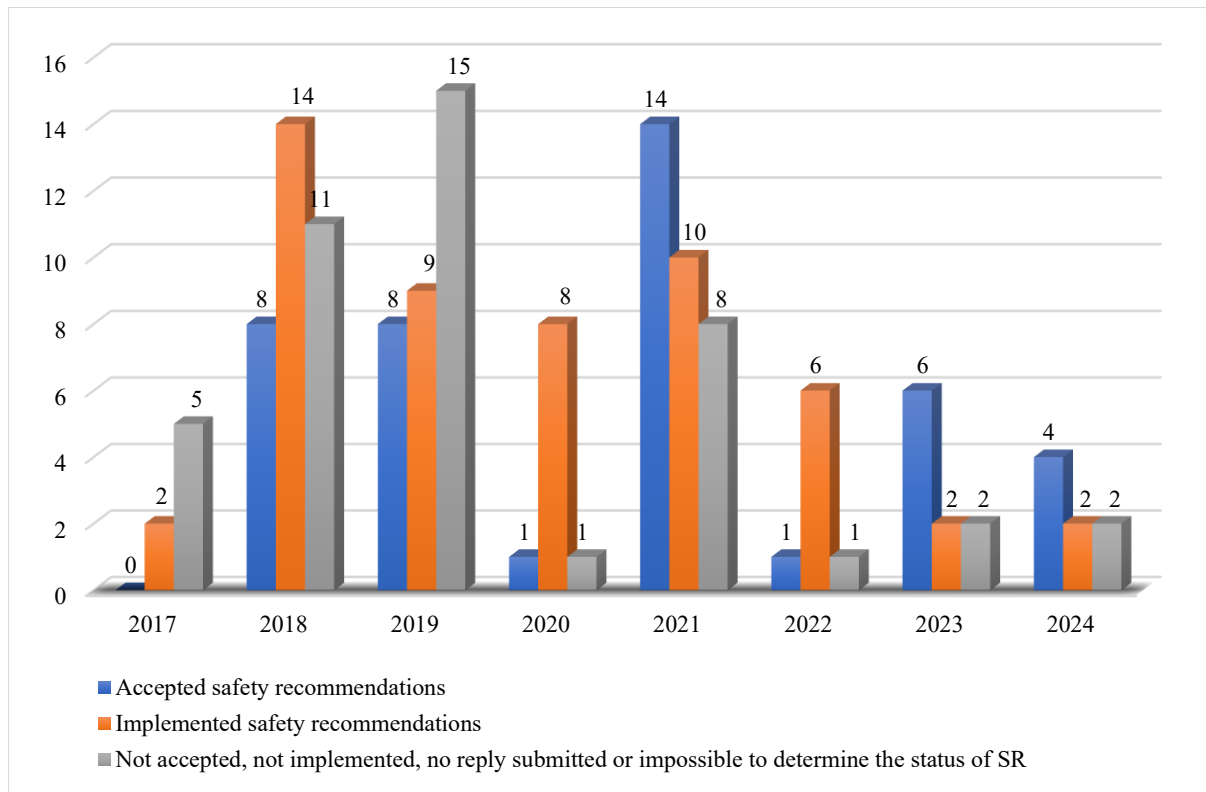


Figure 5.2: Graphic representation of the status of issued safety recommendations per years

Table 5.3. shows the status of issued safety recommendations issued to the Directorate for Railways per years.

Table 5.3. Issued safety recommendations to the Directorate for Railways - status

Year	Accepted		Executed		Not accepted, no response has been submitted or it is not possible to determine the status from the submitted response		Total	
	[No.]	[%]	[No.]	[%]	[No.]	[%]	[No.]	[%]
2017.	-	-	2	33.33	4	66.67	6	100.00
2018.	7	25.00	13	46.43	8	28.57	28	100.00
2019.	3	12.50	8	33.33	13	54.17	24	100.00
2020.	-	-	7	100.00	-	-	7	100.00
2021.	8	42.11	5	26.32	6	31.57	19	100.00
2022.	1	12.50	6	75.00	1	12.50	8	100.00
2023.	6	85.71	1	14.29	-	-	7	100.00
2024.	4	50.00	2	25.00	2	25.00	8	100.00
Total	29	27.10	44	41.12	34	31.78	107	100.00



The tables 5.4. and 5.5. show the status of safety recommendations issued to other bodies and organisations per years, and the Table 5.4. shows the status of safety recommendations issued to MGSI, while the Table 5.5. shows the status of issued safety recommendations to all other bodies and organisations.

Table 5.4: Issued safety recommendations to MGSI - status

Year	Accepted		Executed		Not accepted, no response has been submitted or it is not possible to determine the status from the submitted response		Total	
	[No.]	[%]	[No.]	[%]	[No.]	[%]	[No.]	[%]
2017.	-	-	-	-	1	100.00	1	100.00
2018.	1	25.00	-	-	3	75.00	4	100.00
2019.	5	83.33	1	16.67	-	-	6	100.00
2020.	1	33.33	1	33.34	1	33.33	3	100.00
2021.	6	50.00	5	41.67	1	8.33	12	100.00
2022.	-	-	-	-	-	-	-	-
2023.	-	-	1	50.00	1	50.00	2	100.00
2024.	-	-	-	-	-	-	-	-
Total	13	46.43	8	28.57	7	25.00	28	100.00

Table 5.5: Issued safety recommendations to the other bodies and organizations - status

Year	Accepted		Executed		Not accepted, no response has been submitted or it is not possible to determine the status from the submitted response		Total	
	[No.]	[%]	[No.]	[%]	[No.]	[%]	[No.]	[%]
2017.	-	-	-	-	-	-	-	-
2018.	-	-	1	100.00	-	-	1	100.00
2019.	-	-	-	-	2	100.00	2	100.00
2020.	-	-	-	-	-	-	-	-
2021.	-	-	-	-	1	100.00	1	100.00
2022.	-	-	-	-	-	-	-	-
2023.	-	-	-	-	1	100.00	1	100.00
2024.	-	-	-	-	-	-	-	-
Total	-	-	1	20.00	4	80.00	5	100.00



In accordance with Article 35 of the Law on Investigation of Accidents in Air, Railway and Waterborne Traffic ("Official Gazette of RS" No. 66/15 and 83/18), CINS issues safety recommendations based on data analysis and the results of the investigation. Recommendations are sent to the Directorate for Railways, and in the case when it is necessary, to other bodies and organizations in the RS, as well as to interested bodies and organizations of other countries and international organizations. The Directorate for Railways takes measures to take safety recommendations into account and to act upon them.

5.1. The status of safety recommendations from 2018

5.1.1. Investigation Report (ŽS-01/17) 33 No.: 340-07684/2017-006 of 01.03.2018. (incident, decoupling of the train No. 8011 of 03.08.2017. at 07:55 on the main arterial route E 66: Belgrade Center - Pančevo Main station - Vršac - state border - (Stamora Moravita) in the area of the junction and stop Pančevački most)

SR_03/18 "Srbija Voz" a.d. should, in the submitted Instructions for the Repair of Couplings between Vehicles, which was produced within the Project for the preparation of the technical and overhaul documentation for the electric multiple unit of the series 412/416 by the Institute "Kirilo Savić" from Belgrade in 2004, align item 7 with the Working Instructions for the Control and Receiving Bodies of JŽ ("Official Gazette of ZJŽ", No 1/03).

Status of the recommendation: The Directorate for Railways submitted a report - letter No. 003341856 2025 12500 001 001 051 001 01 001 of 30.07.2025, providing new evidence of the activities undertaken by "Srbijavoz" a.d. which are not in line with clearly issued safety recommendation. The safety recommendation SR 03/18 has not been implemented.

5.1.2. Investigation Report (ŽS-05/17) 33 No.: 340-00-10144/2017-20 of 18.05.2018. (Serious accident, overtaking of the train No. 4905 on the road passenger vehicle of 09.10.2017. at 20:26 on the main arterial route E 70/E 85: Belgrade - Mladenovac - Lapovo - Niš - Preševo - state border - (Tabanovce), on the level crossing, ensured with the traffic signs on the road and the necessary visibility zone, which is located on the open track between the stations Grdelica and Predejane)

SR_09/18 Ministry of Construction, Transport and Infrastructure should adjust the Rulebook on the mode of crossing the railway line and the road, pedestrian or bicycle path, a place where you can carry out the intersection and measures for ensuring safe traffic ("Official Gazette of RS" No. 89/2016) with actual performances of the road vehicles (in the manner of adjustment by some countries in the region) and the actual state of the railway infrastructure.

It is necessary to determine whether the speed of the road vehicle over the crossing which is used in these calculations by this Rulebook, and which amounts to 4 km/h is suitable for the actual performances of the rolling stock, or if this speed should be enlarged (for example, in the Republic of Slovenia the speed is 7 km/h). With the speed of 4 km/h, the large number of crossings cannot satisfy the minimal required zone of visibility that the Rulebook provides for.

Explanation for the Article 11 of the Rulebook, which is given in the Article 12, and which states:

“By securing the necessary zone of visibility from the Article 11 of this Rulebook, the participants in the road traffic are enabled with uninterrupted visibility on the railway track with both sides of the road, pedestrian or bicycle path, for noticing on time of the upcoming railway vehicles on the track so that they could stop the vehicle and stop the moving of the pedestrians or bicycles before they come to the railway, that is, in front of the traffic sign that indicates the point where the road comes over the railway track at the railway level” would make sense only in the case that in front of the crossing there is no traffic sign II-2: “The obligation of stopping”. Situation on site confirms that the traffic sign II-2: “The obligation of stopping”, exists on all the crossings with passive signalization, which we consider absolutely necessary.

In the expression:

$$t_a = \frac{m + n + d + s}{V_p} \cdot 3,6 \quad [s]$$

In front of s should stand a sign “-”, and not the sign “+”.

Status of the recommendation: MGSI did not provide a response - a report on the measures that have been taken or are planned to be taken by July 31 of the current year for the Annual Report for 2024, which is in violation of paragraph 6 of Article 35 of the Law on the Investigation of Accidents in Accidents in Air, Railway, and Waterborne Transport (“Official Gazette” of the RS No. 66/15 and 83/18).

The status of the safety recommendation SR_09/18 has not changed compared to the Annual Report for 2022. The safety recommendation SR_09/18 has been accepted.

SR_10/18 Given the existence of construction facilities and the fact that it is not possible to provide the necessary visibility in all directions even from the limit of dangerous area, “IŽS” a.d. should consider introduction of active signalling, or solve the problem in another way.

Status of the recommendation: The Railway Directorate submitted reports - letter No. 002396042 2024 12500 001 001 051 001 01 001 dated 12.08.2024 and letter No. 003341856 2025 12500 001 001 051 001 01 001 dated 30.07.2025. The safety recommendation SR_10/18 is being implemented.

SR_11/18 “IŽS” a.d. should perform the expert- based risk assessment on the crossing. Having in mind that the accidents on the crossing (viewing them individually) are rare events, the risk evaluation cannot be done solely on the number of accidents that had happened on some crossings. The risk assessment should be done, as a measure of precaution, for all the crossing according to all the relevant parameters, whether there were accidents on them or not.

Status of the recommendation: The Directorate for Railways has submitted the reports - letter No. 002396042 2024 12500 001 001 051 001 01 001 of 12.08.2024 and letter No. 003341856 2025 12500 001 001 051 001 01 001 of 30.07.2025. New evidence has been submitted, based



on which it can be concluded that the Methodology for Risk Assessment at Level Crossings of “IŽS” a.d. (Decision No. 4/2023-4461-840 of 17.03.2023) has been applied to a total of 20 level crossings (since the beginning of the application of the Methodology). The safety recommendation SR_11/18 is being implemented.

SR_13/18 “IŽS” a.d. should draft “Programme for resolution of the level crossings” according to previously finished risk assessment, with the goal of taking certain actions to raise the level of safety in traffic.

Status of the recommendation: The Directorate for Railways has submitted the reports – letter No. 002396042 2024 12500 001 001 051 001 01 001 of 12.08.2024 and letter No. 003341856 2025 12500 001 001 051 001 01 001 of 30.07.2025. The new evidence of activities undertaken that was submitted is not in accordance with the clearly issued safety recommendation. The safety recommendation SR_13/18 has been accepted (the implementation of the safety recommendation SR_13/18 is possible only after the implementation of the safety recommendation SR_11/18).

**5.1.3. Investigation Report (ŽS-04/17) 33 No.: 340-00-9180/2017-18 of 22.06.2018.
(Accident, derailment of the pushed shunting composition of 17.09.2017. at 08:45
on the main arterial route E70/E85: (Belgrade) - Rakovica - Jajinci - Mala Kršna -
Velika Plana, between the junction “K1” and station Rakovica)**

SR_20/18 “IŽS” a.d. should conduct examination of the reasons why the measures have not been taken for urgent elimination of defects type “C” that were determined during the measurement with track examination coach under the Instruction on unique criteria for control of the condition of railways on the network JŽ, Instruction 339 (“Official Gazette of ZJŽ” No.2/2001 and 4/2004) and to develop coordination between sectors that determined the defect and sectors that should eliminate this defect, and under review of management in order to follow and analyse these cases. According to the evaluation of safety risks which due to this occurred, to take efficient measures for elimination of the safety flaws, and in accordance with the Article 5 of Law on safety in Railway Transport (“Official Gazette of RS” No. 41/2018) and its Safety Management System Manual.

Status of the recommendation: The Directorate for Railways submitted the reports – letter No. 002396042 2024 12500 001 001 051 001 01 001 of 12.08.2024 and letter No. 003341856 2025 12500 001 001 051 001 01 001 of 30.07.2025. The new evidence that was submitted is not in accordance with the clearly defined safety recommendation. The safety recommendation SR_20/18 is being implemented.

**5.1.4. Investigation Report (ŽS-06/17) 33 No.: 340-00-10982/2017-16 of 14.08.2018.
(Accident, derailment of the train No. 56990 of 03.11.2017. at 15:25 on the local
track Markovac - Resavica, between the station Svilajnac and Despotovac)**

SR_25/18 Given the extremely poor condition of the track, “IŽS” a.d. should make an assessment of risk of train traffic on the local railway track Markovac - Resavica and take measures to reduce risks to an acceptable level. Based on this, to make a technical assessment of the minimum required resources (materials, machinery, labour) for track maintenance.

Status of the recommendation: The Directorate for Railways has submitted the reports - letter No. 002396042 2024 12500 001 001 051 001 01 001 dated 12.08.2024 and letter No. 003341856 2025 12500 001 001 051 001 01 001 dated 30.07.2025. The safety recommendation SR_25/18 is being implemented. The risk assessment of train traffic has not even started. Measures have been taken to reduce the risk to an acceptable level. An expert assessment of the minimum necessary resources (mechanization and workforce) for railway maintenance, which is planned for the coming period, has not been submitted.

**5.1.5. Investigation Report (ŽS-07/17) 33 No.: 340-00-13136/2017-19 of 26.11.2018.
(Accident, derailment of the train No. 53527 of 23.12.2017. at 13:15 on the regional
line Pančevo Main Station - Zrenjanin - Kikinda - state border - (Jimbolia), in the
area of the station Novi Bečej)**

SR_29/18 “IŽS” a.d. should, due to inadequate maintenance and condition of the track, sleepers and fastening systems, conduct an assessment of risk of train traffic on the regional railway line Pančevo Main Station - Zrenjanin - Kikinda - (Jimbolia) and take measures to reduce risk to an acceptable level. Based on this, to conduct a technical assessment of the minimum required resources (material, machinery, work force) for track maintenance.

Status of the recommendation: The Directorate for railways submitted the reports - letter No. 002396042 2024 12500 001 001 051 001 01 001 dated 12.08.2024 and letter No. 003341856 2025 12500 001 001 051 001 01 001 dated 30.07.2025. The safety recommendation SR_29/18 is being implemented. A risk assessment of train traffic on the regional railway Pančevo Main Station - Zrenjanin - Kikinda - (Jimbolia) has not been carried out. Measures have been taken to reduce the risk to an acceptable level. An expert assessment of the minimum required resources (mechanization and workforce) for railway maintenance, which is planned for the coming period, has not been submitted.

SR_30/18 “IŽS” a.d. should review the procedures and criteria for the approval of the traffic of trains with an overload and that this process is confined to the extreme and rare individual occasions, and not as a daily practice.

Status of the recommendation: The Directorate for Railways submitted the reports - letter No. 002396042 2024 12500 001 001 051 001 01 001 dated 12.08.2024 and letter No. 003341856 2025 12500 001 001 051 001 01 001 dated 30.07.2025. Based on the submitted documents, it can be concluded that the safety recommendation has not been adequately

implemented. In the submitted documents there is no information confirming that the procedures and criteria for approving the traffic of trains with an excess weight have been reviewed in order to limit this procedure only to exceptional and rare individual ones. The safety recommendation SR_30/18 has not been implemented.

5.2. The status of safety recommendations from 2019

5.2.1. Investigation Report (ŽS-04/18) No. 340-00-1/2018-2-2-45 of 29.11.2019. (Serious accident, overtaking of the train No. 7821 on the road vehicle bus of 21.12.2018. at 07:30 on the main arterial route E 70/E 85: Belgrade - Mladenovac - Lapovo - Niš - Preševo - state border - (Tabanovce), on the level crossing, secured with traffic signs on the road and the zone of necessary visibility, located in the area of the station Medurovo)

SR_24/19 Ministry of Construction, Transport and Infrastructure should, in the Rulebook on the manner of crossing of the railway line and the road, pedestrian or bicycle path, the point where the crossing can be made and measures to secure the safe traffic ("Official Gazette of RS" No. 89/2016), define methodology (the manner) of determining (calculating) the elements of the zone of necessary visibility given in Annex 9 (d_{pz} - the length of stopping of the road vehicle and $s_{pžv}$ - the length of approaching of the railway vehicle).

Status of the recommendation: MGSI did not provide a response – a report on the measures that have been taken or are planned to be taken by July 31 of the current year for the Annual Report for 2024, which is in violation of paragraph 6 of Article 35 of the Law on the Investigation of Accidents in Air, Rail, and Water Transport ("Official Gazette of the RS" No. 66/15 and 83/18).

The status of safety recommendation SR_24/19 has not changed compared to the Annual Report for 2022. Safety recommendation SR_24/19 has been accepted.

SR_25/19 Ministry of Construction, Transport and Infrastructure should, in the Rulebook on the manner of crossing of the railway line and the road, pedestrian or bicycle path, the point where the crossing can be made and measures to secure the safe traffic ("Official Gazette of RS" No. 89/2016), define the procedure when there exists a necessary visibility according to the definition from the Article 2 Paragraph 1 under 12) of this Rulebook and it is not possible to determine the zone of necessary visibility. In particular, it should be borne in mind that by setting the traffic sign II-2: "Obligation of stopping", while providing the necessary visibility, enables the safe passage of road vehicles over the crossing.

Status of the recommendation: The Ministry of Construction, Transport, and Infrastructure (MGSI) did not provide a response – a report on the measures that have been taken or are planned to be taken by July 31 of the current year for the Annual Report for 2024, which is in violation of paragraph 6 of Article 35 of the Law on the Investigation of Accidents in Air, Rail, and Water Transport ("Official Gazette" of the RS No. 66/15 and 83/18).

The status of safety recommendation SR_25/19 has not changed compared to the Annual Report for 2022. Safety recommendation SR_25/19 has been accepted.

SR_26/19 Ministry of Construction, Transport and Infrastructure should, in Article 14 of the Rulebook on the manner of crossing of the railway line and the road, pedestrian or bicycle path, the point where the crossing can be made and measures to secure the safe traffic ("Official Gazette of RS" No. 89/2016), make corrections in the expression:

$$t_v = \frac{m + n + d + s}{V_p} \cdot 3,6 \text{ [s]}$$

so that in front of s there is a sign "-", and not the sign "+".

Status of the recommendation: MGSI did not provide a response – a report on the measures that have been taken or are planned to be taken by July 31 of the current year for the Annual Report for 2024, which is in violation of paragraph 6 of Article 35 of the Law on the Investigation of Accidents in Air, Rail, and Water Transport ("Official Gazette of the RS" No. 66/15 and 83/18).

The status of safety recommendation SR_26/19 has not changed compared to the Annual Report for 2022. Safety recommendation SR_26/19 has been accepted.

SR_27/19 Ministry of Construction, Transport and Infrastructure should, in the Rulebook on the manner of crossing of the railway line and the road, pedestrian or bicycle path, the point where the crossing can be made and measures to secure the safe traffic ("Official Gazette of RS" No. 89/2016), harmonize the description of the position of point B given in Article 14, Article 15 and Annex 6.

Status of the recommendation: The Ministry of Construction, Transport, and Infrastructure (MGSI) did not provide a response – a report on the measures that have been taken or are planned to be taken by July 31 of the current year for the Annual Report for 2024, which is in violation of paragraph 6 of Article 35 of the Law on the Investigation of Accidents in Air, Rail, and Water Transport ("Official Gazette of the RS" No. 66/15 and 83/18).

Regarding safety recommendation SR_27/19, the status has not changed compared to the Annual Report for 2022. Safety recommendation SR_27/19 has been accepted.

SR_30/19 "IŽS" a.d. should conduct expertly based risk assessment on level crossings. Given that the accidents on the level crossings (by reviewing every crossing individually) are rare events, it is not possible to assess risk solely on the number of accidents which occurred on the individual level crossings. Risk assessment, as a precautionary measure, should be made jointly for all level crossings in accordance with all relevant parameters, whether the accidents occurred or not.

Status of the recommendation: The Directorate for Railways submitted the reports - letter No. 002396042 2024 12500 001 001 051 001 01 001 dated 12.08.2024 and letter No. 003341856 2025 12500 001 001 051 001 01 001 dated 30.07.2025. New evidence was submitted on the basis of which it can be concluded that the Methodology for Risk Assessment at Level Crossings of "IŽS" a.d. (Decision No. 4/2023-4461-840 dated 17.03.2023) has been applied to a total of 20 level crossings (since the beginning of the application of the Methodology). The safety recommendation SR_30/19 is being implemented.

SR_31/19 “IŽS”a.d. should draft the act “Level Crossing Program” according to the previously done risk assessment on the level crossings with a view to undertake appropriate activities in order to raise the level of traffic safety.

Status of the recommendation: The Directorate for Railways submitted the reports - letter No. 002396042 2024 12500 001 001 051 001 01 001 dated 12.08.2024 and letter No. 003341856 2025 12500 001 001 051 001 01 001 dated 30.07.2025. The new evidence that was submitted on the activities undertaken is not in accordance with the clearly issued safety recommendation. The safety recommendation SR_13/18 has been accepted (the implementation of safety recommendation SR_31/19 will be possible only after the implementation of the safety recommendation SR_30/19).

5.3. The status of safety recommendations from 2020

5.3.1. Investigation Report (ŽS-01/20) No. 340-03-1/2020-02-1-53 of 20.11.2020. (Serious accident, overtaking of the shunting composition MS-4 on the road passenger vehicle of 09.01.2020. at 02:35 on the industrial track, Oil Refinery Pančevo (“NIS”a.d. Novi Sad) on the level crossing, secured with automatic level crossing device, located in the area of the city of Pančevo, the city settlement Stara Misa)

SR_10/20 Ministry of Construction, Transport and Infrastructure should harmonize the provisions of Article 35, paragraph 1 under 2) of the Rulebook on the manner of crossing of the railway line and the road, pedestrian or bicycle path, the point where the crossing can be made and measures to secure the safe traffic (“Official Gazette of RS” No. 89/2016) with Article 58, under 6. of the Rulebook 2, Traffic Rulebook (“Official Gazette of ZJŽ” No. 3/94, 4/94, 5/94, 4/96 and 6/03) and Article 124 of the Shunting Instruction 42 (“Official Gazette of ZJŽ” No. 3/80, 6/83, 3/87, 4/88, 6/91 and 2/94) regarding the manner in which the sent railway worker at the level crossing directly regulates the traffic by giving manual traffic signs to road vehicles.

Note: Article 35 Paragraph 1 under 2) of the Rulebook on the manner of crossing of the railway line and the road, pedestrian or bicycle path, the point where the crossing can be made and measures to secure the safe traffic (“Official Gazette of RS” No. 89/2016) refers to the regulations that regulate traffic safety on roads, and in these regulations the stated issue is not defined (it is defined only in cases of performing works).

Status of the recommendation: The Ministry of Construction, Transport, and Infrastructure (MGSI) did not provide a response – a report on the measures that have been taken or are planned to be taken by July 31 of the current year for the Annual Report for 2024, which is in violation of paragraph 6 of Article 35 of the Law on the Investigation of Accidents in Air, Rail, and Water Transport (“Official Gazette of the RS” No. 66/15 and 83/18)..

The status of safety recommendation SR_10/20 has not changed compared to the Annual Report for 2022. The safety recommendation SR_10/20 has been accepted.

5.4. The status of safety recommendations from 2021

5.4.1. Investigation Report (ŽS-02/20) No. 340-03-1/2020-02-2-49 of 03.03.2021. (Serious accident, overtaking of the train No. 45403 on a road passenger vehicle on 25.07.2020. at 10:55 on the regional railway line 211: Ruma - Šabac - Junction Donja Borina - state border - (Zvornik Novi), at the level crossing, secured with road traffic signs and the zone of necessary visibility, located between the crossing point Štitar and the station Petlovača)

SR_03/21 Ministry of Construction, Transport and Infrastructure, should, in the Law on Roads ("Official Gazette of RS", No. 41/2018 and 95/2018 - other law) in Article 68, define (supplement) maintenance - landscaping of green areas (grass mowing, clearing shrubs and cutting of trees) in the zone of necessary visibility at the points of crossing of the railway line and the road, in accordance with Article 38, which defines the obligation to provide the zone of necessary visibility in accordance with the regulations.

Status of the recommendation: The Ministry of Construction, Transport, and Infrastructure (MGSI) did not provide a response – a report on the measures that have been taken or are planned to be taken by July 31 of the current year for the Annual Report for 2024, which is in violation of paragraph 6 of Article 35 of the Law on the Investigation of Accidents in Air, Rail, and Water Transport ("Official Gazette of the RS" No. 66/15 and 83/18).

The status of safety recommendation SR_03/21 has not changed compared to the Annual Report for 2022. The safety recommendation SR_03/21 has been accepted.

SR_04/21 Ministry of Construction, Transport and Infrastructure, should define, in the Rulebook on the manner of crossing of the railway line and the road, pedestrian or bicycle path, the place where the crossing can be made and the measures for ensuring safe traffic ("Official Gazette RS", No. 89/2016), the methodology (method) for determining (calculating) the elements of the zone of necessary visibility given in the Annex 9 (d_{pz} – length of stopping the road vehicle and $S_{pžv}$ – length of approaching the railway vehicle).

Status of the recommendation: The Ministry of Construction, Transport, and Infrastructure (MGSI) did not provide a response – a report on the measures that have been taken or are planned to be taken by July 31 of the current year for the Annual Report for 2024, which is in violation of paragraph 6 of Article 35 of the Law on the Investigation of Accidents in Air, Rail, and Water Transport ("Official Gazette of the RS" No. 66/15 and 83/18).

The status of safety recommendation SR_04/21 has not changed compared to the Annual Report for 2022. The safety recommendation SR_04/21 has been accepted.

SR_05/21 Ministry of Construction, Transport and Infrastructure, to define in the Rulebook on the manner of crossing of the railway line and the road, pedestrian or bicycle path, the place where the crossing can be made and the measures for ensuring safe traffic ("Official Gazette RS", No. 89/2016) the procedure in the case when there is the necessary visibility according to the definition from Article 2, Paragraph 1 under 12) of this Rulebook and it is not possible to provide the zone of necessary visibility. In particular, it should be borne in mind that the installation of traffic

sign II-2: “Obligation of stopping” while providing the necessary visibility, allows safe passage of road vehicles over the crossing.

Status of the recommendation: The Ministry of Construction, Transport, and Infrastructure (MGSI) has not provided a response - a report on the measures taken or planned to be taken by July 31 of the current year for the 2024 Annual Report. This is in violation of paragraph 6 of Article 35 of the Law on Accident Investigation in Air, Rail, and Water Traffic (“Official Gazette of the RS” No. 66/15 and 83/18).

The status of safety recommendation SR_05/21 has not changed compared to the 2022 Annual Report. The safety recommendation SR_05/21 has been accepted.

SR_06/21 Ministry of Construction, Transport and Infrastructure, to make corrections in the expression in Article 14 of the Rulebook on the manner of crossing of the railway line and the road, pedestrian or bicycle path, the place where the crossing can be made and the measures for ensuring safe traffic (“Official Gazette of RS” No. 89/2016):

$$t_v = \frac{m + n + d + s}{V_p} \cdot 3,6 \text{ [s]}$$

so that in front of s there is a sign “-”, and not the sign “+”.

Status of the recommendation: The Ministry of Construction, Transport, and Infrastructure (MGSI) has not submitted a response - a report on the measures taken or planned to be taken by July 31 of the current year for the 2024 Annual Report, which is in violation of paragraph 6 of Article 35 of the Law on Accident Investigation in Air, Rail, and Water Traffic (“Official Gazette of the RS” No. 66/15 and 83/18).

The status of safety recommendation SR_06/21 has not changed compared to the 2022 Annual Report. The safety recommendation SR_06/21 has been accepted.

SR_07/21 Ministry of Construction, Transport and Infrastructure to harmonize, in the Rulebook on the manner of crossing of the railway line and the road, pedestrian or bicycle path, the place where the crossing can be made and the measures for ensuring safe traffic (“Official Gazette of RS” No. 89/2016), the description of the position of point B given in Article 14, Article 15 and Annex 6.

Status of the recommendation: The Ministry of Construction, Transport, and Infrastructure (MGSI) has not submitted a response - a report on the measures taken or planned to be taken by July 31 of the current year for the 2024 Annual Report, which is in violation of paragraph 6 of Article 35 of the Law on Accident Investigation in Air, Rail, and Water Traffic (“Official Gazette of the RS” No. 66/15 and 83/18)..

The status of safety recommendation SR_07/21 has not changed compared to the 2022 Annual Report. The safety recommendation SR_07/21 has been accepted.

SR_09/21 "IŽS" a.d. to consider a change in the level of insurance (introduction of active signallization) for the level crossing in question, or solve the problem in some other way. Due to the existence of facilities near the level crossing and the curve on the railway, the necessary visibility zone is not provided, and due to the abundant vegetation in the infrastructure belt and thus in the railway belt, the necessary visibility is not provided. It is also a fact that the level crossing in question is a crossing of a regional line and a state road of IIA rank.

Status of the recommendation: The Railway Directorate submitted the reports - letter No. 002396042 2024 12500 001 001 051 001 01 001 dated 12.08.2024 and letter No. 003341856 2025 12500 001 001 051 001 01 001 dated 30.07.2025. The safety recommendation SR_09/21 is being implemented.

SR_10/21 "IŽS" a.d. to make a professionally based risk assessment at road crossings. Bearing in mind that accidents at road crossings (observing each crossing separately) are rare events, risk assessment cannot be performed only on the basis of the number of accidents that occurred at individual road crossings. Risk assessment, as a precautionary measure, should be performed collectively for all road crossings according to all relevant parameters, regardless of whether accidents have occurred at them or not.

Status of the recommendation: The Directorate for Railways submitted the reports - letter No. 002396042 2024 12500 001 001 051 001 01 001 dated 12.08.2024 and letter No. 003341856 2025 12500 001 001 051 001 01 001 dated 30.07.2025. New evidence was submitted on the basis of which it can be concluded that the Methodology for Risk Assessment at Level Crossings of "IŽS" a.d. (Decision No. 4/2023-4461-840 dated 17.03.2023) has been applied to a total of 20 level crossings (since the beginning of the application of the Methodology). The safety recommendation SR_10/21 is being implemented.

SR_11/21 "IŽS" a.d. to make an act "Program for solving road crossings" according to the previously done risk assessment at road crossings, in order to take appropriate activities with the aim to raise the level of traffic safety.

Status of the recommendation: The Directorate for Railways submitted the reports - letter No. 002396042 2024 12500 001 001 051 001 01 001 dated 12.08.2024 and letter No. 003341856 2025 12500 001 001 051 001 01 001 dated 30.07.2025. The new evidence that was submitted on the activities undertaken is not in accordance with the clearly issued safety recommendation. The safety recommendation SR_13/18 has been accepted (the implementation of the safety recommendation SR_11/21 will be possible only after the implementation of the safety recommendation BP_10/21).



5.4.2. Investigation Report (ŽS-03/20) No. 340-00-2/2020-02-1-53 of 17.11.2021. (Accident, derailment of the train No. 45022 of 28.11.2020. at 19:27 on the main arterial line 102: Belgrade Center - Junction “G” - Rakovica - Mladenovac -Lapovo - Niš - Preševo - state border - (Tabanovce), between the stations Bagrdan and Jagodina, on the left track of the double-track railway line)

SR_13/21 “IŽS”a.d., to conduct the risk assessment of train traffic on the main arterial line 102: Belgrade Center - Junction “G”- Rakovica - Mladenovac - Lapovo - Niš - Preševo - state border - (Tabanovce), left track, from Markovac station (exclusively) km 101+057 to Jagodina station (inclusive) km 136+000, given the inadequate maintenance and condition of tracks, sleepers and fasteners and the insufficient number of executors for maintenance from the construction industry; and take measures to reduce the risk to an acceptable level.

Status of the recommendation: The Directorate for Railways submitted the reports - letter No. 002396042 2024 12500 001 001 051 001 01 001 dated 12.08.2024 and letter No. 003341856 2025 12500 001 001 051 001 01 001 dated 30.07.2025. The risk assessment of train traffic has not even started. The status of safety recommendation SR_13/21 has not changed compared to the Annual Report for 2022. The safety recommendation SR_13/21 is being implemented.

SR_14/21 “IŽS”a.d., in the Rulebook on organization and work positions systematization of “IŽS”a.d., Belgrade, to consider the adequacy of the existing ones and consider the possibility to predict the appropriate number of executors in the construction industry both on the section of the railway on which the accident occurred and on the entire network in order to ensure the safe conduct of railway traffic. In accordance with the appropriate number of executors to plan the procurement of the necessary machinery and tools, all in order to ensure the safe conduct of railway traffic.

Status of the recommendation: The Directorate for Railways submitted the reports - letter No. 002396042 2024 12500 001 001 051 001 01 001 dated 12.08.2024 and letter No. 003341856 2025 12500 001 001 051 001 01 001 dated 30.07.2025, from which it can be concluded that the safety recommendation SR_14/21 is being implemented.

5.4.3. Investigation Report (ŽS-04/20) No. 340-03-1/2020-02-3-42 of 22.11.2021. (Serious accident, overtaking of the train No. 6431 on the road passenger vehicle of 02.12.2020. at 08:15 on the main arterial line 110: 110: Subotica - Bogojevo - state border - (Erdut), on the level crossing secured with automatic half barriers with light traffic signs and traffic signs on the road, located in the area of the settlement Bajmok)

SR_26/21 “IŽS”a.d., to revise the technical documentation and diagnostic software for the road crossing device PZZ-EA, and to consider the need for their supplementation and correction in terms of correct and clear translation into Serbian with the use of precise and professional terms. This primarily refers to the documentation for the operation and maintenance of the device, so that the content of the mentioned documentation is clear to the employees of the maintenance service.



Status of the recommendation: The Directorate for Railways submitted the reports - letter No. 002396042 2024 12500 001 001 051 001 01 001 dated 12.08.2024 and letter No. 003341856 2025 12500 001 001 051 001 01 001 dated 30.07.2025, from which it can be concluded that the safety recommendation SR_26/21 has been accepted.

SR_28/21 “IŽS” a.d., in the Rulebook on organization and work positions systematization of “IŽS” a.d., Belgrade, to consider the adequacy of the existing ones and consider the possibility to predict the appropriate number of executors in the electro technical affairs (worker on SS devices and facilities maintenance) both on the section of the railway on which the serious accident occurred and on the entire network in order to reduce the time of starting the process of elimination of the fault to a measure that is in accordance with the Rulebook on maintenance of signalling and safety devices (“Official Gazette RS”, No. 41/18), thus minimizing the time in which SS devices are in the state of fault, all in order to ensure the safe conduct of railway traffic.

Status of the recommendation: The Directorate for Railways submitted the reports - letter No. 002396042 2024 12500 001 001 051 001 01 001 dated 12.08.2024 and letter No. 003341856 2025 12500 001 001 051 001 01 001 dated 30.07.2025, from which it can be concluded that the safety recommendation SR_28/21 is being implemented.

SR_29/21 “IŽS” a.d., to carry out activities on obtaining a use permit issued by the Ministry of Construction, Transport and Infrastructure for level crossing at km 102+890, in accordance with the Article 158 of the Law on Planning and Construction (“Official Gazette of RS”, No. 72/2009, 81/2009 - amended, 64/2010 – US decision, 24/2011, 121/2012, 42/2013 - US decision, 50/2013 - US decision, 98/2013 - US decision, 132/2014, 145/2014, 83/2018, 31/2019, 37/2019 - other law, 9/2020 and 52/2021).

Status of the recommendation: The Directorate for Railways submitted the reports - letter No. 002396042 2024 12500 001 001 051 001 01 001 dated 12.08.2024 and letter No. 003341856 2025 12500 001 001 051 001 01 001 dated 30.07.2025, from which it can be concluded that the safety recommendation SR_29/21 has been accepted.

SR_32/21 The Ministry of Construction, Traffic and Infrastructure to harmonize the Article 2, item 11 and Annex 2 of the Rulebook on the manner of crossing the railway and road, pedestrian or bicycle path, the place where the crossing can be made and measures to ensure safe traffic (“Official Gazette of RS” No. 89/2016) with Annex 2 of the Rulebook on technical conditions for signalling-safety devices (“Official Gazette of RS”, No. 18/2016 and 89/2016) regarding the definition of the border of the dangerous zone of the road crossing, that is, the border of the free profile.

Status of the recommendation: The Ministry of Construction, Traffic and Infrastructure (MGSI) has not provided a response – a report on the measures taken or planned to be taken by July 31 of the current year for the 2024 Annual Report, which is in violation of paragraph 6 of Article 35 of the Law on Accident Investigation in Air, Rail, and Water Traffic (“Official Gazette of the RS” No. 66/15 and 83/18).

The status of safety recommendation SR_32/21 has not changed compared to the 2022 Annual Report. The safety recommendation SR_32/21 has been accepted.

5.5. The status of safety recommendations from 2022

5.5.1. Investigation Report (ŽS-02/21) No. 340-01-1/2021-02-2-42 of 01.06.2022. (Serious accident, Overtaking of the pushed shunting composition on the railway worker on 12.07.2021. at 07:43 in the area of the industrial railway JP “EPS” Branch TENT from Obrenovac, at the station Obrenovac)

SR_08/22 JP “EPS” Branch TENT from Obrenovac, to consider the possibility of a constructive solution for the installation of steps and handrails on the front sides of the wagon type Arbel of series Faboo, for safe stay of train attendants during shunting drives or to apply other measures in order to perform shunting drives with attendants in accordance with the Shunting Instruction 42 (“Official Gazette of ZJŽ” No. 3/80, 6/83, 3/87, 4/88, 6/91 and 2/94) that is, the Traffic Rulebook (“Official Gazette of RS” No. 34/22).

Status of the recommendation: The Directorate for Railways has not provided a response – a report on the measures taken or planned to be taken by July 31 of the current year for the 2024 Annual Report, which is in violation of paragraph 6 of Article 35 of the Law on Accident Investigation in Air, Rail, and Water Traffic (“Official Gazette of the RS” No. 66/15 and 83/18).

The status of the safety recommendation SR_08/22 has not changed compared to the 2023 Annual Report. The safety recommendation SR_08/22 is being implemented.

5.6. The status of safety recommendations from 2023

5.6.1. Investigation Report (ŽS-01/22) No. 340-00-2/2022-02-1-120 of 12.10.2023. (Serious accident, derailment of train No. 45010. of 25.12.2022. at 16:45 on the main arterial line No. 106 Niš - Dimitrovgrad – state border - (Dragoman), between the Staničenje crossing point and the Pirot station)

SR_02/23 The Directorate for Railways is to amend and supply The Rulebook on Maintenance of Super and Substructure of the Railway Tracks (“Official Gazette of the RS”, No. 39/23, dated 12.5.2023.) by removing, in Article 5, paragraph 2, point 1), the speed reduction as a measure to decrease the risk of train derailment in the case of values appearing in the parameters of the relative track geometry that exceed the limit for emergency intervention.

Status of the recommendation: The Directorate for Railways has not provided a response – a report on the measures taken or planned to be taken by July 31 of the current year for the 2024 Annual Report, which is in violation of paragraph 6 of Article 35 of the Law on Accident Investigation in Air, Rail, and Water Traffic (“Official Gazette of the RS” No. 66/15 and 83/18).

The status of the safety recommendation SR_02/23 has not changed compared to the 2023 Annual Report. The safety recommendation SR_02/23 has been taken into account.



SR_03/23 The Directorate for Railways is to amend and supply the Article 4, subitem 5) Annex 3 of the Rulebook on Brakes and Braking of Trains and Vehicles (“Official Gazette of the RS”, No. 68, dated 7.7.2021.) in accordance with the relevant requirements of IRS 40421.

Status of the recommendation: The Directorate for Railways has not provided a response - a report on the measures taken or planned to be taken by July 31 of the current year for the 2024 Annual Report, which is in violation of paragraph 6 of Article 35 of the Law on Accident Investigation in Air, Rail, and Water Traffic (“Official Gazette of the RS” No. 66/15 and 83/18).

The status of the safety recommendation SR_03/23 has not changed compared to the 2023 Annual Report. The safety recommendation SR_03/23 has been accepted.

SR_04/23 “IŽS”a.d. is required to conduct a review of the reasons for the occurrence of a large number of type “C” errors detected during the measurements with track inspection coaches, according to The Instruction on Unique Criteria for Track Condition Control on the Railways of the RS, Instruction 339 (“Official Gazette of the Railways of the ZJŽ” No. 2/2001 and 4/2004, Official Gazette of ŽS, No. 14/22), over an extended period. Based on the assessment of safety risks that have arisen as a result, they should take effective measures to rectify safety deficiencies, in accordance with the requirements of Article 5 of the Law on Railway Traffic Safety (“Official Gazette of the RS” No. 41/2018), and its Safety Management System Manual.

Status of the recommendation: The Directorate for Railways submitted the reports - letter No. 002396042 2024 12500 001 001 051 001 01 001 dated 12.08.2024 and letter No. 003341856 2025 12500 001 001 051 001 01 001 dated 30.07.2025. The safety recommendation SR_04/23 is being implemented.

SR_05/23 “IŽS”a.d. is required to amend and supply The Instruction on Unique Criteria for Track Condition Control on the Railways of the RS, Instruction 339 (“Official Gazette of the Railways of the ZJŽ” No. 2/2001 and 4/2004, Official Gazette of ŽS, No. 14/22), which is, by Decision “IŽS”a.d. No. 4/2015-51-17 of 29.12.2015. still in application in “IŽS”a.d., in accordance with provisions of the Instruction 339 from 1989.

Status of the recommendation: The Directorate for Railways submitted the reports - letter No. 002396042 2024 12500 001 001 051 001 01 001 dated 12.08.2024 and letter No. 003341856 2025 12500 001 001 051 001 01 001 dated 30.07.2025. The new evidence that was submitted is not in accordance with the clearly defined safety recommendation. The safety recommendation SR_05/23 has been accepted.

SR_06/23 “IŽS”a.d. is required to, considering the inadequate maintenance and condition of the track, sleepers, and fastening equipment, conduct a risk assessment for train traffic on the main arterial line No.106: Niš - Dimitrovgrad - state border - (Dragoman) and take measures to reduce the risks to an acceptable level. Based on this, they should conduct a professional assessment of the minimum necessary resources (materials, machinery, workforce) for track maintenance.



Status of the recommendation: The Directorate for Railways submitted the reports - letter No. 002396042 2024 12500 001 001 051 001 01 001 dated 12.08.2024 and letter No. 003341856 2025 12500 001 001 051 001 01 001 dated 30.07.2025, from which it can be concluded that the safety recommendation SR_06/23 is being implemented.

SR_07/23 “IŽS” a.d. to consider in its Rulebook on organization and systematization of tasks within the Joint Stock Company for the Management of Public Railway Infrastructure “IŽS” a.d. and to examine the possibility of predicting an appropriate number of staff in the construction sector, both for the section of the track where the accident occurred and for the entire network, in order to ensure the safe operation of railway traffic. In accordance with the appropriate number of staff, they should plan the procurement of necessary machinery and tools, all with the aim of ensuring safe railway traffic.

Status of the recommendation: The Directorate for Railways submitted the reports - letter No. 002396042 2024 12500 001 001 051 001 01 001 dated 12.08.2024 and letter No. 003341856 2025 12500 001 001 051 001 01 001 dated 30.07.2025, from which it can be concluded that the safety recommendation SR_07/23 is being implemented.

SR_09/23 The Ministry of Construction, Transport, and Infrastructure, Railways and Intermodal Transport Sector, is to consider the possibility of amending Article 51 of the Law on Railway Traffic Safety (“Official Gazette of the RS” No. 41/18), equipment and traction vehicles, to stipulate that the locomotive must also have adequate equipment for the protection of the respiratory organs - protective masks.

Status of the recommendation: MGSI, Sector for Railway and Intermodal Transport submitted a response - letter No. 000295479 2023 14810 002 000 340 047 dated 12.11.2024. The safety recommendation SR_09/23 has not been accepted.

5.7. The status of safety recommendations from 2024

5.7.1. Investigation Report (ŽS-01/23) No. 340-00-1/2023-02-1-87 dated 31.07.2024 (serious accident, collision of trains No. 25412 and 49028/73478, dated 17.11.2023 at 18:42 on the regional line No. 207 Novi Sad - Odžaci - Bogojevo, between the stations Ratkovo and Odžaci)

SR_01/24 The Directorate for Railways, in accordance with Article 37 of the Law on Safety in Railway Traffic (“Official Gazette of the RS”, No. 41/18), should amend and supplement the Rulebook on Technical Conditions and Maintenance of the Railway Telecommunication Network (“Official Gazette of the RS”, No. 68/21), in part II. Technical conditions for the railway telecommunication network, where the minimum technical requirements for the equipment of railways with telecommunication devices should be unambiguously and precisely defined depending on the speed of train movement, railway categorization, volume of railway traffic, and similar factors.

Status of the recommendation: The Directorate for Railways submitted the report - letter No. 003341856 2025 12500 001 001 051 001 01 001 dated 30.07.2025, the safety recommendation SR_01/24 was taken into account.

SR_02/24 “IŽS” a.d. should, in terms of maintaining public railway infrastructure related to the elements of the control, management, and signaling subsystem, replace and supplement the missing and technically faulty elements of the SS devices and installations on the regional railway line 207 Novi Sad - Odžaci - Bogojevo, so as not to compromise the designed technical functionality of the elements of the control, management, and signalling subsystem, in accordance with the provisions of Articles 55 and 56 of the Law on Railways (“Official Gazette of the RS”, Nos. 41/18 and 62/23).

Status of the recommendation: The Directorate for Railways submitted the report - letter No. 003341856 2025 12500 001 001 051 001 01 001 dated 30.07.2025, the safety recommendation SR_02/24 was accepted.

SR_03/24 “IŽS” a.d., in terms of maintaining the public railway infrastructure in relation to the elements of the control, management and signaling subsystem, to replace and supplement the missing telecommunications devices and facilities on the regional railway line 207 Novi Sad - Odžaci - Bogojevo, which are missing and have been switched off due to technical malfunctions, as the designed technical functionality of the elements of the control, management and signaling subsystem would not be impaired, in the sense of the provisions of Art. 55 and 56 of the Law on Railways (“Official Gazette of RS”, Nos. 41/18 and 62/23).

Status of the recommendation: The Directorate for Railways submitted the report - letter No. 003341856 2025 12500 001 001 051 001 01 001 dated 30.07.2025, the safety recommendation SR_03/24 was not accepted.

SR_04/24 “IŽS” a.d. should consider the possibility of replacing the SS devices, on the railway line 207 Novi Sad - Odžaci - Bogojevo, that lack enforced technical dependencies between the positions of switches and entry signals, as well as the absence of exit signals with technical dependencies, and telecommunication devices with limited technical capabilities by installing SS devices with a higher level of enforced technical dependencies and more modern commercially available telecommunication devices. This is aimed at reducing the risk of human factor influence on train traffic regulation and increasing railway traffic safety.

Status of the recommendation: The Directorate for Railways submitted the report - letter No. 003341856 2025 12500 001 001 051 001 01 001 dated 30.07.2025, the safety recommendation SR_04/24 was accepted.

SR_05/24 “IŽS” a.d. to form a Team for the assessment of the elements of the human factor in the occurrence of accidents and incidents in order to create a critical elements model, making a classification of them according to their importance and a ranking list of representation (identification of all risks) in order to work on the expedient structuring of preventive measures and the prediction of human behavior in crisis situations in order to reduce the impact on the occurrence of new accidents and incidents.

Status of the recommendation: The Directorate for Railways submitted the report - letter No.



003341856 2025 12500 001 001 051 001 01 001 dated 30.07.2025, the safety recommendation SR_05/24 was not accepted.

SR_06/24 “IŽS” a.d. should conduct professional training for the staff responsible for regulating traffic (train dispatchers) on the railway line 207 Novi Sad - Odžaci - Bogojevo regarding the regulation of train traffic in accordance with the provisions of Articles 121, 122, 133, and 141 of the Traffic Rulebook (“Official Gazette of the RS” Nos. 34/22, 107/22).

Status of the recommendation: The Directorate for Railways submitted the report - letter No. 003341856 2025 12500 001 001 051 001 01 001 dated 30.07.2025, the safety recommendation SR_06/24 was accepted.

SR_07/24 “IŽS” a.d. should make changes and additions to the Instructions on the Organization and Work of the Operational Service in the area of “Infrastructure of Railways of Serbia” a.d. (“Official Gazette of Railways” Nos. 21/17, 21/18, 37/18, and 28/23) and harmonize, in Articles 3 and 34, the deadline within which the train driver is obliged to inform the traffic staff about the type of fault of the traction vehicle, regardless of the category of the railway line, with the provision from Article 234 of the Traffic Rulebook (“Official Gazette of the RS” Nos. 34/22, 107/22).

Status of the recommendation: The Directorate for Railways submitted the report - letter No. 003341856 2025 12500 001 001 051 001 01 001 dated 30.07.2025. Based on the submitted documents, it can be concluded that the safety recommendation SR_07/24 has been implemented.

SR_08/24 “IŽS” a.d. should, considering that the provisions regarding informing the traffic staff about the fault of the traction vehicle relate to train drivers, who can be railway workers of railway undertakings, make changes and additions to the Instructions on the Organization and Work of the Operational Service in the area of “Infrastructure of Railways of Serbia” a.d. (“Official Gazette of Railways” No. 21/17, 21/18, 37/18, and 28/23), by providing provisions that railway undertakings should be familiar with the mentioned instructions.

Status of the recommendation: The Railway Directorate submitted a report - letter bpoj 003341856 2025 12500 001 001 051 001 01 001 dated 30.07.2025. Based on the submitted documents, it can be concluded that the safety recommendation SR_08/24 has been implemented.