



MINISTERUL TRANSPORTURILOR ȘI INFRASTRUCTURII
AGENȚIA DE INVESTIGARE FEROVIARĂ ROMÂNĂ - AGIFER



**ROMANIAN RAILWAY INVESTIGATION
AGENCY
- AGIFER -**

**ANNUAL REPORT
2024**



INTRODUCTION

This is the Annual Report of Romanian Railway Investigation Agency - AGIFER (hereinafter referred to as AGIFER) for 2022. It meets with the requirement of the Directive 2016/798/EC of European Parliament and Council, transposed into Romanian legislation by the Emergency Ordinance no.73/2019 *for railway safety*.

This reference legislation is uploaded also on AGIFER site www.agifer.ro.

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1. ABOUT

1.1. Foreword of AGIFER General Manager

In 2024, the number of accidents and incidents open by AGIFER is 60, increased compared to the previous years, and the number of completed investigations along this period is also increased compared to the year 2023. This in fact meant the increase of the workload reported to the number of investigators, under the conditions in which the legislation, the budgetary situation of the institution and the salary level, under the one from the railway field, have limited the possibilities of increase of the number of specialized employees, with the experience and the imperative necessary level of training.

Out of the 60 accidents and incidents, 30 were open as a result of the decision of the General Manager (in accordance with the provisions of the Governmental Emergency Ordinance no.73/2019 which transpose the Directive no.798/2016), and for another 30 the investigation was open as a result of the obligations imposed by the subsequent national legislation, respectively the provisions of the Governmental Decision no.117/2010.

Compared to the previous year, the number of investigations open by AGIFER for accidents caused by collisions between trains or between rail vehicles has doubled, but fortunately without injured or deceased persons.

From these 29 accidents whose investigation was completed along the period analyzed, 2 cases consisted of collisions (1 case in which a passenger train caught up and collided with a freight train, and in another case the collision of 2 light locomotives), 22 were derailments and 5 fires into rolling stock (3 into diesel multiple units, 1 into a locomotive and 1 into passenger coaches). Out of the 22 derailments, in terms of causal factors, for 12 cases there were nonconformities in track condition, in particular the improper condition of the wooden sleepers, in 3 cases both nonconformities relating to the condition of the track and at the rolling stock, in 6 cases rolling stock failure and in 1 case nonconformities relating to the loading of wagons.

The proportion of accidents for which the investigations have revealed that the resources allocated for maintenance and investment are not enough, fact which did not allow the observance of the deadlines for repairs at the railway infrastructure and, in certain cases, at the rolling stock (especially in the case of the railway undertakings owned by the state). Also, the shortage of specialized human resources has a negative impact on the way the activity is carried out. Also, risk assessment, management and containment require further attention.

During the period under review, regarding the legislative framework which governs the activity of AGIFER, in 2024, by order of the Minister of Transport and Infrastructure, the organizational chart of the institution was modified, the number of management positions being reduced (requirement imposed by the Law no.296/2023 regarding some fiscal-budgetary measures for ensuring the financial sustainability of Romania on long term).

There is still the risk of the appearance of a regulation void in the situation in which the European Commission would impose the repeal of the current Regulation of investigation of accidents and incidents, of development and improvement of the railway safety on the railways and on the metro transport network of Romania (Regulation approved by Governmental Decision no.117/2010 - normative act which is on the list of national norms which require cleaning up), considering that the draft transmitted by AGIFER for a new Regulation regarding the authorization and investigation was not yet approved.

Regarding the cooperation with other investigative bodies within the network set up at European level, AGIFER continued its active participation in the next working groups:

- Peer review working group in accordance with the provisions of Art.22(7) of 798/2016 Directive on Railway Safety;
- Working Group for the development of guidelines Network of Investigating Bodies.

AGIFER was also represented in the ESReDA seminars – European Safety, Reliability and Data Association, where there are present specialists on safety investigation from the air, naval, land, chemical, nuclear fields, etc.

The collaboration with the railway economic operators within the investigations, even if the conclusions of the investigation reports were not always convenient or comfortable, revealing real problems that need to be very carefully kept under control, was based on communication, namely listening, analyzing and open presentation of the points of view and arguments taken into account, leading to final conclusions with an increased degree of understanding and acceptance, taking into account the common goal of improving railway safety, considering the lessons to be learned.

For this I would like to express my thanks to all the railway undertakings, infrastructure administrator/managers and entities in charge with the maintenance, as well as their employees, with whom we have collaborated and communicated efficiently during the investigations, who have supported us in our activity, in order to increase the accuracy, efficiency and expected effects of improvement of railway safety.

Director General AGIFER
Laurențiu Cornel DUMITRU

1.2. Role and purpose

Role of Romanian Railway Investigation Agency-AGIFER

AGIFER investigates all the accidents and incidents in the train running, on railway and metro networks, as well as the incidents that in slightly different conditions should have led to serious accidents, including the technical failures at the structural subsystems or at the interoperability constituents, parts of European conventional and high-speed system.

According to the provisions of the Emergency Ordinance no. 73/2019 *for the railway safety* and of the Government Decision no.117/02.03.2010 for the approval of the Regulation for the investigation of the accidents and incidents, for the development and improvement of Romanian railway and metro safety (hereinafter referred to as *Investigation Regulation*), in making the decision to start an investigation, AGIFER considers:

- seriousness of the accident or incident;
- if it is part of a series of accidents or incidents relevant for whole system;
- its impact on the community railway safety;
- requests of the infrastructure administrators, railway undertakings, Romanian Railway Safety Authority or of other member states of European Union

AGIFER purpose

- Through the investigations of the accidents and incidents, AGIFER follows the improvement of the railway safety and prevention of some accidents and incidents similar to those investigated. The investigations, if necessary, have as final result safety recommendations, that are proposals for the improvement of the railway safety.

1.3. General data about AGIFER

Employees at the end of 2024

At the end of 2024, AGIFER had 42 employees, that is:

- 1 general manager;
- 1 deputy general manager;
- 1 economic manager;
- 4 advisers of the general manager;
- 1 head of department;
- 1 auditor;
- 2 legal advisers;
- 21 investigators;
- 7 experts;
- 1 technician;
- 1 referent;
- 1 economist.

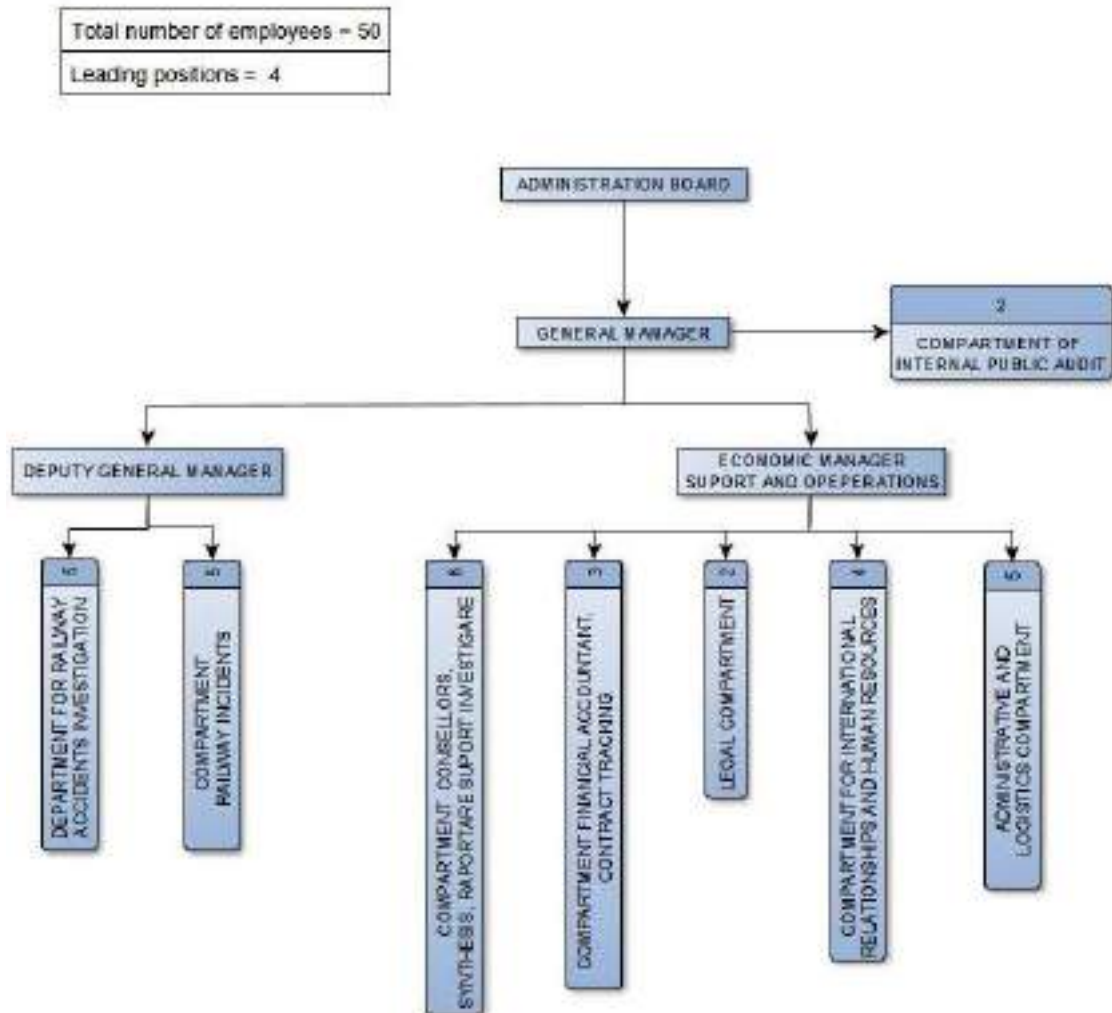
Budget

For its activity in 2024, AGIFER had a budget of 10.291.389 RON, that is 2.068.995 EUR (considering an exchange rate at the 31th December 2024 1 € = 4,9741 lei).

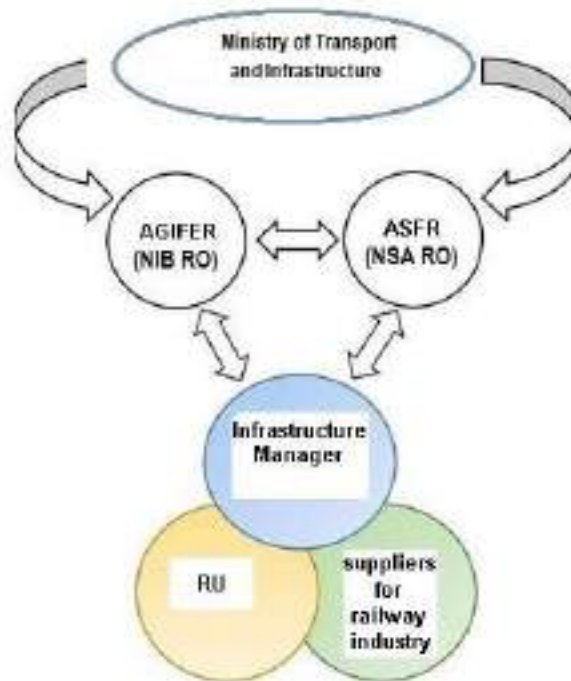
1.4. Organization

The legislation adopted at the end of 2023 by the Romanian Government, on certain fiscal and budgetary measures to ensure Romania's financial sustainability imposed some changes in the organizational structure of AGIFER. So, through the Order of Minister of Transports no.1204/18.06.2024 the organization chart of Romanian Railway Investigation Agency – AGIFER was approved, it being presented below:

Romanian Railway Investigation Agency - AGIFER



1.5. Organizational chart



2. THE INVESTIGATION PROCESS

The investigation aims the prevention of the accidents and incidents and includes the collection and analysis of the information, establishment of the conditions, including the determination of the causes and, if case, issuing of safety recommendations.

The investigators in charge fulfil their tasks as efficiently as possible and as soon as possible. The investigation is performed independently of any legal inquiry. The investigation does not aim any way the establish the guilty or responsibility.

The result of an accident or incident investigation is the object of the investigation report, worked out according to the seriousness of the accident or incident. The report presents the investigation objectives and includes, where appropriate, safety recommendations.

The investigation is carried out as open as possible, so all the parties can be heard and the results shared. The railway infrastructure administrator, the railway undertakings involved, Romanian Railway Safety Authority, European Union Agency for Railways, the victims and their relatives, the keepers of the goods damaged, the manufacturers, the emergency services involved, the representatives of the staff and the users have the possibility to supply technical information relevant for the improvement of the investigation report quality. So, in the last stage of the investigation process, AGIFER works out a draft report, that is sent to all mentioned before, in order to give them the possibility to send relevant technical information.

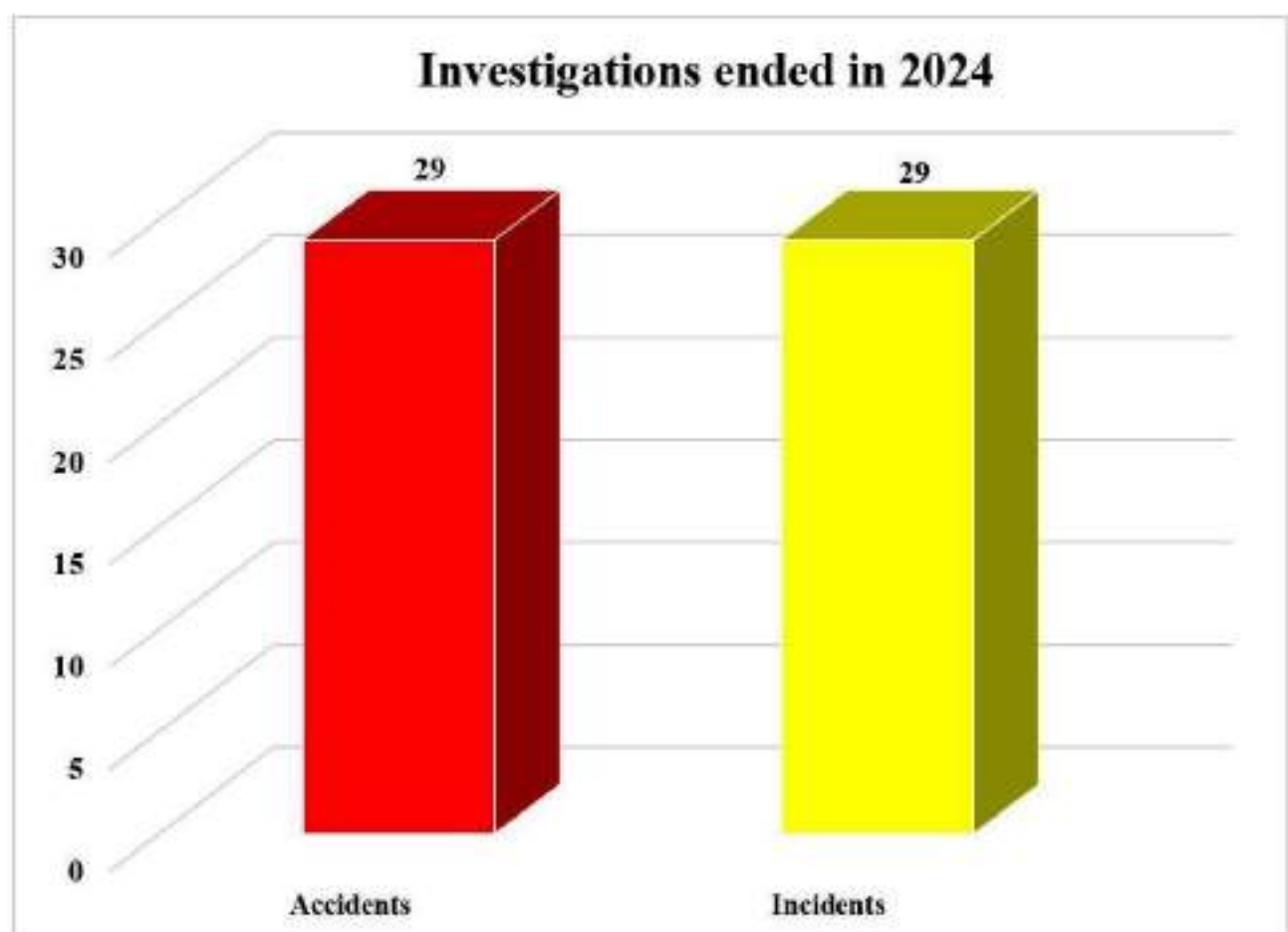
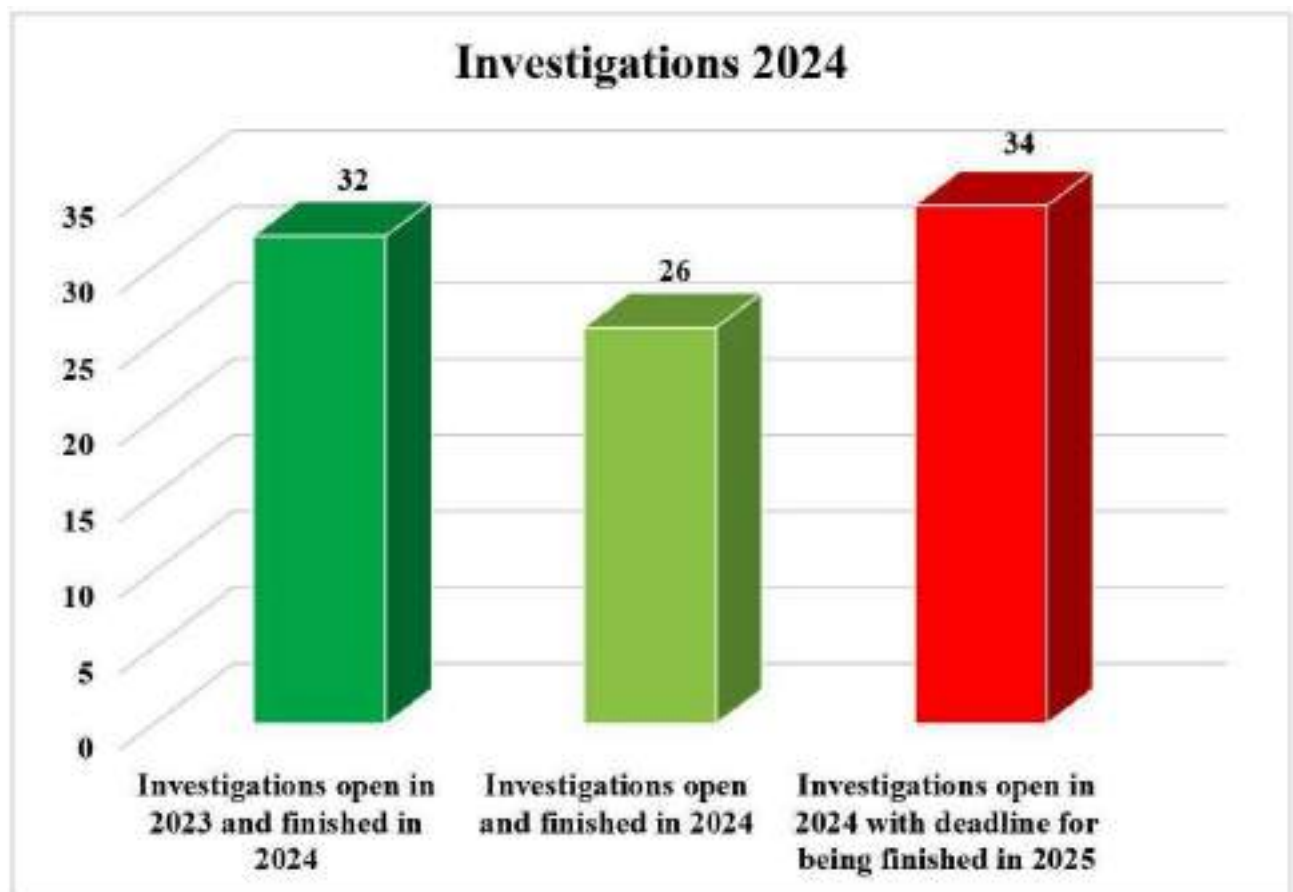
The technical information supplied, the opinions and comments are analyzed and if they are relevant for the investigation, they will be considered, being included in the final report. The investigation report is endorsed by the management of Romanian Railway Investigation Agency – AGIFER for publication and uploading on the website.

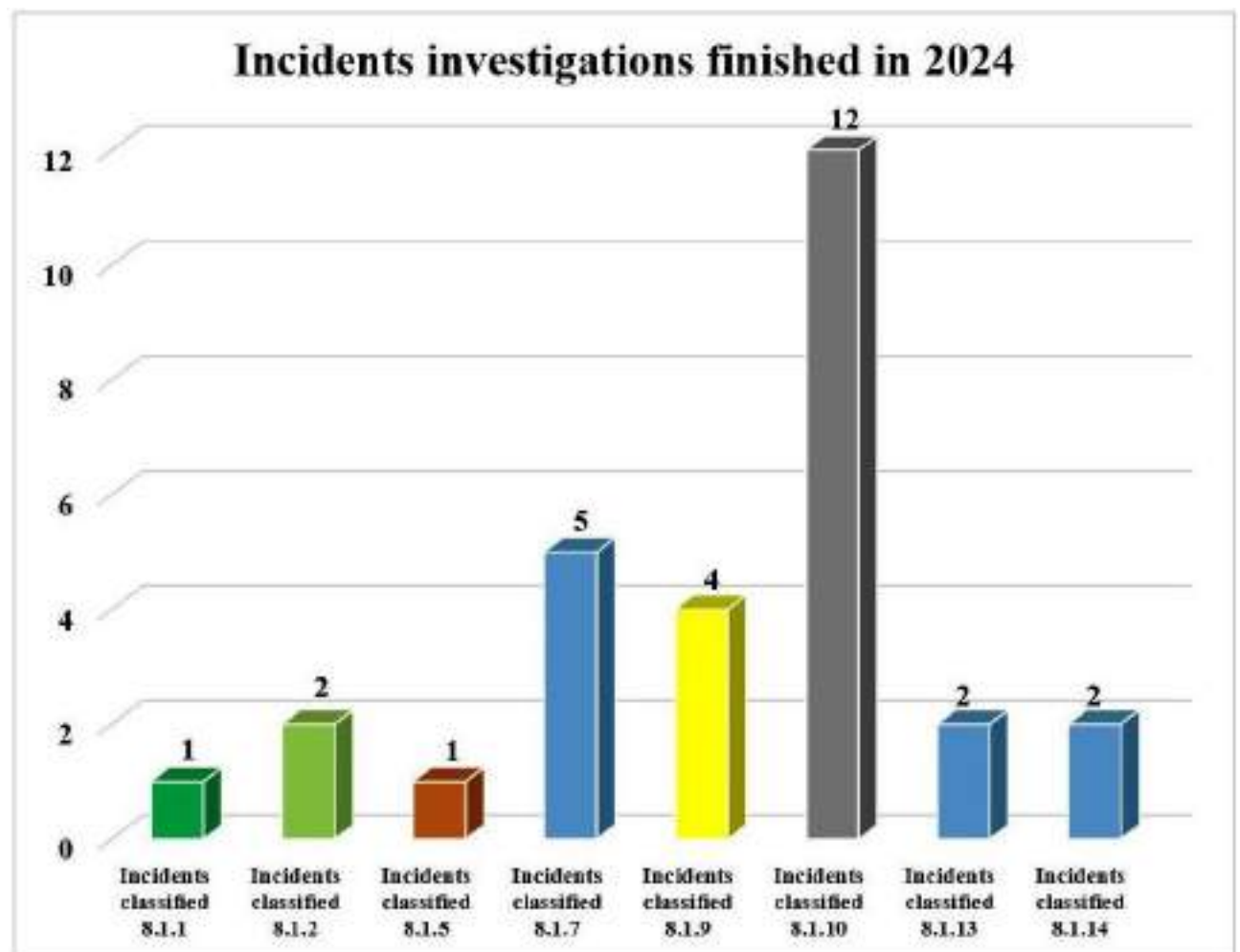
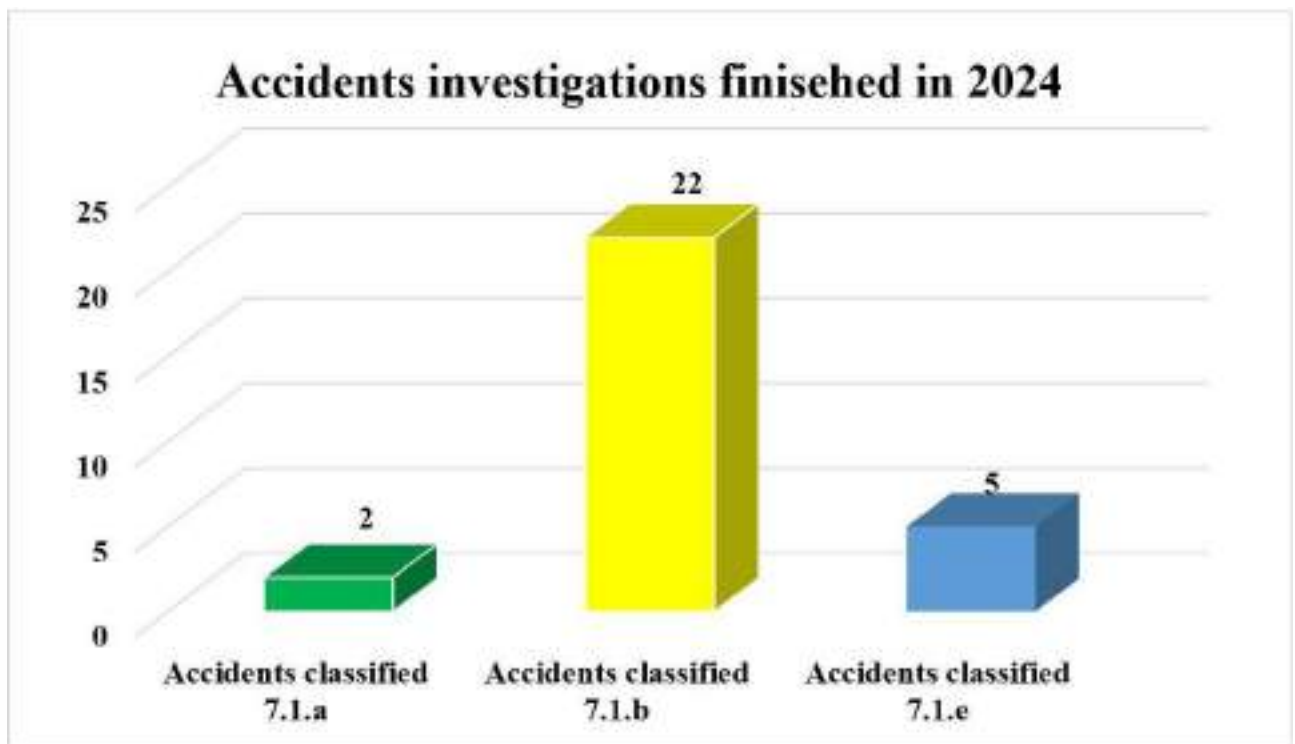
2.1. Rail events that have been investigated

In 2024, AGIFER investigated in total **93** accidents/incidents, according to the provisions of *the Emergency Ordinance no.73/2019 and of the Regulation for the investigation of accidents and incidents, for the development and improvement of Romanian railway and metro safety, approved by the Government Decision 117/2010* – hereinafter referred to as *Investigation Regulation*. From those **93** investigations, **33** were open in 2023 (32 of that were finished in 2024 and 1 case an interim statement was published), and the other ones of **60** were opened in 2024.

In 2024, 58 investigations were also completed and closed:

- **29 railway accidents;**
- **29 railway incidents,** classified according to the provisions of Article .8.1, Group A from the Investigation Regulation, for which Romanian Railway Investigation Agency ensured the investigator in charge.





Incident classification codes according the Regulation for Accident/Incident Investigation:

8.1.1- departure or consignment of trains when the line is busy – train against train or train after train, without observing the provisions of the specific regulations;

8.1.2- entry or reception of a train into the station on occupied track or closed with passing the switch that give access to the closed or occupied track, without observing the provisions of the specific regulations; reception of trains with the fouling point occupied at the entry end of the track;

8.1.5- departure or consignment of trains:

a) without free track or without the approval of the section block from the neighbouring station;

b) without the traffic operator's order, on the sections with „centralized management of train movements;

c) in another direction than the prescribed one, passing the switch with access to that direction;

d) on closed track, without observing the provisions of the specific regulations;

8.1.7- passing on danger the fixed or mobile signals by trains, as well as indicators ordering „stop”, without observing the provisions of the specific regulations, or by metro with the ATP equipment isolated;

8.1.9- exceed the maximum speeds allowed by the track by the train, of the maximum speed set for that category of train in the working timetable or through running order, of the speed restrictions steps;

8.1.10- hitting works of art, constructions, equipment or other railway vehicles by transport with oversize gauge, by the wagons with oversize load or with the mobile parts uninsured or not closed, or by parts or railway vehicles parts or parts of their loads, after which there were no derailments;

8.1.13- incorrect performing of entry route, exit or passing of trains;

8.1.14- hitting by trains of railway vehicles that can be removed from the line on arms, equipment, machinery, devices, parts and equipment situated in the gauge of free passing, after which there were no derailments

2.2. Situation of the investigations opened/completed in the last 5 years

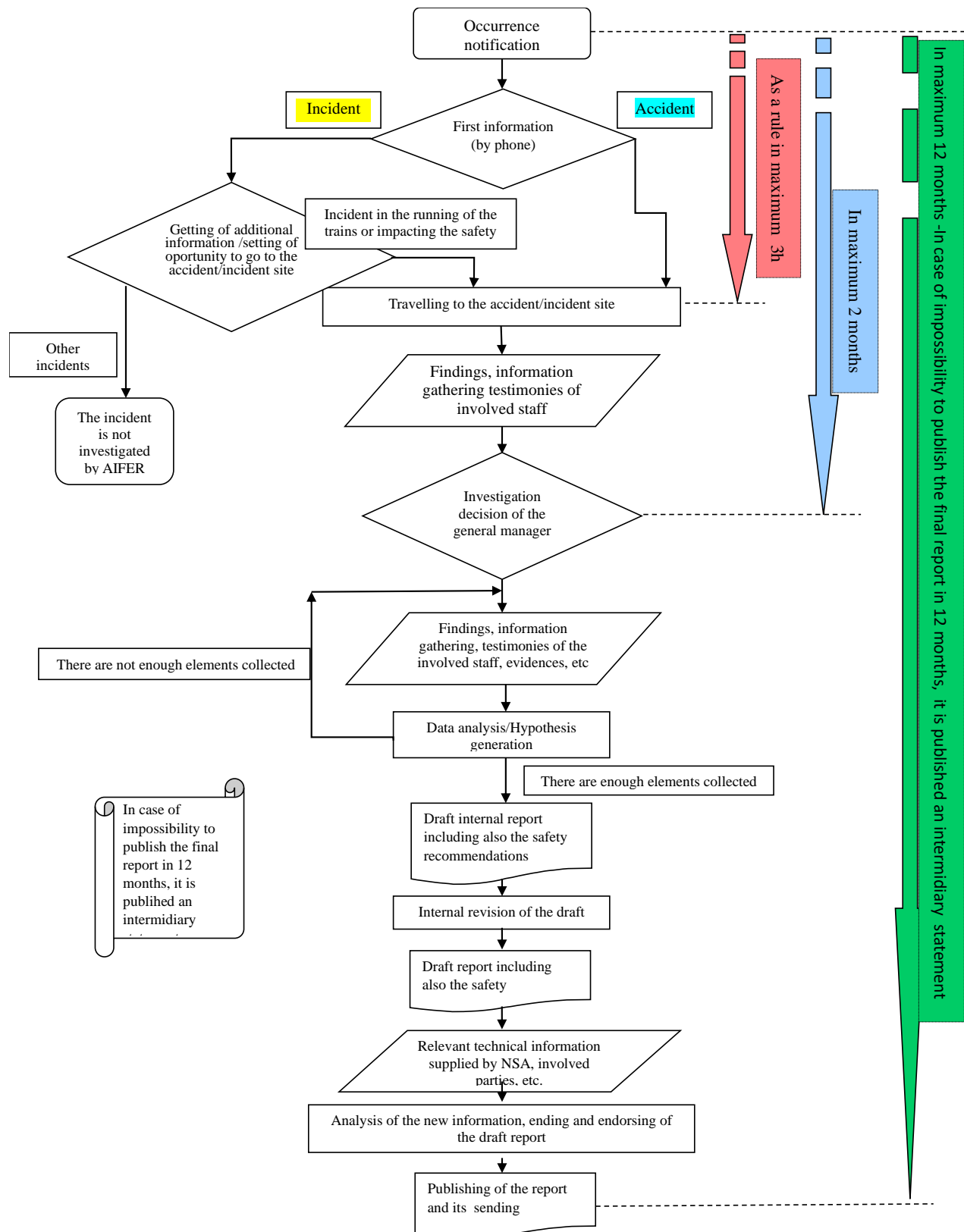
	Number of the opened investigations			Number of the completed investigations		
	Accidents	Incidents	TOTAL	Accidents	Incident	TOTAL
Anul 2020	29	17	46	42	25	67
Anul 2021	32	25	57	30	24	54
Anul 2022	33	20	53	34	22	56
Anul 2023	27	26	53	31	25	56
Anul 2024	29	31	60	29	29	58

2.3. Institutions involved in the investigation (currently or exceptionally)

Since its establishment and up to now, during the course of the investigation, the Romanian Railway Investigation Agency - AGIFER has cooperated with the authorities responsible for the judicial investigation, as well as with other authorities with intervention duties at the scene of the accident/incident.

According to the provisions of the Emergency Ordinance no. 73/2019 on railway safety, the Romanian Railway Investigation Agency - AGIFER may, if necessary, call upon specialists from related fields to carry out investigations. During 2024, there were no cases of co-option in the railway accident investigation commissions of specialists from outside AGIFER.

2.4. The diagram of the investigation process



3. INVESTIGATIONS

3.1. Overview on the investigations completed in 2024 as against to 2023, identification of the main tendencies.

Type of the accidents investigated in 2024 ⁽¹⁾	Number of accidents	Number of victims		Damages including VAT ⁽²⁾ (lei)	Damages including VAT ⁽²⁾ (€)	Tendency of the accident number, as against to 2023 (difference percentage)
		Deaths	Seriously injured			
Trains collisions	2	-	14	4.073.994,29	819.468,65	+1 (+100%)
Trains derailments	22	-	-	3.607.429,62	725.016,58	-4 (-15,38%)
Level crossings accidents	0	-	-	-	-	0 (0%)
Fire in rolling stock	5	-	-	11.684.560,67	2.348.287,45	+1 (+25,00%)
Total	29	-	14	19.365.984,58	3.892.772,68	-2 (-6,45%)

(1) one took into account the year of the investigation completion;

(2) according to the documents submitted by the parties involved by the date of completion of the investigation.

3.2. Investigations completed and investigation started in 2024

In 2024 Romanian Railway Investigation Agency completed and closed 58 (32 of which had been opened in 2023) and started the investigation in 60 cases, 26 of which were completed and closed in 2024, while the remaining **34** are expected to be completed and closed in 2025.

The table below presents the investigations and their legal basis, in accordance with the requirements of the European Railway Safety Directive and national legislation.

Investigations completed in 2024

No	Date of occurrence	Presentation	Legal basis of the investigation (1)	Date of completion
1	07.01.2023	In the railway county Cluj, track section Războieni - Apahida (electrified double-track line), in Câmpia Turzii railway station , in the running of the freight train no.56004 (got by the railway undertaking SNTFM „CFR Marfă” SA), wagon no.3153798201-2 derailed from the both axles of the second bogie, in the running direction.	i	04.01.2024
2	26.01.2023	In the railway county București, track section București Nord - Videle (electrified double-track line), in the railway station Bucureștii Noi , track 1C, Km 0+843, in the running of freight train no.57704 (got by the railway undertaking SC CER-FERSPED	i	23.01.2024

		SA), the first axle of the locomotive EA 038 derailed, in the running direction.		
3	22.02.2023	In the railway county Cluj, track section Jibou - Șarmășag (non-electrified single-track line), between the railway stations Zalău Nord and Mirșid , in the running of passenger train no.4363, both axles from the penultimate bogie of the multiple unit ADH no.1416, derailed in the running direction.	i	19.02.2024
4	28.02.2023	In the railway county Brașov, track section Brașov – Sighișoara (electrified double-track line), between Apața and Augustin railway stations , the third axle of the 8th wagon of freight train no.67815 (got by the railway undertaking SC CER FERSPED SA) derailed.	i	07.02.2024
5	13.03.2023	In the railway county Craiova, in Roșiori Nord railway station , a rear-end collision occurred between freight train no. 50514 (got by the railway undertaking Deutsche Bahn Cargo Romania) and passenger train no. 1822 (got by the railway undertaking SNTFC „CFR SA), after the latter train approached the former from behind.	i	11.03.2024
6	17.03.2023	In the railway county Brașov, track section Brașov – Sighișoara (electrified double-track line), between Beia and Cața railway stations , both bogies of the penultimate wagon no. 31533960791-5 of the freight train no. 66358 (got by the railway undertaking SNTFM „CFR Marfă” SA) derailed.	i	06.03.2024
7	28.03.2023	In the railway county Craiova, track section Alunu - Băbeni (non-electrified single-track line), between Berbești and Popești railway stations , km 21+550, in the running direction of freight train no.60566(got by the railway undertaking SNTFM „CFR Marfă” SA.), first axle of the first bogie of the banking locomotive DA 1129 derailed.	i	26.03.2024
8	18.04.2023	In the railway county Timișoara, track section Ronaț Triaj Gr.D – Cenad (non-electrified single-track line), non-interoperable track section managed by SC RC-CF Trans SRL Brașov, between Sânnicolau Mare and Cenad railway stations , km 68+513, the first axles of both bogies of the driving power car and the first axle of the first bogie of the trailer vehicle, being in the composition of the multiple unit AMX 556 which composed the passenger train no.11187 (got by the railway undertaking SC RegioCălători SRL Brașov) derailed.	i	03.04.2024

9	17.05.2023	In the railway county București, track section Rădulești – Giurgiu Nord (non-electrified single-track section) between the railway stations Toporu and Chiriacu , km 31+173, locomotive DA1692 (a light one which was running as freight train no.79562 -got by the railway undertaking SC United Railways SRL) collided with locomotive DA1566 (a light one which was running like freight train no.88324 -got by the railway undertaking SC Rail Cargo Carrier - România SRL).	i	16.05.2024
10	08.06.2023	In the railway county Brașov, track section Brașov – Copșa Mică (electrified double-track line), in Sighișoara railway station , the freight train no.66691-007 (got by the railway undertaking Grup Feroviar Român SA) which had set the reception route on the diverging track no.5 (from Albești Târnava) pass the exit signal X5 on danger (displaying a red light indicating “STOP – do not pass the signal in stop position!”). This resulted in forcing of switch no. 26 by the train 66691-007 and its entrance on the entry path of freight train no.57700-005 (got by the railway undertaking SC CER FERSPED SA) that was ran in opposite direction.	iii	23.05.2024
11	01.08.2023	In the railway county Craiova, track section Roșiori – Videle (electrified double-track line), between Roșiori Nord and Atârnați railway stations , in the running of train no. 96212 (got by the railway infrastructure manager CNCF “CFR” SA), consisting of a rail road motorized multifunctional vehicle – MSM type T 3500 FS Colmar no. 6698, the derailment of this vehicle occurred.	i	31.07.2024
12	05.08.2023	In the railway county Brașov, track section Brașov–Copșa Mică (electrified double-track line), in Dumbrăveni railway station , a fire burst into the hauling locomotive BB 528 of the freight train. no.58808 (got by the railway undertaking Rail Force SRL).	i	24.07.2024
13	09.08.2023	In the railway county Galați, on the track section Galați Brateș – Connecting Line CSG – Cătușa, line 706M, in Cătușa railway station CFU , in the running of freight train no.77546 (got by the railway undertaking SC Unicom Tranzit SA), two wagons for broad-gauge track derailed.	i	08.08.2024
14	23.08.2023	In the railway county Brasov, track section Blaj - Praid (non-electrified single-track line), between Târnăveni Vest and Jidvei	i	20.08.2024

		railway stations , km.23 + 400, a fire broke out in diesel multiple unit AMX 525 of passenger train Regio no. 11316, (got by the railway undertaking Regio Passenger train SRL).		
15	01.09.2023	In the railway county Cluj, track section Oradea – Salonta (non-electrified single-track line) between railway stations Leș Bihor and Oradea Vest , km.108 + 200, in the running of passenger train Regio no.3111 (got by the railway undertaking SNTFC „CFR Călători” SA), composed of diesel multiple units no. 9553978-1008-1 and no. 9553978-1009-9, a fire broke out in the second diesel multiple unit, no. 9553978-1008-1.	i	28.08.2024
16	08.09.2023	In the railway county Iași, track section Suceava Nord – Pașcani, in Verești railway station , entrance signal YII was passed on danger, displaying a red light indicating “STOP – do not pass the signal in stop position” by passenger train no. 1752, hauled with locomotive EA598, got by the railway undertaking SNTFC „CFR Călători” SA.	iii	24.07.2024
17	10.09.2023	In the railway county Constanța, track section Constanța Mărfuri - Capu Midia, km. 0 + 160, in Capu Midia railway station , the first two axles of the locomotive DA 216 that hauled the freight train no.67055010 (got by the railway undertaking Grup Feroviar Român SA), derailed.	i	21.08.2024
18	17.09.2023	In the railway county Craiova, track section Craiova – Filiași, in Cernele railway station , the electric locomotive LEMA 063 (got by the railway undertaking Vest Trans Rail SRL), a light locomotive stationed on line no.11 since 16.09.2023, at 20:55 o'clock, started running in the direction of Ișalnița and passed on trailing direction over switch no. 22 at the Y end of the railway station, after which it entered on the running track no. I between Cernele and Ișalnița, coming to a stop after running approximately 3.6 km on the running line.	iii	18.03.2024
19	03.10.2023	In the railway county Brașov, track section Brașov – Sighișoara (electrified double-track line), km 223+139.5, on track I, between Augustin and Racoș railway stations , the 23rd wagon of freight train no. 66633-002 (got by the railway undertaking	i	01.10.2024

		SC Grup Feroviar Român SA) derailed from all axles.		
20	24.10.2023	In the railway county Craiova, track section Costești - Roșiori Nord (non-electrified single-track line), between Costești and Miroși railway stations , km 132+830 the first bogie in the running direction of the 13th wagon derailed from freight train no. 66764, got by the railway undertaking SC Grup Feroviar Român SA.	i	23.10.2024
21	04.11.2023	In the railway county Timișoara, track section Periam – Aradu Nou – a non-interoperable line managed by SC RC-CF Trans SRL Brașov –, non-electrified single-track line, between Periam and Zădăreni railway stations , km 15+400, in the running of passenger train no. 11160, got by the railway undertaking SNTFC Regio Călători, a fire broke out in the diesel multiple unit AMX 533-9.	i	30.10.2024
22	05.11.2023	In the railway county Craiova, track section Drăgotești – Turceni (electrified single-track line), between Drăgotești and Borăscu railway stations , km 28+480, in the running of freight train no. 65004 (got by the railway undertaking SNTFM "CFR Marfă" SA), the first 8 wagons (Fals series), all loaded with coal, derailed.	i	30.10.2024
23	14.11.2023	In the railway county Timișoara, track section Timișoara – Arad (electrified single-track line), at the exit of Aradu Nou railway station , on the diverging track no. 3, km 51+654, in the running of freight train no. 66653013 (got by the railway undertaking Grup Feroviar Român SA), 6 tank wagons loaded with diesel oil derailed (from the 3rd to the 8th wagon of the composition of the train), of which two overturned.	i	03.10.2024
24	27.11.2023	In the railway county Iași, on the track section Lețcani – Dorohoi (non-electrified single-track line, managed by SC RC-CF TRANS Brașov SRL), between Trușești and Todireni railway stations , km 77+326, both axles of the first bogie of the 11th wagon no. 83536651666-3 derailed, in the running direction, from freight train no. 66952027 (got by the railway undertaking SC Grup Feroviar Român SA).	i	05.11.2024
25	28.11.2023	In the railway county Brașov, on the track section Siculeni – Deda (electrified single-track line), between Voșlăbeni and Izvoru Mureșului railway stations , the first axle in	i	21.11.2024

		the running direction of the locomotive no. 91 53 0 400146-3, hauling freight train no. 66394 (got by the railway undertaking SNTFM "CFR Marfă" SA), derailed.		
26	01.12.2023	In the railway county Constanța, track section Capu Midia – Dorobanțu, in Capu Midia railway station , km 32+250, in the running of freight train no. 66602030, the locomotive DA 1547 derailed with the first 5 wheels on the left-hand side in the running direction, along with the first 30 wagons in the train's composition.	i	13.11.2024
27	04.12.2023	In the railway county București, track section Ploiești Vest – Brașov (electrified double-track line), in Azuga railway station , in the running of passenger train no. 1742 (got by the railway undertaking SNTFC "CFR Călători" SA), the active pantograph of the hauling locomotive EA 583 broke off. As it fell, the pantograph shattered a window of the first coach of the train, resulting in injuries to three persons.	iii	02.12.2024
28	09.12.2023	In the railway county Craiova, in Gălăteni railway station , track section Roșiori Nord – Videle (electrified double-track line), a runaway occurred involving freight train no. 68202 (got by the railway undertaking Vest Trans Rail SRL), hauled by locomotive EA 079. The train, which was parked on line no. 5 in the direction of railway station Olteni, overran the fouling point, ran through turnout no. 14 in a trailing-point movement, and came to a stop on turnout no. 10.	iii	20.08.2024
29	13.12.2023	In the railway county Cluj, track section Dej - Beclean pe Someș (electrified double-track line), during the entry of freight train no. 661004 (got by the railway undertaking SNTFM "CFR MARFĂ" SA) from running track I onto line no. 6 in Beclean pe Someș railway station , 5 wagons in the composition of the train derailed.	i	10.12.2024
30	22.12.2023	In the railway county București, track section Chiajna – Videle (electrified double-track line), in Zăvestreni railway station , in the running of passenger train no. 9304 (got by the railway undertaking SNTFC "CFR Călători" SA), the hauling locomotive derailed by axle no. 6 (the first one in the running direction).	i	03.12.2024
31	28.12.2023	In the railway county Galați, track section Brăila – Făurei (electrified double-track line), in Făurei railway station , the securing straps of the cargo from three	iii	13.02.2024

		wagons of freight train no. 66050 (got by the railway undertaking SNTFM "CFR Marfă" SA) hit the terminal boxes of the 500 Hz inductor (located at km 172+490) and the 1000/2000 Hz inductor (km 172+240) corresponding to signal YFII.		
32	28.12.2023	In the railway county Galați, track section Brăila – Făurei (electrified double-track line), in Urleasca railway station , the peg of the 500 Hz track inductors related to signal YII from the railway station was struck by the securing and anchoring straps of the goods loaded on two wagons of freight train no. 66928, got by the railway undertaking CER-Fersped SA.	iii	13.02.2024
33	01.01.2024	In the railway county Cluj, track section Cluj Napoca – Războieni, between Boju and Tunel railway stations , nine track inductors were struck by metal parts detached from wagon no. 33535304637-8, part of freight train no. 66703-031, got by the railway undertaking Unicom Tranzit SA.	iii	20.02.2024
34	05.01.2024	In the railway county Craiova, track section Gura Motrului – Turceni (electrified double-track line), at the entrance to the railway station Turceni , over turnout no. 47, wagon no. 31536651420-7, the 18th one after the locomotive in the composition of freight train no. 65096 (got by the railway undertaking SNTFM „CFR MARFĂ” SA) derailed by the second bogie.	i	20.12.2024
35	05.01.2024	In the railway county Craiova, track section Strehăia – Drobeta Turnu Severin (electrified single-track line), in Balota railway station , in the running of the freight train no. 66240 (got by the railway undertaking Grup Feroviar Român SA), the banking locomotive EA 91 53 0400 478 – 0 derailed by the first axle.	i	23.12.2024
36	10.01.2024	In the railway county Craiova, track section Băbeni – Alunu (non-electrified single-track line), between Popești Vâlcea and Băbeni railway stations , km 15+130, in the running of the freight train no. 60566 (got by the railway undertaking SNTFM "CFR Marfă" SA), the wagon no. 81536650824-1, 14 th in the composition of the train derailed by the first axle of the second bogie in the running direction.	i	20.12.2024
37	23.01.2024	In the railway county Cluj, track section Salva – Beclean pe Someș (electrified single-track line), between Mogoșeni and Beclean pe Someș railway stations , a fire	i	23.12.2024

		broke out on passenger coach no. 50532049115-0, and subsequently spread to passenger coach no. 50532049112-7. These coaches were in the composition of passenger train no. 1830, got by the railway undertaking SNTFC "CFR Călători" SA.		
38	29.01.2024	In the railway county București, track section București – Ploiești, in the railway station Crivina , the striking of 3 track inductors was caused by the connecting bar of the axle guidance on the left-hand side, in the running direction, of the locomotive EA 773, hauling the passenger train IC 538, got by the railway undertaking SNTFC "CFR Călători" SA.	iii	22.03.2024
39	10.02.2024	In the railway county București, track section Rădulești – Giurgiu Nord (non-electrified single-track line), in Toporu railway station , the switch rails and control bars of the point switch no. 1 were struck by the residue collection tank detached from the locomotive DA 1541, hauling the freight train no. 56380, got by the railway undertaking Grup Feroviar Român SA.	iii	01.04.2024
40	04.04.2024	In the railway county București, track section Rădulești – Giurgiu Nord (non-electrified single-track line), in Târnavale railway station , four track inductors were struck by the residue collection tank detached from the locomotive DA 1502, hauling the freight train no. 61356, got by the railway undertaking Grup Feroviar Român SA.	iii	27.05.2024
41	21.03.2024	In the railway county București, track section Rădulești – Giurgiu Nord, between Toporu and Giurgiu Nord , the maximum speed limit of 50 km/h was exceeded by the passenger train no. 1095, hauled by the locomotive GM 1384, got by the railway undertaking SNTFC „CFRCălători” SA.	iii	27.05.2024
42	16.04.2024	In the railway county Constanța, track section Ciulnița – Fetești, in Jegălia railway station , the balancing counterweight of the LC SH 59 pole, km 127+800, was hit by the door of the wagon no. 61538487004-9, from the composition of the passenger train no. 1887, got by the railway undertaking SNTFC “CFR Călători” SA.	iii	03.07.2024
43	21.04.2024	In the railway county Brașov, track section Bartolomeu – Zărnești, between Bartolomeu and Cristian railway stations , the track inductor of the emergency signal of the automatic half	iii	24.07.2024

		barrier crossing, km 5+948, was hit by the onboard inductor of the INDUSI system of the diesel multiple unit that formed the passenger train Regio no. 11337, got by the railway undertaking Regio Călători SRL.		
44	26.04.2024	In the railway county Cluj, track section Dej Călători – Apahida (electrified double-track line), between Dej Călători and Gherla railway stations , on track I, km 40+760, the locomotive DHC 473, that hauled the freight train no. 66717025 (got by the railway undertaking Unicom Tranzit SA), hit a piece of track located within the clearance gauge.	iii	07.10.2024
45	02.05.2024	In the railway county București, track section Golești–Titu, the freight train no. 67752-001, got by the railway undertaking Tehnotrans Feroviar SRL passed the exit light signal YIII of the Găești railway station , on danger.	iii	16.05.2024
46	10.01.2024	On Craiova railway county, on the track section Caransebeș – Strehaia, between Drobeta Turnu Severin Mărfuri and Balota , railway stations the freight trains no. 67002, no. 87067, and no. 87069, got by the railway undertaking Tim Rail Cargo SRL exceeded the maximum speed-30 km/h, allowed.	iii	16.12.2024
47	15.01.2024	On Craiova railway county, on the track section Caransebeș – Strehaia, between Drobeta Turnu Severin Freight and Balota railway stations , the freight trains no. 67002, no. 87051, and no. 67094, got by the railway undertaking Tim Rail Cargo SRL exceeded the maximum speed allowed by the 30 km/h maximum speed-30 km/h, allowed..	iii	16.12.2024
48	27.05.2024	On Cluj railway county, track section Halmeu – Oradea (non-electrified single-track line), in Sanislău railway station , the freight train no.66350427, got by the railway undertaking Grup Feroviar Român SA passed the group-type exit semaphore signal B, equipped with one arm, which was displaying the indication “STOP without passing the signal! – By day: the arm in horizontal position to the right of the running direction; by night: one red light unit facing the train”, and forced the turnout no.1.	iii	23.12.2024
49	07.06.2024	On București railway county, track section Rădulești – Giurgiu Nord (non-electrified single – track line), in Rădulești railway station , the locomotive DA 1680, which	iii	01.10.2024

		was hauling the freight train no.64054006, got by the railway undertaking United Railways SRL hit the lower gear casing, located within the clearance gauge which was detached from the locomotive DA 1402 (which hauled the freight train no.56100007, got by the railway undertaking SNTFM “CFR Marfă” SA).		
50	11.06.2024	On Craiova railway county, track section Craiova – Filiași, between Răcari and Coțofeni railway stations , several track inductors were hit by the vertical damper from axle no. 3, in the running direction, of the locomotive EC 052 hauling the Regio train no. 2092, got by the railway undertaking SNTFC „CFR Călători” SA.	iii	14.10.2024
51	21.06.2024	On București railway county, track section Chitila – București Nord, in Chitila railway station , the passenger train no. 13905021, got by the railway undertaking SNTFC „CFR Călători” SA, was wrong routed to railway station București Nord on track II instead of track III.	iii	23.08.2024
52	16.06.2024	On Craiova railway county, track section Roșiori Nord – Caracal, between Fărcașele and Caracal railway stations , the freight train no.67204, got by the railway undertaking VEST TRANS RAIL SRL, exceeded the maximum permitted speed for the train category, as established in the train order.	iii	18.09.2024
53	31.07.2024	In the railway county Craiova, track section Roșiori Nord – Caracal, the simultaneous dispatching of the passenger train no. 348031, got by the railway undertaking SNTFC „CFR Călători” SA, on running track II between Fărcașele and Drăgănești Olt railway stations occurred, although it was already occupied by the freight train no. 57322030, got by the railway undertaking Rail Cargo Carrier – România SRL.	iii	14.11.2024
54	10.08.2024	In the railway county București, track section Chitila – București Nord, in Chitila railway station , the passenger train no. 9102010, got by the railway undertaking SNTFC „CFR Călători”, was wrong routed towards the railway station București Nord on running track III instead of track II.	iii	27.11.2024
55	25.09.2024	In the railway county București, track section Giurgiu Nord – Videle (electrified single-track line), between Rădulești and Videle railway stations , the check rail located on the bridge at km 62+409 was hit	iii	12.12.2024

		by the plough of the GM 1025 locomotive, which was hauling the passenger train no.460025, got by the railway undertaking SNTFC „CFR Călători” SA.		
56	05.10.2024	In the railway county București, track section București – Brașov, in Comarnic railway station , the freight train no.87702005, got by the railway undertaking Rail Force SRL, passed on danger the exit signal Y4, which was displaying the indication “STOP without passing the signal”.	iii	17.12.2024
57	19.10.2024	In the railway county Galați, track section Mărășești – Galați (electrified double-track line), between Barcea and Ivești railway stations , the impedance bond of the track circuit X2AD, Km 252+935, was hit by the automatic brake rigging adjuster of the locomotive EC 092, which hauled the passenger train no.7569, got by the railway undertaking SNTFC „CFR Călători” SA.	iii	11.11.2024
58	17.11.2024	In the railway county Iași, track section Lețcani – Dorohoi (non-interoperable section, managed by RC-CF Trans SRL Brașov – non-electrified single-track line), in Lețcani railway station , the freight train no.66578015, got by the railway undertaking Deutsche Bahn Cargo România SRL, was dispatched without the traffic controller’s order.	iii	11.12.2024

- (1) **Legal basis of the investigation:** i= According to the Safety Directive, ii= Upon the national legal basis (that covers the possible areas excluded by the art.2, paragraph 2 of the Safety Directive), iii= Optional – other criteria (National norms/regulations, to which the Safety Directive does not refer).

Investigations opened in 2024, that are going to be completed in 2025

No	Date of occurrence	Presentation	Legal basis of the investigation ⁽¹⁾	Date of completion
1	16.01.2024	In the railway county Craiova, track section Craiova – Caracal (electrified double-track line), in Leu railway station , 11 wagons from the freight train no.68322 got by the railway undertaking Global Rail Solutions SRL, derailed (out of which 2 overturned), in the area of the turnout no.16 situated in Y end of the station.	i	10.01.2025
2	07.02.2024	In the railway county București, track section București Băneasa – București Sud, in Pantelimon railway station , an end-on collision occurred between the light engine DA no.180 which running as train no.86350 (got by the railway undertaking	i	05.02.2025

		Grup Feroviar Român SA), and the last wagon of the freight train no.58182106 (got by the railway undertaking United Railways SRL), which was stationary on track no.2.		
3	27.02.2024	On the railway transport network of the metro, in the train no.04 (formed of the electric metro trains 1121-2121), passed on danger the home signal Y of Timपुरi Noi station and entered on the diverging route on the track no.1 of the station, where metro train no.17 (formed of the electric metro trains 1117-2117) was stationary, which caused the coupling of the two trains.	ii	24.02.2025
4	01.03.2024	In the railway county Craiova, track section Strehaia – Motru Est (electrified single-track line), between Strehaia and Jirov railway stations , km 12+012, the wagon no.81536653508-7 (the 3rd in the composition of the train) of the freight train no.65094, got by the railway undertaking SNTFM “CFR Marfă” SA, derailed by both axles of the first bogie, in the running direction.	i	26.02.2025
5	13.03.2024	In the railway county Galați, track section Buzău – Mărășești (electrified double-track line), between Zoița and Râmnicu Sărat railway stations , km 158+875, the wagon no.83537963122-8 of the freight train no.66307, got by the railway undertaking Grup Feroviar Român SA, derailed by the first bogie in the running direction.	i	06.03.2025
6	26.03.2024	In the railway county Craiova, track section Băbeni – Alunu (non-electrified single-track line), between Berbești and Popești Vâlcea railway stations , km 21+850, the 13th wagon (no.81536653750-5) of the freight train no.60566, got by the railway undertaking SNTFM „CFR Marfă” SA, derailed by the first bogie in the running direction,	i	24.03.2025
7	21.04.2024	In the railway county Timișoara, track section Arad – Oradea (non-electrified double-track line), between Sântana and Utvinișu Nou railway stations , on the track II, km 9+300, a fire broke out on the hauling locomotive DA1544 of the freight train no.66290-020, got by the railway undertaking Grup Feroviar Român SA,.	i	16.04.2025
8	15.05.2024	In the railway county Constanța, track section București – Constanța (electrified double-track line), on track I, between Dorobanțu and Basarabi railway stations , km 206+400, a fire broke out on the hauling locomotive DA1504 of the freight train no.66363815, got by the railway undertaking Grup Feroviar Român SA,	i	15.04.2025
9	08.06.2024	In the railway county București, track section Ploiești Sud – Buzău, in Ploiești Est railway station , during the stabling to line no.10 B, of the freight train no.77280-108, got by the railway	i	08.05.2025

		undertaking Vest Trans Rail SA, the hauling locomotive DHC no.938, derailed with all four axles, in the area of the turnout no. 37, at the X end of the station.		
10	11.06.2024	In the railway county Craiova, track section Roșiori Nord – Videle (electrified double-track line), between Roșiori Nord and Atârnați railway stations , on the track II, km 94+807, in the running of the passenger train no.1596, got by the railway undertaking SNTFC „CFR Călători” SA, the last two wagons of the composition of the train derailed (the second bogie, in the running direction, of each wagon).	i	20.05.2025
11	13.07.2024	In the railway county Brașov, track section Brașov – Sighișoara (electrified double-track line), between Rupea and Racoș railway stations , on the track I, km 238+194, in the running of the passenger train no.347, got by the railway undertaking SNTFC „CFR Călători” SA, both axles of the first bogie of the 3rd wagon derailed.	i	09.07.2025
12	19.07.2024	On the railway county București, in București Nord, group A railway station , during the shunting movement for running around of the passenger train Regio no.11034, got by the railway undertaking Regio Passenger train SRL, that had to compose the passenger train Regio no.11037, on section no.074, the locomotive BB 576 collided with the railcar RIO no.05.	iii	03.07.2025
13	24.07.2024	In the railway county Craiova, track section Băbeni – Alunu (non-electrified single-track line), between Berbești and Popești Vâlcea railway stations , km 18+600, in the running of the freight train no.60566, got by the railway undertaking SNTFM "CFR Marfă" SA, the first axle, in the running direction, of the train engine DA 913 derailed.	i	15.07.2025
14	25.07.2024	In the railway county Timișoara, track section Periam – Aradu Nou (non-interoperable track section managed by SC RC-CF Trans Brașov SRL – non-electrified single-track line), between Aradu Nou and Zădăreni railway stations , km 1+095,50, in the first wagon in the running direction of the freight train no.66143, got by the railway undertaking SNTFM "CFR Marfă" SA, derailed by both axles of the first bogie.	i	14.07.2025
15	14.08.2024	In the railway county Craiova, track section Băbeni – Alunu (non-electrified single-track line), between Berbești and Popești Vâlcea railway stations , km 18+410, the hauling locomotive DA 913 of the freight train no.86077, got by the	i	11.08.2025

		railway undertaking SNTFM "CFR Marfă " SA, derailed by the first axle, in the running direction.		
16	29.08.2024	In the railway county Craiova, track section Roșiori Nord – Videle (electrified double-track line), between Olteni and Ciolpani railway stations , ten track inductors were hit by a damper detached from the locomotive EA 397, which was hauling the passenger train no.9900, got by the railway undertaking SNTFC "CFR Călători" SA.	iii	15.07.2025
17	01.09.2024	In the railway county București, track section Giurgiu Nord – Videle (partially electrified single-track line), upon the departure of the freight train no.40712 001 (got by the railway undertaking Rail Cargo Carrier - România SRL) from track no.5 of Rădulești railway station , both axles of the last bogie (in the running direction), of the 7th wagon in the composition of the train, derailed.	i	25.08.2025
18	07.09.2024	In the railway county Constanța, track section Medgidia – Constanța (electrified double-track line), in Valu lui Traian railway station , km 215+350, the 22nd wagon of the freight train no.68502006 (got by the railway undertaking Constantin Grup SRL), derailed by the first bogie, in the running direction.	i	ongoing investigation
19	12.09.2024	In the railway county Craiova, track section Băbeni – Alunu (non-electrified single-track line), between Berbești and Popești Vâlcea railway stations , km 30+520, in the running of the freight train no.60568212 (got by the railway undertaking SNTFM "CFR Marfă" SA), the 21st wagon in the composition of the train derailed by both axles of the first bogie.	iii	ongoing investigation
20	19.09.2024	In the railway county Timișoara, track section Timișoara Nord – Arad (electrified single-track line), on the entry route of the passenger train Regio no.2601 (got by the railway undertaking SNTFC "CFR Călători" SA), in the railway station Șag , on the point switch no.5, the last axle, in the running direction, of the 2nd wagon in the composition of the train derailed.	i	25.08.2025
21	22.09.2024	In the railway county Craiova, track section Turceni – Filiași (electrified double-track line), in Turceni railway station , the locomotive LEMA 083, that hauling the freight train no.58490 (got by the railway undertaking Constantin Grup Rail Logistic SRL), derailed by the first bogie, in the running direction, and the first axle of the second bogie.	i	ongoing investigation
22	26.09.2024	In the railway county Craiova, track section Craiova – Filiași (electrified double-track line), in Craiova railway station , the light engine LEMA 006, running as train no.86699 (got by the railway undertaking Deutsche Bahn Cargo România SRL),	i	ongoing investigation

		derailed with the first axle of the first bogie, in the running direction.		
23	11.10.2024	In the railway county Craiova, track section Gura Motrului – Plopșoru (electrified double-track line), in Turceni railway station , the pedestrian crossing slabs installed between the tracks were hit by a brake adjuster slack of the locomotive EC 053, which was hauling the passenger train no.2855, got by the railway undertaking SNTFC “CFRCălători” SA.	iii	ongoing investigation
24	17.10.2024	In the railway county Timișoara, track section Timișoara – Lugoj (electrified single-track line), in Belinț railway station , the polyester enclosure cables of the track circuit 1-3Si3, located within the CFR clearance gauge, was hit by the cut out cock of air distributors of the wagons in that composed the freight train no.48431016, got by the railway undertaking Deutsche Bahn Cargo România SRL	iii	31.01.2025
25	19.10.2024	In the railway county București, track section Titu – Târgoviște (non-electrified double-track line), between Nucet and Târgoviște railway stations , on track I, km 29+850, a fire broke out at the DA 011 locomotive that hauled the train in the freight train no.666251, got by the railway undertaking Deutsche Bahn Cargo România SRL,.	i	ongoing investigation
26	20.10.2024	In the railway county București, track section București – Videle, between Zăvestreni and Grădinari railway stations , the vertical damper of the bogie no.2, axle no.4, from the EA 789 locomotive hauling the passenger train no.9002, got by the railway undertaking SNTFC „CFR Călători” SA, struck 17 track inductors.	i	19.03.2025
27	29.10.2024	In the railway county Constanța, track section Palas – Constanța Mărfuri (non-electrified single-track line), km 1+040, the 31st wagon and the 32 nd wagon (no.315366661926 and no.895369500460) of the freight train no.66361, got by the railway undertaking Grup Feroviar Român SA derailed (first one by the second bogie in the running direction and the second one derailed by both bogies).	i	ongoing investigation
28	04.11.2024	In the railway county București, track section Ploiești Sud – Buzău (electrified double-track line), in Ploiești Est railway station , during the stabling of the freight train no.58496 003, got by the railway undertaking Constantin Grup Rail – Logistic SRL, three wagons in the train composition derailed.	i	ongoing investigation
29	05.11.2024	In the railway county Craiova, track section Filiași – Drobeta Turnu Severin (electrified single-track line), between Tîmna and Igiroasa railway stations , km 328+511, in the running of the freight train no.66078 004, composed of 27 wagons loaded with gasoline, got by the railway undertaking	i	ongoing investigation

		SNTFM “CFR Marfă” SA, seven wagons in the train composition derailed.		
30	16.11.2024	In the railway county Cluj, track section Carei – Sărmășag, in Carei railway station , elements of the railway installations were hit by an open access door of the equipment loaded on the wagon no.31804863701-7, which was in the composition of the freight train no.56522 016, got by the railway undertaking Deutsche Bahn Cargo România SRL.	iii	10.04.2025
31	20.11.2024	In the railway county Brașov, track section Brașov – Sighișoara (electrified double-track line), km 228+908, on the track I, between Augustin and Racoș railway stations , the railway crane EDK (with a lifting capacity of 250 tf), which was included in the freight train no.67733, got by the railway undertaking RAIL FORCE SRL, derailed with the first bogie in the running direction.	i	ongoing investigation
32	28.12.2023	In the railway county Craiova, track section Caracal – Roșiori Nord (electrified double-track line), between Măldăeni and Roșiori Nord railway stations , the 1000/2000 Hz track inductors of the signal BL24 were hit by a component detached from the diesel multiple unit AM 974, which formed the passenger train Regio no.9386, got by the railway undertaking SNTFC “CFRCălători” SA.	iii	21.08.2025
33	11.12.2024	In the railway county Craiova, track section Piatra Olt – Podu Olt (non-electrified single-track line), in Lotru railway station , the freight train no.57423 (got by the railway undertaking PSP Cargo) was set in motion from the diverging line no.2 without having the traffic order, and forced the switch no.2.	iii	10.07.2025
34	23.12.2024	In the railway county Constanța, track section Constanța – Medgidia, in Palas railway station , the route setting for the departure of the passenger train no.1680023 (got by the railway undertaking SNTFC “CFR Călători” SA) was erroneously executed simultaneously with the shunting route from track L4 Tranzit to track L1D, for the purpose of the run around operation of a catenary maintenance machine.	iii	15.04.2025

- (1) **Legal basis of the investigation:** i = According to the Safety Directive, ii= Upon the national legal basis (that covers the possible areas excluded by the art.2, paragraph 2 of the Safety Directive), iii= Optional – other criteria (National norms/regulations, to which the Safety Directive does not refer).

3.3. Researches (or safety surveys) completed or ordered in 2024

Surveys ordered in 2023 and completed in 2024

Order date	Study name (classification type, localization)	Legal basis of the investigation (1)	Complementary data
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(1) **Legal basis of the investigation:** i = According to the Safety Directive, ii= Upon the national legal basis (that covers the possible areas excluded by the art.2, paragraph 2 of the Safety Directive), iii= Optional – other criteria (National norms/regulations, to which the Safety Directive does not refer).

Surveys ordered in 2024 and completed in 2024

Order date	Study name (classification type, localization)	Legal basis of the investigation (1)	Complementary data
31.05.2024	Determination of the chemical composition, metallographic structure, and mechanical properties of five rail piece of rails from CNCF “CFR” SA – railway county Craiova. Expert analysis carried out as part of the investigation into the incident that occurred on 16 January 2024, at 01:20 o’clock, in the railway county Craiova, track section Craiova – Caracal (electrified double-track line), in the area of turnout no. 16 at the Y end of railway station Leu, in the running of freight train no. 68322 (got by the railway undertaking SC Global Rail Solutions SRL), involving the derailment of 11 wagons, 2 of which overturned.	i	25.07.2024
25.11.2024	Extrajudicial expert report on turnout no. 5, diverging track line 2, at railway station Șag, Arad County, aiming to determine the cause of the switch rail breakage. Expertise carried out as part of the investigation into the incident that occurred on 19 September 2024, at 07:05 o’clock, in the railway county Timișoara, track section Timișoara Nord – Arad (electrified single-track line), during the entry of passenger train Regio no. 2601 (got by the railway undertaking SNTFC “CFR Călători” SA) into the railway station Șag, on turnout no. 5, through the derailment of the last axle, in the running direction, of the second coach of the train.	i	12.12.2024

Studies ordered in 2024 and remaining incomplete by the end of the year

Order date	Study name (classification type, localization)	Legal basis of the investigation ⁽¹⁾	Complementary data
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- (1) **Legal basis of the investigation:** i = According to the Safety Directive, ii= Upon the national legal basis (that covers the possible areas excluded by the art.2, paragraph 2 of the Safety Directive), iii= Optional – other criteria (National norms/regulations, to which the Safety Directive does not refer).

3.4. Summary of the investigations completed and closed in 2024

Along 2024 there was completed and closed a number of **58** investigations, from which 32 opened in 2023, the rest of 26 being opened in 2024.

Forwards, it is presented the synthetical situation of 58 investigation reports completed and closed in 2024.

3.4.1. The accident that occurred on **7th January 2023**, at 02:24 o'clock, in the railway county Cluj, track section Războieni - Apahida (electrified double-track line), in Câmpia Turzii railway station, in the running of the freight train no.56004 (got by the railway undertaking SNTFM „CFR Marfă” SA), wagon no.31537982021-2 derailed from the axles of second bogie, in the running direction.

The investigation report was completed on 04th January 2024.

Causal factor

The derailment occurred due to the detachment of the hanger of the brake block holder from the assembly with the bogie frame, followed by the fall of the brake beam on the safety strap and its breakage caused by vibrations transmitted by the flat wheels and entering of the end of the brake beam (from the axle no.3) between the rail and the wheel no.6.

Contributing factors

- improper performance, in the railway station Dumbrăveni, of the temporary repairs of the flat areas on the running surface of the wheels from the second bogie in the running direction of the wagon no.31537982021-2.
- acceptance and keeping in traffic of the wagon no.31537982021-2, with a failure that did not allow it running loaded.

Systemic factor

Lack of an assessment of the risks associated to the dangers of acceptance and keeping in service a wagon with failures that did not allow its running loaded.

Measures taken after the accident

Following the accident, SNTFM „CFR Marfă” SA took the next measures in order to avoid similar incidents/accidents in the future:

- the accident was discussed with the own employees;
- it was disposed that within the technical inspections (composition, transit, arrival), the technical examiners pay an important attention to the visual inspection of the train and to the instruction approach of the wagons to which there were found scaling and flat areas.

Additional remarks

During the investigation, there were the next additional remarks about some deficiencies at the track geometry, but which, considering the way the accident happened, did not influence its occurrence:

- exceeding of the accepted tolerances of the cross level of a rail against the another one;
- exceeding of the value accepted for the counter-cants of the outer rail;
- the gauge variations over 2 mm/m, at the derailment site.

Safety recommendations

The accident happened on 7th January 2023, in the railway station Câmpia Turzii, was caused by the failures existing at the wheel's afferent to bogie no.2 from the wagon no.31537982021-2.

During the investigation, there was found that the wagon derailed following the accident was accepted and kept in running, with a failure that was not allowing its running loaded (flat areas on the running surface of the wheels).

Preamble of the safety recommendation no.446/1

The investigation commission found that the railway undertaking did not assess the risks associated to the dangers generated by the acceptance and keeping in running a wagon with failures that did not allow its running loaded.

Considering the findings and conclusions of the investigation commission, before mentioned, for the improvement of railway safety and prevention of similar events, AGIFER considers timely to address ASFR the next safety recommendation, without excluding the extension of the recommendation also to other railway undertakings:

Safety recommendation no.446/1

Romanian Railway Safety Authority – ASFR shall ask the railway undertaking SNTFM „CFR Marfă” SA to assess the risks associated to the dangers generated by the acceptance and keeping in traffic a wagon with failures that do not allow its running loaded and to establish possible measures for keeping these risks under control.

3.4.2. The train accident that occurred on **26th January 2023**, at 14:10 o'clock, in the railway county București, track section București Nord - Videle (electrified double-track line), in the railway station Bucureștii Noi, line 1C, Km 0+843, in the running of freight train no.57704 (got by the railway undertaking SC CER-FERSPED SA), the first axle from the locomotive EA 038 derailed, in the running direction.

The investigation report was completed on 23rd January 2024.

Causal factor

Exceeding of the derailment stability limit, following the improper condition of the track, because of keeping the track geometry outside the tolerances accepted in operation.

Contributing factors

Ineffective monitoring of the track condition during the suspension of the track maintenance works.

Systemic factors

- ineffective management of the risks associated to the danger generated by the exceeding of the tolerances accepted for the track geometry;
- provision with unsuitable material and human resources, against the necessary one, for the performance of the corresponding maintenance of the line geometry between the accepted tolerances.

Measures taken after the accident

After the accident, on line 1C, all the improper sleepers were replaced, the track bed was supplemented at km 0+843 and the level was rectified by hand sleeper packing

Additional remarks

During the investigation, following the analysis of the documents submitted to the investigation commission, by the involved actors, it was found that the maximum duty for the locomotive was not met with, that is the duty of the crew from the locomotive EA 038, (head locomotive hauling the freight train no.57704), was 13 hours and 10 minutes, from the start of the duty in the railway station Constanța Port Terminal Ferry - Boat until the accident occurrence, against the provisions of the Minister of Transports' Order no.256 from 29th March 2013.

Safety recommendations

The accident happened on 26th January 2023, on the passing route through the railway station Bucureștii Noi, on line 1C, km 0+843, was generated by the improper technical condition of the railway infrastructure.

During the investigation, it was found that the improper technical condition of the track was generated by the unsuitable maintenance, that was not performed in accordance with the provisions of the practice codes (reference documents associated to Safety Management System procedures of infrastructure administrator).

Considering the similar railway events happened between 2015÷2023 in the railway county București, presented into chapter 4.e. „Similar previous accidents or incidents” and taking into account that there were issued recommendations in this respect, the commission considers that there is no longer need to issue other similar recommendations.

3.4.3. The train accident that occurred on **22nd February 2023**, at about 14:40 o'clock, in the railway county Cluj, track section Jibou - Șarmășag (non-electrified single-track line), between the railway stations Zalău Nord and Mirșid, in the running of passenger train no.4363 got by the railway undertaking SNTFC „CFR Călători” SA), both axles (9 and 10) from the last but one bogie of the multiple unit ADH nr.1416 derailed in the running direction.

The investigation report was completed on 19th February 2024.

Causal factor

Exceeding of the derailment stability limit, following the load transfer of the first right wheel, against the running direction, from the motor car no.1416 and increase of the lateral force (guiding one) on

this wheel, that was running on the exterior rail of the curve, given the existence of the next nonconformities at the track superstructure and at the wheelset derailed:

- existence within the track, at the accident site, a track section with the gradient of the track twist over the maximum accepted value;
- exceeding of the gauge variation between the points before the derailment point, as well as exceeding of tolerances in operation for the values of the close track versines and between the maximum and minimum versine for a curve;
- existence of some plastic deformation at the metalastic springs, that led to an insufficiency of vibrations absorbing effect and permanent static load transfers of the first right wheel from the motor car no.1416, in the running direction.

Contributing factor

Improper fixing of the failures registered following the control of the track geometry with the testing and recording car.

Systemic factors

- lack of periodical repairs for keeping the corresponding maintenance of the lines and the track geometry between the accepted tolerances, following the provision with insufficient human resources for these activities.
- failure in the getting by CNCFR" CFR" SA the safety traffic staff (track and dangerous points gangers, foreman gangers in charge with the track maintenance);
- keeping in running of the multiple unit ADH no.1416, after exceeding the deadline of time and km run, for the performance of planned repairs;
- lack, within the technical specifications for the planned inspections, of some provisions for the control and maintenance of metalastic springs from the carrying bogie of the motor car, that composed the multiple unit type ADH.

Measures taken after the accident

- the concrete sleepers, damaged following the accident, were replaced and there were performed packing of the sleepers with heavy track vehicles;
- in July 2023 there were performed periodical repairs with heavy track vehicles, the track bed of broken stone from the accident site being completely cleaned.

Additional remarks

Along the investigation there were the next additional remarks about the deficiencies and lacks, without relevance on the causal, contributing or systemic factors of the accident:

- following the not-supplying with necessary materials and non-performance of periodical repairs, on kept within the track rails with wears over the value accepted in operation, in 2020. They were replaced in 2021;
- in the sheet for the curves control, there are written down the measures at the gauge, level crossing and deflections, when the district staff was out of duty or the performance of works at other km.

Safety recommendations

The investigation revealed that the motor coach no.1416 was in the normal running time and at this type of multiple units provided with metalastic springs there were no more investigations of the derailments caused by this type of suspension, from which be learned lessons.

At the carrying bogie of the motorised coach no.1416, the investigation commission identified that the metalastic springs used, there were not stipulated controls, adjustments or replacements during the planned repairs.

Development of advanced wears of the metalastic springs, that can generate the derailments, led to the conclusions that the periodical control of these springs may be required, considering that these are safety critical parts.

Considering the findings and conclusions of the investigation above mentioned, for the improvement of railway safety and prevention of similar events, AGIFER issues next safety recommendation:

Safety recommendation no.448/1

Romanian Railway Safety Authority - ASFR shall ask the railway undertaking SNTFC" CFR Călători" SA to assess the danger represented by the lack, within the technical specifications for the planned inspections, of some provisions for the control and maintenance of metalastic springs from

the carrying bogie of the motor car, part of the multiple unit type ADH and to establish effective measures for keeping under control the risks generated by it.

3.4.4. The train accident that occurred on 28th February 2023, at about 00:05 o'clock, in the railway county Braşov, track section Braşov – Sighişoara (electrified double-track line), between Apaţa and Augustin railway stations, third axle from the 8th wagon of freight train no.67815 derailed (got by the railway undertaking SC CER- FERSPED SA).

The investigation report was completed on 07th February 2024.

Causal factor

Improper condition of one part ensemble between the supports from the fixing collars of the air tank and the wagon frame, that led to the fall of the air tank between the rails.

Contributing factor

Existence on the surfaces of the wheels R1 and R2 of some flat areas with values over the maximum limit accepted for the running of loaded wagons.

Systemic factor

Inobservance, by the economic operator RSCO – keeper of the rolling stock, of the procedures for introduction, respectively reception and putting into operation, in and from the contract repairing unit (STM), of the rolling stock, according to the system procedures worked out by RSCO.

Safety recommendations

Preamble of safety recommendation no.449-1

Along the investigation resulted that the inobservance, by the economic operator SC ROLLING STOCK COMPANY SA – keeper of the rolling stock, of the procedures for introduction, respectively reception and putting into operation, in and from the contract repairing unit (SIRV SRL Săcele), of the rolling stock, according to the system procedures worked out by SC ROLLING STOCK COMPANY SA.

Following the control of the way the technical reception activity is regulated and performed– at the certification keeper ERI - SC ROLLING STOCK COMPANY SA- the investigation commission found that within the contract relationships with SIRV SRL Săcele, the activity above mentioned was not observed, regarding the repair type RIF, so the staff in charge with technical reception from SC ROLLING STOCK COMPANY SA not being present.

Considering the findings and conclusions of the investigation commission, above mentioned, for the improvement of railway safety and prevention of similar events, AGIFER considers timely to address Romanian Railway Safety Authority – ASFR the next safety recommendation:

Safety recommendation no.449-1

Romanian Railway Safety Authority shall ask the economic operator SC ROLLING STOCK COMPANY SA the revision of the provisions from the own system procedure PSF-45 – Identification of dangers in the management of the maintenance of wagon and locomotive stock and from the procedures that define the control measures applied to the maintenance carried out and re-putting in operation of the wagons

3.4.5. The train accident that occurred on **13th March 2023**, at 03:54 o'clock, in the railway county Craiova, in Roşiori Nord railway station, a rear-end collision occurred between freight train no. 50514 (got by the railway undertaking Deutsche Bahn Cargo Romania) and passenger train no. 1822 (got by the railway undertaking SNTFC „CFR Călători” SA), after the latter approached the former from behind.

The investigation report was completed on 11th March 2024.

Causal factors

- lack of braking measures for the train stops before the light home signal YM of Roşiori Nord railway station, which was on „STOP without pass the signal in stop position!” – a light red unit to the train;
- unjustified pushing, by the driver, of the button „Commanded passing of the signal in stop position” when the locomotive EA 637 ran by the inductor of the light home signal YM of Roşiori Nord railway station;

- delayed taking of braking measures and application of train service brake instead of a rapid one, after passing the light entry signal YM of the railway station Roşiori Nord

Contributing factors

- fatigue of the driver of passenger train no.1822;
- lack of immediate notification of the collision between the passenger train no.1822 and the freight one no.50514, that had to be made by the driver from the passenger train no.1822, it generating the increase of the consequences seriousness.

Systemic factors

- lack of an assessment of the risks generated by the danger represented by the unjustified/non-instruction pushing of the button „Commanded passing the signal in stop position” at the passing by the signals that order the stop;
- lack of an assessment of the risks generated by the danger represented by the noncompliance with the instruction provisions by the trains crew, regarding the obligation to notify soon the accidents/incidents occurrence.

Measures taken after the accident

Following the accident, SNTFC issued the papers no. RGSC1/5/265/17.03.2023 and DMR/2/2/101/20.03.2023, that include measures for avoiding the occurrence of events similar to the accident happened on 13th March 2023 in Roşiori Nord railway station.

Safety recommendations

Considering the causal, contributing and systemic factors identified along the investigation, as well as the measures already taken after the accident, in order to prevent similar accidents/incidents in the future, in accordance with the provisions art.26, paragraph(2) of the Emergency Government Decision no.73/2019 for the railway safety, the investigation commission considers timely to issue the next safety recommendation, addressed to Romanian Railway Safety Authority - ASFR, that, upon its limits of competences, takes the necessary measures in order to be sure that the safety recommendations issued by AGIFER are considered and, if case, implemented. According to the provisions of art.26, paragraph (3) of the Emergency Government Decision no.73/2019 ASFR shall notify AGIFER, periodically, once every 6 months at least, about the measures taken or planned, following the recommendations issued.

Preamble of safety recommendation no.450/1

Along the investigation it was found, as it is mentioned at point 4.d.” Feedback and control mechanisms.....”, that the railway undertaking SNTFC identified and assessed a part of dangers developed in case of this accident. Considering the seriousness of damages resulted from the accident and frequency change, the basic elements on which the risk is established and implicitly the measures for its monitoring are disposed, AGIFER considers timely to issue the next safety recommendation:

Safety recommendation no.450/1

SNTFC re-assessment of the risks associated to the next dangers and taken of some effective measures for keeping them under control:

- passing the signals on danger;
- delayed application of train brake;
- locomotive crew fatigue or lack of attention;
- non-compliance with the maximum running speeds stipulated by the working timetable, sheets for the notification of speed restrictions or running order, by the locomotive crew.

Preamble of safety recommendation no.450/2

Along the investigation, it was found, as it is mentioned at point 4.d.” Feedback and control mechanisms.....”, that the railway undertaking SNTFC did not identify and assess some dangers that developed in case of this accident, because of it AGIFER considers timely to issue the next safety recommendation:

Safety recommendation no.450/2

SNTFC re-assessment of the risks associated to the next dangers and taken of some effective measures for keeping them under control:

- unjustified/non-instruction pushing of button „Commanded passing the signal in stop position” at the running by the signals ordering stop

3.4.6. The train accident that occurred on **17th March 2023**, at about 20:30 o'clock, in the railway county Braşov, track section Braşov – Sighişoara (electrified double-track line), between Beia and Caţa railway stations, when the both bogies from the last but one wagon no 31533960791-5 of the freight train no 66358 derailed (got by the railway undertaking SNTFM „CFR Marfă” SA. The investigation report was completed on 06.03.2024.

Causal factor

Not ensuring of the free ends of the chain used for the anchorage/fixing of the military equipment, backwards in the running direction, on the antepenultimate wagon of the train, and that wagon had holes in the floor where the lateral stanchions are put.

Contributing factor

Improper assembling on the track bed of the check rail from the bridge km.262+858.

Systemic factors

- Summary activity (unstudied) performed by SNTFM for the identification of the risks associated to the railway operations, keeping the competences of the jobs involved in the reception of the wagons loaded and monitoring of the activity in the stations assigned.
- Improper monitoring (ineffective) of the line district activity by the staff having responsibilities of inspection and control within Track Section L2 Sighişoara and the railway county Braşov.

Measures taken after the accident

After the accident occurrence, into the Working Point Braşov Triaj there was disposed the additional training of Movements/Commercial and Wagons staff with the provisions from the Annex II RIV, loading provisions „How to load and handle – Wheeled or tracked vehicles”.

In addition to these above mentioned, it was also disposed that at the reception of the trains loaded with wheeled vehicles, to check mandatory that all the elements used for the vehicles ensuring (chains, belts, etc), be ensured against falling along the route, by their binding or their fixing on the wagon floor.

The military unit from the Ministry of Internal Affairs took measures for training the staff that participates in the loading of the military equipment on wagons, to ensure the excess of anchoring materials against their fall from the wagon.

Additional remarks

Along the investigation, there was identified the next safety problem without relevance for the conclusions on the accident causes:

Annex II RIV, worked out by UIC, was replaced by the same organization by Trends/guides/rules for loading. According to the statements from UIC site (<https://uic.org/freight/load-safety/article/loading-guidelines>), for 2022 ERA considers these norms as being „Acceptable means of conformity” that guarantee that the freight loaded on the wagon is ensured and rested thus along the journey to the client. These are updated and completed periodically (last version being issued on 1st April 2023).

Along the investigation, it was found that the railway undertaking has no provisions/procedures by which ensure permanently that the practice codes used for loading and checking the loading way of the wagons are updated periodically, in order to ensure that the transport operations are safely performed.

Safety recommendations

Preamble safety recommendation no.451/1

Along the investigation, it was found that the assembling on the track bed of the check rail from the bridge at km.262+858 was unsuitable, both before the accident and after the performance of the repairs after the accident. It was also found that in the railway county Braşov, there are still such situations where the check rails of the bridges did not play their part for which they were assembled.

Safety recommendations no.451/1

Romanian Railway Safety Authority – ASFR shall ask CNCF „CFR” SA to make an action plan for reducing the risks of improper assembling of the check rails on the bridges from whole managed infrastructure (see the provisions of art.28, point 14 from the Instruction no.314/1989 of norms and tolerances for the track construction and maintenance-lines with normal gauge).

Safety recommendations associated to the additional remarks.

Preamble of safety recommendation no.451/2

Annex II RIV was replaced by Guidelines of loading worked out by UIC. Agency for European Railways – ERA considers these norms as being „Acceptable Means of Conformity” that guarantee that the freight loaded on the wagon is secured and rested in a such condition along the journey to the client. These are updated and completed from time to time.

Safety recommendation no.451/2

Romanian Railway Safety Authority – ASFR shall ask the railway undertaking SNTFM „CFR Marfă” SA to work out some provisions/ procedures for ensuring permanently that the practice codes used for loading and checking the loading way of the wagons are updated from time to time, in order to ensure that the transport operations are performed in safety conditions.

We underline that, although the safety recommendation aims the activity of railway undertaking SNTFM (it being analysed along the investigation of the railway accident), it is not restricting, it could be extended at other railway undertakings at which ASFR finds similar gaps along the surveillances.

3.4.7. The train accident that occurred on **28th March 2023**, at about 06:20 o'clock, in the railway county Craiova, track section Alunu - Băbeni (non-electrified single-track line), between the railway stations Berbești and Popești, km 21+550, in the running direction of freight train no.60566(got by the railway undertaking SNTFM „CFR Marfă” SA.), when the first axle from the first bogie of the banking locomotive DA 1129 derailed.

The investigation report was completed on 26.03.2024.

Causal factor

Hitting of buffing gear, fallen from the wagon no.81536653796-8, by the banking locomotive DA 1129, of the freight train no.60566, followed by the climbing of the exterior rail of the track by the left wheel of the first axle, in the running direction.

Contributing factor

- existence of an old crack of about 40% from the breaking surface of a screw ensuring the fastening of the front left buffing gear, in the running direction, on the front beam of the wagon no.81536653796-8;
- taking for transport the wagon no.81536653796-8, after being loaded by the beneficiary, and its coupling in the freight train no.60566, without being technically inspected by the staff competent in this respect;
- the additional collision forces, generated by the reactions appeared into the train, in its running, following the inconsistent coupling found between some wagons (6 active buffing gears improperly fastened).

Systemic factors

Lack of an assessment of the risks associated to the danger represented by the fall, along the running, of a part from a train wagon.

Safety recommendations

Along the investigation, it was found that the event happened following the fall of a part (buffing gear) from the wagon no.81536653796-8 of freight train no.60566, that was hit afterwards by the locomotive DA 1129, the train banking locomotive. Considering the findings and conclusions of the investigation commission before mentioned, for the improvement of the railway safety and prevention of similar events, AGIFER considers timely to issue the next safety recommendation:

Safety recommendation no.453/1

The railway undertaking SNTFM „CFR Marfă” SA shall assess the risks associated to the danger represented by the fall, in the running, a part of the train wagon and shall dispose effective safety measures for keeping them under control.

3.4.8. The train accident that occurred on **18th April 2023**, at about 19:26 o'clock, in the railway county Timișoara, track section Ronaț Triaj Gr.D – Cenad (non-electrified single-track line), non-interoperable track section (managed by SC RC-CF Trans SRL Brașov), between Sânnicolau Mare and Cenad railway stations, when the first axles from those two bogies of the motorised car and the first axle from the first bogie, from the trailer vehicle derailed. Both cars where in the composition

of the multiple unit AMX 556, forming the passenger train no.11187 (got by the railway undertaking SC RegioCălători SRL Braşov).

The investigation report was completed on 03.04.2024.

Causal factor

Existence within the track, at the accident site, a group of improper normal consecutive wooden sleepers, whose technical condition could no longer ensure the safety fastening of the metallic plates, leading to the exceeding of the maximum accepted limit for the track gauge in operation, making both the loosening of the support and guiding capacity of the rails under the dynamic action of the rolling stock.

Contributing factor

Lack, along the last 10 years, before the accident, the measurements made with the testing and recording car.

Systemic factors

- provision with unsuitable material and human resources, against the necessary one, for the performance of the corresponding maintenance of the line geometry between the accepted tolerances.
- ineffective management of the risk associated to the dangers „Exceeding of the maximum value accepted for the track gauge” and „Keeping within the track of improper wooden sleepers” by the infrastructure manager.

Safety recommendations

Considering the causal, contributing and systemic factors identified during the investigation, in order to prevent the occurrence of future similar accidents/incidents, in accordance with the provisions of art.26, paragraph (2) from the Emergency Government Ordinance no.73/2019 on railway safety, the investigation commission considers timely to issue the next safety recommendations, addressed to Romanian Railway Safety Authority - ASFR, that, upon its competences, takes the measures necessary in order to be sure that the safety recommendations issued by AGIFER are taken into account and, if case, they are followed. In accordance with the provisions of art.26, paragraph (3) from the Emergency Government Ordinance no.73/2019 ASFR shall notify AGIFER periodically, at 6 months, at least, about the measures taken or planned consequently the recommendations issued.

Preamble of safety recommendation no.454/1

During the investigation it was found, as it is mentioned at point „4. d. Feedback and control mechanisms, including the management of risks and safety, as well as the monitoring processes”, that the railway infrastructure manager SC RC-CF Trans SRL Braşov identified and assessed the dangers developed in case of this accident, because of it AGIFER considers timely to issue the next safety recommendation:

Safety recommendation no.454/1

Re-assessment by the railway infrastructure manager SC RC-CF Trans SRL Braşov the risks associated and the establishment of some effective measures for keeping under control the next dangers:

- non-provision with the material and human resources, necessary for the performance of railway infrastructure maintenance;
- exceeding of maximum value accepted for the track gauges;
- keeping within the track the improper wooden sleepers.

3.4.9. The train accident that occurred on **17th May 2023**, at about 02:57 o'clock, in the railway county Bucureşti, track section Videle – Giurgiu (non-electrified single-track section) between Toporu and Chiriacu railway stations, km 31+173, when the locomotive DA1692, a light one and running like freight train no.79562 (got by the railway undertaking SC United Railways SRL) collided head-on with the locomotive DA1566, a light one and running like freight train no.88324 (got by the railway undertaking SC Rail Cargo Carrier - România SRL).

The investigation report was completed on 16 May 2024.

Causal factors

- lack of the braking measures for stopping the light locomotive DA1692, running like train no.79562, before the light exit signal XI of the railway station Toporu, whose position was „STOP without pass the signal in stop position!” – a light red unit to the train;
- unjustified pressing of the button „Commanded passing a signal in stop position” (it being left on pressed position), by the driver along the route, as well as the running with IVMS installation set on a level superior to the category of freight train no.79562;
- loss of the driving capacity by the driver of the locomotive DA1692, because he fell asleep during its duty;
- missing of the train manager in the driving cab of the locomotive DA1692 in the running of the freight train no.79562.

Contributing factor

Physical and mental conditions of the crew from the locomotive DA1692, that were affected by the fatigue cumulated because of frequent exceeding of the continuous maximum duty accepted for the locomotive, missing of the corresponding rest time at home and outside of it, as well as the consumption of alcohol during the duty.

Systemic factors

- ineffectiveness of the control mechanisms and of the safety management system procedures, that ensure the compliance with the provisions of Minister of Transports and Infrastructure’s Order no.256/2013;
- lack of measures necessary to keep under control the dangers identified and recorded into the Register of Risks;
- lack of identification and implicitly of the assessment of the dangers represented by:
 - not taking of braking measures by the locomotive’s crews, according to the situation imposed by the regulations in force;
 - non-instruction operation of the safety and vigilance equipment’s, as well as of the installations for the automatic control of the train speed, providing the locomotive;
 - missing of the train manager into the driving cab of the locomotive DA1692 during the trains running, in accordance with the regulations in force.

Measures taken after the accident

Following the accident, the railway freight undertaking SC United Railways SRL issued the decision no.224 from 18th May 2023, appointing the Commission for the re-assessment of the risks and identification of the dangers, following the accident occurrence, in order to analyse the accident and its consequences, so to identify the additional measures for keeping the risks under control.

Following this decision, the register of risks was filled with the measures for the risks control, as follows:

- addition at the control topics the control of the meeting with the Minister of Transports’ Order 256/2013;
- notification of the situations where the installations INDUSI and DSV are out of working;
- addition at the control topics the control of the meeting with Orders 17/A/447/1971 and 17DA/610/1987;
- addition at the control topics the control of the meeting with Minister of Transports’ Order no. 855/1986;

Also, by the decision no.244 from 22nd May 2023 was disposed the intensification of the controls, increasing the minimum norms of the staff in charge with monitoring.

Following the analysis of the accident draft report, ASFR, through the paper no.2010/225/13.05.2024, notified as follows:

- Romanian Railway Safety Authority – ASFR, by the paper no.1000/61/17.05.2023 limited the next elements of the unique safety certificate no.RO 1020210005, valid from 24th January 2021 until 23rd January 2026, got by the railway undertaking United Railways SRL, respectively: Performance of transports in accordance with art.1 paragraph (10) letter g) from the Emergency Ordinance no.12/1998, with further amendments, for the track sections recorded in the List of track sections accepted following the assessment for the granting of the unique safety certificate

no.RO 1020210005 to the railway undertaking United Railways SRL, according to point no.4.4 from the certificate.

Also, Romanian Railway Safety Authority – ASFR imposed a series of measures to end the limitation, as follows:

- checking by ASFR the knowledge of whole safety staff of the railway undertaking United Railways SRL, in accordance with the Minister of Transports and Infrastructure Order no.900/2023 regarding the settlement of some emergency prevention measures for the improvement of railway safety;
- submission by the railway undertaking United Railways SRL the evidences of identification all dangers and the revision the list of risks from its own activity, as well as the measures to cover them, following the accident happened on 17th May 2023 and control of right and effective implementation of the processes and procedures from the safety management system, including the technical, operational and organization measures for the risks control.

Romanian Railway Safety Authority – ASFR performed state inspections at the railway undertaking United Railways SRL, ended by drafting a finding note no.2310/384 from 24th May 2023.

By the address no.1000/460/25.05.2023, ASFR decided to end the limitation of transports on the track section recorded in the List of track sections accepted following the assessment for granting the unique safety certificate no.RO1020210005, valid from 24th January 2021 until 23rd January 2026, got by railway undertaking United Railways SRL, according to point 4.4 from the certificate, upon the next conditions:

- the railway undertaking United Railways SRL submitted to ASFR, for 6 months, on 20th of each month, the results of monitoring performed according to Regulation (EU) no.1078/2012, regarding the effectiveness of established additional safety measures, including compulsory the detailed situation on the meeting with Minister of Transports' Order no.256/2013, respectively the concrete results following the control of all route sheets of the motorized railway vehicles used;
- performance by ASFR staff of monthly surveillances, for 6 months, mainly for the control of the monitoring way, as well as the compliance with the additional measures according to the situations sent.

After these 6 months, the result was that the requirements and the commitments were compiled and the specific regulations were meet with.

Additional remarks

The data recorded by IVMS installations put in evidence many exceeding of maximum speed stipulated in the working timetable, as follows:

- between Jilava – Chiajna there were 5 speed exceeding with values of 4 – 12 Km/h (figure no.3);
- between Chiajna – Videle there were 5 speed exceeding with values of 4 – 8 Km/h (figure no.4);
- between Videle - Toporu there were 8 speed exceeding with values of 4 – 14 Km/h (figure no.5).

These speed exceeding are high and on important distances and they were generated by the serious fatigue following the infringement of the maximum accepted continuous duty and minimum rest time at home and outside.

Safety recommendations

Considering the causal, contributing and systemic factors identified during the investigation, as well as the measures already taken after the accident, in order to prevent the occurrence of future similar accidents/incidents, in accordance with the provisions of art.26, paragraph (2) from the Emergency Government Decision no.73/2019 for railway safety, the investigation commission considers timely to issue the next safety recommendations, addressed to Romanian Railway Safety Authority- ASFR, that, upon its competences, takes the measures necessary to ensure that the safety recommendations issued by AGIFER are taken into account and, if case, they are followed. According to the provisions art.26, paragraph (3) from the Emergency Government Decision no.73/2019 ASFR shall notify AGIFER periodically, at 6 months, at least, about the measures taken or planned following the recommendations issued.

Preamble safety recommendation no.455/1

During the investigation there was found that the railway undertaking SC United Railways SRL identified and assessed the risks associated to the dangers mentioned into chapter „4. d. Mechanisms

of feedback and control, including the management of risks and safety, as well as monitoring processes”, but it did not take measures for keeping them under control.

Safety recommendation no.455/1

The railway freight undertaking SC United Railways SRL shall re-assess the risks associated and establish effective measures for keeping under control the next dangers:

- exceeding of the maximum duty accepted for the locomotive;
- fatigue generated by the exceeding of the maximum duty accepted for the locomotive;
- passing in stop position the signals/indicators that are on stop position;
- performance the duty under the influence of alcohol, narcotics, drugs and/or substances that can reduce the working capacity;
- not-tracking and non-compliance with the positions of fixed and mobile signals and of the indicators that display stop for the driver;
- non-compliance with the maximum speeds accepted.

Preamble of safety recommendation no.455/2

During the investigation, there was found that the railway undertaking SC United Railways SRL did not identify and implicitly assess the risks associated to the dangers mentioned into chapter,,4. d. Mechanisms of feedback and control, including the management of risks and safety, as well as monitoring processes”.

Safety recommendation no.455/2

The railway freight undertaking SC United Railways SRL shall assess the risks associated and establish effective measures for keeping under control the next dangers:

- not-taking of braking measures by the locomotives crew in accordance with the situation imposed by the regulations in force;
- non-instructional operation of the safety and vigilance installations, as well as of the installations for the automatic control of trains speed, providing the locomotive;
- missing of the train manager into the driving cab of the locomotive DA1692, during the trains running, in accordance with the regulations in force.

3.4.10. The train incident that occurred on **8th June 2023**, at about 04:30 o'clock, in the railway county Braşov, track section Braşov – Copşa Mică (electrified double-track line), in Sighişoara railway station, in the running of freight train no.66691-007 got by the railway undertaking Grup Feroviar Român SA. The train which has set the reception route on the diverging track no.5 (from Albeşti Târnava), passed the exit signal X5 on danger „STOP without pass the signal in stop position!”, forcing the switch no.26 and entered on the rote set for the freight train no.57700-005 (got by the railway undertaking SC CER FERSPED SA).

The investigation report was completed on 23 May 2024.

Causal factor

Not paying attention to the line and to the position of the exit signal corresponding to the parking line of the train no.66691-007 in the railway station and delay taking of braking measures to stop before the exit signal, that was in stop position, amid the fatigue of the driver, generated by the exceeding of the maximum accepted continuous duty.

Contributing factor

No.

Systemic factors

Not elaborated identification of the risks associated to the railway operations performed by SC Grup Feroviar Român SA for the risk category” railway transport”.

Additional remarks

Along the investigation, there were identified the next safety problems without relevance for the conclusions on the incident causes:

- electronic signal box from the railway station Sighişoara was not complete, that is in the office of the movements inspector there was no printer for printing the registered alerts – according to the operation instructions – so, the alert indications could not be printed even if there have been existed a procedure that establishes the person to do it – neither this issue was established.

- In the railway county Braşov there was no effective monitoring of the movement's inspector activity from the railway stations provided with electronic signal box, by drafting control topics or a procedure/working instruction that shall impose the control of the information – that include also the registered alerts/failures – from the "book" of the installation at the end of the duty program of each movement's inspector.
- during the identification of risks associated to the railway operations performed by CNCF, for the activity „Management of railway traffic”, there was not identified like danger (see chapter definitions and abbreviations), failure to notify an accident/incident.

Safety recommendations

Considering the causal and systemic factors identified along the investigation, for the prevention of future similar accidents/incidents, in accordance with the provisions of art.26, paragraph (2) from the Emergency Government Decision no.73/2019 for the railway safety, the investigation commission considers timely to issue the next safety recommendations, addressed to Romanian Railway Safety Authority - ASFR, that, upon the limits of its competences, takes the necessary measures in order to ensure that the safety recommendations issued by AGIFER are considered an, if case, they are followed. According to the provisions of art.26, paragraph (3) from the Emergency Government Decision no.73/2019 ASFR shall notify AGIFER periodically, at 6 months at least, about the measures taken or planned following the safety recommendations issued.

Preamble of safety recommendations no.456/1

Along the investigation it was found that SC Grup Feroviar Român SA performed a non-elaborated identification of risks associated to the railway operations for the risk category „railway transport”. The investigation commission considers necessary to issue the next safety recommendation:

Safety recommendation no.456/1

Re-assessment by SC Grup Feroviar Român SA the risks associated to its own railway operations and the establishment of effective measures for keeping under control the dangers "inobservance of the provisions for the maximum accepted continuous duty for the locomotive", "wrong understanding by the driver of the positions of the fixed and mobile signals that are on STOP" and „fatigue/low attention following the exceeding by the driver of the maximum accepted continuous duty for the locomotive”.

Preamble of safety recommendation no.456/2

During the investigation, there were found some deficiencies in the activity of SC Grup Feroviar Român SA, regarding:

- monitoring of maximum accepted continuous duty;
- lessons learned from the accidents and incidents, respectively drafting of investigation reports following the incidents consisting in exceeding of maximum accepted continuous duty;
- monitoring of the activity of railway staff by instructors during the train runnuning.

Safety recommendation no.456/2

Re-assessment by SC Grup Feroviar Român SA of the mentioned activities and taking of measures considered necessary in order to improve the activity.

Preamble of safety recommendation no.456/3

Along the investigation, there were found some deficiencies in the activity of CNCF „CFR” SA – railway county Braşov, regarding:

- monitoring of the activity of the movements inspectors from the railway stations provided with electronic signal box;
- identification of the risks associated to the own railway operations for the activity „Management of railway traffic”, regarding the lack of notification about an accident or incident.

Safety recommendation no.456/3

Re-assessment by CNCF „CFR” SA of the mentioned activities mentioned and of the identification of the associated them.

3.4.11. The train accident that occurred on **1st August 2023**, in the railway county Craiova, track section Roşiori – Videle (electrified double-track line), between Roşiori Nord and Atârnaţi railway stations, in the running of train no. 96212 (got by the railway infrastructure manager CNCF

“CFR” SA), consisting in a derailment of a motorized multifunctional vehicle – MSM type T 3500 FS Colmar no. 6698.

The investigation report was completed on 31 July .2024.

Causal factor

Breakage of intermediary center axle (planetary gear) for the turning of the left wheel (in the running direction of the track vehicle) from the railway axle no.2 (first in the running direction) of the maintenance track vehicle Colmar.

Contributing factor

Lack, within the repairs and maintenances, of periodic non-destructive ultrasonic controls at the intermediary center axles (planetary gear) through which one could have identify possible cracks, developed during the time, at these parts.

Systemic factors

Lack, in the documentation for the maintenance of the track vehicle Colmar, of some provisions that impose performance, periodically, ultrasonic non-destructive controls (CUS) at the intermediary center axles (planetary gear);

Lack of the assessment of the risks generated by the failure during the operation, of the critical railway safety parts from the track vehicles used for the track maintenance.

Additional remarks

During the investigation, there were found that the track maintenance vehicle Colmar has not valid railway technical agreement for use.

Safety recommendations

The railway accident happened on 1st August 2023, between the railway stations Roșiori Nord and Atârnați, was caused by the breakage of the intermediary center axle (planetary gear) for the turning of left wheel (in the running direction of the vehicle) from the railway axle no.2 (first in the running direction) of the track maintenance vehicle Colmar.

Considering the systemic factors identified during the investigation, for the prevention of future similar accidents/incidents, in accordance with the provisions of art.26, paragraph (2) from the Emergency Government Decision no.73/2019 for railway safety, the investigation commission considers timely to issue the next safety recommendations, addressed to Romanian Railway Safety Authority – ASFR, which, under the limits of its competences, takes the necessary measures in order to be sure that the safety recommendations issued by AGIFER are considered and, if case, they are followed. According to the provisions of art.26, paragraph (3) from the Emergency Government Decision no.73/2019 ASFR shall periodically notify AGIFER, at least 6 months, about the measures taken or planned consequently the recommendations issued.

Preamble of recommendation no.457/1

During the investigation one found out the existence of an old crack at the intermediary center axle broken, that crack could not have been identified at the visual inspection stipulated to be done within the current repairs at the maintenance track vehicle. Also, from the checking of the documentation for the track vehicle maintenance resulted that, it does not stipulate non-destructive controls at the safety critical parts of the vehicle, as it is in the case of intermediary center axles.

Safety recommendation no.457/1

CNCF” CFR” SA shall revise the documentation for the maintenance of the track vehicle Colmar, that is to introduce some provisions that impose the periodic performance of ultrasonic non-destructive controls (CUS) at the intermediary center axles (planetary gear).

Preamble of recommendation no.457/2

During the investigation one found that, into the actions for the risks management, CNCF” CFR” SA did not identify and assess the risks generated by the failure in operation of the safety critical parts from the track vehicles used for the track maintenance, as it is the case of the intermediary center axle (planetary gear).

Safety recommendation no.457/2

CNCF” CFR” SA shall assess the risks associated to the dangers generated by the identification in operation the safety critical parts at the vehicles used for the track maintenance.

3.4.12. The train accident occurred on **5th August 2023**, at about 11:55 o'clock, in the railway county Braşov, track section Braşov–Copşa Mică (electrified double-track line), in Dumbrăveni railway station, when a fire burst into the hauling locomotive BB 528 of the freight train. no.58808 (got by the railway undertaking Rail Force SRL).

The investigation report was completed on 24 July 2024.

Causal factor

Appearance of a short circuit between the wires of the contactor solenoid for the fans of the electric motors.

Contributing factor

None.

Systemic factors

None.

Safety recommendations

Considering the findings of the investigation, the fire occurrence, as well as the actions done for its extinguishing, the investigation commission did not consider necessary to issue safety recommendations.

3.4.13. The train accident that occurred on **9th August 2023**, at about 14:50 o'clock, in the railway county Galaţi, on the track section Galaţi Brateş – Connecting Line CSG – Cătuşa, line 706M, in CFU Cătuşa railway station, in the running of freight train no.77546 (got by the railway undertaking SC Unicom Tranzit SA), two wagons for broad-gauge track derailed.

The investigation report was completed on 08 August 2024.

Causal factor

Existence within the switch R8 for broad-gauge track, at the accident site, a group of improper wooden sleepers (that could no more ensure the suitable fastening of the rails and keeping the track gauge between the tolerances limits accepted by the regulation framework), leading to the exceeding of the limit accepted for the track gauge in operation, so being lost the support and guiding capacity of the rails, under the dynamic action of rolling stock.

Contributing factor

Inefficiency of the mechanisms established for the maintenance performance and checking of the infrastructure condition.

Systemic factors

Lack of repairs, to be made by SC Liberty Steel Galaţi SA, in order to assure the safety and security conditions for the performance of transports on lines and switches got.

Additional remarks

The owner of the industrial branch SC Liberty SA Galaţi did not work out and submit, for signing, to CNCF, the contract for operation the industrial branch, although the legislation in force stipulates it.

Safety recommendations

Considering the causal and systemic factors identified during the investigation, in order to prevent similar accidents/incidents in the future, in accordance with the provisions of art. 26, paragraph (2) of the Emergency Government Decision no.73/2019 for railway safety, the investigation commission considers timely to issue the next safety recommendations, addressed to Romanian Railway Safety Authority-ASFR, that, in accordance with the limits of its competences, takes the measures necessary to assure that the safety recommendations issued by AGIFER are considered and, if case, they are followed. According to the provisions of art.26, paragraph (3) of the Emergency Government Decision no.73/2019 ASFR shall notify periodically AGIFER, at least 6 months, about the measures taken or planned following the recommendations issued.

Preamble of safety recommendation no.459/1

During the investigation, one found that the derailment was caused by the improper technical condition of the track superstructure, following the lack of schedule and repairs performance. The investigation commission considers necessary to issue the next safety recommendation:

Safety recommendation no.459/1

SC Liberty Steel Galați SA, like owner, together with SC Euroconstruct SA, like” economic agent authorized by Romanian Railway Authority-AFER”, provider of” line maintenance and repairs”, shall take all the necessary measures in order to assure safety and security conditions for performance transports on the tracks and switches got.

Preamble of safety recommendation no.459/2

During the investigation, one found that the owner of the industrial branch SC Liberty SA Galați did not work out and submit, for signing, to the infrastructure manager CNCF, the contract for the operation of the industrial branch (although the legislation in force stipulates it).

Safety recommendation no.459/2

The owner of the industrial branch SC Liberty SA Galați shall take the measures for working out and submitting, for signing, to CNCF the contract for operation the industrial branch.

3.4.14. The train accident that occurred on 23rd August 2023, in the railway county Brasov, track section Blaj - Praid (non-electrified single-track line), between railway stations Târnăveni Vest and Jidvei, km.23 + 400, a fire broke out in diesel multiple unit AMX 525 of passenger train Regio no. 11316, got by the railway undertaking Regio Passenger train SRL. The investigation report was completed on 20 August 2024.

Causal factor

Mechanical damage to the plastic insulation of the 24 V converter - battery connection wiring by repeated rubbing against a steel strip in the wagon box, which led to the copper core of the conductor coming into contact with the strip, followed by an electrical short circuit which overheated and ignited the plastic insulation of the electrical conductors.

Contributing factor

Execution of the design of the 24 V power supply installation by a company which had not gone through the technical approval procedures laid down in the regulations in force and could not prove that it had the competence and capability to execute the design.

Systemic factors

- the lack of a procedure transferring to own staff, both responsibilities for records management and responsibilities for verifying the conditions to be fulfilled by the diesel multiple unit for authorization/certification/accreditation "from design to disposal";
- the failure by railway undertaking Regio Călători to carry out a risk analysis to determine whether the mileage norms taken over from SNCF are still appropriate for the AMX 525's level of reliability, given that the Poyaud engine was replaced by a Tedom engine which also required a new type of electrical installation.

Additional remarks

On the rules applicable to imported vehicles

The diesel multiple unit AMX 525 was imported, and in this case, the Railway Technical Approval (ATF) is issued by AFER at the request of the supplier, according to the provisions of Article 1 paragraph (2) of Annex 5 to the Order of the Minister of Transportation no.290/2000.

The parties involved provided the investigation commission with a number of ATFs (Railway Technical Approvals), the latest being ATF 33/2010, which was valid until 26.04.2012.

After the expiration of the Railway Technical Approval validity period, a new Railway Technical Approval had to be obtained for AMX 525 or the technical type-approval had to be carried out, at the end of which a Certificate of Technical Approval was to be issued, according to Article 4 paragraph (2) letter c) of Annex 5 to the same Order.

The investigation commission found that at the time of the accident, AMX 525 had not undergone a technical approval process and did not hold a valid Railway Technical Approval or Certificate of Technical Approval, which represented a case of non-compliance.

On the difference between normal service life and service life of AMX 525, i.e. the two types of Approvals issued by AFER

According to the Order of the Minister of Transportation no.1484/2008:

The normal service life is the period during which the input value of the fixed asset is fiscally recovered through depreciation, as per Annex 1, Art.1(b).

Diesel multiple units with standard track gauge have a normal service life of 12–18 years (classification code 2.3.1.1.1, Fixed Assets Catalogue).

Vehicles exceeding this life may be kept in operation based on a Technical Opinion issued by AFER certifying the technical condition.

The investigation commission found that AMX 525 was in service for 55 years (being produced in 1968), a duration significantly exceeding the 35 years prescribed for similar units in Table 1 of NF 67-006:2011.

At the time of the accident, AMX 525 did not hold a Technical Opinion for maintaining in service or for granting a new normal service life.

On compliance with the safety management system (SMS) requirements

From the data submitted by the railway undertaking Regio Călători, it appears that the procedures in the safety management system (SMS) did not contain explicit provisions for taking the diesel multiple unit out of service for planned repairs.

This constitutes a non-compliance with the requirements of Annex I, paragraphs 5.1.3 and 5.2.4, of EU Regulation 2018/762.

Safety recommendations

Preamble Safety Recommendation 460/1

The investigation commission found that Regio Călători's SMS procedures lacked explicit provisions transferring to its own staff both responsibilities for records management and responsibilities for verifying the conditions to be fulfilled by the diesel multiple unit for authorization/certification/approval "from design to disposal". It also emerged in the course of the investigation that Regio Călători did not keep records and did not manage the information according to which the design of the 24 V power supply system had been carried out by a firm which had not followed the technical approval procedures laid down in the regulations in force.

Safety recommendation 460/1

The railway undertaking SC Regio Călători SRL shall assess the dangers posed by the lack of records management and failure to carry out the prescribed authorizations/certifications/approvals for diesel multiple units" from design to disposal";

Preamble safety recommendation 460/2

During the investigation it emerged that the owner Regio Călători had taken over the mileage norms that were adopted by the former owner REGIOTRANS, without a risk analysis being carried out on compliance with the requirements of NF 67-006:2011 on the compatibility between the interval between planned repairs and the level of reliability of the rail vehicle, given that the Poyaud engine was replaced by a Tedom engine which also required a new type of electrical installations.

Safety recommendation 460/2

The railway undertaking SC Regio Călători SRL shall carry out a risk analysis on the compatibility between the planned repair interval and the reliability level of the diesel multiple unit AMX 525.

3.4.15. The train accident that occurred on **1st September 2023**, at about 06:20 o'clock, in the railway county Cluj, track section Oradea – Salonta (non-electrified single-track line) between Leș Bihor and Oradea Vest railway stations, km.108 + 200, in the running of passenger train Regio no.3111 (got by the railway undertaking SNTFC „CFR Cășători” SA), composed of diesel multiple units no. 9553978-1008-1 and no. 9553978-1009-9, a fire broke out in the second diesel multiple unit, no. 9553978-1008-1.

The investigation report was completed on 28 August 2024.

Causal factor

The most probable occurrence of short circuits between cables inside the electrical appliance block, as well as between the cables and the metal case of the block, due to damaged cable insulation

Contributing factor

The continued use of the diesel multiple units involved in the accident for hauling passenger trains after exceeding the prescribed time interval for planned repairs—repairs which were intended to restore the technical capacity necessary for safe, comfortable, and reliable railway transport.

Systemic factors

The failure of the railway undertaking SNTFC "CFR Călători" SA to assess the risks associated with operating AM 1000 diesel multiple units beyond the time and mileage thresholds set for carrying out scheduled repairs.

Measures taken after the accident

During the investigation, Romanian Railway Safety Authority (ASFR), by document no. 2021/246/01.09.2023, ordered the withdrawal from circulation of all AM 1000 series diesel multiple units.

Safety recommendations

Reasons for the absence of safety recommendations

Given that ASFR intervened during the investigation by ordering the withdrawal from circulation of all AM 1000 series diesel multiple units, the investigation commission considers it unnecessary to issue further safety recommendations.

3.4.16. The railway incident that occurred on **08th September 2023**, in the railway county Iași, track section Suceava Nord – Pașcani, in Verești railway station, when the passenger train no.1752 hauled with locomotive EA598, got by the railway undertaking SNTFC „CFR Călători” SA passed on danger the exit signal YII displaying a red light indicating “STOP – do not pass the signal”. The investigation report was completed on 24 July 2024.

Direct cause

The direct cause of the railway incident was the reduction in adhesion between wheels and rails due to contamination of the running surface with oil released from crushed rape seed that had fallen from freight train no. 57410. This caused the wheels locking during the braking of train no. 1752 in order to stop at railway station Verești, increasing the braking distance and causing the train to pass the YII exit signal of the station, which was indicating “STOP – do not pass the signal! – Day and night: one red light facing the train.”

Contributing factors

None.

Underlying causes

None.

Primary causes:

None.

Measures taken after the incident

Between 20.08.2023 and 08.09.2023, there were repeated cases of loss of contents from freight trains operated by the railway undertaking Unicom Tranzit SA, consisting of Fals-series freight wagons transporting rape seed as follows:

- On 20/21.08.2023, after the passage of train no. 57402, there were delays and skidding of locomotives no. 1952, 5423, and 1654 on the Roman – Galbeni – Itești section.
- On 23.08.2023, after train no. 57408 had passed, the driver of train no. 5444 reported that the rails between track section Mircești and Săbăoani were covered with a black, oily film and that there were braking issues.
- On 02.09.2023, after train no. 57412 had passed, the driver of train no. 5602 reported skidding and braking issues on the track sections Verești – Liteni – Dolhasca.
- On 02.09.2023, following the same train no. 57412, the drivers of trains no. 1656 and 5610 reported skidding on the track section Dolhasca – Roman.
- On 08.09.2023, after the passage of train no. 57410, the driver of train no. 1656 reported skidding and braking difficulties on the track sections Săbăoani – Roman – Galbeni, resulting in extended journey time.

In response to these repeated incidents with implications for railway safety, railway county Iași, by Regional Traffic Safety Inspectorate act no. 1.3/937/11.09.2023, imposed an immediate restriction on access to the railway infrastructure for freight trains composed of Fals-series wagons transporting rape seed.

Additionally, immediately after the incident, the following measures were implemented:

- Interregio and Intercity trains were prohibited from operating on track II between Suceava and Pașcani;

- Temporary speed restrictions were introduced at station areas along the track section Verești – Pașcani on lines belonging to track II, to ensure optimal braking and stopping conditions for trains in stations.

Safety recommendations

Given the measures taken by railway county Iași following this incident, the investigation commission considers that the issuance of safety recommendations is not necessary.

3.4.17. The train accident occurred on 10th September 2023, at about 13:05 o'clock, in the railway county Constanța, track section Constanța Mărfuri - Capu Midia, km. 0 + 160, in Capu Midia, railway station in the running of the freight train no.67055010 (got by the railway undertaking Grup Feroviar Român SA), hauled with the locomotive DA 216, when the first two axles of the train locomotive derailed.

The investigation report was completed on 21 August 2024..

Causal factor

The railway accident happened following the overclimbing of the exterior rail head by the flange of the guiding wheel of the locomotive DA 216, given the exceeding of the derailment stability limit, generated by the increase of the guiding force and decrease of the load acting on this wheel.

It was possible because:

- existence within the track, at the accident site, at some joints, two improper close wooden sleepers, whose technical condition led finally to the increase of the lateral thresholds at those joints;
- exceeding, at the derailment site, of the accepted gauge variation and of the tolerances accepted in operation for the gauge;
- exceeding, before the derailment site, of the tolerances accepted in operation for the crossing level.

Contributing factor

Non-performance, according to the deadline, of track repair and maintenance, in accordance with the practice codes.

Systemic factors

- lack of the action plan for the monitoring by the infrastructure manager the supplier of track repairs and maintenance (TEF Logistică Feroviară SRL), generated by the bad collection and analysis of the information;
- infringement of the provisions from the own procedures, having direct implications in the assurance given by the infrastructure manager that, the infrastructure maintenance is ensured safely and that complies with the specific needs of the track section where the derailment happened;
- keeping for a long time the speed restrictions.

Additional remarks

In accordance with the telegram no.141 from 19th October 2023 of the railway county Constanța, “starting with 20th October.2023 the management of the railway infrastructure of the non-interoperable track-sections Dorobanțu – Năvodari, Năvodari – P1 Capu Midia, P1 Capu Midia - Sitorman is taken over by CNCF CFR SA, through the railway county Constanța.”

Safety recommendations

Motivation of the recommendations missing

Considering the provisions of the telegram no.141 from 19th October 2023 of the railway county Constanța, where it is specified that „starting with 20th October.2023 the management of the railway infrastructure of the non-interoperable track-sections Dorobanțu – Năvodari, Năvodari – P1 Capu Midia, P1 Capu Midia Sitorman is taken over by CNCF CFR SA through the railway county Constanța”, AGIFER considers unnecessary to issue safety recommendations.

3.4.18. The railway incident that occurred on **17th September 2023**, in the railway county Craiova, track section Craiova – Filiași, in the railway station Cernele, the electric locomotive LEMA 063 (got by the railway undertaking Vest Trans Rail SRL), a light locomotive stationed on line no. 11 since 16.09.2023, at 20:55 o'clock, started running in the direction of Ișalnița and passed trailing

over turnout no. 22 at the Y end of the railway station, after which it entered running track no. I between Cernele and Işalnița, coming to a stop after running approximately 3.6 km on the running line.

The investigation report was completed on 18 March 2024.

Direct cause

The direct cause of the railway incident was the deactivation of the parking brake after it had been applied by unauthorized personnel and the failure to follow the procedure for releasing this type of brake.

Contributing factors

Failure to open the main air reservoir isolating valve from the 'OFF' position to the 'ON' position (Fig. 19).

Underlying causes

Failure to comply with certain provisions of the codes of practice, as follows:

- Art.12, para. (3) of the Instructions for the activity of locomotive personnel in rail transport no. 201/2007, referring to the fact that the driver's assistant /locomotive fireman is prohibited from running the locomotive;
- Art.177, para. (2) of the Instructions for the activity of locomotive personnel in rail transport no. 201/2007, referring to the fact that the shunting is performed by railway undertaking personnel or other economic operators authorized for this purpose;
- Paragraph 3, point "BEFORE STARTING THE LOCOMOTIVE" of the "PARKING BRAKE OPERATING INSTRUCTIONS", referring to the opening of the main air reservoir isolating valve when starting the locomotive.

Primary causes

None.

Measures taken after the incident

None.

Safety recommendations

During the investigation, the investigation commission found that the railway incident was caused by a mistake made by the driver's assistant, who was not authorized to operate the brake system and did not fully comply with the instructions for starting the locomotive.

In these circumstances, the investigation commission considers that no safety recommendations are necessary.

3.4.19. The train accident occurred on **03rd of October 2023**, in the railway county Braşov, track section Braşov – Sighișoara (electrified double-track line), km 223+139.5, on track I, between Augustin and Racoş railway stations, when the 23rd wagon of freight train no. 66633-002 (got by the railway undertaking SC Grup Feroviar Român SA) derailed from all axles.

The investigation report was completed on 01 October 2024.

Causal factor

The breakage of the main leaf spring, in the area of the fastening eye, of the laminated suspension spring with negative of the guiding wheel no. 7 of the freight wagon no. 88537980117-2, caused a significant unload along with an increase in the angle of attack of this wheel and, consequently, an increase in the guiding force applied to it, thereby exceeding the derailment stability limit.

Contributing factor

Failure to comply with the uniform variation of 2 mm/m and exceedance of the maximum permissible tolerances in service of the track gauge in the area where the wheel dropped.

Systemic factors

Ineffective management by SC Grup Feroviar Român SA, as the Entity Responsible for Maintenance, of the information regarding laminated suspension springs (a safety-critical component) resulting from periodic repairs.

Additional remarks

The following additional remark were made during the investigation, concerning some deficiencies and shortcomings that are not relevant to the causal, contributing or systemic factors of the accident:

due to staff shortage, the curve 223+014 ÷ 223+284, in the period 12.05.2015 – 31.07.2023, was not manually measured for track gauge, level, versine, and rail wear.

Safety recommendations

The railway accident occurred on 03.10.2023, between the railway stations Augustin and Racoș, was caused by the breakage of the main leaf of the laminated suspension spring with negative camber of the guiding wheel no. 7, which caused the wheel on the left side of the first axle, in the running direction, to leave the rail surface on the outside of a right-hand curve, while the wagon was running on a curved track section.

Considering the causal and systemic factors identified during the investigation, in order to prevent similar accidents/incidents in the future, in accordance with the provisions of art. 26, paragraph (2) of the Emergency Government Decision no.73/2019 for railway safety, the investigation commission considers timely to issue the next safety recommendations, addressed to Romanian Railway Safety Authority-ASFR, that, in accordance with the limits of its competences, takes the measures necessary to assure that the safety recommendations issued by AGIFER are considered and, if case, they are followed. According to the provisions of art.26, paragraph (3) of the Emergency Government Decision no.73/2019 ASFR shall notify periodically AGIFER, at least 6 months, about the measures taken or planned following the recommendations issued.

Preamble – Safety Recommendation 463/1

During the investigation, it was found that the breakage of the main leaf of the laminated suspension spring occurred due to fatigue, in the presence of old cracks (affecting 80% of the cross-section of the spring leaf) in the spring eye area. These cracks are impossible to detect during periodic overhaul, as the area is covered by suspension components (suspension ring support, suspension ring, and split pin).

Such cracks could have been identified if SC Grup Feroviar Român SA, as the ECM the involved wagon, had effectively managed the information on laminated suspension springs (a safety-critical component) resulting from periodic repairs.

Safety Recommendation 463/1

SC Grup Feroviar Român SA, as the Entity Charge of Maintenance, shall review the management of information on laminated suspension springs (a safety-critical component) resulting from periodic repairs carried out on the wagons for which it is responsible, and shall take the necessary measures for the efficient management of this information.

3.4.20. The train accident occurred on **24th October 2023**, at around 11:25 o'clock, in the railway county Craiova, track section Costești - Roșiori Nord (non-electrified single-track line), between Costești and Miroși railway stations, km 132+83, when the first bogie in the running direction of the 13th wagon derailed from freight train no. 66764, got by the railway undertaking SC Grup Feroviar Român SA.

The investigation report was completed on 23 October 2024.

Causal factor

Existence in the track, on a section of line within the circular curve, prior to the derailment site, of an area in which the track twist, the track gauge variation, the value of the neighboring versines and the difference between the maximum and minimum versines in the curve exceeded the values allowed in operation. These exceeded values caused an increase in the lateral guiding force on the guiding wheel (on the right-hand side running on the outside of the curve, in the train running direction), associated with the first axle of wagon No. 33539339897-9, and caused the exceeding of the derailment stability limits.

Contributing factor

Carrying out the measurements with the track recording car or the track trolley at longer time intervals than those provided for in the codes of practice.

Systemic factors

- Failure to carry out capital repair works to restore the railway components to the design parameters of the track, in order to ensure the safe operation of trains at the established speeds and tonnages;

- Provision with unsuitable material and human resources, against the necessary one, for the performance of the corresponding maintenance of the track geometry between the accepted tolerances;
- Ineffective management of the risk associated to the dangers „Exceeding of the maximum, value accepted for the track gauge.

Safety recommendations

Considering the causal and systemic factors identified during the investigation, in order to prevent similar accidents/incidents in the future, in accordance with the provisions of art. 26, paragraph (2) of the Emergency Government Decision no.73/2019 for railway safety, the investigation commission considers timely to issue the next safety recommendations, addressed to Romanian Railway Safety Authority-ASFR, that, in accordance with the limits of its competences, takes the measures necessary to assure that the safety recommendations issued by AGIFER are considered and, if case, they are followed. According to the provisions of art.26, paragraph (3) of the Emergency Government Decision no.73/2019 ASFR shall notify periodically AGIFER, at least 6 months, about the measures taken or planned following the recommendations issued.

Preamble – Safety Recommendation no. 464/1

Upon completion of the investigation of the railway event of a similar nature that took place in the railway county Craiova, presented in Chapter 4.e "Previous accidents or incidents of a similar nature", for the similar accident that occurred on 13.04.2022 at railway station Drăgotești, on the direct track II km 40+830, by derailment of all axles of locomotive ED 050 hauling freight train no. 64208 (got by the railway undertaking SNTFM "CFR Marfă" SA), the following safety recommendation was issued:

Romanian Railway Safety Authority – ASFR shall ensure that the public railway infrastructure manager CNCF "CFR" SA re-assesses the risks generated by the failure to provide line sections with a sufficient number of employees for the proper maintenance of the line and the keeping of track geometry within the accepted tolerances, and shall establish measures for keeping these risks under control.

Through act no. 2010/14/05.03.2024, ASFR communicated the status of implementation of the measures taken by the infrastructure manager CNCF "CFR" SA following the safety recommendations issued by AGIFER, on the occasion of the completion of the investigation actions in 2023. Thus, for the railway accident that occurred on 13.04.2022, the following measures were communicated:

In order to ensure a sufficient number of employees at the level of the line sections to carry out proper maintenance of the line and keep the track geometry within the accepted tolerances, a request was sent to the Human Resources Office and to the Lines Directorate to hire staff (request no. 22/1/422/06.10.2022).

However, considering that in the Risk Register of the railway county Craiova – Lines Division (document no. 22/3/11/04.01.2023), the risks generated by the lack of a sufficient number of employees for proper maintenance of the line and for keeping the track geometry within the accepted tolerances were not assessed, the implementation of the safety recommendation did not achieve its intended objective. Since deficiencies in ensuring a sufficient number of employees are still being found, AGIFER considers it appropriate to issue a new safety recommendation:

Safety Recommendation no. 464/1

The public railway infrastructure manager CNCF "CFR" SA shall re-assess the risks associated with the danger caused by the failure to provide, at the level of the line sections, a sufficient number of employees for the proper maintenance of the line and for keeping the track geometry within the accepted tolerances, and shall establish measures for keeping these risks under control.

3.4.21. The train accident occurred on **04th November 2023**, at about 06:18 o'clock, in the railway county Timișoara, track section Periam – Aradu Nou – a non-interoperable section managed by SC RC-CF Trans SRL Brașov –, non-electrified single-track line, between Periam and Zădăreni railway stations, km 15+400, in the running of passenger train no. 11160, got by the railway undertaking SNTFC Regio Călători, when a fire broke out in the diesel multiple unit AMX 533-9. The investigation report was completed on 30 December 2024.

Causal factor

The occurrence of cracks in the inlet hose to the diesel oil filter, through which diesel oil was sprayed and leaked onto the exhaust system components of the Tedom engine, which was leaking high-temperature exhaust gases. This caused the outbreak of the fire.

Contributing factors

- The use, during maintenance works, of a fuel supply hose (connecting the fuel pump to the diesel filters), which did not meet the technical requirements set by the manufacturer of the Tedom engine and whose supplier did not hold the Rail Supplier Authorization (AFF) or the Railway Technical Agreement (AT);
- Failure by the maintenance personnel to ensure the tightness of the exhaust gas system;
- Keeping the diesel multiple unit AMX 533-9 in service after exceeding the mileage limit at which the Tedom engine was due for scheduled repair.

Systemic factors

None.

Safety recommendations

Motivation of the recommendations missing

The train accident that occurred on 04.11.2023, caused by the outbreak of a fire in the diesel multiple unit AMX 533-9, was caused by the improper technical condition of the motorized coach.

During the investigation, it was found that the improper technical condition of the diesel multiple unit AMX 533-9 was caused by improper maintenance, which was not carried out in accordance with the provisions of the codes of practice (reference/associated documents of SC MARUB SRL procedures). Under these circumstances, the investigation commission considers that it is not necessary to issue safety recommendations.

It should be noted that the absence of safety recommendations does not preclude the railway undertaking Regio Călători SRL from implementing any safety measures it deems necessary for keeping under control the risk of fire occurrence.

3.4.22. The train accident occurred on **05th November 2023**, at 02:45 o'clock, in the railway county Craiova, track section Drăgotești – Turceni (electrified single-track line), between Drăgotești and Borăscu railway stations, at km 28+480, in the running of freight train no. 65004 (got by the railway undertaking SNTFM "CFR Marfă" SA), when the first 8 wagons (Fals series), all loaded with coal, derailed.

The investigation report was completed on 30 October 2024.

Causal factors

Improper condition of the track on the track bed at the Y end of the metal bridge at km 28+465 (in the direction of increasing mileage), caused by:

- The existence on the track, at the accident site, of a group of consecutive prestressed-concrete sleepers and normal wooden sleepers, whose technical condition did not ensure proper bearing and maintenance of the track gauge within the accepted tolerances;
- Non-compliant construction of the joints at the unintentional gaps at km 28+480 on both tracks (due to failure to ensure full horizontal fastening);
- Existence of cross-level irregularities exceeding the values accepted in operation, thus causing the loss of bearing and guiding capacity of the rails under the dynamic action of the rolling stock.

Contributing factor

Lack of check rails inside the track on the track bed sections at the ends of the metal bridge at km 28+465.

Systemic factors

- Provision with unsuitable material and human resources, against the necessary one, for the performance of the corresponding maintenance of the line geometry between the accepted tolerances;
- Ineffective management of the risk associated to the dangers "Exceeding of the maximum value accepted for the track gauge", by the infrastructure manager.

Additional remarks

In view of the findings made, the members of the investigation commission consider that there are sufficient elements leading to the conclusion that the side bearer on the right side of the bogie with wheels no. 5–8 was not properly secured by the 4 fastening bolts, and at the time of the occurrence, it was fixed to the bogie frame only by the two end welding cords.

The installation of the side bearers on the wagon was carried out during the periodic repair performed on 03.03.2022 (about 1 year and 8 months prior to the railway occurrence), at the economic operator identified by the acronym “SRS”.

Safety recommendations

Considering the causal and systemic factors identified during the investigation, in order to prevent similar accidents/incidents in the future, in accordance with the provisions of art. 26, paragraph (2) of the Emergency Government Decision no.73/2019 for railway safety, the investigation commission considers timely to issue the next safety recommendations, addressed to Romanian Railway Safety Authority-ASFR, that, in accordance with the limits of its competences, takes the measures necessary to assure that the safety recommendations issued by AGIFER are considered and, if case, they are followed. According to the provisions of art.26, paragraph (3) of the Emergency Government Decision no.73/2019 ASFR shall notify periodically AGIFER, at least 6 months, about the measures taken or planned following the recommendations issued.

Preamble Safety Recommendation no. 466/1

During the investigation, it was found that the metal bridge at km 28+465 was equipped with check rails on the inside of the track, but they were not extended onto the track bed at the ends of the bridge, contrary to the provisions of Article 28, point 14 of the “Instruction on Norms and Tolerances for the Construction and Maintenance of Normal Gauge Railway Tracks” – no. 314/1989:

“Check rails shall be installed on all bridges with unballasted track located in alignment and having a length greater than 10 m or in curves with a length greater than 5 m. The check rails on the bridge shall also be extended onto the track bed at the ends of the bridge. Check rails shall be mounted inside the track.”

For this reason, AGIFER considers it appropriate to issue the following safety recommendation:

Safety Recommendation no. 466/1

The public railway infrastructure manager– CNCF “CFR” SA shall perform a reassessment of the risks associated and shall establish effective safety measures to control the following dangers:

- lack of check rails inside the track on the track bed sections at the ends of bridges with a length greater than 10 m located in alignment and of bridges with a length greater than 5 m located in curves;
- keeping in the track wooden sleepers in improper condition on the track bed at the ends of bridges, over the length where check rails are installed inside the track.

3.4.23. The train accident occurred on **14th Octobre 2023**, about 12:35 o'clock, in the railway county Timișoara, track section Timișoara – Arad (electrified single-track line), at the exit of Aradu Nou railway station, on the diverging track no. 3, at km 51+654, in the running of freight train no. 66653013 (got by the railway undertaking Grup Feroviar Român SA), 6 tank wagons loaded with diesel oil derailed (from the 3rd to the 8th wagon of the composition of the train), of which two overturned.

The investigation report was completed on 03 Octobre 2024.

Causal factor

Existence in the track, at the railway accident site, of a group of consecutive improper normal wooden sleepers, whose technical condition could no longer ensure a secure fastening of the metal plates, causing the exceeding of the maximum value accepted for the track gauge in operation, and thereby causing the loss of the support and guiding capacity of the rails under the dynamic action of the rolling stock.

Contributing factor

Ineffective monitoring of the evolution of the defects recorded with the track measuring trolley, which favoured their worsening.

Systemic factors

- Deficiencies in the activity of identifying and assessing the risks generated by its own railway operations carried out by the infrastructure manager, regarding the danger posed by the derailment of railway vehicles.
- Provision with unsuitable material and human resources, against the necessary one, for the performance of the corresponding maintenance of the line geometry between the accepted tolerances.

Safety recommendations

Considering the causal and systemic factors identified during the investigation, in order to prevent similar accidents/incidents in the future, in accordance with the provisions of art. 26, paragraph (2) of the Emergency Government Decision no.73/2019 for railway safety, the investigation commission considers timely to issue the next safety recommendations, addressed to Romanian Railway Safety Authority-ASFR, that, in accordance with the limits of its competences, takes the measures necessary to assure that the safety recommendations issued by AGIFER are considered and, if case, they are followed. According to the provisions of art.26, paragraph (3) of the Emergency Government Decision no.73/2019 ASFR shall notify periodically AGIFER, at least 6 months, about the measures taken or planned following the recommendations issued.

Preamble Safety Recommendation no. 467/1

Upon completion of the investigation of the railway event of a similar nature that took place in the railway county Timișoara, presented in Chapter 4.e "Previous accidents or incidents of a similar nature", for the similar accident occurred on 11.06.2020, between railway stations Baru Mare and Crivadia, on track I, km 54+370, in the running of freight train no. 30536 (got by the railway undertaking DB CARGO ROMÂNIA SRL), due to the derailment of the second axle in the running direction of wagon no. 2180247015-8, located 15th in the composition of the train, the following safety recommendation was issued:

ASFR shall ensure that the public railway infrastructure manager CNCF "CFR" SA re-assesses the risks associated to the danger generated by the keeping in operation of improper wooden sleepers within the curves and shall establish viable safety measures for keeping under control these risks.

By act no. 2330/42/27.04.2022, ASFR communicated the status of the implementation of the measures taken by the public railway infrastructure manager CNCF "CFR" SA, as a consequence of the safety recommendations issued by AGIFER, upon the completion of the investigations in 2021. Thus, for the railway accident that occurred on 11.06.2020, the following measures taken or planned to be taken were communicated: The Lines Division, following the reassessment of the risks associated with the danger generated by the keeping in operation of unsuitable wooden sleepers in the areas of railway track located in curves, has established the following safety measures:

Carrying out the necessary steps to ensure the material, financial and human resources;

Carrying out maintenance of the track with compliance to the technological process for replacing wooden sleepers in curved areas;

Rectification of track gauge and maintaining it within the accepted tolerances;

Monitoring all curved track areas with wooden sleepers, respectively performing measurements (track gauge, level, versine), with compliance to the deadlines established in instruction I 305/1997.

Measurement programs of the railway lines were drafted using track measuring trolley, testing and recording car, track recording train, the results of these measurements were interpreted, analyzed and remediation programs were established for the identified defects.

Material resources provision, namely rail and standard wooden sleepers, was carried out by supplying new type 49 heat-treated rails, 23 pieces of 30 m, for the outer track in the curve km 53+835 / 54+530, replaced between February and May 2021. On the inner track, the rail was replaced with SB rail and the joints were re-aligned during the same period. Wooden sleepers were replaced by SC Antrepriza de Construcții Căi Ferate SA under contract no. 352/30.07.2021 concluded by the railway county Timișoara. The wooden sleepers were replaced between August and December 2021, in the curve at km 53+835 / 54+530, with 1236 new sleepers in a row, including new small track components (rubber pads, polyethylene plates and B2 coach screws).

Human resources were provided through recruitment at District no. 5 and by secondment of workers from Section L9 Simeria to carry out the rail replacement works.

Control measures:

Inspections in accordance with I 305/1997 were carried out according to sheets no. 2, 3, 4, 9, 10, 11, 12 based on annual and monthly programs drafted and approved by the management of the Lines Division, completed with finding notes submitted to the districts. The track measuring trolley program was drafted for 2021.

Considering that the safety recommendation was mainly implemented in the area where the railway accident occurred on 11.06.2020, i.e. between the railway stations Baru Mare and Crivadia, and not across the entire railway network managed by CNCF "CFR" SA, it was determined that the implementation of the safety recommendation did not achieve the objective for which it was issued. Deficiencies are still being recorded regarding the keeping in operation of improper wooden sleepers on curved railway track sections, which is why AGIFER considers it appropriate to issue a new safety recommendation:

Safety Recommendation no. 467/1

The public railway infrastructure manager CNCF "CFR" SA shall reassess the risks associated to the danger generated by the keeping in operation of improper wooden sleepers within the curves and shall establish viable safety measures for keeping under control these risks.

3.4.24. The train accident that occurred on 27 th November 2023, at about 22:00 o'clock, in the railway county Iași, on the track section Lețcani – Dorohoi (non-electrified single-track line, managed by SC RC-CF TRANS Brașov SRL), between Trușești and Todireni railway stations, km 77+326, both axles of the first bogie of the 11th wagon no. 83536651666-3 derailed, in the running direction, from freight train no. 66952027 (got by the railway undertaking SC Grup Feroviar Român SA).

The investigation report was completed on 05 November 2024.

Causal factor

Existence, within the track at the accident site, of defects in the track geometry (track gauge and transversal level), in conjunction with defects of wagon no. 83536651666-3 (the clearance in the side bearers exceeding the values permitted in service), caused the exceeding of the derailment stability limit.

Contributing factor

- Overloading of wagon no. 83536651666-3 by the consignor.
- Difficulty in checking the allowances in the side bearers during the periodic overhaul of this type of wagon (Fals series wagon modified for cereal transport), due to the installation of a metal plate (3200 mm x 240 mm) in the area of the wagon bogies, mounted during the additional works to extend the fixed downgrade.

Systemic factors

Failure by the consignor (SC Comcereal SA Botoșani) and the railway undertaking (SC Grup Feroviar Român SA) to ensure the conditions for weighing the wagons before their inclusion in the composition of the train.

Measures taken after the accident

To restore railway traffic, SC RC-CF TRANS Brașov SRL replaced the damaged sleepers over the track section affected by the derailment of wagon no. 83536651666-3, over a length of 1,376 meters.

Additional remarks

During the investigation, the following observations regarding shortcomings and deficiencies were made:

Wagon no. 83536651666-3 is a freight wagon intended for cereal transport, based on the Fals construction series. Important additional works include the installation of a metal roof with a longitudinal loading mouth (according to the Uagps wagon model), relocation of the pneumatic unloading air valves, and the extension of the fixed downgrade, according to execution project 91.SIM.5.00 and SIM.3079-00, approved by the Romanian Railway Authority – AFER, and the technical product specification ST-Fals 02/2014, approved by the Romanian Railway Safety Authority – ASFR.

The additional fixed downgrade extension was carried out by installing a 3200 mm x 240 mm metal plate in the area of the bogies, which significantly obstructs access to the side bearers for checking allowances, as required by Instruction no. 250 (see photo no. 9 and photo no. 10).

This configuration makes it impossible for the operating personnel to check the side bearer allowances according to Instruction no. 250, except for a rough visual approximation. It is worth noting that actual measurements of the side bearer allowances were performed by two persons at Vlădeni railway station during wagon weighing, while at SC Electroputere VFU SA Pașcani the checks were carried out on a track equipped with an inspection pit.



Photo no. 9 – Fals series wagon with fixed downgrade (bottom) compared with standard Fals series wagon (top).

Although the operating staff (carriage and wagon inspectors) acknowledged that side bearer allowances are only visually estimated on these wagons, there was no in-service monitoring program or analysis, as required by the railway undertaking's procedures (Operational Procedure Management of the Train Inspection Process PO 8.1-01 and Integrated System Procedure Risk Assessment PSI 6.1-01).



Photo no. 10 – Comparative view of access to the side bearers: standard Fals series wagon (top) vs. Fals wagon with fixed downgrade (bottom).

The system procedures implemented by SC Rolling Stock Company SRL – the entity in charge of maintenance and owner of the rolling stock – (*PSF-45 Hazard Identification in Maintenance*

Management of the Wagon and Locomotive Stock and Risk Sheet – Side Bearer) only address the risks related to poor maintenance of side bearers during periodic overhauls.

Safety recommendations

Considering the causal and systemic factors identified during the investigation, in order to prevent similar accidents/incidents in the future, in accordance with the provisions of art. 26, paragraph (2) of the Emergency Government Decision no.73/2019 for railway safety, the investigation commission considers timely to issue the next safety recommendations, addressed to Romanian Railway Safety Authority-ASFR, that, in accordance with the limits of its competences, takes the measures necessary to assure that the safety recommendations issued by AGIFER are considered and, if case, they are followed. According to the provisions of art.26, paragraph (3) of the Emergency Government Decision no.73/2019 ASFR shall notify periodically AGIFER, at least 6 months, about the measures taken or planned following the recommendations issued.

Preamble Safety Recommendation 468/1

During the investigation, it was found that the technical operating personnel of the wagon branch, following the additional work carried out on this series of wagons, does not have access to and cannot check the total allowances in the side bearers, in accordance with the Instructions on the Periodical Overhaul and Maintenance of Wagons in Service No. 250.

The investigation commission considers it necessary to issue the following safety recommendation:

Safety Recommendation 468/1

The economic operators SC ROLLING STOCK COMPANY SA and SC Grup Feroviar Român SA shall assess the risks associated with the danger generated by the operation of wagons on which additional works have been carried out to extend the fixed down-grade, through the installation of a metal plate measuring 3200 mm x 240 mm in the area of the wagon bogies, and shall establish concrete measures to keep these risks under control.

3.4.25. The train accident occurred on **28th November 2023**, at about 10:10 o'clock, in the railway county Braşov, on the track section Siculeni – Deda (electrified single-track line), between Voşlăbeni and Izvoru Mureşului railway stations, when the first axle in the running direction of the locomotive with the matriculation number 91 53 0 400146-3, hauling freight train no. 66394 (got by the railway undertaking SNTFM “CFR Marfă” SA), derailed.

The investigation report was completed on 21 November 2024.

Causal factor

Improper static load distribution on axle no. 6, the first axle in the running direction of locomotive EA 146, which resulted in the unloading of the guiding wheel.

Contributing factors

- Ineffectiveness of 7 (seven) oil dampers — out of the 16 installed on the locomotive — including both (the vertical and the horizontal one) on the opposite side of the wheel that left the running surface.
- Improper condition of the track, caused by maintaining the track geometry outside the tolerances allowed in service.
- Failure to identify in due time the deficiencies in the track superstructure, due to the failure to carry out periodical overhauls by the traffic safety personnel within the deadlines stipulated in the practice codes.

Systemic factors

- Improper (ineffective) monitoring by SNTFM CFR Marfă SA of the activities carried out by the Maintenance and Repair of Locomotives and Machinery “CFR IRLU” SA sections involved in performing the General Planned Repair for the locomotive involved.
- Ineffective supervision/monitoring of the District activity responsible for the track maintenance made by staff of L6 Gheorgheni and the railway county Braşov.

Measures taken after the accident

None.

Additional remarks

None.

Safety recommendations

Considering the causal and systemic factors identified during the investigation, in order to prevent similar accidents/incidents in the future, in accordance with the provisions of art. 26, paragraph (2) of the Emergency Government Decision no.73/2019 for railway safety, the investigation commission considers timely to issue the next safety recommendations, addressed to Romanian Railway Safety Authority-ASFR, that, in accordance with the limits of its competences, takes the measures necessary to assure that the safety recommendations issued by AGIFER are considered and, if case, they are followed. According to the provisions of art.26, paragraph (3) of the Emergency Government Decision no.73/2019 ASFR shall notify periodically AGIFER, at least 6 months, about the measures taken or planned following the recommendations issued.

Preamble – Safety Recommendation 469/1

During the investigation, several deficiencies were identified in the locomotive, six months after the completion of the General Planned Repair, which contributed to the occurrence of the accident. These deficiencies were favoured by the improper (ineffective) monitoring by SNTFM "CFR Marfă" SA of the activities carried out by the sections got by the railway undertaking "CFR IRLU" SA involved in the General Planned Repair of the locomotive — a systemic factor.

It was also found that the measures ordered after a previous accident were not fully implemented.

Safety Recommendation 469/1

SNTFM "CFR Marfă" SA shall reassess the monitoring method of the activities carried out by contractors/partners, in order to ensure that the maintenance processes performed by them comply with the applicable regulations and are able to control the risk of accidents or damages.

3.4.26. The train accident that occurred on **01st December 2023**, at about 14:50 o'clock, in the railway county Constanța, track section Capu Midia – Dorobanțu, in Capu Midia railway station, km 32+250, in the running of freight train no. 66602030, when the locomotive DA 1547 derailed with the first 5 wheels on the left-hand side in the running direction, along with the first 30 wagons in the train's composition.

The investigation report was completed on 13 November 2024.

Causal factor

The presence within the track, in the area of turnout no. 13, of a group of improper sleepers that could no longer ensure the proper fastening of the rails and the maintenance of the track gauge within the tolerances allowed by the regulatory framework caused the loss of the rails' supporting and guiding capacity under the dynamic action of the rolling stock.

Contributing factor

Failure to carry out track repair and maintenance within the required deadlines, in accordance with the applicable practice codes.

Systemic factors

- Lack of an action plan for the monitoring, by Grup Feroviar Român SA, as manager of the non-interoperable railway infrastructure, of the provider of track repair and maintenance services (LOG FER), which favoured the poor collection and analysis of information.
- Failure to comply with the provisions of its own procedures, with direct implications for the infrastructure manager's ability to ensure that infrastructure maintenance is carried out safely and that it meets the specific needs of the traffic section.
- Keeping the speed restrictions in place for a long period of time, without taking measures to lift them, which represents a danger to traffic safety

Measures taken after the accident

None.

Additional remarks

None.

Safety recommendations

Motivation of the recommendations missing

SC Grup Feroviar Român SA, in its capacity as manager of non-interoperable railway infrastructure, requested, by document no. G.7/220/07.03.2024, the extension by 4 years of the lease contract for the track section P1 Capu Midia – Capu Midia.

By document no. 8/1/560 dated 17.04.2024, CNCF "CFR" SA, through the Technical Directorate – Technical Organisation and Standardisation Service, replied that on 19 October 2023 Government Decision no. 831/2023 entered into force, amending Annexes no. 2 and 3 of Government Decision no. 643/2011 on the approval of the conditions for leasing parts of the non-interoperable railway infrastructure by CNCF "CFR" SA, as well as their management. According to this new regulation, the track section P1 Capu Midia – Capu Midia is no longer individually included in Annex no. 3 – TRACK SECTIONS that constitute the non-interoperable railway infrastructure.

Therefore, as of 13.11.2024, lease contract no. 127/15.11.2011 for the track section P1 Capu Midia – Capu Midia shall legally terminate, with no possibility of extension.

Given that SC Grup Feroviar Român SA will no longer be responsible for managing this track section, the investigation commission considers that the issuance of safety recommendations is not necessary.

3.4.27. The railway incident that occurred on 4th December 2023, at about 06:45 o'clock, in the railway county Bucureşti, track section Ploieşti Vest – Braşov (electrified double-track line), in Azuga railway station, in the running of passenger train no. 1742 (got by the railway undertaking SNTFC "CFR Călători" SA), when the active pantograph of the hauling locomotive EA 583 broke off. As it fell, the pantograph shattered a window of the first coach of the train, resulting in injuries to three persons.

The investigation report was completed on 02 December 2024.

Direct cause

Breakage of pantograph no. 1 of locomotive EA 583, whose contact strips remained stuck in the contact wire, resulting in the metal frame of the pantograph striking the side wall of wagon no. 61 53 21-76 035-2 and breaking the sixth window on the left-hand side in the running direction.

Contributing factors

- Improper technical condition of pantograph no. 1 of locomotive EA 583;
- Omissions during the PTh3-type intermediate overhaul and lack of adequate training for the personnel performing repairs on Schunk-type pantographs.

Systemic factors

- Existing shortcomings in Technical Specification code ST 31-2016 "Planned overhauls type PTh3, RT, R1, R2, winter preparation and accidental repairs for electric locomotives of 3400/3860/4400/5100/6000 kW", the lack of necessary technical equipment for maintaining and verifying parameters of Schunk-type pantographs, as well as documentation regulating the inspection and maintenance procedures for these pantographs;
- Inefficiency of the monitoring process of the measures set for controlling the risks associated with the hazard "non-compliance with overhaul/repair technological processes MR";
- Lack of a hazard assessment for the risk "pantograph breakage" within the railway undertaking SNTFC;
- Lack of a risk assessment of potential damage to electric locomotive pantographs caused by the technical condition of fixed traction installations (IFTE) by the infrastructure manager CNCF.

Measures taken during the investigation

According to document no. DMR3/1/536/06.12.2023 issued immediately after the incident on 04.12.2023 during the operation of passenger train IR no. 1742 at Azuga station, SNTFC ordered the following measures:

- Retraining of repair and operating personnel working in the traction subunits on the provisions of Joint Decision no. 10 of 24.02.2016 and ST 31-2016, focusing on inspection and correction of non-conformities of roof equipment on locomotives
- A reminder to relevant personnel regarding tasks performed during PTh3 intermediate overhauls on electric locomotives, according to technical specification ST 31-2016 of SCRL Braşov – maintenance supplier SCRL CFR Braşov SA, namely:
- General inspection of: pantographs, surfaces of bushing insulators, cap-and-pin insulators, connecting bars (condition of blade connectors/cable lugs, tightening);

- Checking raising time of pantographs (maximum 10 seconds) and lowering time (maximum 5 seconds), and appropriate adjustments if needed;
- Adjustment or replacement of defective carbon brushes, painting of the horns;
- Measuring brush height (replacement or adjustment, as applicable);
- Control of upper base frame assembly, bar spring joints, braided cords;
- Lubrication of sled guides and joints.

To objectively establish the causes leading to roof equipment damage, it was ordered that in all such cases, alongside the locomotive driver, technical-engineering staff from traction subunits, repair sections, or SRTFC headquarters also participate in on-site assessments. Each SRTFC will designate competent personnel per operational area (stations, rail hubs, track sections) for this purpose.

Following the review of the draft investigation report, SNTFC „CFR Călători” SA communicated through documents no. SC5/1182/22.11.2024 and no. SC/2/1205/29.11.2024 the following actions taken:

- Maintenance instructions for Schunk pantographs are currently held by SCRL CFR Braşov” SA sections in English;
- SNTFC „CFR Călători” SA has sent a request (no. SIRMR/1/875/2024) to SC Schunk Carbon Technology SRL to obtain Romanian-language maintenance instructions for the WBL-Z type pantograph with ADD system;
- Upon obtaining the Romanian documentation, by 10.12.2024, SNTFC „CFR Călători” SA will initiate necessary actions with SCRL CFR Braşov” SA to update the technical specification for “Planned overhauls type PTh3, RT, R1, R2, winter preparation and accidental repairs for electric locomotives of 3400/3860/4400/5100/6600 kW”, by adding the content regarding the maintenance of Schunk WBL-Z pantographs with ADD system. A copy of the updated specification will be forwarded to AGIFER.
- Document no. SIRMR/1/893/2024 was sent to SRTFC 1–8 to verify the endowment status of traction subunits with the necessary equipment for pantograph maintenance and parameter checks, and to take corrective action where necessary;
- Starting in 2025, second-party audits to be carried out at SCRL CFR Braşov” SA will include specific objectives and criteria in the audit themes to monitor how preventive maintenance of Schunk WBL-Z pantographs with ADD system is performed, aiming to improve the monitoring process of the measures set to control risks associated with the hazard "non-compliance with MR overhaul/repair technological processes";
- SNTFC „CFR Călători” SA has initiated actions to evaluate the hazard of “pantograph breakage”.

Additional remarks

During the investigation, although unrelated to the causes and contributing factors of the incident, it was found that data extracted from the ICOL system installed on locomotive EA 583 was not time-synchronized and therefore could not be used in the investigation.

Safety recommendations

Considering the causal and systemic factors identified during the investigation, in order to prevent similar accidents/incidents in the future, in accordance with the provisions of art. 26, paragraph (2) of the Emergency Government Decision no.73/2019 for railway safety, the investigation commission considers timely to issue the next safety recommendations, addressed to Romanian Railway Safety Authority-ASFR, that, in accordance with the limits of its competences, takes the measures necessary to assure that the safety recommendations issued by AGIFER are considered and, if case, they are followed. According to the provisions of art.26, paragraph (3) of the Emergency Government Decision no.73/2019 ASFR shall notify periodically AGIFER, at least 6 months, about the measures taken or planned following the recommendations issued.

Preamble – Safety Recommendation 471/1

During the investigation, deficiencies were found in the way the maintenance of Schunk-type pantographs is carried out, as well as in the management of the risks associated to the danger "non-compliance with the technological processes for planned repairs/overhauls (MR)", for which AGIFER considers it appropriate to issue the following safety recommendation:

Safety Recommendation No. 471/1

Reassessment by SNTFC "CFR Călători" SA of the associated risks and the establishment of effective measures to keep under control the danger represented by "non-compliance with the technological processes for planned repairs/overhauls (MR)".

Preamble – Safety Recommendation no.471/2

During the investigation, it was found that the railway undertaking SNTFC "CFR Călători" SA had not identified and assessed the danger represented by "pantograph breakage", a danger which manifested itself in the case of this incident, for which AGIFER considers it appropriate to issue the following safety recommendation:

Safety Recommendation No. 471/2

Risk assessment by SNTFC "CFR Călători" SA of the risks associated to the railway operations it carries out and the establishment of effective measures to keep under control the danger represented by "pantograph breakage".

Preamble – Safety Recommendation no.471/3

During the investigation, it was found that the railway infrastructure manager CNCF "CFR" SA had not identified and assessed the risk represented by "damage to electric locomotive pantographs caused by the technical condition of the fixed electric traction installations (IFTE)", for which AGIFER considers it appropriate to issue the following safety recommendation:

Safety Recommendation No. 471/3

Risk assessment by CNCF "CFR" SA of the risks associated to the railway operations it carries out and the establishment of effective measures to keep under control the risk represented by "damage to electric locomotive pantographs caused by the technical condition of the fixed electric traction installations (IFTE)".

3.4.28. The railway incident that occurred on **09th December 2023**, at about 01:55 o'clock, in the railway county Craiova, in Gălăteni railway station, track section Roşiori Nord – Videle (electrified double-track line), a runaway occurred involving freight train no. 68202 (got by the railway undertaking Vest Trans Rail SRL), hauled by locomotive EA 079. The train, which was parked on line no. 5 in the direction of railway station Olteni, overran the fouling point, ran through turnout no. 14 and forced it and came to a stop on turnout no. 10.

The investigation report was completed on 20 August 2024.

Direct cause

The uncommented running of locomotive EA 079, due to the improper securing of the train during its stop in Gălăteni railway station, which resulted in overrunning the fouling point and forcing turnout no. 14.

Contributing factors

- Failure to ensure the train's immobilization during its stop in Gălăteni railway station using the automatic and hand brake of the locomotive, as well as the hand brakes of the railway vehicles in its composition;
- Failure to monitor the air pressures in the main brake pipe, the main reservoir of the locomotive and the brake cylinders;
- Improper handling of the automatic brake driver's valve KD2 in the neutral position III instead of the service braking position IV;
- Loosening of the direct brake of locomotive EA 079 due to interaction between the driver's seat and the FD1 valve lever.

Underlying causes

Failure to comply with certain provisions of the practice codes, as follows:

- Article 80(1), paragraph b, of the Towing and Braking Regulation no. 006/2005, which states that if the stopping time exceeds 30 minutes, the train shall be secured with the automatic brake, with the direct and hand brake of the locomotive, and by applying the hand brakes on the wagons.
- Article 79(7) of the same regulation, which requires the assistant driver, upon the driver's order, to apply the hand brake of the locomotive and of the wagons assigned for securing the train.
- Article 79(1), letter a, of the same regulation, which obliges the driver to monitor the pressure in the locomotive's main reservoir and in the main brake pipe, ensuring they do not fall below 7 bar and 5 bar respectively.

- Article 127, point f, of the Instructions for Locomotive Staff Activity in Railway Transport no. 201/2007, concerning the monitoring of measuring instruments, indicators, displays, according to the specific operating rules for each type.

Primary cause

Failure to identify the hazard posed by the installation on the locomotive of seats whose dimensions and degree of movement may interfere with the direct brake of the locomotive, resulting in the FD1 valve being moved from braking to release position.

Measures taken since the incident

By the freight railway undertaking Vest Trans Rail SRL:

- During staff training sessions and SC analyses, the circumstances in which the railway incident occurred were reviewed with all personnel;
- The hazard list was updated (accidental contact of the FD1 brake valve handle by the driver's seat backrest).

Additional remarks

During the investigation, other deficiencies were found, which were not relevant to the causes of the incident, such as:

Non-compliance with the provisions of the Order of the Ministry of Transport no. 256 of 29 March 2013, Chapter III, Article 9, concerning:

Ensuring rest time at home;

Respecting rest time away from home.

Safety recommendations

Given the measures that were taken before the conclusion of the investigation, the investigation commission considered it unnecessary to issue safety recommendations.

3.4.29. The train accident that occurred on **13th December 2023**, at about 12:35 o'clock, in the railway county Cluj, track section Dej - Beclean pe Someș (electrified double-track line), during the entry of freight train no. 661004 (got by the railway undertaking SNTFM "CFR MARFĂ" SA) from running track I onto line no. 6 in the railway station Beclean pe Someș, when 5 wagons in the composition of the train derailed.

The investigation report was completed on 10 December 2024.

Causal factor

The existence on the track, at the accident site, of a group of improper wooden sleepers, whose technical condition no longer ensured the secure fastening of the metal plate with the coach screws and allowed their displacement, resulting in the track gauge exceeding the maximum permissible value in service.

Contributing factors

- Failure to replace the improper wooden sleepers identified in the "Record of defective and worn sleepers and their replacement in 2023–2024", located on the curve after turnout no. 16;
- Failure to carry out the periodic overhaul by the traffic safety personnel, within the deadlines and in the order specified in the codes of practice, to timely identify the worsening of the existing defects on the curve after points and crossing no. 16 of the railway station Beclean pe Someș.

Systemic factor

Improper management of the risks associated to the danger generated by the presence of two or more improper wooden sleepers within the track.

Additional remarks

Regarding the maintenance of the track:

- The periodical overhaul and control program at the districts, drawn up by Line Division Bistrița for the year 2022 in accordance with Instruction no. 305/1997, does not comply with Article 2, Sheet no. 12 – Duties of the head of the maintenance section, which states that the schedule for the detailed inspection of the track must be established in such a way that, together with the deputy section chief, it ensures the inspection of the entire maintenance section over a two-month period.
- Line Division Bistrița does not have an authorized and designated engineer responsible for the continuous welded rail (CWR) track; this activity has been taken over by the deputy section chief since 06.01.2021.

These observations were also mentioned in the investigation report of the railway accident that occurred on 13th September 2022, between the railway stations Monor Gledin and Râpa de Jos, on the same maintenance section.

During the investigation, the following irregularities in the wagon loading process were identified:

- The pallets on which the bags were loaded were placed eccentrically and unevenly on the wagon platform, relative to the longitudinal axis of the wagon. This improper loading caused the maximum permissible axle load ratio between the two wheels to be exceeded, which, under certain conditions, caused the climbing of the head of rail.
- This irregularity was identified in the case of 4 axles (out of 20 axles weighed on 5 non-derailed wagons, selected as having the most eccentric loads), as presented in Chapter 3.a.4 of this report.

Measures taken after the accident

By act no. 43/E/2/124/07.05.2024, the Lines Division Cluj informed the investigation commission that, after the accident, the curves located after the points and crossings within the District L Beclean were inspected, T17 sleepers were replaced, the track was ballasted with broken stone, and tamping was performed using heavy track machines.

Safety recommendations

Preamble – Safety Recommendation 472/1

Considering the causal and systemic factors identified during the investigation, in order to prevent similar accidents/incidents in the future, in accordance with the provisions of art. 26, paragraph (2) of the Emergency Government Decision no.73/2019 for railway safety, the investigation commission considers timely to issue the next safety recommendations, addressed to Romanian Railway Safety Authority-ASFR, that, in accordance with the limits of its competences, takes the measures necessary to assure that the safety recommendations issued by AGIFER are considered and, if case, they are followed. According to the provisions of art.26, paragraph (3) of the Emergency Government Decision no.73/2019 ASFR shall notify periodically AGIFER, at least 6 months, about the measures taken or planned following the recommendations issued.

Taking into account the identified causal and contributing factors, as well as the findings of the investigation commission, it can be stated that SNTFM "CFR Marfă" SA did not contribute to the occurrence of this railway accident.

The irregularity observed — non-uniform wagon loading — which caused the exceeding of the maximum permissible load ratio between the two wheels of the same axle, caused an uneven distribution of the load and may have caused the climbing of the head of rail.

The documents provided to the investigation commission revealed that SNTFM "CFR Marfă" SA did not identify the possibility that the risk of an accident on the CFR network might be generated by the improper loading of wagons sealed by the contract partner — an irregularity that cannot be detected during the handover process (since the wagons are closed and sealed at the moment of delivery/receipt).

To improve railway safety and prevent future railway accidents, AGIFER considers it appropriate to address the following recommendation to the Romanian Railway Safety Authority:

Safety Recommendation 472/1

The railway undertaking SNTFM "CFR Marfă" SA shall assess the risks associated with the dangers generated by the admission into circulation of a non-uniformly loaded wagon, for the situations in which the irregularity cannot be detected during the handover of the wagons, and shall establish concrete measures to control these risks.

3.4.30. The train accident that occurred on **22th Decembre 2023**, at about 04:21 o'clock, in the railway county București, track section Chiajna – Videle (electrified double-track line), in Zăvestreni railway station, in the running of passenger train no. 9304 (got by the railway undertaking SNTFC "CFR Călători" SA), when the hauling locomotive derailed by axle no. 6 (the first one in the running direction).

The investigation report was completed on 03 December 2024.

Causal factor

The existence in the track, at the insulating joint at the switch end of a turnout no. 5 of railway station Zăvestreni, of a group of consecutive improper special and normal sleepers, whose technical condition could no longer ensure the secure fastening of the metal plates that support the rails and maintain the track gauge.

Contributing factors

- Incorrect securing, with only two horizontal bolts at one end wall, of the insulating rail joint in the expansion joint between the butt-end of the rail on the right-hand side of the connecting track panel and the butt-end of the rail on the diverging direction, at the frog point of the switch no.15;
- Exceeding the maximum track gauge variation limit of 2 mm/m and the tolerances allowed in operation, on a section prior to the railway accident, in the area of the track panel between turnouts no. 5 and 7, which caused the amplification of the hunting phenomenon by increasing the wheel-rail contact forces;
- Failure to carry out measurements/periodical overhauls of the respective switch, and failure of the traffic safety personnel to interpret the measurements within the time limits and in the order specified in the codes of practice, which resulted in the failure to identify in time the deficiencies in the track superstructure;
- Carrying out the periodical overhaul with unauthorized personnel, which decreased the effectiveness of the activity.

Systemic factors

- Ineffective supervision/monitoring of the Track District activity by the personnel in charge of periodical control within Section L1 Bucharest and the railway county București – territorial structure within CNCF "CFR" SA;
- Provision with unsuitable material and human resources, against the necessary one, for the performance of the corresponding maintenance of the track geometry between the accepted tolerances.

Safety Recommendations

Motivation for the Lack of Safety Recommendations

The railway accident that occurred on 22nd December 2023, on the exit route from the railway station Zăvestreni, on the connecting line between the frog point of turnout no. 5 and the frog point of turnout no. 7, was caused by the improper technical condition of the railway infrastructure.

During the investigation, it was found that the improper technical condition of the track was caused by improper maintenance, which was not carried out in accordance with the provisions of the codes of practice (reference documents associated with the procedures of the safety management system at the level of the public railway infrastructure manager).

Taking into account the previous railway events of a similar nature that occurred on the railway network managed by CNCF „CFR” SA, presented in Chapter 4.e "Previous accidents or incidents of a similar nature", and considering that for the similar accident that occurred on 01st April 2022 in the railway station Turceni, in the area of the cross-over no. 28-38/44, a safety recommendation was issued – which, according to the information provided by the Romanian Railway Safety Authority, is currently being implemented – the investigation commission considers that it is no longer necessary to issue additional safety recommendations.

It is worth mentioning that, even in the absence of new safety recommendations, based on the analysis carried out by the investigation commission following the non-compliances identified, CNCF „CFR” SA may order the safety measures it deems necessary to control the risk of derailments.

3.4.31. The railway incident that occurred on **28th December 2023**, in the railway county Galați, track section Brăila – Făurei (electrified double-track line), between Făurei and Urleasca railway station, where the securing straps of the cargo from three wagons of freight train no. 66050 (got by the railway undertaking SNTFM "CFR Marfă" SA) hit the terminal boxes of the 500 Hz track inductor (located at km 172+490) and the 1000/2000 Hz track inductor (km 172+240) corresponding to signal YFII.

The investigation report was completed on 13 February 2024.

Direct cause

The direct cause of the railway incident was the exit from the “CFR LOADING GAUGE - WAGON” (Sheet no.1 of Instruction no.328/2008) and the intrusion into the “GAUGE FOR RAILWAY INSTALLATION ELEMENTS” (Sheet no.4 of Instruction no.328/2008), of the anchoring and securing straps from wagons no. 3185931000-9, 31805931217-3, and 31805931549-9, part of freight train no. 66050.

Contributing factor

The improper securing of the straps, as they were wound on the collecting drum in the opposite direction to the mandatory one for winding and securing.

Underlying causes

Failure to identify and correct the improper method of winding and securing the inactive straps on the wagons during the periodic overhaul at the formation of freight train no. 66050 on 28th December 2023, which included wagons no. 3185931000-9, 31805931217-3, and 31805931549-9.

(This is in accordance with the provisions of the “CUU – General Contract of Use of Wagons on the conditions for technical transfer inspection – Annex no.9, pt. 6.6.7.1”).

Root causes

No root causes were identified.

Measures taken after the incident

SNTFM “CFR Marfă” SA – Galați Operational Point issued on 29th December 2023 the Service Order no. 83 and on 04th January 2024 the Note no. P7.1.1-V4/3/04.01.2024, which established the following:

- All wagons of the Ealos-t series shall be carefully checked so that the load securing straps, when not in use, are properly fastened and tightened;
- It shall be ensured that the straps are wound on the drum in the direction secured against unwinding (the bottom part of the strap must be on the outside of the drums and the top end must be attached to the support);
- All identified irregularities shall be reported so that the necessary corrective measures can be taken;

Starting immediately, it is strictly prohibited to allow the circulation of wagons with damaged strap securing systems or with straps wound in the reverse direction.

Following this incident, the Risk Assessment Sheet for the SMS – code F PO 5-1 – was updated for the process/activity of performing technical inspections on operated trains (both formation and in-transit inspections) / Remedying all chalk-marked defects and completing missing components, with the hazard “keeping in circulation wagons with improperly secured movable accessories, allowing their opening or falling during running”, with the associated risk “Railway accidents/incidents”, classified as “Critical” severity and “Undesired” risk level.

Safety recommendations

Given the measures already taken, the investigation commission considers that it is not necessary to issue safety recommendations in this case.

3.4.32. The railway incident that occurred on **28th December 2023**, in the railway county Galați, track section Brăila – Făurei (electrified double-track line) in Urleasca railway station, in the running of the freight train no. 66928 (got by the railway undertaking CER-Fersped SA), by the striking of the inductor of 500 Hz junction box of the signal YII from the railway station, by the lashing and securing straps of the goods from two wagons in the composition of the train.

The investigation report was completed on 13 February 2024.

Direct cause

The exit of the anchoring and securing straps of the goods from the wagons no. 3185931000-9, no. 31805931217-3 and no. 31805931549-9, located in the composition of the freight train no. 66050, from the “CLEARANCE GAUGE FOR RAILWAY WAGON – FOR LOADING” (Drawing no. 1 of Instructions no. 328/2008) and their entering into the “CLEARANCE GAUGE FOR RAILWAY INSTALLATION ELEMENTS” (Drawing no. 4 of Instructions no. 328/2008).

Contributing factor

The improper securing of the straps, namely they were wound on the collecting drum in the opposite direction to the mandatory direction of winding and securing.

Underlying causes

The lack of identification and the lack of taking the measures for the correction of the improper way of tightening and securing the inactive straps of the wagons, on the occasion of the performance of the technical inspection at the composition of the freight train no. 66050 on 28th December 2023, in the composition of which were also the wagons no. 3185931000-9, no. 31805931217-3 and no. 31805931549-9. (provisions included in the “CUU – General Contract of Use of Wagons regarding the conditions for the technical transfer inspection – Annex no. 9, point 6.6.7.1”).

Root causes

None.

Measures that have been taken after the incident

CER-Fersped SA transmitted to PACIFICA RAIL SRL the letter no. M05/4214/29.12.2023, by which it requested the immediate taking of the following measures:

- retraining of the wagon staff (RTV) regarding the way of securing and locking of the strap system with which the wagons of the series Ealos-t are equipped;
- evaluation of the risks generated by this situation and their introduction into the own safety management system, for keeping under control and avoiding the occurrence of railway accidents and incidents.

Safety recommendations

Given the measures already taken, the investigation commission considers that it is not necessary to issue safety recommendations in this case

3.4.33. The railway incident that occurred on 31st December 2023, in the railway county Cluj, between the railway stations Boju and Tunel, in the running of the freight train no. 66703-031 (got by the railway undertaking Unicom Tranzit SA), by the striking of some railway installation elements by metal parts detached from the wagon no. 33535304637-8, which was in the composition of the train.

The investigation report was completed on 20th February 2024.

Direct cause

The breaking of the assembly fastening the spindle of the hand brake with crank to the wagon platform, located on the front right side of the wagon, in the running direction of the train, followed by the detachment and falling of the component parts of the hand brake rigging from the wagon platform and their entering into the clearance gauge for railway installation elements.

Contributing factors

The strong shock produced as a result of the breaking of the main leaf of the laminated suspension spring of wheel no. 4, which caused the transmission of additional vibrations and oscillations to the frame-built body of the wagon and to the supporting/fastening elements of the hand brake rigging.

Underlying causes

None.

Root causes

None.

Safety recommendations

No safety recommendations were identified.

3.4.34. The train accident that occurred on **05th January 2024**, at 08:00 o'clock, in the railway county Craiova, track section Gura Motrului – Turceni (electrified double-track line), when the 18th wagon after the locomotive (no. 31536651420-7) of the freight train no. 65096 (got by the railway undertaking SNTFM „CFR Marfa” SA) which entered into Turceni railway station, derailed by the second bogie when passed over the switch no.47.

The investigation report was completed on 20 December 2024.

Causal factor

The existence in the track, at the accident site, of a group of consecutive improper special wooden sleepers, whose technical condition could no longer ensure the proper tightening of the coach screws for fastening the metallic plates and preventing their movement, thus allowing the track gauge to exceed the maximum permissible value in operation.

Contributing factor

Failure to replace the improper special wooden sleepers previously identified in the "record of defective and worn sleepers and their replacement in 2023–2024", within the points and crossing no. 47.

Systemic factors

- Failure to carry out the periodic repair works necessary for the proper maintenance of the tracks and points and crossing, in order to maintain the track geometry within the permitted tolerances, due to the provision of insufficient material and human resources for these activities.
- Ineffective management of the risks associated to the danger generated by maintaining improper special wooden sleepers within the points and crossing.

Safety Recommendations

Motivation of the absence of safety recommendations

The railway accident that occurred on 05th January 2024, on the reception route of the freight train no. 65096 on line no. 4 in the railway station Turceni, was caused by the improper technical condition of the railway infrastructure, resulting from maintenance activities that were not carried out in accordance with the provisions of the codes of practice (reference/associated documents of the procedures included in the safety management system at the level of the infrastructure manager).

In the investigation report drafted following the railway accident that occurred on 01st April 2022 in the railway station Turceni, AGIFER proposed that CNCF „CFR” SA should reassess the risk of “derailment of railway vehicles” generated by “maintaining improper sleepers in the track”, and establish concrete measures for managing the risks associated with this hazard. A safety recommendation in this regard was issued to the Romanian Railway Safety Authority – ASFR.

Between 2020 and the present date, AGIFER has issued six safety recommendations following railway accidents with similar causes and contributing factors, which occurred on the track section Turceni – Drăgotești.

One of the safety recommendations addressed to the Romanian Railway Safety Authority – ASFR concerns the evaluation of the manner in which the public railway infrastructure manager, CNCF „CFR” SA, identified and applied the necessary measures for the implementation of the safety recommendations issued in the investigation reports finalized for the railway accidents that occurred on the track section Turceni – Drăgotești over the past five years, which had similar causes and contributing factors.

Considering the above, the investigation commission considers that it is no longer necessary to issue additional safety recommendations of a similar nature.

It should be noted that, even in the absence of new safety recommendations, based on the analysis carried out by the investigation commission following the identified non-conformities, CNCF „CFR” SA may order the safety measures it deems necessary in order to keep the risk of derailments under control.

3.4.35. The train accident that occurred on **05th January 2024**, at 11:40 o'clock, in the railway county Craiova, track section Strehaia – Drobeta Turnu Severin (electrified single-track line), in Balota railway station, in the running of the freight train no. 66240 (got by the railway undertaking Grup Feroviar Român SA), when the banking locomotive EA 91 53 0400 478 – 0 derailed by the first axle.

The investigation report was completed on 23 December 2024.

Causal factor

The derailment occurred due to the increase in the ratio between the guiding force and the weight acting on the right-hand wheel of axle no. 1, relative to the running direction of the banking

locomotive EA 478, which exceeded the derailment stability limit, as a result of the combination of the following non-conformities:

- Existence within the track, at the accident site, of a section where the difference in crosslevel exceeded the maximum permissible value, as well as exceeding the permissible tolerances of the tolerance from zero crosslevel, which caused the load relief of the right-hand wheel of axle no. 1;
- Exceeding the track gauge variation between the points before the point of derailment, which caused an increase in the lateral (guiding) force;
- The left-right load difference at axle no. 1, the first in the running direction, which caused a further increase in the unloading of the right-hand wheel of axle no. 1.

Contributing factor

Exceeding of the deadlines, stipulated by the applicable legislation, for the performance of the periodical repairs of the track at the accident site.

Systemic factors

- Provision with unsuitable material and human resources, against the necessary ones, for the performance of the corresponding maintenance of the line and keeping the track geometry between the accepted tolerances;
- Ineffective management of the risks associated to the danger generated by exceeding the permitted tolerances of the track geometry by the infrastructure manager.

Safety Recommendations

The railway accident that occurred on 05th January 2024, during the reception of the freight train no. 66240 on line no. 5 of the railway station Balota, was caused by the improper technical condition of track no. 5, located on the curve after the switch no. 11, and the improper distribution of the loads on the wheels of axle no. 1 of the EA 478, banking locomotive.

Considering the causal and systemic factors identified during the investigation, in order to prevent similar accidents/incidents in the future, in accordance with the provisions of art. 26, paragraph (2) of the Emergency Government Decision no.73/2019 for railway safety, the investigation commission considers timely to issue the next safety recommendations, addressed to Romanian Railway Safety Authority-ASFR, that, in accordance with the limits of its competences, takes the measures necessary to assure that the safety recommendations issued by AGIFER are considered and, if case, they are followed. According to the provisions of art.26, paragraph (3) of the Emergency Government Decision no.73/2019 ASFR shall notify periodically AGIFER, at least 6 months, about the measures taken or planned following the recommendations issued.

Preamble of Safety Recommendation no. 475/1

During the investigation of the accident, it was found that the existence within the track, at the accident site, of a section where the difference in crosslevel exceeded the maximum permissible value, as well as exceeding the permissible tolerances of the tolerance from zero crosslevel and the exceeding of the gauge variation between the points prior to the point of derailment, were critical factors that caused the occurrence of the accident.

In addition, from the analysis of the risk and safety management activity (presented in Chapter 4.d.2), it resulted that the public railway infrastructure manager CNCF „CFR” SA has established procedures, identified and analyzed the risks, and determined that their control should be achieved by applying the provisions of the codes of practice. However, CNCF „CFR” SA did not ensure the necessary conditions for the implementation of these provisions, which denotes ineffective management of the risks associated with the danger generated by exceeding the admitted tolerances of the track geometry.

Safety Recommendation no. 475/1

CNCF „CFR” SA, as the manager of the public railway infrastructure, shall reanalyze the management of the risks associated with the danger of exceeding the admitted tolerances of the track geometry and shall take the necessary measures for their effective control.

3.4.36. The train accident that occurred on **10th January 2024**, at about 16:45 o'clock, in the railway county Craiova, track section Băbeni – Alunu (non-electrified single-track line), between Popești Vâlcea and Băbeni railway stations, km 15+130, in the running of the freight train no. 60566 (got by the railway undertaking SNTFM "CFR Marfă" SA), when the first axle in the running

direction of the second bogie of the wagon no. 81536650824-1 (14th in the train composition) derailed.

The investigation report was completed on 20 December 2024.

Causal factor

The exceeding of the maximum permissible limit of the track gauge in service caused the wheel on the left side of the first axle of the second bogie of the wagon no. 81536650824-1 to fall between the rails, due to the improper condition of the track.

Contributing factors

- Exceeding of the deadlines stipulated by the applicable legislation for performing the periodical repairs on the tracks at the accident site, which caused the ballast prism to remain highly clogged with vegetation and coal dust;
- Failure to carry out the periodical overhaul by authorized personnel, within the deadlines and in the order specified in the codes of practice, which caused a decrease in the effectiveness of this activity and the failure to identify in due time the deficiencies in the superstructure of the track.

Systemic factors

- Provision with unsuitable material and human resources, against the necessary one, for the performance of the corresponding maintenance of the track geometry between the accepted tolerances;
- Deficiencies in the identification and assessment of the risks generated by own railway operations carried out by the entity in charge of the track superstructure maintenance, in relation to the risk "Derailments of railway vehicles in trains in service".

Safety Recommendations

The railway accident occurred on 10th January 2024, between Popești Vâlcea and Băbeni railway stations, was caused by the improper condition of the track, generated by maintaining the track geometry outside the tolerances accepted in operation. This caused the exceeding of the maximum permissible value of the track gauge in service, resulting in the wheel on the left side of the first axle of the second bogie of the wagon to fall between the rails, at a point where the wagon was running on a curved section with a left deviation in the running direction.

Considering the causal and systemic factors identified during the investigation, in order to prevent similar accidents/incidents in the future, in accordance with the provisions of art. 26, paragraph (2) of the Emergency Government Decision no.73/2019 for railway safety, the investigation commission considers timely to issue the next safety recommendations, addressed to Romanian Railway Safety Authority-ASFR, that, in accordance with the limits of its competences, takes the measures necessary to assure that the safety recommendations issued by AGIFER are considered and, if case, they are followed. According to the provisions of art.26, paragraph (3) of the Emergency Government Decision no.73/2019 ASFR shall notify periodically AGIFER, at least 6 months, about the measures taken or planned following the recommendations issued.

Preamble to Safety Recommendation no. 476/1

During the investigation, it was found that the sleepers in the derailment area allowed, under the dynamic load of the rolling stock in circulation, the rails to shift radially outward on the curve, causing an increase in the track gauge and exceeding the accepted tolerances in operation.

It should be noted that in the derailment area, it was impossible to monitor the condition of the fastenings and sleepers during the periodical overhauls of the track, since the area was covered with coal dust resulting from transport activity.

The investigation commission found that the infrastructure manager had identified the risk "Derailments of railway vehicles in trains in service", but the risk assessment activity had not been properly performed.

Safety Recommendation no. 476/1

CNCF "CFR" SA – railway county Craiova shall reanalyze the method of risk identification and shall draw up the "Railway Safety Hazard Record" in compliance with the System Procedure for Risk Management – code PS 0 – 6.1, edition 3.

3.4.37. The train accident that occurred on **23rd January 2024**, in the railway county Cluj, track section Salva – Beclean pe Someș (electrified single-track line), between Mogoșeni and Beclean pe Someș railway stations, when a fire broke out on passenger coach no. 50532049115-0, and subsequently spread to passenger coach no. 50532049112-7. These coaches were in the composition of passenger train no. 1830, got by the railway undertaking SNTFC "CFR Călători" SA. The investigation report was completed on 23rd December 2024.

Causal factor

Possible external action which caused the initiation of the fire in the lower area of the toilet cabin, located in the front left, in the running direction, of the passenger coach no.50532049115-0 (opposite end with the hand brake).

Contributing factor

The extension of the consequences of the accident was influenced by the air currents produced by the running of the train, the toilet cabin window being in the half-open position, as well as by the discharge of compressed air from the pneumatic system for opening the saloon door of the wagon (as a result of overheating and damage to the 5-bar and 10-bar pipes of the pneumatic actuation system of the saloon door).

Systemic factor

Lack of identification of risks arising from situations in which an external factor (e.g., passenger) could cause fires in railway vehicles in the train composition while running.

Measures taken after the accident

Following the accident, CNCF „CFR” SA communicated that it has taken the following measures:

- The Regional Railway Safety Commission of Cluj drafted Research Report no.49/SC/2/3/2024, investigating the intervention of the crew of the Electrified Traction Network Section 2 Dej, following which the following measures were established:
- Considering that, as a result of the fire, the contact wire was damaged over a length of about 20–21 metres, a Damage Estimate will be prepared.
Answer: Installations Division – Electrified Traction Network Section 2 Dej.
- For better organisation, deployment and operability in case of such an incident, and not only, it is necessary to equip a van (at each Electrified Traction Network Section) with: short-circuit breakers (at least 2 pcs.), articulated electro-insulating pole (at least 1 pcs.), personal protective equipment (at least 1 set).
- Also, for better organisation, deployment and operability in case of such an incident, and not only, it is necessary to equip a van (at each Electrified Traction Network Section) with a 1,000 kg trailer, with or without braking system, for fuel transport, generating set / electric generator, lighting fixtures, etc.

Following the rail accident, the National Railway Passenger Transport Company "CFR Călători" SA communicated that it has taken the following measures:

- By act no.DMR7/1/183/28.02.2024, the Mechanical and Electrical Engineer's Department and the Operating Wagons Department ordered all Railway Counties of Rail Passenger Transport to take the necessary measures to eliminate any technical deficiencies that may cause electrical short-circuits, components of electrical installations in the running of trains.
- In accordance with art.23.2 of the infrastructure access contract no.49/08.02.2024 and the provisions of the Fire Protection Law no.307/2006 and the normative acts in force, CNCF „CFR” SA and „CFR Călători” SA have concluded a Fire Protection Agreement, which established the rights and obligations of the parties.

Additional remarks

With regard to the intervention times for the earthing of the contact line, the investigation commission found that, in this case, as well as in other investigated ones, these times were repeatedly very high, although the provisions of Article 15 of the Instructions no.355, on the use of intervention means at the contact line, were complied with, the intervention of the firemen was nevertheless delayed. The emergency intervention of the IFTE (railway fixed installation of electric traction) teams is made with the tower wagon, without any difference from the usual intervention works for the repair of the contact line. The investigation revealed that the notification circuit of the IFTE teams could be improved and

that the intervention times of the IFTE teams could be improved if they intervened in the critical points, without limiting the means of travel to the tower wagon.

Following the railway accident that occurred on 08th October 2020, in the railway county Timișoara, track section Simeria – Livezeni, railway station Bănița, in the running of freight train no.90478, by bursting a fire into the locomotive EA 647, regarding the intervention times for the earthing of the contact line, the following safety recommendation that was not implemented was issued:

Romanian Railway Safety Authority – ASFR to ensure that CNCFR together with Electrificare CFR and, where appropriate, with the railway undertakings, shall analyse the intervention mode for the earthing of the connection of the contact line, in order to identify ways to reduce the time required for this operation.

Safety recommendations

Considering the measures taken by CNCF "CFR" SA following the railway accident, presented in Chapter 5.b., in conjunction with the safety recommendation issued following the railway accident on 08th October 2020, presented in Chapter 5.c. and not yet implemented, the investigation commission considers that it is not necessary to issue another safety recommendation.

3.4.38. The railway incident that occurred on **29th January 2024**, in the railway county București, track section București – Ploiești, in Crivina railway station, by striking of 3 track inductors by the connecting bar of the axle guidance on the left side, in the running direction, from the locomotive EA 773, which was hauling the passenger train IC 538 (got by the railway undertaking SNTFC "CFR Călători" SA).

The investigation report was completed on 23rd March 2024.

Direct cause

The direct cause of this railway incident is the entry of the connecting bar assembly formed by the connecting bar of the axle guidance and inductor from the Cab 1 into the "clearance gauge for railway installation elements", which caused the striking of 3 track inductors on the left side, in the running direction.

Contributing factor

Loosening of the fastening of the connecting bar of the axle guidance – inductors from Cab 1 due to vibrations, under the conditions of not ensuring the proper tightening of the fastening screw on the wheel side, followed by its complete detachment.

Underlying causes

None.

Root causes

None.

Measures taken after the incident

Following the occurrence of the railway incident, SNTFC "CFR Călători" SA has taken the following measures in order to avoid future incidents/accidents with similar causes:

- The railway incident was analyzed with its own staff.
- Compliance will be monitored with the measures schedule no.RGSC1/5/404/27.04.2023 drawn up by SNTFC "CFR Călători" SA – General Railway Traffic Safety Inspectorate, which ordered the careful checking, during the scheduled PTh3, RT, R1, R2 type inspections, of the existence and tightening of all fastening screws of the connecting bars of the axle guidance on the bogie frame, as well as the condition and fastening of the connecting bars of the axle guidance on the bogie frame.

Safety recommendations

Considering the way in which the incident occurred and the measures taken by SNTFC "CFR Călători" SA, the investigation commission did not consider it necessary to issue safety recommendations.

3.4.39. The railway incident that occurred on **10th February 2024**, at about 13:19 o'clock, in the railway county București, in Toporu railway station, by striking of the switch blades and control

bars of the turnout no.1 by the waste collection tank, detached from the locomotive DA 1541, which was hauling the freight train no.56380 (got by the railway undertaking Grup Feroviar Român SA). The investigation report was completed on 01st April 2024.

Direct cause

Detachment of the waste collection tank of the locomotive DA 1541, located on the left side in the running direction of the train, as a result of loosening of the fastening screws and its entry into the “clearance gauge for railway installation elements”, which caused the striking of the switch blades and control bars of the turnout no.1 of Toporu railway station.

Contributing factors

Failure to check the fastening of the waste collection tank during the intermediate inspections.

Underlying causes

None.

Root causes

None.

Measures taken after the incident

Following the occurrence of the railway incident, the railway undertaking Grup Feroviar Român SA has taken the following measures in order to avoid future incidents with similar causes:

- The Locomotive Current Maintenance Department ordered the analysis with the locomotive maintenance staff, and the careful checking, during the intermediate and scheduled RT, R1, R2, 2R2, R3 type inspections, of the existence and tightening of the fastening screws of the waste collection tank.
- The necessary steps have been taken so that, within the technical specification for the Diesel-electric locomotives 1250/2100 HP code G.4.1-II owned by GFR, provisions will be included regarding the obligation to check the fastening of the waste collection tank.
- The railway incident will be analyzed with the company’s own staff after the finalization of the investigation report.

Safety recommendations

Considering the way in which the incident occurred and the measures taken by the railway undertaking Grup Feroviar Român SA, the investigation commission did not consider it necessary to issue safety recommendations.

3.4.40. The railway incident that occurred on 04th April 2024, in the railway county București, track section Rădulești – Giurgiu Nord, in Târnavele railway station, by striking of 4 track inductors by the waste collection tank detached from the locomotive DA 1502, which was hauling the freight train no.61356 (got by the railway undertaking Grup Feroviar Român SA).

The investigation report was completed on 27th May 2024.

Direct cause

The detachment of the waste collection tank of the locomotive DA 1502, located on the right side in the running direction of the train, as a result of loosening of the fastening screws and its entry into the “clearance gauge for railway installation elements”, which caused the striking of 4 track inductors.

Contributing factor

Failure to check the fastening of the waste collection tank during the intermediate inspections.

Underlying causes

None.

Root causes

Lack, in the existing technical specification for the Diesel-electric locomotives 1250/2100 HP code G.4.1-II got by Grup Feroviar Român SA, of provisions regarding the method of checking the fastening of the waste collection tank.

Measures taken after the incident

Following the occurrence of the railway incident, the railway undertaking Grup Feroviar Român SA has taken the following measures in order to avoid future incidents with similar causes:

The Locomotive Current Maintenance Department drafted the Corrective Action Plan no.G.3.3.1/425/10.04.2024 regarding:

- Checking all LDE 2100 HP type locomotives in the GFR fleet regarding the existence and fastening of the waste collection tanks, as well as the tightening of the screws.
- Supplementing the works within the technical inspections with the checking of the existence of the screws and their tightening, work that will be obligatorily recorded in the “Additional works” section of the Unified Work Order.
- Identifying a solution to secure the waste collection tank against falling.

Safety recommendations

Considering the way in which the incident occurred and the measures taken by the railway undertaking Grup Feroviar Român SA, the investigation commission did not consider it necessary to issue safety recommendations.

3.4.41. The railway incident that occurred on 21st March 2024, in the railway county București, track section Rădulești – Giurgiu Nord, between Toporu – Giurgiu Nord railway stations, by exceeding the maximum permitted speed imposed by the speed restriction of 50 km/h, by the passenger train no.1095 hauled by the locomotive GM 1384 (got by the railway undertaking SNTFC „CFR Călători” SA).

The investigation report was completed on 27th May 2024.

Direct cause

The human error occurred in the process of driving the locomotive, manifested by exceeding the train speed on the line section with speed restriction, established in the Route Book.

Contributing factors

- Improper assimilation by the locomotive staff of the provisions in the Route Book;
- Failure by the locomotive staff to carefully monitor the speedometer indication during the journey.

Underlying causes

- Failure to comply with Art. 90, point (1), letter b) of the “Instructions for the activity of locomotive staff in railway transport” no.201 – Before the dispatching of the train, the locomotive staff shall consult and assimilate the provisions of the Route Book corresponding to the track section on which they will haul the train;
- Failure to comply with Art. 125, point (1) of the “Instructions for the activity of locomotive staff in railway transport” no.201 – The locomotive staff must know the timetable of the train they haul and ensure its running without delay and in safe conditions, with strict compliance with the train speeds, running times, stops and their duration, as provided in the timetable booklet or in the timetable prepared at the train dispatching;
- Failure to comply with Art. 125, point (3) of the “Instructions for the activity of locomotive staff in railway transport” no.201 – During the journey, the locomotive staff shall comply with the provisions written in the traffic order and the Route Book;
- Failure to comply with Art. 127, paragraph (1), letter f) of the “Instructions for the activity of locomotive staff in railway transport” no.201 – When hauling the train, during the journey, the locomotive staff must carefully monitor: the functioning mode of the locomotive, by following the indications of the measuring devices, indicators, and on-board displays;
- Failure to comply with Art. 132 of the “Instructions for the activity of locomotive staff in railway transport” no.201 – In driving the train, the locomotive driver is prohibited:
 - letter a) to divert their attention from driving the locomotive/diesel multiple unit and from observing the signals and the line;
 - letter b) to exceed the speeds established for the locomotive, train and the respective track section, as well as those notified in writing by traffic order or indicated by signals and indicators.

Root causes

None.

Safety recommendations

None.

3.4.42. The railway incident that occurred on **16th April 2024**, in the railway county Constanța, track section Ciulnița – Fetești, in Jegălia railway station, by hitting the balance weight of

the compensation device of the contact line pole SH 59 located at km.127+800, by the door of the passenger coach no.61538487004-9, from the composition of passenger train no.1887, got by the railway undertaking SNTFC “CFR Călători” SA.

The investigation report was completed on 03rd July 2024.

Direct cause

The direct cause of this incident is the exceeding of the gauge of the passenger coach by the second access door on the right-hand side of the passenger coach no.61538487004-9, in the running direction of passenger train IR no.1887, and its entering into the “Gauge for elements of the railway installations”, which caused the hitting of the balance weight of the compensation device of the contact line pole SH 59 located at km.127+800 in the railway station Jegălia.

Contributing factor

The blocking of the access door in the open position (on the right-hand side in the running direction) of the passenger coach no.61538487004-9 by persons/passengers in passenger train IR no.1887, when departing from the railway station Ciulnița, which probably caused the deformation of the supporting elements, conditions which, combined with the action of the air currents produced while running with the door open, finally caused its detachment from the upper pin.

Underlying causes

None.

Root causes

None.

Measures taken after the incident

By the act no. SEV/1/553/21.06.2024, as a result of the problems encountered lately regarding the assurance of travel conditions in passenger trains, SNTFC “CFR Călători” SA ordered at point 2 that *“the train staff shall ensure, each time after the departure of the train from a station with scheduled stop, that the train is running with the side access doors closed and locked”*. In this respect, measures for training and compliance by the concerned staff have been taken.

Safety recommendations

None

3.4.43. The railway incident that occurred on **21st April 2024**, in the railway county Brașov, track section Bartolomeu – Zărnești, between the railway stations Bartolomeu and Cristian, by hitting the track inductor related to the emergency signal of the level crossing equipped with automatic road signaling installation with semi-barrier BAT type at km.5+948, by the INDUSI inductor magnet of the multiple unit which formed passenger train no.11337, got by the railway undertaking Regio Călători SRL.

The investigation report was completed on 24th July 2024.

Direct cause

The direct cause of this incident was the loss of tightening capacity of one of the bolts of the fixing system of the inductor PZB 90 type of the multiple unit to its support, which caused the lowering of the inductor and finally to the hitting of the 2000 Hz track inductor related to the emergency signal of the level crossing equipped with automatic road signaling installation with semi-barrier BAT type at km.5+948.

Contributing factors

None.

Underlying cause

None.

Root causes

None.

Measures taken since the incident

After the start of the investigation, the railway undertaking together with the economic operator MRB jointly prepared a set of Regulations regarding the checks to be carried out on multiple unit of the type involved in the incident concerning the fixing of the inductors to its support and the fixing of the inductors support to the multiple unit.

The checks ordered are both the responsibility of the operating staff belonging to railway undertaking:

- Checking the integrity and fixing of the inductors, their support and the holder to the multiple unit during the technical checks carried out by the locomotive staff at the entry/exit of the multiple unit from the traction workshops, as well as during the journey and in the terminal stations;
- Checking the integrity and fixing of the inductors during the reception after maintenance works, recording these checks in the vehicle incident record.

And the responsibility of the maintenance staff belonging to MRB:

- Checking, during the intermediate revision, the fixing of the field magnet, monitoring the existence of fixing elements and visualizing the paint marks certifying the “tightened” position of the bolts;
- Checking with the torque wrench the tightening of the bolts of the fixing system of the inductors support to the fixed part of the bogie during all periodical overhaul;
- During accidental repairs to inductors, whenever they are dismantled, at reassembly the flat washers, Grower washers, and old fixing bolts shall be replaced with new ones.

Safety recommendations

Considering the measures taken by the economic operators involved in the incident after the start of the investigation, the commission considers that it is not necessary to issue any safety recommendation..

3.4.44. The railway incident that occurred on **26th April 2024**, in the railway county Cluj, track section Apahida – Dej Călători (electrified double-track line), between Dej Călători and Gherla railway stations, km 40+760, by hitting a rail section located within the clearance gauge by the DHC 473 locomotive, which was part of train no.66717025, got by the railway undertaking Unicom Tranzit SA.

The investigation report was completed on 07th October 2024.

Direct cause and

The existence of one end of a rail section within the clearance gauge of track I at the moment of passing of the DHC 473 locomotive, which was part of train no.66717025.

Contributing factors

Improper lifting and handling, for storage purposes, of the rail sections between track I and track II, which caused one end of a rail section to enter the clearance gauge of track I.

Underlying causes

The underlying causes of the occurrence of the incident were the non-compliance with some provisions of the applicable instructions, namely Art.12 point 19 from Instruction 314, according to which the storage of materials shall be carried out outside the clearance gauges.

Root causes

- Failure by the Association Drum-Asfalt-ZUE to allocate to the three employees involved in the occurrence of the incident and to the SC Responsible the responsibilities established by the Prescriptions regarding the service performance during the “Quick Wins” works.
- Failure by the Association Drum-Asfalt-ZUE to allocate to the three employees involved in the occurrence of the incident and to the SC Responsible the responsibilities established by the Railway Safety Convention.
- Failure by the Association Drum-Asfalt-ZUE to have in its own documentation the identification of railway safety risks communicated through the Prescriptions regarding the service performance during the “Quick Wins” works and the omission to implement the necessary measures for risk control.
- Omission by the Association Drum-Asfalt-ZUE to establish, for the operation of lifting and handling for storage purposes of the rail sections in the vicinity of the clearance gauge, who were the site managers and what were the necessary technical measures to be implemented in order to supervise the compliance with the clearance gauge and the intervention method in case of exceeding the clearance gauge.
- Failure by SRCF Cluj to explicitly communicate to the Association Drum-Asfalt-ZUE the information regarding the existence of the risk of railway accident/incident associated with the

hazard called “Storage or unloading of goods and materials near the track without complying with the clearance gauge”.

- Failure by SRCF Cluj to identify the hazards of entering the clearance gauge by rails lifted and handled with the MSM machine and the improper supervision of these operations by the agents during the works.
- Failure by SRCF Cluj, as contracting entity, to comply with the provisions of the Railway Safety Convention – 2022 to perform, through its own inspection staff, the explicit verification of the compliance with the railway safety regulations within the carried-out inspections.

Measures taken since the incident

None.

Additional remarks

None.

Safety recommendations

None.

3.4.45. The railway incident that occurred on **02nd May 2024**, in the railway county București, track section Golești – Titu, non-electrified double-track line, by passing on danger the exit light signal YIII of the railway station Găești, by the freight train no.67752-001, got by the railway undertaking Tehnotrans Feroviar SRL.

The investigation report was completed on 16th July 2024.

Direct cause and

The delayed braking action of the driver in order to stop the freight train no.67752-001 before the exit light signal YIII of the railway station Găești, which had the indication “STOP without passing the signal! Day and night – one red light unit towards the train”.

Contributing factors

- Lack of attention of the train driver, who observed late the indication given by the exit signal YIII Găești;
- Failure to take into account the communication via the radio station made with the station traffic controller (IDM) Găești regarding the exit light signal YIII, which had the indication “STOP without passing the signal! Day and night – one red light unit towards the train”;
- Failure to take into account the indication of the home light signal of the railway station Găești, which had the indication “CLEAR with set speed. ATTENTION! The next signal orders the stop. Day and night – one yellow light unit towards the train”;
- Unjustified isolation/removal from service of the INDUSI punctual speed control installation and the DSV safety and vigilance installation;
- The physical and mental condition of the train crew, affected by the stress and fatigue accumulated as a result of frequent exceeding of the maximum allowed continuous service on the locomotive, failure to ensure the proper duration of rest time at home and away from home, failure to comply with the daily working time and daily rest, as well as keeping in service for a long period of time;
- Impairment of the train driver’s working capacity caused by the fact that, prior to the incident, the driver consumed alcoholic beverages.

Underlying causes

The underlying causes of the incident were the non-compliance with the provisions of the regulations and instructions in force, respectively:

- “Instructions for the activity of train driving personnel in railway transport” no.201/2007, Art.127 (1), letter a – regarding the careful observation of the indications of fixed and mobile signals and the indicators placed in accordance with the specific regulations in force;
- “Regulation for technical railway operation” no.002/2001, Art.59 (4) – regarding the prohibition to pass a signal ordering the stop or to exceed the speed ordered by the signal;
- “Signaling regulation” no.004/2006, Art.161 (2) – regarding the compliance with the indication of the reference of the entrance, exit, route and branching light signals, which indicate that the respective light signal, if ordering the stop, cannot be passed by the train except under the conditions established by the respective regulation;

- “Instructions for the activity of train driving personnel in railway transport” no.201/2007, Art.12 (1), letter d – regarding the prohibition of unjustified removal from service of safety and vigilance installations;
- “Instructions for the activity of train driving personnel in railway transport” no.201/2007, Art.12 (1), letter a – regarding the prohibition of reporting for duty tired, under the influence of alcoholic beverages, narcotic substances, medicines and/or substances that may impair the ability to drive the locomotive;
- “Instructions for the activity of train driving personnel in railway transport” no.201/2007, Art.12 (1), letter b – regarding the prohibition of consuming alcoholic beverages during the service.

Root causes

Failure to apply the control mechanisms at the level of department heads within the Operation Directorate and the tacit acceptance of the monthly activity reports regarding the identification and treatment of cases of exceeding the maximum allowed continuous service on the locomotive.

Additional remarks

From the data recorded by the IVMS installation of the locomotive DA1707, both before and after the occurrence of the incident, it was found that there were frequent cases of isolation of the INDUSI and DSV installations by the operating personnel.

It was also found a non-compliant practice of closing the current route sheet and opening another one, in order to hinder the detection of performing the service exceeding the maximum allowed continuous service on the locomotive.

Measures taken since the incident

Following the occurrence of this railway incident, until the completion date of the investigation report, the railway undertaking Tehnotrans Feroviar SRL terminated the individual employment contracts of the personnel involved in this incident and sanctioned the duty dispatcher with a “Written Warning” for failing to comply with the procedure for monitoring the maximum allowed continuous service.

To avoid such incidents in the future, Tehnotrans Feroviar SRL has drawn up:

- Control topics at the level of the Traction and Traffic Departments to monitor compliance with the safety management system implemented by the company (checking the condition of the personnel in the places where rest is ensured, monitoring the maximum continuous service of the train crew, ensuring rest between trains);
- The Traffic Safety Department, according to the control plan, performs unannounced inspections verifying:
 - a. the manner of reporting for duty;
 - b. with breathalyser devices, the personnel on duty, both at the start and during the route;
 - c. compliance with the maximum continuous service;
 - d. the duty operators regarding the way they monitor the maximum continuous service and the measures taken to comply with order no.256/2013.

Safety recommendations

Considering the measures adopted after the occurrence of the incident, the investigation commission does not consider it appropriate to issue safety recommendations.

3.4.46. The railway incident that occurred on **10th January 2024**, in the railway county Craiova, track section Caransebeş – Strehaia, electrified single-track line, between Drobeta Turnu Severin Mărfuri – Balota railway stations, in the running of freight trains no. 67002, no. 87067 and no. 87069 (got by the railway undertaking Tim Rail Cargo SRL), was caused by exceeding the maximum permitted speed imposed by the speed restriction of 30 km/h.

The investigation report was completed on 16th December 2024.

Direct cause

The human error occurred in the process of driving the train, manifested by not carefully monitoring the train running speed.

Contributing factor

None.

Underlying causes

Failure to comply with certain provisions of the codes of practice, as follows:

- Art. 9, (1) letter i of the Instructions for the activity of locomotive personnel in railway transport no. 201/2007, regarding the preparation of the event report in the cases provided in the specific regulations in force, as well as in all situations in which it is necessary to bring to the attention of the traction unit management the problems occurred in the train running;
- Art. 9, (1) letter h of the Instructions for the activity of locomotive personnel in railway transport no. 201/2007, regarding the completion of the locomotive incident record with the data required by the form and the observations on the functioning of the locomotive during train hauling or shunting;
- Art. 90, (1) letter b of the Instructions for the activity of locomotive personnel in railway transport no. 201/2007, regarding the consultation and assimilation before the train dispatching by the locomotive personnel of the provisions of Route Book corresponding to the track section on which the train is to be hauled;
- Art. 125, (3) of the Instructions for the activity of locomotive personnel in railway transport no. 201/2007, regarding the compliance during the train running by the locomotive personnel with the provisions written in the running order and in Route Book. These provisions do not exempt the locomotive personnel from carefully observing and respecting the indications of the signals and signs on the route;
- Art. 125, (4) of the Instructions for the activity of locomotive personnel in railway transport no. 201/2007, regarding the observation of an indication ordering speed reduction at a certain point or on a certain section of track, where the driver shall adjust the train speed so that the train speed at that point or on that section of track is 2–3 km/h lower than the ordered one.

Primary causes

None.

Additional remarks

During the investigation, other deficiencies were identified, with no relevance to the causes of the occurrence of the incident, as follows:

Failure to comply with the provisions of Government Decision no. 117 of 17th February 2010, Chapter IV, Section 1, Art. 22-(2), regarding the fact that “The personnel of the economic operators carrying out railway transport operations, who have become aware of the occurrence of an accident or incident on the running line, are obliged to immediately notify, by event report, the head of the nearest station or his substitute.”

It is mentioned that the incident in question occurred on 10th January 2024 and was reported on 09th May 2024.

The railway undertaking Tim Rail Cargo SRL, in the Operational Procedure Code: PO-09 “ORGANISING THE READING, INTERPRETATION AND PROCESSING OF INFORMATION FROM THE EQUIPMENTS INSTALLED ON LOCOMOTIVES”, at point 5, sub-point 5.1, states that “The downloading of data from the CEL, ICL, IVMS and Deuta equipments and the replacement of the speedometer tapes from the Hassler speedometers fitted on the locomotives shall be carried out monthly, between the 1st–10th of the month, for the data from the previous month, by the specialized T personnel from the Operation Service.”

At sub-point 5.4, it states that “The activity of reading and interpreting the data downloaded from the memory of IVMS, Hassler and Deuta shall be carried out by the specialised T personnel from the Operation Service, at most within 5 months from the date of the first recording entered in the file.”

The record downloaded from the memory of the IVMS speed recording equipment of locomotive EA 1020 for January 2024 was read, analysed, interpreted and recorded in the reading minutes no. E/145/22.03.2024, but the overspeed events mentioned in this investigation report were not reported at that date.

The railway undertaking Tim Rail Cargo SRL, in the General Procedure Code: PG-17 “INVESTIGATION OF RAILWAY ACCIDENTS/INCIDENTS, NEAR-MISS INCIDENTS AND OTHER DANGEROUS EVENTS”, at point 5, sub-point 5.17, para. 5.17.7, states that “The reporting of railway incidents identified after the date of their occurrence (exceeding of maximum permitted service, overspeed, event reports proving the occurrence of a railway incident, train running without knowledge/recognition of the track section, train running with expired authorizations, medical and/or

psychological certificates, etc.) shall be carried out immediately after the investigation of the personnel considered guilty for its occurrence, following the investigation report approved by the company management.”

Safety recommendations

None.

3.4.47. The railway incident that occurred on **10th January 2024**, in the railway county Craiova, track section Caransebeş – Strehaia, electrified single-track line, between Drobeta Turnu Severin Mărfuri – Balota railway stations, in the running of freight trains no. 87099, no. 87051 and no. 67094 (got by the railway undertaking Tim Rail Cargo SRL), was caused by exceeding the maximum permitted speed imposed by the speed restriction of 30 km/h.

The investigation report was completed on 16th December 2024.

Direct cause

The human error occurred in the process of driving the train, manifested by not carefully monitoring the train running speed.

Contributing factors

None.

Underlying causes

Failure to comply with certain provisions of the codes of practice, as follows:

- Art. 9, (1) letter i of the Instructions for the activity of locomotive personnel in railway transport no. 201/2007, regarding the preparation of the event report in the cases provided in the specific regulations in force, as well as in all situations in which it is necessary to bring to the attention of the traction unit management the problems occurred in the train running;
- Art. 9, (1) letter h of the Instructions for the activity of locomotive personnel in railway transport no. 201/2007, regarding the completion of the locomotive incident record with the data required by the form and the observations on the functioning of the locomotive during train hauling or shunting;
- Art. 90, (1) letter b of the Instructions for the activity of locomotive personnel in railway transport no. 201/2007, regarding the consultation and assimilation before the train dispatching by the locomotive personnel of the provisions of Route Book corresponding to the track section on which the train is to be hauled;
- Art. 125, (3) of the Instructions for the activity of locomotive personnel in railway transport no. 201/2007, regarding the compliance during the train running by the locomotive personnel with the provisions written in the running order and in Route Book. These provisions do not exempt the locomotive personnel from carefully observing and respecting the indications of the signals and signs on the route;
- Art. 125, (4) of the Instructions for the activity of locomotive personnel in railway transport no. 201/2007, regarding the observation of an indication ordering speed reduction at a certain point or on a certain section of track, where the driver shall adjust the train speed so that the train speed at that point or on that section of track is 2–3 km/h lower than the ordered one.

Primary causes

None.

Additional remarks

During the investigation, other deficiencies were identified, with no relevance to the causes of the occurrence of the incident, as follows:

Failure to comply with the provisions of Government Decision no. 117 of 17th February 2010, Chapter IV, Section 1, Art. 22-(2), regarding the fact that “The personnel of the economic operators carrying out railway transport operations, who have become aware of the occurrence of an accident or incident on the running line, are obliged to immediately notify, by event report, the head of the nearest station or his substitute.”

It is mentioned that the incident in question occurred on 10th January 2024 and was reported on 09th May 2024.

The railway undertaking Tim Rail Cargo SRL, in the Operational Procedure Code: PO-09 “ORGANISING THE READING, INTERPRETATION AND PROCESSING OF INFORMATION FROM THE EQUIPMENTS INSTALLED ON LOCOMOTIVES”, at point 5, sub-point 5.1, states that “The downloading of data from the CEL, ICL, IVMS and Deuta equipments and the replacement of the speedometer tapes from the Hassler speedometers fitted on the locomotives shall be carried out monthly, between the 1st–10th of the month, for the data from the previous month, by the specialised T personnel from the Operation Service.”

At sub-point 5.4, it states that “The activity of reading and interpreting the data downloaded from the memory of IVMS, Hassler and Deuta shall be carried out by the specialised T personnel from the Operation Service, at most within 5 months from the date of the first recording entered in the file.”

The record downloaded from the memory of the IVMS speed recording equipment of locomotive EA 1020 for January 2024 was read, analysed, interpreted and recorded in the reading minutes no. E/145/22.03.2024, but the overspeed events mentioned in this investigation report were not reported at that date.

The railway undertaking Tim Rail Cargo SRL, in the General Procedure Code: PG-17 “INVESTIGATION OF RAILWAY ACCIDENTS/INCIDENTS, NEAR-MISS INCIDENTS AND OTHER DANGEROUS EVENTS”, at point 5, sub-point 5.17, para. 5.17.7, states that “The reporting of railway incidents identified after the date of their occurrence (exceeding of maximum permitted service, overspeed, event reports proving the occurrence of a railway incident, train running without knowledge/recognition of the track section, train running with expired authorizations, medical and/or psychological certificates, etc.) shall be carried out immediately after the investigation of the personnel considered guilty for its occurrence, following the investigation report approved by the company management.”

Safety recommendations

None.

3.4.48. The railway incident that occurred on **27th May 2024**, at about 23:52 o'clock, in the railway county Cluj, track section Halmeu – Oradea, non-electrified single-track line, in Sanislău railway station, in the running of the freight train no. 66350427 (got by the railway undertaking Grup Feroviar Român SA), caused by passing the exit semaphore signal with a group-arm B displaying the indication “STOP without passing the signal”.

The investigation report was completed on 23rd December 2024.

Direct cause

The human error produced in the activity of driving the locomotive by the train driver, who did not take adequate braking measures in order to stop the train before the exit semaphore signal with a group-arm B displaying the indication: “STOP without passing the signal! Day – the arm horizontal to the right of the running direction, and night – one red light unit towards the train”, which caused the passing of this signal.

Contributing factors

The lack of attention of the train driver during train driving.

Underlying causes

The underlying causes of the occurrence of the incident were the non-compliance with certain provisions of the regulations and instructions in force, respectively:

- Art. 11, para. (2) of Regulation 004/2006, regarding the exit semaphore signal with a group-arm B in “stop” position, displaying the indication “STOP without passing the signal! Day – the arm horizontal to the right of the running direction, and night – one red light unit towards the train”;
- Art. 8 of Regulation 004/2006, regarding the meaning of the red color which orders stopping, in relation to train running and shunting movements;
- Art. 121, para. (1) of Instructions 201/2006, regarding the obligation of the locomotive personnel to continuously observe the indication of the exit semaphore of the station;
- Art. 127, para. (1), letter a) of Instructions 201/2006, which provides that during train running the locomotive personnel must carefully follow the indication of the fixed signals placed in accordance with the specific regulations in force.

Primary causes

None.

Additional remarks

During the investigation action, it was found that in the railway station Halmeu, the train driver unjustifiably disabled the INDUSI automatic speed control equipment, according to the information recorded by IVMS. Thus, the driver unjustifiably disabled the INDUSI automatic speed control equipment, contrary to the provisions of Annex 2, Art. 1, point (3) of Instructions 201/2007, regarding the cases in which disabling the automatic speed control equipment is permitted.

From the verifications carried out by the investigation commission, it was also found that after disabling the INDUSI equipment, the train driver omitted to notify the station dispatcher from the railway station Halmeu about this disabling, contrary to the provisions of Art. 6, point (2) of Annex 2 to Instructions 201/2007. At the same time, the driver omitted to make the handwritten entries under signature regarding the disabling of the INDUSI equipment, in the incident record of locomotive LDE 1554, contrary to the provisions of Art. 3, para. (1) of Annex 2 to Instructions 201/2007.

Regarding the possible automatic braking of the train by the INDUSI equipment before passing the exit semaphore, in the case in which the equipment had been in function in the railway station Sanislău, the verifications identified the following aspects.

From the data recorded in the IVMS equipment it resulted that at the moment of passing the entrance semaphore D1/2, the train had a speed lower than 46 km/h, and at the moment when braking was initiated by the driver, the train had a speed of 24 km/h. Considering the prescribed control speed values V1 and V2 of the INDUSI equipment, it results that the train speeds were lower than the control speed V1 = 50 km/h and the control speed V2 = 40 km/h, therefore the INDUSI equipment would not have triggered the emergency braking, since the control speeds were observed.

Regarding the passing of the train by the 2000 Hz track inductor at the exit semaphore, the investigation commission found that the train would not have been automatically stopped by the INDUSI equipment in front of the exit semaphore in “stop” position, even if this equipment had been in function, because the 2000 Hz field magnet is positioned at a distance of 19 m after the exit semaphore, in relation to the running direction of the train. Thus, the locomotive LDE 1554 passed first the semaphore and subsequently the 2000 Hz track inductor.

From the aspects mentioned above, the investigation commission concludes that the incident would not have been prevented by the automatic braking of the train, in the case in which the INDUSI equipment had been in function, however the unjustified disabling of the INDUSI equipment is retained as a nonconformity.

Measures taken since the incident

The employment contract of the train driver was temporarily suspended by the employer immediately after the occurrence of the incident, and subsequently the employment contract was terminated following the administrative investigation action.

Safety recommendations

During the investigation action, the investigation commission found that the occurrence of the railway incident was caused by an error of the train driver, caused by the lack of attention. In the risk register, the hazard of passing signals ordering stopping, as well as the consequences that may occur in such a situation, has been entered. Under these conditions, the investigation commission considers that it is not necessary to issue safety recommendations.

3.4.49. The railway incident that occurred on **07th June 2024**, at about 07:40 o'clock, in the railway county București, track section Rădulești – Giurgiu Nord, non-electrified single-track line, in Rădulești railway station, caused by the hitting of the lower gear case, located in the clearance gauge, originating from locomotive DA 1402 (got by the railway undertaking SNTFM “CFR Marfă” SA), by locomotive DA 1680 which was hauling the freight train no. 64054006 (got by the railway undertaking United Railways SRL).

The investigation report was completed on 01st October 2024.

Direct cause

The detachment of the lower gear case of electric motor no. 6 of locomotive DA 1402, followed by its fall together with the pinion of the motor between the track rails, thus entering the clearance gauge,

which caused their hitting by locomotive DA 1680 that was hauling the freight train no. 64054006.

Contributing factors

- The existence of an old fracture of approximately 35% of the section of the shaft of traction motor no. 6, which, during the hauling of the freight train no. 56048006, under the action of torsional forces, caused the shearing of the shaft of traction motor no. 6 in the area of the pinion and the tearing off from the fixing of the gear drum.
- The lack of adequate verification measures of the locomotive, following the entries of the locomotive personnel in the incident record.

Underlying causes

The non-compliance with the provisions of procedure PO 04.3 – Control of the maintenance carried out to locomotives and their re-commissioning, regarding the obligation to issue maintenance orders for accidental revisions/repairs with the mention of the identified defects.

Primary causes

None.

Additional remarks

- The non-compliance with the planned revision cycle in accordance with Order 315/2011 regarding the approval of NF 67-006:2011 – Railway Norm “Railway vehicles. Types of planned revisions and repairs. Time norms or mileage norms for carrying out the planned revisions and repairs” from 04th May 2011.
- From the data recorded by the IVMS equipment of locomotive DA 1402 before the occurrence of the incident, it was found that there were several cases of unjustified disabling of the DSV equipment (06th May 2024 – 06th June 2024) by the locomotive personnel.

Safety recommendations

None.

3.4.50. The railway incident that occurred on 11th June 2024, in the railway county Craiova, track section Craiova – Filiași, in Coțofeni railway station, caused by the hitting of several track inductors by passenger train no. 2092 (got by the railway undertaking SNTFC “CFR Călători” SA). The investigation report was completed on 14th October 2024.

Direct cause

The cause of the occurrence of the railway incident was the breaking from welding of the support in the upper part of the vertical oil damper of axle no. 3, right side, of locomotive EA 052, followed by the 180° rotation of the vertical oil damper and its entry into the clearance gauge of the railway equipment elements.

Contributing factors

- The material fatigue of the fixing support of the vertical damper of axle no. 3, resulting from the bending stresses in oscillatory regime, from the process of damping the oscillations produced during the movement due to the irregularities of the running track.
- The occurrence and development over time of a crack in the material of the upper support of the fixing of the damper, as a result of taking over the stresses transmitted by the irregularities of the running track and the locomotive body.
- The lack of identification of the existing old crack in the upper support of the fixing of the vertical damper of axle no. 3, right side, of locomotive EA 052, during the periodical overhaul R1 carried out on 04th June 2024.

Underlying causes

The improper application of the provisions of the Technical Specification Code: ST 31bis – 2016, regarding the obligation to verify during the planned revision R1, the fixing of the dampers.

Primary causes

None.

Measures taken since the incident

- All locomotives and multiple units arriving after the hauling of passenger trains will be introduced to the inspection pit of the Technical Group of the Wagon Revision Craiova, in order to be checked technically by specialized personnel.

- The locomotive and multiple unit personnel within SELC Craiova, on the occasion of introducing and stabling locomotives and multiple units, will prepare order notes and will bring to the attention of the repair personnel the deficiencies or technical problems found during the run or at the stabling.
- During the hauling of passenger trains, when the stop is longer than 3 minutes, the locomotive and multiple unit personnel have the obligation, according to the orders and instructions in force, to carry out permanent external technical inspections of locomotives and multiple units, in order to identify and detect technical problems and to take the necessary measures.
- All locomotive and multiple unit personnel were retrained in regular training hours to thoroughly check the technical condition of locomotives and multiple units at their taking over, both in the formation stations and in the workshops, for all subassemblies and especially for those related to railway safety.

Safety recommendations

None.

3.4.51. The railway incident that occurred on **21st June 2024**, in the railway county București, track section Chitila – București Nord, in Chitila railway station, caused by the routing of passenger train no. 13905021 (got by the railway undertaking SNTFC “CFR Călători” SA) towards the railway station București Nord on track II instead of track III.

The investigation report was completed on 23rd August 2024.

Direct cause

The direct cause of the occurrence of the railway incident was the erroneous setting by the dispatching movement inspector of the exit route for the running of passenger train no. 13905021, by manipulating the turnouts no. -33, -27, -19, -11, +9 in position with access towards track II București Nord.

Contributing factor

The lack of attention of the dispatching movement inspector, the local movement inspector I and the local movement inspector II in monitoring on the screens the exit route of passenger train no. 13905021.

Underlying causes

The non-compliance with the provisions of:

- Art. 208-point (2) letter f of the “Regulation for the running of trains and shunting of railway vehicles” no. 005/2005, regarding the verification of the route of the train on the luminous scheme or on the display, if it corresponds to the train, line and commanded direction;
- Point 5.13 of the job description of the dispatching movement inspector, regarding the monitoring and ensuring of the operations related to the reception, dispatching and passing of the trains according to the stabling plan of the trains and the provisions of the Traffic Regulation (RC);
- Point 5.10 of the job description of the local movement inspector I, regarding the monitoring and ensuring of the operations related to the reception, dispatching and passing of the trains according to the stabling plan of the trains and the provisions of the Traffic Regulation (RC);
- Point 5.10 of the job description of the local movement inspector II, regarding the monitoring and ensuring of the operations related to the reception, dispatching and passing of the trains according to the stabling plan of the trains and the provisions of the Traffic Regulation (RC).

Primary causes

The displaying of similar indication (letter N) for the routes executed on track II Pajura – București Nord and on track III București Nord, by the route indicator mounted under the exit signal YIV of the railway station Chitila.

Additional remarks

According to telegram no. 14 from 11th June 2024, by which works were executed between Pitești railway stations –Golești ramification, a series of trains were cancelled and received another number, so passenger train no. 9024 received the number 13905021.

The stabling plan was not modified with the new train numbers, these being only mentioned with blue ink on the sleeve next to the trains that already existed.

Safety recommendations

Considering the causal and systemic factors identified during the investigation, in order to prevent similar accidents/incidents in the future, in accordance with the provisions of art. 26, paragraph (2) of the Emergency Government Decision no.73/2019 for railway safety, the investigation commission considers timely to issue the next safety recommendations, addressed to Romanian Railway Safety Authority-ASFR, that, in accordance with the limits of its competences, takes the measures necessary to assure that the safety recommendations issued by AGIFER are considered and, if case, they are followed. According to the provisions of art.26, paragraph (3) of the Emergency Government Decision no.73/2019 ASFR shall notify periodically AGIFER, at least 6 months, about the measures taken or planned following the recommendations issued.

Preamble of the safety recommendation no. I253/2024

The investigation revealed that the route indicator mounted under the exit signal YIV of Chitila railway station has the same indication for different running routes, which influenced the occurrence of the incident.

Safety recommendation no. I253/2024

The identification by CNCF “CFR SA” of a technical/organizational solution through which to ensure the distinction of the indication displayed by the route indicator of the exit signal YIV of the railway station Chitila in the case of the routes executed on track II and track III.

3.4.52. The railway incident that occurred on **16th June 2024**, in the railway county Craiova, track section Roșiori Nord – Caracal, electrified double-track line, between Fărcașele and Caracal railway stations, during the running of freight train no. 67204 (got by the railway undertaking Vest Trans Rail SRL), caused by the exceeding of the maximum permitted speed established in the traffic order.

The investigation report was completed on 18th September 2024.

Direct cause

The human error occurred in the process of driving the train, manifested by the lack of monitoring with attention of the running speed of the train.

Contributing

factors

None.

Underlying causes

Non-compliance with the provisions of the Instructions for the activity of locomotive personnel in railway transport no. 201, Art. 125 para. (1), regarding the strict observance of the running speeds established by the traffic order.

Primary causes

None.

Safety recommendations

None.

3.4.53. The railway incident occurred on **31st July 2024**, in the railway county Craiova, track section Roșiori Nord – Caracal, by the simultaneous dispatching of the passenger train no. 348031 (got by the railway undertaking SNTFC “CFR Călători” SA) on track II between Fărcașele and Drăgănești Olt railway stations, while it was occupied by the freight train no. 57322030 (got by the railway undertaking Rail Cargo Carrier – România SRL).

The investigation report was completed on 14th November 2024.

Direct cause and contributing factors

The failure to monitor the running of the freight train no. 57322 and the switching of the automatic block signaling (BLA) without carrying out the checks required by the codes of practice/operating instructions and without having the Traffic Manager order concerning the running and crossings of the freight train.

Contributing factors

None.

Underlying causes

The underlying cause of the incident was the non-compliance with some provisions of the codes of practice, as follows:

- point 5.2.4.(11) of PO 0-8.5-19 “Train traffic management by the traffic operator”, which specifies that the traffic operator may issue orders for establishing non-scheduled crossings and overtakes, in order to ensure traffic regularity;
- article 208(5) of the Regulation no. 005/2005 “Regulation for the running of trains and shunting of railway vehicles”, which specifies that: “in case the automatic orientation of the BLA is not possible for the dispatching of a train, the orientation of the BLA shall be changed by the specially designated buttons; for this, the movements inspector, together with the traffic operator and the movements inspector of the neighboring station, first checks the running line, as provided in article 190(2) (which specifies that: before the change from one traffic system to another, the movements inspectors are obliged to check if the track section between the two neighboring railway stations is free, by each of them specifying in writing, by exchange of phone messages performed on the traffic operator circuit and in his/her presence, the last train circulated between the two railway stations, on each line when applicable; the exchange of phone messages is recorded by the two movements inspectors in the unified register of free tracks, orders and running, and by the traffic operator in the register of orders. The traffic operator checks on the traffic diagram whether the data communicated by the dispatcher stationmasters are confirmed, declares that the running line is free and issues an order, by phone message, for the switching to train traffic in the new traffic system), and if the running line is free, it shall be considered a signaling system failure, it shall be recorded in the register RRLISC, proceeding further according to the provisions of the operating instructions of the signaling installations.”

Root causes

None.

Measures taken after the incident

Following the occurrence of the railway incident, CNCF “CFR” SA took its own measures to improve traffic safety, such as:

- increased strictness in the performance of hierarchical control;
- the Traffic Division will submit to RRSCF the work schedule of the heads of subunits and the shift hours of the subordinate staff from the affiliated stations;
- the regional instructors from the Traffic Division will prepare and distribute to the affiliated training centers a material to be used within the theoretical professional training sessions for the positions of movements inspector (IDM) and traffic operator, based on which the circumstances of the railway incident will be debated;
- the inclusion by the staff with training responsibilities, in the lesson plan corresponding to the first theoretical training session of the IVth quarter of 2024, for the groups of functions IDM and traffic operator RC, of an additional topic in which the circumstances of the incident will be debated and a role-playing exercise organized;
- the re-training under signature of the staff with the IDM function on the obligation to report to the traffic operator the departure time of the train and the line from which the train departed;
- conducting an additional practical service training session during September 2024 for the group of movements inspectors functions operating in the stations equipped with double-track automatic block signalling (BLA banalizat), with the topic: “Train running on BLA banalizat in normal conditions; the use of the emergency button (BAV); working method in case of line closure/reopening; reversal of the block in special regime; train running on main line when only one isolated section is occupied on the signal diagram and free for train”;
- re-training under signature of the staff with movements inspector function regarding the provisions of the specific working sheets (check lists) corresponding to the types of signaling system failures of the signaling equipment served by each employee;
- re-training in writing of the staff with traffic operator function regarding the obligations of real-time monitoring of train movements in order to make operative decisions for traffic regulation, as well as for issuing and monitoring the execution of traffic orders;
- ensuring, by the technical-engineering staff, the supervision of the performance of the biannual inspections and the verification of the hidden parts, based on a monthly schedule approved by the head of section.

Safety recommendations

Considering the measures communicated by CNCF ‘CFR’ SA, which were taken during the investigation activity, the investigation commission did not consider necessary the issuance of a safety recommendation.

3.4.54. The railway incident occurred on **10th August 2024**, in the railway county București, track section Chitila – București Nord, in Chitila railway station, by the dispatching of the passenger train no. 9102010 (got by the railway undertaking SNTFC “CFR Călători” SA), towards the railway station București Nord on track III instead of track II.

The investigation report was completed on 27th November 2024.

Direct cause

The improper execution by the movements inspector of the exit route for the running of the passenger train no. 9102010, by the manipulation of the turnout no. -33, -27, +15, +19, in the position with access to track III Chitila – Pajura – București Nord.

Contributing factor

The lack of careful monitoring by the dispatching movement inspector, local movement inspector I, local movement inspector II on the monitors of the exit route of the passenger train no. 9102010.

Underlying causes

Non-compliance with the provisions of:

- art. 208-point (2) letter f of the “Regulation for the running of trains and shunting of railway vehicles” no. 005/2005, regarding the verification of the train route on the track diagram or on the display, if it corresponds to the train, line and commanded direction;
- point 5.13 of the job description of the dispatching traffic controller, regarding the monitoring and assurance of operations related to the reception, dispatching and passing of trains according to the stabling plan of the trains and RC instructions;
- point 5.10 of the job description of the local traffic controller I, regarding the monitoring and assurance of operations related to the reception, dispatching and passing of trains according to the stabling plan of the trains and RC instructions;
- point 5.10 of the job description of the local traffic controller II, regarding the monitoring and assurance of operations related to the reception, dispatching and passing of trains according to the stabling plan of the trains and RC instructions.

Primary causes

None.

Measures taken after the accident

The investigation carried out for the incident of 21st June 2024, in the railway station Chitila, similar to the incident presented above, revealed that the route indicator installed under the exit signal YIV of the railway station Chitila has the same indication for different routes, which influenced the occurrence of the incident. In order to avoid similar incidents, the safety recommendation no. I253/2024 was issued: “Identification by CNCF ‘CFR SA’ of a technical/organizational solution by which to ensure the distinction of the indication displayed by the route indicator of the exit signal YIV of the railway station Chitila in the case of the routes made on track II respectively track III.”

Following the above recommendation, the Equipment Division București requested from Hitachi Rail GTS România “analysis and technical solution for the modification of CE Chitila installation, X end.” At the same time, the head of the railway station Chitila issued the service order no. 1/19.09.2024, by which he gave additional duties to the movements inspector from the railway station Chitila regarding the monitoring and dispatching of the trains running on track III K in the direction București Nord via Pajura.

Safety recommendations

Considering the way in which the incident occurred, the measures taken by the public railway infrastructure manager CNCF “CFR” SA, the investigation commission did not consider necessary to issue safety recommendations.

3.4.55. The railway incident occurred on **25th September 2024**, in the railway county București, track section Giurgiu Nord – Videle, between Rădulești and Videle railway stations (electrified single-track line), by the hitting of the check rail located on the bridge at km 62+409, by the cowcatcher of the locomotive GM 1025 which was hauling the passenger train no. 460025 (got by the railway undertaking SNTFC “CFR Călători” SA).

The investigation report was completed on 12th December 2024.

Direct cause

The local deviation in the longitudinal level of the track. This occurred in the conditions of the yielding of the fastening of the rail–sleeper frame under the action of the forces transmitted to the track by the rolling stock in running. These defects have direct implications in maintaining within operating parameters the values of the longitudinal level of the track.

Contributing factors

The improper technical condition of the wooden sleepers, which, under the action of the forces transmitted by the wheels of the rolling stock, did not allow the maintaining within operating parameters of the values of the longitudinal level of the track.

Underlying causes

- non-compliance with the provisions of art. 25, para. (2) and para. (4) of the “Instruction of norms and tolerances for the construction and maintenance of the track – standard gauge lines no. 314/1989”, regarding the defects that impose the replacement of the wooden sleepers;
- non-compliance with the provisions of art. 3 of the Instruction 305/1997 regarding the setting of the deadlines and the order in which the track inspections must be carried out, regarding the performance of the fortnightly inspections.

Primary causes

The lack of application of the provisions of the operational procedure code PO SMS 0-4.07, “Compliance with the technical specifications, standards and relevant requirements throughout the life cycle of the tracks in the maintenance process”, part of the safety management system of CNCF “CFR” SA, regarding the sizing of the personnel of the Line District no. 3 Videle within the Section L1 București, in relation to the volume of works.

Measures that have been taken

Following the occurrence of the railway incident, the Tracks Maintenance Division București took measures for the provision of the Track District no. 3 Videle with the necessary materials for carrying out the maintenance of the track and maintaining the tracks in proper condition for the running and shunting of trains in railway safety conditions.

Safety recommendations

None.

3.4.56. The railway incident occurred on 05th October 2024, in the railway county București, in Comarnic railway station, when the train no. 87702 005 hauled by the locomotive BB 523 (got by the railway undertaking Rail Force SRL), which had in its composition the locomotive DA 850 (got by the railway undertaking Vest Trans Rail SRL), passed on danger the exit signal Y4, having the indication “stop without passing the signal”, by

The investigation report was completed on 17th December 2024.

Direct cause

The direct cause of the railway incident was the passing on danger the exit signal Y4 of the railway station, caused by the improper adaptation of the speed and braking, considering the fact that the locomotive DA 850, situated at the rear of the train, does not have a brake that can be gradually released.

Contributing factors

- during the braking of the train on descending track sections, it was not taken into account that the locomotive DA 850 situated at the rear of the train does not have a brake that can be gradually released, and any step of release caused the complete feeding of the main pipe, respectively to the release of the air from the brake cylinders of the locomotive, which caused the locomotive DA 850

not to brake (or to brake improperly) on the entire distance, and thus the braking distance to increase significantly;

- the brake rigging of the locomotive DA 850 was not properly adjusted, which caused the braking efficiency to be very low, thus not ensuring the braking percentage for the respective train.

Underlying causes

Non-compliance with the provisions of:

- Art. 75 (5) of the “Regulation for hauling and braking – no. 006”, braking of trains on descending track sections, regarding the release of the train;
- Art. 72 (13) of the “Regulation for hauling and braking – no. 006”, service braking, for trains having in their composition railway vehicles equipped with brakes that cannot be gradually released, any increase of pressure in the main air pipe of the train, after a braking, caused the total release of the brake;
- Annex 7, table no. 3 of the “Instructions for the activity of locomotive staff in railway transport no. 201/2007”, regarding the stroke of the piston in the brake cylinders.

Primary causes

None.

Safety recommendations

None.

3.4.57. The railway incident occurred on **19th October 2024**, at about 08:10 o'clock, in the railway county Galați, track section Mărășești – Galați (electrified double-track line), km 252+935 between Barcea and Ivești railway stations, by the hitting of the impedance bond related to the track circuit X2AD, by the automatic brake adjuster of the brake rigging of the locomotive EC 092 which was hauling the passenger train no. 7569 (got by the railway undertaking SNTFC “CFR Călători” SA).

The investigation report was completed on 11th November 2024.

Direct cause

The exit of the brake adjuster lever of the brake rigging from the axle no. 3 of the locomotive EC 092 from the “rolling stock gauge”. This was possible as a result of the detachment of the threaded part of the adjustment tube from the coupling sleeve of the brake adjuster of the brake rigging, at the front part in the running direction of the train, followed by the rotation around the fixing bolt of the detached end at an angle of 90° (vertical position – hanging) relative to the normal horizontal fixing position.

Contributing factors

The development over time of wear at the threaded part of the adjustment tube of the brake adjuster of the brake rigging and at the threaded part of its coupling sleeve, as a result of taking over the axial loads transmitted in the braking/releasing processes.

Underlying causes

Non-compliance with the provisions of the Order no. 315/2011 for the approval of the “Railway Norm – Railway vehicles. Types of planned revisions and repairs. Time norms or mileage norms for performing the planned revisions and repairs”, Chapter 3, Table 3.1, regarding the non-performance of the planned repairs due for the locomotive EC 092.

Primary causes

None.

Safety recommendations

None.

3.4.58. The railway incident occurred on **17th November 2024**, at about 13:58 o'clock, in the railway county Iași, track section Lețcani – Dorohoi (non-interoperable section, got by RC-CF Trans SRL Brașov, non-electrified single-track line), in Lețcani railway station by the dispatching without the written order of the traffic operator, of the freight train no. 66578015, got by the railway undertaking Deutsche Bahn Cargo România SRL.

The investigation report was completed on 11th December 2024.

Direct cause

The human error occurred in the process of train traffic management, by the execution of the exit route for the running of the freight train no. 66578015, without having the written order from the traffic operator, by the movement inspector in the railway station Lețcani.

Contributing factors

- superficial verification by the movement inspector regarding the order of the RC traffic operator related to the running of the freight train no. 66578015;
- lack of communication between the movement inspector and the staff who drove and operated the locomotive BR 1006, regarding the handover-receipt of the written order of running;
- during the shunting operations, the isolated section 22-26 of the railway station Lețcani showed occupied on the luminous diagram, free on site (technical problems at the CR3 installation);
- the driver of the train no. 66578015 departed from the railway station Lețcani without noticing that the written order of running did not have the number and the time of the approval order of the traffic operator, according to art. 204, para. 1, of the “Instruction no. 201/2006, Activity of locomotive staff in railway transport.”

Underlying causes

Non-compliance with the provisions of art. 235 (1), art. 237 (1), art. 237 (2), art. 240 (1) of the “Regulation for the running of trains and shunting of railway vehicles” no. 005/2005, regarding the obligation of the movement inspector to communicate to the traffic operator that the freight train no. 66578015 is prepared for dispatching on the track section with the system “centralized train traffic control”, in order to transmit the written order.

Primary causes

None.

Measures taken after the incident

Following the occurrence of the railway incident, the railway county Iași took the following measures to avoid future incidents/accidents with similar causes:

- re-training of the traffic staff regarding the preparation and issuing of the written orders of running for the running of trains on track sections with the system “centralized train traffic control”;
- identification of cases in which the operating conditions changed due to failures of interlocking installations, track and installation closures, and verification of the measures established by the management of the railway station together with the management of the other railway sub-units involved in the respective process, in order to keep under control, the risks occurred;
- verification of the informing of its own staff regarding the risks from their own activity/interface, generated by the identified dangers.

Following the occurrence of the railway incident, DBCR will take the following measures in order to avoid in the future the occurrence of similar incidents/accidents:

- re-training of the traction staff with the provisions of the Instruction no. 201/2006, Activity of locomotive staff, Part VII, Chapter I “Running of trains on sections with centralized train traffic control”;
- informing the traction staff with the incident report in the first planned SC meeting.

Safety recommendations

Considering the measures communicated by the railway county Iași, measures that were taken during the investigation activity, the investigation commission did not consider it necessary to issue a safety recommendation.

3.5. Accidents and incidents investigated over the last 5 years

Investigations performed between 2020-2024:

Accidents investigated ⁽¹⁾		2020	2021	2022	2023	2024	TOTAL
Accidents (Art.19, 1 + 2)	Train collisions	2	1	1	1	2	7
	Collisions between trains and obstacles	-	-	-	-	-	-
	Train derailments	31	22	25	26	22	126
	Level crossing accidents	-	-	-	-	-	-
	Persons accidents generated by the rolling stock in motion	-	-	-	-	-	-
	Fires in rolling stock	9	7	8	4	5	33
	Accidents involving dangerous goods	-	-	-	-	-	-
Other accidents (Art.21.6)	Trains collisions	-	-	-	-	-	-
	Collisions between trains and obstacles	-	-	-	-	-	-
	Train derailments	-	-	-	-	-	-
	Level crossing accidents	-	-	-	-	-	-
	Person accidents generated by the rolling stock in motion	-	-	-	-	-	-
	Fires in rolling stock	-	-	-	-	-	-
	Accidents involving dangerous goods	-	-	-	-	-	-
Incidents		25	24	22	25	29	125
TOTAL		67	54	56	56	58	291

⁽¹⁾ one considered the year of the investigation completion;

4. RECOMMENDATIONS

4.1. Brief presentation and an analysis of the safety recommendations issued in 2024

Through the issued recommendations, Romanian Railway Investigation Agency-AGIFER aimed the improvement of the railway safety and the prevention of the accidents/incidents.

No	Train/ rolling stock involved		Details about the occurrence			Date of the report completion	Type of railway event	
	No of train	Type of train						
			Occurrence site	Occurrence date	Time			
1.	56004	freight	Câmpia Turzii	7.01.2023	02:20	04.01.2024	accident	freight wagon derailment
		In the railway county Cluj, track – section Războieni – Cluj Napoca (electrified double -track line), the wagon no .31537982021-2 by both axles of the second bogie, in the running direction.						
		recommendations issued	1	446/1. Romanian Railway Safety Authority – ASFR shall ask the railway undertaking SNTFM „CFR Marfă” SA to assess the risks associated to the dangers generated by the acceptance and keeping in traffic a wagon with failures that do not allow its running loaded and to establish possible measures for keeping these risks under control.				
		recommendation implemented (closed)	1	Romanian Railway Safety Authority, in its response formulated in document no. 2010/69/20.01.2025, communicated, with regard to safety recommendation no. 446/1 issued following the investigation of this railway accident, that it had been analysed, the measures to be taken had been identified, and these had been implemented.				
2.	67815	freight	Augustin- Apaşa	28.02.2023	00:05	17.02.2023	accident	freight wagon derailment
		In the railway county Braşov, track-section Braşov – Sighişoara (electrified double-track line), third axle from the 8th wagon derailed in the running direction.						
		Recommendations issued	1	449/1. Romanian Railway Safety Authority shall ask the economic operator SC ROLLING STOCK COMPANY SA the revision of the provisions from the own system procedure PSF-45 – Identification of dangers in the management of the maintenance of wagon and locomotive fleet and from the procedures that define the control measures applied to the maintenance carried out and release to service of the wagons.				
		recommendation implemented (closed)	1	Romanian Railway Safety Authority, in its response set out in document no. 2010/69/20.01.2025, stated, with regard to safety recommendation no. 449/1 issued following the investigation of this railway accident, that it had been analyzed, the measures to be taken had been identified, and these had been implemented.				
3.	4363	passenger train	Zalău Nord- Mirşid	22.02.2023	14:40	19.02.2024	accident	diesel multiple unit derailment
		In the railway county Cluj, track section Jibou - Şarmăşag (non-electrified single-track line), both axles (9 and 10) from the penultimate bogie of the multiple unit ADH no. 1416 derailed in the running direction.						
		recommendations issued	1	448/1 Romanian Railway Safety Authority - ASFR shall ask the railway undertaking SNTFC” CFR Călători” SA to assess the danger represented by the lack, within the technical specifications for the planned inspections, of some provisions for the control and maintenance of metalastic springs from the middle bogie of the motorised coach, part of the multiple unit type ADH and to establish effective measures for keeping under control the risks generated by it.				
		recommendation implemented	1	Romanian Railway Safety Authority, in its response formulated in document no. 2010/69/20.01.2025, communicated, with regard to safety				

		(closed)		recommendation no. 446/1 issued following the investigation of this railway accident, that it had been analysed, the measures to be taken had been identified, and these had been implemented.				
4.	66358	freight	Beia-Cața	17.03.2023	20:30	06.03.2024	accident	freight wagon derailment
		In the railway county Brasov, track section Brașov – Sighișoara (electrified double-track line), both bogies from the penultimate wagon no. 31533960791-5 of the train derailed.						
		recommendations issued	2	<p>451/1. Romanian Railway Safety Authority – ASFR shall ask CNCF „CFR” SA to make an action plan for reducing the risks of improper assembling of the check rails on the bridges from whole managed infrastructure (see the provisions of art.28, point 14 from the Instruction no.314/1989 of norms and tolerances for the track construction and track maintenance-tracks with normal gauge).</p> <p>451/2. Romanian Railway Safety Authority – ASFR shall ask the railway undertaking SNTFM „CFR Marfă” SA to work out some provisions/procedures for ensuring permanently that the practice codes used for loading and checking the loading way of the wagons are updated periodically, in order to ensure that the transport operations are performed in safety conditions.</p>				
		recommendation implemented (closed)	1	Romanian Railway Safety Authority, in its response contained in document no. 2010/845/26.08.2025, stated, with regard to safety recommendation no. 451/1 issued following the investigation of this railway accident, that it had been analysed, the measures to be taken had been identified, and these had been implemented.				
		recommendation under implementation (open)	1	Romanian Railway Safety Authority, through the response formulated in the document no. 2020/845/26.08.2025, communicated, with reference to the safety recommendation no. 451/1 issued following the investigation of this railway accident, that it was analysed, the measures to be taken were identified, and these are in the process of being implemented.				
5.	50514 1822	passenger train + freight	Roșiori Nord	13.03.2023	03:54	11.03.2024	accident	collision between a freight train and a passenger train
		In the railway county Craiova, a rear-end collision occurred between freight train no. 50514 and passenger train no. 1822, after the latter approached the former from behind.						
		recommendations issued	2	<p>450/1. SNTFC shall re-assess the risks associated to the dangers and take effective measures for keeping them under control:</p> <ul style="list-style-type: none"> - passing the signals on danger; - delayed application of train brake; - locomotive crew fatigue or lack of attention; - non-compliance with the maximum running speeds stipulated by the working timetable, sheets for the notification of speed restrictions or running order, by the locomotive crew. <p>450/2. SNTFC re-assessment of the risks associated to the dangers and take effective measures for keeping them under control:</p> <ul style="list-style-type: none"> - unjustified/non-instruction pushing of button „intentional passing the signal on danger”. 				
		recommendation implemented (closed)	2	Romanian Railway Safety Authority, in its response formulated in document no.2020/845/26.08.2025, communicated, with regard to safety recommendations no. 450/1 and 452/2 issued following the investigation of this railway accident, that they had been analysed, the measures to be taken had been identified and implemented.				
6.	60566	freight	Berbești-Popești	28.03.2023	06:20	26.03.2024	accident	diesel locomotive derailment
		In the railway county Craiova, track section Alunu - Băbeni (non-electrified single-track line), first axle from the first bogie of the banking locomotive DA 1129 derailed.						

		recommendations issued	1	453/1. The railway undertaking SNTFM „CFR Marfă” SA shall assess the risks associated to the danger represented by the fall, in the running, a part of the train wagon and shall dispose effective safety measures for keeping them under control.				
		recommendation implemented (closed)	1	Romanian Railway Safety Authority, in its response set out in document no. 2010/69/20.01.2025, stated, with regard to safety recommendation no. 453/1 issued following the investigation of this railway accident, that it had been analyzed, the measures to be taken had been identified, and these had been implemented.				
7.	11187	passenger train	Sânnicolau Mare-Cenad	18.04.2023	19:26	03.04.2024	accident	Diesel multiple unit derailment
		In the railway county Timișoara, track section Ronaț Triaj Gr.D – Cenad (non-electrified single-track line), non-interoperable track section managed by SC RC-CF Trans SRL Brașov, diesel multiple unit AMX 556, that the passenger train, derailed.						
		recommendations issued	1	452/1 Re-assessment by the railway infrastructure manager SC RC-CF Trans SRL Brașov the risks associated and the establishment of some effective measures for keeping under control the dangers: - non-provision with the material and human resources, necessary for the performance of railway infrastructure maintenance; - exceeding of maximum value accepted for the track gauges; - keeping within the track the improper wooden sleepers				
		recommendation implemented (closed)	1	Romanian Railway Safety Authority, in its response contained in document no. 2010/69/20.01.2025, stated, with regard to safety recommendation no. 452/1 issued following the investigation of this railway accident, that it had been analyzed, the measures to be taken had been identified, and these had been implemented.				
8.	79562 88324	Freight train	Toporu-Chiriacu	18.04.2023	02:57	03.04.2024	accident	collision between 2 diesel locomotives
		In the railway county București, track section Rădulești – Giurgiu Nord (non-electrified single-track section), km 31+173, a collision occurred between locomotive DA1692 and light engine DA1566, both running as freight trains.						
		recommendations issued	2	455/1. The railway freight undertaking SC United Railways SRL shall re-assess the risks associated and establish effective measures for keeping under control the dangers: - exceeding of the maximum duty accepted for the locomotive; - fatigue generated by the exceeding of the maximum duty accepted for the locomotive; - passing on danger of the signals/indicators; - performing the duty under the influence of alcohol, narcotics, drugs and/or substances that can reduce the working capacity; - not-tracking and non-compliance with the positions of fixed and mobile signals and of the indicators that display stop for the driver; - non-compliance with the maximum speeds accepted.				
				455/2. The railway freight undertaking SC United Railways SRL shall assess the risks associated and establish effective measures for keeping under control the dangers: - not-taking of braking measures by the locomotives crew in accordance with the situation imposed by the regulations in force; - unauthorized operation of the safety and vigilance installations, as well as of the equipment for the automatic control of trains speed, providing the locomotive; - absence of the train manager into the driving cab of the locomotive DA1692, during the trains running, in accordance with the regulations in force.				

		recommendation implemented (closed)	2	Romanian Railway Safety Authority, in its response formulated in document no. 2010/69/20.01.2025, communicated, with regard to safety recommendations no. 455/1 and 455/2 issued following the investigation of this railway accident, that they had been analysed, the measures to be taken had been identified and implemented.				
9.	66691-007 57700-005	freight	Sighișoara	08.06.2023	04:30	23.05.2024	incident	passing the signal on danger by a freight train
		In the railway county Brașov, track section Brașov – Copșa Mică (electrified double-track line), a freight train passed an exit signal on danger the exit signal, forced the switch, and entered to a route set for another freight train.						
		recommendations issued	3	<p>456/1. Re-assessment by SC Grup Feroviar Român SA the risks associated to its own railway operations and the establishment of effective measures for keeping under control the dangers "inobservance of the provisions for the maximum accepted continuous duty for the locomotive", "wrong understanding by the driver of the positions of the fixed and mobile signals that are on STOP" and „fatigue/low attention following the exceeding by the driver of the maximum accepted continuous duty for the locomotive”.</p> <p>456/2. Re-assessment by SC Grup Feroviar Român SA of the mentioned activities and taking of measures considered necessary in order to improve the activity.</p> <p>456/3. Re-assessment by CNCF „CFR” SA of the mentioned activities mentioned and of the identification of the associated them.</p>				
		recommendation implemented (closed)	3	Romanian Railway Safety Authority, in its response formulated in document no. 2020/845/26.08.2025, communicated, with regard to the safety recommendations no. 456/1, 456/2 and 456/3 issued following the investigation of this railway accident, that they had been analysed, the measures to be taken had been identified, and these had been implemented				
10.	96212	freight	Roșiori Nord-Atârnați	01.08.2023	09:00	31.07.2024	accident	multifunctional vehicle derailed
		In the railway county Craiova, track section Roșiori – Videle (electrified double-track line), multifunctional vehicle Colmar derailed.						
		recommendations issued	2	<p>457/1. CNCF” CFR” SA shall revise the documentation for the maintenance of the track vehicle Colmar, that is to introduce some provisions that impose the periodic performance of ultrasonic non-destructive controls (CUS) at the intermediary centre axles (planetary ones).</p> <p>457/2. CNCF” CFR” SA shall assess the risks associated to the dangers generated by the identification in operation the safety critical parts at the track vehicles used for the track maintenance.</p>				
		recommendation implemented (closed)	2	Romanian Railway Safety Authority, through the response formulated in the document no. 2020/845/26.08.2025, communicated, with reference to the safety recommendations no. 457/1 and 457/2 issued following the investigation of this railway accident, that they had been analysed, the measures to be taken had been identified, and these had been implemented.				
11.	77546	freight	Cătușa	09.08.2023	14:45	08.08.2024	ccident	Two freight wagons derailed
		In the railway county Galați, on the track section Galați Brateș – Connecting Line CSG – Cătușa, line 706M, two wagons for broad-gauge track derailed.						
		recommendations issued	2	459/1. SC Liberty Steel Galați SA, like owner, together with SC Euroconstruct SA, like” economic agent authorized by Romanian Railway Authority-AFER”, provider of” track maintenance and repairs working”, shall take all the necessary measures in order to ensure safety and security conditions for performance transports on the tracks and switches got.				

				459/2. The owner of the industrial branch SC Liberty SA Galați shall take the measures for working out and submitting, for signing, to CNCF the contract for operation the industrial branch.				
		recommendation implemented (closed)	1	Romanian Railway Safety Authority, in its response set out in document no. 2020/845/26.08.2025, stated that, with regard to safety recommendation no. 459/1 issued following the investigation of this railway accident, the recommendation had been analysed, the necessary measures had been identified, and these measures had already been implemented.				
		recommendation under implementation (open)	1	Romanian Railway Safety Authority, through the response formulated in the document no. 2020/845/26.08.2025, communicated, with reference to the safety recommendation no. 459/2 issued following the investigation of this railway accident, that it is under analysis.				
12.	11316	passenger train	Târnăveni Vest-Jidvei	23.08.2023	13:45	20.08.2024	accident	fire involving a diesel multiple unit
		In the railway county Brașov, track section Blaj – Praid (non-electrified single-track line), a fire broke out in the diesel multiple unit AMX 525.						
		recommendations issued	2	460/1. The railway undertaking SC Regio Călători SRL shall assess the dangers posed by the lack of records management and failure to carry out the prescribed authorizations/certifications/approvals for diesel multiple units” from design to disposal”;				
				460/2. The railway undertaking SC Regio Călători SRL shall carry out a risk analysis on the compatibility between the planned repair interval and the reliability level of the diesel multiple unit AMX 525.				
		recommendation implemented (closed)	2	Romanian Railway Safety Authority, through the response formulated in the document no. 2020/845/26.08.2025, communicated, with reference to the safety recommendations no. 460/1 and 460/2 issued following the investigation of this railway accident, that they had been analysed, the measures to be taken had been identified, and these had been implemented.				
13.	13905021	passenger train	Chitila	21.06.2024	09:10	23.08.2024	incident	Incorrect routing of a passenger train
		In the railway county București, track section Chitila – București Nord, the train was routed to București Nord station on line II instead of line III.						
		recommendations issued	1	I.253/1. Identification by CNCF "CFR" SA of a technical/organisational solution to ensure the distinction of the indication displayed by the route indicator of the exit signal YIV in Chitila railway station, in the case of train routes set on line II versus line III.				
		recommendation under implementation (open)	1	Romanian Railway Safety Authority, through the response formulated in the document no. 2010/69/20.01.2025, communicated, with reference to the safety recommendation no. I.253/1 issued following the investigation of this railway accident, that it was analysed, the measures to be taken were identified, and these are in the process of being implemented.				
14.	66633-002	freight	Augustin-Racoș	03.10.2023	02:30	01.10.2024	accident	freight wagon derailment
		In the railway county Brașov, track section Brașov - Sighișoara (electrified double-track line), the 23rd wagon of freight train derailed from all axles.						
		recommendations issued	1	463/1. SC Grup Feroviar Român SA, as the ECM, shall review the management of information on laminated suspension springs (a safety-critical component) resulting from periodic repairs carried out on the wagons for which it is responsible, and shall take the necessary measures for the efficient management of this information.				
		recommendation implemented (closed)	1	Romanian Railway Safety Authority, through the response formulated in the document no. 2020/845/26.08.2025, communicated, with reference to the safety recommendation no. 459/1 issued following the investigation of this				

				railway accident, that it had been analysed, the measures to be taken had been identified, and these had been implemented				
15.	66653013	freight	Aradu Nou	14.11.2023	12:45	03.10.2024	accident	freight wagon derailment
		In the railway county Timișoara, track section Timișoara – Arad (electrified single-track line), 6 tank wagons loaded with diesel oil derailed (from the 3rd to the 8th wagon in the composition), two of which overturned.						
		recommendations issued	1	467/1. The public railway infrastructure manager CNCF "CFR" SA shall reassess the risks associated to the danger generated by the keeping in operation of improper wooden sleepers within the curves and shall establish viable safety measures for keeping under control these risks.				
		recommendation implemented (closed)	1	Romanian Railway Safety Authority, through the response provided in act no. 2010/69/20.01.2025, communicated, with reference to safety recommendation no. 467/1 issued following the investigation of this railway accident, that the recommendation was analyzed, the necessary measures to be taken were identified, and they have been implemented.				
16.	66764	freight	Costești-Miroși	24.10.2023	11:25	23.10.2024	accident	freight wagon derailment
		In the railway county Craiova, track section Costești - Roșiori Nord (non-electrified single-track line) the first bogie in the running direction of the 13th wagon derailed from freight train.						
		recommendations issued	1	464/1. The public railway infrastructure manager CNCF "CFR" SA shall reassess the risks associated with the danger caused by the failure to provide, insufficient number of employees for the proper maintenance of the track and for keeping the track geometry within the accepted tolerances, and shall establish measures for keeping these risks under control.				
		recommendation under implementation (open)	1	Romanian Railway Safety Authority, through the response formulated in the document no. 2010/69/20.01.2025, communicated, with reference to the safety recommendation no. 464/1 issued following the investigation of this railway accident, that it was analysed, the measures to be taken were identified, and these are in the process of being implemented.				
17.	65004	freight	Drăgotești-Borăscu	05.11.2023	02:45	30.10.2024	accident	8 freight wagons derailed
		In the railway county Craiova, track section Drăgotești – Turceni (electrified single-track line), the first 8 wagons, series Fals, loaded with coal, derailed from the composition of the train.						
		recommendations issued	1	466/1. The public railway infrastructure manager– CNCF “CFR” SA shall perform a reassessment of the risks associated and shall establish effective safety measures to control the following dangers: - lack of check rails inside the track on the track bed sections at the ends of bridges with a length greater than 10 m located in alignment and of bridges with a length greater than 5 m located in curves; - keeping in the track wooden sleepers in improper condition on the track bed at the ends of bridges, over the length where check rails are installed inside the track.				
		recommendation under implementation (open)	1	Romanian Railway Safety Authority, through the response formulated in the document no. 2020/845/26.08.2025, communicated, with reference to the safety recommendation no. 466/1 issued following the investigation of this railway accident, that it was analysed, the measures to be taken were identified, and these are in the process of being implemented.				
18.	66952027	freight	Trușești-Todireni	27.11.2023	22:00	05.11.2024	accident	freight wagon derailment
		In the railway county Iași, track section Lețcani - Dorohoi (non-electrified single-track line, managed by RC-CF TRANS Brașov SRL), both axles of the first bogie of the 11th wagon derailed in the running direction.						

		recommendations issued	1	468/1. The economic operators SC ROLLING STOCK COMPANY SA and SC Grup Feroviar Român SA shall assess the risks associated with the danger generated by the operation of wagons on which additional works have been carried out to extend the fixed down-grade, through the installation of a metal plate measuring 3200 mm x 240 mm in the area of the wagon bogies, and shall establish concrete measures to keep these risks under control.					
		recommendation implemented (closed)	1	Romanian Railway Safety Authority, through the response formulated in document no. 2010/69/20.01.2025, communicated, with regard to safety recommendation no. 468/1 issued following the investigation of this railway accident, that it was analyzed, the necessary measures were identified, and these were implemented.					
19.	66394	freight	Voşlăbeni-Izvoru Mureşului	28.11.2023	10:10	21.11.2024	accident	Electric locomotive derailment	
		In the railway county Braşov, track section Siculeni – Deda (electrified single-track line), the first axle in the running direction of the locomotive hauling freight train no. 66394 derailed.							
		recommendations issued	1	469/1. SNTFM "CFR Marfă" SA shall reassess the monitoring method of the activities carried out by contractors/partners, in order to ensure that the maintenance processes performed by them comply with the applicable regulations and are able to control the risk of accidents or damages.					
		recommendation implemented (closed)	1	Romanian Railway Safety Authority, through the reply provided in document no. 2010/69/20.01.2025, communicated, regarding safety recommendation no. 469/1 issued following the investigation of this railway accident, that it was analyzed, the necessary measures were identified, and they were implemented.					
20.	1742	passenger train	Azuga	04.12.2023	06:45	02.12.2024	incident	locomotive pantograph breakage	
		In the railway county Bucureşti, track section Ploieşti Vest – Braşov (electrified double-track line), the active pantograph of the hauling locomotive broke, and as it fell, it shattered a window of the first wagon of the train, causing injuries to three persons.							
		recommendations issued	3	471/1. Reassessment by SNTFC "CFR Călători" SA of the associated risks and the establishment of effective measures to keep under control the danger represented by "non-compliance with the technological processes for planned repairs/overhauls for rolling stock". 471/2. Risk assessment by SNTFC "CFR Călători" SA of the risks associated to the railway operations it carries out and the establishment of effective measures to keep under control the danger represented by "pantograph breakage". 471/3. Risk assessment by CNCF "CFR" SA of the risks associated to the railway operations it carries out and the establishment of effective measures to keep under control the risk represented by "damage to electric locomotive pantographs caused by the technical condition of the fixed electric traction installations (IFTE)".					
		recommendation implemented (closed)	3	Romanian Railway Safety Authority, through the response formulated in the document no. 2020/845/26.08.2025, communicated, with reference to the safety recommendations no. 471/1, 471/2 and 471/3 issued following the investigation of this railway accident, that they had been analysed, the measures to be taken had been identified, and these had been implemented.					
21.	661004	freight	Beclean pe Someş	13.12.2023	12:35	10.12.2024	accident	derailment of 5 freight wagons	
		In the railway county Cluj, on the track section Dej – Beclean pe Someş (electrified double-track line), 5 wagons from the composition of the train derailed.							

		recommendations issued	1	472/1. The railway undertaking SNTFM "CFR Marfă" SA shall assess the risks associated with the dangers generated by the admission into circulation of a non-uniformly loaded wagon, for the situations in which the irregularity cannot be detected during the handover of the wagons, and shall establish concrete measures to control these risks.					
		recommendation not implemented (closed)	1	Romanian Railway Safety Authority, through the response formulated in document no. 2010/69/20.01.2025, communicated, with regard to Safety Recommendation no. 472/1 issued following the investigation of this railway accident, that it was analyzed but not accepted.					
22.	60566	freight	Popești Vâlcea-Băbeni	10.01.2024	16:45	20.12.2024	accident	freight wagon derailment	
		In the railway county Craiova, track section Băbeni – Alunu (non-electrified single-track line), the first axle in the running direction of the second bogie of wagon no. 81536650824-1, which was the 14th in the composition of the train, derailed.							
		recommendations issued	1	476/1. CNCF „CFR” SA – railway county Craiova shall reassess the risk identification process and shall draw up the “Record of Railway Safety Hazards” in compliance with the System Procedure Risk Management – code PS 0 - 6.1, edition 3.					
		recommendation implemented (closed)	1	Romanian Railway Safety Authority, through the response formulated in the document no. 2020/845/26.08.2025, communicated, with reference to the safety recommendation no. 476/1 issued following the investigation of this railway accident, that it had been analysed, the measures to be taken had been identified, and these had been implemented.					
23.	66240	freight	Balota	05.01.2024	11:40	23.12.2024	accident	derailment of an electric locomotive	
		In the railway county Craiova, track section Strehaia – Drobeta Turnu Severin (electrified single-track line), the first axle of the banking locomotive derailed.							
		recommendations issued	1	475/1. CNCF "CFR" SA, as the manager of the public railway infrastructure, shall reassess the way of managing the risks associated with the danger of exceeding the permissible tolerances of the track geometry and shall take the necessary measures for their effective management.					
		recommendation implemented (closed)	1	Romanian Railway Safety Authority, through the response formulated in the document no. 2020/845/26.08.2025, communicated, with reference to the safety recommendation no. 475/1 issued following the investigation of this railway accident, that it had been analysed, the measures to be taken had been identified, and these had been implemented					

4.2. Implementation of the safety recommendations issued within the last 5 years

Investigations completed in	Number of the issued recommendations	Number of the issued recommendations	Number of the recommendations in implementation process	Number of the recommendations about which ASFR communicated that they should not be implemented	Number of the recommendations without answer
2020	111	63	39	9	0
2021	52	44	4	3	1
2022	31	26	5	0	0
2023	25	13	12	0	0
2024	33	27	5	1	0
TOTAL	252	173	65	13	1

Director General
Laurențiu Cornel DUMITRU