



**National Commission for Rail Accidents Investigation  
MINISTRY OF HOME AFFAIRS AND ADMINISTRATION**

**2019 ANNUAL REPORT**

**ON THE OPERATIONS  
OF THE NATIONAL COMMISSION FOR RAIL  
ACCIDENTS INVESTIGATION**

Approved by:

Signature on the original

Tadeusz Ryś

Chairman

of the National Commission for Rail Accidents Investigation

ul Chałubińskiego 4, 00-928, Warsaw  
tel.: (+ 48 22) 630 14-33, fax.: (+48 22) 630 14-39, e-mail: pkbwk@mswia.gov.pl  
Officer on duty: +48 510 126 711

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## 1. Introduction

### 1.1 Legal basis of the Commission operation and its tasks

An independent standing National Commission for Rail Accidents Investigation (PL. Państwowa Komisja Badania Wypadków Kolejowych), hereinafter "**the Commission**" or "NCRAI" operates to the Minister competent for home affairs and administration. The Commission establishment resulted from the implementation to the national law of Directive 2004/49/EC of the European Parliament and the Council of 29 April 2004 on safety on the Community's railways and amending Council Directive 95/18/EC on the licensing of railway undertakings and Directive 2001/14/EC on the allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and safety certification (Directive of the European Parliament and the Council (EU) 2016/798 of 11 May 2016 on railway safety - Official Journal L 138 of 26 May 2016, p. 102, hereinafter called "the Directive"). In accordance with Art. 22 of the Directive each Member State shall ensure that investigations of the accidents and incidents are conducted by a permanent body, which shall comprise at least one investigator able to perform the function of investigator-in-charge in the event of an accident or incident. That body shall be independent in its organisation, legal structure and decision-making from any infrastructure management body, railway undertaking, charging body, allocation body and conformity assessment body and from any party whose interests could conflict with the tasks entrusted to the investigating body. According to the Polish law the "Commission" is the national investigation body specified by the Directive. The Commission is fully independent in its organisation and legal structure from the bodies mentioned in Art. 22 of the Directive and **represented before third parties by the President**.

The Commission operates pursuant to the provisions of Section 5a of the Act of 28 March 2003 on rail transport (consolidated text: Journal of Laws of 2020, item 1043), hereinafter called the "rail transport act" or "the Act". In accordance with Art. 4 Section 2 of the Act of 30 August 2019 on amending the rail transport act (Journal of Laws item 1979) (hereinafter called "*the Act amending the Act*") on the day of this Act becoming effective (14 days after the announcement date - i.e. from 1 November 2019) **the minister responsible for home affairs** or his/her servicing office replaces the **minister responsible for transportation** or his/her servicing office within the rights and obligations related to the operation of the National Commission for Rail Accidents Investigation.

As of the day of the *Act amending the Act* becoming effective the minister responsible for home affairs or his/her servicing office becomes the party to any contracts and agreements concluded by the minister responsible for transportation or his/her servicing office and concerning the operation of the National Commission for Rail Accidents Investigation.

The standing and independent National Commission for Rail Accidents Investigation investigates serious accidents, accidents and incidents.

In accordance with the comments submitted by the European Commission representatives to the national laws, amendments were made to the rail transport act by the act of 25 September 2015 on amending the rail transport act (Journal of Laws item 1741). The main task of the Commission is to initiate proceedings **after each serious accident in rail transport** (which occurred on a railway line or rail siding) that had an obvious (negative) impact on the railway safety regulations or management of railway safety. The Commission is also entitled to conduct proceedings **in reference to accidents or incident that could become serious accidents in slightly different conditions** and would result in breaking the operation of structural subsystems or components of the trans-European railway system interoperability.

The Chairman of the Commission makes a decision to instigate proceedings in relation to the abovementioned accident or incident not later than within a week from the date of being notified about the accident/incident.

The Commission can conduct proceedings in relation to a different accident or incident, provided that it occurred in circumstances justifying the investigation, and in such a case the Chairman of the Commission makes a decision about instigating the proceedings based on art. 28e par. 2a of the rail transport act, having no set deadline.

In accordance with the amendments to the rail transport act the scope of the Commission competence has been extended as of 1 March 2016 with the possibility to investigate incidents which occurred on rail sidings. Covering rail sidings with the same solutions as those applying to railway lines enables conducting of proceedings by an independent body in the area of rail sidings.

Another prerequisite for conducting the proceedings in relation to accidents and incidents is their occurrence in repeatable situations resulting from similar causes. Every decision about initiating accident or incident proceedings is preceded by considering:

- the accident or incident severity;
- whether the accident or incident develops a series of accidents or incidents applying to the system as a whole;
- the influence of the accident or incident on the railway safety on the Community level;
- applications of management bodies, railway operators, minister responsible for transportation, President of the Office for Rail Transport, hereinafter called the "President of the ORT" or the European Union Member States.

Within a week after making a decision to instigate the proceedings, the Commission shall inform the Agency, indicating the date, time and place of the occurrence, as well as the incident type and effects, including casualties, injured people and the injuries they suffered as well as material losses.

As part of its operation the Commission conducts investigations aimed to determine the causes and circumstances of the occurrences and to stipulate preventive conclusions intended to improve rail transport safety. The Commission issues its decisions in a form of resolutions.

The Commission members hold identity cards which authorise them to carry out procedures on the rail occurrence site, as well as other related procedures in accordance with the Regulation of the Minister of Transport of 21 February 2007 on the template of the identity card for the members of the National Commission for Rail Accidents Investigation (Journal of Laws item 269).

The identity cards issued:

- 1) for the **permanent members** of the National Commission for Rail Accidents Investigation **remain valid** by the date of the issuance of identity cards according to the template set out in the regulations based on Art. 28d par. 3 of the amended act, but **no longer than 12 months** from the date of the Act amending the Act entering into force;
- 2) for the **temporary members** of the National Commission for Rail Accidents Investigation remain valid in the period they were issued for but no longer than 12 months from the date of the *Act amending the Act* entering into force.

By the date of issuance of identity cards complying with the template specified in the regulations issued based on Art. 28d par. 3 of the amended Act, but no longer than 12 months from this Act entering into force, **the temporary members** of the National Commission for Rail Accidents Investigation appointed to participate in the proceedings starting from the date of this Act entering into force are authorised to conduct procedures **after presenting the appointment to participate in the proceedings**.

In reference to the cases covered by the Commission's proceedings, the Commission develops a report in accordance with the regulation of the Minister of Transport of 12 April 2016 amending the regulation of the contents of a rail serious accident, accident or incident investigation proceedings (Journal of Laws item 369).

## 1.2 Organisational structure of the Commission

As of 31 December 2019, there were 12 permanent members of the Commission, including the Chairman, two Deputy Chairmen, the Secretary and one Commission clerk responsible for administration and office matters, and the Commission Chairman's secretary's office. The National Commission for Rail Accidents Investigation is based in the building of the Ministry of Infrastructure: ul. Chałubińskiego 4, building A, 00-928 Warsaw; as stipulated in Art. 28d par. 2 of the amended act the Commission is serviced by the office servicing the minister responsible for home affairs. By 31 October 2019 the Commission was serviced by the relevant organisational units of the office servicing the minister responsible for transportation.

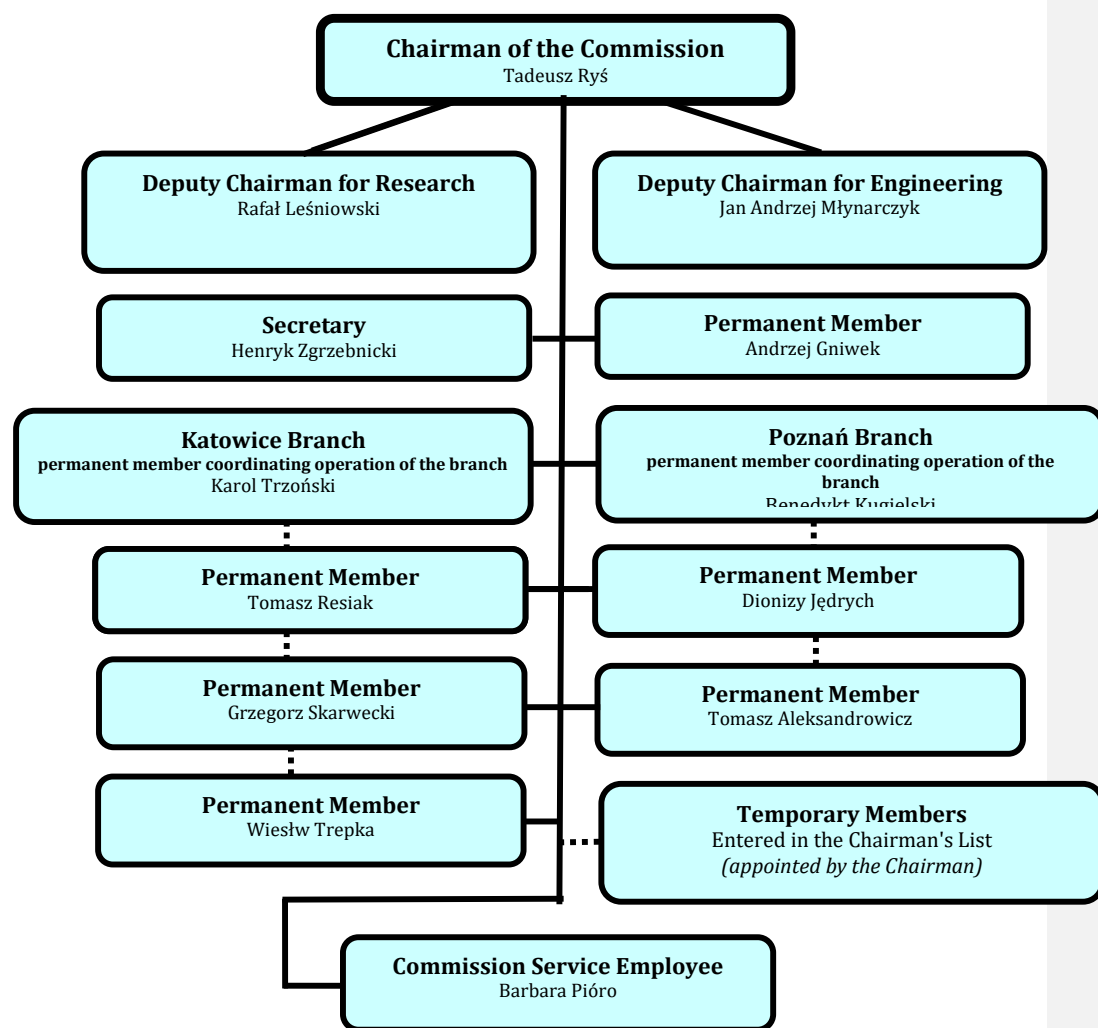
In accordance to the provisions of § 5 par. 1 of the Rules of the National Commission for Rail Accidents Investigation operation, effective in 2019, enclosed in Annex No. 1 to the Instruction No. 29 of the Minister of Infrastructure and Construction of 22 June 2017 on the Rules of the National Commission for Rail Accidents Investigation operation (Official Journal of the Min. of Inf. and Constr., item 48), the Chairman was coordinating the implementation of the Commission's tasks, ensured adequate organisation of the Commission's work and its effective operation, and represented the Commission before third parties.

As a result of the amendment of the rail transport act in 2015, additional obligations were imposed on the National Commission for Rail Accidents, related to including rail sidings in the scope of the Commission's operation, which caused a rapid increase in the number of the occurrences reported to the Commission as of 1 March 2016. According to the new system, the scope of the National Commission for Rail Accidents Investigation operation includes over 700 entities, such as railway lines management bodies, railway operators and rail siding users, who are obliged to report the occurrences to the Commission for the needs to issue a decision to instigate proceedings.

Based on the delegation of legislative powers set out in Art. 1 item 3 letter a of the *Act amending the Act*, the minister responsible for home affairs is obliged to determine - by way of a regulation - the rules of the Commission operation, the number of its permanent members and the organisational structure, including the nature of the Commission's tasks and the need to provide adequate resources necessary for proper implementation of the Commission's tasks.

The Commission members according to the new organisational structure (i.e. the structure effective as of 31 January 2020) include:

1. National Commission for Rail Accidents Investigation based in Warsaw (5 positions - permanent members):
  - a) Chairman,
  - b) Deputy Chairman for Research,
  - c) Deputy Chairman for Engineering,
  - d) Secretary,
  - e) permanent member.
2. The Commission's branch in Katowice (4 positions):
  - 1) permanent member coordinating operation of the branch,
  - 2) permanent members (3 positions).
3. The Commission's branch in Poznań (3 positions):
  - 1) permanent member coordinating operation of the branch,
  - 2) permanent members (2 positions).



*As of 31 December 2019*

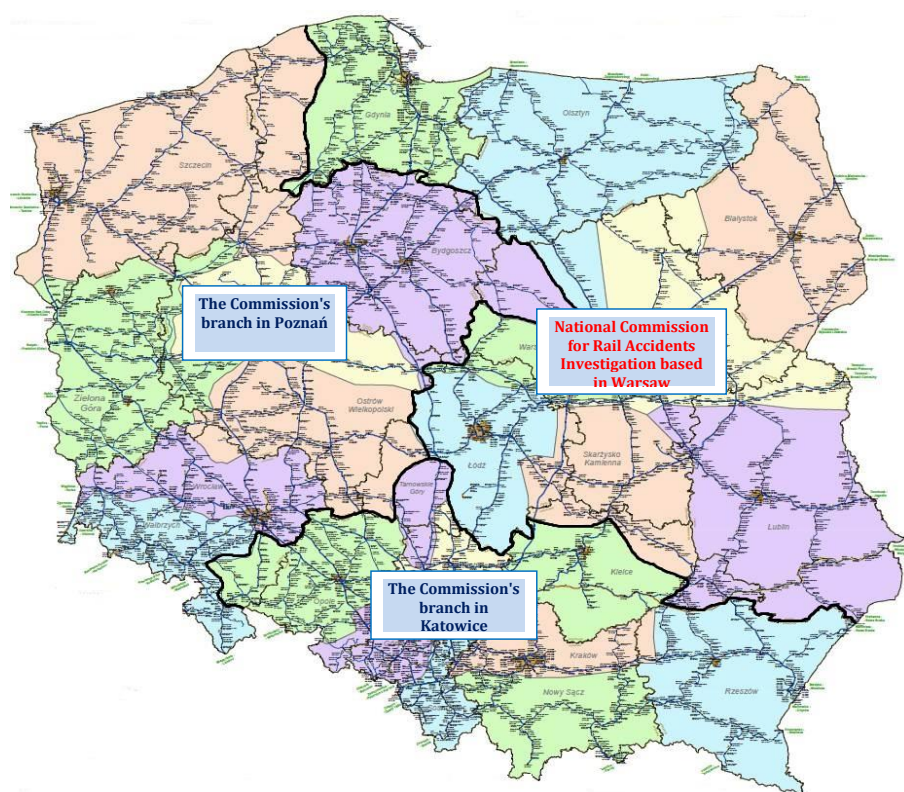
Number of employees of 31 December 2019 in:

- the Commission's head office in Warsaw - 5 permanent members and 1 Commission service employee<sup>\*)</sup>,



- the Katowice Branch of the Commission - 4 persons,
- the Poznań Branch of the Commission - 3 persons,

\*) the Commission is serviced by the office of the minister responsible for home affairs, now there is 1 employee of the Department of Civil Defence and Crisis Management of the Ministry of Home Affairs and Administration, working in the Commission's head office in Warsaw.



The act of 30 August 2019 on amending the rail transport act entered into force on 1 November 2019 (Journal of Laws item 1979) introducing organisational changes pertaining to the Commission. The organisational structure and the Rules of the National Commission for Rail Accidents Investigation operation, effective in 2019, were introduced by the Instruction No. 29 of the Minister of Infrastructure and Construction of 22 June 2017 on the Rules of the National Commission for Rail Accidents Investigation operation.

It shall be mentioned that the new Rules of the National Commission for Rail Accidents Investigation operation have been in force since 31 January 2020, which were introduced by the Instruction No. 3 of the Minister of Home Affairs and Administration of 31 January 2020 on the Rules of the National Commission for Rail Accidents Investigation operation.

## **2. Forms of the Commission's proceedings and exercising supervision by the Chairman in 2019**

In 2019 the Commission was conducting proceedings related to serious accidents, accidents and incidents in the following forms:

1. *Proceedings conducted by the Investigation Team of the Commission appointed by the Commission's Chairman* - in the case of this form of proceedings, the Chairman of the Commission appointed the head of the investigation team, and then in agreement with them was selecting the investigation team members among the permanent and temporary members of the Commission. The Commission's investigation team was conducting procedures aimed to identify the circumstances and causes of the occurrences and to develop the documentation describing the proceedings, necessary for the Commission to make a resolution closing the investigation of a serious accident, accident or incident. The head of the investigation team was assigning and coordinating the tasks performed by his/her team and was responsible for the correct implementation of the tasks. The tasks and detailed scope of activities were set out in the Rules of the NCRAI organisation of 22 June 2017.

In 2019 the Report was developed by the Investigation Team based on the Regulation of the Minister of Infrastructure and Construction on 12 April 2016, amending the regulation on the contents of the report on a serious rail accident, accident or incident (Journal of Laws item 560). By the time of the issuance of the regulation set out in Art. 1 item 6 letter b, based on the Act amending the Act (i.e. Art. 28l par. 3 of the rail transport act), the Regulation of the Minister of Infrastructure and Construction on 12 April 2016, amending the regulation on the contents of the report on a serious rail accident, accident or incident remains in force; the Regulation applies to the substantial contents of a report developed by the Investigation Team.

In 2019 the Commission's Chairman, Mr Tadeusz Ryś, three times made a decision of the Commission's Investigation Team taking over the proceedings in relation to the following occurrences:

- 1) B11 category accident which occurred on 17 March 2019 at 21:49 at the Taczanów - Pleszew route, track 1, 107.985 km of the Kluczbork – Poznań Główny railway line No. 272;
- 2) B13 category accident which occurred on 19 May 2019 at 15:25 at Rybnik Towarowy railway station, track No. 308, Katowice Ligota – Nędza railway line No. 140;

- 3) serious A20 category accident which occurred on 15 June 2019 at 18:22 at the C category level crossing, situated at the Kąty Wrocławskie – Mietków junction post route, track No. 2, 22.788 km of the Wrocław Świebodzki – Zgorzelec railway line No. 274;

The Deputy Chairman of the Commission, Mr Rafał Leśniowski - acting according to the Chairman's instructions, five times made a decision in 2019 of the Commission's Investigation Team taking over the proceedings in relation to the following occurrences:

- 4) A19 category serious accident which occurred on 3 July 2019 at 08:50 at B category level crossing located at Wargowo – Złotniki route, on closed track No. 2, 13.916 km of the Poznań Główny PoD – Piła Główna railway line No. 354;
- 5) C41 category incident which occurred on 30 July 2019 at 16:53 at Złocieniec railway station, track No. 2, 114.131 km of the Chojnice – Runowo Pomorskie railway line No. 210;
- 6) A21 category accident which occurred on 2 August 2019 at 19:42 at D category level crossing located at the Starzyny – Koniecpol route, track No. 1, 34.751 km of the Kozłów – Koniecpol railway line No. 64;
- 7) B11 category accident which occurred on 8 August 2019 at 23:18 at the Tarnów Opolski - Opole Groszowice route, track No. 1, 87.973 km of the Bytom – Wrocław Główny railway line No. 132;
- 8) serious A35 category accident, which occurred on 28 October 2019 at 12:55 at Paczyna-Toszek route, track No. 1, 48.180 km of the Bytom - Wrocław Główny railway line No. 132.

The progress of the investigations carried out by the Commission is as follows:

- the proceedings mentioned in items 1 to 7 were closed by the Commission's investigation teams after making the entities (mentioned in Art. 28k par. of the Act) familiar with the draft Report contents, and the developed "Reports on the Proceedings" were adopted by the resolutions of the Commissions and published,
- draft Report No. PKBWK/08/2020 was developed on the proceedings mentioned in item 8 and sent to the entities mentioned in Art. 28k par. 2 of the Act, based on § 17 par. 8 of the Rules of the NCRAI operation,
- after collecting comments on draft Report PKBWK/08/2020 on the proceedings, reported by the entities mentioned in Art. 28k par. 2 of the Act, the head of the Investigation Team or their appointed member of the Investigation Team shall discuss the comments in the Commission's meeting during which the comments shall be either accepted or rejected; then the corrected Report shall be adopted by the Commission's resolution and published (probable publication date - October 2020).

Detailed information concerning the proceedings related to the occurrences are presented further in the Report.

2. *Direct participation of the Commission member in the site survey in the presence of rail commissions* - was used mainly for occurrences with the suspected contribution of malfunctioning rail traffic safety management system and it requires an analysis and potential corrective measures, or if there were other premises suggesting the need to instigate the proceedings - in accordance with § 6 of the Regulation of the Minister of Infrastructure and Construction of 16 March 2016 on serious rail accidents, accidents and incidents (Journal of Laws item 369 ).

The site reconnaissance allows the Chairman of the Commission to make a decision to take over the proceedings in order to identify the circumstances and causes of the occurrence.

3. The Commission was cooperating with relevant entities conducting proceedings related to serious accidents, accidents or incidents in other European Union Member States, e.g. the Commission was cooperating with Drážní Inspekce (NCRAI's counterpart in the Czech Republic) and with NCRAI's counterpart in Lithuania.
4. The Commission was monitoring the reported rail occurrences and kept the Rail Occurrences Record (ROR).
5. In 2019 common surveys of the rail occurrences were held, performed by the members of the Commission and rail commissions, e.g. combined with measurements and tests, and an analysis of the occurrence-related documents.

The most important factors which affected the Commission's operation included:

- ❖ Cooperation between bodies operating simultaneously and independently, respecting one another's competence in relation to the rail occurrence, based on the "Agreement of 27 June 2014 signed between the National Commission of Rail Accidents Investigation and the General Prosecutor". The Agreement also applies to cooperation with the Police, Internal Security Agency, Military Police and Border Guards (in accordance with the definition of a crime proceedings conducting body - set out in § 1 item 5 of the Agreement). All provisions related to the NCRAI apply to the rail commission as well.

The contents of the Agreement and the following ones are available at [www.gov.pl](http://www.gov.pl) tag: Ministerstwo Spraw Wewnętrznych i Administracji → Co robimy → Państwowa Komisja Badania Wypadków Kolejowych: → Akty prawne i dokumenty [Ministry of Home Affairs and Administration - What we do - National Commission for Rail Accidents Investigation - Acts of law and documents]

<https://www.gov.pl/web/mswia/panstwowa-komisja-badania-wypadkow-kolejowych>

- ❖ The Agreement of 16 December 2014 was signed between the Chief Police Officer and the National Commission for Rail Accidents Investigation to determine the rules of cooperation within mutual support for the operations performed in relation to the training initiatives organised and conducted by the two institutions.
- ❖ The Agreement of 3 June 2016 signed between the Chairman of the National Commission for Rail Accidents Investigation and the President of the Office of Rail Transport on cooperation in relation to rail transport safety in the Republic of Poland. The purpose of the Agreement is to carry out common operations of the parties towards development and provision of rail transport safety and to exchange information and experiences related to the rail commissions operation.
- ❖ The Commission provides training for the Prosecutor's office and the Police as part of experience exchange and improvement of the state of safety in rail transport. The Commission members participate in training organised by other entities, conferences, meetings, plenary meetings, working teams, workshops and assemblies organised by the European Union Agency for Railways and entities conducting the proceedings on serious accidents, accidents and incidents in other European Union Member States.
- ❖ Amendments to the national regulations from March 2016 (acts and regulations) resulting in the inclusion of rail sidings in the system of supervision and investigation of rail occurrences imposed new obligations on the rail sidings users; the obligations are related to reporting any rail occurrences to the Chairman of the NCRAI and the President of the ORT, investigating the causes of the occurrences by the dedicated investigation teams as well as recording the occurrences and the analysis on their impact on the safety level on the rail siding. 2019 was the third full year when the implemented amendments to national regulations have been in force.

### 3. Occurrences between 1 January and 31 December 2019

#### 3.1 Occurrences reported to the Commission by entities under obligation

As of 31 December 2019 the obligation of immediate reporting of rail serious accidents, accidents and incidents at railway lines to the Commission and President of the ORT by the railway management bodies and operators and users of rail sidings resulted from Art. 28g par. 1 of rail transport act. The obligation of written notification about the occurrence by the rail siding user or management bodies responsible for the occurrence site resulted from § 7 par. 1-5 of the Regulation of the Minister of Infrastructure and Construction of 16 March 2016 on serious accidents, accidents and incidents in rail transport. The amendments to the national regulations established the following division of rail transport occurrences:

- 1) **serious accident – any accident caused** by collision, derailment or by another occurrence having an obvious influence on the railway safety or safety management: with at least **one**

**casualty or at least five severely injured persons** (a severely injured person who suffered from the impairment of the body functions or disturbance of health, and consequently stayed in hospital for more than 24 h), or causing severe damage to the railway vehicle, railway infrastructure or the environment, which can be immediately estimated by the accident investigating commission as amounting to at least two million euro;

- 2) **accident** – unintended, sudden occurrence or a series of occurrences with a participation of a railway vehicle, resulting in negative consequences for the human health, property or environment;

accidents include but are not limited to: collision, derailment, occurrences on level crossings, occurrences involving humans and caused by a moving railway vehicle or a fire to a railway vehicle.

- 3) **incident** – any occurrence other than an accident or serious accident, related to **railway traffic** and affecting its safety.

The abovementioned definitions of the occurrence categories (serious accident, accident and incident) were defined according to the regulations of the rail transport act, which entered into force on 1 March 2016.

Definitions other than the abovementioned ones were in force by 29 February 2016. The changes concerning the definitions were presented in detail in the 2016 Annual Report.

Between 1 January and 31 December 2019 a total of 1897 rail occurrences were reported to the Commission and entered into the Rail Occurrences Record (ROR). The occurrences were qualified according to the Regulation of the Minister of Infrastructure and Construction of 16 March 2016 on serious accidents, accidents and incidents in rail transport, and included: 4 serious accidents, 632 accidents and 1261 incidents. Table 2 shows the number of persons affected (casualties, severely injured and injured) in the occurrences in 2019 as compared to 2018.

The number and structure of the occurrences, divided into categories, are summarised in Tables 1 and 3.

Table 1. Occurrences reported to the Commission in 2019, as compared to 2018.

Type of occurrence (SA - serious accident, A - accident, I - incident)	2018	2019	Revision 2019/2018
SA (cat. A)	6	4	-33.3%
A (cat. B)	722	632	-12.5 %
I (cat. C)	1257	1261	+0.3 %
Total number of rail incidents	1985	1897	-4.4 %

Table 2. Persons affected in the occurrences in 2019 as compared to 2018.

Affected persons	2018	2019	Revision 2019/2018
Casualties	196	160 <sup>*)</sup>	-18.4%
Severely injured	86	49 <sup>**)</sup>	-43.0%
Injured	131 <sup>**)</sup>	99 <sup>**)</sup>	-24.4%

<sup>\*)</sup> Total number of casualties (including on rail sidings) according to the information as of the day of the Report (i.e. 26 August 2020) does not include the persons affected and classified according to the prosecutor's decision as suicides or attempted suicides.

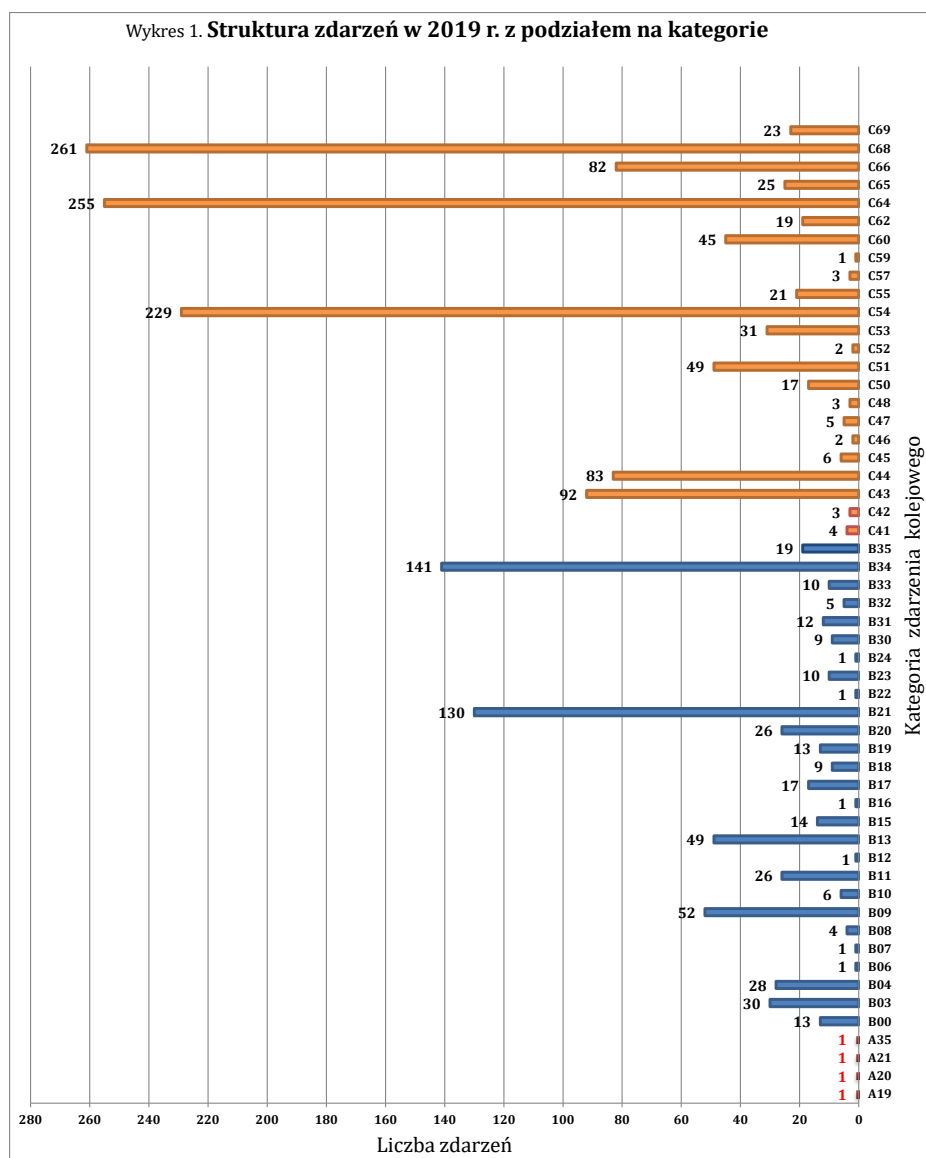
<sup>\*\*)</sup> The statistics (numerical data) revealed based on the Commission's Report and Report on the Final Arrangements developed by the rail commissions and submitted to the NCRAI.

## 2019 Annual Report

Table 3 - Structure of occurrences in 2019 as compared to 2018, divided into categories

Occurrence category (letter symbols)	Description of the occurrence category <b>Qualification of the direct cause</b>	Category (numerical symbol)	TOTAL 2018	TOTAL 2019
A	Railway vehicle running into a road vehicle (another piece of road equipment or agricultural machine) or vice versa on a level crossing with barriers (cat. A acc. to the crossing metrics)	18	1	-
	Railway vehicle running into a road vehicle (another piece of road equipment or agricultural machine) or vice versa on a level crossing with an automatic crossing system with light signals and barriers (cat. B)	19	-	1
	Railway vehicle running into a road vehicle (another piece of road equipment or agricultural machine) or vice versa on a level crossing with an automatic crossing system with light signals and without barriers (cat. C)	20	1	1
	Railway vehicle running into a road vehicle (another piece of road equipment or agricultural machine) or vice versa on a level crossing not featured with a safety system (cat. D)	21	4	1
	Occurrences related to the railway vehicle movement (jumping into, falling out of a train, railway vehicle, violent approach or sharp braking of a railway vehicle)	35	-	1
<b>SERIOUS ACCIDENTS</b>			<b>6</b>	<b>4</b>
B	Causes other than mentioned below or a combination of several simultaneous causes resulting in equivalent causes	00	19	13
	Sending a railway vehicle off onto an occupied track, either closed or opposite to the right one, or into a wrong direction	01	0	0
	Accepting a railway vehicle in a station on a closed or occupied track	02	0	0
	Sending off, acceptance or running of a railway vehicle on a wrongly arranged and non-secured route or incorrectly serviced railway traffic control equipment	03	30	30
	Railway vehicle not stopping ahead of "Stop" signal or in the place where it should stop or starting a railway vehicle without the required permission	04	35	28
	Unsafe practices after the railway vehicle's passing an automatic block signal ("Stop") or ambiguous signal after stopping	05	0	0
	Exceeding the permissible speed	06	0	1
	Making a manoeuvre which poses hazard to train traffic safety	07	8	1
	Inadvertent starting of a railway vehicle	08	11	4
	Damage to or poor maintenance of structures, e.g. surface, bridge or overpass, including works carried out incorrectly, e.g. wrong unloading of materials, surface, leaving materials and equipment (including road equipment) on the track or within the railway vehicle gauge or a railway vehicle running into parts of a building structure	09	43	52
	Damage to or poor technical condition of a railway vehicle with a drive, special purpose railway vehicle (including running into an object which is a structural component of a railway vehicle with a drive or wrong operation of the board equipment enabling the railway vehicle control (ERTMS).	10	4	6
	Damage to a railway car or its poor condition (including running into a part of the railway car construction)	11	21	26
	Damage to or incorrect activation/operation of railway traffic control equipment	12	3	1
	Railway vehicle running onto another railway vehicle or obstacle (e.g. a brake skid, luggage trolley or postal trolley)	13	48	49
	Criminal assault	14	0	0
	Premature termination of the route or removing the closure and throwing the points under a railway vehicle	15	18	14
	Incorrect forming of a train or shunting train	16	0	1
	Incorrect loading, unloading or securing of load or other irregularities in loading operations, or incorrect forming of a train or shunting train	17	17	17
	Railway vehicle running into a road vehicle (another piece of road equipment or agricultural machine) or vice versa on a level crossing with barriers (cat. A acc. to the crossing metrics)	18	2	9
	Railway vehicle running into a road vehicle (another piece of road equipment or agricultural machine) or vice versa on a level crossing with an automatic crossing system with light signals and barriers (cat. B)	19	21	13
	Railway vehicle running into a road vehicle (another piece of road equipment or agricultural machine) or vice versa on a level crossing with an automatic crossing system with light signals and without barriers (cat. C)	20	35	26
	Railway vehicle running into a road vehicle (another piece of road equipment or agricultural machine) or vice versa on a level crossing not featured with a safety system (cat. D)	21	137	130
	Railway vehicle running into a road vehicle (another piece of road equipment or agricultural machine) or vice versa on a level crossing with an automatic crossing system with light signals and without barriers (cat. E)	22	0	1
	Railway vehicle running into a road vehicle (another piece of road equipment or agricultural machine) or vice versa in areas other than level crossings at railway stations, routes or on a traffic and access route to the rail siding	23	6	10
	Fire on the train, shunting train or railway vehicle	24	6	1
	Building structure fire etc. within the borders of the railway area, forest fire within the borders to the end of fire safety belt; fire of corn, grass and peat bogs within the railway area	26	0	0
	Explosion in the train, shunting train or railway vehicle	27	0	0
	Natural calamities (e.g. flood, snowdrifts, ice jams, hurricanes, landslides)	28	2	0
	Construction disaster in the direct vicinity of railway track with normal railway traffic	29	0	0
	Mischvious, hooligan or reckless misdeemeanour (e.g. throwing stones at the train, stealing cargo from a moving train or shunting train, placing an obstacle on the track, devastation of power, communication or railway traffic control equipment or surface and tampering the equipment)	30	1	9
	Railway vehicle running into persons when they are crossing the track at a level crossing or railroad crossing with barriers	31	4	12
	Railway vehicle running into persons when they are crossing the track at a level crossing with an automatic crossing system (cat. B, C)	32	10	5
	Railway vehicle running into persons when they are crossing the track at other types of level crossing or railroad crossing	33	9	10
	Railway vehicle running into persons when they are crossing the track away from level crossings or railroad crossings at railway stations and routes	34	205	144
	Occurrences related to the railway vehicle movement (jumping into, falling out of a train, railway vehicle, violent approach or sharp braking of a railway vehicle)	35	24	19
	Road vehicle driver's ignoring of the signals forbidding entering a level crossing, or damage to the barriers and traffic signals	36	0	0
	Separation of a train or shunting train which resulted in inadvertent starting of railway cars	37	0	0
	Incorrect activation of structures and equipment intended for managing the railway traffic or railway vehicle as a result of theft	38	0	0
	Railway vehicle using overhead line power entering a non-occupied non-electrified track from the overhead line	39	1	0
	Uncontrolled release of dangerous goods from a railway car or packaging, requiring intervention of authorities or the use of measures to eliminate fire, chemical or biological hazard at the station or on the route	40	0	0
	Category not specified	-	4	3
<b>ACCIDENTS</b>			<b>722</b>	<b>632</b>
<b>TOTAL</b>				
C	Sending a railway vehicle off onto an occupied track, either closed or opposite to the right one, or into a wrong direction	41	3	4
	Accepting a railway vehicle in a station on a closed or occupied track	42	4	3
	Sending off, acceptance or running of a railway vehicle on a wrongly arranged and non-secured route or incorrectly serviced or a lack of service of the railway traffic control equipment	43	67	92
	Railway vehicle not stopping ahead of "Stop" signal or in the place where it should stop or starting a railway vehicle without the required permission	44	86	83
	Exceeding the permissible speed	45	8	6
	Making a manoeuvre which poses hazard to train traffic safety	46	1	2
	Inadvertent starting of a railway vehicle	47	9	5
	Premature termination of the route or removing the closure and throwing the points under a railway vehicle	48	4	3
	Incorrect forming of a train	49	0	0
	Incorrect loading, unloading or securing of load or other irregularities in loading operations	50	26	17
	Damage to the surface, bridge, overpass or overhead line, including works carried out incorrectly, e.g. wrong unloading of materials, surface, leaving materials and equipment (including road equipment) on the track or within the railway vehicle gauge	51	45	49
	Incorrect activation of the railway traffic control equipment, which resulted in not covering the line block system section occupied by a railway vehicle with the "Stop" signal; setting a permitting light signal at an incorrectly arranged route (track), incorrect operation of the track or turnout occupancy equipment, incorrect operation of the junction or line block, failing to warn or protect the road users from a train approaching a level crossing or railroad crossing featured with a crossing system	52	0	2
	Damage to or poor technical condition of a railway vehicle with a drive, special purpose railway vehicle which results in its withdrawal from use as a result of the detection equipment indicating failure of the rolling stock, confirmed in workshop conditions (hot axle boxes, hot brake resulting in rim displacement) or other failures to moving railway vehicles discovered by the service staff (e.g. spring fracture)	53	25	31
	Damage to or poor technical condition of a railway car, which results in its withdrawal from use as a result of the detection equipment indicating failure of the rolling stock, confirmed in workshop conditions (hot axle boxes, hot brake resulting in rim displacement) or other failures to moving railway vehicles discovered by the service staff	54	240	229
	Fire on a train or railway vehicle which does not cause negative effects for the property or environment, with no persons affected	55	26	21
	Fire on a railway vehicle, except fires on trains	56	0	0
	Fire of a building structure and plants in the direct vicinity of railway track with normal railway traffic	57	3	3
	Uncontrolled release of dangerous goods from a railway car or packaging, requiring intervention of authorities or the use of measures to eliminate fire, chemical or biological hazard at the station or on the route	58	0	0
	Uncontrolled release of dangerous goods from a railway car or packaging, requiring intervention of authorities or the use of measures to eliminate fire, chemical or biological hazard at the station or on the route	59	2	1
	Railway vehicle running onto another railway vehicle or obstacle (e.g. a brake skid, luggage trolley or postal trolley) with no derailment or injured persons	60	58	45
	Criminal assault	61	0	0
	Natural calamities (e.g. flood, snowdrifts, ice jams, hurricanes, landslides)	62	8	19
	Construction disaster in the direct vicinity of railway track with normal railway traffic	63	0	0
	Mischvious, hooligan or reckless misdeemeanour (e.g. throwing stones at the train, stealing cargo from a moving train or shunting train, placing an obstacle on the track, devastation of power, communication or railway traffic control equipment or surface and tampering the equipment), with no persons affected or negative consequences for the property or environment which would pose a hazard for passengers or train staff	64	133	255
	Occurrences involving humans, related to the railway vehicle movement (crossing the track at level crossings or away from them, jumping into, falling out of a train or railway vehicle, being knocked down by a moving rolling stock, violent approach or sharp braking of a railway vehicle) with no persons affected or negative consequences for the property or environment	65	10	25
	Road vehicle not stopping before a closed barrier (half barrier) and its damage or damage to signal lights where the signals warning about an approaching train were on, with no collision with the railway vehicle	66	138	82
	Incorrect operation of structures and equipment intended for managing the railway traffic or railway vehicle as a result of theft	67	1	0
	Separation of a train or shunting train which did not result in inadvertent starting of railway cars	68	333	261
	Causes other than mentioned above or a combination of several simultaneous causes resulting in equivalent causes	69	28	23
<b>INCIDENTS TOTAL</b>			<b>1257</b>	<b>1261</b>
<b>OCCURRENCES TOTAL</b>			<b>1985</b>	<b>1897</b>





[Diagram 1. Structure of occurrences in 2019 divided into categories; horizontal axis - number of occurrences, vertical axis - rail occurrence category]

Diagram 1 does not include any rail occurrences which occurred in 2019 with no category specified by 26 August 2020

### 3.2 Occurrences in relation to which the Commission was engaged in the proceedings that the European Union Agency for Railways (EUAR) was notified about

#### 3.2.1 B11 category accident which occurred on 17 March 2019 at 21:49 at the Taczanów - Pleszew route, track No. 1, 107.985 km of the Kluczbork – Poznań Główny railway line No. 272

On 17 March 2019 at 21:00 the train dispatcher at the Taczanów junction post displayed the clear signal on the home signal at track No. 1 for train No. TMS 654035 (train operator: Przedsiębiorstwo Obrotu Surowcami Wtórnymi DEPOL Sp. z o.o.) led by the BR232-15-05 engine. The Taczanów junction post is not equipped with home signals at the Taczanów - Pleszew route. At 107.985 km the first axle of the 20th railway car No. 84 51 5945 940-1 (from the head of the train) broke and derailed. Consequently, SB4 springs at the inner side of the left rail were hit. The trackside electromagnet of the SHP device at the right rail was damaged at 109.257 km. The railway gateman noticed sparking when the train was running through cat. A level crossing at 109.317 km. He thought that it had been caused by the braking railway car and reported the fact to the Taczanów junction post dispatcher. The railway gateman recorded the fact of reporting the irregularity in the Railway Gateman's Log - R49. The dispatcher informed the TMS 654035 train driver via radio telephone about the railway car sparking. The train driver confirmed being informed about the failure, which was confirmed in the conversation recorder, and continued driving. At the level crossing at 109.317 km the derailed car bogie hit the first inner guiding sleeper (of "Mirośław Ujski" type) at the left rail. Three springs from the first bogie were lying at 109.332 km in the intertrack space. As a result of continuing the train run, pre-stressed concrete sleepers with SB4 type of fixing were damaged. The inner CBP was damaged when the train was passing through the next cat. A level crossing at 109.782 km. It resulted in the damage to the rail car bogie with the broken axle, and even greater damage to pre-stressed concrete sleepers, fixing and damage to the return network lines (rail run connection lines and return wires of the overhead line posts). At cat. D level crossing at 111.731 km, as a result of the bogie damage, the derailed car hooked the internal CBP sleeper, which got stuck between the side sill and the car bogie. Moreover, the damaged car hit two outer sleepers which were moved to 111.750 km. The sleeper stuck under the car together with the broken axle damaged the rail fixing and pre-stressed concrete sleepers. Following subsequent run, at the next cat. D level crossing at 112.194 km two inner sleepers got stuck, and two outer sleepers at the right rail were thrown out to track No. 1 foundation. TMS 654035 train with the damaged car and stuck sleepers continued running to Pleszew station, damaging the sleepers, rail fixing, Railway Traffic Control System equipments and return network lines. When the train entered track No. 1 to Pleszew station, the rails in the right rail were broken at 113.660 km, 113.682 km and 113.700 km, and the rails in the left rail were broken at 113.682 km and 113.700 km, and "Mirośław Ujski" type of sleepers were damaged at the level crossing at 113.700 km (7 inner ones and 2 outer ones). The train with the derailed car entered turnout No. 1 and damaged: Tm3 shunting signal, the drive of turnout No. 1, setting turnout lock, and wing rail of the frog, and broke up right in front of the damaged car. As a result of the train breaking up, the brake pipe broke and the train braked sharply. The head of the train stopped at 113.740 km, and the separated part of the train set stopped at the level crossing at Pleszew station, at 113.705 km. From the place where the axle broke to the place where the train broke up and stopped, the train set covered the distance of 5,720 m. Upon request of the Rail Commission's Chairman, at ca. 3:00 a.m. on 18 March 2019, the train driver reversed a part of the train set which blocked the level

crossing at 113.705 km towards Taczanów station. To that end the train driver used TEM2-065 diesel engine located at the back of TMS 654035 train set.

Following the NCRAI Chairman's decision that the Investigation Team should take over the proceedings, considering the provisions of Art. 28e par. 4 of the rail transport act, on 25 March 2019 the Commission reported this fact to the European Union Agency for Railways (EUAR) via "ERAIL" IT system. The occurrence was registered in the ERAIL data base at No. **PL-5947**.

**The Commission developed Report No. PKBWK/07/2019 on the proceedings. The Commission's Investigation Team recommended that the following measures should be implemented:**

1. Infrastructure management bodies as part of their periodical and one-off training shall discuss the rules included in the internal regulations, concerning the obligation to immediately stop the train, if the dispatcher or another employee learns that sparking occurs in a train set.
2. DEPOL Sp. z o.o. shall improve monitoring of the quality and effectiveness of periodical instructions provided for all employees working on positions related to railway vehicle driving, and safety of the rail traffic and of railway vehicle drivers.
3. DEPOL Sp. z o.o. shall adjust the rules of conducting authorisation of the employees working on positions related to railway vehicle driving and rail traffic safety in their internal regulations.
4. DEPOL Sp. z o.o. shall introduce the following obligations as part of their inner regulations:
  - a) archiving of train speedometer tapes, determining the rules and time of their storage, designation rules, and the obligation to check the the parameter recording correctness by the train driver or another employee,
  - b) periodical inspections of random speedometer tapes to check if the train drivers comply with the regulations in their work.
5. DEPOL Sp. z o.o. shall adapt the method of employing the staff for positions related to railway vehicle driving and rail traffic safety, as well as for positions of railway vehicle drivers to the effective requirements of Procedure P/09 (employed only based on an employment contract).
6. DEPOL Sp. z o.o. shall provide complementary training for the rolling stock inspectors, with a special consideration for the deadlines of P4 and P5 level repairs.
7. In reference to the internal control system, DEPOL Sp. z o.o. shall take necessary measures aimed to:
  - a) increase the number of train drivers' work inspections,
  - b) extend the scope of inspections to include all key areas related to the rail traffic safety (cars, engines, transport, personnel, maintenance, technical condition of railway vehicles etc.),
  - c) making the inspections more in-depth.
8. In reference to the Safety Management System, DEPOL Sp. z o.o. shall undertake the following measures:
  - a) revise the SMS procedures and internal regulations for their compliance with effective regulations, and implement adequate adaptive changes, especially in relation to P/15 procedure,

- b) improve supervision of the compliance with the SMS procedures and their related documents, including but not limited to P/03, P/04, P/05, P/06 and P/09, and increase the number and effectiveness of safety audits,
  - c) audits of all suppliers before they are entered in the "List of qualified suppliers",
  - d) DEPOL's taking measures to establish auditing teams in the future that shall guarantee the fulfilment of the rule of impartiality of the SMS audits,
  - e) introduce new hazards identified during the proceedings carried out by the Investigation Team into the Register of Hazards in the Safety Management System. The hazards include:
    - incorrect marking on the railway vehicles,
    - the railworthiness certificate or railway vehicle recommissioning certificate issued incorrectly or not complying with the applicable laws.
9. INTER KOMTRANS, as the ECM for freight wagons, shall strengthen its supervision of correct maintenance of freight wagons, especially in relation to the compliance with the maintenance cycles.
10. Certified train operators and authorised infrastructure management bodies shall check the following in their internal regulations:
- a) if the regulations set out the method of conducting and documenting the authorisation of the employees employed on positions related to railway vehicles driving and railway traffic safety, and if they discover that this are shall be specified in detail, they shall take the right measures,
  - b) if the regulations determine the method of archiving the train speedometer tapes, with determination of the rules and time of their storage, designation rules, and the obligation to check the the parameter recording correctness after each run of the train, and if they discover that this area shall be specified in detail, they shall take the right measures,
  - c) if the regulations determine the rules of periodical inspections of random speedometer tapes for the train drivers work complying with the rules.
11. In relation to the fact that non-destructive tests of the wheelsets, carried out as part of the maintenance process required by the Maintenance System Documentation, did not detect any internal defects of the axle in its central part, the freight wagon ECMs entities shall introduce additional tests for the middle parts of wheelsets (between the wheel disks) as mandatory in the Maintenance System Documentation and performed during P3, P4 and P5 level maintenance activities. 12. The infrastructure management bodies and railway operators being freight wagon ECMs, and executing only process runs or runs for their own needs, shall introduce additional tests for the middle parts of wheelsets (between the wheel disks) as mandatory in the Maintenance System Documentation and performed during P3, P4 and P5 level maintenance activities.
12. The infrastructure management bodies and railway operators being freight wagon ECMs, and executing only process runs or runs for their own needs, shall introduce additional tests for the middle parts of wheelsets (between the wheel disks) as mandatory in the Maintenance System Documentation and performed during P4 and P5 level maintenance activities.

13. The President of the Office of Rail Transport shall take measures to introduce mandatory traceability of wheelsets for freight wagon axles according to the Guidelines for the European Wheelset Traceability (EWT) for freight wagon axles, developed in Brussels on 26 July 2010 by the ERA Task Force Group for freight wagon/axle issues; the Guidelines were agreed with the National Safety Authorities.

**3.2.2 B13 category accident which occurred on 19 May 2019 at 15:25 at Rybnik Towarowy railway station, track No. 308, Katowice Ligota – Nędza railway line No. 140.**

On 19 May 2019 at ca. 14:30, PKP CARGO S.A. railway operator reported to the RTB dispatcher the need to have the engine located in the RTA shunting loop, dispatched as helper engine for the TMS 444255 freight train on route from Rybnik Towarowy to Chałupki, which was waiting on track 308 in the RTB and RTD switch circle due to the profile of the section (climbing a slope) and the forecast of heavy rainfall. At 14:58, the SM42-1205 (6Dg) shunting engine was dispatched at Rybnik Towarowy station, from the RTA shunting area to RTB positioning circle as helper engine for the TMS 444255 freight train standing on track 308. Without discussing the shunting manoeuvre with the SM42-1205 engine driver, the RTB signal box dispatcher permitted the run near the shunting signal indicating "Shunting prohibited" signal, and giving the following instruction, "At 309 as a helper for train to Chałupki... you can skip 257". His instructions resulting in directing SM42-1205 engine wrongly onto track 309, instead of track 308. At 15:07:30 the engine arrived at a set of empty cars standing on this track (that was the time recorded in the monitoring system of ST48-049 engine standing on track 308 at the front of the TMS 444255 freight train). The SM42-1205 engine driver, having reached the set of empty cars on track 309, connected the engine with a screw and air coupling to the cars standing on that track.

Then he called (using his private mobile phone) the driver of the ST48-049 engine standing on track 308 at the front of the TMS 444255 freight train to discuss the execution of a simplified brake test, which was not performed at all. Then, after the coupling, he called (mobile phone) the ST48-049 engine driver and informed him that his train was connected to the train set and that they could proceed with a simplified brake test. After a failed attempt to perform the simplified test of the combined brake, the pulling engine driver instructed the bank engine driver to disconnect the brake couplings (close the air valves) and maintain the connection to the set by means of the screw coupling only.

The driver of the ST48-049 engine leading the train, having received the permission signal (S10) emitted from the RTD command box and transmitted on the T3082 exit signal from track 308, at 15:23:55 started the TMS 444255 freight train and instructed the driver of the SM42-1205 pusher engine which was mistakenly located on track 309 at the end of the empty car set, to go "full speed ahead".

The driver of the ST48-049 engine leading the TMS 444255 train was not authorised to give the instructions to the pusher engine driver; he was only supposed to inform him about starting the train. When the TMS 444255 freight train was leaving track 308 at 15:25:10, a side collision took place at the fouling point of turnout 452 with set of empty freight wagons pushed simultaneously from track 309. This resulted in a derailment of three empty cars of the train set pushed from track 309 and in damage to 8 freight wagons of the departing train the TMS 444255 on route from Rybnik Towarowy to Chałupki. Moreover, some elements of the infrastructure were damaged (mechanical point drives for points 452 and 455 including transmission routes, whereas railroad

turnouts 452 and 455 and eight wooden sleepers between turnouts 452 and 455 were destroyed). At the time of the occurrence, the speed of the pushed set of empty coal wagons was about 10 km/h, while the speed of the TMS 444255 train at the time of the event was 16 km/h.

Following the NCRAI Chairman's decision that the Investigation Team should take over the proceedings, considering the provisions of Art. 28e par. 4 of the rail transport act, on 25 May 2019 the Commission reported this fact to the European Union Agency for Railways (EUAR) via "ERAIL" IT system. The occurrence was registered in the ERAIL data base at No. **PL-5985**.

**The Commission developed Report No. PKBWK/01/2020 on the proceedings. The Commission's Investigation Team recommended that the following measures should be implemented:**

1. PKP CARGO S.A. railway operator and the PKP PLK S.A. railway infrastructure management body Zakład Linii Kolejowych [Railway Track Development and Construction Unit] in Tarnowskie Góry shall take measures aimed to eliminate other irregularities discovered during the proceedings, and mentioned in this report, according to the competencies resulting from applicable laws.
2. The PKP CARGO S.A. railway operator and the PKP PLK S.A. railway infrastructure management body shall include the rules of shunting operations and running with a pusher engine in their periodical training.
3. As part of periodical instructions PKP CARGO S.A. railway operator shall recall the rules of performing a combined brake simplified test in freight trains with a pusher engine and the rules of correct train preparation for a journey in relation to railway traffic safety.
4. The PKP PLK S.A. infrastructure management body shall revise its regulations concerning shunting operations and shall verify them in reference to discussing the shunting operation between the dispatcher and freight transport organiser or another employee of the railway operator who organises the shunting operations.
5. The PKP PLK S.A. infrastructure management body shall recall the rules of correct handling of Track Occupancy Controls, keeping the Traffic Logs, rules of performing shunting operations at the station and correct methods of communication via radio communication and station communication equipment.
6. In order to enforce compliance with the internal regulations and instructions, the railway operators and infrastructure management bodies shall enhance monitoring of the following:
  - correct formulation of radiograms and telephonograms,
  - correct performance of brake tests,
  - correct discussion on and execution of shunting operations.

**3.2.3 Serious A20 category accident which occurred on 15 June 2019 at 18:22 at category C level crossing, situated at the Kąty Wrocławskie – Mietków junction post route, track No. 2, 22.788 km of Wrocław Świebodzki – Zgorzelec railway line No. 274.**

On 15 June 2019, the MOE 67900 train on route from Szklarska Poręba Górna to Luboń near Poznań, operated by Przewozy Regionalne Sp. z o.o. (currently called POLREGIO Sp. z o.o.) led by the EP07P-2004 engine on track No. 2, on Kąty Wrocławskie - Mietków junction post, line 274 Wrocław Świebodzki – Zgorzelec, ran into a road vehicle (private car) crossing the category C level crossing at 22.788 km.

The last scheduled stop of the MOE 67900 train was at Mietków station. At 18:18, the train departed from the station in accordance with the timetable. At 23.850 km, the train passed the crossing signal No. ToP 228, which was signalling Osp2 (two steady white lights arranged vertically), informing the train driver that the signalling devices at the level crossing at 22.788 km are functioning properly, and driving can be continued with the timetable speed. Then, having passed the W6 sign at 23.723 km, the train driver gave the "Attention" acoustic signal. When the train was approximately 500 metres from the level crossing, the train driver noticed a car approaching the crossing. The train driver repeated the "Attention" acoustic signal for 2 seconds. The car nearly stopped before the level crossing, and then suddenly speeded up and drove across the level crossing in front of the train, ignoring the flashing red light signal. Three seconds later, the MOE 67900 train driver noticed another car (Peugeot Partner) approaching the level crossing, when the train was ca. 330 m away from the crossing. The car was ca. 180–200 metres from the level crossing, and the train driver noticed it just before entering the track section hidden behind plants growing along the road. Having noticed the other car, the train driver gave the "Attentions" acoustic signal again. The signal continued until the accident occurred (12 seconds). During the twelve seconds' period, the train driver could not see the car (it was obscured by the plants growing along the road leading to the level crossing). When the car appeared from behind the plants growing along the road, it was driving at 36÷38 km/h (the car speed was estimated based on the data from the level crossing monitoring system). The car driver, instead of stopping the vehicle (which the car driver was obliged to do in compliance with the B20 "STOP" sign, light signals and the "Attention" acoustic signal given by the engine driver of the MOE 67900 train) speeded up and entered the level crossing directly in front of the approaching train. The train hit the right side of the car when the road vehicle's axle was right within the axis of track 2. As a result of the collision with the MOE 67900 train, the road vehicle was crushed and then ejected ca. 30 metres to the right (looking towards the train driving direction). Five passengers of the car died on the spot. At the time of the occurrence, the train was running at 103.3 km/h, while the maximum timetable speed was 115 km/h. Immediately after the occurrence the train driver started to brake suddenly and the train set stopped at 22.230 km, i.e. 560 m away from the site of the occurrence.

Following the NCRAI Chairman's decision that the Investigation Team should take over the proceedings, considering the provisions of Art. 28e par. 4 of the rail transport act, on 25 June 2019 the Commission reported this fact to the European Union Agency for Railways (EUAR) via "ERAIL" IT system. The occurrence was registered in the ERAIL data base at No. **PL-6000**.

**The Commission developed Report No. PKBWK/02/2020 on the proceedings. The Commission's Investigation Team recommended that the following measures should be implemented:**

1. The railway operator Przewozy Regionalne Sp. z o.o. (currently called POLREGIO Sp. z o.o.) and the PKP PLK S.A. infrastructure management body shall take measures to eliminate other

irregularities not related to the causes of the serious accident, and revealed during the investigation of the serious accident causes.

2. The railway infrastructure management bodies in agreement with the road operators shall check the correctness of road signs location for compliance with the applicable regulations.
3. The railway operator Przewozy Regionalne Sp. z o.o. (currently called POLREGIO Sp. z o.o.) shall enhance monitoring of the inspections of correct parameter recording by electronic recorders installed in railway vehicles with drives.
4. The railway operator Przewozy Regionalne Sp. z o.o. (currently called POLREGIO Sp. z o.o.) shall embed a video camera in the EP07P-2004 engine according to the instructions of the President of the Office of Rail Transport No. DBK-550/R-03/KB/12 of 30 May 2012 and the recommendations of the National Commission for Rail Accidents Investigation No. PKBWK-076-305/RL/R/11 of 22 November 2011 on the installation of digital video cameras and video recorders.
5. The railway operator Przewozy Regionalne Sp. z o.o. (currently called POLREGIO Sp. z o.o.) and the PKP PLK S.A. infrastructure management body shall discuss the serious accident during the periodical instructions.
6. The road operator - the Office of the Kąty Wrocławskie Commune shall arrange the G-1a, G-1b and G-1c in the right way.
7. The road operator - the Office of the Kąty Wrocławskie Commune shall ensure the required visibility of the G-1a, G-1b, G-1c and A-10 signs and the visibility of the level crossing from the required distance by removing the unnecessary plants.
8. The road operator - the Office of the Kąty Wrocławskie Commune shall install a speed limit sign at road No. 120603 Nowa Wieś Kącka - Sokolniki, according to the class of the road.

**3.2.4 Serious A19 category accident which occurred on 3 July 2019 at 08:50 at B category level crossing located at the Wargowo – Złotniki route, on a closed track No. 2, 13.916 km of the Poznań Główny PoD – Piła Główna railway line No. 354**

On 3 July 2019, a Rob.2 work train consisting of the WM-15A 311 rail motor car No. EVN PL-PLK 99 51 9 483 127-8 was moving on a closed track No. 2 of the Wargowo–Złotniki route, railway line No. 354 towards Złotniki station. The purpose of the run was to conduct operating tests in relation to the acceptance of the railway traffic control devices after modernisation of track No. 2. The rail motor car was moving forward with a cargo box with a hydraulic crane. The WM-15A 311 rail motor car driver stayed inside in the railway vehicle. The speed of Rob.2 train was (according to the hearing) ca. 50 km/h. While approaching the Top140 warning signal of the crossing, situated at 14.626 km and referring to the level crossing at 13.916 km, the train driver noticed that the signal was dark. He continued driving and kept on reducing the speed. When passing the W6a sign located at 14.450 km (534 m before the level crossing) and referring to that crossing, the train driver gave the Rp1 "Attention" signal (one long horn signal). When the Rob.2 work train was directly before the crossing, a private car (Ford Fusion) entered the crossing from the Gołęczewo direction, driving at moderate speed (built-up area). The car driver was looking straight ahead, without making sure if a railway vehicle was approaching (it was discovered based on the



recording from the monitoring system at the crossing) Rob.2 work train entered the crossing at ca. 27 km/h (without the traffic controller). The visibility at the crossing was limited by the automatic crossing system box, which made it difficult for the vehicles to see each other in advance. In spite of the sudden braking, the railway vehicle hit the left side of the car. The private car was hit by the bumpers of the rail motor car. The left bumper hit the passenger car at the driver's window level and was pushed inside the car, while the right bumper hit the back of the car. The passenger car, hooked on the bumper and rolled to the left side of the rail motor car, was then pushed by the rail motor car until it stopped, which took place after driving for ca. 26 m. If the rail motor car had been driving at the permissible speed up to 20 km/h, the accident could have been less serious, as the private car would have managed to cross track No. 2 or the rail motor car would have hit the back side of the private car increasing the passenger's chance to survive. As a result of the occurrence, the car driver died after being taken to hospital. The private car was completely damaged and the rail motor car had its front wall steps damaged.

In relation to the fact that the Investigation Team took over the proceedings based on Art. 28e par. 4 of the rail transport act, on 8 July 2019 the Commission reported this fact to the European Union Agency for Railways (EUAR) via "ERAIL" IT system. The occurrence was registered in the ERAIL data base at No. **PL-6014**.

**The Commission developed Report No. PKBWK/03/2020 on the proceedings. The Commission's Investigation Team recommended that the following measures should be implemented:**

1. The PKP PLK S.A. infrastructure management body shall introduce detailed procedures related to the work train operation on a closed track, at the crossing automatic system sensors off, when the train traffic continues on other tracks.
2. By the time the changes in the instructions shall have been implemented, should it be necessary to operate a work train on a closed track with the crossing automatic system devices off when the other track is used, and if the interaction sensors are disconnected in the track with track identification:
  - the train driving speed on both the closed and the used track shall be limited to 20 km/h at the whole width of the crossing,
  - the crews of the trains running on the open track and the work train crews shall be informed about the need to give Rp1 "Attention" acoustic signal by the time W6b sign has been installed at the section between the W6a sign and the level crossing; if the W6a is not present - from the km determined individually in the technical rules for each crossing,
  - the level crossing shall be marked with B-20 "Stop" road sign with a board saying "Damaged barrier" or "Signalling system defect".
3. The PKP PLK S.A. infrastructure management body shall increase the number of inspections and shall enhance monitoring of the compliance with the temporary rules and internal regulations in the case of track closures because of investment works, and shall include these activities in the Safety Improvement Programmes being parts of the SMS.

4. Recommendations No. 1 and 3 of the National Commission for Rail Accidents Investigation, given in Report No. PKBWK/05/2018 on A18 category serious accident investigation are extended. The accident happened on 2 November 2017 at 18:49 at cat. A level crossing with suspended service, situated at 37.119 km of Śniadowo-Łapy route, mainline track No. 1 of the Ostrołęka - Łapy railway line No. 36. The recommendations apply to providing the auxiliary vehicles with reflective elements which improve the vehicle visibility from the side, and providing special purpose vehicles with operating parameters on-board recorders (recording at least the speed, pressure in the main tube and brake cylinders and activation of the "Attention" signal).
5. The PKP PLK S.A. infrastructure management body shall take measures aimed to eliminate irregularities related to the issuance of the railworthiness certificates.
6. The PKP PLK S.A. infrastructure management body shall include the hazard involving switching off the crossing automatic system devices in one of the tracks in the level crossing in the Register of Hazards.

#### **3.2.5 C41 category rail accident which occurred on 30 July 2019 at 16:53 at Złocieniec railway station, track No. 2, 114.131 km of the Chojnice – Runowo Pomorskie railway line No. 210**

On 30 July 2019 the operation of Złocieniec station was subject to the following restrictions:

- the trains on the adjacent routes i.e. to Czaplinek station and Jankowo Pomorskie station were announced via phone,
- the readiness of the running routes was recommended and reported.

The junction and line block was an auxiliary measure and did not give grounds to train operation.

Two trains were approaching Złocieniec station:

- the APM 88226 train on route from Szczecin Główny to Szczecinek (operated by Przewozy Regionalne Sp. z o.o.) was approaching from Janowo Pomorskie station on track No. 2,
- the APM 88247 train on route from Szczecinek to Szczecin Główny (operated by Przewozy Regionalne Sp. z o.o.) was approaching from Czaplinek station on the left track No. 2,

The dispatcher at Złocieniec station, at 16:46 informed the driver of the APM 88247 train driving from Czaplinek station to Złocieniec station on the left track No. 2 via the radiotelephone that the arrival would take place based on the written "N" order, while the departure towards Jankowo Pomorskie station would take place based on the written "S" order. At 16:48 the Złocieniec station dispatcher gave the written "N" order to the APM 88247 train driver via radiotelephone, permitting the entrance to Złocieniec station from the left track to the railway station track No. 2. The train dispatcher informed the train driver via the radiotelephone that the train driver would get the written "S" order for the train departure from track No. 2 not featured with the exit signal from track No. 2 onto mainline track No. 1 towards Jankowo Pomorskie station. The train entered at 16:49. The Złocieniec station dispatcher instructed the point operator to prepare the route for the APM 88226 train to enter the railway station track No. 4, and informed the point operator that after this train has arrived, the APM 88247 train would depart from the railway station track No. 2 towards Jankowo Pomorskie station. Train No. 88226 arrived at Złocieniec station at 16:50. The Zł1 post point operator serviced the junction interlocking and reported the train arrival to the "Zł1" dispatcher. The point operator communicated the information about preparation of the route for APM 88247 train from track No. 2 to Jankowo Pomorskie station. At 16:51 the Złocieniec station dispatcher gave the written "S" order for the APM 88247 train, permitting its departure from the

railway station track No. 2 not featured with the starting signal. While dictating the written "S" order, the dispatcher did not inform the train driver about the mainline track number because he was not obliged to do so. The train driver accepted the order, quoted the name of the order and his name. The point operator at Złocieniec station prepared the train route in a wrong way. The point operator prepared the route from track No. 2 to mainline track No. 2 (left) instead of mainline track No. 1. Having received the written "S" order the train driver departed at 16:53 from the railway station track No. 2 towards the mainline track No. 2 (left), despite the fact that the written "S" order permitted the entrance only to the railway station track No. 1. The "Zł1" point operator, after the departure of the APM 88247 train did not discover that the route was wrongly arranged, and serviced the line block equipment by pressing the dPo button permitting the train to Jankowo Pomorskie to run on the mainline track No. 1. The use of the dPo button resulted in the line interlocking equipment in the dispatchers posts in Złocieniec and Jankowo Pomorskie indicating that the set interlocking direction was used. It suggested to the Jankowo Pomorskie dispatcher that the train was running on track No. 1, while it was actually on track No. 2. The APM 88247 train run on the mainline track No. 2 resulted in the mainline track No. 2 section being marked as occupied in the Złocieniec and Jankowo Pomorskie dispatchers posts as well as at the "Zł1" point operator. Having departed from Złocieniec station, the APM 88247 train driver continued driving on track 2 to 123.300 km, where he stopped in relation to the rolling stock "fault" and informed the Jankowo Pomorskie station dispatcher that his train was on track No. 2. After a while he started driving and informed the dispatcher that he was driving on track No. 2. At 16:57 the Jankowo Pomorskie station dispatcher informed the Złocieniec station dispatcher about the intended arrival of the ZXS 889252 train (tamping machine) operated by ZRK-DOM Sp. z o.o. in Poznań. He requested that Eap-94 line block direction should be set along track No. 2 from Jankowo Pomorskie to Złocieniec. The Złocieniec station dispatcher instructed the point operator to use the Poz2ZJ button setting the block direction. The Jankowo Pomorskie station dispatcher noticed that the mainline track No. 2 was occupied and considered it as a failure of the track section after the previous train (No. 88226) had run. He instructed the dispatcher from Złocieniec how to set the counter to zero position and how to restore the home position of the block. Despite a lack of response from the Złocieniec station dispatcher and regardless of the fact that the it2ZJ section was occupied, the dispatcher at Jankowo Pomorskie station dispatched the ZKS889252 train onto the mainline track No. 2 at 16:59, based on a written "S" order, and used the dPo2ZJ button. The APM88247 train driver noticed the ZXS889252 train (which he described as a work train) departing from a curve on the same track. He started to brake rapidly and activated the "Radio stop" signal. The head of the APM 88247 train stopped at 13.400 km, 600 m away from the ZXS889252 train head. The speed of the APM 88247 train before it stopped was ca. 60 km/h, while the 889252 train was running at ca. 50 km/h.

Following the NCRAI Deputy Chairman's decision that the Investigation Team should take over the proceedings, considering the provisions of Art. 28e par. 4 of the rail transport act, on 5 August 2019 the Commission reported this fact to the European Union Agency for Railways (EUAR) via "ERAIL" IT system. The occurrence was registered in the ERAIL data base at No. **PL-6036**.

**The Commission developed Report No. PKBWK/05/2020 on the proceedings. The Commission's Investigation Team recommended that the following measures should be implemented:**

1. The railway infrastructure managers shall verify the modernised mechanical equipment with light signals within three months from the date of this Report publishing for compliance with the provisions of § 47 par. 7 of the Ie-4 lighting plan Instructions, including in particular the placement of the station track arrangement diagram. If irregularities are discovered, measures shall be taken to eliminate them.
2. The PKP PLK S.A. railway infrastructure manager, as part of the current and future modernisation of the mechanical equipment shall ensure compliance with the provisions of § 47 par. 7 of the Ie-4 Instructions.
3. The PKP PLK S.A. railway infrastructure manager, as part of its internal audits, shall include the issues related to the traffic temporary rules developed for the period of conducting the investment project works in order to ensure railway traffic safety.
4. The railway infrastructure managers shall extend the scope of the obligation to seal the dPo semi-automatic relay line block, regardless of the meter operation.
5. The PKP PLK S.A. railway infrastructure manager shall modify the provisions of Instructions Ir-1 in § 28 "execution of train traffic on routes with single-access (semi-automatic) line block", adding in par. 19 the rules concerning the initial block operation by the point operator only upon the instructions of the train dispatcher, in the period when trains are announced by phone.
6. The railway infrastructure managers and railway operators shall take measures involving regular real-time synchronisation (including documentation) of the internal system times in the call recorders, computer systems and other time recording devices.
7. The PKP PLK S.A. railway infrastructure manager shall amend the provisions of Ir-1 Instructions on the written orders given with the use of communication equipment to the train manager who does not stay in the train operator's cabin.
8. The PKP PLK S.A. railway infrastructure manager shall modify the provisions of Instructions Ir-1 in § 58 par. 4 item 2) adding the provision "the number of the mainline track onto which the train departs" after the words "... of the signal". The information should be added in section 4 "Other" of the "S" written order.

**3.2.6 A21 category serious accident which occurred on 2 August 2019 at 19:42 at the D category level crossing located at the Starzyny – Koniecpol route, track No. 1, 34.751 km of the Kozłów – Koniecpol railway line No. 64**

On 2 August 2019 at 19:34 the EIE 8306 passenger train on route from Kołobrzeg to Przemyśl Główny, operated by PKP Intercity S.A. Zakład Południowy w Krakowie, left from Koniecpol station. The train set consisted of the EP09-002 engine and twelve passenger cars, including "WARS" restaurant car. The train was serviced by the train crew consisting of the train driver and train driver crew, train manager and conductors of PKP Intercity S.A. According to the "Brake test and train pneumatic equipment sheet" a thorough brake test was carried out on 2 August 2019 at 9:00 at Kołobrzeg station (initial station). Simplified brake tests were performed when the train was on its route, i.e. at 10:00 on Białogard station and at 15:41 on Wrocław Główny station. The train was led from Wrocław Główny station by the EP09-002 engine, cabin B, as scheduled, until the

accident happened. At 19:42, at cat. D level crossing, at 34.751 km on the Starzyny–Konięcpol route, track No. 1, a car (Toyota Yaris) drove directly in front of the approaching EIE 8306 passenger train from Kołobrzeg to Przemyśl Główny. The train engine hit the middle of the road vehicle's right side (i.e. the passenger's side). As a result of being hit with the bumpers and the engine front, the car cabin was crushed and the car was pushed 51 m away from the level crossing axis and thrown to the right of the tracks towards the train travel direction. After the accident, the train stopped 651 m from the level crossing axis (the head of the engine was at 34.100 km). On that day, no disturbances had been noted on the route of the EIE 8306 train from Kołobrzeg to Przemyśl Główny until the serious accident occurred. The train departed from Konięcpol station as scheduled. When the train was approaching the level crossing at 34.751 km, having passed the W6a sign at 35.525 km, the driver gave the "Attention" acoustic signal. Driving at 120 km/h, the train driver noticed a car approaching the level crossing from the left at a significant speed. Then he gave the "Attention" acoustic signal again. The vehicle driver did not react to the acoustic signals given by the train driver. The car did not stop and it drove directly in front of the engine head. In spite of the "Attention" signal warnings, the train ran into the road vehicle. The train was running at 120 km/h. As a result of the collision, the car driver died on the spot. The train passengers and crew suffered no injuries. The train driver informed the dispatcher of the Starzyny junction post about the occurrence via a radiotelephone. The road vehicle (car) was completely damaged as a result of the serious accident. The EP09-002 engine cabin B was damaged; the damage included the components of the housing, braking system and the paint coat at the railway vehicle front. The further part of the train route was cancelled. The train passengers continued their trip by buses provided by the PKP Intercity S.A. operator and by the Powiat Starosty in Włoszczowa. When the rail commission, prosecutor and the Police completed their operating procedures, the train was pulled from the route to Konięcpol by the EP09-036 engine ordered from Kraków Główny station. The EIE 8306 train left the accident site on 3 August 2019 at 01:05. The train reached Konięcpol station at 01:41.

Following the NCRAI Deputy Chairman's decision that the Investigation Team should take over the proceedings, considering the provisions of Art. 28e par. 4 of the rail transport act, on 6 August 2019 the Commission reported this fact to the European Union Agency for Railways (EUAR) via "ERAIL" IT system. The occurrence was registered in the ERAIL data base at No. **PL-6038**.

**The Commission developed Report No. PKBWK/04/2020 on the proceedings. The Commission's Investigation Team recommended that the following measures should be implemented:**

1. The PKP PLK S.A. Zakład Linii Kolejowych in Kielce railway infrastructure management body shall assess the operating risk to consider changing the current D category of the level crossing to a higher category or to reduce the train running speeds, with regard to the local conditions (train speed of 120 km/h) and to the recommendations given by local authorities.
2. PKP Intercity S.A., the railway operator, shall implement the instructions of the President of the Office of Rail Transport no. DBK 550/R03/KB/12 of 30 May 2012 addressed to railway operators on the obligation to install recorders - digital cameras or video recorders in the new and operating railway vehicles, according to the NCRAI recommendations - No. PKBWK-076-

305/RL/R/11 of 22 November 2011 so that continuous audio and video recording is ensured during the train's whole journey.

3. Zarząd Dróg Powiatowych (District Road Management Authority) in Włoszczowa, with regard to local conditions, shall determine the permissible speed of road vehicles on the road near the reference level crossing, shall add P-12 horizontal sign and shall adapt the position of the B-20 sign to the requirements, in agreement with the railway infrastructure management body.
4. The PKP PLK S.A. Zakład Linii Kolejowych in Kielce railway infrastructure manager shall update the Crossing Metrics in reference to the records according to letter No. ILK2d-5003-500/1/2018 introducing the "Guidelines on the Development and Updating of Level Crossing/ Railroad Crossing Metrics".
5. PKP PLK S.A. Zakład Linii Kolejowych w Kielce railway infrastructure management body shall level the embankments on both sides of the level crossing at 34.751 km of the Kozłów - Koniecpol railway line No. 64 to improve the clear view triangle from 10 to 20 m.

**3.2.7 B11 category accident which occurred on 8 August 2019 at 23:18 at the Tarnów Opolski - Opole Groszowice route, track No. 1, 87.973 km of the Bytom - Wrocław Główny railway line No. 132**

On 8 August 2019, the TME 464045 freight train operated by PKP CARGO S.A. was on its way from Ornontowice Budryk - Opole Elektrownia. The train was composed of the ET22-1064 series engine and 40 coal hopper cars loaded with fine coal. At 23:00 the train dispatcher at the "Kms" post in Kamień Śląski noticed white light in the train car. He reported the fact to the dispatcher at Tarnów Opolski station. Having received the information, the Tarnów Opolski station dispatcher was observing the train and noticed sparking at the fourth or fifth car. He reported this fact to the train driver via radiotelephone and instructed the train driver to stop the train before the home signal of Tarnów Opolski station. The train driver stopped the train at 23:04. Having stopped the train, the train driver left the train engine to inspect the cars. He checked the adhesion of the brake inserts to the wheelset rolling surface in the fifth, sixth and seventh car from the train head. At 23:10 he informed the dispatcher that he had checked the fourth, fifth, sixth and seventh car and had not noticed any irregularities or smelled any specific odours which could suggest overheating of the wheelsets in the inspected cars. In relation to the above, he made a decision to continue driving and started the train according to the dispatcher's permit. He continued driving at ca. 60 km/h. Having passed the distance of ca. 3.8 km, at 23:18 he noticed swinging of the line, the engine jerked and the train driver started to brake suddenly. When he looked out of the window, he noticed that the cars were overturning. The train driver immediately informed the Tarnów Opolski station dispatcher about the derailment of the cars at 87.973 km of the Bytom - Wrocław Główny railway line no. 132. He instructed the dispatcher to close tracks No. 1 and 2, because the cars were lying on tracks No. 1 and 2. Ten (10) coal hopper cars filled with fine coal derailed as a result of the accident.

Following the NCRAI Deputy Chairman's decision that the Investigation Team should take over the proceedings, considering the provisions of Art. 28e par. 4 of the rail transport act, on 29 August 2019 the Commission reported this fact to the European Union Agency for Railways (EUAR) via "ERAIL" IT system. The occurrence was registered in the ERAIL data base at No. **PL-6065**.

**The Commission developed Report No. PKBWK/06/2020 on the proceedings. The Commission's Investigation Team recommended that the following measures should be implemented:**

1. PKP CARGO S.A. railway operator shall immediately enhance the supervision of the rolling stock maintenance levels, including but not limited to wheelsets.
2. PKP CARGO S.A. railway operator shall enforce the quality of inter-operational and final acceptance, including but not limited to wheelsets.
3. In reference to the Safety Management System, the railway infrastructure management body and the railway operator shall include the hazard involving "breaking of the wheelset axle pivot" in the Register of Hazards. The infrastructure management body implemented the recommendation during the proceedings.
4. PKP PLK S.A. shall accelerate the implementation of the recommendations included in report No. PKBWK/02/2019 declaring that: PKP PLK S.A. shall take measures aimed to gradually equip the railway lines with the devices detecting the railway stock emergency conditions, at the operating railway lines, based on an analysis concerning the risk of the occurrences. At the same time, it shall be implementing the provisions of Ir-3 Instructions.
5. The railway infrastructure management bodies and railway operators shall include the procedures in case irregularities are observed in the car wheelsets in the scope of periodical instructions for train dispatchers. It is meant to emphasise the importance of the issue and to enhance the safety culture awareness. It shall be carried out according to internal regulations (included in § 76 of the Ir-1 Instructions for PKP PLK S.A.).
6. The railway operators shall equip the traction vehicles leading the trains and/or train drivers with sources of light (torches) for visual inspections of railway vehicles when it is dark.
7. PKP CARGO S.A. shall revise the Maintenance System Documentation and implement the obligation of correct filling of the measurement sheets during maintenance inspections in all plants where the maintenance process is carried out.

**3.2.8 Serious A35 category accident, which occurred on 28 October 2019 at 12:55 at Paczyna-Toszek route, track No. 1, 48.180 km of Bytom - Wrocław Główny railway line No. 132**

On 28 October 2019, when the MPE 16111 from Warszawa Grochów to Wrocław Główny, operated by PKP INTERCITY S.A. railway operator, led by the EP 07-1056 engine, was running on track No. 1, on the Paczyna - Toszek route, Bytom - Wrocław Główny line No. 132, the operator of the geodesic settings of the MD07 type tamping machine owned by PNUIK in Krakow was knocked dead at 48.180 km.

At 12:49 th MPE 16111 train passed through Pyskowice station at the speed of 100 km/h. At 12:51 the train passed by the Paczyna junction post and continued running at the scheduled speed of 120 km/h. Then, having passed the W6 sign at 48.150 km, referring to the level crossing at 48.792 km, the train driver gave the "Attention" acoustic signal. As the train driver reported in the hearing, when the train was ca. 700 m away from the tamping machine working on track No. 2, he noticed the machine and gave the "Attention" signal again. When the train was ca. 400 m away from the tamping machine, the train driver noticed the people working and the employee staying in the intertrack area, in track No. 1 gauge. The person was standing with his back towards the

approaching train. The train driver gave the "Attention" acoustic signal again and heard a thump on the left side of the engine. He started sudden braking immediately. The train stopped after passing ca. 770 m. The train driver informed the Toszek station dispatcher about the occurrence and the suspected knocking of a human.

Following the NCRAI Deputy Chairman's decision that the Investigation Team should take over the proceedings, considering the provisions of Art. 28e par. 4 of the rail transport act, on 11 November 2019 the Commission reported this fact to the European Union Agency for Railways (EUAR) via "ERAIL" IT system. The occurrence was registered in the ERAIL data base at No. **PL-6122**.

The Commission submitted the draft report to the interested parties. The Commission shall publish Report No. PKBWK/08/2020 on the proceedings in October 2020.

#### **4. Recommendations on safety improvement issued by the Commission in the annual reports based on 28l par. 6 of the act of 28 March 2003 on rail transport**

##### **4.1 Recommendations issued in 2019 and published in the 2018 Annual Report of the National Commission for Rail Accidents Investigation**

Pursuant to Art. 28l par. 6 of the rail transport act, in 2019 the Commission issued the following recommendations to improve safety:

- 1) The infrastructure management bodies and railway operators shall take measures aimed to ensure that the persons providing staff training for positions directly related to the railway traffic operation and safety as well as driving of specific types of railway vehicles, in accordance with the Regulation of the Minister of Transport and Development of 30 December 2014 on the staff employed on positions directly related to the railway traffic operation and safety as well as driving specific types of railway vehicles (Journal of Laws of 2015, item 46), **shall not become members of qualification and verification examination boards, examining the persons they trained.**

*The purpose of this recommendation is to increase independence and impartiality of the examination boards from the training process, which shall contribute to an increase in the knowledge level of the employees taking the exams, and consequently shall help to improve rail transport safety. According to the Commission, the fact that the examination board members are not the persons who provide the training shall require more thorough knowledge from the staff and shall help to avoid the conflict of interest between the trainers and the examiners.*

- 2) The infrastructure management bodies shall eliminate exit barriers for automatic crossing systems at cat. B crossings, in reference to the four half-barrier solutions. This status quo contradicts the provisions included in Annex 4, item 6.2 of the regulation of the Minister of Infrastructure of 3 July 2003 on the details of technical requirements for road signs and signals as well as road traffic safety equipment and the conditions of its placement at the roads



(consolidated text: Journal of Laws of 2019, item of Laws of 2019, item 2311) which states what follows: "barriers closing the whole width of U-13a and U-13b roadway shall be used at A category level crossings, whereas U-13c half-barriers shall be used at B category level crossings. Half barriers shall be placed so that they close the right half of the road (including when half barriers are used on one-way roads) on each side of the level crossing".

The recommendation above is meant to eliminate occurrences which involve road vehicles staying in the level crossing hazard area, between closed half barriers, and it enables road vehicles to leave the crossing when the vehicle driver failed to observe the ban to enter the crossing, when the signal prohibiting the entrance was emitted (to avoid collision with the approaching railway vehicles). Flashing red signal, emitted on the traffic signal installed before the crossing means that it is forbidden to drive behind the traffic signal, as stipulated by § 98 par. 5 of the Regulation of the Minister of Infrastructure and the Minister of Home Affairs and Administration of 31 July 2002 on the road signs and traffic signals (consolidated text: Journal of Laws of 2019, item 2310). Between April and June 2019 there were at least 45 similar occurrences at the railway network managed by PKP PLK S.A.

- 3) The railway infrastructure management bodies, railway operators and users of rail sidings shall take measures aimed to **eliminate the practice of replacing training** provided as part of professional (vocational) preparation for qualification exams for the staff employed directly on the positions related to railway traffic operation and safety as well as driving specific types of railway vehicles, in accordance with the regulation of the Minister of Infrastructure and Development of 30 December 2014 on the staff employed directly on the positions related to railway traffic operation and safety as well as driving specific types of railway vehicles (Journal of Laws of 2015, item 46), **with any type of the staff guided self-learning**.

The abovementioned recommendation is related to the fact that the staff who prepare to qualification exams based only on guided self-learning often reveal a lack of practical and theoretical knowledge, which may result in their posing hazard for the railway traffic safety and contributing to rail occurrences. This requires an analysis and implementation of specific changes in the internal regulations of the railway market sector entities.

- 4) In order to improve the visibility of the emitted D8 signal (gateman's presence), the railway infrastructure management bodies shall introduce emitting of the night signal 24/7 from the post of the person responsible for closing the barriers (level crossing gateman or another employee).

The D8 day signal emitted indoors (guards or rail signal control operators) or through the window (guards or rail signal control operators) is not visible (or is poorly visible) for the train driver crew.

- 5) Railway operators shall take measures aimed to eliminate rail occurrences caused by inadvertent starting of a railway vehicle.

*The recommendation results from a significant increase in the number of C47 category occurrences and the persistent high number of B08 category occurrences. The occurrences may be caused by e.g. incorrectly secured railway vehicles, incorrect organisation of work, failing to observe the work rules etc.*

- 6) The railway infrastructure management bodies shall take measures aimed to eliminate premature termination of the route and sending off, acceptance or running of a railway vehicle on a wrongly arranged and non-secured route or incorrectly serviced or a lack of service of the railway traffic control equipment.

*The recommendation results from a significant increase in the number of B15, C48 and C43 category occurrences. The occurrences may be attributed e.g. to insufficient communication between the staff employed on positions related to railway traffic safety when the trains are running and during shunting operations, wrong organisation of marshalling works, shunting operations wrongly discussed by the shunting operations manager etc.*

The abovementioned recommendations were submitted to the President of the Office of Rail Transport who communicated them to the railway market entities supervised by the President of the Office of Rail Transport.

#### **4.2 Recommendations issued in the 2019 Annual Report**

Pursuant to Art. 281 par. 6 of the rail transport act on 28 March 2003, the Commission issued the following recommendations in the 2019 Annual Report to improve safety:

- 1) The railway infrastructure management bodies responsible for servicing and maintenance of cat. B level crossings, as well as railway operators, shall take measures to minimise C64 occurrences with the participation of the users of level crossings, which involved road vehicles staying in the crossing hazard area (closed between the barriers), by applying e.g. the provisions included in §21 of the regulation of the Minister of Infrastructure of 13 September 2018, amending the regulation on the technical requirements to be met by the railway lines and rail siding crossings with roads, as well as their location (Journal of Laws of 2018, item 1876).

*This recommendation is meant to minimise the number of occurrences which involve road vehicles entering and staying in the crossing hazard area, between the barriers (half barriers) if the level crossing users fail to observe the regulations of the Road traffic law. The decrease in the number of such occurrences shall improve the safety on B category level crossings (lower probability of collision, avoiding collision with approaching railway vehicles) and finally shall improve the*

*compliance with the effective regulations by the users while approaching to and crossing the level crossing (improving the drivers' discipline).*

- 2) The railway infrastructure management bodies shall take measures (improve the effectiveness of their actions) aimed to minimise the following in the performance of their transport services: mischievous, hooligan or reckless misdemeanour (e.g. throwing stones at the train, stealing cargo from a moving train or shunting train, placing an obstacle on the track, devastation of power, communication or railway traffic control equipment or surface and tampering the equipment), with no persons affected or negative consequences for the property or environment which would pose a hazard for passengers or train staff.

*This recommendation is aimed to eliminate the cases of objects (e.g. stones) being thrown at the trains or other mischievous, hooligan or reckless misdemeanours qualified as B30 and C64 category occurrence, whose number increased significantly in 2019.*

*The occurrences pose significant hazard for the passengers or train staff. In 2019 there were 9 B30 category occurrences (there was one occurrence in 2018), and 255 C64 category occurrences, including over 80 instances of throwing objects at trains, i.e. occurrences classified as this category. Cases of an unauthorised use Radiostop signal, which may cause traffic problems, are also classified as hooligan misdemeanours.*

- 3) Railway operators shall take organisational and technical measures aimed to minimise damage to or poor technical condition of railway cars, which results in their withdrawal from use as a result of the detection equipment indicating failure of the rolling stock, confirmed in workshop conditions (hot axle boxes, hot brake resulting in rim displacement) or other failures to moving railway vehicles discovered by the service staff.

*The recommendation may help to reduce the persistently high number of C54 category occurrences and a 50% increase in the number of B10 category.*

- 4) The railway infrastructure management bodies shall take documented preventive measures related to the development of proactive approach of the staff (on all stages, from starting until completing of investment and modernisation works), aimed to counteract railway traffic safety hazards. The measures shall involve and engage the company managers (including contractors and subcontractors), according to the Safety Culture rules on all levels of the railway infrastructure management.

The railway infrastructure management bodies shall consider the following in the measures they take: all stages of investment and modernisation works, initial and internal acceptance, technical acceptance, final acceptance, commissioning and withdrawing from use (routes and sections of railway lines, other railway equipment and infrastructure etc.), breaks in the works and securing of the infrastructure which has been withdrawn from service.

*The recommendation results from a significant increase in the number of B09 and C51 category occurrences in 2019 and the persistent high number of occurrences related to the performance of investment or modernisation works representing different categories of occurrences (i.e. B03, B04, B10, B13, B19, B20, B21, B23, B34, B35, C41, C43, C44, C48 C57, C60, C64, C66 and C69).*

*The purpose of the recommendation is to take systemic measures based on the involvement of the senior management of the railway infrastructure management companies, as well as of companies responsible for investments, modernisation, repairs and maintenance of railway infrastructure.*

- 5) Railway infrastructure management bodies and railway operators who have digital data recorders (speed, equipment status etc.) and route monitoring equipment (video recorders or video and audio recorders) installed in their vehicles shall take measures aimed to provide the rail commission members with the necessary instruments that enable reading the data from the recorders on the site, immediately after the occurrence has happened.

*This recommendation repeats the NCRAI's recommendation for 2015 and it results from **the recurring situations** when the staff appointed for working in rail commissions on the occurrence site are not able to read the abovementioned data, which impedes and extends the process of initial determination of the occurrence causes and the development of the site survey report.*

*The recommendation is still supposed to be implemented by the entities that have not implemented it yet.*

The presented recommendations shall be communicated to the President of the ORT in accordance with the provisions of Art. 28l par. 8 of the act of 28 March 2003 on rail transport (consolidated text: Journal of Laws of 2020, item 1043), who shall share the recommendations with the railway market entities that the recommendations apply to.

#### **5. Implementation of the recommendations given in 2019 by the National Commission for Rail Accidents Investigation (based on the information from the Office of Rail Transport)**

On 29 April 2020 the Commission received the information from the Office of Rail Transport (ORT) about the implementation of the Commission's recommendations in 2019.

As part of the supervision of the NCRAI's recommendations implementation by the railway market entities, the recommendations included in the following documents were analysed:

- 1) Report No. PKBWK/01/2019 on the investigation of a serious A21 category rail accident which occurred on 13 June 2018 at 12:54 at the D category level crossing located on the Szczecin Podjuchy - Daleszewo Gryfińskie route, in track No. 2, 342.231 km of the Wrocław Główny – Szczecin Główny railway line No. 273

- 2) Report No. PKBWK/02/2019 on the investigation of a B11 category serious accident which occurred on 10 May 2018 at 16:12 at Wronki station, in track No. 1, at 50.474 km of the Poznań Główny - Szczecin Główny railway line No. 351;
- 3) Report No. PKBWK/03/2019 on the investigation of an A21 category serious accident which occurred on 23 August 2018 at 11:17 at the D category level crossing located at Szaflary station, 25.749 km of the Chabówka - Zakopane railway line No. 99;
- 4) Report No. PKBWK/04/2019 on the investigation of an A18 category serious accident which occurred on 2 August 2018 at 16:30, at the A category level crossing located at the Pierzyska - Gniezno route, 43.141 km of the Poznań Wschód - Skandawa railway line No. 353;
- 5) Report No. PKBWK/05/2019 on the investigation of an A21 category serious accident which occurred on 17 November 2018 at 11:49 at the D category level crossing located at the Dobrzechów - Frysztak route, 42.602 km of the Rzeszów Główny - Jasło No. 106;
- 6) Report No. PKBWK/06/2019 on the investigation of a serious A20 category rail accident which occurred on 19 December 2018 at 14:33 at the C category level crossing located at the Głogów Małopolski - Rzeszów Główny route, 63.130 km of the Ocice - Rzeszów Główny railway line No. 71;
- 7) Report No. PKBWK/07/2019 on the investigation of a B11 category accident which occurred on 17 March 2019 at 21:49 at the Taczanów - Pleszew route, track No. 1, 107.985 km of the Kluczbork - Poznań Główny railway line No. 272;
- 8) 2018 Annual Report on the NCRAI operation.

In order to make the execution of the NCRAI's recommendation by the railway market entities more effective, the Office of Rail Transport, hereinafter called "the ORT" developed a survey and requested the entities to submit information about the implementation status of the recommendations issued by the NCRAI in 2019.

In 2019 the President of the ORT communicated the recommendations given by the NCRAI to the entities in two stages:

- by letter No. DMB-WMIC.464.4.2019.2.MK of 18 October 2019,
- by letter No. DMB-WMIC.464.4.2020.1.AM of 25 February 2020.

### 5.1. Analysis of information related to the implementation of the recommendations

The implementation status of the recommendations based on the information submitted by the ORT is as follows:

- a) In his letter No. DMB-WMIC.464.4.2019.2.MK of 18 October 2019 the President of the ORT requested that the following railway market entities shall execute the recommendations set out in Reports No. PKBWK/01/2019 and PKBWK/02/2019:
  - 102 certified railway operators (RO),
  - 11 authorised railway infrastructure management bodies (IMB),
  - 61 entities in charge of maintenance of freight wagons (ECM), and

- 647 management bodies and railway operators operating based on safety certificates.

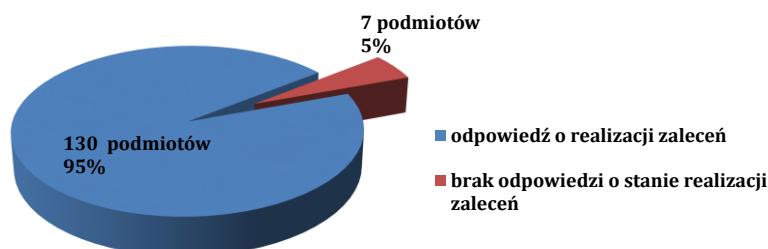
Many entities fulfil several functions, which means that letter no. DMB-WMIC.464.4.2019.2.MK was sent to the following of the entities mentioned above:

- 44 of them are only certified railway operators,
- 8 are only entities in charge of maintenance,
- 15 are both certified railway operators and entities in charge of maintenance,
- 8 are only authorised infrastructure management bodies,
- 1 entity is both an authorised infrastructure management body and a certified railway operator,
- 1 entity is both an authorised infrastructure management body and an entity in charge of maintenance,
- 1 entity fulfils all three functions: of a certified management body, certified railway operator and entity in charge of maintenance,
- 18 entities combine the function of a certified railway operator, entity in charge of maintenance and a rail siding user,
- 23 entities - a certified railway operator and rail siding user,
- 18 entities which are both entities in charge of maintenance and rail siding users,
- 598 entities - only a rail siding user or infrastructure management bodies or a railway operator operating based on a safety certificate.

**A total of 736 entities received the recommendations from the President of the ORT on the first stage.**

As of 17 April 2020 455 entities (62%) sent the information to the President of the ORT about the progress of the recommendations implementation. Considering only the authorised infrastructure management bodies, certified railway operators and certified entities in charge of maintenance, 130 out of 137 entities (95%) submitted the information about the status of the recommendations implementation.

Diagram 2a **Summary of the entities' responses to the letter (survey) sent by the President of the ORT - stage one**



[130 entities - response on the recommendations implementation, 7 entities - no response about the recommendations implementation progress]

b) In his letter No. DMB-WMIC.464.4.2020.1.AM of 25 February 2020 the President of the ORT submitted the recommendations set out in the 2018 Annual Report and NCRAI Reports No. 3, 4, 5, 6 and 7 to be implemented by:

- 104 certified railway operators,
- 11 authorised railway infrastructure management bodies,
- 60 certified entities in charge of maintenance of freight wagons (ECM).

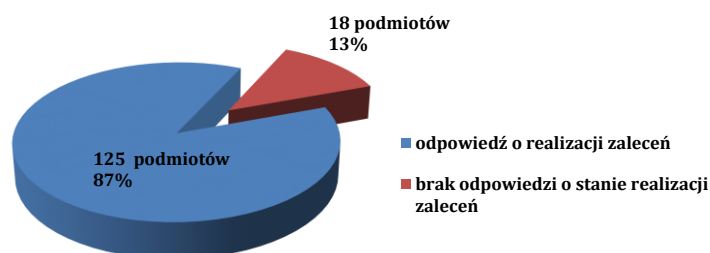
Many entities fulfil several functions, which means that letter no. DMB-WMIC.464.4.2020.1.MK was sent to:

- 70 entities fulfilling the roles of certified railway operators,
- 27 fulfilling the function of a certified entity in charge of maintenance,
- 35 certified railway operators, being also certified entities in charge of maintenance,
- 8 entities fulfilling the functions of authorised infrastructure management bodies,
- 1 entity being both an authorised infrastructure management body and a certified railway operator,
- 1 entity being both an authorised infrastructure management body and an entity in charge of maintenance,
- 1 entity fulfilling all three functions: of a certified management body, certified railway operator and entity in charge of maintenance.

**In this case (stage two) a total of 143 entities received the recommendations from the President of the ORT.**

As of 17 April 2020, 125 entities (87%) sent the information about the progress of the recommendations implementation was to the President of the ORT.

Diagram 2b. **Summary of the entities' responses to the letter (survey) sent by the President of the ORT - stage two**



[125 entities - response on the recommendations implementation, 18 entities - no response about the recommendations implementation progress]

In his letter No. DMB-WMIC.464.4.2020.1.AM of 25 February 2020 the President of the ORT sent the Recommendation No. 3 from the NCRAI's Annual Report to 658 entities which are rail siding users, infrastructure management bodies and railway operators operating based on the safety certificate. 409 entities (62%) responded to the letter.

The entities filled the survey developed by the Office of Rail Transport, providing the information about the status (progress) and stage of the recommendation implementation. The statistics also included the entities that did not submit any responses but were the recipients of the letter sent by the President of the ORT that requested providing the information about the method of the recommendations implementation.

7 entities (5%) on stage one and 18 entities (13%) on stage two did not provide the information about the implementation status of the recommendations concerning safety improvement or measures intended to implement them.

The President of the ORT shall take supervisory measures towards the entities that did not submit their responses and towards the entities for which the proposed methods of the recommendations implementation were not accepted. The purpose of the supervision is to get full information about the status and method of the recommendations implementation.

The first part of the analysis of the NCRAI's recommendations implementation includes **the ORT President's opinion on the method of the NCRAI's recommendations implementation**. This part is the **result of a qualitative analysis of the answers submitted to the President of the ORT by the railway market entities**.



The recommendations were divided into two groups depending on their assessment: positive opinions and negative opinions.

A **positive opinion** on the implementation of the recommendations included in the NCRAI's reports was given only when the ORT decided that the actions taken by the entity are adequate or properly oriented in reference to all recommendations that applied to the entity in the report.

The implementation of the report recommendations by the entity was regarded as complete when all individual recommendations included in the report received **positive** opinions. If at least one recommendation included in the report received a negative opinion or if the entity did not send the information about the implementation of the recommendations to the ORT, then the opinion on the implementation of the recommendations was **negative**.

The ORT President's opinion about the implementation of the recommendations included in individual reports is summarised in the pie charts below.

The answers declared by the railway market entities are the other part of the information (included in the Annex). According to the information provided by the ORT, **the mean percentage of the recommendation implementation** was specified for each recommendation. For the purpose of the assessment the percentage was calculated as **the arithmetic mean based on the values declared by the market entities**.

**Ad.1)** Having carefully analysed Report No. PKBWK/01/2019, the President of the Office of Rail Transport requested that the following recommendations shall be implemented by all authorised railway infrastructure management bodies, certified railway operators or other entities, based on the letter of the ORT No. DMB-WMIC.464.4.2019.2.MK of 18 October 2019:

➤ **Recommendations given by the Commission in Report No. PKBWK/01/2019:**

1. The PKP PLK S.A. Zakład Linii Kolejowych in Szczecin railway management body shall assess the operating risk to consider changing the current D category of the level crossing to a higher category.
2. By the time a risk analysis is carried out, PKP PLK S.A. Zakład Linii Kolejowych in Szczecin shall introduce a speed limit for the trains at this level crossing, on each track and in both directions, within the clear view triangle, at the whole length of the train approaching, pursuant to the provisions of the Regulation of the Minister of Infrastructure and Development of 20 October 2015, included in Part B, Annex No. 3.
3. The infrastructure management bodies and rail siding users shall inspect all D category level crossings for correct marking and regular updating of the crossing metrics.
4. The operators of railway vehicles with drives shall inspect the video recording systems embedded at the front of traction vehicles for correct and continuous recording, with no delay, if buffer recording is used. The systems with delayed video recording shall have their supply systems modified so that continuous recording is ensured, even if external power outage occurs.
5. Przewozy Regionalne Sp. z o.o. shall introduce mandatory checks, if the required running parameters of traction vehicles with drives are recorded by electromechanical and electronic recorders. The checks shall be a part of railcar inspections after repair related to the vehicle operation parameters recording and P3, P4 and P5 maintenance.

were amended by the President of the ORT who requested the implementation of the following recommendations (based on the recommendations of Report No. PKBWK/01/2019):

– **corrective recommendations:**

- 1) PKP Polskie Linie Kolejowe S.A. shall consider changing the D category of the 273 342 231 level crossing to a higher one, based on risk assessment. By the time it has been done, the speed of the trains running on each track and in both directions shall be limited within the clear vision triangle, at the whole length of the train approaching.

➤ **The recommendation implementation is identical to the implementation of recommendations No. 1 and 2 of the Commission, and applies to the PKP PLK S.A railway infrastructure management body.**

– **corrective (systemic) recommendations:**

- 2) Certified railway operators shall check the embedding of the video recording systems for correctness and continuity of video recording.

➤ **The recommendation implementation is the implementation of the amended Commission's Recommendation No. 4 and applies to 102 entities.**

- 3) Certified railway operators shall implement permanent obligation of checking if the required running parameters of a vehicle with a drive are recorded, including but not limited to checks after P3, P4 and P5 level maintenance inspections.

➤ **The recommendation implementation is the implementation of the amended Commission's Recommendation No. 5 extended to cover all certified railway operators - it applies to 102 entities.**

- 4) The infrastructure management bodies (including rail siding users) shall inspect all level crossings for the following aspects:
  - a) correct development of the metrics;
  - b) review of meeting the technical conditions, including but not limited to visibility at level crossings.

By the time the compliance with the applicable laws has been ensured, the management bodies shall implement adequate safety measures, including operating limitations.

➤ **The recommendation implementation is the implementation of the Commission's amended Recommendation No. 3 extended to cover all operated level crossings - it applies to 11 infrastructure management bodies (+ users of rail sidings).**

- 5) The infrastructure management bodies (including rail siding users) shall verify the troubleshooting records (it applies to other documents resulting from construction inspections) for the discovered irregularities and the stage of their eliminating.

By the time all discovered irregularities have been eliminated, the management bodies shall implement adequate safety measures, including operating limitations.

➤ **The new recommendation issued by the President of the ORT applies to 11 infrastructure management bodies (+rail siding users).**

- 6) The authorised infrastructure management bodies shall verify the correctness of the Safety Management Systems implementation for:

- a) proper supervision of troubleshooting and inspections;
- b) proper planning of supervision activities;
- c) proper implementation of corrective measures.

➤ **The new recommendation issued by the President of the ORT applies to 11 entities.**

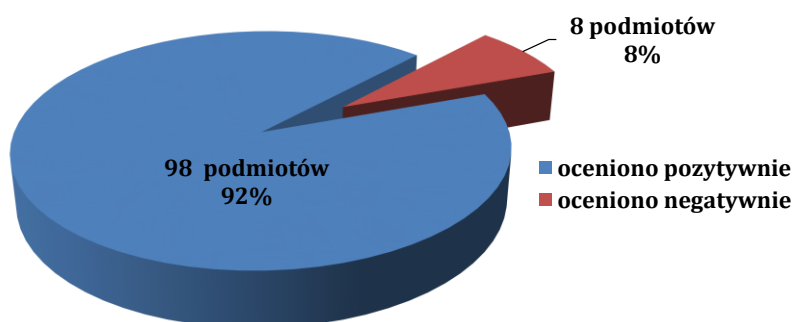
**Table 4. Implementation of the recommendations by the entities mentioned by the Commission in Report No. PKBWK/01/2019** - based on the information submitted to the NCRAI in March and April 2020.

Recommendations given by the President of the ORT based on Report No. PKBWK/01/2019 (published in 2019):	Entity being the addressee of the recommendation	Date of recommendation implementation	Mean percentage (%) of the recommendation implementation by the entities mentioned in column 2/ (implementation stage)
1	2	3	4
<b>corrective recommendations</b>			
Recommendation 1	PKP PLK S.A.	7 October 2019	<b>100</b>
<b>systemic corrective recommendations</b>			
Recommendation 2	PK	.....	<b>92</b> (% of implementation by all ROs)**)
Recommendation 3	PK including: PR Sp. z o.o. <sup>*)</sup>	25 April 2019	<b>95</b> (% of implementation by all ROs)**) <b>100</b> (implemented by PR Sp. z o.o.) <sup>*)</sup>
Recommendation 4	IMB	.....	<b>91</b> (% of implementation by all IMBs)**)
Recommendation 5	IMB	.....	<b>91</b> (% of implementation by all IMBs)**)
Recommendation 6	IMB	.....	<b>91</b> (% of implementation by all IMBs)**)

<sup>\*)</sup> based on the information submitted to the NCRAI by Przewozy Regionalne Sp. z o.o. (PR Sp. z o.o.) – currently called POLREGIO Sp. z o.o.

<sup>\*\*)</sup> based on the information about the implementation of the recommendations issued by NCRAI in 2019 – from the ORT – DMB-WMIC.464.2.2020 of 29 April 2020

**Diagram 3. Assessment of the method of implementing the recommendations set out in Report No. PKBWK/01/2019 and to be implemented pursuant to the decision of the President of the ORT** (based on the information submitted by the ORT)



[98 entities - positive opinion, 8 entities - negative opinion]

**"Positive opinion"** – according to the ORT the measures declared by 98 railway market entities shall result in proper implementation of the NCRAI's recommendations.

**"Negative opinion"** – according to the ORT the measures declared by 8 entities shall not result in proper implementation of the recommendations.

Table 5. **Summary of the opinions on the responses submitted by the entities in relation to the implementation of the recommendations given in Report No. PKBWK/01/2019 communicated by the President of the ORT to the entities** (based on the information given by the ORT)

	Recommendation 1 (PKP PLK S.A.)	Recommendation 2 (RO)	Recommendation 3 (RO)	Recommendation 4 (IMB)	Recommendation 5 (IMB)	Recommendation 6 (IMB)
Applied to entities	1	102	102	11	11	11
Positive opinion	1	97	97	10	10	10
Negative opinion	0	5	5	1	1	1

Ad.1) Having carefully analysed Report No. PKBWK/02/2019, the President of the Office of Rail Transport requested that the following recommendations shall be implemented by all authorised railway infrastructure management bodies and certified entities in charge of maintenance or other entities, based on the letter of the ORT No. DMB-WMIC.464.4.2019.2.MK of 18 October 2019:

➤ **Recommendations given by the Commission in Report No. PKBWK/02/2019:**

1. Railway operators and entities in charge of rolling stock maintenance shall implement the NCRAI's recommendation concerning securing the bearings in the axle boxes after they have been mounted on the wheelset axle pivots, by using new screws and lock washers.

2. The staff mounting the axle boxes on the wheelset axle pivots, responsible for P3, P4 and P5 level inspections, shall stamp the mounting employee's identification symbol and the date of mounting on the lock washers.
3. Based on the expert opinion, the entities in charge of freight trains maintenance (ECM) shall introduce the obligation to replace the wheelset rolling bearings with new ones, during the P4 or P5 level inspection, up to 25 years of their use.
4. The entities in charge of maintenance shall inspect the MMS systems for the causes identified in this report and shall consider including the following items in the systems:
  - a) detailed requirements for P4 and P5 level inspection contractors,
  - b) including detailed tasks for commissioning officers in the freight wagon MMS, including but not limited to partial interoperation commissioning.
5. PKP PLK S.A. shall provide additional dSAT devices on line No. 351 for both tracks so that the rolling stock emergency condition troubleshooting (diagnostics) could be carried out for all directions.
6. PKP PLK S.A. shall take measures aimed to gradually equip the railway lines with the devices detecting the railway stock emergency conditions, at the operating railway lines, based on an analysis concerning the risk of the occurrences.
7. As part of the Maintenance Management System CTL Logistics shall take measures aimed to:
  - a) increase the supervision of the Maintenance Management System procedures implementation,
  - b) provide careful supervision of the repair service providers, including WWK Łapy (WWK - Warsztaty Wagonów Kolejowych [Rail Car Workshops]).
8. WWK Łapy shall take measures aimed to improve the supervision of the performed rolling stock repairs, including greater control of the quality of implemented repair activities.

were amended by the President of the ORT who requested the implementation of the following recommendations (based on the recommendations of Report No. PKBWK/02/2019):

– **corrective recommendations:**

- 1) PKP Polskie Linie Kolejowe S.A. shall provide additional dSAT devices on line No. 351 for both tracks so that the rolling stock emergency condition troubleshooting (diagnostics) could be carried out for all directions.
- **The implementation of Recommendation No. 1 is identical to the implementation of Recommendation No. 5 of the Commission, and applies to the PKP PLK S.A railway infrastructure management body.**
- 2) As part of the Maintenance Management System (MMS) CTL Logistics Sp. z o.o. shall take measures aimed to:
    - a) enhance supervision of the MMS procedures implementation,
    - b) provide careful supervision of the repair service providers, including WWK in Łapy.
- **The recommendation implementation is identical to the implementation of Recommendation No. 7 of the Commission, and applies to the CTK Logistics Sp. z o.o. railway operator - i.e. one entity.**

- 3) WWK in Łapy shall take measures aimed to improve the supervision of the performed rolling stock repairs, including greater control of the quality of the implemented repair activities.

➤ **The implementation of Recommendation No. 3 is identical to the implementation of recommendation No. 8 of the Commission, and applies to WWK in Łapy - i.e. 1 entity.**

**corrective (systemic) recommendations:**

4) The ECMs shall adapt their MMS for:

- a) securing the bearings in the axle boxes after they have been mounted on the wheelset axle pivots, by using new screws and lock washers;
- b) stamping the mounting employee's identification symbol and the mounting date on the lock washers while mounting the axle boxes on wheelset axle pivots during P3, P4 and P5 level inspections.
- c) introducing the obligation to replace the wheelset rolling bearings with new ones, during the P4 or P5 level inspection, up to 25 years of their use;
- d) introducing a ban on disassembling and assembling the bearing set not in compliance with the manufacturer's specifications or industry guidelines, e.g. VPI;
- e) detailed requirements (assessment criteria) for P4 and P5 level inspection contractors;
- f) detailed tasks for the employees responsible for acceptance and commissioning in the freight wagon MMS, including but not limited to partial interoperation commissioning.

The implementation of Recommendation No. 4.a) is identical (coherent) with the implementation of Recommendation No. 1 of the Commission.

The implementation of Recommendation No. 4.b) is identical (coherent) with the implementation of Recommendation No. 2 of the Commission.

The implementation of Recommendation No. 4.c) is identical (coherent) with the implementation of Recommendation No. 3 of the Commission.

Recommendation No. 4.d) is a new requirement of the President of the ORT.

The implementation of Recommendation No. 4.e) is identical (coherent) with the implementation of Recommendation No. 4.a) of the Commission.

The implementation of Recommendation No. 4.f) is identical (coherent) with the implementation of recommendation No. 4.b) of the Commission.

➤ **The implementation of Recommendations 4.a) to 4.f) applies to the operation scope of certified entities in charge of maintenance (ECM) - i.e. it applies to 62 entities according to the ORT.**

- 5) The authorised infrastructure management bodies shall take measures aimed to gradually equip the railway lines with the devices detecting the railway stock emergency conditions, at the operating railway lines, based on an analysis concerning the risk of the occurrences.

➤ **Recommendation No. 6 addressed by the Commission to PKP PLK S.A. - was also submitted by the President of the ORT as Recommendation No. 5 to be implemented by all authorised infrastructure management bodies - i.e. 11 entities.**

- 6) The entities in charge of maintenance shall carry out an additional audit for correct supervision of suppliers, including but not limited to observing adequate intervals of the suppliers' monitoring.

➤ **Recommendation No. 6 is a new recommendation issued by the President of the ORT - it applies to 62 certified entities in charge of maintenance - i.e. 62 entities.**

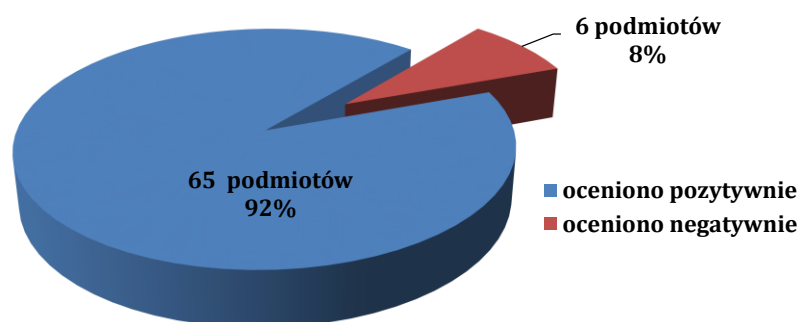
Table 6. **Implementation of the recommendations by the entities mentioned by the Commission in Report No. PKBWK/02/2019** - based on the information submitted to the NCRAI in March and April 2020.

Recommendations given by the President of the ORT based on Report No. PKBWK/01/2019 (published in 2019):	Entity being the addressee of the recommendation	Date of recommendation implementation	Mean percentage (%) of the recommendation implementation by the entities mentioned in column 2/ (implementation stage)
1	2		4
<b>➤ corrective recommendations</b>			
Recommendation 1	PKP PLK S.A.	31 December 2022	<b>60</b> (under implementation by PKP PLK S.A.)
Recommendation 2	CTL Logistics Sp. z o.o.	11 December 2019	<b>100</b>
Recommendation 3	WWK in Łapy	18 February 2019	<b>100</b>
<b>➤ corrective (systemic) recommendations</b>			
Recommendation 4	ECM	.....	<b>61</b> (% of implementation by all ECMs)**)
Recommendation 5	IMB including: PKP PLK S.A.	..... 2 April 2019	<b>74</b> (% of implementation by all IMBs)**) <b>100</b> <sup>*)</sup>
Recommendation 6	ECM	.....	<b>49</b> (% of implementation by all ECMs)**)

<sup>\*)</sup> based on the information submitted to the NCRAI by PKP Polskie Linie Kolejowe S.A. – information IBR4a-743-1/20 of 15 March 2020

<sup>\*\*)</sup> based on the information about the implementation of the recommendations issued by NCRAI in 2019 – from the ORT – DMB-WMIC.464.2.2020 of 29 April 2020

Diagram 4. **Assessment of the method of implementing the recommendations set out in Report No. PKBWK/02/2019 and to be implemented pursuant to the decision of the President of the ORT** (based on the information submitted by the ORT)



[65 entities - positive opinion, 6 entities - negative opinion]

**"Positive opinion"** – according to the ORT the measures declared by 65 railway market entities shall result in proper implementation of the NCRAI's recommendations.

**"Negative opinion"** – according to the ORT the measures declared by 6 entities shall not result in proper implementation of the recommendations.

Table 7. **Summary of the opinions on the responses submitted by the entities in relation to the implementation of the recommendations given in Report No. PKBWK/02/2019 communicated by the President of the ORT to the entities (based on the information given by the ORT)**

	Recommendation 1 (PKP PLK S.A.)	Recommendation 2 (CTL Logistics sp. z o.o.)	Recommendation 3 (WWK in Łapy)	Recommendation 4 (ECM)	Recommendation 5 (IMB)	Recommendation 6 (ECM)
Applied to entities	1	1	1	62	11	62
Positive opinion	1	1	1	56	10	56
Negative opinion	0	0	0	6	1	6

**Ad. 3)** The President of the Office of Rail Transport adopted the recommendations set out in Report No. PKBWK/03/2019 requesting that the following recommendations shall be fully implemented by all authorised railway infrastructure management bodies, certified railway operators or other entities, based on the letter of the ORT No. DMB-WMIC.464.1.2019.1.AM of 25 February 2020 in the following way:

- Recommendation No. 1 addressed by the Commission to PKP PLK S.A. Zakład Linii Kolejowych in Nowy Sącz – was submitted by the President of the ORT for implementation by PKP PLK S.A.,
- Recommendation No. 2 addressed by the Commission to PKP PLK S.A. – was also submitted by the President of the ORT for implementation by PKP PLK S.A.,
- Recommendation No. 3 addressed by the Commission to Przewozy Regionalne Sp. z o.o. (PR Sp. z o.o.) – was also submitted by the President of the ORT for implementation by PR Sp. z o.o.,
- Recommendation No. 4 addressed by the Commission to PKP PLK S.A. Zakład Linii Kolejowych in Nowy Sącz – was submitted by the President of the ORT for implementation by KP PLK S.A.,
- The content of Recommendation No. 5 addressed by the Commission **to the road authority**, with the following wording:  
*"5. The road operator shall adapt the width of the road at the access to the crossing to ensure grade-separated (collision free) passing of road vehicles at the level crossing",*



at 25.749 km of the Chabówka – Zakopane railway line No. 99, and then the width of the crossing shall be adapted to the crown of the road, in agreement with the infrastructure management body",

was amended by the President of ORT, and based on this recommendation of the NCRAI the President of the ORT **addressed the following recommendation to all authorised railway infrastructure management bodies (i.e. 11 entities):**

"5a. The infrastructure management bodies shall inspect the crossings for the width of the crossings and access roads, ensuring grade-separated (collision free) passing at the width of the crossings".

- Recommendation No. 8 addressed by the Commission to railway operators was also submitted by the President of the ORT to be implemented by all railway operators,
- Recommendation No. 9 addressed by the Commission to the railway infrastructure management bodies and operators of roads for motor vehicles was also submitted by the President of the ORT to be implemented by all authorised railway infrastructure management bodies in cooperation with the operators of roads for motor vehicles,
- Recommendation No. 10 addressed by the Commission to the railway infrastructure management bodies was also submitted by the President of the ORT to be implemented by all authorised railway infrastructure management bodies,

Note:

- Recommendations No. 5 and 6 of the Report addressed by the Commission to the road operator<sup>4\*)</sup>,
- Recommendations No. 7 and 11 of the Report addressed by the Commission to the NCRAI's Chairman - was addressed to the Minister of Infrastructure<sup>5\*)</sup>,
- Recommendation No. 12 of the Report addressed by the Commission to the Minister of Infrastructure was submitted to the Minister of Infrastructure. <sup>5\*)</sup>

**Table 8. Implementation of the recommendations by the entities mentioned by the Commission in Report No. PKBWK/03/2019** - based on the information submitted to the NCRAI in March and April 2020.

Recommendations resulting from Report No. PKBWK/03/2019 (published in 2019):	Entity being the addressee of the recommendation	Date of recommendation implementation	Mean percentage (%) of the recommendation implementation by the entities mentioned in column 2/ (implementation stage)
1	2	3	4
Recommendation 1	PKP PLK S.A. <sup>3*)</sup>	10 February 2020	<b>100</b>
Recommendation 2	PKP PLK S.A.	22 October 2018	<b>100</b>
Recommendation 3	<sup>1*)</sup> PR Sp. z o.o.	by 30 June 2020	<b>10%</b> (under implementation by PR sp. z o.o.)
Recommendation 4	<sup>2*)</sup> PKP PLK S.A. IZ Nowy Sącz	23 December 2019	<b>100</b>
Recommendation 5	<sup>*)</sup> road operator +	31 December	<b>40%</b> - under implementation according to the recommendations

	PKP PLK S.A. IZ Nowy Sącz – in agreement with the road operator <sup>3*)</sup>	2022 20 March 2020	resulting from NCRAI's Report <sup>6*)</sup>  <b>100%</b> implemented by PKP PLK S.A. according to the Recommendation (5a) of the President of the ORT <sup>6*)</sup>
Recommendation 5a	IMB	31 December 2022	<b>65</b> (% of implementation by all IMBs <sup>**)</sup> )
Recommendation 6	<sup>*)</sup> road operator + PKP PLK S.A. IZ Nowy Sącz <sup>4*)</sup>	18 February 2020	implemented
Recommendation 8	RO	.....	<b>62</b> (% of implementation by all ROs <sup>**)</sup> )
Recommendation 9	IMB (including PKP PLK S.A.)	31 December 2019	<b>69</b> (% of implementation by all IMBs <sup>**)</sup> ) <b>100</b> (implemented by PKP PLK S.A.)
Recommendation 10	IMB	.....	<b>88</b> (% of implementation by all IMBs <sup>**)</sup> )
Recommendation: 7, 11 and 12	<sup>5*)</sup> NCRAI	4 October 2019	implemented within the Commission's authority

<sup>\*)</sup>Report No. PKBWK/03/2019 submitted by the Commission to the Mayor of the Town of Nowy Targ, based on Art. 28l of the act of 28 March 2003 on rail transport (Journal of Laws of 2019, item 710 as amended), with letter PKBWK.4631.93.2019.BP of 31 July 2019

<sup>\*\*) based on the information about the implementation of the recommendations issued by NCRAI in 2019 – from the ORT – DMB-MIC.464.2.2020 of 29 April 2020</sup>

<sup>1\*)</sup>PR Sp. z o.o. – Przewozy Regionalne Sp. z o.o. – currently called POLREGIO Sp. z o.o.

<sup>2\*)</sup> Zakład Linii Kolejowych (IZ) in Nowy Sącz applied to the road operator in relation to the installation of B-20 "STOP" sign

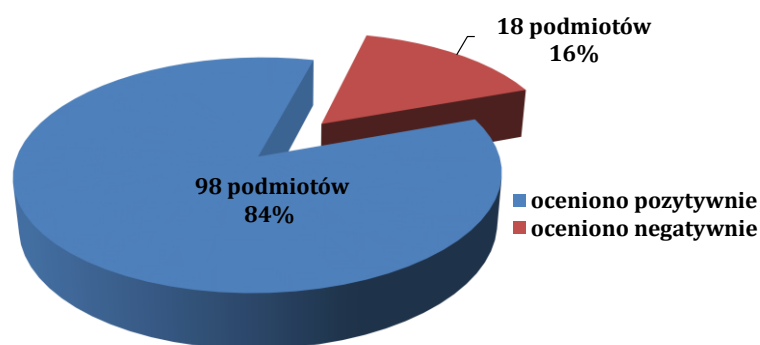
<sup>3\*)</sup> in relation to Recommendation No. 5 concerning the crossing at 25.749 km of the Chabówka – Zakopane railway line, "the road operator, i.e. the Mayor of the Town of Nowy Targ informed PKP PLK S.A. Zakład Linii Kolejowych in Nowy Sącz in his letter No. DiT.7221.99.2019 of 23 December 2019 that D-5 sign "right-of-way on a narrow section of the road" had been implemented and reported to the commune traffic management body. Pursuant to Recommendation No. 1 the level crossing located at 25.749 km of the Chabówka-Zakopane railway line No. 99 shall be reconstructed as part of the implementation of the task called "Works at the railway line No. 99 by the end of 2022 - the level crossing surface to be modernised according to the provisions of the Functional Plan".

<sup>4\*)</sup> implemented by the road operator and PKP PLK S.A. Zakład Linii Kolejowych in Nowy Sącz. PKP PLK S.A. was informed by the road operator (Mayor of the Town of Nowy Targ) in his letter No. DiT.7221.99.2019 of 23 December 2019 about the approval of the project of the traffic organisation on ul. Kolorowa, applying to the implementation of A-30 sign "Other hazards", including T-14d boards "Accidents". The road operator informed in his letter of 18 February 2020 that the signs were installed in the reference area.

<sup>5\*)</sup> in his letter No. PKBWK.38.2019RL of 4 October 2019 the President of the NCRAI, in accordance with Art. 28l par. 8 of the act of 28 March 2003 on rail transport (Journal of Laws of 2019, item 710 as amended) communicated to the Minister of Infrastructure the recommendations included in the letter on the safety improvement No. 7, 11 and 12, including Report No. PKBWK/03/2019.

<sup>6\*)</sup> based on the information about the implementation of the recommendations given by PKP PLK S.A. – information IBR4a-743-1/20 of 15 March 2020

Diagram 5. **Assessment of the method of implementing the recommendations set out in Report No. PKBWK/03/2019 and to be implemented pursuant to the decision of the President of the ORT (based on the information submitted by the ORT)**



[98 entities - positive opinion, 18 entities - negative opinion]

**"Positive opinion"** – according to the ORT the measures declared by 98 railway market entities shall result in proper implementation of the NCRAI's recommendations.

**"Negative opinion"** – according to the ORT the measures declared by 18 entities shall not result in proper implementation of the recommendations.

Table 9. Summary of the opinions on the responses submitted by the entities in relation to the implementation of the recommendations given in Report No. PKBWK/03/2019 (based on the information given by the ORT)

	Recommendati on 1 (PKP PLK S.A.)	Recommendati on 2 (PKP PLK S.A.)	Recommendati on 3 (PR Sp. z o.o.)	Recommendati on 4 (PKP PLK S.A.)	Recommendati on 5 (IMB)	Recommendati on 8 (RO)	Recommendati on 9 (IMB)	Recommendati on 10 (IMB)
Applied to entities	1	1	1	1	11	107	11	11
Positive opinion	1	1	1	1	10	89	10	10
Negative opinion	0	0	0	0	1	18	1	1

**Ad. 4)** The President of the Office of Rail Transport adopted the recommendations set out in Report No. PKBWK/04/2019, requesting that the following recommendations shall be fully implemented by all authorised railway infrastructure management bodies, certified railway operators or other entities, based on the letter of the ORT No. DMB-WMIC.464.1.2019.1.AM of 25 February 2020 in the following way:

- Recommendation No. 1 addressed by the Commission to PKP PLK S.A. Zakład Linii Kolejowych in Poznań – was submitted by the President of the ORT for implementation by PKP PLK S.A.,
- Recommendations No. 2 and 5 addressed by the Commission to PKP PLK S.A. – were also submitted by the President of the ORT for implementation by PKP PLK S.A.,

- Recommendation No. 2a - based on Recommendation No. 2 of the Commission, the President of the ORT addressed the following recommendation to all authorised railway infrastructure management bodies - excluding PKP PLK S.A. - i.e. to 10 entities,
- Recommendation No. 3 addressed by the Commission to the railway infrastructure management bodies was also submitted by the President of the ORT to be implemented by all authorised infrastructure management bodies - i.e. 11 entities,
- Recommendation No. 6 addressed by the Commission to PKP Intercity S.A railway operator - was also submitted by the President of the ORT for implementation by PKP Intercity S.A.,
- Recommendation No. 6a - based on Recommendation No. 6 of the Commission, the President of the ORT issued a recommendation to be implemented by all certified railway operators - i.e. 107 entities.

Note:

- Recommendation No. 4 - addressed by the Commission to the Minister of Infrastructure (MI) - was submitted by the President to the Minister of Infrastructure. <sup>6\*)</sup>

**Table 10. Implementation of the recommendations by the entities mentioned by the Commission in Report No. PKBWK/04/2019** - based on the information submitted to the NCRAI in March and April 2020.

Recommendations resulting from Report No. PKBWK/04/2019 (published in 2019):	Entity being the addressee of the recommendation	Date of recommendation implementation	Mean percentage (%) of the recommendation implementation by the entities mentioned in column 2/ (implementation stage)
1	2	3	4
Recommendation 1	PKP PLK S.A. ZLK in Poznań	31 July 2021	60 (under implementation by PKP PLK S.A.)
Recommendation 2	PKP PLK S.A.	31 December 2019	100
Recommendation 2a	authorised railway infrastructure management bodies, excluding PKP PLK S.A.	.....	30 (% of implementation by all IMBs)**)
Recommendation 3	IMB including: PKP PLK S.A.	..... 31 December 2020	38 (% of implementation by all IMBs)**) 20 (under implementation by PKP PLK S.A.)
Recommendation 5	PKP PLK S.A.	31 December 2020 <sup>*)</sup>	70 (under implementation by PKP PLK S.A.)
Recommendation 6	PKP Intercity S.A.	23 March 2020	100
Recommendation 6a	PK	.....	54(% of implementation by all ROs)**)
Recommendation 4	<sup>6*)</sup> NCRAI	4 October 2019	implemented within the Commission's authority

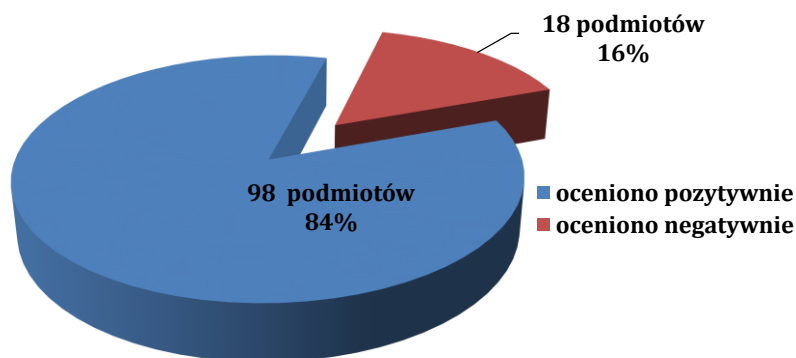
<sup>\*)</sup> based on the information about the implementation of the recommendations given by PKP PLK S.A. – information IBR4a-743-1/20 of 15 March 2020

<sup>\*\*) based on the information about the implementation of the recommendations issued by NCRAI in 2019 – from the ORT – DMB-WMIC.464.2.2020 of 29 April 2020</sup>

<sup>6\*) Recommendation No. 4 and Report No. PKBWK/04/2019 – were communicated based on Art. 281 par. 8 of the act of 28 March 2003 on rail transport (Journal of Laws of 2019, item 710 as amended), with letter PKBWK.37.2019.RL of 4 October 2019 to the Minister of Infrastructure.</sup>

<sup>6\*) in his letter PKBWK.37.2019.RL of 4 October 2019 the NCRAI's Chairman, in accordance with Art. 281 par. 8 of the act of 28 March 2003 on rail transport (Journal of Laws of 2019, item 710 as amended) communicated to the Minister of Infrastructure the recommendation on the safety improvement No. 4, including Report No. PKBWK/04/2019.</sup>

Diagram 6. **Assessment of the method of implementing the recommendations set out in Report No. PKBWK/04/2019 and to be implemented pursuant to the decision of the President of the ORT** (based on the information submitted by the ORT)



[98 entities - positive opinion, 18 entities - negative opinion]

**"Positive opinion"** – according to the ORT the measures declared by 98 railway market entities shall result in proper implementation of the NCRAI's recommendations.

**"Negative opinion"** – according to the ORT the measures declared by 18 entities shall not result in proper implementation of the recommendations.

Table 11. **Summary of the opinions on the responses submitted by the entities in relation to the implementation of the recommendations given in Report No. PKBWK/04/2019** (based on the information given by the ORT)

	Recommendation 1 (PK PLK S.A.)	Recommendation 2 (PK PLK S.A.)	Recommendation 2a (IMB excluding DZD PLK S.A.)	Recommendation 3 (IMB)	Recommendation 5 (PK PLK S.A.)	Recommendation 6 (PKP Intercity S.A.)	Recommendation 6a (RO)
Applied to entities	1	1	10	11	1	1	107
Positive opinion	1	1	9	10	1	1	90
Negative opinion	0	0	1	1	0	0	17

**Ad. 5)** The President of the Office of Rail Transport adopted the recommendations set out in Report No. PKBWK/05/2019 requesting that the following recommendations shall be fully implemented by all authorised railway infrastructure management bodies and certified railway operators, based on the letter of the ORT No. DMB-WMIC.464.1.2020.1.AM of 25 February 2020 in the following way:

- Recommendation No. 1 addressed by the Commission to the PKP PLK S.A. railway infrastructure management body Zakład Linii Kolejowych in Rzeszów – was submitted by the President of the ORT for implementation by PKP PLK S.A.,
- Recommendations No. 2 and 3 addressed by the Commission to Spółka SKPL Cargo Sp. z o.o. railway operator – was also submitted by the President of the ORT for implementation by Spółka SKPL Cargo Sp. z o.o.,
- Recommendation No. 2a - based on Recommendation No. 2 of the Commission, the President of the ORT issued a recommendation to be implemented by all certified railway operators (i.e. to 107 entities) *"obliging them to verify the compliance with the NCRAI's recommendation No. PKBWK-076-305/RL/R/11 of 22 November 2011 - the use of digital cameras or video recorders in new and operating railway vehicles"*.
- Recommendation No. 3a - based on Recommendation No. 3 of the Commission, the President of the ORT issued a recommendation to be implemented by all certified railway operators (i.e. to 107 entities) *"obliging them to take measures to ensure recording of the "Attention" acoustic signal emitting on the electronic recorders in use"*.
- Recommendation No. 6 addressed by the Commission to PKP PLK S.A. – was also submitted by the President of the ORT for implementation by PKP PLK S.A.,

Note:

- Recommendations No. 4 of the Report No. PKBWK/05/2019 addressed by the Commission to the operator of district road No. 1922 in Strzyżów.

**Table 12. Implementation of the recommendations by the entities mentioned by the Commission in Report No. PKBWK/05/2019** - based on the information submitted to the NCRAI in March and April 2020.

Recommendations resulting from Report No. PKBWK/05/2019 (published in 2019):	Entity being the addressee of the recommendation	Date of recommendation implementation	Mean percentage (%) of the recommendation implementation by the entities mentioned in column 2/ (implementation stage)
1	2	3	4
Recommendation 1	PKP PLK S.A.	20 March 2020	<b>100</b>
Recommendation 2	SKPL Cargo Sp. z o.o.	31 December 2019	<b>30</b> (under implementation by SKPL Cargo Sp. z o.o.)
Recommendation 2a	PK	.....	<b>57</b> (% of implementation by all ROs)**)
Recommendation	SKPL Cargo Sp. z o.o.	31 December	<b>40</b> (under implementation by SKPL

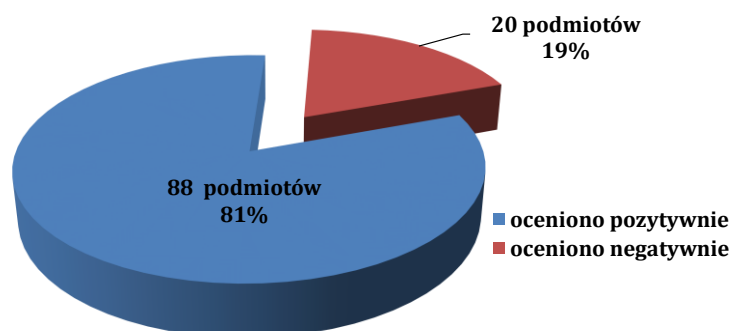
3		2019	Cargo Sp. z o.o.)**)
Recommendation 3a	PK	31 December 2019	54 (% of implementation by all ROs)**)
Recommendation 4	*) road operator*1)	10 January 2020	implemented
Recommendation 6	PKP PLK S.A.	24 January 2020	100

\*\*\*) based on the information about the implementation of the recommendations issued by NCRAI in 2018 – from the ORT – DMB-WMIC.464.2.2020 of 29 April 2020

\*) Report No. PKBWK/05/2019 submitted by the Commission to the District Roads Authority in Strzyżów based on Art. 281 of the act of 28 March 2003 on rail transport (Journal of Laws of 2019, item 710 as amended), with letter PKBWK.4631.126.2019.BP of 23 October 2019

1) PKP PLK S.A. Zakład Linii Kolejowych in Rzeszów was exchanging correspondence on the reference recommendation with the district road management authority in Strzyżów and the Wiśniowa District Office. The District Office responded in letter No. P.7226.13.2018.KP of 10 January 2020 that F6a road sign had been installed.

Diagram 7. Assessment of the method of implementing the recommendations set out in Report No. PKBWK/05/2019 and to be implemented pursuant to the decision of the President of the ORT (based on the information submitted by the ORT)



[88 entities - positive opinion, 20 entities - negative opinion]

**"Positive opinion"** – according to the ORT the measures declared by 88 railway market entities shall result in proper implementation of the NCRAI's recommendations.

**"Negative opinion"** – according to the ORT the measures declared by 20 entities shall not result in proper implementation of the recommendations.

Table 13. Summary of the opinions on the responses submitted by the entities in relation to the implementation of the recommendations given in Report No. PKBWK/05/2019 (based on the information given by the ORT)

Recommendation 1 (PKP PLK S.A.)	Recommendation 2 (SKPL Cargo Sp. z o.o.)	Recommendation 2a RO	Recommendation 3 (SKPL Cargo Sp. z o.o.)	Recommendation 3a (RO)	Recommendation 6 (PKP PLK S.A.)
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Applied to entities	1	1	107	1	107	1
Positive opinion	1	1	87	1	87	1
Negative opinion	0	0	20	0	20	0

**Ad. 6)** Having carefully analysed Report No. PKBWK/06/2019, the President of the Office of Rail Transport requested that the following recommendations shall be fully implemented by all certified railway operators and authorised railway infrastructure management bodies, based on the letter of the ORT No. DMB-WMIC.464.1.2019.1.AM of 25 February 2020 in the following way:

- Recommendations No. 1 and 2 addressed by the Commission to the road operator, who had been obliged to implement the recommendations in agreement with the railway infrastructure management body.
- Recommendation No. 3 addressed by the Commission to PKP PLK S.A. – was also submitted by the President of the ORT for implementation by PKP PLK S.A.,
- Recommendation No. 3a – based on Recommendation No. 3 of the Commission, the President of the ORT issued a recommendation to be implemented by all authorised infrastructure management bodies (excluding PKP PLK S.A.) and certified railway operators (i.e. 115 entities), *"obliging them to enhance monitoring of the compliance with the procedures related to corrective and preventive measures, including but not limited to the aspect of taking measures following railway occurrences"*.
- Recommendation No. 4 addressed by the Commission to PKP PLK S.A. – was also submitted by the President of the ORT for implementation by PKP PLK S.A.,
- Recommendation No. 4a - based on Recommendation No. 4 of the Commission, the President of the ORT issued a recommendation to be implemented by authorised railway infrastructure management bodies, excluding PKP PLK S.A. (i.e. to 10 entities) *"so that the scope of inspections carried out at level crossings also covered checking the road traffic organisation on the access roads to level crossings for compliance with effective regulations. Should any irregularities be discovered, the road operators shall be informed immediately"*.
- Recommendation No. 5 addressed by the Commission to Przewozy Regionalne Sp. z o.o. railway operator – was also submitted by the President of the ORT for implementation by PR Sp. z o.o.,
- Recommendation No. 6 addressed by the Commission to railway operators was also submitted by the President of the ORT to be implemented by all certified railway operators,
- Recommendation No. 7 addressed by the Commission to the railway infrastructure management bodies was submitted by the President of the ORT to be implemented by all authorised railway infrastructure management bodies,



**Table 14. Implementation of the recommendations by the entities mentioned by the Commission in Report No. PKBWK/06/2019 - based on the information submitted to the NCRAI in March and April 2020.**

Recommendations resulting from Report No. PKBWK/06/2019 (published in 2019):	Entity being the addressee of the recommendation	Date of recommendation implementation	Mean percentage (%) of the recommendation implementation by the entities mentioned in column 2/ (implementation stage)
1	2	3	4
Recommendation 1	1*) road operator in agreement with PKP PLK S.A. ZLK in Rzeszów	under implementation	1*)
Recommendation 2	2*) road operator in agreement with PKP PLK S.A. ZLK in Rzeszów	implemented	2*)
Recommendation 3	PKP PLK S.A.	31 December 2019	100 (the measures implemented in a continuous mode shall also be implemented in 2020) 3*)
Recommendation 3a	IMB excluding PKP PLK S.A. + RO	.....	66 (% of implementation by IMB excluding PKP PLK S.A. + RO )**)
Recommendation 4	PKP PLK S.A.	31 December 2019	100 (the measures implemented in a continuous mode shall also be implemented in 2020)
Recommendation 4a	IMB excluding PKP PLK S.A.	.....	40 (% of implementation by IMB excluding PKP PLK S.A. )**)
Recommendation 5	PR Sp. z o.o.	31 December 2020	0 (under implementation by PR sp. z o.o.)
Recommendation 6	PK	.....	58 (% of implementation by ROs)**)
Recommendation 7	IMB	.....	92.5 (% of implementation by IMBs)**)

\*\*) based on the information about the implementation of the recommendations issued by NCRAI in 2019 – from the ORT – DMB-WMIC.464.2.2020 of 29 April 2020

\*) Report No. PKBWK/06/2019 submitted by the Commission to the District Roads Authority in Strzyżów based on Art. 28l of the act of 28 March 2003 on rail transport (Journal of Laws of 2019, item 710 as amended), with letter PKBWK.4631.142.2019.BP of 5 December 2019

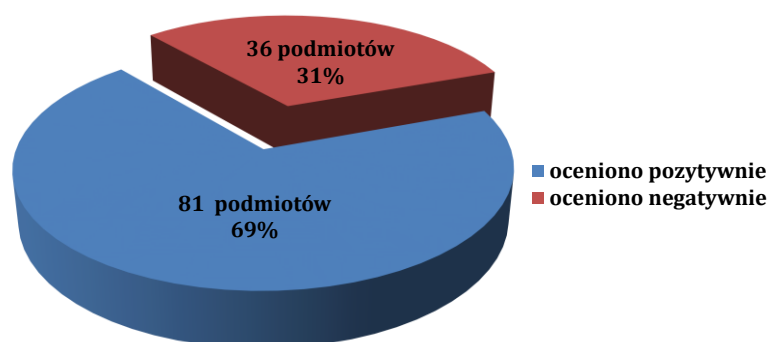
1\*) PKP PLK S.A. ZLK in Rzeszów was exchanging correspondence on the reference recommendation with the road operator.

ZLK in Rzeszów invited the Municipal Road Administration Board in Rzeszów and the Mayor of the City of Rzeszów to discuss and implement the NCRAI's recommendations. As a result of the efforts made, the road operator shall communicate their opinion by 31 January 2020 on maintaining the previous category of the crossing and reconstructing the existing system of roads near the crossing by executing the extended stage II of the project developed in February 2019. The road operator (Municipal Road Administration Board in Rzeszów) in their letter No. TR.433.5.2020.JP of 28 January 2020 expressed a positive opinion on the reference issue.

2\*) Road operator and PKP PLK S.A. Zakład Linii Kolejowych in Rzeszów eliminated the irregularities discovered during the proceedings. Furthermore, the Municipal Road Administration Board in the letter No. TE.413.114.2019 JG of 29 November 2019 shared the new results of visibility measurements carried out in 2019; the results were entered into the level crossing metrics.

3\*) based on the information about the implementation of the recommendations given by PKP PLK S.A. – information IBR4a-743-1/20 of 15 March 2020

Diagram 8. **Assessment of the method of implementing the recommendations set out in Report No. PKBWK/06/2019 and to be implemented pursuant to the decision of the President of the ORT** (based on the information submitted by the ORT)



[81 entities - positive opinion, 36 entities - negative opinion]

**"Positive opinion"** – according to the ORT the measures declared by 81 railway market entities shall result in proper implementation of the NCRAI's recommendations.

**"Negative opinion"** – according to the ORT the measures declared by 36 entities shall not result in proper implementation of the recommendations.

Table 15. **Summary of the opinions on the responses submitted by the entities in relation to the implementation of the recommendations given in Report No. PKBWK/06/2019** (based on the information given by the ORT)

	Recommendation 3 (PKP PLK S.A.)	Recommendation 3a (IMB excluding PKP PLK S.A.)	Recommendation 4 (PKP PLK S.A.)	Recommendation 4a (IMB excluding PKP PLK S.A.)	Recommendation 5 (POLREGIO Sp. z o.o.)	Recommendation 5a (RO)	Recommendation 7 (IMB)
Applied to entities	1	115	1	10	1	107	11
Positive opinion	1	82	1	9	1	90	10
Negative opinion	0	33	0	1	0	17	1

**Ad. 7)** The President of the Office of Rail Transport included and accepted for implementation all recommendations set out in Report No. PKBWK/07/2019, requesting that they shall be fully implemented by all authorised railway infrastructure management bodies and certified railway operators, based on the letter of the ORT No. DMB-WMIC.464.1.2020.1.AM of 25 February 2020 in the following way:

- Recommendation No. 1 addressed by the Commission to the railway infrastructure management bodies was also submitted by the President of the ORT to be implemented by authorised railway infrastructure management bodies - i.e. 11 entities,

- Recommendations No. 2 – 8 addressed by the Commission to Przedsiębiorstwo Obrotu Surowcami Wtórnymi "DEPOL" Sp. z o.o. (hereinafter called DEPOL Sp. z o.o.) – was also submitted by the President of the ORT for implementation by Depol sp. z o.o.,
- Recommendation No. 2a - based on the Commission's Recommendation No. 2 - the President of the ORT issued the recommendation to be implemented by all authorised infrastructure management bodies and certified railway operator (i.e. 116 entities), *"obliging them to verify monitoring of the quality and effectiveness of periodical instructions provided for all employees working on positions related to railway vehicle driving, and safety of the rail traffic and of railway vehicle drivers"*.
- Recommendation No. 5a - based on Recommendation No. 5 of the Commission, the President of the ORT extended the recommendation and obliged all certified railway operators (i.e. 107 entities): *to verify if the method of employing the staff for positions related to railway vehicle driving and rail traffic safety, as well as for positions of railway vehicle drivers (employed only based on an employment contract, civil-law contract) complies with the effective SMS procedures*.
- Recommendation No. 7a - based on Recommendation No. 7 of the Commission, the President of the ORT obliged all certified railway operators (i.e. 107 entities): *"to verify the method and scope of train operators' work control"*,
- Recommendation No. 9 addressed by the Commission to P.W. "Inter-KomTrans"- was also submitted by the President of the ORT for implementation by P.W. "Inter-KomTrans",
- Recommendation No. 10 addressed by the Commission to certified railway operators and authorised infrastructure management bodies was also submitted by the President of the ORT to be implemented by certified railway operators and authorised railway infrastructure management bodies - i.e. 116 entities,
- Recommendation No. 11 addressed by the Commission to the entities in charge of maintenance of freight wagons (ECM) was also submitted by the President of the ORT to be implemented by the entities in charge of maintenance of freight wagons (ECM) - i.e. 65 entities,
- Recommendation No. 12 addressed by the Commission to railway infrastructure management bodies and railway operators, being entities in charge of maintenance of freight wagons (ECM) was also submitted by the President of the ORT to be implemented by authorised railway infrastructure management bodies and certified railway operators who also fulfil the role of certified entities in charge of maintenance RO(ECM) - i.e. 38 entities,
- Recommendation No. 13 addressed by the Commission to the President of the ORT - was submitted to the ORT.

**Table 16. Implementation of the recommendations by the entities mentioned by the Commission in Report No. PKBWK/07/2019 - based on the information submitted to the NCRAI in March and April 2020.**

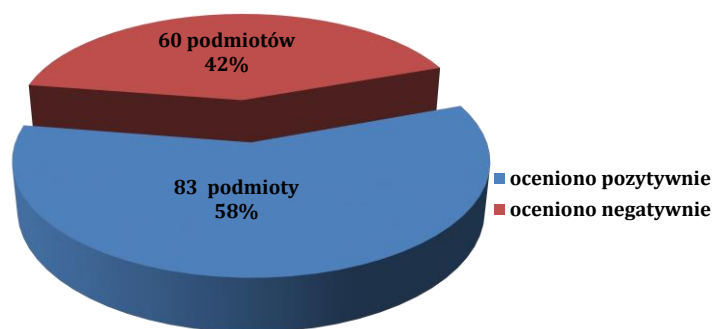
Recommendations resulting from Report No. PKBWK/07/2019 (published in 2019):	Entity being the addressee of the recommendation	Date of recommendation implementation	Mean percentage (%) of the recommendation implementation by the entities mentioned in column 2/ (implementation stage)
1	2	3	4
Recommendation 1	IMB	.....	<b>49%</b> (% of implementation by IMBs)**)
Recommendation 2	DEPOL Sp. z o.o.	31 December 2020	<b>0</b> (under implementation by DEPOL Sp. z o.o.)**)
Recommendation 2a	IMB+RO	.....	<b>61</b> (% of implementation by IMBs + ROs)**)
Recommendation 3	DEPOL Sp. z o.o.	31 December 2020	<b>10</b> (under implementation by DEPOL Sp. z o.o. z o.o.) **)
Recommendation 4	DEPOL Sp. z o.o.	30 April 2020	<b>50</b> (under implementation by DEPOL Sp. z o.o.)**)
Recommendation 5	DEPOL Sp. z o.o.	30 June 2020	<b>0</b> (under implementation by DEPOL Sp. z o.o.)
Recommendation 5a	IMB	.....	<b>75</b> **)
Recommendation 6	DEPOL Sp. z o.o.	31 December 2020	<b>0</b> (under implementation by DEPOL Sp. z o.o.)**)
Recommendation 7	DEPOL Sp. z o.o.	31 December 2020	<b>0</b> (under implementation by DEPOL Sp. z o.o.)**)
Recommendation 7a	RO	.....	<b>65</b> (% of implementation)**)
Recommendation 8	DEPOL Sp. z o.o.	31 December 2020	<b>0</b> (under implementation by DEPOL Sp. z o.o.)
Recommendation 9	P.W. "Inter-KomTrans"	31 December 2020	<b>30</b> (under implementation by P.W. "Inter-KomTrans"1*))
Recommendation 10	IMB+RO including: P.W. "Inter-KomTrans"	31 December 2020	<b>73</b> (% of implementation by IMBs + ROs)**) <b>40</b> (under implementation by P.W. "Inter-KomTrans"1*))
Recommendation 11	ECM	.....	<b>62</b> (% of implementation by ECM)**)
Recommendation 12	IMB+RO(ECM)	.....	<b>78</b> (% of implementation by IMB+ROECM)**)
Recommendation 13	ORT***)		<b>***)</b>

\*\*\*) based on the information about the implementation of the recommendations issued by NCRAI in 2019 – from the ORT – letter No. DMB-WMIC.464.2.2020 of 29 April 2020

1\*) based on the information submitted by P.W. "Inter-KomTrans" to NCRAI

\*\*\*)President of the ORT did not communicate the information to NCRAI on the implementation of the recommendation.

Diagram 9. **Assessment of the method of implementing the recommendations set out in Report No. PKBWK/07/2019 and to be implemented pursuant to the decision of the President of the ORT** (based on the information submitted by the ORT)



[83 entities - positive opinion, 60 entities - negative opinion]

**"Positive opinion"** – according to the ORT the measures declared by 83 railway market entities shall result in proper implementation of the NCRAI's recommendations.

**"Negative opinion"** – according to the ORT the measures declared by 60 entities shall not result in proper implementation of the recommendations.

Table 17. **Summary of the opinions on the responses submitted by the entities in relation to the implementation of the recommendations given in Report No. PKBWK/07/2019** (based on the information given by the ORT)

	Recommendatio n 1 (IMB)	Recommendatio n 2 (DEPOL Sp. z o.o.)	Recommendatio n 2a (IMB+RO)	Recommendatio n 3 (DEPOL Sp. z o.o.)	Recommendatio n 4 (DEPOL Sp. z o.o.)	Recommendatio n 5 (DEPOL Sp. z o.o.)	Recommendatio n 5a (RO)	Recommendatio n 6 (DEPOL Sp. z o.o.)	Recommendatio n 7 (DEPOL Sp. z o.o.)
Applied to entities	11	1	116	1	1	1	107	1	1
Positive opinion	10	1	82	1	1	1	87	1	1
Negative opinion	0	0	34	0	0	0	20	0	0

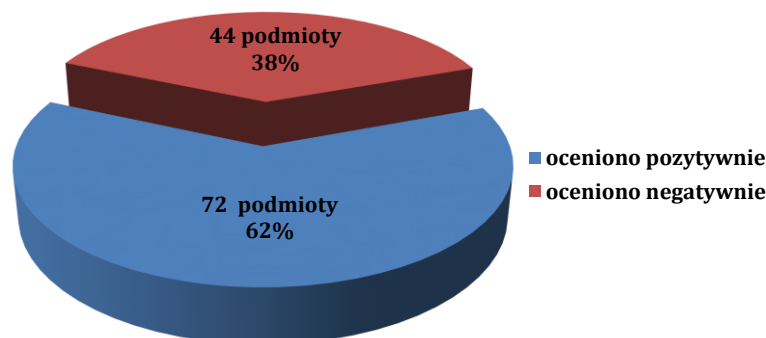
	Recommendation n 7a (R a)	Recommendation n 8 (DEPOL Sp. z o.o.)	Recommendation n 9 (Inter KamTransel)	Recommendation n 10 (IMB+RO)	Recommendation n 11 (ECM)	Recommendation n 12 (IMB+RO(ECM))
Applied to entities	107	1	1	116	65	38
Positive opinion	87	1	0	80	50	19
Negative opinion	20	0	1	36	15	19

**Ad. 8)** In 2019 the NCRAI issued 6 Recommendations in the 2018 Annual Report. The President of the ORT addressed the recommendations from the 2018 Annual Report to be implemented by the authorised railway infrastructure management bodies (IMB), certified railway operators (RO) or entities in charge of maintenance (ECM) in the ORT's letter No. DMB-WMIC.464.1.2020 of 25 February 2020 in the following way:

- Recommendation No. 1 addressed by the Commission to railway operators and railway infrastructure management bodies was also submitted by the President of the ORT to be implemented by all authorised infrastructure management bodies and certified railway operators - i.e. 116 entities (in total),
- Recommendations No. 2, 4 and 6 addressed by the Commission to the railway infrastructure management bodies was also submitted by the President of the ORT to be implemented by all authorised infrastructure management bodies - i.e. to 11 entities,
- Recommendation No. 3 addressed by the Commission to the railway infrastructure management bodies, railway operators and rail siding users was submitted by the President of the ORT to be implemented by authorised infrastructure management bodies and certified railway operators - i.e. 116 entities\*),
- Recommendation No. 5 addressed by the Commission to railway operators was also submitted by the President of the ORT to certified railway operators, i.e. 107 entities.

\*) Recommendation No. 3 amended by the President of the ORT

Diagram 10 **Assessment of the method of implementing the recommendations set out in 2018 Annual Report and meant for implementation pursuant to the decision of the President of the ORT** (based on the information submitted by the ORT)



[72 entities - positive opinion, 44 entities - negative opinion]

**"Positive opinion"** – according to the ORT the measures declared by 72 railway market entities shall result in proper implementation of the NCRAI's recommendations.

**"Negative opinion"** – according to the ORT the measures declared by 44 entities shall not result in proper implementation of the recommendations.

Table 18. **Summary of the opinions on the answers given by the entities mentioned by the Commission in reference to the recommendations set out in the 2018 Annual Report** ( based on the information provided by the ORT)

	Recommendation 1 (RO+IMB)	Recommendation 2 (IMB)	Recommendation 3 (IMB+RO) <sup>1)</sup>	Recommendation 4 (IMB)	Recommendation 5 (RO)	Recommendation 6 (IMB)
Applied to entities	116	11	116	11	107	11
Positive opinion	76	9	78	10	89	9
Negative opinion	40	2	38	1	18	2

The mean percentage of the implementation of the Commission's recommendation is included in the table below.

Table 19. **Implementation status of NCRAI's recommendations issued in 2019 and published in the NCRAI's 2018 Annual Report** ( based on the information provided by the ORT)

Recommendations resulting from NCRAI's Annual Report for 2017 (published in 2018)	Number of entities being the addressees of the recommendations <sup>2)</sup>	Mean percentage (%) of the recommendation implementation by the entities mentioned in column 2
1	2	4
Recommendation 1	(IMB+RO) - 116	74
Recommendation 2	(IMB) - 11	81
Recommendation 3	(IMB+RO) - 116 <sup>1)</sup> (RS+ ) - 658 <sup>2)</sup>	85 <sup>2)</sup>
	(RS) - 658	62

Recommendation 4	(IMB) - 11	<b>74</b>
Recommendation 5	(RO) - 107	<b>63</b>
Recommendation 6	(IMB) - 11	<b>65</b>

RS+ - rail siding users, infrastructure management bodies and railway operators operating based on a safety certificate

<sup>\*)</sup> recommendation amended by the President of the ORT

<sup>2\*)</sup> The President of the ORT sent letter No. DMB-WMIC.464.1.2020.2.AM of 25 February 2020 to 658 entities which are rail siding users (RS), infrastructure management bodies and railway operators operating based on the safety certificate. 409 entities (62%) responded to the letter (according to the information given by the ORT).

Only 168 of the 409 entities that submitted their answers (i.e. 41%) took measures towards mandating the lack of acceptability for guided self-learning in the internal regulations applicable for the particular entity (e.g. rail siding operation rules). Still, the remaining entities (59%) which provided their answers, informed the President of the ORT only about their current actions (e.g. by outsourcing the rail siding servicing to licenced operators and the current lack of the need to employ the staff related to train traffic safety).

The information about **the mean percentage of the implementation of the recommendations given by the Commission in 2019** that were adopted for implementation by the President of the ORT and submitted for implementation by the authorised operators, certified railway infrastructure management bodies or other entities, included in Annex A to this Annual Report. The information about the implementation of the NCRAI's recommendations published in 2019 addressed to other stakeholders (according to Art. 281 par. 8 on the rail transport act) is included in Annex B.

## 5.2. Summary of the Commission recommendations implementation (based on the opinion of the President of the Office of Rail Transport)

The President of the ORT analysed the NCRAI's recommendations issued in 2019 and submitted them for implementation by the authorised railway infrastructure management bodies and certified railway operators and certified entities in charge of maintenance. An excel chart has been developed to make the implementation of the task by the abovementioned entities more efficient. The chart is available on the website of the Office for Rail Transport. The information obtained from the entities was used as the base for developing the outcomes presented in the Annex. The Annex provides annual information about the status of the NCRAI's recommendations issued in 2019. As regard the verification of the implementation by the railway market entities of the NCRAI's recommendations issued in 2019 one should bear in mind that the reports which contain the recommendations are published in different parts of the year, and hence the results of the verification of the recommendations issued in 2019 are not complete. The mean percentage of the implementation of the recommendations (given in the NCRAI's published reports) by the market entities at the beginning of 2019 is higher, which is clearly shown in Diagram 11. *Mean percentage of the NCRAI's recommendations implementation for 2019.*

Pursuant to the obligation resulting from Art. 281 par. 9 of the rail transport act, the President of



the ORT, supervising the implementation of the recommendations by the entities whose operation affects the railway traffic safety and railway operation safety, carried out 58 inspections in 2019 and at the beginning of 2020. The recommendations from the 2018 Annual Report and from the following reports were addressed to the entities: PKBWK/01/2019, PKBWK/02/2019, PKBWK/03/2019, PKBWK/04/2019, PKBWK/05/2019, PKBWK/06/2019 and PKBWK/07/2019. Following an analysis of the information provided by the entities, the President of the ORT adopted the proposed methods of the recommendations implementation, giving a positive opinion in the majority of cases. The President of the ORT did not provide the information concerning taking measures to implement Recommendation No. 13 addressed in the Report No. PKBWK/07/2019 to the President of the Office of Rail Transport.

**Implementation of NCRAI's recommendations by entities operating based on a safety certificate**

The President of the ORT addressed two new recommendations in **Report No. PKBWK/01/2019** - No. 4 (extended) and No. 5 (brand new) to the infrastructure management bodies not having a safety management system but operating based on a safety certificate.

**Recommendation No. 4** - addressed by the President of the ORT - applies to the infrastructure management bodies' (including rail siding users) carrying out inspections of all operating level crossings for correct preparation of metrics and verification of the compliance with technical requirements, including but not limited to visibility at level crossings.

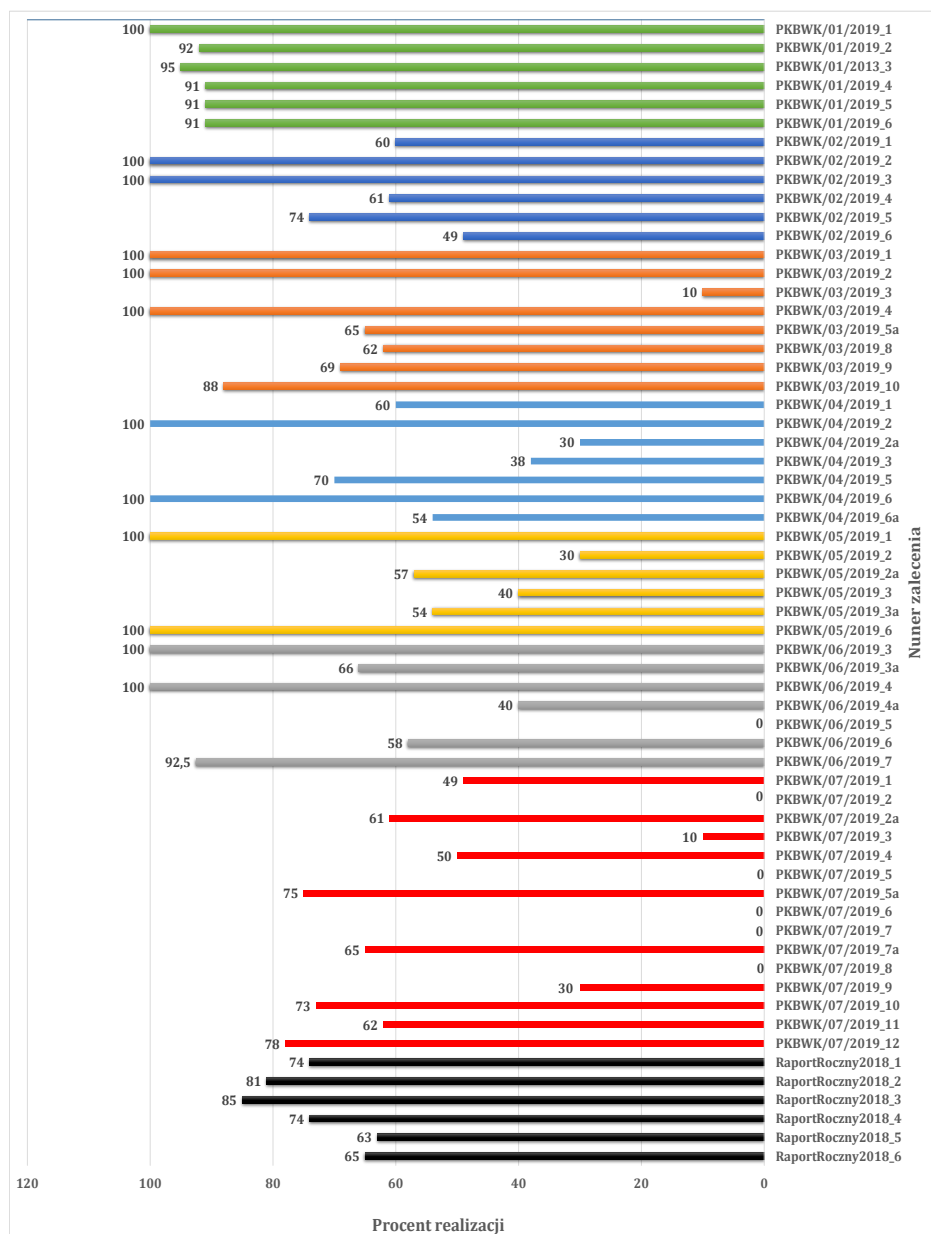
322 entities provided their answers on the implementation of the abovementioned recommendation. It accounts for 49% entities operating based on a safety certificate that received the recommendation in the letter No. DMB.WMIC.464.4.2019.2.MK of 18 October 2019. The recommendation was given to a total of 657 rail siding users and non-authorised infrastructure management bodies. 114 of the entities which provided their answers informed that there were no level crossings with public roads in their infrastructure operation areas, whereas 208 of the entities confirmed the presence of level crossings. 179 of the entities that confirmed having level crossings in their infrastructure areas ensured that they had implemented the recommendation, 2 informed that they had alternative implementation methods, while 27 entities did not provide any information about the degree of the recommendation implementation, because they reported that the recommendation did not apply to them (e.g. due to the fact that they did not have a safety management system).

**Recommendation No. 5** applies to the verification by the infrastructure management bodies (including rail siding users) of the troubleshooting records (it also applied to other documents resulting from construction inspections) for the discovered irregularities and the stage of their eliminating. 325 entities (50%) gave their answers related to this recommendation to the President of the OTK, whereby 314 entities confirmed that they had implemented the recommendation, while 11

entities informed that the recommendation was not applicable to them.

**Recommendation No. 3** from the NCRAI's Annual Report was addressed in the letter No. DMB-WMIC.464.4.2020.1.AM of 25 February 2020 to 658 entities which are rail siding users, infrastructure management bodies and railway operators operating based on a safety certificate. The recommendation applies to eliminating the practice of replacing training provided as part of professional (vocational) preparation for qualification exams for the staff employed directly on the positions related to railway traffic operation and safety as well as driving specific types of railway vehicles by a form of the employees' guided self-learning. Only 168 of the 409 entities that submitted their answers (i.e. 41%) took measures towards mandating the lack of acceptability for guided self-learning in the internal regulations applicable for the particular entity (e.g. rail siding operation rules). According to the ORT this shall guarantee correct operation in the future. Still, the remaining entities (59%) which provided their answers, informed the President of the ORT only about their current actions (e.g. by outsourcing the rail siding servicing to licensed operators and the current lack of the need to employ the staff related to train traffic safety).

Diagram 11 **Mean percentage of the NCRAI's recommendations implementation for 2019** according to Annex A



[horizontal axis - implementation progress; vertical axis - recommendation number]

## 6. Analysis of occurrences in 2019

### **Minor decrease in the total number of occurrences**

The total number of the occurrences reported to the Commission by the infrastructure management bodies and rail siding users competent for the occurrence site decreased by 4.4% in 2019 as compared to 2018, whereby:

- 4 serious accidents occurred in reference to which the Commission was conducting proceedings (there were 6 serious rail accidents in 2018),
- the number of accidents dropped by 12.5%,
- the number of incidents increased by 0.3%.

### **Accidents**

A decrease in the number of accidents was observed in 14 categories (out of all 40 B category occurrences).

**A decrease** in the number of accidents as compared to the previous year was observed in the following categories:

- B28 – natural calamities (e.g. flood, snowdrifts, ice jams, hurricanes, landslides), (in 2018 there were 2 occurrences, in 2019 – 0 occurrences) – by 100%,
- B39 – a railway vehicle using overhead line power entering a non-occupied non-electrified track from the overhead line (in 2018 there was 1 occurrence, in 2019 – 0 occurrences) – by 100%,
- B07 – making a manoeuvre which poses hazard to train traffic safety (in 2018 there were 8 occurrences, in 2019 – 1 occurrence) – by 87.5%,
- B24 – fire on the train, shunting train or railway vehicle (in 2018 there were 6 occurrences, in 2019 – 1 occurrence) – by over 83.3%,
- B12 – damage to or incorrect activation/operation of railway traffic control equipment (in 2018 there were 3 occurrences, in 2019 – 1 occurrence) – by 66.7%,
- B08 – inadvertent starting of a railway vehicle (in 2018 there were 11 occurrences, in 2019 – 4 occurrences) – by over 63.6%,
- B32 – a railway vehicle running into persons when they are crossing the track at a level crossing with an automatic crossing system (cat. B, C) – (in 2018 there were 10 occurrences, in 2019 – 5 occurrences) – by 50.0%,
- B19 – a railway vehicle running into a road vehicle (another piece of road equipment or agricultural machine) or vice versa on a level crossing with an automatic crossing system with light signals and barriers (cat. b) (in 2018 there were 21 occurrences, in 2019 – 13 occurrences) – by 38.1%,

- B34 - a railway vehicle running into persons when they are crossing the track away from level crossings or railroad crossings at railway stations and routes (in 2018 there were 205 occurrences, in 2019 – 141 occurrences) – by over 31.2%,
- B20 - a railway vehicle running into a road vehicle (another piece of road equipment or agricultural machine) or vice versa on a level crossing with an automatic crossing system with light signals and without barriers (cat. C) – (in 2018 there were 35 occurrences, in 2019 – 26 occurrences) – by over 25.7%,
- B15 - premature termination of the route or removing the closure and throwing the points under a railway vehicle (in 2018 there were 18 occurrences, in 2019 – 14 occurrences) – by over 22.2%,
- B35 - occurrences related to the railway vehicle movement (jumping into, falling out of a train, railway vehicle, violent approach or sharp braking of a railway vehicle)(in 2018 there were 24 occurrences, in 2019 - 19 occurrences) - by over 20.8%,
- B04 - a railway vehicle not stopping ahead of "Stop" signal or in the place where it should stop or starting a railway vehicle without the required permission (in 2018 there were 35 occurrences, in 2019 – 28 occurrences) – by 20%,
- B21 - a railway vehicle running into a road vehicle (another piece of road equipment or agricultural machine) or vice versa on a level crossing not featured with a safety system (cat. D), (in 2018 there were 137 occurrences, in 2019 – 130 occurrences) – by 5.1 %.

**An increase** in the number of accidents as compared to the previous year was observed in the following categories:

- B30 - mischievous, hooligan or reckless misdemeanour (e.g. throwing stones at the train, stealing cargo from a moving train or shunting train, placing an obstacle on the track, devastation of power, communication or railway traffic control equipment or surface and tampering the equipment) (in 2018 there was 1 occurrence, in 2019 – 9 occurrences) – by 800%,
- B18 - a railway vehicle running into a road vehicle (another piece of road equipment or agricultural machine) or vice versa on a level crossing with barriers (cat. A according to the crossing metrics) (in 2018 there were 2 occurrences, in 2019 – 9 occurrences) – by 350%,
- B31 - a railway vehicle running into persons when they are crossing the track at a level crossing or railroad crossing with barriers (in 2018 there were 4 occurrences, in 2019 – 12 occurrences) – by 200%,
- B22 - a railway vehicle running into a road vehicle (another piece of road equipment or agricultural machine) or vice versa on a private level crossing (cat. F), (in 2018 there were no occurrences, in 2019 - 1 occurrence),

- B06 - exceeding the permissible speed (in 2018 there were no occurrences, in 2019 - 1 occurrence),
- B23 - a railway vehicle running into a road vehicle (another piece of road equipment or agricultural machine) or vice versa in areas other than level crossings at railway stations, routes or on a traffic and access route to the rail siding (in 2018 there were 6 occurrences, in 2019 – 10 occurrences) – by over 66.6%,
- B10 - damage to or poor technical condition of a railway vehicle with a drive, special purpose railway vehicle (including running into an object which is a structural component of a railway vehicle with a drive or wrong operation of the board equipment enabling the railway vehicle control (ERTMS)(in 2018 there were 4 occurrences, in 2019 – 6 occurrences) – by 50%,
- B11 - damage to or poor technical condition of a rail car (in 2018 there were 21 occurrences, in 2019 – 26 occurrences) – by over 23.8%,
- B09 - damage to or poor maintenance of structures, e.g. surface, bridge or overpass, including works carried out incorrectly, e.g. wrong unloading of materials, surface, leaving materials and equipment (including road equipment) on the track or within the railway vehicle gauge or a railway vehicle running into parts of a building structure (in 2018 there were 43 occurrences, in 2019 – 52 occurrences) – by over 20.9%,
- B33 - railway vehicle running into persons when they are crossing the track at other types of level crossing or railroad crossing (in 2018 there were 9 occurrences, in 2019 – 10 occurrences) – by over 11%,
- B13 - a railway vehicle running onto another railway vehicle or obstacle (e.g. a brake skid, luggage trolley or postal trolley) (in 2018 there were 48 occurrences, in 2019 – 49 occurrences) – by 2.1 %.

### **Incidents**

In 2019 a minor increase in the number of reported incidents was observed as compared to the previous year - by 0.3%.

A decrease in the number of incidents was observed in 13 categories (out of all 27 C category occurrences).

**A decrease** in the number of incidents was observed in the following categories:

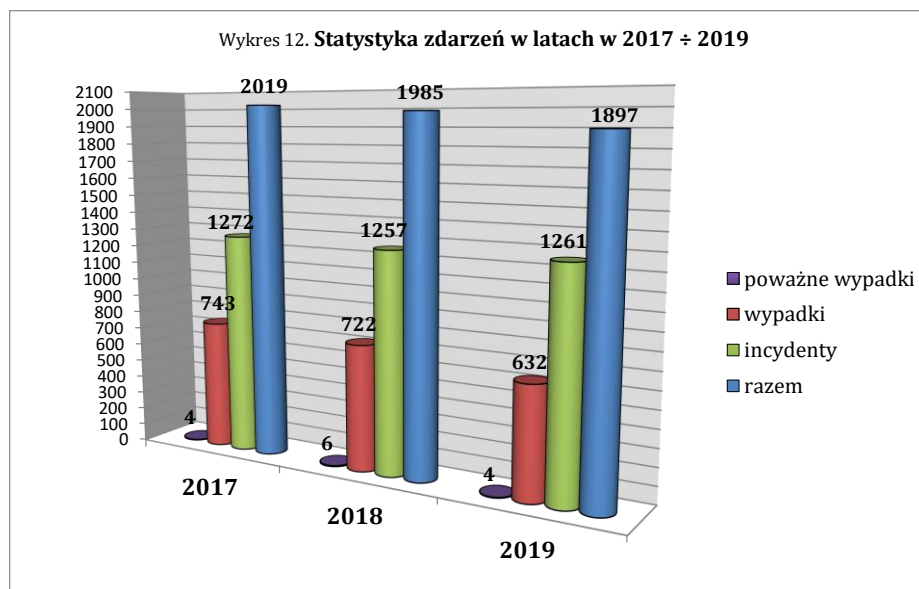
- C67 - incorrect operation of structures and equipment intended for managing the railway traffic or railway vehicle as a result of theft (in 2018 there was 1 occurrence in this category, in 2019 – 0 occurrences) – by 100%,

- C59 - uncontrolled release of dangerous goods from a railway car or packaging, requiring intervention of authorities or the use of measures to eliminate fire, chemical or biological hazard at the station or on the route (in 2018 there were 2 occurrences, in 2019 - 1 occurrence) - by 50%,
- C47 - inadvertent starting of a railway vehicle (in 2018 there were 9 occurrences in this category, in 2019 - 5 occurrences) - by 44.4%,
- C66 - a road vehicle not stopping before a closed barrier (half barrier) and damage to the barrier or road signals emitting signals banning the entrance to the level crossing without colliding with a railway vehicle (in 2018 there were 138 occurrences, in 2019 - 82 occurrences) - by over 40.5%,
- C50 - incorrect loading, unloading or securing of load or other irregularities in loading operations (in 2018 there were 26 occurrences, in 2019 - 17 occurrences) - by over 34.6%,
- C42 - accepting a railway vehicle in a station on a closed or occupied track (in 2018 there were 4 occurrences, in 2019 - 3 occurrences) - by 25%,
- C45 - exceeding the maximum permissible speed (in 2018 there were 8 occurrences in this category, in 2019 - 6 occurrences) - by 25%,
- C48 - premature termination of the route or removing the closure and throwing the points under a railway vehicle (in 2018 there were 4 occurrences, in 2019 - 3 occurrences) - by 25%,
- C68 - separation of a train or shunting train which did not result in inadvertent starting of railway cars (in 2018 there were 333 occurrences, in 2019 - 261 occurrences) - by over 21.6%,
- C55 - fire on a train or railway vehicle which does not cause negative effects for the property or environment, with no persons affected (in 2018 there were 26 occurrences in this category, in 2019 - 21 occurrences) - by over 19.2%,
- C69 - causes other than mentioned above or a combination of several simultaneous causes resulting in equivalent causes (in 2018 there were 28 occurrences in this category, in 2019 - 23 occurrences) - by over 17.8%,
- C54 - damage to or poor technical condition of a railway car, which results in its withdrawal from use as a result of the detection equipment indicating failure of the rolling stock, confirmed in workshop conditions (hot axle boxes, hot brake resulting in rim displacement) or other failures to moving railway vehicles discovered by the service staff (in 2018 there were 240 occurrences, in 2019 - 229 occurrences) - by over 4.5%,
- C44 - a railway vehicle not stopping ahead of "Stop" signal or in the place where it should stop or starting a railway vehicle without the required permission (in 2018 there were 86 occurrences in this category, in 2019 - 83 occurrences) - by 3.4%,

The areas where an **increase** in the number of incidents was observed included:

- C65 - occurrences involving humans, related to the railway vehicle movement (crossing the track at level crossings or away from them, jumping into, falling out of a train or railway vehicle, being knocked down by a moving rolling stock, violent approach or sharp braking of a railway vehicle)(In 2018 there were 10 occurrences, in 2019 – 25 occurrences) – by 150%,
- C52 – incorrect activation/operation of railway traffic control equipment (in 2018 there were no occurrences in this category, in 2019 - 2 occurrences in this category),
- C62 – natural calamities (e.g. flood, snowdrifts, ice jams, hurricanes, landslides), (in 2018 there were 8 occurrences, in 2019 – 19 occurrences) – by 137.5%,
- C46 - making a manoeuvre which poses hazard to train traffic safety (in 2018 there was 1 occurrence in this category, in 2019 - 2 occurrences) - by 100%,
- C64 - mischievous, hooligan or reckless misdemeanour (e.g. throwing stones at the train, stealing cargo from a moving train or shunting train, placing an obstacle on the track, devastation of power, communication or railway traffic control equipment or surface and tampering the equipment), with no persons affected or negative consequences for the property or environment which would pose a hazard for passengers or train staff (in 2018 there were 133 occurrences in this category, in 2019 - 255 occurrences) - by 91.7%,
- C41 - sending a railway vehicle off onto an occupied track, either closed or opposite to the right one, or into a wrong direction (in 2018 there were 3 occurrences in this category, in 2019 - 4 occurrences) - by over 33.3%,
- C43 - sending off, acceptance or running of a railway vehicle on a wrongly arranged and non-secured route or incorrectly serviced or a lack of service of the railway traffic control equipment (in 2018 there were 67 occurrences in this category, in 2019 - 92 occurrences) - by over 37.3%,
- C53 - damage to or poor technical condition of a railway vehicle with a drive, a special purpose railway vehicle which results in its withdrawal from use as a result of the detection equipment indicating failure of the rolling stock, confirmed in workshop conditions (in 2018 there were 25 occurrences in this category, in 2019 - 31 occurrences) - by 24%,
- C51 - damage to the surface, bridge, overpass or overhead line, including works carried out incorrectly, e.g. wrong unloading of materials, surface, leaving materials and equipment (including road equipment) on the track or within the railway vehicle gauge (in 2018 there were 45 occurrences in this category, in 2019 - 49 occurrences) - by over 8.8%,



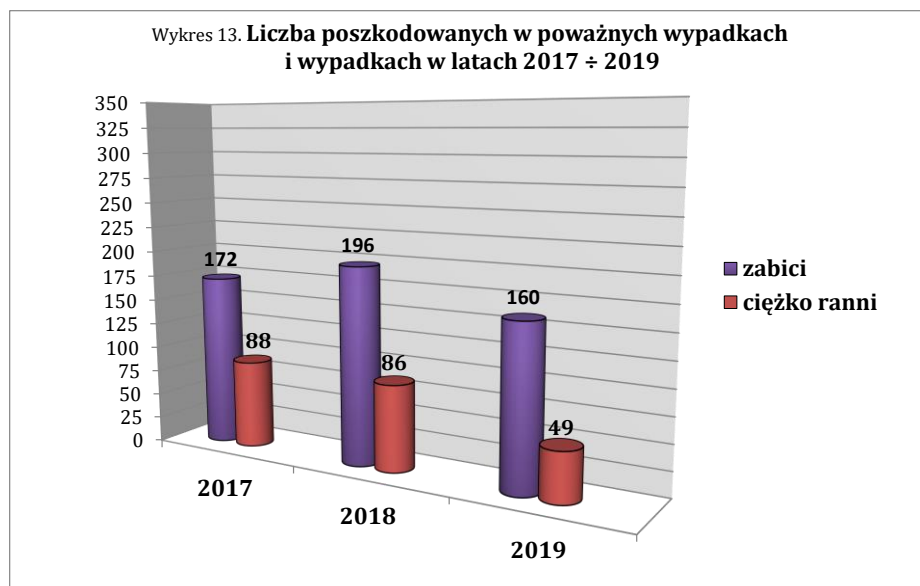


[Diagram 12. Occurrence statistics for 2017 - 2019; purple - serious accidents; pink - accidents; green - incidents; blue - total]

#### **Affected persons**

In 2019, as compared to 2018, the number of rail occurrence casualties decreased by 18.4%, while the number of severely injured persons decreased by 43.0% (Table 2). The majority of the affected persons (casualties and severely injured) were crossing the railway track in unauthorised access areas or at crossings at the rail level, were knocked down by railway vehicles, were jumping into or out of running railway vehicles and were the users of level crossings.

The following diagram illustrates the basic data concerning the affected persons (casualties and severely injured) between 2017 and 2019.



[Diagram 13. Number of persons affected in serious accidents and accidents between 2017 and 2019: purple - casualties; pink - severely injured]

#### Occurrences at level crossings

In 2019, as compared to 2018 a decrease was observed in the total number of accidents at A, B, C and D category level crossings by over 9.9%, including:

- at A category level crossings - 6 accidents more,
- at B category level crossings - 7 accidents less,
- at C category level crossings - 9 accidents less,
- at D category level crossings - 10 accidents less (including the rail siding users),

The main causes of occurrences at level crossings still include but are not limited to:

- ignoring the "Stop" sign and road vehicle drivers failing to exercise special care,
- driving under closing barriers,
- omitting half barriers,
- a lack of the required clear view triangle,
- blocking the level crossing by entering the track with no possibility to leave it,
- failing to adapt the speed to the road conditions,
- non-observance of road signs and other signals,
- behaving in a wrong way when the car is immobilised on the track,

- a road vehicle driver's not responding to the "Attention" signals given by the train driver, while driving through a level crossing and consequently entering the level crossing straight in front of the incoming train.

According to the statistics in the NCRAI's rail occurrences record, there were 38 rail occurrences which involved a road vehicle hitting the side of a railway vehicle being a part of a train set.

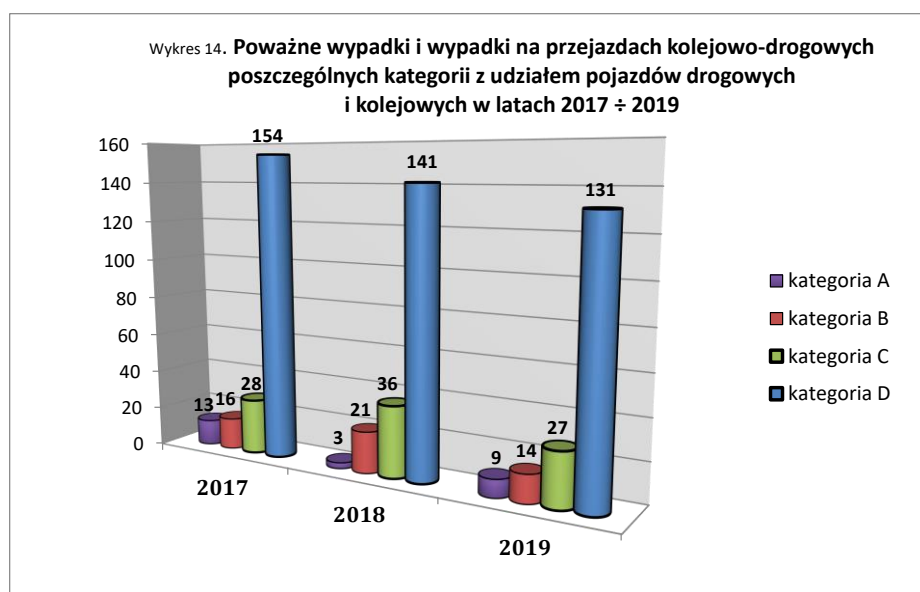
In 2019 there were 6 more accidents at the A category level crossings than in 2018. The main causes of the accidents included:

- road vehicle driver failing to exercise caution at an A category level crossing with no maintenance staff
- a road vehicle driver failing to observe the signals given by the level crossing traffic manager,
- a road vehicle driver entering a level crossing and colliding with a railway vehicle (failing to exercise caution while driving through an A category level crossing),
- a railway vehicle running into a road vehicle at a remotely serviced A category level crossing - faulty equipment,
- barriers closed too late or not closed at all before the train entered the level crossing (for the period of the train running through the crossing).

Mass occurrences of road vehicles entering B category level crossings (when the barriers are closing) and their trapping between the barriers has been observed. An analysis of the *Final Arrangements* submitted by the commissions revealed that in 2019 there were over 110 cases of road vehicles being trapped between the barriers of B category level crossings (road vehicles did not collide with the trains because they were outside the rolling stock outline). **The circumstances and causes of the incidents should be thoroughly analysed by rail commissions and railway infrastructure management bodies.**

In 2019 38 persons died and 18 were severely injured in the level crossing occurrences (serious accidents and accidents) which involved road and railway vehicles.

In 2019 22 persons died and 4 were severely injured in the occurrences involving humans at the level crossings and pedestrian railway crossings, caused by moving railway vehicles.



[Diagram 14. Serious accidents and accidents at level crossings representing each category, involving road and railway vehicles, between 2017 and 2019; purple - A category; pink - B category; green - C category; blue - D category]

#### 7. Other aspects related to the Commission's operation in 2019

In 2019 The Commission continued its statutory activity by implementing the established objectives and challenges, based on the financial resources assigned for the reference year. There were twelve permanent members of the Commission, employed based on the assigned financial resources.

As part of its operation, the Commission was cooperating with the organisational units of the Ministry of Infrastructure and Ministry of Home Affairs and Administration, including but not limited to an analysis of draft acts of law, industry sector programmes, budget preparation, and organisational and personnel issues.

The operation of the Commission included :

- cooperation with the Office of Rail Transport (ORT),
- cooperation with rail commissions conducting proceedings on the identification of the causes and circumstances of the occurrences,
- permanent members of the Commission visiting the sites of the occurrences, based on notifications (visits to 35 occurrence sites); instigating proceedings in relation to an accident or incident, if it occurred under circumstances which justify such an investigation

(3 decisions made by the Chairman of the NCRAI and 5 decisions of the Deputy Chairman acting on behalf of the Chairman of the NCRAI),

- cooperation with the prosecutor's office and the police on the occurrence site and on further stages of the proceedings, according to the concluded agreement and effective regulations,
- cooperation with organisers of training and conferences as part of the Commission's work presentation and the method of conducting investigations related to rail accidents (serious accidents, accidents and incidents) by the rail commissions, and participation in railway company meetings and assemblies devoted to the rail transport safety assessment.
- participation of the Commission members in the working team at the Ministry of Infrastructure on the implementation of the national GSM-R programme for the Polish railway network, and in the meetings of the Technical Committee No. 61 and 138 for Traction Technical Equipment,
- participation of the Commission members in regular training organised e.g. for the police, prosecutor's office and railway market entities,
- participation of the Commission members in seminars and conferences devoted to rail transport safety,
- cooperation with public road operators on different levels (district, commune) after the railway occurrence at level crossings,
- cooperation with domestic investigation bodies from other EU countries,
- participation in the meetings and cooperation with the European Union Agency for Railway,
- participation of the NCRAI's Deputy Chairman for Investigation in the team evaluating the domestic investigation body of Lithuania as part of EU countries peer review,
- cooperation with the organisational units of the Ministry of Infrastructure, e.g. Department of Railway, Secretary of the National Board for Road Traffic Safety, Department of Law and Department of Public Roads within safety improvement and changes in the legal regulations concerning road vehicle drivers while driving through level crossings,
  - presenting to the Ministry of Infrastructure the proposals for amendments, supplements and elimination of inconsistencies in the acts and executive regulations of some provisions in the acts of law (acts and regulations),
  - an analysis of the provisions in the acts determining train traffic and road traffic organisation in the areas of level crossings,
- cooperation with the organisational units of the Ministry of Home Affairs and Administration, e.g. General Director of the Ministry of Home Affairs and Administration; Department for Civil Protection and Crisis Management; Personnel, Training and Organisation Office; Administration and Finance Office and ICT Department,

- cooperation with the Chief Inspectorate for Road Transport on the equipment monitoring drivers' regulator offences/misdemeanours in the area of B and C category level crossings.

**Participation in the following activities as part of international operation in 2019:**

➤ **plenary meetings of EU national investigation teams**

In 2019 the Commission participated in 3 plenary meetings of the European Union national investigation body networks, organised by the EUAR. The participation in plenary meetings and working groups results from the provisions of Art. 22 Section 7 and the Directive, which states that "the investigation bodies actively exchange their opinions and experiences with a view to develop common methods of conducting the investigations, developing common rules to implement the recommendations on safety and adaptation to science and technology progress". Participation in plenary meetings is of key importance for the exchange of information, experiences and cooperation with the Agency and other National Investigation Bodies, in relation e.g. to the discussion of the accident investigation findings, exchange of information about the actions taken after the occurrences to improve safety in the EU, information about annual reports, safety management system, safety certification and safety authorisation, interoperability, status of the EUAR working teams' work, ERAIL occurrence notification system, peer review, implementation status of the Directive in the member states and other aspects important in the context of rail transport safety in Europe.

➤ **Peer review programme working group and the programme pilot assessment**

The Commission participated in the "Peer Review" working group operating as part of the EUAR. The obligation to develop and implement the peer review programme by the member states results from Art. 7, sentence three, i.e. "The investigation bodies supported by the Agency, in accordance with Art. 38 Section 2 of the EU regulation No. 2016/796 shall establish a peer review programme, whereby all investigation bodies are encouraged to participate in the programme to monitor the effectiveness and independence of their actions. The investigation bodies (...) publish a common peer review programme, assessment criteria and annual reports on the programme implementation, emphasising the strengths and proposing improvements. Peer review is a kind of assessment, which involves an insight into an investigation body to analyse the way it operates and identifying the areas for improvement. A domestic investigation body is evaluated by a panel consisting of three persons, representing other investigation bodies. In 2019 a pilot evaluation was carried out in the head office of the Lithuanian investigation body. The members of the evaluation team included representatives of Poland (NCRAI), Norway and Romania. As part of the evaluation, the team analysed selected aspects of the evaluated entity's functioning, including but not limited to independence, organisation, issuing recommendations of safety improvement and the investigation methods and scope.

The NCRAI implemented the GDPR - since 25 May 2018 the Regulation of the European Parliament and the Council (EU) No. 2016/679 of 27 April 2016 on the protection of natural persons in relation

to personal data processing and free movement of such data and abrogating Directive 95/46/EC is in force (General Data Protection Regulation) (Official Journal of the EU, L 119 of 4 May 2016, p. 1, as amended).

In 2019 the Chairman of NCRAI, Mr Tadeusz Ryś was still supervising the improvement of the project developed by the PKP PLK S.A. operator, aimed to install the marking of the level crossing/pedestrian railway crossing at the track level with the information about the location. The project was implemented in May 2018 in PKP PLK S.A. The national railway infrastructure management body was highly involved in the project implementation. Everybody should know the yellow label, placed at the track and road crossing, on the barrier posts or on the inside of the Crossbuck. Each label contains the level crossing individual number (identification number), 112 emergency telephone number and telephone numbers of technical services. In order to reach the users of level crossings and pedestrian railway crossings with the information about the #ŻółtaNaklejkaPLK campaigns, there are various leaflets, videos video tutorials banners, posters, information campaigns and materials for driving instructors available.

Based on the information submitted by PKP Polskie Linie Kolejowe S.A.:

- As of 16 July 2020 the yellow label was used to mark:
  - 13044 level crossings and pedestrian railway crossings.
- From the beginning of the programme (i.e. June 2018) to 30 June 2020, the emergency telephone line operators (112) received:
  - **7410 notifications**  
(including: in 2018 – 417 notifications  
**in 2019** – 4352 notifications  
and in the first six months of 2020 – 2641 notifications.
- From the beginning of the programme, i.e. 30 June 2020, owing to the special quick connection, **railway traffic was stopped** at a railway line in **275 cases**:
  - in 2018 - in 24 cases
  - in 2019 - in 167 cases
  - in the first six months of 2020 - in 84 cases.
- From the beginning of the programme in 2018 to 30 June 2020 :
  - in **487 cases** the train traffic was limited to ensure the safety of passengers and users of level crossings (including: in 2018 - in 30 cases
    - in 2019 - in 269 cases
    - and in the first six months of 2020 - in 188 cases.

Moreover, to avoid rail occurrences in 2019, the use of "Alarm" signal was recorded in the Radio-stop system.

In 2019 a total of 660 cases of using the "Alarm" signal were recorded in PKP PLK S.A., 634 of which were the cases of unauthorised use. The number of such cases increased by 17.5% (from 540 to 634) in 2019 as compared to 2018. The number of unauthorised uses dropped by 8 (from 34 in 2018 to 26 in 2019). The "Alarm" signal was used by the staff working on the following positions:

- train dispatcher - in 12 cases regarded as authorised, and 11 cases regarded as unauthorised,
- level crossing gateman - in 6 cases regarded as authorised, and 2 cases regarded as unauthorised,
- train operator - in 8 cases regarded as authorised, and 96 cases regarded as unauthorised,
- Other: service employee, train operator employee, radiotelephone failure - 14 cases,

and

- unidentified perpetrators - 511 cases of unauthorised use by persons from beyond the railway system.

Other authorised infrastructure management bodies (IMB) other than PKP PLK S.A.:

- The ORT informed that in 2019 The President of the ORT continued the works related to coordinate the measures related to additional marking of level crossings and pedestrian railway crossings on the track level with an identification label, containing necessary information for the emergency telephone number operator (112) and other authorised infrastructure management bodies.
- The actions involving marking level crossings with the "yellow label" covered ten authorised infrastructure management bodies: CARGOTOR sp. z o.o., CTL Maczki Bór S.A., Lower Silesian Road and Railway Services in Wrocław, Euroterminal Sławków sp. z o.o., Infra Silesia S.A., Jastrzębska Spółka Kolejowa sp. z o.o., Kopalnia Piasku Kotłarnia - Linie Kolejowe sp. z o.o., PKP Linia Hutnicza Szerokotorowa sp. z o.o., PKP Szybka Kolej Miejska w Trójmieście sp. z o.o., PMT Linie Kolejowe sp. z o.o. **The abovementioned scope was implemented in 2019 in 100%.**
- The President of the ORT continues coordinating the works related to the data base updating and its sharing with the relevant entities. Authorised infrastructure management bodies other than PKP PLK S.A., who implemented the "yellow label" programme to maintain the project life, were obliged by the President of the ORT to update the data bases of level crossings and to verify the correctness of their marking with individual identification numbers. If it turns out necessary to change the abovementioned data, the bodies are obliged to submit an updated list of level crossings to the President of the ORT.

The year 2019 was the first year of the level crossings/pedestrian railway crossing marking with the "yellow label" on the track (rail) level with the information about its location. The summary above reveals that the implemented project has contributed to effective limitation or elimination of safety hazards which occur during transport.



2019 was the third full calendar year when the rail siding users were obliged to immediately report serious accidents, accidents and incidents to the Commission and the President of the ORT. 148 rail occurrences that took place at rail sidings were entered into the Rail Occurrences Record held by the NCRAI.

#### **8. Tasks of the National Commission for Rail Accidents Investigation in 2020**

As part of the Commission's operation in 2020, it shall be necessary to implement the following actions:

- the Commission conducting proceedings resulting from national regulations,
- visiting the sites of rail occurrences, based on the submitted notifications,
- instigating proceedings on an accident or incident, if it occurred in circumstances justifying such investigation,
- training for permanent members of the Commission to update their knowledge in the scope necessary to implement the Commission's tasks,
- updating (purchase) of applications to read the train running parameters - selected electronic recorders,
- updating and keeping a database of registered railway occurrences,
- updating the Chairman's lists including temporary members of the Commission,
- cooperation with the ORT, including but not limited to the recommendations submitted for implementation to the President of the ORT according to his competencies, and other measures aimed to improve the railway traffic safety,
- analysis of applications submitted to the Commission's Chairman by management bodies, railway operators, rail siding users, minister responsible for transportation, minister responsible for home affairs, President of the Office for Rail Transport or the European Union Member States,
- cooperation with the organisational units of the Ministry of Home Affairs and Administration following the implementation of the *Act amending the Act* on rail transport, concerning the implementation of the decision of the Court of Justice of the European Union of 13 June 2018 on C-530/16,
- cooperation with the units of the Ministry of Home Affairs and Administration within drafting the amendments to national regulations (e.g. within the contents of the Report in relation to the implemented EU Regulation on the subject matter and the regulation on the mandate of the Commission's permanent and temporary member),
- cooperation with the organisational units of the Ministry of Infrastructure, e.g. Department of Railway, Secretary of the National Board for Road Traffic Safety, Department of Law and Department of Public Roads within safety improvement and

changes in the legal regulations concerning road vehicle drivers approaching and driving through level crossings,

- cooperation with the Chief Inspectorate for Road Transport on the use of pilot monitoring system in the area of B and C category level crossings.
- participation in the meetings with the representatives of national investigation bodies of other EU countries, and the European Union Agency for Railway (EUAR) as part of plenary meetings and working teams - exchange of expertise,
- cooperation with and participation in the working teams and training organised by the European Union Agency for Railway,
- participation in meetings with the prosecutor's office and police,
- participation in conferences, meetings, workshops and seminars,
- continuing training as part of in-service training of the representatives of the bodies conducting criminal proceedings, rail commissions and the Commission,
- participation in site surveys and investigation related to the occurrences,
- monitoring the observance of the Commission's budget assumptions for 2020.

## 9. Summary

In 2019 the total number of occurrences reported to the Commission decreased by 4.4% as compared to the previous year.

A minor decrease in the total number of accidents was observed (by 12.5%), the number of serious accidents dropped by 33.3%, and the number of incidents increased slightly - by 0.3%. In 2019 there were 3 serious accidents at level crossings - one at each of the B, C and D category level crossing, while in 2018 there were 6 serious accidents - 4 at D category level crossings, and one at each of the A and C category level crossings. There were no serious accidents at the A category level crossings in 2019, but there were 9 accidents, which resulted in the total number of accidents greater by 6 as compared to the previous year (in 2018 there was one serious accident and two B category accidents). In 2019 there was one serious accident at the C category level crossing, whereas in 2018 there were no serious accidents at all.

In 2019 there were over 37 occurrences which involved a road vehicle driving onto the level crossing and hitting the side of a railway vehicle being a part of a train set, while crossing the D, C and B category level crossing.

An analysis of the number of occurrences revealed an alarming increase in the number of occurrences classified as B30 category (in 2019 there were 9 accidents, while in 2018 there was one accident) and C64 category (255 incidents in 2019 and 133 incidents in 2018), i.e. *C64 - mischievous, hooligan or reckless misdemeanour (e.g. throwing stones at the train, stealing cargo from a moving train or shunting train, placing an obstacle on the track, devastation of power,*

*communication or railway traffic control equipment or surface and tampering the equipment), with no persons affected or negative consequences for the property or environment which would pose a hazard for passengers or train staff.*

An increase in the number of C64 category incidents (there were 122 incidents more in 2019 than in 2018).

In 2019 there were 9 B30 category occurrences (there was one occurrence in 2018), and 255 C64 category occurrences, including over 80 instances of throwing objects at trains, and over 110 cases of road vehicles trapping (in the hazard zone) at B category level crossings between the barriers (outside the track edge), i.e. occurrences classified as this category. The occurrences of throwing stones or other objects at trains pose hazard for the life and health of the passengers or train staff.

It should be mentioned that the presented numerical data concerning trapping of road vehicles in the hazard zones at the B category level crossings are based only on the information submitted by the rail commissions in the *Final Arrangements*. The number of this type of occurrences is practically much higher but not all of them are registered (after a collision-free leaving of the level crossing by the train, the barriers lift automatically for the road vehicle driver; this way the road vehicle driver can leave the level crossing and avoid punishment despite failing to observe the road traffic regulations pertaining to driving through level crossings).

The positive aspect is that the number of persons affected (casualties) listed in the record of all rail accidents dropped by 18.4%. Attention should be paid to B34 category, which was updated as of 26 August 2020. The number of occurrences in this category statistics is much lower than recorded for 31 December 2019 because of the prosecutor's office completed proceedings and changing the classification of some B34 category occurrences as "suicide" or "attempted suicide". A decrease in the number of B34 category accidents was observed in 2019 as compared to 2018 (205 occurrences in 2018 and 141 occurrences in 2019).

A decrease in the number of C68 category incidents is another positive fact (261 incidents in 2019 and 333 incidents in 2018). Still, the number of these occurrences is high, which should encourage rail commissions to more in-depth analyses of the root causes and to identify their circumstances to further minimise the hazards. In 2019 the hazards contributed to the occurrence of 4 B08 category accidents and 5 C47 category incidents (i.e. inadvertent starting of a railway vehicle).

An increase in the number of incidents involving people, related to the railway vehicle movement, i.e. C65 category incidents - from 10 incidents in 2018 to 25 incidents in 2019, as well as a high number of B35 category occurrences, i.e. 19 accidents in 2019 (24 accidents in 2018) is a worrying trend.

In 2019 a minor increase in the number of reported incidents was observed in the Rail Occurrences Recording System as compared to the previous year - by 0.3%. As compared to

**Z komentarzem [A1]:** Prosimy o zweryfikowanie oryginału: na początku akapitu jest mowa o incydentach, a tu nagle mamy wypadki.

accidents, the incidents generate lower material losses and there are fewer persons affected. Nonetheless, their persistently high number provides significant information about the existing hazards that should be monitored by the railway market entities as part of their safety management systems. C54, C64 and C68 category incidents amount to over 59% of all incidents which occurred in 2019.

The generally lower number of serious accidents and accidents at the A, B, C and D category level crossings is worthy of attention. In 2019, as compared to the previous year the total number of accidents dropped by over 9.9%.

The occurrences that took place during investment and modernisation works should be thoroughly analysed and hazards (irregularities) eliminated. Investment-related occurrences are usually qualified as B09 and C51 category. B09 and C51 categories of occurrences related to the damage or poor maintenance of building structures include incorrect performance of investment and modernisation works (e.g. a railway vehicle running into equipment (materials) left on the track or within the track outline. An increase in the number of B09 category accidents was observed in the previous year - from 43 in 2018 to 52 in 2019, and an increase in the C51 category incidents from 45 in 2018 to 49 in 2019. Moreover, there was one A19 category serious accident in 2019 related to investment works. At the railway line No. 354 a work train ran into a car (Ford Fusion) that was driving through the B category level crossing at open half barriers and deactivated light and sound signals; the signals were switched off for the need of conducting investment works. The passenger car driver died on the spot. Another serious accident which occurred in 2019 was classified as A35 category. The operator of a tamping machine (working on a closed mainline track No. 2 in an area of poorly organised working site), who stayed between the mainline tracks No. 1 and 2, within the open track outline was knocked dead during the occurrence.

Notwithstanding the categories above, the occurrences which result from irregularities during infrastructure repair works, investment and modernisation works were classified by rail commissions as: B03, B04, B10, B13, B19, B20, B21, B23, B34, B35, C41, C43, C44, C48 C57, C60, C64, C66 or C69 category.

The most common irregularities in the occurrences related to investment and modernisation works and repairs of surfaces and tracks included:

- **failing to observe temporary rules** of doing works and management body's internal instructions,
- **development of simplified rules** which do not include all safety hazards related to the works done,
- **incorrectly secured working site** – (collisions of railway vehicles with the objects staying within an open track outline, typically with building site vehicles (excavators, dump cars), incorrectly stored materials (sleepers, rails), collisions with road vehicles as a result of an

authorised person failing to guard a level crossing, rolling stock damage by break stones from the break stone cleaner working on the other track, or sand blasting of a repaired bridge structure,

- **incorrect behaviour of the users of level crossings** located within the work site area,
- **failure to exercise caution while doing works** – workers being knocked down by trains running on the open track without a speed limit, in the vicinity of the work site,
- **incorrectly planned route** – the correctness of the route planning is not verified by the railway traffic control devices because they are switched for the duration of the works,
- **vehicle failing to stop where it should stop** (e.g. before a shunting signal or turnout when leaving the work site or starting the run without the required permit or without arranging it with the dispatcher),
- **the investment office imposes the investment implementation method** without close cooperation or complying with the comments made by the infrastructure maintenance staff (applicable mainly to PKP PLK S.A.).

The analysis of the occurrences reported to the NCRAI in 2019 revealed a high number of occurrences that took place at rail sidings, i.e. 140 (including 117 classified as rail accidents and 23 classified as rail incidents). A minor decrease in the number of rail occurrences including rail sidings was observed - by 5.4%. Still the number of rail occurrences on rail sidings amounts to over 7.0% of all rail occurrences in the NCRAI's record in 2019. The Commission in this report has issued a number of recommendations aimed to improve rail transport safety.

In 2019 the Commission was fulfilling its statutory duties and did not exceed the budget planned for 2019. The Commission effectively cooperated with a number of entities, including rail commissions, the ORT, infrastructure management bodies and railway operators towards the implementation of its tasks.

## 10. Contact data and address of the National Commission for Rail Accidents Investigation on 1 August 2020

<b>National Commission for Rail Accidents Investigation</b> <b>Ministry of Home Affairs and Administration</b> <b>ul. Chałubińskiego 4/6 budynek A</b> <b>00-928 Warsaw</b> <b>PERMANENT MEMBERS:</b>	
<b>Tadeusz Rys</b> Chairman of the NCRAI telephone (+48 22) 630-14-33, fax (+48 22) 630-14-39	<b>Jan Andrzej Młynarczyk</b> Deputy Chairman of the NCRAI telephone (+48 22) 630-14-34, fax (+48 22) 630-14-39
<b>Rafał Leśniowski</b> Deputy Chairman of the NCRAI telephone (+48 22) 630-14-35, fax (+48 22) 630-14-39	<b>Andrzej Gniwek</b> Permanent member of the NCRAI telephone (+48 22) 630-14-36, fax (+48 22) 630-14-39
<b>Henryk Zgrzebnicki</b> Secretary of the NCRAI telephone (+48 22) 630-14-30, fax (+48 22) 630-14-39	<b>Barbara Pióro</b> Commission Service Employee: telephone (+48 22) 630-14-33, fax (+48 22) 630-14-39, e-mail: pkbwk@mi.gov.pl
<b>Katowice branch</b> ul. Rolna 43 40-555 Katowice	<b>Poznań branch</b> ul. Składowa 4 61-897 Poznań
<b>Karol Trzoński</b> Permanent member of the NCRAI coordinating the operation of the Katowice branch telephone (+48 32) 607-24-65	<b>Benedykt Kugieński</b> Permanent member of the NCRAI coordinating the operation of the Poznań branch telephone (+48 61) 225-51-00
<b>Grzegorz Skarwecki</b> Permanent member of the NCRAI - Katowice Branch telephone (+48 32) 607-24-64	<b>Dionizy Jędrzych</b> Permanent member of the NCRAI - Poznań branch telephone (+48 61) 225-51-01
<b>Tomasz Resiak</b> Permanent member of the NCRAI - Katowice branch telephone (+48 32) 607-24-64	<b>Tomasz Aleksandrowicz</b> Permanent member of the NCRAI - Poznań branch telephone (+48 61) 225-51-01
<b>Wiesław Trepka</b> Permanent member of the NCRAI - Katowice branch telephone (+48 32) 607-24-64	
<b>Emergency telephone number +48 510 126 711</b>	

### NCRAI's website

The Commission's website is available at:

[www.gov.pl](http://www.gov.pl)

tag: *Ministerstwo Spraw Wewnętrznych i Administracji → Co robimy → Państwowa Komisja Badania Wypadków Kolejowych: → Akty prawne i dokumenty [Ministry of Home Affairs and Administration - What we do - National Commission for Rail Accidents Investigation - Acts of law and documents]*

<https://www.gov.pl/web/mswia/panstwowa-komisja-badania-wypadkow-kolejowych>

The Commission's website publishes information and documents divided into the following categories:

- immediate reporting of occurrences (Art. 28g),
- written notification about rail occurrences (§ 7),
- about the Commission,
- law and documents,
- reports,
- personal data protection (in accordance with the GDPR).

**Annex "A"**  
**to the 2019 Annual Report of the National Commission for Rail Accidents Investigation**  
**Information on the implementation of NCRAI's recommendations issued in 2019**  
**(based on the information from the Office of Rail Transport)**

Pursuant to the content of Annex II to the regulation of the Commission (EU) No. 1158/2010 of 9 December 2010 on a common safety method for assessing conformity with the requirements for obtaining railway safety certificates and pursuant to the content of Annex II to the regulation of the Commission (EU) No. 1169/2010 of 10 December 2010 on a common safety method for assessing conformity with the requirements for obtaining railway safety certificates, the railway operators and railway infrastructure management bodies, operating based on safety management system are obliged to establish the procedures ensuring that the recommendations of the national safety body and national investigation body are evaluated and implemented or recommended for implementation, if applicable.

Companies which hold a certificate of an entity in charge of maintenance or a certificate within the 4th maintenance function, pursuant to Art. 4 item f crit. I of Annex III to the regulation of the Commission (EU) No. 445/2011 of 10 May 2011 on a system of certification of entities in charge of maintenance for freight wagons, shall have procedures aimed to ensure that the applicable recommendations of national safety bodies and national accident investigation bodies as well as resulting from industry sector investigations are evaluated and implemented, whenever applicable.

The President of the ORT, implementing the instructions of Art. 28l par. 9 of the rail transport act supervises the implementation of the NCRAI's recommendations by the entities whose operation affects the railway traffic safety and railway operation safety and which are covered by the regulation, based on the provisions of the act.

Bearing in mind the above and the obligations of the railway sector entities in the area related to safety recommendations, the railway entities, i.e. infrastructure management bodies, railway operators and entities in charge of maintenance, operating based on the certificate issued by the President of the ORT or safety authorisation, as well as entities in charge of maintenance of freight wagons were requested to submit the information about the implementation progress of the recommendations given by the Chairman of the NCRAI in 2019.

As part of the supervision of the NCRAI's recommendations implementation by the railway market entities, the recommendations included in the following documents were analysed:

- 1) Report No. PKBWK/01/2019 on the investigation of an A21 category serious accident which occurred on 13 June 2018 at 12:54 at D category level crossing located on the Szczecin Podjuchy - Daleszewo Gryfińskie route, in track No. 2, 342.231 km of Wrocław Główny – Szczecin Główny railway line No. 273;
- 2) Report No. PKBWK/02/2019 on the investigation of a B11 category serious accident which occurred on 10 May 2018 at 16:12 at Wronki station, in track No. 1, at 50.474 km of the Poznań Główny - Szczecin Główny railway line No. 351;
- 3) Report No. PKBWK/03/2019 on the investigation of an A21 category serious accident which occurred on 23 August 2018 at 11:17 at D category level crossing located at Szaflary station, 25.749 km of Chabówka - Zakopane railway line No. 99;
- 4) Report No. PKBWK/04/2019 on the investigation of an A18 category serious accident which occurred on 2 August 2018 at 16:30, at the A category level crossing located at the Pierzyska - Gniezno route, 43.141 km of Poznań Wschód – Skandawa railway line No. 353;

- 5) Report No. PKBWK/05/2019 on the investigation of an A21 category serious accident which occurred on 17 November 2018 at 11:49 at the D category level crossing located at the Dobrzechów - Frysztak route, 42.602 km of the Rzeszów Główny - Jasło No. 106;
- 6) Report No. PKBWK/06/2019 on the investigation of an A20 category serious accident which occurred on 19 December 2018 at 14:33 at the C category level crossing located at the Głogów Małopolski - Rzeszów Główny route, 63.130 km of the Ocice - Rzeszów Główny railway line No. 71;
- 7) Report No. PKBWK/07/2019 on the investigation of a B11 category accident which occurred on 17 March 2019 at 21:49 at the Taczanów - Pleszew route, track No. 1, 107.985 km of the Kluczbork - Poznań Główny railway line No. 272;
- 8) 2018 Annual Report on the NCRAI operation.

#### Analyses of the recommendations - the answers declared by the railway market entities

The President of the ORT did not evaluate the method of dealing with the recommendations but only presented the declared progress of the recommendations implementation. **The actual method of the NCRAI's recommendation implementations was verified during the course of the ORT President's supervisory actions.**

**The mean percentage of the recommendation implementation** was specified under each recommendation. For the purpose of the assessment the percentage was calculated as **the arithmetic mean based on the values declared by the market entities.**

- I. Recommendations included in Report No. PKBWK/01/2019 on the investigation of an A21 category serious accident which occurred on 13 June 2018 at 12:54 at the D category level crossing located on the Szczecin Podjuchy - Daleszewo Gryfińskie route, in track No. 2, 342.231 km of the Wrocław Główny - Szczecin Główny railway line No. 273;

**PKBWK/01/2019 - RECOMMENDATION 1:** PKP Polskie Linie Kolejowe S.A. shall consider changing the D category of the 273 342 231 level crossing to a higher one, based on risk assessment. By the time it has been done, the speed of the trains running on each track and in both directions shall be limited within the clear vision triangle, at the whole length of the train approaching.

RECOMMENDATION ADDRESSEE: PKP Polskie Linie Kolejowe S.A. (1 entity)

IMPLEMENTATION PROGRESS: **100%**

**PKBWK/01/2019 - RECOMMENDATION 2:** Certified railway operators shall check the embedding of the video recording systems for correctness and continuity of video recording.

RECOMMENDATION ADDRESSEES: certified railway operators (102 entities)

MEAN IMPLEMENTATION PROGRESS: **92%**

The recommendation does not apply to 10 entities (the entity does not have railway vehicles; the entity operates only historical vehicles).

**PKBWK/01/2019 - RECOMMENDATION 3:** Certified railway operators shall implement permanent obligation of checking if the required running parameters of a vehicle with a drive are recorded, including but not limited to checks after P3, P4 and P5 level maintenance inspections.



RECOMMENDATION ADDRESSEES: certified railway operators (102 entities)

MEAN IMPLEMENTATION PROGRESS: **95%**

The recommendation does not apply to 5 entities - according to the information communicated by the President of the ORT.

**PKWBK/01/2019 - RECOMMENDATION 4:** The infrastructure management bodies (including rail siding users) shall inspect all their level crossings for the following aspects:

- a) correct development of the metrics;
- b) review of meeting the technical conditions, including but not limited to visibility at level crossings.

(By the time the compliance with the applicable laws has been ensured, the management bodies shall implement adequate safety measures, including operating limitations).

RECOMMENDATION ADDRESSEES: authorised infrastructure management bodies (11 entities)

MEAN IMPLEMENTATION PROGRESS: **91%**

Recommendation No. 4 (with the text issued by the President of the ORT) was also addressed in letter No. DMB-WMIC.464.4.2019.2.AM of 18 October 2019 to 657 users of rail sidings and non-authorised infrastructure management bodies. 114 of the 322 entities which provided their answers informed that there were no level crossings with public roads in their infrastructure operation areas. 208 entities confirmed the presence of level crossings, 179 of which confirmed that they had implemented the recommendation, 2 informed that they had alternative implementation methods, while 27 entities did not provide any information about the degree of the recommendation implementation, because they reported that the recommendation did not apply to them (e.g. due to the fact that they did not have a safety management system).

**PKWBK/01/2019 - RECOMMENDATION 5:** The infrastructure management bodies (including rail siding users) shall verify the troubleshooting records (it applies to other documents resulting from construction inspections) for the discovered irregularities and the stage of their eliminating.

(By the time all discovered irregularities have been eliminated, the management bodies shall implement adequate safety measures, including operating limitations).

RECOMMENDATION ADDRESSEES: authorised infrastructure management bodies (11 entities)

MEAN IMPLEMENTATION PROGRESS: **91%**

Recommendation No. 5 (new) was addressed by the President of the ORT to the infrastructure management bodies (including rail siding users). 325 entities gave their answers related to this recommendation, whereby 314 entities confirmed that they had implemented the recommendation, while 11 entities informed that the recommendation was not applicable to them.

**PKWBK/01/2019 - RECOMMENDATION 6:** The authorised infrastructure management bodies shall verify the correctness of the Safety Management Systems implementation for:

- a) proper supervision of troubleshooting and inspections;
- b) proper planning of supervision activities;
- c) proper implementation of corrective measures.

RECOMMENDATION ADDRESSEES: authorised infrastructure management bodies (11 entities)

MEAN IMPLEMENTATION PROGRESS: **91%**

A new recommendation issued by the President of the ORT.

**II. Recommendations included in Report No. PKWBK/02/2019 on the investigation of a B11 category serious accident which occurred on 10 May 2018 at 16:12 at Wronki station, in track No. 1, at 50.474 km of the Poznań Główny - Szczecin Główny railway line No. 351;**

**PKWBK/02/2019 - RECOMMENDATION 1:** PKP Polskie Linie Kolejowe S.A. shall provide additional dSAT devices on line No. 351 for both tracks so that the rolling stock emergency condition troubleshooting (diagnostics) could be carried out for all directions.

RECOMMENDATION ADDRESSEES: PKP Polskie Linie Kolejowe S.A. (1 entity)

IMPLEMENTATION PROGRESS: **60%**

**PKWBK/02/2019 - RECOMMENDATION 2:** As part of the Maintenance Management System (MMS) CTL Logistics Sp. z o.o. shall take measures aimed to:

- a) enhance supervision of the MMS procedures implementation,
- b) provide careful supervision of the repair service providers, including WWK in Łapy.

RECOMMENDATION ADDRESSEE: CTL Logistics Sp. z o.o. (1 entity)

IMPLEMENTATION PROGRESS: **100%**

**PKWBK/02/2019 - RECOMMENDATION 3:** WWK in Łapy shall take measures aimed to improve the supervision of the performed rolling stock repairs, including greater control of the quality of the implemented repair activities.

RECOMMENDATION ADDRESSEE: WWK in Łapy (1 entity)

IMPLEMENTATION PROGRESS: **100%**

**PKWBK/02/2019 - RECOMMENDATION 4:** The ECMs shall adapt their MMS for:

- a) securing the bearings in the axle boxes after they have been mounted on the wheelset axle pivots, by using new screws and lock washers;
- b) stamping the mounting employee's identification symbol and the mounting date on the lock washers while mounting the axle boxes on wheelset axle pivots during P3, P4 and P5 level inspections;
- c) introducing the obligation to replace the wheelset rolling bearings with new ones, during the P4 or P5 level inspection, up to 25 years of their use;
- d) introducing a ban on disassembling and assembling the bearing set not in compliance with the manufacturer's specifications;
- e) detailed requirements (assessment criteria) for P4 and P5 level inspection contractors;
- f) detailed tasks for commissioning officers in the freight wagon MMS, including but not limited to partial interoperation commissioning.

RECOMMENDATION ADDRESSEES: certified entities in charge of maintenance (62 entities)

MEAN IMPLEMENTATION PROGRESS: **61%**

**PKWBK/02/2019 - RECOMMENDATION 5:** The authorised infrastructure management bodies shall take measures aimed to gradually equip the railway lines with the devices detecting the railway stock emergency conditions, at the operating railway lines, based on an analysis concerning the risk of the occurrences.

RECOMMENDATION ADDRESSEES: authorised infrastructure management bodies (11 entities)

MEAN IMPLEMENTATION PROGRESS: **74%**

The recommendation does not apply to 1 entity (the maximum speed at the lines managed by the IMB amounts to 40 km/h).

**PKWBK/02/2019 - RECOMMENDATION 6:** The entities in charge of maintenance shall carry out an additional audit for correct supervision of suppliers, including but not limited to observing adequate intervals of the suppliers' monitoring.

Z komentarzem [A2]: W oryginale: 02/2018 - to chyba błąd?

RECOMMENDATION ADDRESSEES: certified entities in charge of maintenance (62 entities)

MEAN IMPLEMENTATION PROGRESS: **49%**

**III. Recommendations included in Report No. PKWBK/03/2019 on the investigation of an A21 category serious accident which occurred on 23 August 2018 at 11:17 at the D category level crossing located at Szaflary station, 25.749 km of the Chabówka - Zakopane railway line No. 99**

**PKWBK/03/2019 - RECOMMENDATION 1:** The PKP PLK S.A. Zakład Linii Kolejowych in Nowy Sącz infrastructure management body shall assess the operating risk to consider changing the current D category of the level crossing to a higher category, or its elimination leaving the E category pedestrian railway crossing.  
By the time the level crossing has been reconstructed, the train running speed shall be limited to 60 km/H at the railway line section, for the clear view triangles, from the distance of 5 m.

RECOMMENDATION ADDRESSEE: PKP Polskie Linie Kolejowe S.A. (1 entity)

IMPLEMENTATION PROGRESS: **100%**

**PKWBK/03/2019 - RECOMMENDATION 2:** PKP PLK S.A. infrastructure management body shall replenish the bitumen surface defects in the level crossing zone and shall update the level crossing metrics.

RECOMMENDATION ADDRESSEE: PKP Polskie Linie Kolejowe S.A. (1 entity)

IMPLEMENTATION PROGRESS: **100%**

**PKWBK/03/2019 - RECOMMENDATION 3:** Przewozy Regionalne sp. z o.o. shall check the quality of the image from the front recorder cameras in the operated railway vehicles.

RECOMMENDATION ADDRESSEE: Przewozy Regionalne Sp. z o.o. (1 entity)

IMPLEMENTATION PROGRESS: **10%**

**PKWBK/03/2019 - RECOMMENDATION 4:** PKP PLK S.A. IZ Nowy Sącz shall adapt the level crossing marking to the effective regulations (applies to B20, G2 and G3 signs).

RECOMMENDATION ADDRESSEE: PKP Polskie Linie Kolejowe S.A. (1 entity)

IMPLEMENTATION PROGRESS: **100%**

**PKWBK/03/2019 - RECOMMENDATION 5a:** The authorised infrastructure management bodies shall inspect the crossings for the width of the crossings and access roads, ensuring grade-separated (collision free) passing at the width of the crossings.

RECOMMENDATION ADDRESSEES: authorised infrastructure management bodies (11 entities)

MEAN IMPLEMENTATION PROGRESS: **65%**

**PKBWK/03/2019 - RECOMMENDATION 8:** All railway operators during regular instructions and one-off instructions for train drivers shall remind the following rules:

- using the train driver's safety brake ("emergency stop", "Ackerman stop") should direct safety hazard occur,
- performing a thorough brake test according to effective regulations,
- making records in the Vehicle with a Drive Board Log after occurrences.

RECOMMENDATION ADDRESSEES: certified railway operators (107 entities)

MEAN IMPLEMENTATION PROGRESS: **62%**

The recommendation does not apply to 4 entities - according to the information communicated by the President of the ORT.

**PKBWK/03/2019 - RECOMMENDATION 9:** Railway infrastructure management bodies, in cooperation with the operators of roads for motor vehicles shall:

- inspect all B, C and D category level crossings for the validity of B20 "Stop" signs installation, as stipulated by Annex No. 3 Section B of the Regulation of the Minister of Infrastructure and Development of 20 October 2015 on the technical and organisational conditions to be fulfilled by the crossings of railway lines and rail sidings with roads and by their locations (Journal of Laws item 1744, as amended) - actions meant to implement train speed conditions adequate for the visibility conditions, in accordance with the provisions of Annex 4 to the regulation of the Minister of Infrastructure and Development of 20 October 2015 on the technical conditions to be fulfilled by the crossings of railway lines and rail sidings with roads and by their locations.

RECOMMENDATION ADDRESSEES: authorised infrastructure management bodies (11 entities)

MEAN IMPLEMENTATION PROGRESS: **69%**

The recommendation does not apply to 1 entity - i.e. CARGOTOR sp. z o.o. (at all D category level crossings managed by CARGOTOR Sp. z o.o. there is effective speed limit of 20 km/h for railway vehicles with regard to the railway traffic safety).

**PKBWK/03/2019 - RECOMMENDATION 10:** The infrastructure management bodies shall apply to the road operators with a request to install B-20 "Stop" signs before level crossings. The infrastructure management bodies shall inform the road operators about the need to communicate the information to the responsible infrastructure management body about the changes in the method of vertical and horizontal marking of level crossings, before the marking is implemented.

RECOMMENDATION ADDRESSEES: authorised infrastructure management bodies (11 entities)

MEAN IMPLEMENTATION PROGRESS: **88%**

**IV. Recommendations included in Report No. PKBWK/04/2019 on the investigation of an A18 category serious accident which occurred on 2 August 2018 at 16:30, at the A category level crossing located at the Pierzyska - Gniezno route, 43.141 km of Poznań Wschód – Skandawa railway line No. 353;**

**PKBWK/04/2019 - RECOMMENDATION 1:** PKP PLK S.A. Zakład Linii Kolejowych in Poznań shall take measures aimed to install warning signals informing the train driver about the status of the level crossing

protection at 43.141 km on tracks 1 and 2 of the Pierzyska - Gniezno route, with a simultaneous prevention of the barriers opening when the train has passed the level crossing warning signal.

RECOMMENDATION ADDRESSEE: PKP Polskie Linie Kolejowe S.A. (1 entity)

IMPLEMENTATION PROGRESS: **60%**

**PKBWK/04/2019 - RECOMMENDATION 2:** PKP PLK S.A. railway line management body shall practically test the employees' skills in the level crossing emergency service. The tests shall be carried out during all inspections of the posts servicing level crossings. The tests shall be reported in the Railway Traffic Control Equipment Inspection Log, including a note on the introduction or cancelling of restrictions (E-1758).

RECOMMENDATION ADDRESSEE: PKP Polskie Linie Kolejowe S.A. (1 entity)

IMPLEMENTATION PROGRESS: **100%**

**PKBWK/04/2019 - RECOMMENDATION 2a:** Authorised infrastructure management bodies shall verify the employees' practical skills in the level crossing emergency services while inspecting the level crossing posts. A record shall be made on the verification in the Railway Traffic Control Log or its equivalent.

RECOMMENDATION ADDRESSEES: authorised infrastructure management bodies excluding PKP Polskie Linie Kolejowe (11 entities)

MEAN IMPLEMENTATION PROGRESS: **30%**

The recommendation does not apply to 1 entity - i.e. PKP Szybka Kolej Miejska w Trójmieście sp. z o.o., which declared that the A category level crossings at the Gdańsk Główny – Rumia railway line No. 250 are serviced by PKP PLK ZLK in Gdynia, according to an agreement.

**PKBWK/04/2019 - RECOMMENDATION 3:** During the periodical instructions for the staff operating the crossing barriers, the infrastructure management bodies shall provide theoretical and practical training to remind the rules of proceedings should a need to close the barriers in an emergency mode arise.

RECOMMENDATION ADDRESSEES: authorised infrastructure management bodies (11 entities)

MEAN IMPLEMENTATION PROGRESS: **38%**

The recommendation does not apply to 1 entity - according to the information communicated by the ORT, it does not apply to PKP Szybka Kolej Miejska w Trójmieście Sp. z o.o. (no barrier servicing staff).

**PKBWK/04/2019 - RECOMMENDATION 5:** PKP PLK S.A. shall take measures to set out uniform technical requirements and the rules of using the emergency barrier closing system (function) on the control panel, with the function recording.

RECOMMENDATION ADDRESSEE: PKP Polskie Linie Kolejowe S.A. (1 entity)

IMPLEMENTATION PROGRESS: **70%**

**PKBWK/04/2019 - RECOMMENDATION 6:** PKP Intercity S.A. during periodical instructions shall remind the procedures for situations when open crossing barriers are noticed while driving railway vehicles with drives and shall implement regular exercising of such situations on a railway vehicle simulator.

RECOMMENDATION ADDRESSEES: PKP Intercity S.A. (1 entity)

IMPLEMENTATION PROGRESS: **100%**

**PKBWK/04/2019 - RECOMMENDATION 6a:** During periodical instructions, certified railway operators shall remind the procedures for situations when open crossing barriers are noticed while driving railway vehicles with drives and shall implement regular exercising of such situations on a railway vehicle simulator.

RECOMMENDATION ADDRESSEES: certified railway operators (107 entities)

MEAN IMPLEMENTATION PROGRESS: **54%**

The recommendation does not apply to 4 entities - according to the information communicated by the President of the ORT.

- V. Recommendations included in Report No. PKBWK/05/2019** on the investigation of an A21 category serious accident which occurred on 17 November 2018 at 11:49 at the D category level crossing located at the Dobrzechów - Frysztak route, 42.602 km of the Rzeszów Główny - Jasło No. 106;

**PKBWK/05/2019 - RECOMMENDATION 1:** With regard to local conditions and the maximum speed of the trains of 100 km/h PKP PLK S.A. Zakład Linii Kolejowych in Rzeszów railway management body shall assess the operating risk to consider changing the current D category of the level crossing to a higher category.

RECOMMENDATION ADDRESSEE: PKP Polskie Linie Kolejowe S.A. (1 entity)

IMPLEMENTATION PROGRESS: **100%**

**PKBWK/05/2019 - RECOMMENDATION 2:** SKPL Cargo Sp. z o.o. railway operator shall implement the instructions of the President of the Office of Rail Transport no. DBK 550/R03/KB/12 of 30 May 2012 addressed to railway operators on the obligation to install recorders - digital cameras or video recorders in the new and operating railway vehicles, according to the NCRAI recommendations - No. PKBWK-076-305/RL/R/11 of 22 November 2011 so that continuous audio and video recording is ensured during the train's whole journey.

RECOMMENDATION ADDRESSEE: SKPL Cargo Sp. z o.o. (1 entity)

IMPLEMENTATION PROGRESS: **30%** (during implementation - implementation deadline: 31 December 2020).

**PKBWK/05/2019 - RECOMMENDATION 2a:** Certified railway operators shall verify the observance of the NCRAI's recommendation No. PKBWK 076-305/RL/R/11 of 22 November 2011. - the use of digital cameras or video recorders in new and operating railway vehicles.

RECOMMENDATION ADDRESSEES: certified railway operators (107 entities)

MEAN IMPLEMENTATION PROGRESS: **57%**

The recommendation does not apply to 11 entities - according to the information provided by the ORT (it does not apply to entities that have digital camera recorders installed in all traction vehicles; to entities that implemented the recommendation in previous years; to entities that

operate only historical traction vehicles and are obliged to maintain the historical value of the railway vehicles).

**PKBWK/05/2019 - RECOMMENDATION 3:** SKPL Cargo sp. z o.o. railway operator shall take measures to ensure that the emission of "Attention" signals is recorded on the electronic recorders.

RECOMMENDATION ADDRESSEE: SKPL Cargo Sp. z o.o. (1 entity)

IMPLEMENTATION PROGRESS: **40%** (during implementation - implementation deadline: 31 December 2020).

**PKBWK/05/2019 - RECOMMENDATION 3a:** Certified railway operators shall take measures to ensure that the emission of "Attention" signal is recorded on the electronic recorders.

RECOMMENDATION ADDRESSEES: certified railway operators (107 entities)

MEAN IMPLEMENTATION PROGRESS: **54%**

The recommendation does not apply to 18 entities - according to the information submitted by the ORT (it does not apply to the entities whose vehicles are not featured with electronic recorders; all vehicles are featured with recorders of e.g. "Attention" signal; the entity operates only historical traction vehicles and is obliged to maintain the historical value of railway vehicles).

**PKBWK/05/2019 - RECOMMENDATION 6:** The PKP PLK S.A. Zakład Linii Kolejowych in Rzeszów railway infrastructure management body shall improve the visibility of G3 signs and shall update the crossing metrics in reference to the road slope at the crossing.

RECOMMENDATION ADDRESSEE: PKP Polskie Linie Kolejowe S.A. (1 entity)

IMPLEMENTATION PROGRESS: **100%**

**VI. Recommendations included in Report No. PKBWK/06/2019** on the investigation of an A20 category serious accident which occurred on 19 December 2018 at 14:33 at the C category level crossing located at the Głogów Małopolski - Rzeszów Główny route, 63.130 km of the Ocice - Rzeszów Główny railway line No. 71;

**PKBWK/06/2019 - RECOMMENDATION 3:** In reference to the safety management system, the PKP PLK S.A. railway infrastructure management body shall enhance monitoring of the compliance with the PD-05 (corrective and preventive measures), including but not limited to the aspect of taking adequate corrective and preventive measures following railway occurrences).

RECOMMENDATION ADDRESSEE: PKP Polskie Linie Kolejowe S.A. (1 entity)

IMPLEMENTATION PROGRESS: **100%**

**PKBWK/06/2019 - RECOMMENDATION 3a:** Authorised infrastructure management bodies and certified railway operators shall enhance monitoring of the compliance with the procedures related to corrective and preventive measures, including but not limited to the aspect of taking measures following railway occurrences.

RECOMMENDATION ADDRESSEES: authorised infrastructure management bodies (excluding PKP Polskie Linie Kolejowe S.A.) and certified railway operators (115 entities)

MEAN IMPLEMENTATION PROGRESS: **66%**

The recommendation does not apply to 6 entities - according to the information submitted by the ORT (according to 6 entities, since the beginning of their operation as railway operators, there were no rail occurrences, and the process of corrective and preventive measures is regularly monitored).

**PKBWK/06/2019 - RECOMMENDATION 4:** PKP PLK S.A. railway infrastructure management body during the inspections carried out at level crossings shall also check the road traffic organisation on the access road to the level crossing for compliance with effective regulations. Should any irregularities be discovered, the road operators shall be informed immediately (according to the Register of Hazard implemented by PKP PLK S.A. - hazard No. 5.1.5).

RECOMMENDATION ADDRESSEE: PKP Polskie Linie Kolejowe S.A. (1 entity)

IMPLEMENTATION PROGRESS: **100%**

**PKBWK/06/2019 - RECOMMENDATION 4a:** Authorised infrastructure management bodies during the inspections carried out at level crossings shall also check the road traffic organisation on the access roads to the level crossings for compliance with effective regulations. Should any irregularities be discovered, the road operators shall be informed immediately.

RECOMMENDATION ADDRESSEES: authorised infrastructure management bodies excluding PKP Polskie Linie Kolejowe S.A. (10 entities)

MEAN IMPLEMENTATION PROGRESS: **40%**

**PKBWK/06/2019 - RECOMMENDATION 5:** Przewozy Regionalne Sp. z o.o. railway operator shall take measures aimed to ensure reliable operation of the system of cameras installed in the traction vehicles and recording the route in front of the railway vehicle. As part of the procedure, the railway operator shall increase the number of checks concerning the equipment records and shall take adequate corrective and preventive measures should any irregularities occur.

RECOMMENDATION ADDRESSEE: Przewozy Regionalne Sp. z o.o. (1 entity)

IMPLEMENTATION PROGRESS: **0%** (during implementation - implementation deadline: 31 December 2020).

**PKBWK/06/2019 - RECOMMENDATION 6:** Certified railway operators shall take measures aimed to ensure that any dangerous situations occurring on the level crossings are reported on a regular basis to the infrastructure management bodies, according to effective procedures.

RECOMMENDATION ADDRESSEES: certified railway operators (107 entities)

MEAN IMPLEMENTATION PROGRESS: **58%**

The recommendation does not apply to 3 entities - according to the information communicated by the President of the ORT.

**PKBWK/06/2019 - RECOMMENDATION 7:** If any dangerous situations occur, the infrastructure management bodies shall analyse them on a regular basis, and shall take adequate preventive measures in co-operation with the road operators, should such a need arise.

RECOMMENDATION ADDRESSEES: authorised infrastructure management bodies (11 entities)

MEAN IMPLEMENTATION PROGRESS: **92.5%**



**VII. Recommendations included** in Report No. PKBWK/07/2019 on the investigation of a B11 category accident which occurred on 17 March 2019 at 21:49 at the Taczanów - Pleszew route, track No. 1, 107.985 km of the Kluczbork – Poznań Główny railway line No. 272;

**PKBWK/07/2019 - RECOMMENDATION 1:** Infrastructure management bodies as part of their periodical and one-off training shall discuss the rules included in the internal regulations, concerning the obligation to immediately stop the train, if the dispatcher or another employee learns that sparking occurs in a train set.

RECOMMENDATION ADDRESSEES: authorised infrastructure management bodies (11 entities)

MEAN IMPLEMENTATION PROGRESS: **49%**

**PKBWK/07/2019 - RECOMMENDATION 2:** DEPOL Sp. z o.o. shall improve monitoring of the quality and effectiveness of periodical instructions provided for all employees working on positions related to railway vehicle driving, and safety of the rail traffic and of railway vehicle drivers.

RECOMMENDATION ADDRESSEE: Przedsiębiorstwo Obrotu Surowcami Wtórnymi "DEPOL" Sp. z o.o. (1 entity)

IMPLEMENTATION PROGRESS: **0%** (during implementation - implementation deadline: 31 December 2020).

**PKBWK/07/2019 - RECOMMENDATION 2a:** Authorised infrastructure management bodies and certified railway operators shall verify the monitoring of the quality and effectiveness of periodical instructions provided for all employees working on positions related to railway vehicle driving, and safety of the rail traffic and of railway vehicle drivers.

RECOMMENDATION ADDRESSEES: authorised infrastructure management bodies and certified railway operators (116 entities)

MEAN IMPLEMENTATION PROGRESS: **61%**

The recommendation does not apply to 6 entities - according to the information communicated by the President of the ORT.

**PKBWK/07/2019 - RECOMMENDATION 3:** DEPOL Sp. z o.o. shall adjust the rules of conducting authorisation of the employees working on positions related to railway vehicle driving and rail traffic safety in their internal regulations.

RECOMMENDATION ADDRESSEE: Przedsiębiorstwo Obrotu Surowcami Wtórnymi "DEPOL" Sp. z o.o. (1 entity)

IMPLEMENTATION PROGRESS: **10%** (during implementation - implementation deadline: 31 December 2020).

**PKBWK/07/2019 - RECOMMENDATION 4:** DEPOL Sp. z o.o. shall introduce the following obligations as part of their inner regulations:  
a) archiving of train speedometer tapes, determining their designation rules, and the obligation to check the parameter recording correctness by the train driver or another employee after each run of the train,  
b) periodical inspections of random speedometer tapes to check if the train drivers comply with the regulations in their work.

RECOMMENDATION ADDRESSEE: Przedsiębiorstwo Obrotu Surowcami Wtórnymi "DEPOL" Sp. z o.o. (1 entity)

IMPLEMENTATION PROGRESS: **50%** (during implementation - implementation deadline: 30 April 2020).

**PKBWK/07/2019 - RECOMMENDATION 5:** DEPOL Sp. z o.o. shall adapt the method of employing the staff for positions related to railway vehicle driving and rail traffic safety, as well as for positions of railway vehicle drivers to the effective requirements of Procedure P/09 (employed only based on an employment contract).

RECOMMENDATION ADDRESSEE: Przedsiębiorstwo Obrotu Surowcami Wtórnymi "DEPOL" Sp. z o.o. (1 entity)

IMPLEMENTATION PROGRESS: **0%** (during implementation - implementation deadline: 30 June 2020).

**PKBWK/07/2019 - RECOMMENDATION 5a:** Certified railway operators shall verify if the method of employing the staff for positions related to railway vehicle driving and rail traffic safety, as well as for positions of railway vehicle drivers (employed only based on an employment contract, civil-law contract) complies with the effective SMS procedures.

RECOMMENDATION ADDRESSEES: certified railway operators (107 entities)

MEAN IMPLEMENTATION PROGRESS: **75%**

The recommendation does not apply to 5 entities - according to the information provided by the ORT (all the persons working on positions related to railway vehicle driving and rail traffic safety, as well as on positions of railway vehicle drivers are employed based on an employment contract in accordance with the SMS procedures in force; the entity employees the staff whose work is related to the rail traffic safety only based on an employment contract).

**PKBWK/07/2019 - RECOMMENDATION 6:** DEPOL Sp. z o.o. shall provide complementary training for the rolling stock inspectors, with a special consideration for the deadlines of P4 and P5 level repairs.

RECOMMENDATION ADDRESSEE: Przedsiębiorstwo Obrotu Surowcami Wtórnymi "DEPOL" Sp. z o.o. (1 entity)

IMPLEMENTATION PROGRESS: **0%** (during implementation - implementation deadline: 31 December 2020).

**PKBWK/07/2019 - RECOMMENDATION 7:** In reference to the internal control system, DEPOL Sp. z o.o. shall take necessary measures aimed to:

- a) increase the number of train drivers' work inspections,
- b) extend the scope of inspections to include all key areas related to the rail traffic safety (cars, engines, transport, personnel, maintenance, technical condition of railway vehicles etc.),
- c) making the inspections more in-depth.

RECOMMENDATION ADDRESSEE: Przedsiębiorstwo Obrotu Surowcami Wtórnymi "DEPOL" Sp. z o.o. (1 entity)

IMPLEMENTATION PROGRESS: **0%** (during implementation - implementation deadline: 31 December 2020).

**PKBWK/07/2019 - RECOMMENDATION 7a:** DEPOL Sp. z o.o. shall provide complementary training for the rolling stock inspectors, with a special consideration for the deadlines of P4 and P5 level repairs.

RECOMMENDATION ADDRESSEES: certified railway operators (107 entities)

MEAN IMPLEMENTATION PROGRESS: **65%** (during implementation - implementation deadline: 31 December 2020).

The recommendation does not apply to 3 entities - according to the information communicated by the President of the ORT.

**PKBWK/07/2019 - RECOMMENDATION 8:** In reference to the Safety Management System, DEPOL Sp. z o.o. shall undertake the following measures:

- a) revise the SMS procedures and internal regulations for their compliance with effective regulations, and implement adequate adaptive changes, especially in relation to P/15 procedure,
- b) improve supervision of the compliance with the SMS procedures and their related documents, including but not limited to P/03, P/04, P/05, P/06 and P/09, and increase the number and effectiveness of safety audits,
- c) audits of all suppliers before they are entered in the "List of qualified suppliers",
- d) DEPOL's taking measures to establish auditing teams in the future that shall guarantee the fulfilment of the rule of impartiality of the SMS audits,
- e) introduce new hazards identified during the proceedings carried out by the Investigation Team into the Register of Hazards in the Safety Management System. The hazards include:
  - incorrect marking on railway vehicles,
  - the railworthiness certificate or railway vehicle recommissioning certificate issued incorrectly or not complying with the applicable laws.

RECOMMENDATION ADDRESSEE: Przedsiębiorstwo Obrotu Surowcami Wtórnymi "DEPOL" Sp. z o.o. (1 entity)

IMPLEMENTATION PROGRESS: **0%** (during implementation - implementation deadline: 31 December 2020).

**PKBWK/07/2019 - RECOMMENDATION 9:** INTER KOMTRANS, as the ECM for freight wagons, shall strengthen its supervision of correct maintenance of freight wagons, especially in relation to the compliance with the maintenance cycles.

RECOMMENDATION ADDRESSEE: Sylwester Komisarek P.W. "Inter-KomTrans" (1 entity)

MEAN IMPLEMENTATION PROGRESS: **30%** (based on the information communicated to the NCRAI)

**PKBWK/07/2019 - RECOMMENDATION 10:** Certified train operators and authorised infrastructure management bodies shall check the following in their internal regulations:

- a) if the regulations set out the method of conducting and documenting the authorisation of the employees employed on positions related to railway vehicles driving and railway traffic safety, and if they discover that this are shall be specified in detail, they shall take the right measures,
- b) if the regulations determine the method of archiving the train speedometer tapes, with determination of the rules and time of their storage, designation rules, and the obligation to check the the parameter recording correctness after each run of the train, and if they discover that this area shall be specified in detail, they shall take the right measures,
- c) if the regulations determine the rules of periodical inspections of random speedometer tapes for the train drivers work complying with the rules.

RECOMMENDATION ADDRESSEES: authorised infrastructure management bodies and certified railway operators (116 entities)

**MEAN IMPLEMENTATION PROGRESS: 73%**

The recommendation does not apply to 6 entities - according to the information communicated by the President of the ORT.

**PKBWK/07/2019 - RECOMMENDATION 11:** In relation to the fact that non-destructive tests of the wheelsets, carried out as part of the maintenance process required by the Maintenance System Documentation, did not detect any internal defects of the axle in its central part, the freight wagon ECMs entities shall introduce additional tests for the middle parts of wheelsets (between the wheel disks) as mandatory in the Maintenance System Documentation and performed during P3, P4 and P5 level maintenance activities.

RECOMMENDATION ADDRESSEE: certified entities in charge of maintenance (65 entities)

**MEAN IMPLEMENTATION PROGRESS: 62%**

The recommendation does not apply to 4 entities - according to the information communicated by the ORT (the 4 entities implement Recommendation No. 12 from Report No. PKBWK/07/2019).

**PKBWK/07/2019 - RECOMMENDATION 12:** The infrastructure management bodies and railway operators being freight wagon ECMs, and executing only process runs or runs for their own needs, shall introduce additional tests for the middle parts of wheelsets (between the wheel disks) as mandatory in the Maintenance System Documentation and performed during P3, P4 and P5 level maintenance activities.

RECOMMENDATION ADDRESSEE: authorised infrastructure management bodies and certified railway operators who also fulfil the role of certified entities in charge of maintenance (38 entities)

**MEAN IMPLEMENTATION PROGRESS: 78%**

The recommendation does not apply to 13 entities - according to the information communicated by the ORT (the 13 entities

- are implementing Recommendation 11 from Report No. PKBWK/07/2019;
- the entity does not provide technological transport or transport for its own purposes).

**PKBWK/07/2019 - RECOMMENDATION 13:** The President of the Office of Rail Transport shall take measures to introduce mandatory traceability of wheelsets for freight wagon axles according to the Guidelines for the European Wheelset Traceability (EWT) for freight wagon axles, developed in Brussels on 26 July 2010 by the ERA Task Force Group for freight wagon/axle issues; the Guidelines were agreed with the National Safety Authorities.

RECOMMENDATION ADDRESSEE: President of the Office for Rail Transport (1 entity)

The President of the ORT did not communicate the information to NCRAI on the implementation of the recommendation.

**VIII. Recommendations included in the 2018 Annual Report:**

**2018 Annual Report - RECOMMENDATION 1:** The infrastructure management bodies and railway operators shall take measures aimed to ensure that the persons providing staff training for positions directly related to the railway traffic operation and safety as well as driving of specific types of railway vehicles, in accordance with the Regulation of the Minister of Transport and Development of 30 December 2014 on the staff employed on positions directly related to the railway traffic operation and safety as well as driving specific types of railway vehicles (Journal of Laws of 2015, item 46), shall not become members of qualification and verification examination boards, examining the persons they trained.

RECOMMENDATION ADDRESSEES: authorised infrastructure management bodies and certified railway operators (116 entities)

MEAN IMPLEMENTATION PROGRESS: **74%**

The recommendation does not apply to 13 entities - according to the information communicated by the ORT (11 entities):

- the entity does not have its own examination boards which carry out qualification and verification exams for the employees working on positions directly related to railway vehicle driving and rail traffic safety or related to driving specific types of railway vehicles;
- following earlier recommendations the entity separated the training and examination functions; it is not the entity's practice that the persons who provide training as part of the staff in-service preparation also fulfil the roles of the examination board members during the training).

**2018 Annual Report - RECOMMENDATION 2:** The infrastructure management bodies shall eliminate exit barriers for automatic crossing systems at cat. B crossings, in reference to the four half-barrier solutions. This status quo contradicts the provisions included in Annex 1, item 6.2 of the regulation of the Minister of Infrastructure of 3 July 2003 on the details of technical requirements for road signs and signals as well as road traffic safety equipment and the conditions of its placement at the roads (Journal of Laws of 2013, item 2181, as amended) which states what follows: "barriers closing the whole width of U-13a and U-13b roadway shall be used at A category level crossings, whereas U-13c half-barriers shall be used at B category level crossings. Half barriers shall be placed so that they close the right half of the road (including when half barriers are used on one-way roads) on each side of the level crossing".

RECOMMENDATION ADDRESSEES: authorised infrastructure management bodies (11 entities)

MEAN IMPLEMENTATION PROGRESS: **81%**

The recommendation does not apply to 5 entities - according to the information communicated by the ORT (the 5 entities

- do not have locally operated A and B category level crossings;
- there are no automatic B category crossing systems at the railway line managed by the entity).

**2018 Annual Report - RECOMMENDATION 3:** The railway infrastructure management bodies, railway operators and users of rail sidings shall take measures aimed to **eliminate the practice of replacing training** provided as part of professional (vocational) preparation for qualification exams for the staff employed directly on the positions related to railway traffic operation and safety as well as driving specific types of railway vehicles, in accordance with the regulation of the Minister of Infrastructure and Development of 30 December 2014 on the staff employed directly on the positions related to railway traffic operation and safety as well as driving specific types of railway vehicles (Journal of Laws of 2015, item 46), with any type of the staff guided self-learning.

RECOMMENDATION ADDRESSEES: authorised infrastructure management bodies and certified railway operators (116 entities)

MEAN IMPLEMENTATION PROGRESS: **85%**

**Recommendation No. 3** from the NCRAI's 2018 Annual Report was also addressed by the President of the ORT in the letter No. DMB-WMIC.464.1.2020.2.AM of 25 February 2020 to **658 entities which are rail siding users, infrastructure management bodies and railway operators operating** based on a safety certificate. Only 168 of the 409 entities that submitted their answers took measures towards mandating the lack of acceptability for guided self-learning in the internal regulations.

The recommendation does not apply to 12 entities - according to the information communicated by the ORT (the 12 entities:

- in-service preparation training events are always outsourced to training centres included in the list held by the President of the ORT;
- as part of the preparation for work the entity does not provide guided self-learning training).

**2018 Annual Report - RECOMMENDATION 4:** In order to improve the visibility of the emitted D8 signal (gateman's presence), the railway infrastructure management bodies shall introduce emitting of the night signal 24/7 from the post of the person responsible for closing the barriers (level crossing gateman or another employee). The D8 day signal emitted indoors (guards or rail signal control operators) or through the window (guards or rail signal control operators) is not visible (or is poorly visible) for the train driver crew.

RECOMMENDATION ADDRESSEES: authorised infrastructure management bodies (11 entities)

MEAN IMPLEMENTATION PROGRESS: **74%**

The recommendation does not apply to 4 entities - according to the information communicated by the President of the ORT (the 4 entities:

- the entity does not have locally operated A category level crossings;
- the A category level crossings are operated by PKP PLK based on an agreement;
- there are no gateman posts at the infrastructure managed by PMT).

**2018 Annual Report - RECOMMENDATION 5:** Railway operators shall take measures aimed to eliminate rail occurrences caused by inadvertent starting of a railway vehicle. The recommendation results from a significant increase in the number of C47 category occurrences and the persistent high number of B08 category occurrences. The causes of the occurrences may be related e.g. to incorrectly secured railway vehicles, incorrect organisation of work, failing to observe the work rules etc.

RECOMMENDATION ADDRESSEES: certified railway operators (107 entities)

MEAN IMPLEMENTATION PROGRESS: **63%**

The recommendation does not apply to 5 entities.

**2018 Annual Report - RECOMMENDATION 6:** The railway infrastructure management bodies shall take measures aimed to eliminate premature termination of the route and sending off, acceptance or running of a railway vehicle on a wrongly arranged and non-secured route or incorrectly serviced or a lack of service of the railway traffic control equipment.

RECOMMENDATION ADDRESSEES: authorised infrastructure management bodies (11 entities)

MEAN IMPLEMENTATION PROGRESS: **65%**

The recommendation does not apply to 1 entity - i.e. CARGOTOR Sp. z o.o. with the effective speed limit of 20 km/h for railway vehicles at all D category level crossings managed by this company, with regard to the railway traffic safety.

### of the National Commission for Rail Accidents Investigation

Information about the implementation of the recommendations presented by the National Commission for Rail Accidents Investigation in 2019 and addressed to other stakeholders (Art. 28l par. 8 of rail transport act).

- I. Recommendations included in Report No. PKBWK/03/2019 on the investigation of an A21 category serious accident which occurred on 23 August 2018 at 11:17 at the D category level crossing located at Szaflary station, 25.749 km of the Chabówka - Zakopane railway line No. 99, the area of PKP Polskie Linie Kolejowe S.A., Zakład Linii Kolejowych in Nowy Sącz infrastructure management body.**

**PKBWK/03/2019 - RECOMMENDATION 5:** The road operator shall adapt the width of the road at the access to the crossing to ensure grade-separated (collision free) passing of road vehicles at the level crossing", at 25.749 km of the Chabówka - Zakopane railway line No. 99, and then the width of the crossing shall be adapted to the crown of the road, in agreement with the infrastructure management body.

RECOMMENDATION ADDRESSEE: Road operator and PKP Polskie Linie Kolejowe S.A. (2 entities)

MEAN IMPLEMENTATION PROGRESS: **40%** - under implementation (according to the recommendation resulting from the NCRAI's Report)

**PKBWK/03/2019 - RECOMMENDATION 6:** In relation to previous accidents at the reference level crossing and a serious accident on 23 August 2018, the road operator (the mayor of the town of Nowy Targ) shall install A30 "Other hazards" on both sides of the level crossing, along with T14d "Accidents" boards.

RECOMMENDATION ADDRESSEE: Road operator and PKP Polskie Linie Kolejowe S.A. (2 entities)

MEAN IMPLEMENTATION PROGRESS: **100%**

**PKBWK/03/2019 - RECOMMENDATION 7:** The Chairman of the National Commission for Rail Accidents Investigation shall apply to the Minister of Infrastructure to supplement the provision of § 7 Section 1 item 1 of the regulation of the Minister of Infrastructure and Civil Engineering of 24 February 2016 on the method of examining the candidates for qualifications to drive vehicles, provide training, run examinations, on obtaining qualifications by examiners, and on document templates used for such purposes, and on the installation of equipment to register sound and audio inside the examination vehicle.

RECOMMENDATION ADDRESSEE: Ministry of Infrastructure (1 entity)

**PKBWK/03/2019 - RECOMMENDATION 11:** The Chairman of the National Commission of Rail Accidents Investigation shall apply to the minister responsible for transport to change the text of the regulation of the Minister of Infrastructure and Development of 20 October 2015 on the technical and organisational conditions to be fulfilled by the crossings of railway lines and rail sidings with roads and by their locations, in the scope related to the functioning of D category level crossings within a railway station limits on the trucks where trains are running.

RECOMMENDATION ADDRESSEE: Ministry of Infrastructure (1 entity)

**PKBWK/03/2019 - RECOMMENDATION 12:** The minister responsible for transport shall introduce the obligation of ensuring absolute visibility of the train front from the distance of 5 and 10 m; it applies to Annex 3, item B, subitems 5 and 6 to the regulation of the Minister of Infrastructure and Development of 20 October 2015 on the technical and organisational conditions to be fulfilled by the crossings of railway lines and rail sidings with roads and by their locations, in the scope related to the functioning of D category level crossings. If the visibility from the 10 m distance cannot be ensured, the train speed shall be determined at

which the visibility conditions from the 10 m distance are fulfilled.

RECOMMENDATION ADDRESSEE: Ministry of Infrastructure (1 entity)

IMPLEMENTATION PROGRESS: implemented within the Commission's authority

by letter No. PKBWK.38.2019RL of 4 October 2019 the President of the NCRAI, in accordance with Art. 281 par. 8 of the act of 28 March 2003 on rail transport (Journal of Laws of 2019, item 710 as amended) communicated to the Minister of Infrastructure the recommendations included in the letter on the safety improvement No. 7, 11 and 12, including Report No. PKBWK/03/2019.

- II. Recommendations included in Report No. PKBWK/04/2019** on the investigation of an A18 category serious accident which occurred on 2 August 2018 at 16:30, at the A category level crossing located at the Pierzyska - Gniezno route, 43.141 km of Poznań Wschód – Skandawa railway line No. 353, area of the PKP Polskie Linie Kolejowe S.A., Zakład Linii Kolejowych in Poznań railway infrastructure management body.

**PKBWK/04/2019 - RECOMMENDATION 4:** The Chairman of the NCRAI shall apply to the minister responsible for transport to take measures to amend the regulation in relation to the reduction in the initial warning time for the locally operated A category level crossings to 3 seconds, and to 8 seconds for the remotely operated A category level crossings.

RECOMMENDATION ADDRESSEE: Ministry of Infrastructure (1 entity)

IMPLEMENTATION PROGRESS: implemented within the Commission's authority

In his letter No. PKBWK.37.2019RL of 4 October 2019 the President of the NCRAI, in accordance with Art. 281 par. 8 of the act of 28 March 2003 on rail transport (Journal of Laws of 2019, item 710 as amended) communicated to the Minister of Infrastructure the recommendation on the safety improvement No. 4, including Report No. PKBWK/04/2019.

- III. Recommendations included in Report No. PKBWK/05/2019** on the investigation of an A21 category serious accident which occurred on 17 November 2018 at 11:49 at the D category level crossing located at the Dobrzechów - Fryszak route, at 42.602 km of the Rzeszów Główny - Jasło railway line No. 106, the area of PKP Polskie Linie Kolejowe S.A., Zakład Linii Kolejowych in Rzeszów infrastructure management body.

**PKBWK/05/2019 - RECOMMENDATION 4:** The operator of the district road No. 1922 R in Strzyżów shall install F6a sign at the exit from the Wiśniowa railway stop loading yard.

RECOMMENDATION ADDRESSEE: Road operator (1 entity)

IMPLEMENTATION PROGRESS: **100%**

**PKBWK/05/2019 - RECOMMENDATION 5:** The minister responsible for transport shall take measures related to the amendment of the regulation of the Minister of Infrastructure on detailed technical requirements for road signs and signals and road traffic safety devices, and the conditions of their installation at the roads, of 3 July 2003, in item 3.2.21 of Annex 1 in relation to the obligation to install B-20 sign under G-3 or G-4 signs at the D category level crossings, so that the location of the B-20 "STOP" sign clearly identified the place where a road vehicle shall stop before the level crossing.

RECOMMENDATION ADDRESSEE: Ministry of Infrastructure (1 entity)



MEAN IMPLEMENTATION PROGRESS: implemented within the Commission's authority (the scope was discussed with the representatives of the Ministry of Infrastructure in the meetings at the NCRAI)

- IV. **Recommendations included in Report No. PKBWK/06/2019 on the investigation of an A20 category serious accident** which occurred on 19 December 2018 at 14:33, at the C category level crossing located at the Głogów Małopolski - Rzeszów Główny, at 63.130 km of the Ocice -Rzeszów Główny railway line No. 71, the area of PKP Polskie Linie Kolejowe S.A., Zakład Linii Kolejowych in Rzeszów infrastructure management body.

**PKBWK/06/2019 - RECOMMENDATION 1:** The road operator, in agreement with the railway infrastructure management body shall take common measures within the extended stage II of the reconstruction project developed in February 2019.

RECOMMENDATION ADDRESSEE: Road operator and PKP Polskie Linie Kolejowe S.A. (2 entities)

MEAN IMPLEMENTATION PROGRESS: under implementation

**PKBWK/06/2019 - RECOMMENDATION 2:** The road operator and railway infrastructure management bodies shall take measures aimed to eliminate other irregularities discovered during the proceedings, and mentioned in this report, according to the competencies resulting from applicable laws.

RECOMMENDATION ADDRESSEE: Road operator and PKP Polskie Linie Kolejowe S.A. (2 entities)

MEAN IMPLEMENTATION PROGRESS: completed.