

**National Railway Accident Investigation Committee**

**MINISTRY OF INFRASTRUCTURE AND CONSTRUCTION**

**ANNUAL REPORT 2016**

**ON ACTIVITY**

**OF THE NATIONAL RAILWAY ACCIDENT INVESTIGATION**

**COMMITTEE**

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**1. Introduction on activity of the National Railway Accident Investigation Committee**

**1.1 Legal basis for the Committee’s activity and its tasks**

The independent and permanent National Railway Accident Investigation Committee (”Committee”) operates at the Minister with responsibility for transport. Establishment of the Committee resulted from transposition of Directive 2004/49/EC of the European Parliament and of the Council of 29 April 2004 (”Directive”) on safety of the Community’s railways. Pursuant to Art. 21 each Member State shall ensure that investigations of accidents and incidents are conducted by a permanent body, independent functionally, organizationally and in its decision-making form, from any safety authorities, rail regulators, railway undertakings, infrastructure managers and all other parties, whose interests would be contrary to operations undertaken by the investigation body. In Poland, the National Investigation Body as provided for in the Directive is the National Railway Accident Investigation Committee (”Committee”). The Committee is fully independent in organizational and legal terms, from the entities stipulated in Art. 21 of the Directive, and it is represented outside by its President.

Pursuant to provisions of Chapter 5a of the Act dated 28 March 2003 on Railway Transport (uniform text: OJ Dz. U. of 2016, item 1727, as amended), the Committee carries out its tasks on behalf of the Minister in charge of transport. According to the comments reported by representatives of the European Commission as regards railway law regulations, the Act on Railway Transport was amended what was stipulated in the provisions of the Act of 25 September 2015 amending the Railway Transport Act (OJ Dz.U. of 2015, item 1741). The basic tasks of the Committee is to perform proceedings **after each serious accident** in rail transport (that occurred on a railway network and on railway sidings), having obvious negative influence on railway safety regulations or safety management. Furthermore, the Committee can also conduct proceedings **in relation to accidents or incidents that would be serious accidents** in slightly different conditions, ceasing operation of the structural subsystems or interoperability constituents of the trans-European rail system.

The decision on undertaking of the proceedings related to an accident or incident mentioned above is made by the Head of the Committee not later than within a week from obtaining information about their occurrence.

Pursuant to the amendments made to the Act on Railway Transport of 1 March 2016, the scope of competence of the Committee was extended with the possibility to investigate the incidents that take place on railway sidings. Covering the railway sidings with solutions that are applicable to railway lines allowed to homogenize the principles of collecting data about railway incidents and considering the threats that result from carriage on the railway sidings.

Another condition for the possibility to carry out proceedings related to accidents and incidents is their occurrence in repeatable situations caused by similar reasons.
The Committee may carry out the proceedings in relation to the accident and incident if it occurred in circumstances that justify such an investigation. The decision to undertake the investigation of the accident or incident is made by the Head of the Committee, taking into account:

* weigh of the accident or incident;
* whether the accident or incident is a part of a series of accidents or incidents related to the whole system;
* influence of the accident or incident on railway safety on the community level;
* requests from railway operators, carriers, the minister in charge of transport, the President of the Office of Rail Transport or EU member states.

Within one week from making the decision to undertake the investigation, the Committee informs the Agency thereof, communicating the date, time and place of the incident as well as its type and consequences including casualties, the injured, suffered injuries and losses in property.

Within the scope of its activity, the Committee carries out investigations intended to identify the causes and circumstances of occurrences and to draw preventive conclusions. The Committee’s decisions have a form of resolutions.

Members of the Committee hold cards authorizing them to carry out their duties at the accident place, pursuant to the Regulation of the Minister of Transport of 21 February 2007 on the PKBWK member card template (OJ Dz.U. of 2007 r. no 41, item 269). When the Committee carries out the proceedings, it draws up a report complying with the Regulation of the Minister of Infrastructure and Construction of 12 April 2016 amending the regulation on the contents of the serious railway accident, accident or incident proceedings report (OJ Dz.U. of 2016, item 560);

**1.2 Committee’s organizational structure**

As of 12/31/2016, the Committee was composed of 4 permanent members, including the President, Deputy President, Secretary and one Committee’s service employee carrying out administration and office duties, taking care of the office of the President of the Committee. The Committee is seated in the Ministry of Infrastructure and Construction in Warsaw, 4 Chałubińskiego St., and according to Article 28D para 2 of the Act, HR, financial, social and administrative issues of the Committee are dealt with by adequate organizational units of the Ministry in charge of transport (currently, the Ministry of Infrastructure and Construction).

Pursuant to provisions of §4(1) of the Terms and Regulations for operation of the National Railway Accident Investigation Committee (Attachment to the Order No 59 of the Ministry of Infrastructure of 11 December 2008, OJ Dz.Urz. of the Minister of Infrastructure, No 15, item 75), the President of the Committee coordinates implementation of its tasks, ensures proper work organization, its efficient activity and represents the Committee outside.

*As of 12/31/2016*

The Act on Railway Transport amended in 2015 burdened PKBWK with additional duties related to covering also the railway sidings with the scope of its operations what resulted in a rapid increase of incidents reported to the Committee from 1 March 2016. In the new system PKBWK covers more than 700 entities with the scope of its operations, including the railway lines administrators, carriers and users of sidings, who are obliged to report the incidents to the Committee. The Committee is composed of the permanent members, including: heads, two deputies, a secretary and other permanent members.

In its new, amended composition, the Committee will include the Committee’s Office in Warsaw and its divisions with seats in Poznań and Katowice. The planned employment in the Committee is 12 permanent members (together with the Committee’s management staff) and - as previously - 1 auxiliary employee in:

* the Committee’s Office in Warsaw (6 persons, including 5 permanent members),
* divisions - only the permanent members in two planned divisions
with their seats in Poznań (3 positions) and Katowice (4 positions).



**Committee’s Division** **with its seat**  **in Katowice**

**Committee’s Division** **with its seat**  **in Poznań**

**Committee’s Office** **with its seat**  **in Warsaw**

Pursuant to the delegation of legislative powers stipulated in Article 28d para 4 of the Act of 28 March 2003 on Railway Transport (OJ Dz.U. of 2016, item 1727, as amended), the minister in charge of transport was obliged to determine the number of permanent members and the new organizational structure of the National Railway Accident Investigation Committee.

The organizational modification related to the Committee, introduced by the Act of 25 September 2015 amending the Act on Railway Transport (OJ Dz.U. of 2015, item 1741) were not implemented
in 2016 because there were no financial resources for that purpose.

The new operational rules and regulations of the National Railway Accident Investigation Committee, considering the new organizational structure, was entered into force in the Regulation No 29 issued by the Minister of Infrastructure and Construction of 22 June 2017 on the Operational Rules and Regulations of the National Railway Accident Investigation Committee (OJ, Dz. Urz. Ministry of Infrastructure and Construction, item 48).

1. **Forms of proceedings carried out by the Committee and the President’s supervision over works performed by railway committees in 2016**

In 2016, the Committee carried out proceedings in serious accidents, accidents and incidents in the following forms:

1. *The proceedings carried out by an accident investigation team or the Committee’s investigation team called by the President of the Committee* - when it comes to these forms, the President of the Committee nominates a leader of the accident investigation team or the Committee’s investigation team, with whom he agrees on permanent and temporary members of the Committee. The accident investigation team or the Committee’s investigation team conducts the proceedings related to the occurrence directly. In these cases, the proceedings result in drawing up a Report, which is approved by the Committee by way of resolution.

In 2016, the Committee’s President made two decisions on the Committee’s undertaking the proceedings and calling the accident investigation team and the Committee’s investigation team in case of the following occurrences:

1. A18 cat. serious accident that took place on 26 March 2016 at 17.10 at cat. A level crossing, located at 95,669-kilometer point of the railway line No 353,
2. A18 cat. serious accident that took place on 8 November 2016 at 6.51 at cat. A level crossing, located at 148,388-kilometer point of the railway line No 001,

Detailed information on the proceedings carried out in relation to those occurrences can be found further in the Report.

1. *Direct participation of the Committee member in works of the railway committee* - was applied first of all if it was suspected that the accident may have been caused by wrongful operation of the railway traffic safety management system, in case of which the proceedings are not carried out by the Committee’s accident investigation team.

Pursuant to Article 10 para 3 of the Regulation by the Minister of Transport of 30 April 2007 (OJ Dz. U. No 89, item 593), for each kind of incident, *the President of the Committee could nominate a Committee member (permanent or temporary) as a head of local or facility railway committee.*

In 2016, the President of the Committee exercised this right once.
The above-mentioned principles were in force from 1 March 2016, i.e. from enforcement of the amendments introduced by the Act of 25 September 2015, amending the Act on Railway Transport (OJ Dz.U. of 2015, item 1741).

1. *Direct supervision over occurrences* - until 29 February 2016, was applied in case of some occurrences, especially in situations, when there was a justified suspicion that the railway committee can have certain problems with identification of causes, circumstances or a category of the occurrence. Within the scope of direct supervision, permanent members of the Committee took part in the railway committee’s meetings watching the performed proceedings.

In 2016, joint meetings of the Committee and railway committees took part in the PKBWK office in Warsaw, and there were numerous cases of external meetings of the President and other members of PKBWK and railway committees, outside the Committee’s office, among others in places of the occurrences, connected with visual inspections, tests and measurements supervised by the Commission, and analysis of documentation related to the occurrences.

Pursuant to the Act of March 28, 2003, on Railway Transport (OJ Dz. U. of 2015, items 1297, 1741, 1753, 1777 and 1893) there were new executive regulations issued, i.e. the Regulation of the Minister of Infrastructure and Construction of 16 March 2016, on serious accidents, accidents and incidents in railway transport (OJ Dz.U. , item 369), which entered into force on 19 March 2016.

1. *General supervision over occurrences* - within the scope of this supervision, until 29 February 2016, the Committee verified documentation of each occurrence, starting with an analysis of the notification about the occurrences and ending with an analysis of the final findings protocol. In individual cases, when the local or facility railway committee failed to suggest potential causes or failed to determine the occurrence category in the occurrence notification, the PKBWK President applied to provide the Committee with a protocol for visual inspection of the site and other documents related to the occurrence, in order to make adequate decisions.

The most significant factors that influenced operations of the Committee were:

1. Amendments of the national regulations from March 2016 (Acts and Regulations) that included the railway sidings into the system for supervision and investigation of railway incidents what resulted in new duties imposed on users of the railway sidings related to reporting all railway incidents to the Head of PKBWK and President of the Office of Rail Transport (UTK), investigate the causes of the incidents by the railway committees designated for that purposes, and to record the incidents and analyze their influence on the safety level on the railway siding.
2. From 1 March 2016, the supervision over works of the railway committees that carry out the proceedings related to railway occurrences (both accidents and incidents) is exercised by the President of the Office of Rail Transport (UTK). The introduced changes eliminate the discrepancy of the transposition of the Directive 2004/49/EC as regards entrusting an investigation body with supervisory duties what was stressed by the European Commission. The supervision over proceedings carried out by the railway Commissions are carried out by the national safety authority what complies with the Safety Directive 2004/49/EC. The executive provisions stipulated in the new Regulation, regulate in detail the principles of conduct of the railway committees considering the railway sidings.
3. On 3 June 2016, there was an agreement concluded between the Head of the National Railway Accident Investigation Committee and the President of the Office of Rail Transport on cooperation regarding safety in railway transport in the Republic of Poland. The purpose of the concluded agreement is for the parties to undertake common actions to the benefit of development and safety in railway transport, and to exchange information and experiences regarding works of the railway committees.

**3. Occurrences between 1 January and 31 December 2016**

**3.1 occurrences reported to the Committee by obliged entities.**

As of 12/31/2016, the obligation for immediate reporting of serious accidents, accidents and incidents on railway lines to the Committee and the President of the Office of Rail Transport by railway undertakings and infrastructure managers was stipulated in Article 28g of the Act, and the obligation to submit a written notification by the manager was provided for in §7 para 1-5 of the Regulation of the Minister of Infrastructure and Construction dated 16 March 2016 (OJ Dz.U. item 369).

Changes in the national regulations established a division into the following types of occurrences in railway transport:

1. **(1) serious accident - each accident caused by** a collision, derailment or by another occurrence exerting obvious influence on railway safety regulations or safety management: with at least **one fatality or five heavily injured** (a heavily injured - a person staying in a hospital for more than 24h as a result of the accident), or resulting in major damages to the rail vehicle, railway infrastructure or surroundings, which can be estimated by the Committee to amount up to at least EUR 2 mln,
2. accident - unintended, sudden occurrence or a chain of such occurrences with participation of a rail vehicle, causing negative consequences for human health, property or environment; accidents include especially: collisions, derailments, level crossing accidents, accidents to persons caused by a rail vehicle in motion or fire of a rail vehicle,
3. (2) incident - means any occurrence other than accident or serious accident, associated with the operation of trains and affecting the safety of operation.

The above-mentioned definitions of the categories of occurrences (a serious accident and incident) were defined according to the regulations from the Act on Railway Transport, in force from 30 December 2016.

Changes of definitions

Until 29 February 2016 the following definitions of the categories of occurrences were in force:

1. a serious accident - an accident caused by a collision, derailment of a train or a different similar occurrence, with at least one fatality or at least five heavily injured persons, or causing significant damage to the rail vehicle, railway infrastructure or environment, which can be estimated by the Committee as amounting to at least EUR 2 mln, exerting obvious influence on the railway safety regulations or safety management.
2. accident - unintended, sudden occurrence or a chain of such occurrences with participation of a rail vehicle, causing negative consequences for human health, property or environment; accidents include especially: collisions, derailments, level crossing accidents, accidents to persons caused by a rail vehicle in motion or fire of a rail vehicle,
3. incident - means any occurrence other than accident or serious accident, associated with the operation of trains and affecting the safety of operation.

Between 1 January and 31 December 2016, the Committee was informed about 1543 railway occurrences according to the classification stipulated in the Regulation, out of which there were: 2 serious accidents, 688 accidents and 853 incidents.

The number and structure of occurrences, divided into categories, are presented in the tables below, No 2 and 4.

Table No 3 presents the number of persons injured in the occurrences in 2016

Table No 2- Occurrences reported to the Commission in 2016, in comparison to 2015.

|  |  |  |  |
| --- | --- | --- | --- |
| **Type of occurrence****(SA - serious accident, A - accident, I - incident)** | **2015** | **2016** | **Change****2016/2015** |
| SA (cat. A) | **2** | **2** | **0.0%** |
| A (cat. B)  | **629** | **688** | **+9.4 %** |
|  I (cat. C) | **521** | **853** | **+63.7%** |
| Total | **1152** | **1543** | **+33.9%** |

Table No 3 - The injured in the occurrences in 2016, in comparison to 2015.

|  |  |  |  |
| --- | --- | --- | --- |
| **Injured** | **2015** | **2016\*)** | **Change****2016/2015** |
| Fatalities | **227** | **174\*)**  | **-23.3%** |
| Severely injured  | **109** | **92** | **-15.6%** |
| Total | **336** | **266** | **- 20.8%** |

\*) Joint number of fatalities, according to information communicated as of the day of drawing up the Report (10 August 2017) does not include the casualties qualified by the prosecutor as “S” (suicides);

 - with consideration of railway sidings.

|  | Table No 4 - Structure of occurrences in 2016 in comparison to 2015, divided into categories |  |  |  |
| --- | --- | --- | --- | --- |
| **Occurrence category** (letter marking) | **Occurrence category description****Qualification of the direct cause** | **Category**(numerical marking) | **IN TOTAL****2015** | **IN TOTAL****2016** |
| **A** | Rail vehicle hits a road vehicle (another road machinery, agricultural machinery) or is hit by a road vehicle, on a level crossing with boom barriers (A cat. according to travel specification) | 18 | **1** | **2** |
| Rail vehicle hits a road vehicle (another road machinery, agricultural machinery) or is hit by a road vehicle, on a level crossing without a crossing system ( D cat.)  | 21 | **1** | **0** |
|  **SERIOUS ACCIDENTS**  | **2** | **2** |
| **B** | Other causes than those mentioned above, or combination of several causes, resulting in equivalent causes | 00 | **-** | **12** |
| Dispatch of a rail vehicle to a track that is occupied, closed or opposite to the primary, or in improper direction | 01 | **0** | **0** |
|  | Receipt of a rail vehicle on a station, to a closed or occupied track | 02 | **0** | **1** |
|  | Dispatch, receipt or travel of a rail vehicle on an improperly laid and unsecured route, or improper operation of railway traffic control devices  | 03 | **17** | **30** |
|   | Rail vehicle fails to stop before the “Stop” signal, or in a place where it should stop, or it is started without a necessary permission | 04 | **19** | **21** |
|  | Rail vehicle fails to remain cautious after passing an automatic block semaphore, displaying the “Stop” signal or a doubtful signal after stopping | 05 | **2** | **0** |
|   | Maximum permitted speed is exceeded | 06 | **0** | **3** |
|  | A maneuver that poses a danger for railway traffic | 07 | **1** | **4** |
|   | Runaway of a rail vehicle | 08 | **6** | **10** |
|  | Damage or improper maintenance of a structure, e.g. surface, bridge or viaduct, including improper realization of works, e.g. inadequate unloading of materials, surface, leaving the materials and equipment (including road machinery) on the track or clearance gauge of a rail vehicle, or a rail vehicle hitting fragments of the object | 09 | **48** | **55** |
|  | Damage or bad technical condition of a rail vehicle with a drive, special-purpose rail vehicle (including hitting an item that is a structural part of a rail vehicle with a drive or special-purpose rail vehicle), and damaging or improper operation of the on-board part of devices allowing to control the operation of a rail vehicle (ERTMS)  | 10 | **9** | **8** |
|  | Damage or poor technical condition of a car (including hitting the structural part of the car)  | 11 | **19** | **27** |
|  | Damage or faulty activation of railway traffic control devices  | 12 | **3** | **1** |
|  | Rail vehicle hits another rail vehicle or an obstacle (e.g. brake skid, luggage or postal cart)  | 13 | **24** | **57** |
|  | Criminal act | 14 | **0** | **0** |
|  | The travel route is opened too early or the barrier is raised and the switch is shifted under a rail vehicle | 15 | **11** | **24** |
|  | Wrong setting-up of the train or shunting train | 16 | **1** | **2** |
|  | Improper loading, unloading, irregularities in securing the load or other irregularities in loading activities or wrong setting-up of the train or shunting train  | 17 | **7** | **3** |
|  | Rail vehicle hits a road vehicle (another road machinery, agricultural machinery) or is hit by a road vehicle, on a level crossing with boom barriers (A cat. according to travel specification) | 18 | **7** | **8** |
|  | Rail vehicle hits a road vehicle (another road machinery, agricultural machinery) or is hit by a road vehicle, on a level crossing with an automatic crossing system with traffic lights and boom barriers ( B cat.) | 19 | **14** | **15** |
|  | Rail vehicle hits a road vehicle (another road machinery, agricultural machinery) or is hit by a road vehicle, on a level crossing with an automatic crossing system with traffic lights and without boom barriers ( C cat.)  | 20 | **32** | **22** |
|  | Rail vehicle hits a road vehicle (another road machinery, agricultural machinery) or is hit by a road vehicle, on a level crossing without a crossing system ( D cat.)  | 21 | **109** | **147** |
|  | Rail vehicle hits a road vehicle (another road machinery, agricultural machinery) or is hit by a road vehicle, on a level crossing for private use ( F cat.)  | 22 | **1** | **0** |
|  | Rail vehicle hist a road vehicle (other road machinery, agricultural machinery) or is hit by a road vehicle outside level crossings at stations and on routes, or communication-access track to the railway siding | 23 | **7** | **6** |
|  | A fire in a train, shunting train or a rail vehicle | 24 | **0** | **3** |
|  | Fire in a construction work, etc., within a railway area, forest fires reaching the end of the fire strip, fire of cereals, grasses and tracks started within the railway area | 26 | **-** | **0** |
|  | An explosion in a train, shunting train or a rail vehicle | 27 | **-** | **0** |
|  | Natural disasters (e.g. flood, snowdrifts, ice dams, hurricanes, land slides) | 28 | **1** | **5** |
|  | Construction disaster in direct neighborhood of rail tracks where trains travel regularly | 29 | **-** | **0** |
|  | Mean, hooligan or reckless acts (e.g. throwing stones at the train, stealing goods from the train or the shunting train in motion, placing an obstacle on the track, devastation of the energetic devices, communication, railway traffic control or surface, and interference with these devices)  | 30 | **1** | **3** |
|  | Rail vehicle hits persons crossing the railway tracks on the level crossing or supervised crossing | 31 | **10** | **6** |
|  | Rail vehicle hits persons crossing the railway tracks on the level crossing with automatic crossing system ( B, C cat.)  | 32 | **9** | **9** |
|  | Rail vehicle hits persons crossing the railway tracks on remaining railway crossings and pedestrian crossings | 33 | **14** | **13** |
|  | Rail vehicle hits persons crossing the railway tracks outside the level crossings or pedestrian crossings at stations and on railway routes | 34 | **239** | **171** |
|  | Occurrences with persons related to railway traffic (jumping out or falling out of a train, rail vehicle, strong approach or rapid braking of a rail vehicle)  | 35 | **12** | **22** |
|  | A driver of a road vehicle ignores the signals forbidding entrance to the level crossing, and damages the boom or road signals | 36 | **-** | **0** |
|  | Disconnection of a train or a shunting train that caused the cars to runaway | 37 | **1** | **0** |
|  | Faulty operation of buildings and devices intended to operate railway traffic or rail vehicles, caused by a theft  | 38 | **3** | **0** |
|  | Approach of a rail vehicle driven by electricity supplied from a contact line to an unoccupied non-electrified track | 39 | **1** | **0** |
|  | Uncontrolled release of dangerous goods from a car or packaging requiring authorities intervention or application of preparations for liquidation of fire, chemical, biological threat on a station or route  | 40 | **-** | **0** |
|  | Undetermined category | - | **1** | **-** |
|  **ACCIDENTS** **TOTAL** |   | **629** | **688** |
|  | Dispatch of a rail vehicle to a track that is occupied, closed or opposite to the primary, or in improper direction | **41** | **1** | **3** |
| **C** | Receipt of a rail vehicle on a station, to a closed or occupied track | **42** | **4** | **0** |
|  | Dispatch, receipt or travel of a rail vehicle on an improperly laid and unsecured route, or improper or lack of operation of railway traffic control devices | **43** | **19** | **47** |
|  | Rail vehicle fails to stop before the “Stop” signal, or in a place where it should stop, or it is started without a necessary permission | **44** | **49** | **57** |
|  | Maximum permitted speed is exceeded | **45** | **1** | **3** |
|  | A maneuver that poses a danger for railway traffic | **46** | **0** | **2** |
|  | Runaway of a rail vehicle | **47** | **2** | **3** |
|  | The travel route is opened too early or the barrier is raised and the switch is shifted under a rail vehicle | **48** | **2** | **0** |
|  | Wrong formation of the train | **49** | **1** | **2** |
|  | Improper loading, unloading, irregularities in securing the load or other irregularities in loading activities | **50** | **5** | **11** |
|  | Damage to surface, bridge or viaduct, a contact line, including improper realization of works, e.g. inadequate unloading of materials, leaving the materials and equipment (including road machinery) on the track or clearance gauge of a rail vehicle | **51** | **15** | **35** |
|  | Faulty activation of railway traffic control devices, causing: a block system occupied by a rail vehicle is not covered with the “Stop” signal, a semaphore displays an enable signal when the route is arranged improperly, inadequate operation of track or turnouts vacancy devices, improper operation of station or line block systems, - failure to warn or secure the road users against a train approaching a railway crossing or a pedestrian crossing equipped with a crossing system | **52** | **1** | **2** |
|  | Damage or poor technical condition of a railway vehicle with a drive, a special-purpose railway vehicle causing the need to exclude it from operation as a result of the indication from the detection devices for the rolling-stock emergency status, confirmed in workshop conditions (hot axle-boxes, hot brake resulting in a shifted ring), as well as other faults in the rail vehicles in operation, observed by the operation personnel (e.g. a cracked suspension spring) | **53** | **17** | **21** |
|  | Damage or poor technical condition of a car causing the need to exclude it from operation as a result of the indication from the detection devices for the rolling-stock emergency status, confirmed in workshop conditions (hot axle-boxes, hot brake resulting in a shifted ring), as well as other faults in the rail vehicles in operation, observed by the operation personnel  | **54** | **292** | **262** |
|  | A fire in a train or railway vehicle not causing negative consequences for the property or environment, without any casualties | **55** | **29** | **21** |
|  | Fire in a rail vehicle, except fires in trains | **56** | **0** | **1** |
|  | A fire of a construction object and vegetation in direct neighborhood of rail tracks where trains travel regularly  | **57** | **0** | **2** |
|  | Uncontrolled release of dangerous goods from a car or packaging requiring authorities intervention or application of preparations for liquidation of fire, chemical, biological threat on a station or route  | **59** | **1** | **15** |
|   | Rail vehicle hits an obstacle (e.g. brake skid, luggage cart, postal cart, etc.) without derailment or victims | **60** | **21** | **33** |
|  | Criminal act | **61** | **0** | **0** |
|   | Natural disasters (e.g. flood, snowdrifts, ice dams, hurricanes, land slides) | **62** | **12** | **21** |
|  | Construction disaster in direct neighborhood of rail tracks where trains travel regularly | **63** | **0** | **1** |
|   | Mean, hooligan or reckless acts (e.g. throwing stones at the train, stealing goods from the train or the shunting train in motion, placing an obstacle on the track, devastation of the energetic devices, communication, railway traffic control or surface, and interference with these devices), without victims or negative consequences for the property or environment, posing a threat for passengers or workers of a train  | **64** | **21** | **63** |
|   | Occurrences with persons, related to operation of a rail vehicle (crossing the tracks on railway crossings and pedestrian crossings or outside them, jumping into, falling out of a train or rapid braking of a rail vehicle), without victims or any negative consequences for the property or environment  | **65** | **20** | **26** |
|    | Road vehicle fails to stop before a closed boom barrier (half-way barrier), damages the barrier or its road signals that warned about an approaching train, without a collision with a rail vehicle  | **66** | **6** | **52** |
|  Faulty operation of devices intended to operate railway traffic or rail vehicles, caused by a theft | **67** | **2** | **1** |
| Disconnection of a train or a shunting train, not causing the cars to runaway | **68** | **-** | **161** |
| Other causes than those mentioned above, or combination of several causes, resulting in equivalent causes | **69** | **-** | **8** |
|  | **INCIDENTS IN TOTAL** |  | **521** | **853** |
|  | **OCCURRENCES IN TOTAL** | **1152** | **1543** |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

* 1. Occurrences, in relation to which the Committee carried out direct proceedings reported to the European Union Agency for Railways (EUAR).
		1. A18 cat. serious accident that took place on 26 March 2016 at 17.10 at cat. A level crossing, located at Dziarnowo level junction, in the 95,669-kilometer point, Dziarnowo - Inowrocław Towarowy route of the railway line No 353

On 3/26/2016 at 7.37, a passenger train No EIE 7501 “BAŁTYK”, route Poznań Główny - Gdynia Główna, operated with a locomotive series EU07A-003 (EVN No 91-51-5160-000-3) owned by “PKP Intercity” S.A. railway carrier, on the A cat. railway crossing, situated in the poviat route No 2555C: Inowrocław – Kościelec Kujawski, at the Dziarnowo level juncton, Dziarnowo - Inowrocław Towarowy route, line No 353: Poznań Wsch. – Skandawa, route track No 1, at km-point 95.669, hit hit a passenger car, AUDI A4 STATION WAGON, that entered the level crossing directly in front of the approaching train, with opened crossing booms.

The train was driven by the train driver of electric traction vehicles and the assistant of the train driver of electric traction vehicles and the train’s manager.

The car entered the level crossing mentioned above from the right according to the travel direction, and was hit by the right part of the locomotive’s front into the front part of the road vehicle.

The train driver gave the *Rp1 “Warning”*  signal at the W6a sign at a distance of 839 meters (located at the 94.830 km-point) related to that crossing and continued to travel with a speed of about 100 km/h (with permissible timetable speed of 120 km/h) towards the level crossing at the 95.669 km-point, directly before the crossing, the train driver spotted the passenger car, AUDI A4 STATION WAGON entering the crossing.

Before hitting the car, at a distance of about 20 m before the level crossing gave the *Rp1 “Warning”* signal one more time and started to brake the train rapidly - despite that action the train hit the passenger car.

At a speed of 105 km/h, the rail vehicle hit the front part of the passenger car with the right part of the locomotive’s front, turning the car around by 90°. The hit passenger car was pushed from the level crossing, to the right side of the track No 1, towards the direction of travel, and into the drain channel, and afterwards the force of impact threw the car into the traction pole situated at 36,678-kilometer point. 95.700 km-point (31 meters from the travel axis), and afterwards on the lighting pole of the set-up region, located at the 95.705 km-point (36 meters from the travel axis). There were no visible braking marks of the passenger car on the level crossing and on the access route to the crossing.

There were two adults in the passenger car who were killed instantly.

The train’s front stopped at 95.996 km-point, at a distance of 321 m, according to the locomotive’s speed meter, calculated from sudden activation of brakes - 297 m, according to the protocol of investigation of the serious accident spot on the railway crossing from the place of hit, calculated from the axis of the railway crossing.

The following elements were damaged: a locomotive pilot under the “A” cab, a hose with a cut-off valve was torn along with the air hoses from the “A” train driver’s cab.

The passenger car, AUDI A4 STATION WAGON, was completely destroyed.

The Head of PKBWK made a decision to delegate the proceedings to the Committee’s accident investigation team pursuant to Article 28e, para 4 of the Act of 28 March 2003 on Rail Transport (OJ Dz.U. of 2015, item 1297, as amended). On 6 April 2016, the Committee reported that fact to the European Union Agency for Railways (EUAR) via the ERAIL system, and the aforementioned occurrence was registered in the ERAIL database under the number **PL-5061**. The Committee completed the proceedings related to the investigated occurrence by way of resolution No 2/PKBWK/2017 dated 3/3/2017, and published the report No PKBWK/01/2017, specifying the causes of the occurrence and issued 6 recommendations for implemented by the interested entities in 2017.

### **Recommendations issued by the National Railway Accident Investigation Committee in the Report PKBWK/01/2017.**

1. Infrastructure managers and railway undertakings will intensify inspections on employees in the scope of presence of substance with similar influence to alcohol in their organisms, or if there are no such inspections, they will develop and implement internal systems of random inspections on employees that have direct influence on railway traffic safety.
2. PKP PLK S.A., within the scope of supervision, will verify documentation in terms of provisions related to irregularities in operation of train radio communication systems, and will undertake appropriate preventive measures.
3. In relation to the Safety Management System, PKP Polskie Linie Kolejowe S.A. will undertake the following actions:
4. as regards the PKP PLK S.A. scale, to accelerate identification of cat. “**A**” level crossings operated by train dispatchers or other operators of signal boxes and technical posts, and to undertake appropriate actions intended to successive subordination of the possibility to give the signal allowing to proceed on the position of the gates; the above should be realized on the basis of performed risk assessment as regards accidents on those level crossings, and if necessary, undertake appropriate corrective or preventive actions,
5. enter the following threat identified during the investigation carried out by the accident investigation team, i.e. “failure to make the signal dependent on closure of the gates for cat. “**A**” level crossings, operated from signal boxes and technical posts” to the “***Hazard Register***”, and carry out necessary further actions, including those resulting from the SMS employed by the infrastructure manager,
6. carry out an extraordinary comprehensive inspection of the SMS again, checking implementation of corrective and preventive actions that result from the comprehensive audit in the Railway Lines in Bydgoszcz, especially in the scope of SMS procedures: PR-02, PW-01, PR-03, PG-01 and SMS-PD-05 and to undertake appropriate corrective actions, if necessary; the repeated comprehensive audit should also cover the Exploitation Section in Inowrocław,
7. efficiently monitor and analyze data related to the occurred dangerous events and situations, especially on cat. “**A**” level crossings, and to initiate adequate preventive actions with consideration of previous recommendations proposed by the National Railway Accident Investigation Committee (PKBWK) and railway commissions investigating the circumstances and causes of accidents on level crossings of this category.
	* 1. A18 cat. serious accident that took place on 8 November 2016 at 6.51 at cat. A level crossing, located at the 148.388-kilometer point, Piotrków Trybunalski - Rozprza route of the railway line No 001

On 8 November 2016 at cat. A level crossing, at 148.388 km-point of the Piotrków Trybunalski - Rozprza route of the railway line No 1 Warszawa Zachodnia - Katowice, a A.G.O lineman started their day shift at 6.00; at 6.06, according to the timetable, the crossing was crossed by the train No 42104 “Czartoryski” in the even direction. At 6.47.03, a fast train No 1329 (travel time of the train No 1329 according to the video recorder of that train) stops at the platform on the track No 1 at the Piotrków Trybunalski station. In the meantime, there is the train No 14311 standing at the same platform, on the track No 3. At 6.47.49, the auxiliary train dispatcher of the Piotrków Trybunalski station calls the posts (No 41 and 41) on the Piotrków Trybunalski - Rozprza route and successfully informs the linemen about departure of the train No 1329 and the train No 14311, communicating the times - 6.45 and 6.48 respectively. The logs of the linemen (R-49) of both these posts include entries confirming that the communication was received. At 6.48.01, the train No 1329 departures from the Piotrków Trybunalski station. At 6.49, the train dispatcher of the Rozprza station calls the posts No 41 and 41 on the Piotrków Trybunalski - Rozprza route and informs about departure of the train No 41334, communicating the time - 6.45. The linemen of the posts No 40 and 41 confirmed that they received the communication. At 6.49.53, the train passes by the PT2 signal box and the “Bujny” level crossing at the 146.232. At 6.51.01, the front of the train No 1329, traveling at a speed of about 118 km/h before starting to break, approaches the “Moryc” level crossing at the 148.388 km-point (post No 40) and hits a passenger car, Nissan Sunny, which entered the crossing while the booms were not closed, traveling from left to right from the perspective of the train’s travel direction (from track No 2 of line No 1), directly before the train No 1329 reached the crossing. The train’s front was lit properly for the whole time (Pc1 signal). At the fragment, which the train traveled on, nearby the place of the accident, there was a fog limiting the visibility to about 50 - 100 m (to about 2 s of a train traveling at a speed of 120 km/h), and visibility of lights of rail vehicles for drivers of road vehicles to about 100 - 200 m (about 3 - 4 s of a traveling train). On the video recording from the driver’s cab of the train No 1329, the passenger car that was hit afterwards appeared less than 2.5 s before the accident. There is also a dark, blurred outline of a car that crossed the level crossing directly before the occurrence, traveling through track No 1 about 1s before the hit passenger car entered the level crossing. It can be also observed that the booms started to close directly before the passenger car entered the level crossing. The driver of the train No 1329, started the sudden braking procedure after noticing the vehicle, at the same time giving the Rp1 “Warning” signal (which he earlier gave before approaching the level crossing, at the W6a signs, and then repeated it twice). The train’s front stopped after 25 s, at a distance of about 460 m from the level crossing. During the braking procedure, the train’s buzzer emitted the A1 “Emergency” signal automatically (three times). Immediately after the train stopped, at 6.51.30, the train’s driver started to emit the A1r “Emergency” signal with a radiotelephone in the “Radio-stop” system. The signal was being emitted until 6.52.16.

As a result of the hit, the passenger car, Nissan Sunny, was completely destroyed. Its parts, including the front with the engine and riving system were thrown to the intertrack space of track No 1, line No1, and track No1, line No 24, and outside the track.

The car driver was killed instantly. The remaining, rear and middle part of the passenger car, hammered onto and under the front coupler, were pushed to the place, where the train stopped. The elements of the front of train No 1329, type ED160, were damaged from the side of the B cab that the train was driven from, including the coupler and parts of the body.

Pursuant to provisions of Chapter Article 28e para 3 of the Act dated 28 March 2003 on Railway Transport (uniform text: Dz. U. of 2016, item 1727, as amended), The Head of the National Railway Accident Investigation Committee - Tadeusz Ryś - made a decision that the investigation procedure will be taken over from the railway committee by the Committee’s Investigation Team.

The Committee reported commencement of the proceedings related to the occurrence to the European Union Agency of Railways on 23 July 2015 (ERAIL database No PL-4826).

The Committee completed the proceedings related to the investigated occurrence by way of resolution No 1/PKBWK/2017 dated 24 February 2017, and published the report No PKBWK/2/2017, specifying the causes of the occurrence and issued 11 recommendations on safety improvement for implementation by the interested entities in 2017.

**Recommendations issued by the National Railway Accident Investigation Committee in the Report**

**PKBWK/02/2017.**

The Committee’s investigation team recommends the infrastructure manager - PKP Polskie Linie Kolejowe S.A. to implement the following actions allowing to avoid such accidents - as the one in question - in the future or to limit their results:

* 1. Carry out analyses of whether the provisions of the terms and regulations of the level crossings operation on the sections of the line undergoing revitalization are updated, especially in terms of adequate time for notifying and informing that a train is approaching. If there is such a need, introduce appropriate changes.
	2. Analyze the possibility to requalify the “Moryc” level crossing to cat. B, since such a solution is permitted with three tracks, based on provisions stipulated in the Regulation issued by the Minister of Infrastructure and Development of 20 October 2015 on *technical conditions that must be met by railway lines and railway sidings junctions with roads and their location* (OJ Dz.U. of 2015, item 1744) and to implement that change.
	3. Until “B” cat. is introduced on the “Moryc”level crossing at 148.388 km-point, the infrastructure manager will undertake appropriate actions as to ensure that the proceed signal given by any of the exit signals from the Piotrków Trybunalski station to the route leading to the Rozprza station will be there only if the gates at the level crossing at 148.388 km-point are closed.
	4. Until comprehensive change and improvement of the system for notifying and informing the crossing keepers on traveling trains, the technical terms and regulations of the Piotrków Trybunalski station must present determine division of actions and exchange of information between the senior signalman of the signal box PT2 in the scope of level crossing operation, and allocate the responsibility to inform about trains traveling through the “Bujny” level crossing at 146.232 km-point (PT2 signal box) to the senior signalman of that signal box.
	5. Ad-hoc improvement of the workplaces in the dispatching signal box PT in Piotrków Trybunalski, to provide the auxiliary train dispatcher with a possibility to observe the approaching sections, and to consider equipping the train dispatcher’s workplace in an additional monitor presenting the actual timetable of trains. There is a need to consider a change in the scope of responsibilities between the train dispatcher and the auxiliary train dispatcher. Especially introduce a change assuming that one of them operates between the Baby and Piotrków Trybunalski stations, and the second one between the Piotrków Trybunalski and Rozprza stations, and manages the work of the executive signal box PT2. It would eliminate the need to exchange information, what at the current work organization provides the threat of negligence or inaccuracy in the process of mutual information exchange by the keepers, especially as regard notifying the guard posts about the approaching trains.
	6. In case of posts staffed with a signalman and a senior signalman, and the responsibilities of the senior signalman include carrying out tasks of the signalman in special circumstances, employ two types of authorization and adequate entries in the authorization process for a given job position:

a) signalman (exclusively),

b) signalman and senior signalman,

not applying authorization limited to just the scope of the senior signalman’s duties, without simultaneous authorization as a signalman.

* 1. Ensure that the existing radio talks recording system from the announcement and guard posts registers whole talks. For this purpose introduce outrunning of recording (e.g. by 2 seconds, as in case of radio-communication) of talks initiated by voice (by analog subscribers), and implement an additional criterion for finishing of the talks initiated by a subscriber equipped with new-generation devices, which apart from ending the call by the subscriber (by hanging up) would be finishing the talk by other parties, regardless of their equipment (including telephones with batteries).
	2. During the periodic briefings for crossing keepers, discuss the serious accidents with special emphasis put on compliance with correct times for closure of the gates, pursuant to provisions of the terms and regulations regarding operation of the level crossings.
	3. Within the safety management system of the infrastructure manager carry on with risk analysis for threats on cat. A level crossings, and improve the number of level crossings equipped with automatic signaling devices informing about approaching trains, and in the “radio-stop” system devices, first at the level crossings, where the risk of accidents is high.
	4. Undertake appropriate actions by the PKP Polskie Linie Kolejowe S.A. railway infrastructure manager, updating the safety management system in such a manner that the “Hazard Register” includes the threats for level crossings, identified within the scope of performed investigation, especially those discussed in sub-chapter III.1.3 of this Reports, especially the threats:
* caused by loss of individual predispositions of a crossing keeper for operation of new devices, improved rail and road traffic intensity, as well as increased travel speeds or trains,
* consisting in failure to adjust the system of notifying and informing about times of trains approaching, to the required time for closure of the gates,
* resulting from non-optimum adjustment of the system notifying and informing about times of train approaching, in terms and conditions of announcement and crossing keepers posts in relation to guaranteed times in comparison to train timetables, i.e. lack of proper updates to the terms and conditions of level crossings operation when the line revitalization is completed,
* caused by failure to inform the guard posts that a train is approaching what results from no or wrong allocation of responsibilities between the train dispatchers and signalmen in the traffic posts.

What is more, as a result of an analysis of the work by Piotrków Trybunalski station posts, carried out

a part of the investigation, the Team found out that is is justified to complement the appropriate sub-chapter of the “Register of Threats” (e.g. 7.9) in terms of provisions resulting from:

* wrong allocation of responsibilities between the post’s employees,
* wrong ergonomics of workplaces on technical posts,

as well as consideration of purposefulness of a threat that may arise on the design phase of a technical post, resulting from wrong assumptions as regards work organization of the technical post, including e.g. its division into switch circles. As a result of the analysis there is a need to formulate the hazards and enter them into the Register in a more precise manner than currently in chapter 8.

Presentation of hazards regarding level crossings in three different chapters of the “Hazards Register” causes that some of them, including those identified during the accident investigation carried out by the Committee’s investigation team, could not have been considered in the current version of the Register. There is a need to analyze the “Hazard Register” in terms of notes included in sub-chapter III.1.3 of this Report, and to consider introduction of adequate changes and amendments.

* 1. Consider and change the organizational structure of the internal audits carried out by the infrastructure manager, whenever possible, consisting in the fact that the auditor working for the railway lines are subordinate to the Comapny’s HQ.
1. **Safety improvement recommendations issued by the Committee in annual reports based on Article 28L para 6 of the Act dated 28 March 2003 on Railway Transport.**
	1. **Recommendations issued in 2016 and published in the PKBWK Annual Report 2015.**

In 2016, pursuant to Article 28l para 6 of the Act of 28 March 2003 on Railway Transport, the National Railway Incident Investigation Committee published the following recommendations in the Annual Report 2015:

1. Within the operated management systems, the infrastructure managers and railway undertakings shall carry on actions intended to reduce the number of occurrences caused by bad technical condition or rolling stock without drive.

*The recommendation results from a major increase in the number of such occurrences in the railway network.*

1. Infrastructure managers and railway undertakings that have digital data registering devices (speed, statuses of devices, etc.) installed in their rail vehicles and route monitoring devices (registration of image or image and sound) shall take up actions intended to equip the railway committee members in proper tools enabling to read data from the recorders on site immediately after the occurrence.

*The recommendation results from repeating situations of lack of possibility to read the above-mentioned data by employees designated to work in railway committees on site, what inhibits and prolongs the process of identifying initial causes of the events and preparation of the protocol from visual inspection from the site.*

1. According to changes in provisions of the Act dated 28 March 2003 on Railway Transport and changes of implementation acts to the Act, considering performance of accident investigation procedures, the infrastructure carriers and railway undertakings:
	1. shall adjust the internal regulations, safety management systems (SMS) and maintenance management systems (MMS) to the amended national legal acts,
	2. shall ensure that the employees delegated to work in railway committees have current knowledge in the amended national, internal, SMS and MMS regulations as well as technical expertise

The above-mentioned recommendations were handed to the President of the Office of Rail Transport (UTK), who submitted the recommendations to the addressees - i.e. railway market entities, which the President of the Office of Rail Transport oversees as provided for in the Act.

After the Committee analyzed the issued recommendations, the President of the Office of Rail Transport (UTK) developed an additional recommendation and directed it to the railway market entities - reading as follows:

1. Reporting information to the President of the Office of Rail Transport, on actions that the Entity undertook to ensure that the results of the railway incident investigation include adequate and in-depth analysis with identification of all required causes.
	1. **Recommendations issued in this Annual Report 2016**

In 2016, pursuant to Article 28l para 6 of the Act of 28 March 2003 on Railway Transport, the National Railway Incident Investigation Committee publishes the following safety improvement recommendations in the Annual Report 2015:

1. The railway carriers and entities responsible to maintenance of railway vehicles will undertake actions within their management systems, intended to reduce the number of events caused by disconnection of a train.

*The recommendation results from a high number of C68 cat. events on the railway network and small involvement of the entities that maintain and operate the railway vehicles in analyzing and eliminating the primary, direct and indirect causes of the incidents, and the risk of those disconnect elements of the train running away.*

1. The railway infrastructure administrators will undertake actions intended to minimize the reasons and prevent the emergence of occurrences and improve organization in removing the results of those occurrences on the level crossings and pedestrian crossings on the level of tracks by the railway infrastructure manager and rescue services, by introducing additional identification signs for crossings on the level of tracks, including necessary information for the 112 emergency number operator.

*The investigation related to the A20 cat. railway accident on the level crossing that occurred on 4/7/2017, with part of the train operated with the “PENDOLINO” level crossing, suggests that in case the information is communicated quickly to adequate services, the occurrence could have been prevented. One possible solution is to place a “St. Andrew’s Cross” on the back surface of the sign located before a level crossing or a pedestrian crossing, and additional information on the housing of the booms allowing fast contact with the railway infrastructure manager, and in case of a railway incident, to quickly inform the interested services so they can start their rescue action.*

*According to the concept of the proposed solution, providing additional information is intended to allow fast contact with the railway infrastructure manager, and in case of an occurrence with part of a railway vehicle, causing negative consequences for human health, property or environment and other irregularities or threats on a level/pedestrian crossing, to allow to quickly inform the interests services so they can start the rescue action, via the emergency number operator.*

Currently, the cases related to introduction of additional signs of level crossings by the national railway infrastructure manager, i.e. PKP PLK S.A. are at the final stage (description can be found in point 7, page 33).

1. The railway infrastructure managers will undertake actions intended to reduce the number of accidents on the level crossings. Especially for the increasing number of accidents on the A, B and D cat. level crossings the infrastructure managers should undertake adequate corrective and preventive actions, pursuant to the functioning safety management systems (SMS). The managers should accomplish implementation of the provisions from the Regulation of the Minister of Infrastructure and Development of 20 October 2015 on technical conditions that must be met by railway lines and sidings level crossings and their location (OJ Dz.U. of 2015, item 1744).

*The recommendation results from the increasing number of accidents on the A, B and D cat. level crossings and the obligation to meet the provisions of executive regulations related to ensuring visibility of the train’s front from a public route.*

1. The railway carriers and railway infrastructure managers will undertake actions intended to reduce the number of incidents caused by dispatch, arrival or travel of a railway vehicle on a wrongly laid and unsecured route or improper operation of the railway traffic.

*The recommendation results from a major increase in the number of B03 cat. accidents and C43 incidents.*

The above-mentioned recommendations are handed to the President of the Office of Rail Transport (UTK), who submits them to the addressees - i.e. railway market entities, which the President of the Office of Rail Transport oversees as provided for in the Act.

**5. Implementation of recommendations issued in 2016 by PKBWK (based on information from the Office of Rail Transport - UTK).**

On 5 May, 2017, the National Railway Accident Investigation Committee was provided by the Railway Transport Office with information on implementation of recommendations issued by the Committee in 2016.

To improve implementation of the PKBWK’s recommendations by the railway market entities, a survey was developed in the Office of Rail Transport (UTK). The railway market entities communicated the information on implementation of the recommendations in a form of surveys to the President of the Office of Rail Transport.

**5.1. Analyzing information regarding implementation of recommendations**

The implementation status of the recommendations, based on the information communicated by UTK, is as follows:

The submitted analyses suggest that about 30% of the railway market enterprises did not communicate any information. The group of 241 entities that provided no information consists in 1 infrastructure manager and 8 railway carriers.



*A list of the entities’ responses to the letter by the President of the Office of Rail Transport.*

As a results of an analysis of the information submitted by the entities, the proposed manner for the recommendations implementation was accepted in case of 365 responses what constitutes more than 80% among 456 entities. In relation to the remaining enterprises of the railway sector, the Office of Rail Transport sent letters to complement and present the plan for implementation of the recommendations.

*List of evaluations of the entities’ responses*

While supervising implementation of the recommendations by the entities, the operations of which influence the safety of railway traffic and railway exploitation, the President of the Office of Rail Transport carried out 74 inspections at the premises of the railway enterprises in 2016.

 **Table - implementation status of PKBWK recommendations on improvement of safety**

|  |  |  |  |
| --- | --- | --- | --- |
| **Recommendations arising from the PKBWK Annual Report 2015 (issued in 2016)** | The degree, which the recommendations have been implemented in\*) | \*)No response (no answer) | \*)Not applicable |
| Implemented | Under implementation | Alternative actions |
| Recommendation 1 | 61 | 44 | 6 | 56 | 187 |
| Recommendation 2 | 20 | 35 | 6 | 64 | 229 |
| Recommendation 3a | 178 | 88 | 7 | 35 | 46 |
| Recommendation 3b | 125 | 134 | 9 | 40 | 46 |
| Recommendation 4 | 98 | 109 | 5 | 84 | 58 |

\*) regarding the number of entities (the general number of entities that declare implementation of recommendations according to the Office of Rail Transport - 354)

In 2016, PKBWK issued 4 recommendations in the Annual Report for 2015. The implementation status of the recommendations issued by the Committee is presented on the diagram:

While analyzing the implementation stage of the recommendations by the entities (considering the average values), it may be concluded that the recommendations were implemented in 27% of the market entities, in 23% they are under implementation, and in 2% some alternative actions were undertaken. The recommendations were not related to 32% of the entities and there was not information recorded in case of 16% of entities.

Detailed discussion of implementation of the recommendations issued by the Committee in 2015 is included in the Attachment to this Annual Report, developed on the basis of feedback from the Railway Transport Office.

**5.2. Summary from implementation of the Committee’s recommendations (based on the opinion issued by the Office of Rail Transport - UTK)**

The President of the Office of Rail Transport (UTK), while analyzing the collected data on implementation of the recommendations, obtained from authorized railway infrastructure managers, certified railway carriers, entities responsible for maintenance and entities that operate on the basis of safety certificates, finds that:

* there is a need for a positive evaluation of the recommendations implementation status by the entities that operate based on SMS or another accepted management system (infrastructure managers, railway carriers, users of railway sidings),
* a high number of entities, especially those operating on the basis of security certificates, did not communicate any information on implementation of the recommendations.

The reasons for no answer from the users of railway sidings will be identified through supervisory actions. The reasons for no answer from the users of railway sidings are explored during the supervisory actions carried out by the Office of Rail Transport. What is more, in case of users of railway sidings - a relatively new category of entities, which have certain duties as regards railway incidents (among others, to inform about the incidents, to report the incidents and implement the recommendations), the reason of failure to communicate the required information may be slight experience in the discussed area. These entities have been imposed with the above-mentioned duties since 1 March 2016, while - according to the Office of Rail Transport (UTK) - the legislator assumed a short, 6-month-long period for adjustment of internal regulations to the new provisions of the Regulation of the Minister of Infrastructure and Construction of 16 March 2016, on serious accidents, accidents and incidents in railway transport. As regards the entities that provided no response as well as those for which no proposed implementation manner for the recommendations was adopted, the Office of Rail Transport (UTK) drafted letters calling to provide the complementations or further explanations.

The recommendations issued by PKBWK pose a significant element and inspiration for actions in the field of education and security monitoring, carried out by the Office of Rail Transport, such as: cyclical meetings of the Safety Team, trainings for the railway market entities within the scope of the UTK Academy and the “Culture of Safety ” project.

**6. An analysis of occurrences that took place in 2016**

An increase in the general number of occurrences

In 2016, the general number of occurrences reported to the Committee by the infrastructure managers and users of railway sidings applicable for the place of the occurrence grew by 33.9 % in comparison to 2015, out of which:

* 2 serious accidents were recorded, investigated by the Committee (the same as in 2015, when also 2 serious railway accidents were recorded),
* the number of accidents increased by 9.4 %,
* the number of incidents grew by more than 63.7 %.

Accidents

The growth in the number of accidents took place in 19 categories (out of all 40 accidents of B category).

The greatest **increase** in the number of accidents took place in the following groups:

* B07 – making a maneuver that caused threat for the trains traffic
– from 1 to 4 accidents - i.e. an increase by 300%,
* B24 – fire in a train, shunting train or a rail vehicle (did not occur in 2015
; 3 incidents occurred in 2016) – by 300%
* B13 - a rail vehicle hits another rail vehicle or an obstacle (e.g. brake skid, luggage or postal cart, etc.) - by more than 137%,
* B15 - the travel route is opened too early or the barrier is raised and the switch is shifted under a rail vehicle - by more than 118%,
* B35 - occurrences with persons related to railway traffic (jumping out or falling out of a train, rail vehicle, strong approach or rapid braking of a rail vehicle) - by more than 83%,
* B03 - dispatch, receipt or travel of a rail vehicle on an improperly laid and unsecured route, or improper operation of railway traffic control devices - by more than 76%,
* B08 - runaway of a rail vehicle - by more than 66%,
* B11 - damage or poor technical condition of a car (including hitting the structural part of the car) - by more than 42%,
* B21 - rail vehicle hits a road vehicle (another road machinery, agricultural machinery) or is hit by a road vehicle, on a level crossing without a crossing system ( D cat. - by more than 34%.

The greatest **drop** in the number of accidents in relation to the previous year took place in the following categories:

* B12 - damage or improper activation of the railway traffic operation devices (3 occurrences in 2015; 1 occurrence in 2016) - by more than 66%
* B17 - improper loading, unloading, irregularities in securing the load or other irregularities in loading activities or wrong setting-up of the train or shunting train - by more than 57%,
* B20 - a rail vehicle hits a road vehicle (another road machinery, agricultural machinery) or is hit by a road vehicle, on a level crossing with an automatic crossing system with traffic lights and without boom barriers ( C cat. - by more than 31%,
* B31 - a rail vehicle hits persons crossing the railway tracks on the level crossing or supervised crossing - by 40%,
* B34 - a rail vehicle hits persons crossing the railway tracks outside the level crossings or pedestrian crossings at stations and on railway routes - by more than 28%.

Incidents

When compared to the previous year, there was a significant increase in the number of reported incidents in 2016, by more than 63.7 %.

An increase in the number of accidents and incidents is caused among others by:

* employing statistics to the railway incidents on railway sidings according to the amended national regulations,
* amendments to the Regulation of 16 March 2016 in the scope of qualification of occurrences related to disconnection of a train or a shunting train, which did not cause the cars to run away, as the C68 cat. incident. Previously, such incidents were treated as potentially hazardous situations (difficulties in exploitation).
* stricter qualification of the potentially hazardous situations as incidents and the fact that now the railway committees recognize situations classified beforehand in terms of exploitation difficulties as incidents, resulting from operations undertaken by the National Railway Accident Investigation Committee, Office of Rail Transport, infrastructure managers and railway undertakings.

The growth in the number of incidents took place in 22 categories (out of all 27 accidents of C category).

The areas, where the **increase** in the number of incidents took place, are:

* C 59 - uncontrolled release of dangerous goods from a car or packaging requiring authorities intervention or application of preparations for liquidation of fire, chemical, biological threat on a station or route - by 1400% (1 occurrence in 2015; 15 occurrences in 2016),
* C66 - a road vehicle fails to stop before a closed boom barrier (half-way barrier), damages the barrier or its road signals that warned about an approaching train, without a collision with a rail vehicle - by more than 766%,
* C41 - dispatch of a railway vehicle to an occupied, closed or opposite track or in a wrong direction (1 occurrence in 2015; 3 occurrences in 2016) - by 200%,
* C66 - disconnection of a train or a shunting train, which did not cause the cars to run away - 161 occurrences (the occurrences registered as incidents since 2016), it must be mentioned that a great number of incidents was requalified to the D category. i.e. exploitation difficulty,
* C43- dispatch, receipt or travel of a rail vehicle on an improperly laid and unsecured route, or improper or lack of operation of railway traffic control devices - by more than 147%.

The greatest **decrease** in the number of accidents took place in the following groups:

* C42 - receipt of a railway vehicle at the station on the closed or occupied track (4 occurrences in 2015; 0 occurrences in 2016) - by 400%,
* C55 - a fire in a train or railway vehicle not causing negative consequences for the property or environment, without any casualties - by more than 27%,
* C54 - damage or poor technical condition of a car causing the need to exclude it from operation as a result of the indication from the detection devices for the rolling-stock emergency status, confirmed in workshop conditions (hot axle-boxes, hot brake resulting in a shifted ring), as well as other faults in the rail vehicles in operation, observed by the operation personnel - by more than 10%.

**Victims of the accidents**

The total number of victims in the occurrences in 2016 dropped by more than 20.8% when compared to 2015, out of which the number of killed by more than 23.3% and the number of severely injured by more than 15.6% (Table 3). The group of victims is in majority composed of persons hit by rail vehicles while crossing the track in prohibited places, or at level crossings, persons jumping in and out of moving rail vehicle and users of the rail vehicles. It was recorded that 1 person (a passenger) and 4 members of train and railway vehicles personnel were killed as a result of jumping out of a train in motion.

The charts presented below illustrate basic data related to victims in 2016.

**Accidents on level crossings**

In 2016, when compared to 2015, there was an increase in the general number of accidents on the A, B, C, D cat. level crossings, by more than 18%, out of which:

* on the level crossings of A cat., an increase by 25% (by 2 accidents),
* on level crossings of B cat., an increase by 7% (by 1 accident),
* on level crossings of C cat., a decrease by 31 % (by 10 accidents),
* on level crossings of D cat., an increase by more than 33% (it also covers the users of railway sidings!).

The drop in the number of accidents took place at cat. C level crossings. At the same time, there was an increase in the number of accidents at A, B and D cat. level crossings. Especially when it comes to the increasing number of accidents on A, B and D cat. level crossings the managers should undertake appropriate corrective and preventive actions, according to the functioning safety management systems (SMS).

7. Remaining aspects of the Committee’s activity in 2016

In 2016 the Committee carried out its statutory operations, realizing its objectives and pursuing its challenges, with significant savings on the awarded funds, in relation to this year’s budget.

Within its actions, the Committee cooperated with other units of the Ministry, among others in the scope of giving opinions on projects of legal acts, sectoral programs, preparation of budget or organizational and personal issues.

Activities of the Committee were also related to cooperation with railway committees, internal organizations and enterprises in the country and abroad, especially:

* railway committees carrying out investigations supervised by the President of the Committee,
* prosecutor’s offices and police, carrying out preparatory investigations related to the occurrences,
* European Union Agency of Railways (EUAR) in the scope of participation in plenary sessions and conferences organized by the Agency, exchange of information and participation in working parties within EUAR,
* organizers of trainings and conferences in the scope of presentation of Committee’s activities and the manner, in which it carries out the investigations related to railway occurrences (serious accidents, accidents and incidents) by railway committees,
* Office of Rail Transport (UTK),

and participation in meetings related to assessment of the safety conditions in railway transport in railway enterprises.

In 2016, the Head of PKBWK, Mr. Tadeusz Ryś, carried on with the project (the first initiatives and concepts of the Head of PKBWK reported in 2011), intended to provide access to individual identification numbers for crossings on the level of rails by PKP PLK S.A., for operators of the 112 emergency number. The project assumes additional information to be placed on the back space of the “St. Andrew’s Cross” road sign, located before a level crossing or a pedestrian crossing, and on the housing of booms.

According to the concept of the proposed solution, the additional information is to allow fast contact with the railway infrastructure manager, and in case of a railway incident, to quickly inform the interested services so they can start their rescue action.

This actions can lead to minimization of causes and prevention of failures and railway occurrences as well as organizational improvement of removal of the consequences of those failures and occurrences on the level crossings and pedestrian crossings on the level of rails.

*One possible pattern to deliver additional information if to prepare a sticker with the following information:*

*a sticker template: yellow background, black characters*

|  |
| --- |
| **Crossing No** **003** **299 860****In case of emergency, call: 112****In case of failure, call: (22) 23 23 567, 606 968 563** |

*where:*

* *003 - is the railway line number,*
* *299.860 - is the location at the railway line (km-point)*
* *112 - the emergency phone to inform the services in case of an occurrence on the level crossing*
* *(22) 23 23 567; 606 968 563 – a phone number to the dispatcher of the railway infrastructure manager (PKP PLK), allowing the user of the level/pedestrian crossing to provide the dispatcher with information in case of a sudden event with a railway vehicle, causing negative consequences for human health, property or environment and other irregularities or threats on the level/pedestrian crossing.*

For comprehensive implementation of the project it is also significant to include the reported demand from the Ministry of Health, complement the data on railway crossings in the Universal Map Module system (at the disposal of GUGiK), for the needs of medical rescue services.

The entities especially involved in implementation of the project for the whole railway network and railway sidings into the rescue system are:

* Head Office of Land Surveying and Cartography (GUGiK)
* PKP Polskie Linie Kolejowe S.A. (PLK),
* Ministry of Internal Affairs and Administration (MSWiA)
* Ministry of Health (MZ),
* Ministry of Infrastructure and Construction (MIB).

The Head of PKBWK, Mr. Tadeusz Ryś, was the initiator and coordinator especially at the initial phase of the project implementation. It must be stressed that the national railway infrastructure manager was greatly involved in implementation of the project.

There were necessary details developed in 2017, which will be obtained by the emergency phone number operator after answering the call from both stationary and mobile phones used by the person communicating the information.

As for now, the substantive issues related to development of all details are in the final phase what gives an opportunity to implement the project within the whole PLK railway network already in 2017.

Additionally, the present Deputy of the Committee’s Head, Mr. Rafał Leśniowski, representing PKBWK during the meetings of working parties of the European Union Agency of Railways (EUAR) in cases related to discussions over causes of the railway accidents, also collected comparative information about signs on the level crossings in various EU member states.

In 2016, amendments to the Railway Transport Act entered into force (uniformed text
Dz. Dz.U. of 2016, item 1727, as amended), which have significant influence on operation of the Committee in 2016. In relation to the Committee, the changes are related to the following aspects:

* taking over the supervision by the Office of Rail Transport (UTK) President over proceedings carried out by railway committees (Article 13 para 1a, point 7a), till 29 February 2016 the supervision was carried out by the President of the Committee,
* wider protection of the Committee members - they cannot be called to act as a witness or an expert before courts or other bodies in the scope of cases carried out by the Committee (Art. 28a para 17),
* users of railway sidings are now obliged to inform the Committee about occurrences (Article 28g para 1),
* Broadening of competence of the Committee members in the scope of, among others, access to the railway area, travel in the train cab and inspection of managers, undertakings and users of railway sidings after showing the Committee member ID card, within the scope of affairs considering traffic safety as a result of occurrence (Article 28h para 2 points 7, 8 and 9),
* applying special legal protection to information, evidence and records from hearings of persons carried out by the Committee, including the prohibition to submit the documentation mentioned above to judicial bodies or other bodies carrying out proceedings (Article 28h para 4), unless the District Court in Warsaw gives its approval for their publication, if it recognizes that the overriding public interest justifies the disclosure (Art. 28h para 5),

The Act entered into force on 1 March 2016

In turn, the changes related to:

* increase in the number of permanent members of the Committee (Article 28a para 3) - a change in the organizational structure,
* the necessity to provide proper resources for operation of the Committee by the ministry in charge of transport (Article 28d para 1),

entered into force in the Regulation No 29 issued by the Minister of Infrastructure and Construction of 22 June 2017 on the Operational Rules and Regulations of the National Railway Accident Investigation Committee (OJ, Dz. Urz. Ministry of Infrastructure and Construction, item 48) and apply as of the day of publishing of this Annual Report.

8. Tasks of PKBWK for 2017

Within the current activities undertaken by the Committee in 2017, it will be necessary to realize the following tasks, among others:

* Committee’s carrying out activities resulting from amended national regulations (among others on railway lines and users of railway sidings),
* complementation of employment in 2 field divisions of the Committee along with adequate equipment,
* increasing the number of Committee permanent members to the extent enabling realization of broader tasks imposed on the Committee by amended national regulations,
* update and maintenance of databases for railway events,
* cooperation with the Railway Transport Office (UTK), especially in the scope of recommendations handed for implementation pursuant to competence of the Railway Transport Office President, and other activities in the scope of railway traffic safety improvement,
* analysis of proceedings communicated by the Head of the Office of Rail Transport (UTK) to the National Railway Accident Investigation Committee (PKBWK),
* cooperation with other units of the Ministry of Infrastructure and Construction in the area of drafting the amendments to national regulations,
* participation in meetings with representatives of national investigation bodies (NIB) of other EU member states and the European Union Agency of Railways (EUAR) within the scope of plenary meetings and working parties - exchange of experience and knowledge,
* cooperation and participation in working parties and trainings organized by the European Union Agency of Railways,
* trainings for the Committee members in the scope necessary for realization of its tasks,
* participation in necessary meetings with prosecutors and police,
* supervision over observance of budgetary assumptions developed by the Committee for 2017

9. Summary

In 2016, the total number of occurrences reported to the Committee grew by 33.9% when compared to the previous year.

When it comes to the number of accidents, there was an increase in occurrences (by more than 9%), while the number of serious accidents on the same level as incidents grew by more than 63%. There were two serious accidents in 2016 on A cat. level crossings, while in the previous year there was one accident on the A cat. level crossing, and one on the D cat. level crossing. A great number of B00 accidents may prove lack of in-depth analyses of circumstances of an accident or incident, which should be carried out during the inspection on-site.

The same period experienced a decrease in the number of accident victims, by more than 23%. Attention must be paid to the B34 category, which was updated as of the date of developing this report, i.e. August 2017 (there is a significantly lower number of occurrences than that recorded as of 31 December 2016, because of the accomplished proceedings of prosecutors and change in qualification of a part of the occurrences from “B34” to “S” (suicide) category.

An increase in the number of occurrences (accidents and incidents) results among others from including the users of railway sidings into the statistics and stricter qualification of potentially hazardous situations as incidents by railway committees, as well as amendment to the Regulation of the Minister of Infrastructure and Construction of 16 March 2016 on qualification of occurrences related to disconnection of a train or shunting train, which did not cause the cars to run away, as a C68 cat. incident. Previously, such incidents were treated as potentially hazardous situations (difficulties in exploitation). They pose more than 10% of the general number of railway occurrences from 2016.

The analysis of the number of occurrences in 2016 suggests an increase in the general number of railway occurrences - because of including the users of railway sidings into the statistics - by 138 occurrences. The general increase, including the users of railway sidings, is more than 8.9% of all railway occurrences not recorded by PKBWK in 2016.

Special attention should be paid to an increase in the number of serious accidents and accidents on level crossings. In 2016, when compared to the previous year, this increase reached 18% (including 2 serious accidents on protected level crossings, i.e. A cat.), when compared to 2014, a general increase by more than 4%.

In this report and in the Annual Report for 2015, the Committee issued a series or recommendations intended to - according to the Committee - improve safety in railway transport.

In 2016, the Committee fulfilled its statutory obligations, at the same time not exceeding the budgetary assumptions for 2016. They were implemented with effective cooperation with numerous entities, first of all with railway committees, Railway Transport Committee, infrastructure managers and railway undertakings.

Remaining activity of the Committee President and of the Committee itself was carried out within the scope of supervision of investigations performed by railway committees until 29 February 2016. This supervision forces an in-depth analysis of reasons for occurrences, on the basis of which conclusions preventing similar occurrences in the future were developed. The Committee played an arbitration role plenty of times, in relation to the railway committees that were unable to reach a common ground in terms of reasons and categories of occurrences during the realized investigations.

10. Contact details of PKBWK as of 8/1/2017

|  |
| --- |
| National Railway Accident Investigation CommitteeMinistry Of Infrastructure And Construction**ul. Chałubińskiego 4/6 building A****00-928 Warsaw****PERMANENT MEMBERS:** |
| Tadeusz Ryś President of PKBWKphone (0-22) 630-14-33, fax (0-22) 630-14-39  | Jan Andrzej Młynarczyk Deputy President of PKBWKphone (0-22) 630-14-34, fax (0-22) 630-14-39  |
| Rafał Leśniowski Secretary, Permanent member of PKBWKphone (0-22) 630-14-35, fax (0-22) 630-14-39  | Andrzej GniwekPermanent member PKBWK phone (0-22) 630-14-36, fax (0-22) 630-14-39 |
| Henryk ZgrzebnickiSecretary, Permanent member of PKBWKphone (0-22) 630-14-30, fax (0-22) 630-14-39  | **COMMITTEE’S SERVICE EMPLOYEE:**Barbara Pióro, phone (0-22) 630-14-33, fax (0-22) 630-14-39, e-mail: pkbwk@mib.gov.pl  |
| Division in Katowiceul. Rolna 4340-555 Katowice | Division in Poznańul. Składowa 461-897 Poznań |
| Karol Trzoński Permanent member of PKBWK coordinating the Division’s operations in Katowicephone (0-32) 607-24-65  | Benedykt Kugielski Permanent member of PKBWK coordinating the Division’s operations in Poznańphone (0-61) 225 51 00  |
|  | Dionizy Jędrych Permanent member of PKBWK - Division in Poznańphone (0-61) 225 51 01  |
| Emergency contact number 510 126 711 |

Website of PKBWK

The Committee’s website is available at:

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

tab: Tasks → Transport → Railway → National Railway Accident Investigation Committee

On the Committee’s website, the available information and documents are grouped according to the following classes:

* Immediate reporting of events (Article 28g),
* reporting of railway occurrences in writing (§),
* about the Committee
* law and documents,
* reports.

**ATTACHMENT**

**to the PKBWK Annual Report 2016**

 **Information on implementation of PKBWK recommendations issued in 2016.**

**based on data from the Office of Rail Transport**

Pursuant to the Attachment to the Commission Regulation (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 according to the Commission Regulation (EU) No 1169/2010 of 10 December 2010 on a common safety method for assessing conformity with the requirements for obtaining railway safety authorisation, railway undertakings and railway infrastructure managers, operating on the basis of the safety management system, are obliged to establish procedures ensuring that recommendations issued by the national safety body and the national investigation body are assessed and applied in justified cases, or their application is advised (Q2 criterion for a common safety method for assessing conformity).

Pursuant to Article 13(1a) point 4 of the Act dated 28 March 2003 on Railway Transport (uniform text: Dz. of 2005, item 1727, as amended), hereinafter referred to as the Railway Transport Act, President of the Railway Transport Office, while implementing his tasks, carries out a systematic monitoring over observance of the conditions or requirements provided for in the safety and authorisation certificates, including requirements related to the manner in which the railway undertakings deal with the safety recommendations issued by an investigation body.

Bearing in mind the above-mentioned information and obligations imposed on the railway sector entities in the area related to safety recommendations, the railway undertakings, i.e.
authorized infrastructure managers and certified railway undertakings operating on the basis of a safety certificate or authorisation issued by the President of the Office of Rail Transport (UTK), were called for information on implementation status of post-accident recommendations issued by the President of the National Railway Accident Investigation Committee in 2016:

* Recommendations published in the **Annual Report for 2015** pursuant to Art. 28l para 6 of the Transport Railway Act.

Implementation of recommendations issued in 2016 by PKBWK (based on information from the Office of Rail Transport - UTK).

The President of the Office of Rail Transport (UTK) supervises implementation of the Committee’s recommendations by the entities, whose operations influence safety of railway traffic and rail exploitation under regulations provided for in the Act. Therefore, the entrepreneurs from the railway sector were informed about their obligation to provide the Office of Rail Transport with information on implementation status of the recommendations issued by the Head of the National Railway Accident Investigation Committee in the Annual report for 2016. To facilitate implementation of the PKBWK’s recommendations by the railway market entities, there was a survey developed in the Office of Rail Transport (UTK). The railway market entities communicated the information on implementation of the recommendations in a form of surveys to the President of the Office of Rail Transport.

The railway market entities communicated the information on implementation of the recommendations in a form of surveys to the President of the Office of Rail Transport. The submitted analyses suggest that about 30% of the railway market enterprises did not communicate any information. The group of 241 entities that provided no information consists in 1 infrastructure manager and 8 railway carriers.

As a results of an analysis of the information submitted by the entities, the proposed manner for the recommendations implementation was accepted in case of 365 responses what constitutes more than 80% among 456 entities. In relation to the remaining enterprises of the railway sector, the Office of Rail Transport sent letters to complement and present the plan for implementation of the recommendations.

**Implementation status of “Recommendation No 1”** issued by the Committee, is presented on the diagram:

|  |  |  |
| --- | --- | --- |
| 1 | Implemented | 61 |
| 2 | Under implementation | 44 |
|  3 | Alternative action | 6 |
| 4 | no data (---) | 56 |
| 5 | N/A | 187 |

* **The recommendation implemented in 100%:** among others by 33 railway carriers,

15 users of railway sidings, 9 railway infrastructure managers and 2 entities responsible for maintenance.

* **Under implementation** - is implemented by 26 railway carriers, 13 railway users, 2 railway infrastructure managers and 3 entities responsible for maintenance.
* **Alternative actions - declared by 1 railway carrier, 3 users of railway sidings, 2 railway infrastructure managers.**

In the scope of Recommendation 1:

The Office of Rail Transport performed 69 supervisory actions, including several monitoring tasks at the premises of designated railway carriers and PKP Polskie Linie Kolejowe S.A.
In case of a part of the entities, the following irregularities were identified:

* no cooperation with the railway market entities, in cases related to the areas of common risk between the infrastructure manager and railway carriers, which makes it hard to implement adequate actions - risk control measures,
* failure to comply with the requirements in the scope of vehicles maintenance, irregularities regarding documentation and supervision over its maintenance,
* compliance of the undertaken actions with the applicable standards and regulations,
* irregularities regarding the use of DSAT devices,
* wrong qualification of occurrences.

Attention must be paid to the actions undertaken by the supervised entities, intended to implement the discussed recommendation, e.g. an increased number of inspections of the technical condition of the rolling stock and inspection travels, supervisions over technical condition of cars, monitoring of indications from the devices that register the damages as well as drawing conclusions and undertaking corrective and preventive actions that contribute to reduction in the number of damages.

**Implementation status of “Recommendation No 2”** issued by the Committee, is presented on the diagram:

|  |  |  |
| --- | --- | --- |
| 1 | Implemented | 20 |
| 2 | Under implementation | 35 |
| 3 | Alternative action | 6 |
| 4 | no data (---) | 64 |
| 5 | N/A | 229 |

* **Recommendation implemented in 100%:** among others by 8 railway carriers, 6 users of railway sidings, 5 railway infrastructure managers.
* **Under implementation** by among others 28 railway carriers, 2 railway users and 3 railway infrastructure managers.
* **Alternative action** - declared by 6 railway carriers.

In the scope of Recommendation 2:

There were 40 supervisory actions performed, including several monitoring tasks at the premises of designated railway carriers and PKP Polskie Linie Kolejowe S.A.
As a result of the performed actions, it was found out that the members of the railway committee are not equipped with adequate tools for reading the data from electronic recorders of travel parameters. In one case, it was suggested to undertake some pilot actions allowing to read the records online, coming from the video cameras that monitor the route. In a part of the cases there were no irregularities identified in this scope, meaning that the entities undertook actions pursuant to the issued recommendation.

**Implementation status of “Recommendation No 3a”** issued by the Committee, is presented on the diagram:

|  |  |  |
| --- | --- | --- |
| 1 | Implemented | 178 |
| 2 | Under implementation | 88 |
|  3 | Alternative action | 7 |
| 4 | no data (---) | 35 |
| 5 | N/A | 46 |

* **Recommendation implemented in 100%**: among others by 55 railway carriers, 98 users of railway sidings, 18 railway infrastructure managers (including the railway sidings) and 4 entities responsible for maintenance.
* **Under implementation** - is implemented by 15 railway carriers, 54 railway users, 10 railway infrastructure managers and 2 entities responsible for maintenance.
* **Alternative action –** declared by 5 users of railway sidings and 1 railway infrastructure manager.

In the scope of Recommendation 3a:

There were 86 supervisory actions performed, including several monitoring tasks at the premises of designated railway carriers and PKP Polskie Linie Kolejowe S.A. A significant part of supervised entities showed some irregularities related to, among others incompliance of the work terms and rules with the provisions of applicable regulations; incompliance of the adopted SMS system to the new regulations or the outdated provisions of the environmental decision.
In a part of the cases there were no irregularities identified, meaning that the internal regulations were adjusted to the requirements of the national legal acts.

**Implementation status of “Recommendation No 3b”** issued by the Committee, is presented on the diagram:

|  |  |  |
| --- | --- | --- |
| 1 | Implemented | 125 |
| 2 | Under implementation | 134 |
|  3 | Alternative action | 9 |
| 4 | no data (---) | 46 |
| 5 | N/A | 40 |

* **Recommendation implemented in 100%**: among others by 45 railway carriers, 59 users of railway sidings, 14 railway infrastructure managers (including the railway sidings) and 4 entities responsible for maintenance.
* **Recommendation implemented in 100%**: among others by 23 railway carriers, 88 users of railway sidings, 12 railway infrastructure managers (including the railway sidings) and 2 entities responsible for maintenance.
* Alternative action – declared by 2 railway carriers, 6 users of railway sidings and 1 railway infrastructure manager.

In the scope of Recommendation 3b:

There were 67 supervisory actions performed, including several monitoring tasks at the premises of designated railway carriers and PKP Polskie Linie Kolejowe S.A. It was found out within the course of the performed actions that during implementation of this recommendation the entities direct the employees to trainings intended to improve their qualifications, and adjust the internal rules to the applicable legal regulations. Nevertheless, during the inspection, there was a case identified where the employees were not directed to trainings.

**Implementation status of “Recommendation No 4”** issued by the President of the Office of Rail Transport, is presented on the diagram:

|  |  |  |
| --- | --- | --- |
| 1 | Implemented | 98 |
| 2 | Under implementation | 109 |
|  3 | Alternative action | 5 |
| 4 | no data (---) | 84 |
| 5 | N/A | 58 |

* **Recommendation implemented in 100%**: among others by 30 railway carriers, 48 users of railway sidings, 11 railway infrastructure managers and 6 entities responsible for maintenance.
* **Under implementation** - is implemented by 35 railway carriers, 56 users of railway sidings, 11 railway infrastructure managers (including the railway sidings).
* **Alternative action** – declared by 1 railway carrier, 3 users of railway sidings and 1 railway infrastructure manager.

In the scope of Recommendation 4:

There were 45 supervisory actions performed, including several monitoring tasks at the premises of designated railway carriers and PKP Polskie Linie Kolejowe S.A., as a result of which there were certain irregularities identified related to, among others incorrectly filled documentation, no cooperation with the entities as regards information exchange or failure to develop required bulletins. It was found out as a result of the performed tasks that the actions undertaken to implement the above-mentioned recommendation are among others: SMS analyses after the occurrences and trainings of the employees in the scope of legal requirements.

**Implementation of recommendations issued by PKBWK in 2016 by**

**PKP Polskie Linie Kolejowe S.A.**

- published in the Annual Report for 2015 as regards improvement of safety and about undertaken preventive measures and actions intended to implement the recommendations.

**Implementation of recommendations issued by PKBWK in 2016.**

**Annual Report for 2015 from operations of the National Railway Accident Investigation Committee**

**published on the PKBWK’s website in September 2016.**

Safety improvement recommendations issued by the Committee in annual reports based on Article 28l para 6 of the Act dated 28 March 2003 on Railway Transport issued in 2015 - published in the Annual Report of PKBWK for 2014.

* + 1. **PKP Polskie Linie Kolejowe S.A. infrastructure manager shall carry on the actions intended to limit the use of substitute signals on railway lines. - Implemented.**

PKP Polskie Linie Kolejowe S.A. infrastructure manager carries on with the actions provided for in the Railway Traffic Safety Improvement Programme in previous years and for 2017, under: Section “Monitoring” Objective M.8.1 “Supervisory actions preventing long-term realization of traffic on the basis of substitute signals and written orders” / Measure M.8.1.1; M.8.1.2 and Section “Improvement” Initiative D.3.3 “Preventing application of substitute signals (Sz) during investment and maintenance works” / Measure D.3.3.1; D.3.3.2 and Objective 8 “Elimination of reasons for long-standing realization of traffic on the basis of substitute signals and written orders” / Initiative D.8.1; D.8.2. What is more, the Management Board of PKP Polskie Linie Kolejowe S.A. in the Resolution No. 1099/2016 of 11/8/2016 adopted the priority safety objectives for 2017 for PKP PLK S.A., including an objective entitled “Elimination of reasons for long-term realization of traffic on the basis of substitute signals and written orders”.

According to the order included in the letters from the Automation and Telecommunications Office - the Railway Lines Plants deliver reports on trains traffic according to the substitute signal lasting more that three days every two weeks. Thanks to decisive actions undertaken by the Company, the number of traffic posts - where traffic was realized on the basis of substitute signals “Sz” for a long time - was reduced. In March 2012, traffic based on substitute signals was realized in 153 posts (applying “Sz” for more than 7 days), in December 2014 on 55 posts (applying “Sz” for more than 3 days), while in the report of 9 December 2015, the number of such posts amounted just to 31. The last report in 2016, dated 21 December, proved 34 locations with a status of active travel according to substitute signals. **However, it must be stressed that in 70% of those locations, the travels according to the substitute signal are caused by an investment under implementation.**

What is more, in accordance with the above-mentioned recommendation, the Guidelines on organization of periodic instructions in 2017 adopted the notion entitled “An analysis and successive elimination of reasons for employing substitute signals on traffic posts as a factor causing high risk of occurrence of threat”. Furthermore, permanent element of periodic instructions for such positions as a train dispatcher, a signalman, or a switch-man, included the notions related to “utilization of substitute signals by workers of traffic posts for a substitute signal with simultaneous indication of the W 24 sign”.

* + 1. **PKP Polskie Linie Kolejowe S.A. infrastructure manager, within the scope of the safety management system, shall undertake actions intended to analyze the risk at the stations not equipped with control of main track occupancy, and shall undertake adequate preventing measures allowing to limit the risk of the event. - Under implementation.**

In 2016, according to the decision made by the Management Board of PKP Polskie Linie Kolejowe S.A. within the field managed by the Company, there were works carried out related to development of the monitoring systems for tracks occupancy, as a results of which such systems were installed on 133 tracks, 35 stations and 24 railway lines.

According to the assumed criteria, the Management Board of the Company planned development of the tracks occupancy monitoring systems in 2016 on the railway stations mentioned below:

1. Sławęcice, track No. 1 and 2 of railway line No. 137,
2. Kędzierzyn Koźle KKA, ttrack No. 5 of railway line No. 709
3. Rudzieniec Gliwicki, track No. 1 and 2 of railway line No. 137,
4. Kutno, track No. 104 and 106 of railway line No. 003,
5. Warszawa Wileńska Marki, track No. 1 and 2 of railway line No. 21,
6. Długołęka, track No. 1 and 2 of railway line No. 143.

Development of the tracks occupancy monitoring system at those station was completed in the planned periods, and the installed devices were commissioned. The exception is posed by track No.104 and 106 at the Kutno station, where no necessary actions were undertaken because of the modernization works on that station planned to be started in June 2017, also including development of the occupancy monitoring system within the scope of the project from the Operational Program Infrastructure and Environment 7.1-8 *“Modernisation of the E20 railway line at the Warsaw-Poznań section, other works, Sochaczew - Swarzędz preparatory works”* financed from the European Union aid measures.

In 2017, actions related to development of the systems in question will be continued, covering 16 tracks on 11 stations of 7 railway lines within the scope of the project *“Modernization of the traffic control devices for safety improvement in selected points of a railway network”*, which will be implemented from the Company’s own resources, to the amount of about PLN 3,645,000 net. Regardless of the above, such an action was also assumed in the project entitled *“Improvement of safety and elimination of exploitation hazards on a railway network”*, which is included in the National Railway Program to be implemented in 2017 and later. The planned action covers 8 tracks at 4 stations of the railway line No. 14, within the operational field IZ Ostrów Wlkp. Furthermore, the actions in this scope are also planned within own actions of particular Railway Line Plants, during which the systems are planned to be developed on 20 tracks at 14 stations of 10 railway lines.

In general, the works related to development of the tracks occupancy monitoring systems were planned for 44 tracks at 29 stations of 18 railway lines. Taking into account the actions implemented in 2016 and planned for 2017 and later, there are still 483 tracks at 275 stations of 96 railway lines to be provided with the occupancy monitoring systems, with the estimated cost of about PLN 151,000,000 mln.

In 2017, in case of stations, which are not equipped with track insulation, there will be other actions taken up in the scope of implementing preventive measures that limit the risk of a certain occurrence, including: utilization of auxiliary locks (protecting or warning), a duty (entered into the field 43 RTPR) to control the station tracks occupancy “R-292”. In case of stations with track insulation, such an obligation is recommended in case of damage or improper operation of railway traffic control devices and track insulation. Principles of conduct during preparation of the route, and application of auxiliary measures by the personnel of traffic posts are constantly monitored and discussed by the instructor-control ans supervisory team during visits in the posts.

* + 1. **PKP Polskie Linie Kolejowe S.A. infrastructure manager shall undertake actions intended to change the Ir-8 manual or other instructions in the following scope:**
	1. **elimination of the notion of “exploitation difficulty” from the manual’s content,**
	2. **introduction of a litigation mechanism in case railway committee members cannot reach a common ground in relation to the causes, category, circumstances, preventive measures, etc., consisting in authorizing the President of the National Railway Accident Investigation Committee for final settlement of the dispute. Implemented**.

By the Order No 53/2015 of 8 December 2015, the Management Board of PKP Polskie Linie Kolejowe S.A. introduced (from 1 January 2016) the amended “Instructions for conduct in case of serious accidents, accidents and incidents on Ir-8 railway lines”, the content of which was modified in accordance with, among others, recommendation issued by the National Railway Accident Investigation Committee, i.e.:

1. the notion of “exploitation difficulty” was eliminated and replaced with the category of “potentially dangerous situations”. Application of a category of occurrences within the safety management system of an auxiliary infrastructure manager - except of serious accidents, accidents and incidents - (especially for the needs of preventing serious accidents, accidents and incidents) complies with point 2 letter h of Attachment III to the Directive 2004/49/EC on railway safety and criterion Q from Attachment II to the Commission Regulation (EU) No 1169/2010 on a common safety method for assessing conformity with the requirements for obtaining railway safety authorisation (OJ Dz. Urz. 327, of 12/11/2010)
2. in § 26. “Proceedings in disputes” was provided with paragraphs 5 - 8, regulating the principles of operation of a litigation team under auspices of PKBWK.

Furthermore, with the resolution No. 686/2016 of 12 July 2016, the Management Board of PKP Polskie Linie Kolejowe S.A. enforced (from 1 September 2016) the new version of the “Instructions for conduct in case of serious accidents, accidents and incidents on Ir-8 railway lines”, the content of which (among others in the scope of conduct in disputable cases) has been adjusted to the currently applicable national legal acts.

* + 1. **The infrastructure managers and railway undertakings shall take up regular actions intended to:**
	1. **Guarantee proper human resources and equipment, allowing to carry out proceedings in railway committees. Implemented.**

The railway committees are composed of designated specialized members, according to the scope of their expertise and skills in a given sector, to carry out the investigation of the occurrence. The personal composition of the railway committees is complemented on continuous basis in case of change in work positions or end of work in the facility’s structure. The Railway Line Plants equip the members of railway committees with photo cameras or cell phones with high-resolution cameras. All members of railway committees were provided with the new Instructions Ir-8 along with the *Interpretation guide* for their personal use. The infrastructure manager, to ensure appropriate human resources and equipment allowing to carry out the investigations in railway committees undertakes systematic actions that consist in:

* designating of workers with adequate authorization for participation in works of a railway committee, according to the Template in the attachment to Ir-8,
* ongoing updates to the facility and local committees’ composition,
* ongoing monitoring of the railway committees’ equipment,
	1. **Constantly improve knowledge and skills of the committee members carrying out proceedings related to the occurrences. Implemented.**

Improvement of knowledge and skills of the railway committees’ members is carried out through:

* periodical instructions and seminars conducted by employees of the Company’s HQ Security Office,
* exchange of experiences on emergency-prevention meetings and exchange of experiences between the railway committees’ members,
* self-education,
* ad-hoc trainings conducted by the Head of PKBWK and heads of the Inspection and Training Department.

Additionally, implementation of the above-mentioned recommendation took place at three stages:

**I stage** - regarded the inspectors of various specializations employed in the Company’s organizational units. **113** persons were trained in total.

**II stage** - regarded the heads of the Exploitation Section, deputy heads of the Exploitation Section, masters of various specialties employed in the Exploitation Section and heads of sections (exploitation, automation and telecommunication, roads, energetics as well as monitoring and training), as well as controller (of traffic, automation, roads) and members of railway committees not included in the previously listed groups of employees. Implementation of the recommendations related to improvement of knowledge and skills of the railway committees’ members was realized via a periodical exam for employees subject to the internal exam and members of the railway committees. The exam in question was carried out from the first to the fourth quarter of 2016.

**III stage** - regarded the employees hired in the Company’s organizational units, and was performed in a form of internal conferences, meetings and workshops in PKP Polskie Linie Kolejowe S.A. **224** persons participated in total.

**Recommendations issued in 2016 and published in the PKBWK Annual Report for 2015.**

* + 1. **Within the operated management systems, the infrastructure managers and railway undertakings shall carry on actions intended to reduce the number of occurrences caused by bad technical condition or rolling stock without drive.**

**- Implemented.**

PKP PLK S.A. undertakes varied actions intended to reduce the number of occurrences caused by the poor technical condition of the rolling stock. Through maintaining the rolling stock on the highest level of safety, according to: Maintenance System Documentation, Policy of the Maintenance Management System (MMS) applicable in PKP PLK S.A.

Protection of the Company’s infrastructure, rolling stock, and thus improvement in safety of carriage emerges through modernization of the existing and development of new devices for detection of the rolling stock emergency statuses - DSAT. Furthermore, the oldest devices (with the poorest technical condition) are being replaced. What is more, there are DSAT devices installed in new locations every year, the operation of which allows more effective protection for the Company’s infrastructure and rolling stock. For more effective utilization of data obtained from DSAT devices, there was a superior IT system SID developed, allowing remote monitoring of devices as regards their efficiency and effectiveness, as well as of the emergency statuses detected in the rolling stock. Monitoring of the efficiency and effectiveness of DSAT devices installed on the railway network is carried out on an on-going basis, and the information obtained from the SID IT system allow to maximally reduce the influence of gear elements on the Company’s technical infrastructure.

The railway traffic safety improvement program includes the actions that consist in monitoring of the faults in the rolling stock based on the indications from the DSAT devices and of the faults detected by the devices that identify the emergency statuses of the rolling stock based on the information collected from the SID system. What is more, when the risk is classified as “unacceptable” or “tolerated”, there are additional risk control measures determined and implemented - pursuant to the Procedure No. SMS/MMS-PD-05 “Corrective and preventive actions”.

The Railway Lines Plants carry out analyses (on-going actions) of occurrences and potentially hazardous situations, qualify and categorize them according to the Ir-8 Instructions. The maintenance process of the railway vehicles in the Company is carried out via:

* complex and thematic audits of the Maintenance Management System,
* inspections over observance of the Maintenance Management System,
* updates of the MMS documentation integrated with the SMS documentation,
* implementation of the periodical instruction with consideration of the SMS and MMS thematics,
* optimization of quantity and equipment for technical facilities utilized for maintenance of railway vehicles.
	+ 1. **Infrastructure managers and railway undertakings that have digital data registering devices (speed, statuses of devices, etc.) installed in their rail vehicles and route monitoring devices (registration of image or image and sound) shall take up actions intended to equip the railway committee members in proper tools enabling to read data from the recorders on site immediately after the occurrence. - Implemented.**

The need to install digital devices for data recording and route monitoring equipment in the exploited and new railway vehicles with drive purchased by PKP PLK S.A. The mentioned devices are planned to be installed in the following types of railway vehicles:

1. In case of modernization: railway vehicles with a drive, characterized with maximum transport speed of at least 120 km/h.
2. In case new railway vehicles are purchased:
* railway vehicles with a drive - motor cars and handcars for independent travels on a railway track, or with technical cars and goods wagons;
* locomotives with power exceeding 300 KM.

After the railway vehicles are equipped with the digital data recording devices and route monitoring equipment, the railway committees’ members will be successively equipped with adequate tools allowing to read the data from that recorders.

When it comes to the currently exploited railway vehicles, equipped with the above-mentioned devices, the railway committees’ members designated by the infrastructure manager were provided with the possibility to read the data, via e.g. software installed on the computers. According to the Ir-8 Instructions, the actions undertaken by the railway committee on the site of the accident or incident, regarding the consequences and circumstances of the occurrence, it is ordered to read and secure the recordings from the devices for the needs of the investigation, by an employee of the organizational unit of the infrastructure manager, designated by the railway committee, user of the railway siding or railway carrier that exploits the recording device.

* + 1. **According to changes in provisions of the Act dated 28 March 2003 on Railway Transport and changes of implementation acts to the Act, considering performance of accident investigation procedures, the infrastructure carriers and railway undertakings:**
			- 1. **shall adjust the internal regulations, safety management systems (SMS) and maintenance management systems (MMS) to the amended national legal acts,**

By way of Resolution No. 686/2016 by the Management Board of PKP Polskie Linie Kolejowe S.A., of 12 July 2016, the new “Instructions for conduct in case of serious accidents, accidents and incidents on Ir-8 railway lines” was enforced in the Company since 1 September 2016, adjusted to the amended national regulations.

The Company, as en entity responsible for maintenance, updated the provisions of the Maintenance Management System included in the Procedure No. SMS/MMS-PW-2 Railway vehicles maintenance - revision 2 of 11 October 2016. There was also the revision 2 of the procedure SMS/MMS-PW-03 “Conduct in case of railway occurrences” adopted in PKP PLK S.A., which was adjusted to the national regulations and the new Ir-8 Instructions.

PKP Polskie Linie Kolejowe S.A. monitor the national and EU legislative process. If there is a need to adjust the internal regulations of the Company to the amended or new legal regulations, appropriate actions are undertaken. A standard practice employed in the Company is to designate working expert parties that develop changes in the existing or create new internal regulations adjusted to the character of the operations carried out by PKP PLK S.A.

 What is more, the Maintenance Management System Proxy and Security Office related to SMS monitor currentness of the legal regulations on interoperability, SMS and other requirements.

They report all amended documents regarding MMS and SMS for publishing in the Intranet network to provide all employees with access to them. The Company’s employees that the implemented changes are related to, are acquainted with them.

* + - * 1. **shall ensure that the employees delegated to work in railway committees have current knowledge in the amended national, internal, SMS and MMS regulations as well as technical expertise -Implemented.**

The new “Instructions for conduct in case of serious accidents, accidents and incidents on Ir-8 railway lines” was handed to the Company’s organizational units. Within the scope of internal conferences, meetings and workshops in PKP Polskie Linie Kolejowe S.A. that took place in:

* Railway traffic safety conference, 6-8 April 2016 in Wieliczka, with participation of employees employed in the Company’s organizational units on the following positions: deputy exploitation director, organizational units manager for inspection and instructions and the head of the Railway Traffic Management Branch of the Railway Traffic Management Center in Warsaw, and workers employed on the position of inspector in the Company’s HQ - there were **71** persons trained in total.
* The workshops regarding the new Ir-8 Instructions August 2016 in Warsaw, participated by workers employed in the Company’s organizational units on the following positions: deputy exploitation director, deputy technical director, organizational unit manager for inspection and instructions and for exploitations - there were **92** persons trained in total.
* A meeting under a name “Responsibility in building the safety culture” between 12 and 13 December 2016 and 15 - 16 December 2016 in Ożarów, participated by workers employed in the Company’s organizational units on the following positions: instructor and inspector (each sector) and workers employed in the position of an inspector in the Company’s HQ - **224** persons in total.

Within the scope of the listed meetings, the workers of the Security Office, while conducting the lectures and presentations, got the participating representatives of the Company’s organizational units familiar with amendments in the national regulations and internal rules of the Company regarding execution of accident investigation proceedings.

Pursuant to § 17 of the Instructions regarding professional preparation and improvement of employees of PKP Polskie Linie Kolejowe S.A. Ia-5, the Exploitation Office, responsible for correct implementation of periodical instructions, draws up the “Guidelines on organization of periodical instructions” for each year.

The “Guidelines on organization of periodical instructions for group XVII from the “List of positions in the Company that are subject to periodical instructions”, including the following positions: head of the department (of exploitation, automation and telecommunications, road, energetics, inspection and instructions), head, deputy and master of the Exploitation Section, inspector and member of the railway committee (included in the list

 mentioned in § 10 para 1 Ir-8), there was a duty assumed for performance of periodical instructions in a form of a seminar, amounting to 6 hours per year, related to the knowledge in the processes of the Safety Management System (SMS), Maintenance Management System (MMS) and recommendations included in the reports by PKBWK. The seminars will be conducted by the SMS coordinator in the Company’s organizational unit, based on the presentation handed by the Company’s HQ Security Office. The remaining number of 10 hours included in the schedule of periodical instructions will be devoted to discussion of on-going issues related to railway exploitations, technical notions and legal issues, including amendments to regulations, etc.

**RECOMMENDATIONS - ISSUED IN 2016:**

**recommendations issued by the National Railway Accident Investigation Committee in the Annual Report 2015
based on Article 28l para 6 of the Act of 28 March 2003 on Railway Transport:**

**Implementation of recommendations (in selected market entities), based on the materials provided for by: Office of Rail Transport (UTK)**

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| **No.** | **CONTENT OF THE RECOMMENDATION**  | **IMPLEMENTATION** |
| 1. | Recommendation 1Within the operated management systems, the infrastructure managers and railway undertakings shall carry on actions intended to reduce the number of occurrences caused by bad technical condition or rolling stock without drive. | **Regarding PKP Cargo S.A. (and based on information communicated to PKBWK)**1. **Description of undertaken actions**
	1. The Company, according to the railway traffic safety improvement program in PKP CARGO S.A. in 2016 and 2017 undertakes the following actions intended to reduce the number of occurrences caused by bad technical condition of the rolling stock without drive:
* within the scope of MMS, monitoring of the scope of damages to cars that are withdrawn from operation because of technical faults,
* inspections of notions related to maintenance of cars in the Company’s plants,
* inspection of the technical condition of cars at shunting stations,
* maintenance meetings with the Company’s Plants and meetings with the commissioning officers.
	1. there are audit actions carried out within the scope of internal audits of the SMS System, related to implementation of the P/12 Procedure, Maintenance of the rolling stock efficiency, and the actions will be carried on in 2017,
	2. within the scope of the internal audits of the MMS, there are audit actions carried out, related to implementation of the following procedures: MMS-03 Performance of maintenance and MMS-02 Management of the goods wagons maintenance,
	3. check and verification audits at the subcontractors’ for repairs of cars,
	4. in case of inspections and repairs of cars, carried of by the external contractors (mainly by PKP CARGOTABOR Sp. z o.o.), the service agreements assumes broader scopes of repairs of parts and elements that influence the railway traffic safety, the check and verification audits at the subcontractors’ of the repairs of cars,
	5. The Company monitors the data in the SEPE and SID systems related to the cases when the rolling stock emergency status detection devices (DSAT) were activated, regarding its own rolling stock and that accepted for carriage, and undertakes actions intended to limit the identified threats by directing the vehicles for inspections on workshop posts.
1. **System actions:**

According to point 1.* 1. f) the Company carries out the railway traffic safety improvement program of PKP CARGO S.A. in 2016, and there was the railway traffic safety improvement program of PKP CARGO S.A. in 2017 developed,
	2. the schedule of internal audits of the SMS for 2016 is under implementation. The schedule of internal audits of SMS for 2017 was developed and approved pursuant to the internal procedures,
	3. the schedule of internal audits of the MMS for 2016 is under implementation. The schedule of internal audits of MMS for 2017 is under development.
	4. there was a mode of status acquisition determined in the Company’s internal regulations related to the principles of providing the plants with a status of approved manufacturer of a products or service provider.

**Implementation stage** - continuous. **Implementation percentage** - 100% (according to data delivered to PKBWK). |
| 2. | Recommendation 2 Infrastructure managers and railway undertakings that have digital data registering devices (speed, statuses of devices, etc.) installed in their rail vehicles and route monitoring devices (registration of image or image and sound) shall take up actions intended to equip the railway committee members in proper tools enabling to read data from the recorders on site immediately after the occurrence. | **Regarding PKP Cargo S.A.****Description of undertaken actions**According to the principles adopted in PKP CARGO S.A. in case of a railway occurrence with the Company’s railway vehicle equipped with digital data recording devices, upon the committee’s request, there is an authorized employee directed to the site of the accident, holding competence and tools to read out the data from the recorders. At the same time, the Company deliberates training and equipping the employees that take part in the railway committees’ works (railway committees’ members) with necessary tools for reading out the data from digital recorders.The mode of conduct with electronic data carriers is determined by an internal regulation.**Implementation stage** - an alternative action. **Implementation percentage** - 100%. |
| 3. | Recommendation 3aAccording to changes in provisions of the Act dated 28 March 2003 on Railway Transport and changes of implementation acts to the Act, considering performance of accident investigation procedures, the infrastructure carriers and railway undertakings:3.a. shall adjust the internal regulations, safety management systems (SMS) and maintenance management systems (MMS) to the amended national legal acts,  | **Regarding PKP Cargo S.A.****Description of undertaken actions** The following were revised:* Safety Management System Books (SMS),
* “Instruction on conduct in case of railway accidents and incidents Cbr-1”,

**Systemic actions** that were undertaken to implement the recommendations and which minimize the risk level in railway transport: * There was an analysis carried out, regarding the influence of changes in regulations on the railway system safety, and there was a modification to the Instructions and Procedures of SMS made based on the “Request for change”. The above was confirmed by the Member of the Management Board of the Company, in charge of SMS

**Implementation stage** - implemented in 100% |
|  4. | Recommendation 3bRegarding changes in the provisions of the Act of 28 March 2003 on railway transport, and amendments to the implementation acts for the Act, as regards performance of accident proceedings, the infrastructure managers and carriers ensure that the employees designated for work in the railway committees have revised knowledge on the amended national regulations, internal rules as well as safety and maintenance management systems, along with technical expertise. | **Regarding PKP Cargo S.A.****Description of undertaken actions**The employees designated for works in railway committees are informed about amendments to the national regulations, internal rules as well as the safety and maintenance management systems with use of IT systems, including the internal Intranet network, the electronic documents and e-mails circulation system. Furthermore, the amendments are discussed during the cyclical meetings and trainings.**System actions:**According to the internal regulations, the employees designated for work in railway committees must prove, among others, the knowledge of regulations and instructions related to infrastructure, operation and safety of railway traffic as well as requirements for devices, vehicles and railway structures. What is more, they are obliged to broaden their knowledge systematically, also during trainings organized by the Company.**Implementation stage** - implemented in 100% |
| 5. | Recommendation 4A conclusion drawn from the analysis by the President of the Office of Rail Transport (UTK):Information on actions that the Entity undertook to ensure that the results of the railway incident investigation include an adequate and in-depth analysis with identification of all required causes.  | **Regarding PKP Cargo S.A.****Description of undertaken actions**The Company carried out verification of proceeding files regarding railway occurrences, and the applications are handed to the interested employees on on-going basis. What is more, there were two trainings organized in 2016, with participation of, among others, representatives of the Office of Rail Transport for the Company’s workers taking part in the railway committees’ works. There were issues related to, among others, diligent and in-depth inspections and analyses of circumstances and causes of the railway occurrences raised during the trainings.**System actions:**According to the railway traffic safety improvement program, the Company verifies the proceedings files related to the occurrences, and organizes trainings for employees that take part in the works of the railway committees, during which the principles of adequate analysis, identification of causes, qualification of railway accidents and application of adequate preventive measures are employed. **Implementation stage** - implemented in 100% |
| 6. | Recommendation 1Within the operated management systems, the infrastructure managers and railway undertakings shall carry on actions intended to reduce the number of occurrences caused by bad technical condition or rolling stock without drive. | **Regarding DB Cargo Polska S.A.****Description of undertaken actions**The following corrective actions were introduced to limit the failures and faults in the cars maintained by DB Cargo Polska S.A.:* in case of an emergency or wear of the rolling bearing elements, there was a requirements to replace a complete bearing introduced,
* there were amendments made to the Maintenance System Documentation (DSU) for railway vehicles without drive, limiting the bearings exploitation period to 24 years,
* the wheel sets with tyred wheels are being successively replaced by sets with mono-block wheels. The above actions allowed to reduce the amount of damages in own cars,
* there was a requirement introduced to replace the brake shoelocker and changer for the P4 stop level (previously, only during P5) - a change in DSU.

**System actions:** Unacceptable risk level initiates undertaking of corrective actions and monitoring of the process in accordance with the M09.4 procedure Implementation of corrective and preventive actions. Development, supervision and management of the safety improvement program, the implementation of which is reported in the management review, based on the M06.17 procedure Review of the Integrated Management System.**Implementation stage** - under implementation**.** **Implementation percentage** - 75%. **Implementation date** - 03-31-2017.  |
| 7. | Recommendation 2 Infrastructure managers and railway undertakings that have digital data registering devices (speed, statuses of devices, etc.) installed in their rail vehicles and route monitoring devices (registration of image or image and sound) shall take up actions intended to equip the railway committee members in proper tools enabling to read data from the recorders on site immediately after the occurrence. | **Regarding DB Cargo Polska S.A.****Description of undertaken actions**Locomotives exploited by DB Cargo Polska S.A. are equipped in electronic devices that record speed, statuses of devices and sound. No electronic image recorders were installed. Recorders of speed and status of devices were installed: QUADS, PIAP i DEUTA-WERKE-ADF-3.The railway committees’ members of DB Cargo Polska S.A. have a portable computer with installed software allowing to read the data from QUADS and PIAP speed recorded on site of the railway occurrence.When the tests are completed, the members of the railway committees will be equipped with software allowing to read the data from the DEUTA-WERKE-ADF-3 recorder on site of the railway occurrence.The purpose of the undertaken tests is the possibility to download the data immediately after the occurrence or incident. There were radio-telephone sets installed on the locomotives exploited by DB Cargo Polska S.A., manufactured by Koliber and Pyrlandia. Only the sets manufactured by Koliber have the function of recording the conversations. Currently, the conversations are saved by the radio-communication service. In 2017, it is planned to equip the railway committees’ members in software allowing to read the data from the recorders.**System actions:**Unacceptable risk level initiates undertaking of corrective actions and monitoring of the process in accordance with the M09.4 procedure Implementation of corrective and preventive actions. Additionally, based on the M06.4 procedure Reporting of safety indicators, implementation of recommendations by PKBWK, is one of the elements that create the Annual safety report. The elements included in the Annual report pose the basis for development of the safety improvement program in accordance witht he M06.1 procedure Development, supervision and management of the safety improvement program, the implementation of which is reported in the management review based on the M06.17 procedure Management review of hte Integrated Management System.**Implementation stage** - under implementation**.** **Implementation percentage** - 75%. **Implementation date** - 03-31-2017 |
| 8. | Recommendation 3aAccording to changes in provisions of the Act dated 28 March 2003 on Railway Transport and changes of implementation acts to the Act, considering performance of accident investigation procedures, the infrastructure carriers and railway undertakings:3.a. shall adjust the internal regulations, safety management systems (SMS) and maintenance management systems (MMS) to the amended national legal acts,  | **Regarding DB Cargo Polska S.A.****Description of undertaken actions**Amendments to legal acts applicable in the Republic of Poland are analyzed in monthly cycles, based on the performed analyses the internal rules and management systems of DB Cargo Polska S.A. are revised.The PKBWK’s recommendations are registered in the kept Register of threats, based on the requirements of the M06.2 procedure Identification of threats, and afterwards the recommendations are monitored through the estimated risk level, according to the M06.3 procedure Analysis of technical and operational risk.**System actions:** Unacceptable risk level initiates undertaking of corrective actions and monitoring of the process in accordance with the M09.4 procedure Implementation of corrective and preventive actions. Additionally, based on the M06.4 procedure Reporting of safety indicators, implementation of recommendations by PKBWK, is one of the elements that create the Annual safety report. The elements included in the Annual report pose the basis for development of the safety improvement program in accordance with the M06.1 procedure Development, supervision and management of the safety improvement program, the implementation of which is reported in the management review based on the M06.17 procedure Management review of the Integrated Management System.**Implementation stage** - implemented. **Implementation percentage** - 100%. |
| 9. | Recommendation 3bRegarding changes in the provisions of the Act of 28 March 2003 on railway transport, and amendments to the implementation acts for the Act, as regards performance of accident proceedings, the infrastructure managers and carriers ensure that the employees designated for work in the railway committees have revised knowledge on the amended national regulations, internal rules as well as safety and maintenance management systems, along with technical expertise. | **Regarding DB Cargo Polska S.A.****Description of undertaken actions**Employees taking part in works of the railway committees and candidates for members of the railway committees are trained on regular basis (at least once a year), in the scope of legal requirements and good practices regarding performance of proceedings after accident occurrences.In 2016, they were trained in requirements stipulated in the Act on Railway Transport and in the Regulation by the Minister of Infrastructure and Construction of 16.03.2016 on serious accidents, accidents and incidents in railway transport.**System actions:**Unacceptable risk level initiates undertaking of corrective actions and monitoring of the process in accordance with the M09.4 procedure Implementation of corrective and preventive actions. Additionally, based on the M06.4 procedure Reporting of safety indicators, implementation of recommendations by PKBWK, is one of the elements that create the Annual safety report. The elements included in the Annual Report posed a base for development of the safety improvement program, according to the M06.1 procedure Development, supervision and management of the safety improvement program, the implementation of which is reported in the management review, based on the M06.17 procedure Review of the Integrated Management System.**Implementation stage** - implemented. **Implementation percentage** - 100%. |
| 10. | Recommendation 4A conclusion drawn from the analysis by the President of the Office of Rail Transport (UTK):Information on actions that the Entity undertook to ensure that the results of the railway incident investigation include an adequate and in-depth analysis with identification of all required causes.  | **Regarding DB Cargo Polska S.A.****Description of undertaken actions**All employees taking part in the works of railway committees were trained in requirements related to performance of proceedings after a railway occurrence, with consideration of an in-depth analysis of incidents, including identification of all causes why the incidents occurred, including the system causes.The PKBWK’s recommendations are registered in the kept Register of threats, based on the requirements of the M06.2 procedure Identification of threats, and afterwards the recommendations are monitored through the estimated risk level, according to the M06.3 procedure Analysis of technical and operational risk.**System actions:**Unacceptable risk level initiates undertaking of corrective actions and monitoring of the process in accordance with the M09.4 procedure Implementation of corrective and preventive actions. Additionally, based on the M06.4 procedure Reporting of safety indicators, implementation of recommendations by PKBWK, is one of the elements that create the Annual safety report. The elements included in the Annual report pose the basis for development of the safety improvement program in accordance with the M06.1 procedure Development, supervision and management of the safety improvement program, the implementation of which is reported in the management review based on the M06.17 procedure Management review of the Integrated Management System.**Implementation stage** - implemented. **Implementation percentage** - 100%. |
| 11. | Recommendation 1Within the operated management systems, the infrastructure managers and railway undertakings shall carry on actions intended to reduce the number of occurrences caused by bad technical condition or rolling stock without drive. | **Regarding LOTOS Kolej sp. z o.o.****Description of undertaken actions**The LOTOS Kolej Company pays attention to the technical condition of the rolling stock entrusted for exploitation. The leased cars undergo detailed technical inspections, against a hand-over protocol, describing the cars’ technical condition. The occurrences with the rolling stock are analyzed in terms of a potential probability of repeated emergence of the failure.**System actions:**The Company monitors the occurrences with part of the rolling stock entrusted to the Company, in terms of its technical condition. The preventive measures taken by the railway committees during the investigations are discussed on the periodical instructions with those employees who are directly related to the carriage process. What is more, there are Operative Commands issued, drawing the employees’ attention to the faults of the rolling stock detected in the recent period.**Implementation stage** - under implementation**.Implementation percentage** - 90% (as of 31/12/2016) |
| 12. | Recommendation 2 Infrastructure managers and railway undertakings that have digital data registering devices (speed, statuses of devices, etc.) installed in their rail vehicles and route monitoring devices (registration of image or image and sound) shall take up actions intended to equip the railway committee members in proper tools enabling to read data from the recorders on site immediately after the occurrence. | **Regarding LOTOS Kolej sp. z o.o.****Description of undertaken actions**The designated members of railway committees were equipped with memory carriers for reading out of the locomotive data, and programs allowing their interpretation (working parameters of a rail vehicle with drive). Some members of railway committees were authorized to read out the data from image recorders, from the front of the locomotive and from the train driver’s cab.**System actions:** The Document No. ZSZ KOL/ZA/015/14/DN - on recording of the image from the video cameras and sound records from the train driver’s cab from the recorders installed on locomotives.**Implementation stage** - implemented. **Implementation percentage** - 100%. |
| 13. | Recommendation 3aAccording to changes in provisions of the Act dated 28 March 2003 on Railway Transport and changes of implementation acts to the Act, considering performance of accident investigation procedures, the infrastructure carriers and railway undertakings:3.a. shall adjust the internal regulations, safety management systems (SMS) and maintenance management systems (MMS) to the amended national legal acts,  | **Regarding LOTOS Kolej sp. z o.o.****Description of undertaken actions**The LOTOS Kolej Company adjusted its internal Procedures and instructions to the amended legal regulations.**System actions:**The Procedures in the systems ZSZ KOL.47.02.00.00 Conduct and response in case of railway occurrences and the Instruction LOTOS-R4 Instructions for conducts in case of serious accidents, accieents and incidents in railway transport were amended.**Implementation stage** - implemented. **Implementation percentage** - 100%. |
| 14. | Recommendation 3bRegarding changes in the provisions of the Act of 28 March 2003 on railway transport, and amendments to the implementation acts for the Act, as regards performance of accident proceedings, the infrastructure managers and carriers ensure that the employees designated for work in the railway committees have revised knowledge on the amended national regulations, internal rules as well as safety and maintenance management systems, along with technical expertise. | **Regarding LOTOS Kolej sp. z o.o.****Description of undertaken actions**The amended Procedure KOL.47.02.00.00 and the Instruction LOTOS-R4 were communicated to all interested employees in a manner assumed in the Company, i.e. via the ZSZ website.**System actions:**The amended Procedure KOL.47.02.00.00 and the Instruction LOTOS-R4 were communicated to all interested employees in a manner assumed in the Company, i.e. via the ZSZ website.**Implementation stage** - implemented. **Implementation percentage** - 100%. |
| 15. | Recommendation 4A conclusion drawn from the analysis by the President of the Office of Rail Transport (UTK):Information on actions that the Entity undertook to ensure that the results of the railway incident investigation include an adequate and in-depth analysis with identification of all required causes.  | **Regarding LOTOS Kolej sp. z o.o.****Description of undertaken actions**The amended Procedure KOL.47.02.00.00 and the Instruction LOTOS-R4 were communicated to all interested employees in a manner assumed in the Company, i.e. via the ZSZ website.**System actions:**The amended Procedure KOL.47.02.00.00 and the Instruction LOTOS-R4 were communicated to all interested employees in a manner assumed in the Company, i.e. via the ZSZ website.**Implementation stage** - implemented. **Implementation percentage** - 100%. |
| 16. | Recommendation 1Within the operated management systems, the infrastructure managers and railway undertakings shall carry on actions intended to reduce the number of occurrences caused by bad technical condition or rolling stock without drive. | **Regarding PKP Linia Hutnicza Szerokotorowa sp. z o.o. in Zamość****Description of undertaken actions (system actions)**Maintenance Department along with the subjected organizational units (Rolling Stock Maintenance Sections) undertake constant intensified supervision over technical revision points.According to the provisions of the Safety Improvement Program for 2016 in Chapter IV. “Actions in the scope of goods wagons maintenance”, there are inspections performed, intended to: * verify compliance of the inspection actions on goods wagons owned by PKP Linia Hutnicza Szerokotorowa sp. z o.o in Zamość with DSU requirements,
* verify compliance of post-failure repairs of goods wagons owned by PKP Linia Hutnicza Szerokotorowa sp. z o.o. in Zamość with requirements of the Instruction LHSw-3, about the principles of technical maintenance of goods wagons on the LHS broad gauge line and DSU requirements,
* verify compliance of the inspection actions on cars not owned by PKP Linia Hutnicza Szerokotorowa sp. z o.o in Zamość with Regulations for Cars Usage (PGW) on each station with a PRT post,
* verify acceptance of wagons after loading actions within a selected station,
* according to the provisions of the LHSw-3 instruction Maintenance Department along with the subjected organizational units (Rolling Stock Maintenance Sections) undertake constant intensified supervision over technical revision points.

**Implementation stage** - under implementation**.** **Implementation percentage** - 92%. **Implementation date** - 31-12-2016 |
| 17. | Recommendation 2 Infrastructure managers and railway undertakings that have digital data registering devices (speed, statuses of devices, etc.) installed in their rail vehicles and route monitoring devices (registration of image or image and sound) shall take up actions intended to equip the railway committee members in proper tools enabling to read data from the recorders on site immediately after the occurrence. | **Regarding PKP Linia Hutnicza Szerokotorowa sp. z o.o. in Zamość****Description of undertaken actions**There are employees designated and properly trained to read out the data on speed and image in PKP LHS Sp. z o.o. in Zamość. There are also train driver instructors trained in this scope, included in the list of persons authorized to take part in the works of a railway committee that carries out the proceedings on the railway occurrences in the operational field of PKP Linia hutnicza Szerokotorowa spółka z o.o. in Zamość. They hold both the authorizations and a read-out device available on the work position. The principles related to monitoring are regulated in the instruction “Principles for use and operation of the monitoring system in locomotives”, implemented by the Regulation of the Management Board of PKP LHS sp. z o.o. In relation to the above, there were no situations when a railway committee would have any difficulties in obtaining the read-out data from the speed, image and sound recorders in relation to the proceedings regarding the accident or incident.**System actions:**There are employees designated and properly trained to read out the data on speed and image in PKP LHS Sp. z o.o. in Zamość. It is reminded that there are also train driver instructors trained in this scope, included in the list of persons authorized to take part in the works of a railway committee that carries out the proceedings on the railway occurrences in the operational field of PKP Linia hutnicza Szerokotorowa spółka z o.o. in Zamość. They hold both the authorizations and a read-out device available on the work position.**Implementation stage** - implemented. **Implementation percentage** - 100%. |
| 18. | Recommendation 3aAccording to changes in provisions of the Act dated 28 March 2003 on Railway Transport and changes of implementation acts to the Act, considering performance of accident investigation procedures, the infrastructure carriers and railway undertakings:3.a. shall adjust the internal regulations, safety management systems (SMS) and maintenance management systems (MMS) to the amended national legal acts,  | **Regarding PKP Linia Hutnicza Szerokotorowa sp. z o.o. in Zamość****Description of undertaken actions**PKP LHS sp. z o.o. in Zamość, introduced certain changes into the System, resulting from the amended legal regulations, i.e.: The Act of 29 March 2003, on Railway Transport (Official Journal Dz. U. of 2015, item 1297, as amended) and the Regulation by the Minister of Infrastructure and Construction on serious accidents, accidents and incidents in railway transport of 16 March 216 (OJ Dz.U. of 2016, item 369). Both the procedures of the SMS/MSM Integrated Management System and internal regulations were adjusted to the above-mentioned requirements.By way of Decision No. 199/2016 issued by the President of the Board of PKP Linia Hutnicza Szerokotorowa spółka z o.o. in Zamość of 28 April 2016, there was a list of persons determined, who are authorized to participate in works of a railway committee carrying out the proceedings related to railway occurrences within the operational field of PKP Linia Hutnicza Szerokotorowa spółka z o.o. in Zamość, according to § 8 para 1 of the Regulation by the Minister of Infrastructure and Construction of 16 March 2016, on serious accidents, accidents and incidents in railway transport (OJ Dz.U. of 2016, item 369). On 28 April 2016, the Security Department, according to the above-mentioned Decision No. 119/2016 issued by the President of the Board, established the “Register of authorizations (designations) of persons to participate in works of a railway committee that carries out the proceedings related to railway occurrence within the operational field of PKP Linia Hutnicza Szerokotorowa spółka z o.o. in Zamość”.The Company adopts adequate SMS and MMS procedures related to informatiom management in the scope of safety and formatting, generating and distributing documentation related to safety, in order to meet the adequate criteria from regulations by the European Commission No. 1158/2010 and 1169/2010 and the EU regulation No. 445/2011.**System actions:**Both the procedures of the SMS/MSM Integrated Management System and internal regulations were adjusted to the above-mentioned requirements, according to the ZSZ/P21.1 and A1 procedures.**Implementation stage** - under implementation**.** **Implementation percentage** - 92%. |
| 19. | Recommendation 3bRegarding changes in the provisions of the Act of 28 March 2003 on railway transport, and amendments to the implementation acts for the Act, as regards performance of accident proceedings, the infrastructure managers and carriers ensure that the employees designated for work in the railway committees have revised knowledge on the amended national regulations, internal rules as well as safety and maintenance management systems, along with technical expertise. |
| 20. | Recommendation 4A conclusion drawn from the analysis by the President of the Office of Rail Transport (UTK):Information on actions that the Entity undertook to ensure that the results of the railway incident investigation include an adequate and in-depth analysis with identification of all required causes.  | **Regarding PKP Linia Hutnicza Szerokotorowa sp. z o.o. in Zamość****Description of undertaken actions****Implementation stage** ---. **Implementation percentage** - 0%.  |
| 21. | Recommendation 1Within the operated management systems, the infrastructure managers and railway undertakings shall carry on actions intended to reduce the number of occurrences caused by bad technical condition or rolling stock without drive. | **Regarding CTL Logistics sp. z o.o.****Description of undertaken actions*** Current monitoring of the technical condition of cars during maintenance actions of P1 level and while starting the trains up.
* Current monitoring and supervision over withdrawal of cars for planned maintenance actions.
* Current monitoring of potentially hazardous situations by analyzing the records from the Exploitation Work Recording System (SEPE), obtained cyclically from the PKP PLK infrastructure manager.
* Current monitoring of occurrences with cars, through access to the DSAT computer app.
* Discussing of the railway occurrences and potentially hazardous situations during periodical instructions for employees who are directly related to the railway traffic safety and employees of the Cars Maintenance Office.
* Block trains approaching the maintenance units for preventive inspections and removal of faults (during the winter time also dewatering of braking devices in all cars).
* Performing audits of the maintenance services providers and entities delivering components that are employed in the maintenance procedures.
* Analyzing the cases of complaints related to adequate performance of maintenance actions and delivered components.
* According to the assumptions of the Safety Improvement Program, the purchase of new wheel sets (monoblocks), replacement of tyred wheels with monoblock wheels.
* During the maintenance actions related to revision of axle-boxes for wheel sets, installation of new rolling bearings and removal of the bearings that apart from positive qualification do not bear marks that would comply with the applicable standards.
* Detailed verification of tyres in cars equipped with tyred wheels, confirmed with a protocol from the examination of tyres embedment.
* Exchange of information with other Entities Responsible for Maintenance in case of occurrences with the car that - based on an agreements - is exploited by CTL Logistics Sp. z o.o.
* Discussing the occurrences with cars during cyclical safety meetings, organized by the Carriage Safety Departments, participated by management of the Company, intended to draw conclusions to minimize the failures and faults in the rolling stock (also refers to the cars covered by the Maintenance Management System of CTL Logistics Sp z o.o.

**System actions:*** current monitoring of the technical condition of cars during maintenance actions of P1 level and while starting the trains up,
* current monitoring and supervision over withdrawal of cars for planned maintenance actions,
* current monitoring of situation

**Implementation stage** - under implementation**.** **Implementation percentage** - 100%. |
| 22. | Recommendation 2 Infrastructure managers and railway undertakings that have digital data registering devices (speed, statuses of devices, etc.) installed in their rail vehicles and route monitoring devices (registration of image or image and sound) shall take up actions intended to equip the railway committee members in proper tools enabling to read data from the recorders on site immediately after the occurrence. | **Regarding CTL Logistics sp. z o.o.****Description of undertaken actions**N/A |
| 23. | Recommendation 3aAccording to changes in provisions of the Act dated 28 March 2003 on Railway Transport and changes of implementation acts to the Act, considering performance of accident investigation procedures, the infrastructure carriers and railway undertakings:3.a. shall adjust the internal regulations, safety management systems (SMS) and maintenance management systems (MMS) to the amended national legal acts,  | **Regarding CTL Logistics sp. z o.o.****Description of undertaken actions**CTL Logistics adjusted the internal rules (CTL instructions) regarding the conduct in case of serious accidents, accidents and incidents in railway transport and the P/15 procedure “Conduct after a threat or occurrence emerged”, the Safety Management System.**System actions:**Each CTL Logistics employee can report changes to internal regulations (instructions) and whole SMS documentation. The Carriage Safety Department updates the legal acts related to the railway system safety and internal rules (instructions) as well as the SMS documentation.**Implementation stage** - implemented. **Implementation percentage** - 100%. |
| 24. | Recommendation 3bRegarding changes in the provisions of the Act of 28 March 2003 on railway transport, and amendments to the implementation acts for the Act, as regards performance of accident proceedings, the infrastructure managers and carriers ensure that the employees designated for work in the railway committees have revised knowledge on the amended national regulations, internal rules as well as safety and maintenance management systems, along with technical expertise. | **Regarding CTL Logistics sp. z o.o.****Description of undertaken actions**CTL Logistics organizes trainings for all members of railway committees once per year. In 2016, such a training took place between 12-13 April 2016.**System actions:**The annual trainings for the railway committees’ members and branch employees in the scope of notifying about railwa occurrences and works of railway committees.**Implementation stage** - implemented. **Implementation percentage** - 100%. |
| 25. | Recommendation 4A conclusion drawn from the analysis by the President of the Office of Rail Transport (UTK):Information on actions that the Entity undertook to ensure that the results of the railway incident investigation include an adequate and in-depth analysis with identification of all required causes.  | **Regarding CTL Logistics sp. z o.o.****Description of undertaken actions**The CTL Logistics Carriage Safety Department analyzes each railway occurrence, including execution of an in-depth analysis of the causes of those occurrences. There are principles for determination of causes and categories of occurrences discussed in detail during the annual trainings for the railway committees’ members, including the practical workshops on how to do it. There is an information bulleting developed after each railway occurrence, for all interested employees.**System actions:** The CTL Logistics Carriage Safety Department analyzes each railway occurrence, including execution of an in-depth analysis of the causes of those occurrences. There are principles for determination of causes and categories of occurrences discussed in detail during the annual trainings for the railway committees’ members, including the practical workshops on how to do it. There is an information bulleting developed after each railway occurrence, for all interested employees.**Implementation stage** - under implementation**.** **Implementation date** - 0 (09-12-2016). |
| 26. | Recommendation 1Within the operated management systems, the infrastructure managers and railway undertakings shall carry on actions intended to reduce the number of occurrences caused by bad technical condition or rolling stock without drive. | **Regarding PKP Intercity S.A.****Description of undertaken actions (system actions)**1. Analyzing the causes of the vehicles being withdrawn from trains because of technical faults that threaten the traffic safety. The analysis if carried out on the basis of technical protocols and expertises.
2. Monitoring and analyzing the indications from the DSAT emergency statuses detection devices (both confirmed and unconfirmed).
3. A series of actions to be implemented was ordered on their basis, intended to:
4. limit the number of withdrawn cars because of damages to the braking system,
5. limit the number of withdrawals because of “hot axle-boxes”, resulting from alarms triggered by the DSAT devices,
6. limit the number of cars withdrawn for vibration (inspection of metal and rubber elements, in case flat places or build-ups are detected - apart from turning the wheel sets, also the brake inspection on the Hadiag station)
7. According to the newly adopted “Framework action program of PKP Intercity for improvement of rail traffic safety in 2017, there will be the Quality Management System for auditors’ work related to the national communication trains introduced in 2017 (the system was introduced for international communication in 2016)

**Implementation stage** - implemented. **Implementation percentage** - 100%. |
| 27. | Recommendation 2 Infrastructure managers and railway undertakings that have digital data registering devices (speed, statuses of devices, etc.) installed in their rail vehicles and route monitoring devices (registration of image or image and sound) shall take up actions intended to equip the railway committee members in proper tools enabling to read data from the recorders on site immediately after the occurrence. | **Regarding PKP Intercity S.A.****Description of undertaken actions (system actions)**1. PKP Intercity S.A. uses the external monitoring, i.e. the video cameras installed in cabs of traction vehicles since 2014. The material read-out directly from the recorder on the vehicle is “encoded”, meaning it is in a format that requires a special app to play it, so it is impossible on the site of the accident and it is useless for the committee until the format is changed by adequate decoding software. Before handing the material to the authorized entities (courts, prosecution, Police, PKBWK), there is a trade secret clause employed.
2. The materials obtained from the read-out data are subject to special protection, which is why only a limited number of persons is authorized to read them out, i.e. those who are in hold of adequate hardware and software (adequate SMS procedure).
3. Since 2016, there is a remote read-out of data employed on EMU (ED160, ED161), allowing direct connection between the vehicle and the HQ. PKP IC carries out certain actions to obtain a possibility to read out the data remotely from all traction vehicles. This will allow to eliminate the possibility to interfere in the recording system and will accelerate the process of obtaining the materials. Data archiving takes place in the HQ.
4. In 2016, PKP IC carried out the trainings in data read-out for 40 persons. The training in the above-mentioned scope will be carried on in 2017. Currently, PKP IC is in hold of traction vehicles with electronic recorders from various manufacturers that require specialist software and hardware to read out the recordings and analyze them.

**Implementation stage** - under implementation**.** **Implementation percentage** - 85%. |
| 28. | Recommendation 3aAccording to changes in provisions of the Act dated 28 March 2003 on Railway Transport and changes of implementation acts to the Act, considering performance of accident investigation procedures, the infrastructure carriers and railway undertakings:3.a. shall adjust the internal regulations, safety management systems (SMS) and maintenance management systems (MMS) to the amended national legal acts,  | **Regarding PKP Intercity S.A.****Description of undertaken actions (system actions)**The Instructions on conduct in case of serious accidents, accidents and incidents (Br-3), which was adopted by the Company’s Management Board on 9/7/2016. (Resolution No. 567/2016). The SMS Procedure P-15 “conduct in case of threat or railway occurrence” was amended with consideration of statutory modifications, and approved on 9/9/2016.The updated Br-3 Instruction, Ir-8 Instruction of the Infrastructure Manager and the applicable SMS P-15 procedure were handed to the Company’s Plants that were ordered to communicate them to the employees on position related to the rail traffic safety. The current SMS instructions and procedures are available in the Intranet of PKP IC - accessible by all Company’s employees.**Implementation stage** - implemented. **Implementation percentage** - 100%. |
| 29. | Recommendation 3bRegarding changes in the provisions of the Act of 28 March 2003 on railway transport, and amendments to the implementation acts for the Act, as regards performance of accident proceedings, the infrastructure managers and carriers ensure that the employees designated for work in the railway committees have revised knowledge on the amended national regulations, internal rules as well as safety and maintenance management systems, along with technical expertise. | **Regarding PKP Intercity S.A.****Description of undertaken actions (system actions)**1. All significant information (changes in regulations and legal acts, documents from PKBWK and UTK, etc.) are communicated via e-mail to all employees designated to work in railway committees.
2. The are 8-hour long trainings carried out every year (included in the safety improvement program) for employees designated to work in railway committees and safety employees related to conduct, covering, among others:
* applicable regulations in the scope of occurrences investigation,
* procedures of conduct after occurrence,
* duties of railway committees and measurements of the rolling stock and infrastructure on site of the accident and on further phases of the proceedings, resulting from the applicable national and internal regulations,
* the manner of carrying out and documenting the proceedings by the railway committee,
* principles for precise determination and documentation of factual reasons of occurrences,
* cooperation with the President of UTK and Head of PKBWK, and the manner of conduct when it is impossible to determine the causes of an event unanimously.

In 2016, all employees participating in railway committees took part in the trainings. The employees designated to work in the railway committees were verified in 2017 in terms of their qualifications, technical expertise and authorizations. **Implementation stage** - implemented. **Implementation percentage** - 100%. |
| 30. | Recommendation 4A conclusion drawn from the analysis by the President of the Office of Rail Transport (UTK):Information on actions that the Entity undertook to ensure that the results of the railway incident investigation include an adequate and in-depth analysis with identification of all required causes.  | **Regarding PKP Intercity S.A.**Protocols from final findings and reports from investigation of potentially hazardous situations are analyzed in terms of the completeness, identification and determination of causes, as well as justifiability of the recommended corrective-preventive actions. Any possible deficiencies and irregularities pose a topic for trainings for the employees designated to work in railway committees. The hazards identified in the occurrences are entered into the hazards register kept by the Company, and considered during risk analyzes (performed annually or ad hoc in justified cases).**Implementation stage** - under implementation**.** **Implementation percentage** - 85%. |
| 31. | Recommendation 1Within the operated management systems, the infrastructure managers and railway undertakings shall carry on actions intended to reduce the number of occurrences caused by bad technical condition or rolling stock without drive. | **Regarding Jastrzębsa Spółka Kolejowa sp. z o.o.****Description of undertaken actions**Not applicable - JSK sp. z o.o. does not own any railway vehicles. |
| 32 | Recommendation 2 Infrastructure managers and railway undertakings that have digital data registering devices (speed, statuses of devices, etc.) installed in their rail vehicles and route monitoring devices (registration of image or image and sound) shall take up actions intended to equip the railway committee members in proper tools enabling to read data from the recorders on site immediately after the occurrence. | **Regarding Jastrzębsa Spółka Kolejowa sp. z o.o.****Description of undertaken actions**Not applicable - JSK sp. z o.o. does not own any railway vehicles. |
| 33. | Recommendation 3aAccording to changes in provisions of the Act dated 28 March 2003 on Railway Transport and changes of implementation acts to the Act, considering performance of accident investigation procedures, the infrastructure carriers and railway undertakings:3.a. shall adjust the internal regulations, safety management systems (SMS) and maintenance management systems (MMS) to the amended national legal acts,  | **Regarding Jastrzębsa Spółka Kolejowa sp. z o.o.****Description of undertaken actions**Regarding the amendments to legal acts, the SMS Book was modified as well. in Procedure Z/18 - Readiness of conduct in case a threat and railway occurrence are found out, in the JSK R3 Instruction on conduct in case of serious accidents, accidents and incidents in railway transport, JSK R1 Instruction on operating railway traffic, in JSK E1 Instruction on signaling on JSK lines, JSK D Instruction related to technical conditions for development and maintenance of railway surface, turnouts and engineering structures.**System actions:**According to the Z/16 Procedure - Access, management and exchange of information related to safety, the SMS Proxy identifies new and amended norms and informs the interested parties about them, and afterwards the Z/03 Procedure - Change management is employed.**Implementation stage** - implemented. **Implementation percentage** - 100%. |
| 34. | Recommendation 3bRegarding changes in the provisions of the Act of 28 March 2003 on railway transport, and amendments to the implementation acts for the Act, as regards performance of accident proceedings, the infrastructure managers and carriers ensure that the employees designated for work in the railway committees have revised knowledge on the amended national regulations, internal rules as well as safety and maintenance management systems, along with technical expertise. | **Regarding Jastrzębsa Spółka Kolejowa sp. z o.o.****Description of undertaken actions**The Company organizes a closed training for all railway committee’s members at least once per year. In 2015, the training was performed by the Head of PKBWK on 8 May 2015 in the Company’s seat, while in 2016, the training was performed by representatives of UTK on 2/25/2016, also in the Company’s seat. The railway committee’s members also participated in dedicated workshops organized in UTK (e.g. 3 and 10 February 2016), as well as in meetings on safety. What is more, the employee designated for work in a railway committee are directed to numerous trainings, course, conferences and studies to obtain updated technical expertise. The employees obtain the knowledge on internal rules while getting familiar with the new regulations.**System actions:**According to Z/12, there is a plan of trainings developed for particular year, which includes the trainings needs of the railway committees’ members.**Implementation stage** - implemented. **Implementation percentage** - 90%. **Implementation date** - 01/30/2017  |
| 35. | Recommendation 4A conclusion drawn from the analysis by the President of the Office of Rail Transport (UTK):Information on actions that the Entity undertook to ensure that the results of the railway incident investigation include an adequate and in-depth analysis with identification of all required causes.  | **Regarding Jastrzębsa Spółka Kolejowa sp. z o.o.****Description of undertaken actions**A training for railway committee’s members is planned, and the topic of the trainings within the UTK Academy are under monitoring. If any topics related to works of a railway committee emerge, its members will be directed to such a training.**System actions:**Z/12 - Personnel competence management.**Implementation stage** - under implementation**.** **Implementation percentage** - 30%. **Implementation date** - 06/30/2017 |
| 36. | Recommendation 1Within the operated management systems, the infrastructure managers and railway undertakings shall carry on actions intended to reduce the number of occurrences caused by bad technical condition or rolling stock without drive. | **Regarding Euroterminal Sławków sp. z o.o.****Description of undertaken actions**N/A |
| 37. | Recommendation 2 Infrastructure managers and railway undertakings that have digital data registering devices (speed, statuses of devices, etc.) installed in their rail vehicles and route monitoring devices (registration of image or image and sound) shall take up actions intended to equip the railway committee members in proper tools enabling to read data from the recorders on site immediately after the occurrence. | **Regarding Euroterminal Sławków sp. z o.o.****Description of undertaken actions**N/A |
| 38. | Recommendation 3aAccording to changes in provisions of the Act dated 28 March 2003 on Railway Transport and changes of implementation acts to the Act, considering performance of accident investigation procedures, the infrastructure carriers and railway undertakings:3.a. shall adjust the internal regulations, safety management systems (SMS) and maintenance management systems (MMS) to the amended national legal acts,  | **Regarding Euroterminal Sławków sp. z o.o.****Description of undertaken actions**There was a risk analyses conducted in relation to failure to adjust the internal regulations and Safety Management Systems (SMS) to the amended requirements of national legal acts.On 20 September 2016, the Management Board of the “EUROTERMINAL SŁAWKÓW” Company, by way of Resolution No. 9/IX/2016, approved the Instruction on conduct in case of serious accidents, accidents and incidents on railway network, ESr-8, and the P/17 Procedure - Readiness and conduct if a threat/occurrence is detected. The change was preceded with an analysis of its significance, pursuant to the requirements of the Commission Implementing Regulation (UE) No. 402/2013 of 30 April 2013, on the common safety method for risk evaluation and assessment and repealing Regulation (EC) No. 352/2009, and Article 3, para 3(a) of the Directive No 2004/49/EC of the European Parliament and the Council of Europe. Analysis of significance of the change entitled “Implementation of the applicable Regulation of the Minister of Infrastructure and Construction of 16 March 2016, on serious accidents, accidents and incidents in railway transport (OJ Dz.U. 2016, item 369) to the ESr-8 Instruction on conduct in case of serious accidents, accidents and incident on railway network and the P/17 Procedure - Readiness and conduct if a threat/occurrence is detected”, was carried out on 23 August 2016. The Safety Management System and internal regulations related to implementation of accident investigations were adjusted to the requirements of the national legal acts.**System actions:**Adjustment of the P/17 Procedure - Readiness and conduct if a threat/occurrence is detected and the internal regulation ESr-8 Instruction on conduct in case of serious accidents, accidents and incidents on a railway network to the applicable legal acts.Pursuant to the Regulation by the Minister of Infrastructure and Construction on serious accidents, accidenta and incidents in railway transport, the internal regulations, SMS procedures were adjusted to the above-mentioned regulation.**Implementation stage** - implemented. **Implementation percentage** - 100%. |
| 39. | Recommendation 3bRegarding changes in the provisions of the Act of 28 March 2003 on railway transport, and amendments to the implementation acts for the Act, as regards performance of accident proceedings, the infrastructure managers and carriers ensure that the employees designated for work in the railway committees have revised knowledge on the amended national regulations, internal rules as well as safety and maintenance management systems, along with technical expertise. | **Regarding Euroterminal Sławków sp. z o.o.****Description of undertaken actions**There was a risk analysis conducted in relation to deficiencies in knowledge of the employees designated to work in railway committees, related to the amended national regulations, internal rules as well as safety and maintenance management system, as well as the technical expertise.On 4/20/2016, the Management Board of the “EUROTERMINAL SŁAWKÓW” Sp. z o.o. Company issued an official order No. 3/2016 regarding: revision of a list of employees designated to wokr in a committee carrying out the proceedings related to occurrences that emerged within the operational field of “EUROTERMINAL SŁAWKÓW” Sp. z o.o. The list of persons authorized to participate in works of the railway committee was verified in order to implement the recommendation. Schedule of actions: A list of members authorized to work in the committee will be complemented with a member that holds the knowledge in the scope of the railway traffic control devices. The risk evaluation and assessment along with the economic importance of the change will be carried out in relation to the modification in composition of the persons authorized to work in a railway committee.Members of the railway committees, designated by the Company, are specialists with varied competences. Employees of “EUROTERMINAL SŁAWKÓW” Sp. z o.o. successively participate in trainings carried out by various entities of the railway market. The Company develops a training plan for each year, which includes, among others, testing of crisis plans and topics related to works of the railway committee and procedure after the occurrence, recommended by PKBWK. The topics for the trainings were verified in terms of the Regulation on serious accidents, accidents and incidents in railway transport (OJ Dz.U. of 2015, item 369).Trainings for employees and the number of trainings in the year are included in the Safety Improvement Program.**System actions:**Adjustment of the P/17 Procedure - Readiness and conduct if a threat/occurrence is detected and the internal regulation ESr-8 Instruction on conduct in case of serious accidents, accidents and incidents on a railway network to the applicable legal acts.**Implementation stage** - implemented. **Implementation percentage** - 30%. **Implementation date** - 03/30/2017. |
| 40. | Recommendation 4A conclusion drawn from the analysis by the President of the Office of Rail Transport (UTK):Information on actions that the Entity undertook to ensure that the results of the railway incident investigation include an adequate and in-depth analysis with identification of all required causes.  | **Regarding Euroterminal Sławków sp. z o.o.****Description of undertaken actions**In the Protocol of Final Findings of occurrences within the operational field of the manager in 2016, the “EUROTERMINAL SŁAWKÓW” Sp. z o.o. company analyzed direct, primary, indirect and systemic causes. The schedule of action: the following amendment is introduced into the P/17 procedure: “Specification of the railway committee’s conduct proceedings (Procedure P/17) in relation to implementation of recommendations by the President of UTK (DBK-WSZM.485.5.2016.1.AB)”. The interdisciplinary team designated by way of Resolution adopted by the Management Board of the “EUROTERMINAL SŁAWKÓW” No. 1/X.2014 of 10/27/2014, will analyze the significance of the change consisting in modification of the procedure P/17 - Readiness and conduct if a threat/occurrence is detected. “Conduct during a railway occurrence - scheme”, the process block “Railway Committee: Determines the circumstances and causes of the occurrence, estimates the size of losses and determines the preventive conclusions”, will be changed into “Railway Committee: Determines the circumstances and causes of the occurrence (determination of direct, primary, indirect, systemic causes), estimates the size of losses and determines the preventive conclusions”.**System actions:**Adjustment of the procedure P/17 - Readiness and conduct if a threat/occurrence is detected, to the applicable legal acts.**Implementation stage** - under implementation**.** **Implementation percentage** - 50%. **Implementation date** - 03/30/2017 |
| 41. | Recommendation 1Within the operated management systems, the infrastructure managers and railway undertakings shall carry on actions intended to reduce the number of occurrences caused by bad technical condition or rolling stock without drive. | **Regarding Infra Silesia S.A.****Description of undertaken actions**Infra SILESIA S.A. does not own any rolling stock without drive. |
| 42. | Recommendation 2 Infrastructure managers and railway undertakings that have digital data registering devices (speed, statuses of devices, etc.) installed in their rail vehicles and route monitoring devices (registration of image or image and sound) shall take up actions intended to equip the railway committee members in proper tools enabling to read data from the recorders on site immediately after the occurrence. | **Regarding Infra Silesia S.A.****Description of undertaken actions**Infra SILESIA S.A. is only in hold of railway vehicles serving to maintain, repair or construct the railway infrastructure. These vehicles are not equipped with digital data recording devices or route monitoring equipment, which could be employed by the railway committees’ members on site of the occurrence.**System actions:**Enforcement, upon 16 September 2016, the Instruction on conduct in case of serious accidents, accidents and invidents in railway transport ISr-3, including a description of actions on site of the occurrence.**Implementation stage** - implemented. **Implementation percentage** - 100%. |
| 43. | Recommendation 3aAccording to changes in provisions of the Act dated 28 March 2003 on Railway Transport and changes of implementation acts to the Act, considering performance of accident investigation procedures, the infrastructure carriers and railway undertakings:3.a. shall adjust the internal regulations, safety management systems (SMS) and maintenance management systems (MMS) to the amended national legal acts,  | **Regarding Infra Silesia S.A.****Description of undertaken actions**On 16 September 2016, there was the second revision of the Instruction on conduct in case of serious accidents, accidents and incidents in railway transport ISr-3 introduced in Infra SILESIA S.A., covering the current legal status, compliant with the Regulation by the Minister of Infrastructure and Construction of 16 March 2016 on serious accidents, accidents and incidents in railway transport.**System actions:**According to the Safety Management System introduced in the company and the Instruction on conduct in case of serious accidents, accidents and incidents in railway transport ISr-3, the preventive conclusions must be implemented:1) immediately - if required by the railway traffic safety,2) within 14 calendar days from the date of signing the “Protocol of final findings” - for remaining cases. Each risk that is defined in accordance with the SMS documentation is analyzed, and if the permissible level values are exceeded, certain actions that will reinstate those values are taken.**Implementation stage** - implemented. **Implementation percentage** - 100%. |
| 44. | Recommendation 3bRegarding changes in the provisions of the Act of 28 March 2003 on railway transport, and amendments to the implementation acts for the Act, as regards performance of accident proceedings, the infrastructure managers and carriers ensure that the employees designated for work in the railway committees have revised knowledge on the amended national regulations, internal rules as well as safety and maintenance management systems, along with technical expertise. | **Regarding Infra Silesia S.A.****Description of undertaken actions**The Company, within the scope of works by the railway committee, uses their own employees and workers hired in the DB Cargo Polska S.A. company what allows to complement knowledge and experience in cases that are strictly related to railway vehicle with and without drive.There were trainings carried out in 2016 on two stages, to improve the knowledge in the field of works of railway committees. There was the seminar entitled “Works of accident investigation committees in railway transport, in the light of changes from 1 March 2016 in the Act on railway transport, in the regulation and internal rules (instructions) organized for the managerial staff and the railway committees’ members” held on 3/31/2016 and 4/1/2016. There was a training conducted between 16 and 18 June 2016, for current and future members of the railway committees, in a form of practical workshops covering operation of a railway occurrence (from receiving the report to drawing up the final findings protocol).Other trainings are planned for the first quarter of 2017, deepening the knowledge in the scope of accident proceedings, taking into account the applicable legal regulations.**System actions:**According to the Safety Management System introduced in the company and the Instruction on conduct in case of serious accidents, accidents and incidents in railway transport ISr-3, the preventive conclusions must be implemented:* 1. immediately - if required by the railway traffic safety,
	2. within 14 calendar days from the date of signing the “Protocol of final findings” - for remaining cases.

Each risk that is defined in accordance with the SMS documentation is analyzed, and if the permissible level values are exceeded, certain actions that will reinstate those values are taken.**Implementation stage** - implemented. **Implementation percentage** - 100%. |
| 45 | Recommendation 4A conclusion drawn from the analysis by the President of the Office of Rail Transport (UTK):Information on actions that the Entity undertook to ensure that the results of the railway incident investigation include an adequate and in-depth analysis with identification of all required causes.  | **Regarding Infra Silesia S.A.****Description of undertaken actions**The template for the final findings protocol, provided in Attachment No. 9 to the Instruction ISr-3, includes the following provision “Reference to the Safety Management System (SMS) or Maintenance Management System (MMS) in point 2.6. What is more, the railway committee investigating the circumstances of an event, tries to determine all known causes of its emergence in each case, and based on that to define adequate preventive measures. The topics of future trainings for the railway committees’ member will include a reference for identification of all required causes.**System actions:**Infra SILESIA S.A. determines the systemic actions in the procedures related to identification of hazards, evaluation and assessment of risk, introduction of actions that minimize the risk, monitoring of effectiveness of the introduced actions, ascribing responsibility for implementation of recommendations, determination of the necessary resources and settlement of the assumed solutions. Each defined threat is entered into the register of threats.**Implementation stage** - implemented. **Implementation percentage** - 100%. |