STATE COMMISSION ON RAILWAY ACCIDENT INVESTIGATION

REPORT No. PKBWK 03/2026

on the investigation of railway incidents that occurred
on 16 November 2025 on railway line no. 7
Warszawa Wschodnia Pasażerska – Dorohusk, mainline route Zarzeka–Puławy Azoty
at 20:02 hrs on track no. 1, km 112.887, and at 23:53 hrs on track no. 1, km 115.507
the area of the infrastructure manager PKP PLK S.A. Railway Line Plant in Lublin

PKBWK
PAŃSTWOWA KOMISJA
BADANIA WYPADKÓW
KOLEJOWYCH

WARSAW, 11 September 2026

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

Pursuant to Article 28f(3) of the Act of 28 March 2003 on rail transport, the Commission's investigation determines neither guilt nor liability.

This Report has been prepared under the provisions of *Commission Implementing Regulation (EU) 2020/572 of 24 April 2020 on the reporting structure to be followed for railway accident and incident investigation reports (OJEU L 132 of 27 April 2020)*

I. SUMMARY 5

II. THE INVESTIGATION AND ITS CONTEXT 8

1. Decision to establish an investigation 8

2. Motivation for the decision to establish an investigation 8

3. The scope and limits of the investigation including a justification thereof, as well as an explanation of any delay that is considered a risk or other impact to the conduct of the investigation or its conclusions 8

4. An aggregated description of the technical capabilities and the functions in the team of investigators 8

5. A description of the communication and consultation process established with persons or entities involved in the occurrence during the investigation and in relation to the information provided 8

6. A description of the level of cooperation offered by the entities involved 9

7. A description of the investigation methods and techniques as well as analysis methods applied to establish the facts and findings referred to in the report 9

8. A description of the difficulties and specific challenges encountered during the investigation 10

9. Any interaction with the judicial authorities 10

10. Any other information relevant in the context of the investigation 11

III. DESCRIPTION OF THE OCCURRENCE 12

1. The occurrence and background information 12

1.1. Description of the type of occurrence 12
1.2 The date, exact time and location of the occurrence 12
1.3. The description of the occurrence site, including weather and geographical conditions at the moment of the occurrence and if any works were carried out at or in the vicinity of the site 12
1.4. Deaths, injuries and material damage 16
1.5. The description of other consequences, including the impact of the occurrence in the regular operations of the actors involved 20
1.6. The identification of the persons, their functions, and entities involved, including possible interfaces to contractors and/or other relevant parties 20
1.7. The description and identifiers of train(s) and their composition including the rolling stock involved and their registration numbers 20
1.8. A description of the relevant parts of the infrastructure and signalling system – track type, switch, interlocking, signal, train protection systems 21
1.9. Any other information relevant for the purpose of the description of the occurrence and background information 22

2. The factual description of the events 22

2.1. The proximate chain of events leading up to the occurrence, including actions taken by persons involved, the functioning of rolling stock and technical installations, the functioning of the operating system 22
2.2. The chain of events from the occurrence until the end of the actions of the rescue services, including measures taken to protect and safeguard the site of the occurrence, the efforts of the rescue and emergency services. 26

IV. ANALYSIS OF THE OCCURRENCE 28

1. Roles and duties 28

1.1. Railway undertaking(s) or infrastructure manager(s) 28
1.2. The entities in charge of maintenance, the maintenance workshops, or any other maintenance suppliers 29
1.3. Manufacturers of rolling stock or other suppliers of rail products 29
1.4. National safety authorities or the European Union Agency for Railways 29
1.5. Notified bodies, designated bodies or risk assessment bodies 29
1.6. Certification bodies of entities in charge of maintenance mentioned under Point 1.2 29

1.7. Any other person or entity relevant to the occurrence, documented or not in one of the relevant safety management systems or referred to in a register or relevant legal framework 29

2. Rolling stock and technical installations 29

3. Human factors 31

3.1. Human and individual characteristics 31
3.2. Job factors 31
3.3. Organisational factors and assignments 31
3.4. Environmental factors 31
3.5. Any other factors relevant for the purpose of the investigation 32

4. Feedback and control mechanisms, including risk and safety management as well as monitoring processes 32

The relevant regulatory framework conditions:: 32
4.1. The processes, the methods, the content and the results of risk assessment and monitoring activities, performed by any of the involved actors: railway undertakings, infrastructure managers, entities in charge of maintenance, maintenance workshops, other maintenance providers, manufacturers and any other actors, and the independent assessment reports referred in Article 6 of Implementing Regulation (EU) No 402/2013 32
4.2. The safety management system of the involved railway undertaking(s) and infrastructure manager(s) including the basic elements stated in Article 9(3) of Directive (EU) 2016/798 and any EU legal implementing acts 33
4.3. The management system of the entity/entities in charge of maintenance and maintenance workshops including the functions stated in the Article 14(3) and Annex III of Directive (EU) 2016/798 and any subsequent implementing acts 33
4.4. The results of supervision performed by the national safety authorities in accordance with Article 17 of Directive (EU) 2016/798 33
4.5. The authorisations, certificates and assessment reports granted by the Agency, the National Safety Authorities or other conformity assessment bodies 33

5. Previous occurrences of a similar character 33

V. CONCLUSIONS 36

1. A summary of the analysis and conclusions with regard to the causes of the occurrence 36

2. Measures taken since the occurrence 36

3. Additional comments 36

VI. SAFETY RECOMMENDATIONS 38

List of figures

Figure 1. Site drawing – key locations relating to the occurrence are marked in red (source: PKBWK) 14
Figure 2. Schematic drawing – key points relating to the occurrence are marked in red (source: PKBWK) 15
Figure 3. Vertical projection – a diagram of the mast layout at track no. 1 showing key points (source: PKBWK) 16
Figure 4. A graph of the running parameters of the EU160-016 locomotive (compiled by PKBWK) 30
Figure 5. A graph of the running parameters of the EU160-016 locomotive (compiled by PKBWK) 30

List of photographs

Photograph 1. A map showing the location of the theft of the OCL on line no. 7 at km 112.887, and the installation of the metal sheet at km 115.507 (photo: Google maps) 13
Photograph 2. Location of the theft: track no. 1 and track no. 2, km 112.887 – the start point of severance of the damaged OCL (illustrative photograph – source: PKBWK) 15
Photograph 3. A view of the YC150-2CS150 overhead contact line at the scene of the occurrence (source: PKBWK) 16
Photograph 4. A view of the damage to the overhead contact line: broken suspension hangers for the contact wire, damaged arm bracket, missing tensioning arms (source: the railway commission) 17
Photograph 5. A view of the damaged contact wire, which was severed and dragged by the locomotive to the mast at site 113-5 (source: the railway commission) 18
Photograph 6. A view of the damaged pantograph on locomotive EU160-016 (source: the railway commission) 19
Photograph 7. A view of the damage sustained by the carriage (source: the railway commission) 19
Photograph 8. The smartphone left at SHP on track no. 1 (source: the railway commission) 25
Photograph 9. A discarded item – a bolt (source: the railway commission) 26
Photograph 10. The cut metal sheet installed on track no. 1 by third parties (source: the railway commission) 26

I. SUMMARY

Type of occurrence: Incidents.

Description: The occurrences took place on the mainline route Zarzeka–Puławy Azoty of railway line no. 7 Warszawa Wschodnia Osobowa – Dorohusk.

The first occurrence took place on 16 November 2025 at 20:02 hrs as a result of theft, namely the cutting out of 60-metre sections of a single DJP contact wire on the tensioning cables at two locations: on track no. 1 from site 112-29 to site 112-27, and on track no. 2 from site 112-30 to site 112-28. Cut out by unknown perpetrators, the sections were found in a drainage ditch alongside mainline tracks no. 2 and no. 1.

Train MPE 83100/1 "GÓRSKI", operating on the Świnoujście–Rzeszów Główny route for the carrier PKP Intercity S.A. and pulled by locomotive EU160-016, had been travelling on mainline track no. 1 to Puławy Azoty station and entered the area where the contact wire had been cut off at the auxiliary arm of overlap mast at site 112-29, which caused damage to the second pantograph in the direction of travel and severance of the overhead contact line on track no. 1 from site 112-31 to site 113-5 (i.e. from km 112.887 to km 113.131). The train driver continued to drive the train coasting to stop halt at Puławy Azoty station at km 118.200. He reported the occurrence to the duty signaller at Puławy Azoty station saying that he had noticed a flash and loss of voltage on track no. 1 at km 112.800. Subsequently, following the arrival of the network train, inspection of the locomotive and the securing of the damaged pantograph, the train continued its journey at 23:23 hrs using the locomotive's first pantograph. There were around 500 passengers on the train. Following the damage to parts of the overhead line and the pantograph on the locomotive, the entire Zarzeka–Puławy Azoty mainline route was inspected in order to assess the extent of the damage to the railway infrastructure. The inspection of the mainline route was carried out by a representative of IZ Lublin and the Railway Security Guard (SOK) with a police officer. During the inspection, at 23:53 hrs, a foreign steel object was found on track no. 1 at km 115.507. This was the second incident in which unknown perpetrators had placed a shaped metal plate over the head of the right-hand track rail and secured it from beneath the rail foot with a bolt. Next, a smartphone with a power bank were found at km 115.534 at the left-hand track rail, propped against the SHP guardrail. A steel bolt was found near the metal sheet attached to the track rail, lying on the outer trackside of the same track. None of these items were part of the railway infrastructure and have been recovered by the police for further investigation.

Date of the occurrence: 16 November 2025, 20:02 hrs: the rain entered the damaged section of the overhead contact line

23:53 hrs: non-railway were found on the track.

Location of the occurrence: Mainline route Zarzeka–Puławy Azoty, track no. 1, km 112.887 of railway line no. 7 Warszawa Wschodnia – Dorohusk. Geographical coordinates 51°30'40.2"N 21°54'08.9"E

Mainline route Zarzeka–Puławy Azoty, track no. 1, km 115.507 of railway line no. 7: Warszawa Wschodnia Osobowa – Dorohusk. Geographical coordinates 51°29'41.1"N 21°55'49.1"E

Consequences of the occurrences:

Severed overhead contact line and destroyed network components on track no. 1 from site 112-31 to site 113-5 (over a distance of 244 m). Furthermore, the pantograph on the locomotive (the second pantograph in the direction of travel) was damaged, and three right-hand side external windows were broken in the third carriage behind the locomotive. As a result of the occurrence, 29 passenger trains were delayed by a total of 438 minutes, and 11 freight trains were delayed by 1,261 minutes. The second incident, which was detected during an inspection following the first incident, did not result in any material losses.

No one was injured as a result of the incidents.

Causal factor:

(means any action, omission, event or condition, or a combination thereof that if corrected, eliminated, or avoided, would have prevented the occurrence, in all likelihood)

1. A train travelling on track no. 1 entering a section with damaged and sagged overhead contact line, causing the pantograph to break and the line to snap.
2. Installation by of the metal sheet by third parties on the right-hand rail on track no. 1 at km 115.507.

Contributing factors:

(means any action, omission, event or condition that affects an occurrence by increasing its likelihood, accelerating the effect in time or increasing the severity of the consequences, but the elimination of which would not have prevented the occurrence)

1. Theft of a section of the overhead contact line, i.e. one of the two contact wires (DJP) on tensioning cables of the overhead contact line, resulting in damage and sagging of the line.
2. Easy access to the railway area, enabling third parties to interfere with elements of the railway infrastructure.
3. Lack of modern anti-theft systems for the railway overhead contact line.
4. Knowledge of issues relating to the construction of the overhead contact line and the principles of operation of surge protection devices on the part of the theft perpetrators.

Systemic factor: None found.

(means any causal or contributing factor of an organisational, managerial, societal or regulatory nature that is likely to affect similar and related occurrences in the future, including, in particular the regulatory framework conditions, the design and application of the safety management system, skills of the staff, procedures and maintenance)

Recommendations and their addressees:

1. PKP Polskie Linie Kolejowe S.A. shall prepare a programme for the implementation of modern anti-theft systems for the railway overhead contact line on railway lines of national importance, utilising:
   – electronic anti-theft systems,
   – structural safeguards,
   – other organisational actions.

2. PKP Polskie Linie Kolejowe S.A., in cooperation with the Railway Security Guard and other competent bodies responsible for the security of railway infrastructure, shall take actions to increase the level of surveillance on selected railway lines of national importance, in particular critical infrastructure elements, by intensification of foot and motorised patrolling and other forms of preventive actions.
3. As part of the construction of new and the modernisation of existing overhead contact lines, PKP Polskie Linie Kolejowe S.A. shall implement modern anti-theft systems for the overhead contact line network.
4. As part of training and periodic briefings for its staff, PKP Polskie Linie Kolejowe S.A. shall cover issues relating to the protection of railway infrastructure against theft and terrorist activity.

II. THE INVESTIGATION AND ITS CONTEXT

1. Decision to establish an investigation

The Chairman of the State Commission on Railway Accident Investigation (hereinafter referred to as "PKBWK" or "the Commission") Tadeusz Ryś issued, pursuant to Article 28e(2) of the Act of 28 March 2003 on rail transport (consolidated text: Journal of Laws of 2025, item 1234), hereinafter referred to as "the Rail Transport Act", Decision No. PKBWK.590.6.2025 of 21 November 2025 on establishing an investigation into the circumstances of the occurrences that took place on 16 November 2025 on railway line no. 7 Warszawa Wschodnia – Dorohusk, mainline route Zarzeka – Puławy Azoty at 20:15 hrs at km 112.800 and at 23:53 hrs at km 115.500.
The locations and times of the occurrences included in the Report are factual and confirmed by the investigation findings, and although they differ from the locations indicated in the notification and the decision, they relate to these occurrences. In accordance with the provisions of Article 28e(4) of the Rail Transport Act, the occurrence was notified to the European Union Agency for Railways and registered in its database under no. PL-10760.

2. Motivation for the decision to establish an investigation

Taking into account the nature and circumstances of the occurrences, the Chairman of PKBWK decided that an investigation should be conducted by the Commission's Investigation Team pursuant to Article 28e(2) of the Rail Transport Act. The said occurrences, as railway incidents, relate to the system as a whole in accordance with Article 28e(3)(1) and (2) of the Railway Transport Act. Furthermore, the decision was supported by the nature of the incidents showing a high likelihood that the theft and installation of foreign objects on the track were linked to an act of sabotage.

3. The scope and limits of the investigation including a justification thereof, as well as an explanation of any delay that is considered a risk or other impact to the conduct of the investigation or its conclusions

The investigation of the causal, contributing and systemic factors was conducted under Article 28h(1) of the Rail Transport Act and, in accordance with the provisions of Article 28f(3), does not determine guilt or liability. There were no limits during the investigation that would have a negative impact on its course.

4. An aggregated description of the technical capabilities and the functions in the team of investigators

The Chairman of the Commission nominated a five-person Investigation Team from among the standing members of the Commission with qualifications and competencies regarding the investigation concerned.

5. A description of the communication and consultation process established with persons or entities involved in the occurrence during the investigation and in relation to the information provided

Under Article 28h(2)(5) of the Rail Transport Act, the Chairman of PKBWK obliged specific persons from the railway commission to cooperate with the Investigation Team (letter no. PKBWK.590.6.3.2025 of 15 December 2025).

Pursuant to the aforementioned letter, on 9 December 2025 at the registered office of PKP PLK S.A. Railway Line Plant in Lublin, Dęblin Operations Section, the chairman of the railway commission formally submitted the documentation gathered by the railway commission to the head of the Commission's Investigation Team. Furthermore, the Chairman of PKBWK requested PGE Energetyka Kolejowa S.A. Zakład Mazowiecki, in letter No. PKBWK.590.6.5.2025/2026 of 26 February 2026, to provide additional documentation relating to the occurrence.

6. A description of the level of cooperation offered by the entities involved

Cooperation with representatives of the entities linked with the circumstances of the occurrences during the investigation into the causes and factors of the occurrences did not give rise to any objections on the part of the Investigation Team.

7. A description of the investigation methods and techniques as well as analysis methods applied to establish the facts and findings referred to in the report

Throughout the process aimed at investigating the causes of the occurrences, the Investigation Team considered the provisions of national rules, internal rules of the infrastructure manager, i.e. PKP Polskie Linie Kolejowe S.A. and the railway carrier PKP Intercity S.A., and the technical documentation. Furthermore, the Investigation Team relied on their own knowledge and experience, as well as on the documentation gathered by the Investigation Team, the railway commission and the prosecutor's office.
Within the investigation of the occurrences, the Investigation Team carried out inter alia the following activities:

- inspection of the scenes of the occurrences,
- production of photographic and video documentation,
- analysis of evidence gathered and made available by the prosecutor's office,
- analysis of the documentation provided by the railway operator, the railway infrastructure manager and PGE Energetyka Kolejowa S.A.,
- inspection of the mainline route concerned,
- interviews with persons connected with the railway occurrences,
- analysis of the CCTV footage from locomotive EU160-016,
- analysis of the CCTV footage from rail vehicles prior to the occurrences,
- analysis of the train radio communication recordings from the voice recorders,
- analysis of the data from the event recorder of locomotive EU160-016.

Below is a list of selected legal acts, rules and internal instructions used during the investigation:

European Union rules:

1) Regulation (EU) No. 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation; OJ EU L 119, 4.5.2016, p. 1, as amended).
2) Commission Implementing Regulation (EU) 2020/572 of 24 April 2020 on the reporting structure to be followed for railway accident and incident investigation reports (OJ EU L 132, 27.04.2020).
3) Directive (EU) 2016/798 of the European Parliament and of the Council of 11 May 2016 on railway safety (OJ EU L 138, 26.05.2016, p. 102, as amended).

National rules:

1) Act of 28 March 2003 on rail transport (consolidated text: Journal of Laws of 2025, item 1234).
2) Act of 7 July 1994 on the Construction Law (consolidated text: Journal of Laws of 2025, item 418).

3) Act of 10 May 2018 on the protection of personal data (consolidated text: Journal of Laws of 2019, as amended).
4) Regulation of the Minister of Infrastructure of 6 April 2021 on rules of conduct applicable in the railway area, on trains and other rail vehicles, and in premises designated for the service of passengers using rail transport at railway stations (Journal of Laws of 2021, item 723).
5) Regulation of the Minister of Infrastructure of 11 January 2021 on personnel employed on positions related directly to the conduct and safety of rail traffic and to driving of specific types of rail vehicles (Journal of Laws of 2024, item 780, as amended).
6) Regulation of the Minister of Infrastructure of 1 November 2022 on the train driver certificate (Journal of Laws of 2022, item 2680).
7) Regulation of the Minister of Infrastructure of 24 November 2022 on the train driver's licence (Journal of Laws of 2022, item 2574).
8) Regulation of the Minister of Infrastructure of 18 July 2005 on general conditions for rail traffic operation and signalling (consolidated text: Journal of Laws of 2025, item 100, as amended).
9) Regulation of the Minister of Infrastructure and Construction of 16 March 2016 on serious accidents, accidents and incidents in rail transport (Journal of Laws of 2016, item 369).

Internal instructions of the infrastructure manager PKP Polskie Linie Kolejowe S.A. (selected):

1) Ir-1 Instruction on operating railway traffic.
2) Ir-8 Instruction on the handling of serious accidents, accidents and incidents in rail transport.
3) Iet-2 Instruction on overhead contact line maintenance.
4) Id-1 Technical conditions on the maintenance of the surface of railway lines.
5) Id-7 Instruction on surveillance of railway lines.
6) Id-21 Rules of entry into the railway area managed by PKP Polskie Linie Kolejowe S.A.
7) Decision No. 3/2025 of the Member of the Management Board – Director of Infrastructure Maintenance at PKP Polskie Linie Kolejowe S.A., of 4 July 2025, concerning the introduction of the Technical and Operational Documentation (DTR) for various overhead contact line types.

Internal instructions of the railway carrier PKP Intercity S.A. (selected):

1) Bt-1 Instruction for a traction vehicle driver.
2) Br-21 Instruction for train crews regarding operation of passenger trains.
3) Br-3 Instruction on the handling of serious accidents, accidents and incidents.
4) Bt-3 Instruction on traction vehicle maintenance.
5) Bbhp-1 Occupational health and safety instruction for traction crews of electric and diesel traction vehicles.

8. A description of the difficulties and specific challenges encountered during the investigation

The Investigation Team did not encounter any other difficulties or problems that could affect the course or conclusions of the investigation.

9. Any interaction with the judicial authorities

The Chairman of PKBWK, in letter No. PKBWK.590.5.4.2025 PKBWK.590.6.4.2025 of 16 December 2025, requested the Mazovian Branch of the Department for Organised Crime and Corruption of the National Public Prosecutor’s Office in Warsaw to provide access to documentation relating to the ongoing proceedings and to

provide photocopies of the evidence secured by the police following the occurrence. The materials referred to above have been made available to the Investigation Team for further investigation.

10. Any other information relevant in the context of the investigation

Considering that foreign objects that had not been part of railway infrastructure had been found on the track, the Investigation Team concluded that they had been placed there deliberately by third parties with the intention of causing a railway accident. This conclusion is supported by an occurrence which took place on the same day at 06.40 hrs on the same track, mainline route Sobolew–Życzyn at km 90.550, which is the subject of a separate investigation by the Commission. According to the Investigation Team, preparation and installation of the items, i.e. a metal sheet wrapped around the rail and secured beneath the rail foot with a bolt, a mobile phone with a connected battery, and additional parts in the form of bolts, as well as signs of damage to track components, on track no. 1 at km 115.507, point to deliberate action by third parties. These actions amount to a terrorist act. Given the nature of the incident, a detailed investigation into the occurrence, identification of the perpetrators and determination of the purpose for which the items were placed on the track fall outside the remit of the Investigation Team. The physical evidence and traces recovered by the police will be used by the state security authorities to continue the ongoing investigation and produce a detailed explanation of the incident.

III. DESCRIPTION OF THE OCCURRENCE

1. The occurrence and background information

1.1. Description of the type of occurrence

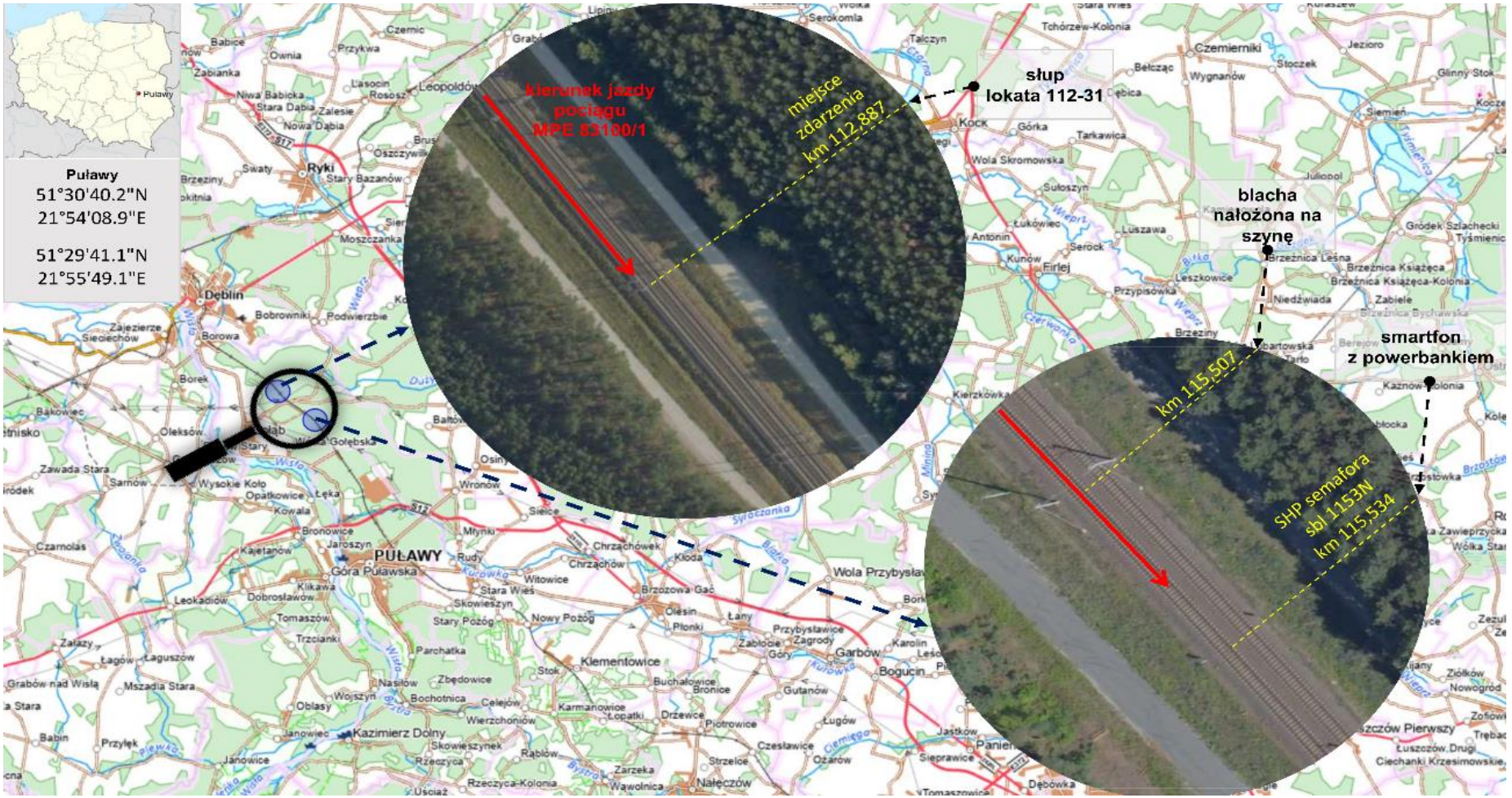
The first incident was caused by the theft of YC150-2CS150 overhead contact line involving the cutting out of one contact wire on the tensioning cables on tracks no. 1 and no. 2 of mainline route Zarzeka–Puławy Azoty of railway line no. 7.. In the occurrence, an electric locomotive with a passenger carriages entered a section of the overhead contact line with the contact wire cut out on track no. 1. The occurrence involved PKP Intercity S.A. train MPE 83100/1 travelling on the Świnoujście – Rzeszów Główny route, pulled by locomotive EU160-016.
The second incident involved installation by third parties of a metal sheet on the right-hand rail of track no. 1, secured with a bolt beneath the rail under its foot. Furthermore, a smartphone with a power bank was found at left-hand rail at km 115.534, propped against the SHP guardrail. A steel bolt was found near the metal sheet attached to the rail, lying on the outer trackside of the right-hand side rail. None of these items were part of the railway infrastructure and have been recovered by the police for further investigation. Further investigations into the motive behind the placement of the aforementioned foreign objects on the track, and the identification of the perpetrators, are being conducted by the public prosecutor's office.

1.2 The date, exact time and location of the occurrence

The first incident occurred on 16 November 2025 on railway line no. 7 Warszawa Wschodnia – Dorohusk, mainline route Zarzeka – Puławy Azoty, at 20:02 hrs, on track no. 1 at km 112.887. The second incident was identified on the same day at 23:53 hrs as foreign objects were found on track no. 1 at km 115.507. The exact date and time of installation of the said items are impossible for the Investigation Team to determine. The occurrences took place within the area of the infrastructure manager PKP Polskie Linie Kolejowe S.A. Railway Line Plant in Lublin.

1.3. The description of the occurrence site, including weather and geographical conditions at the moment of the occurrence and if any works were carried out at or in the vicinity of the site

The Zarzeka–Puławy Azoty mainline route, on which the occurrence took place, is situated on railway line no. 7: Warszawa Wschodnia Osobowa – Dorohusk. The line is a double-track, electrified, first-class railway line. Mainline track no. 1: built of 60E1 rails, jointless, fitted on PS93 concrete sleepers, with Sb7 fastening, and crushed stone ballast. Year of manufacture of the rails and sleepers: 2018; year of installation of the rails and sleepers: 2020.
The section of track no. 1 where the overhead contact line occurrence took place is located on a straight section from km 112.540 to km 113.200, with a gradient of 1.5‰ in the direction of travel of train MPE 83100/1. At the site here the metal sheet was installed at km 115.507, track no. 1 is located on a curve with a radius of R=2010 m and a track cant of h=70 mm. The overhead contact line was built in 2019 as part of the project entitled "Work on railway line no. 7 Warszawa Wschodnia Osobowa – Dorohusk on the section Warsaw – Otwock – Dęblin – Lublin, Phase I". The owner of the overhead contact line installed on mainline route Zarzeka – Puławy Azoty is PKP Polskie Linie Kolejowe S.A., and the line maintenance is by PGE Energetyka Kolejowa S.A. Zakład Mazowiecki. The section of tracks no. 1 and 2 on mainline route Zarzeka–Puławy Azoty is situated in a wooded area. There are hard-surfaced internal roads on both sides of the tracks.
The geographical coordinates of the site of the first overhead contact line occurrence are 51°30'40.2"N 21°54'08.9"E,
and of the second occurrence (installation of the metal sheet) are 51°29'41.1"N 21°55'49.1"E.



Photograph 1. A map showing the location of the theft of the OCL on line no. 7 at km 112.887, and the installation of the metal sheet at km 115.507 (photo: Google maps)

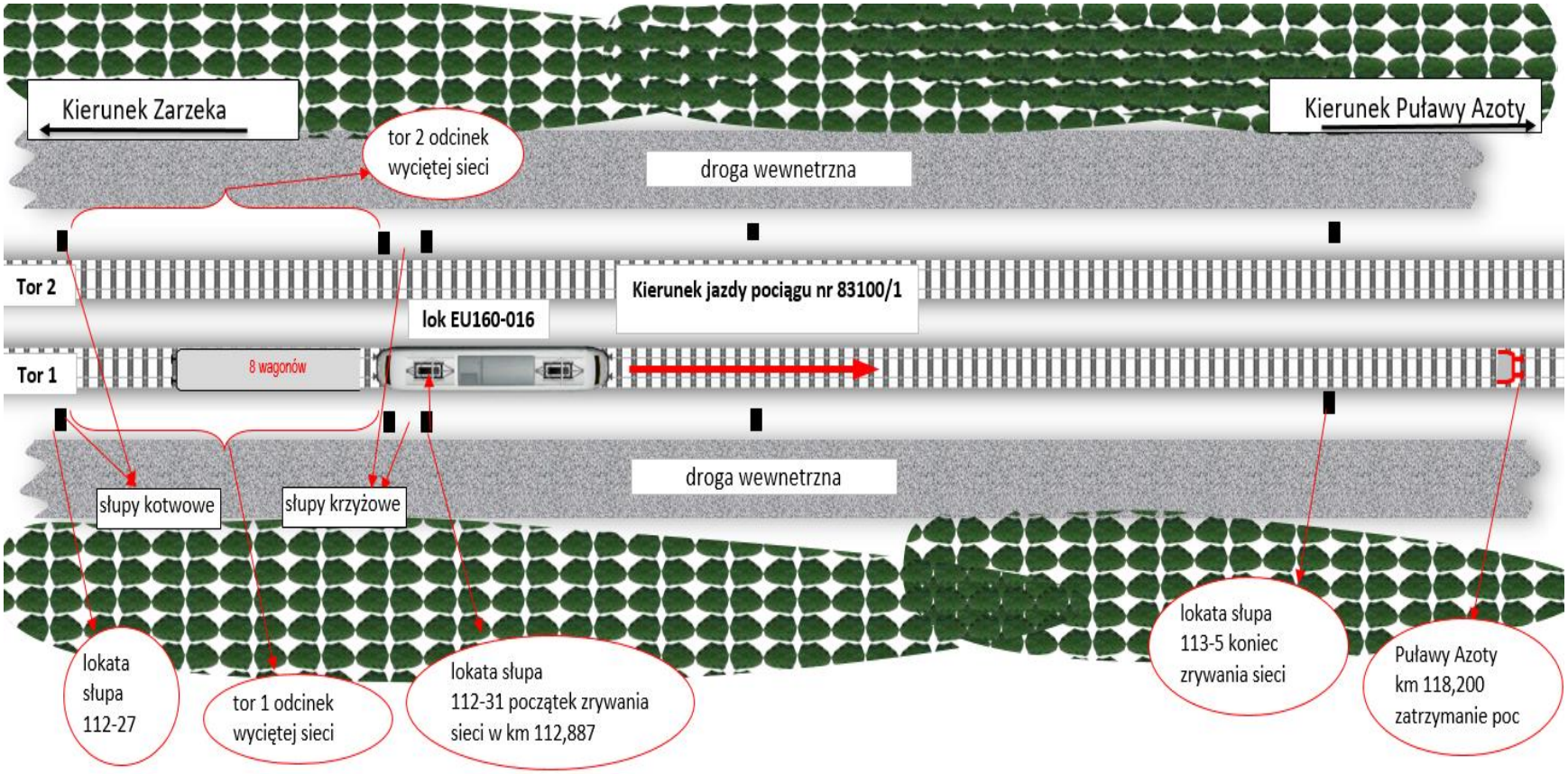


Figure 1. Site drawing – key locations relating to the occurrence are marked in red (source: PKBWK)

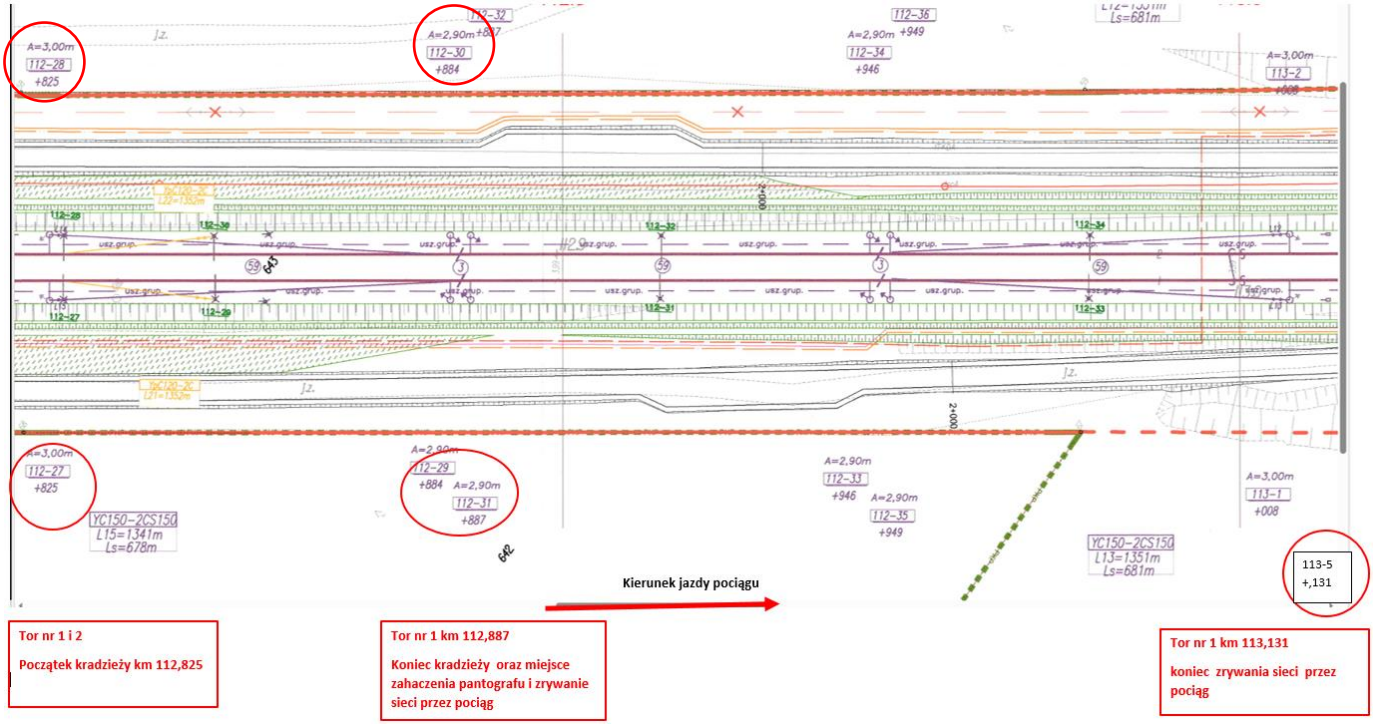


Figure 2. Schematic drawing – key points relating to the occurrence are marked in red (source: PKBWK)



Photograph 2. Location of the theft: track no. 1 and track no. 2, km 112.887 – the start point of severance of the damaged OCL (illustrative photograph – source: PKBWK)

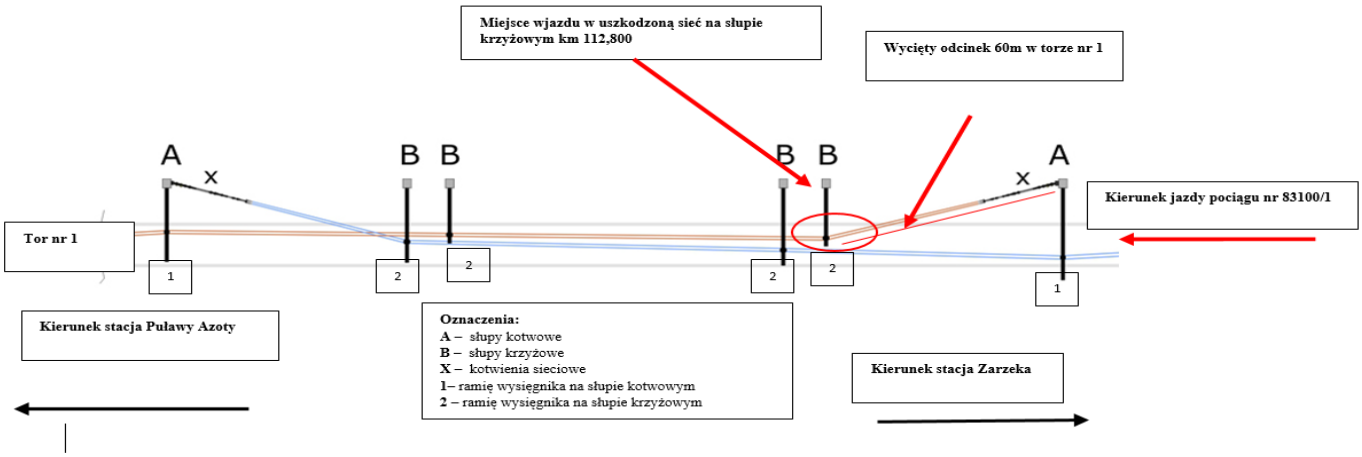


Figure 3. Vertical projection – a diagram of the mast layout at track no. 1 showing key points (source: PKBWK)

The occurrences took place after dark, under very overcast skies. The temperature ranged from 2°C to 5°C; visibility was limited (dark, cloudy evening); audibility was good; no other atmospheric phenomena. The Investigation Team is unable to determine the time of installation of the non-railway items on track no. 1.
At the time of the occurrence, now works were being varried out on the Zarzeka–Puławy Azoty mainline route that could have contributed to the occurrence.



Photograph 3. A view of the YC150-2CS150 overhead contact line at the scene of the occurrence (source: PKBWK)

1.4. Deaths, injuries and material damage

a) passengers, employees or contractors, level crossing users, trespassers, other persons at a platform, other persons not at a platform

None.

b) cargo, luggage and other property

None.

c) rolling stock, infrastructure and the environment

Overhead contact line – one of the DJP contact wires on tensioning cables was cut off at two locations: track no. 1 from site 112-29 to site 112-27, and track no. 2 from site 112-30 to site 112-28. Furthermore, the overhead contact line on track no. 1 was severed from site 112-31 to site 113-5, i.e. from km 112.887 to km 113.131. Approximately 244 metres of the double overhead contact line were severed, and line elements (i.e. hangers, bracket and tension arm) were destroyed. Third parties cut out two sections of the contact wire, each approximately 60 metres long. The wires, bearing signs of mechanical cutting, were lying in the ditches alongside tracks no. 1 and 2.



Photograph 4. A view of the damage to the overhead contact line: broken suspension hangers for the contact wire, damaged arm bracket, missing tensioning arms (source: the railway commission)

Furthermore, pantograph no. 2 on locomotive EU160-016 was damaged. The contact strip with the graphite liner, the head assembly, the suspension bracket and the upper arm were damaged. As a result of the occurrence, passenger carriage no. PL PKPIC 50 51 84-78 125-8 in train MPE 83100/1 was also damaged.
The paintwork on the carriage bodywork was damaged, and three consecutive outer panes of glass were broken in the windows on the right-hand side of the carriage.

The occurrences did not cause any damage to the natural environment.



Photograph 5. A view of the damaged contact wire, which was severed and dragged by the locomotive to the mast at site 113-5 (source: the railway commission)



Photograph 6. A view of the damaged pantograph on locomotive EU160-016 (source: the railway commission)



Photograph 7. A view of the damage sustained by the carriage (source: the railway commission)

1.5. The description of other consequences, including the impact of the occurrence in the regular operations of the actors involved

a) train traffic restrictions:

Station tracks no. 1, 3 and 5 at Zarzeka station and mainline track no. 1 Wieprz – Zarzeka were closed from 20:15 hrs to 21:07 hrs on 16 November 2025. Station tracks no. 1, 3 and 5 at Puławy Azoty station were closed from 20.15 hrs to 23.10 hrs on 16 November 2025.

Track 1 on the Puławy Azoty–Puławy mainline route was closed from 20.15 hrs to 22.40 hrs on 16 November 2025.

Track No. 2 on railway line no. 580 on the Wieprz–Wisła mainline route was closed from 20.15 hrs to 21.07 hrs on 16 November 2025.

Track no. 1 on the Zarzeka–Puławy Azoty mainline route was closed from 20.15 hrs on 16 November 2025 to 22.15 hrs on 17 November 2025 due to damage to the line.

Track no. 2 from km 112.700 to km 112.900 on the Zarzeka – Puławy Azoty mainline route from 22:00 hrs on 16 November 2025 to 03:25 hrs on 18 November 2025 – trains ran with pantographs lowered and at a reduced speed of up to 60 km/h.

Track no. 2 on the Zarzeka–Puławy Azoty mainline route was closed from 04:35 hrs to 05:05 hrs on 17 November 2025 due to work by services to remove the elements linked to the smartphone that had been found.

Track no. 2 on the Zarzeka–Puławy Azoty mainline route was closed from 22:55 hrs on 17 November 2025 to 03:25 hrs on 18 November 2025 due to operations of the network train.

b) train delays:

As a result of the occurrence, 29 passenger trains were delayed by a total of 438 minutes, and 11 freight trains were delayed by 1,261 minutes.

c) backup transport:

None introduced.

1.6. The identification of the persons, their functions, and entities involved, including possible interfaces to contractors and/or other relevant parties

The following persons were directly involved in the occurrence:

- the driver of train MPE 83100/1, an employee of the railway carrier PKP Intercity S.A.,
- the manager of train MPE 83100/1, an employee of the railway carrier Intercity S.A.,
- section signaller 3 at the LCS Dęblin remote control signal box,
- assistant signaller 3 at the LCS Dęblin remote control signal box.

1.7. The description and identifiers of train(s) and their composition including the rolling stock involved and their registration numbers

Passenger train MPE 83100/1 operated by the railway carrier PKP Intercity S.A. on he route Świnoujście – Rzeszów Główny, consisting of a locomotive and 8 passenger carriages:

1) locomotive EU160-016, EVN number: PL-PKPIC 91 51 51 70 103-3;
2) carriages with the following EVN numbers:
   - PL PKPIC 50 51 29-78 048-0,
   - PL PKPIC 50 51 20-78 829-2,
   - PL PKPIC 50 51 84-78 125-8,
   - PL PKPIC 50 51 39-78 049-6,
   - PL PKPIC 61 51 21-70 096-2,
   - PL PKPIC 61 51 21-70 100-2,
   - PL PKPIC 61 51 21-70 093-9,

- PL PKPIC 61 51 19-70 210-3.

Details of train MPE 83100/1:

- length of the train – 224 m,
- total mass of the train -– 474 t,
- gross mass – 394 tonnes,
- required braking mass – 678 t,
- actual braking mass – 790 t,
- actual braking mass percentage – 166%,
- required braking mass percentage – 143%,

The train is correctly marked with Pc1 and Pc5 signals.

Locomotive EU160-016 had notice of return to operations no. BPT1m-8/2024 issued on 22 November 2024 by PKP Intercity S.A. The last P2/1 maintenance check was carried out on 3 October 2025; the P2/2 check was carried out on 3 August 2025.

1.8. A description of the relevant parts of the infrastructure and signalling system – track type, switch, interlocking, signal, train protection systems

Train traffic on the Zarzeka–Puławy Azoty mainline route is managed by section signaller 3 from the Local Control Centre Dęblin "Db", who is assisted by assistant signaller 3. Train traffic is managed with ESTW L90.5 computer devices with the use of a multi-section (automatic) bidirectional four-aspect ESTW block signalling.

Track no. 1, jointless:

Rail type……	–	60E1
Sleepers……..	–	PS93 concrete
Fastening type……	–	flexible, type Sb7,
Ballast type……	–	crushed stone
Maximum permitted train speed en route….	–	160 km/h

Track inspections on the Zarzeka–Puławy Azoty mainline route, from km 106.800 to 116.90, every 10 days. The last track inspection on the Zarzeka–Puławy Azoty mainline route took place on 8 November 2025.

Overhead contact line:

Type YC150-2CS150 – railway traffic construction type approval No. B/2008/0049 issued on 5 June 2008.
YC150-2CS150-type overhead contact line, compensated and flexible, with a Cu catenary wire with cross section area of 150 mm^2 and two contact wires made of copper-silver alloy with a cross section area of 150 mm^2, designed to power electric traction vehicles operating on tracks of PKP Polskie Linie Kolejowe S.A. at speeds of V ≤ 200 km/h. The tensioning used for the contact wire: 2966 daN, on the catenary line: 1907 daN, on the "Y" suspension line: 250 daN. Height: 1.7 m. Nominal span: 65 m.
According to the record for the overhead contact line tensioning section on track no. 1 – section L-15 with the length of 1,341 m from mast site 112-27 to mast site 114-9, i.e. from km 112.825 to km 114.166, inspections were carried out on the following dates: 30/31 May 2022, 12/13 and 13/14 December 2023, 20/21 May 2025 – mean DJP wear: L – 0%, R – 0%. The next DJP wear measurement in 3 years. DJP thickness diameter: L – 14.5, R – 14.5.
Report No. 54/06/2025 on the acceptance of the periodic maintenance carried out on 15/16, 19/20, 20/21, 21/22, 22/23, 26/27 May 2025 by PGE Energetyka Kolejowa S.A. on track no. 1 on sections no. L-9, L-11, L-13, L-15, L-17, L-19 and L-21 did not find any irregularities that could have a direct impact on the safety of rail traffic or could cause a failure of the overhead traction line.

On 16 November 2025, i.e. on the day of the incident, the traction substations were operating correctly.

Power supply settings at the Dęblin substation:
– Wólka Profecka 1 – 2700 A,
– Wólka Profecka 2 – 2700 A.
Power supply settings at the Wólka Profecka substation:
– Dęblin 1 – 2700 A,
– Dęblin 2 – 2700 A.

The Investigation Team concludes that the causal and contributing factors behind the incident involving the severance of the overhead contact line were not related to the technical condition of the line, but to interference by third parties.

1.9. Any other information relevant for the purpose of the description of the occurrence and background information

The metal sheet installed by third parties on the right-hand side rail of track no. 1 and secured below the rail with a bolt, and the smartphone with an attached power bank left at km 115.534 of railway line no. 7, propped against the SHP guardrail, and the other items found do not constitute elements of the railway infrastructure. Since the incident amounts to a potential terrorist threat, all the items have been secured by the police for further investigation. It is impossible for the Commission's Investigation Team to determine with precision the exact date and time when these items were installed, the purpose for which they were placed there, or the identity of the perpetrators. The Investigation Team determined the time range as the period between the last track inspection and the date on which these items were found, i.e. between 8 and 16 November 2025.
Further investigation into the case is being conducted by the public prosecutor's office.

2. The factual description of the events

2.1. The proximate chain of events leading up to the occurrence, including actions taken by persons involved, the functioning of rolling stock and technical installations, the functioning of the operating system

On 16 November 2025 at 15:19 hrs, a train driver employed by the railway carrier PKP Intercity S.A. began his shift at Lublin Główny station, from where he drove the train to Warszawa Wschodnia station. At Warszawa Wschodnia station, the driver took over the driving of train MPE 83100/1 on the Świnoujście–Rzeszów Główny route. While travelling on track no. 1 of the Sobolew–Życzyn mainline route, in accordance with written order "O", he reduced the speed to 20 km/h at the site where the police and other services were attending the incident that had occurred at 06.40 hrs. After passing the speed limit are, the driver of the train continued travel without noticing any irregularities. He passed Zarzeka station at the scheduled speed and continued on track no. 1 on the Zarzeka–Puławy Azoty mainline route.

On the same day, unknown perpetrators drove up in a car from the direction of track no. 1 on that mainline route with the intention of stealing copper cables from the overhead contact line, as evidenced by the car's tyre marks on the roadside between the track and the access road left at the site where the wires were cut out. The perpetrators of the theft secured the weights at the anchor masts. To this end, they used sections of reinforcing rods, approximately 2.0 m in length, which they had brought to the site; these were secured to the cable of the tensioning device with a U-clamp, with the other curved end hooked onto a cable pulley. These rods were intended to prevent the weights from falling suddenly when the contact wire was cut. This method of securing was used on the side of the anchor masts on tracks no. 1 and 2. Next, one of the two DJP wires between the anchor and overlap masts at tracks no. 1 and 2 was cut out. The wires, measuring 2 × 60 m, which had been left in the ditch, showed clear signs of mechanical cutting. This occurred at approximately 19:48 hrs, as evidenced by the fact that the earlier train, no. 125005, travelling on track no. 1, vacated that track at 19:47 hrs without incident, and the driver did not notice any irregularities. The thieves were probably scared off by approaching train MPE 83100/1 travelling on Świnoujście–Rzeszów Główny route, which was running approximately 10 minutes late and was approaching from Zarzeka station. The driver of that train, travelling on track no. 1 at the speed of 159 km/h, noticed at 20:01:11 at km 112.887 a flash on the overhead contact line, detected loss of voltage and saw that the automatic dropping device (ADD) on pantograph no. 2 (in the

direction of ravel) was activated. At at mast at site 112-29, the pantograph came into contact with the damaged and sagging energised overhead contact line – there was another flash of fire and the severance of the contact wire, causing damage to the pantograph and parts of the overhead contact line as far as the mast at site 113-5. One of the wires severed by the pantograph struck the third carriage on the right-hand side of the train, breaking the outer glass panes of three consecutive windows in that carriage (the inner panes remained intact). After hitting the body of the carriage, the severed cable became caught on the steel structure of the mast at site 113-5. Broken sections of the overhead contact line and contact wires were lying on the ground to the right of track no. 1. Although the driver noticed a flash on the overhead contact line at the speed of 159 km/h, he did not feel or notice that the wires were being torn down and parts of the overhead contact line (booms, hangers, tensioning cables) were being damaged behind the train. He continued travel without power, with pantograph no. 2 lowered (as a result of the activation of the ADD system) and damaged, to Puławy Azoty station. After the speed deceased to 60 km/h, the driver raised the front pantograph (pantograph no. 1). Having established that there was no voltage in the line, he lowered it and brought the train to a halt at Puławy Azoty station at 20:05:30 hrs at km 118.200.
While the train was still in motion, at 20:02 hrs, the driver notified the station signaller at Puławy Azoty station that the train needed to be stopped at Puławy Azoty station due to a flash on the overhead contact line and activation of the ADD system on pantograph no. 2. At 20.04 hrs, the train manager informed the driver that a window in one of the carriages had been broken. The driver of another train, no. 21100, travelling on track no. 2 towards Zarzeka station, was monitoring the overhead contact line on track 1 on the instructions of the station signaller at Puławy Azoty station. He noticed that the overhead contact line had been severed at kilometre 112.800 and, at 20:12 hrs, reported this to the station signaller at Puławy Azoty station. At 20.30 hrs, the driver of train MPE 83100/1 informed the signaller that, due to a power line severance, it was necessary to call out the line emergency maintenance team to inspect the locomotive's pantograph. The signaller acknowledged that the network train had already departed from Dęblin station. The line emergency maintenance team that arrived at the scene secured the damaged pantograph no. 2 on locomotive EU160-016. Subsequently, at 23:23 hrs, train MPE 83100/1 continued its travel using pantograph no. 1 to Lublin Główny station, at the reduced speed of 120 km/h due to broken external glass panes in the third carriage of the train. As a result of the occurrence, none of the passengers on the train were injured or suffered any material losses.

Based on the evidence gathered in the course of the investigation, the Investigation Team established the following sequence of events:

A. PGE Energetyka Kolejowa S.A. dispatch log

19:48:29.508 hrs– 19:48:59.890 hrs
The current protection devices on tracks no. 1 and 2 are tripped, and auto reclosing (SPZ) is effected following a successful line test. According to information from PGE Energetyka Kolejowa S.A., the power supply units were switched off due to high current consumption. According to the Investigation Team, this occurred at the moment when the DJP wires were being cut out on tracks no. 1 and 2. This thesis is supported by the fact that, according to the Dęblin signal box's traffic log, there were no trains on the Zarzeka–Puławy mainline route at that time. Train MPE 83100/1, travelling on track no. 1, entered thas route at 19:59 hrs, while the earlier train, No. 125005, also travelling on track no. 1, vacated the route at 19:47 hrs (1E locomotive travelling alone).

20:01:11.729 hrs – 20:01:59.844 hrs
The current protection devices on track no. 2 are tripped, followed by automatic reclosing; failed reclosing attempt on track no. 1.
At that time, train MPE 83100/1 was travelling on track no. 1. Energised elements of the damaged overhead line come into contact wit elements of the locomotive, severing the overhead line and damaging the pantograph. The short circuit of the broken wires and the bonding results in a temporary loss of voltage on track no. 2.

20:02:20 hrs – 20:03:30.618 hrs
Another attempt to energise the line on track no. 1 – The system made a series of line tests with negative result, indicating a permanent short circuit.

20:03:38.492 hrs – 20:06:00.515 hrs

Dispatch operations aimed at attempting to locate the damage.

B. An extract from the Dęblin post's traffic logbook, mainline route to and from Zarzeka – Puławy Azoty

19:09 hrs – 19:13 hrs track no. 2, train no. 2524
19:23 hrs – 19:27 hrs track no. 2, train no. 23100
19:30 hrs – 19:35 hrs track no. 1, train no. 12011
19:41 hrs – 19:47 hrs track no. 1, train No. 125005 (1E locomotive running alone)
19:59 hrs – 20:04 hrs track no. 1, train no. 83100/1
20:10 hrs – 20:14 hrs, track no. 2, train no. 21100
Track no. 1 from Zarzeka to Puławy Azoty closed since 20.15 hrs due to damage to the overhead contact line at km 112.800.

C. An extract from the telephone log – Dęblin post

20:03 hrs – The driver of train 83100/1 reported at km 116.200 that the pantograph had dropped following a flash on the overhead contact line, and that the train would continue to Puławy Azoty station for an inspection of the pantographs.
20:05 hrs – The driver of train 12231 reported loss of power on track no. 1 Wieprz – Zarzeka.
20:10 hrs – The power dispatcher was notified of power loss on track no. 1 Wieprz – Zarzeka; track no. 1 Zarzeka – Puławy Azoty.
20:15 hrs – The driver of train 21100 reported severed overhead contact line at km 112.800 on track no. 1 of the Zarzeka–Puławy Azoty mainline route. The power dispatcher, IDDE and IZDD were notified.
20:17 hrs – Following consultation with the power dispatcher, Wieprz – Zarzeka mainline route track no. 1, Zarzeka station tracks no. 1, 3 and 5, Zarzeka–Puławy Azoty mainline route track no. 1, Puławy Azoty station tracks no. 1, 3 and 5, and Puławy Azoty – Puławy mainline route track 1, were closed at 20:15 hrs.
21:20 hrs – Following notification from the power dispatcher that the overhead contact line voltage was re-energised on the Wieprz – Zarzeka mainline route track no. 1 and Zarzeka station (odd-numbered side), the following tracks were opened: Wieprz – Zarzeka mainline route track no. 1 and Zarzeka station tracks no. 1, 3 and 5 - at 21:07 hrs.
22:00 hrs – The foreman of the network train reported a speed limit of 60 km/h and travel with pantographs lowered on track no. 2 of the Puławy Azoty – Zarzeka mainline route from km 112.900 to km 112.700.



Photograph 8. The smartphone left at SHP on track no. 1 (source: the railway commission)



Photograph 9. A discarded item – a bolt (source: the railway commission)



Photograph 10. The cut metal sheet installed on track no. 1 by third parties (source: the railway commission)

2.2. The chain of events from the occurrence until the end of the actions of the rescue services, including measures taken to protect and safeguard the site of the occurrence, the efforts of the rescue and emergency services.

The occurrence was reported by the driver of train MPE 83100/1 to the signaller at Puławy Azoty station at 20:02:15 hrs; the latter notified the line emergency maintenance at 20:18 hrs. The network train departed from Dęblin station at 20.37 hrs. The train arrived at the scene at 20.44 hrs. A vehicle-borne line emergency maintenance team also arrived at Puławy Azoty station; the crew secured the damaged pantograph at 23:05 hrs and gave the go-ahead for the train to continue its travel using the front, fully functional pantograph of locomotive EU160-016.

Following the occurrence and the stop of train MPE 83100/1 at Puławy Azoty station, passengers waited on board the train under the supervision of the train crew until the train departed. At 23:23 hrs, train MPE 83100/1 departed from Puławy Azoty station, pulled by locomotive EU160-016 and using pantograph no. 1, bound for Lublin Główny station.

Due to broken windows in the third carriage of the train, the train ran at a speed limited to 120 km/h. As a result of the occurrence, none of the passengers on the train were injured or suffered any material losses.

Following the overhead contact line incident, an employee of PKP Polskie Linie Kolejowe S.A., Railway Line Plant in Lublin, together with SOK Dęblin and the police, carried out an inspection and assessment of the damage to the overhead contact line on the Zarzeka – Puławy Azoty mainline route. While walking from the direction of Puławy Azoty station towards the site of the damage to the overhead contact line, they found a steel element on track no. 1 at 23:53 hrs at km 115.507. It was a welded metal sheet fitted from above onto the right-hand rail of track no. 1 and secured with a bolt beneath the rail foot. The metal sheet, approximately 3 mm thick, had been cut by the wheel rims of railway vehicles that had passed over it earlier; the cut edge

showed slight traces of rust. Furthermore, approximately 6.5 m from the point where the metal sheet had been placed on the right-hand track, i.e. at km 115.514, a steel bolt with two washers and a nut was found lying on the outer side of the rail of the same rail track. Damage was also found at the same place to the insulating (shock-absorbing) inserts of the Sb7-type spring-mounted fixing, as well as minor damage to the PS93 concrete base. Furthermore, at km 115.334, a smartphone connected by a cable to a power bank was found. The smartphone was mounted on an SHP guardrail (a railway element) installed on the outside of the left-hand rail of track no. 1. Track no. 2 on the Zarzeka–Puławy Azoty mainline route was closed from 04:35 hrs to 05:05 hrs to allow security specialists to remove the smartphone. Given the nature of the occurrence, security services, the army and the police arrived at the scene. Further detailed clarification of the purpose why the metal clasp with the mobile phone was installed is the subject of a separate investigation.
The items that had been removed were taken into police custody.

IV. ANALYSIS OF THE OCCURRENCE

1. Roles and duties

1.1. Railway undertaking(s) or infrastructure manager(s)

Infrastructure manager PKP Polskie Linie Kolejowe S.A. Railway Line Plant in Lublin

The tasks of the infrastructure manager, hereinafter referred to as "the manager", include operation of rail infrastructure involving inter alia:
- operation of rail traffic;
- provision of railway infrastructure, provision of related services and levying of the related charges;
- maintenance of the rail infrastructure through carrying out works aimed to maintain the condition and ability of the existing rail infrastructure to operate rail traffic safely, including supervision of the functioning of rail traffic control devices and track-side train safety control devices.

Railway lines are divided into lines of national importance and other lines.

A railway line of national importance is an existing or proposed railway line whose construction, maintenance and operation is justified by important economic, social, environmental or defence considerations.

A railway line of defence significance is a railway line of national importance, whose the maintenance and operation is justified by national defence considerations, including the needs of the Armed Forces of the Republic of Poland and allied forces during periods of heightened national defence readiness and in the event of war, and which is scheduled to be provided with technical protection.

The Minister competent for transport, in consultation with the Minister of National Defence, has set out, by means of an ordinance, a list of railway lines of exclusively defence significance.
The ordinance is not subject to publication (it is classified).

Line no. 7 Warszawa Wschodnia Osobowa – Dorohusk – national border is a line of national importance.

Protection of order on railway areas

Access to railway areas is permitted only at places designated by the manager.

Apart from the areas designated by the infrastructure manager, access to railway areas is permitted to persons authorised by the competent infrastructure manager or the competent railway carrier, and to persons authorised under separate regulations.

Railway infrastructure managers and railway carriers are obliged to ensure order and discipline in railway areas and on trains and other rail vehicles.

The infrastructure manager, with the consent of the Minister competent for transport granted in consultation with the Minister competent for home affairs, has established a railway security guard and appointed the commander of the railway security guard.

The duties of the railway security guard include, among others: ensuring compliance with public order regulations in railway areas and protecting the lives and health of people and property in railway areas.

Railway carrier PKP Intercity S.A.

For carrying out a transport task, the railway carrier is obliged to allocate railway vehicles with a type authorisation certificate, notice of return to operations and operation approval certificate issued by the entity in charge of maintenance of the vehicle. The railway carrier PKP Intercity holds a single safety certificate which, together with the licence to carry out rail transport, entitles it to carry out its operations.
The Investigation Team established that the rail vehicles involved in the occurrence met the requirements concerning authorisation to operation and had the required documents.

The responsibilities of the railway carrier concerning safe driving of a rail vehicle are specified in the internal rules of the infrastructure manager and railway carrier. The Investigation Team has not identified any conduct that contravenes applicable regulations.

1.2. The entities in charge of maintenance, the maintenance workshops, or any other maintenance suppliers

Railway carrier PKP Intercity S.A., which provides the rolling stock, is responsible for its serviceability, technical condition and compliance with the vehicle maintenance process. Locomotive EU160-016 had all the necessary documents. The carrier submitted documentation concerning the latest technical inspections of its rail vehicles. The Investigation Team did not find any irregularities as regards rolling stock maintenance. The technical condition of the rail vehicles had no impact on the occurrence concerned.

1.3. Manufacturers of rolling stock or other suppliers of rail products

Based on the investigation material gathered, the Investigation Team did not identify any factors related to manufacturers of rolling stock and suppliers of rail products that could have impact on the occurrence.

1.4. National safety authorities or the European Union Agency for Railways

The President of the Office of Rail Transport (UTK) supervises railway traffic safety. Based on the investigation material gathered in the case, the Investigation Team did not identify any factors on the side of the national safety authority that would have impact on the occurrence.

1.5. Notified bodies, designated bodies or risk assessment bodies

Based on the investigation material gathered, the Investigation Team did not identify any factors that could be affected by notified bodies.

1.6. Certification bodies of entities in charge of maintenance mentioned under Point 1.2

Based on the investigation material gathered, the Investigation Team did not identify any factors that could be affected by certification bodies of the railway carrier.

1.7. Any other person or entity relevant to the occurrence, documented or not in one of the relevant safety management systems or referred to in a register or relevant legal framework

Not applicable.

2. Rolling stock and technical installations

Locomotive EU160-016, which pulled train MPE 83100/1, is equipped by the manufacturer with Hasler TELOC 3000, type 5.2423.069/01, series 19322045, electronic system for event data recording.
A description of selected running parameters for locomotive EU160-016 from its departure from Dęblin station to its arrival at Puławy Azoty station. The Investigation Team used EVA2 software to analyse selected driving parameters recorded by the recorder.
The analysis covered, among others:

- distance by sections,
- speed,
- time,
- pantograph A or B (1 or 2),
- SIFA activation (CA – dead-man's vigilance device),
- braking.



Figure 4. A graph of the running parameters of the EU160-016 locomotive (compiled by PKBWK)



Figure 5. A graph of the running parameters of the EU160-016 locomotive (compiled by PKBWK)

Description of the data:

(No. 1 in the graph) – 19:55:37 hrs, departure of train MPE 83100/1 from Dęblin station,
(No. 2 in the graph) – 20:01:11 hrs, power loss at 158.8 km/h,
(No. 3 in the graph) – the distance travelled from Dęblin station until the power loss is 9.83 km,
(No. 4 in the graph) – 20:05:35 hrs: the train comes to stop at Puławy Azoty station at km 118.200,
(No. 5 on in the graph) – 20:04:19 hrs, the driver raises the front pantograph and lowers it at 20:05:35 hrs,
(No. 6 in the graph) – 20:07:03 hrs, the driver raises the front pantograph again and lowers it a moment later.

3. Human factors

3.1. Human and individual characteristics

PKP Intercity S.A. provided a single-person traction crew to operate train MPE 83100/1.
The train driver involved in the occurrence had the required rest period before starting work. The employee had the required qualifications and licences and a valid medical certificate. The occurrence took place during the fifth hour of the shift. The railway carrier PKP Intercity S.A. provided a train crew consisting of a train manager and a conductor. The LCS Dęblin signaller also held the required qualifications and medical certificates, and had the required rest period. Human factors had no impact on the occurrence.

3.2. Job factors

The rail vehicles involved in the occurrence had the relevant approvals for operation on the railway network in Poland and were in good working order. The job of the train driver was typical and had no impact on the occurrence. Factors relating to the job had no impact on the occurrence.

3.3. Organisational factors and assignments

§ 20(2) of the Instruction for a traction vehicle driver (Bt-1) sets out the procedure to be followed by the train driver in the event of a power cut or damage to the overhead contact line:
Following loss of power supply after noticing unusual behaviour in the overhead contact line (jerks, swaying, or flashes caused by an electric arc), the driver must immediately:

1) lower the pantographs (emergency dropping of the pantographs is permitted at any speed),
2) stop the train.

§ 21(1) and (2) of the Instruction for a traction vehicle driver (Bt-1) sets out the procedure to be followed by the train driver upon detecting activation of the ADD system:

1) if activation of the ADD system is detected and the pantographs on the traction unit are automatically dropped, the train driver shall notify the signaller of this, specifying the location of the fault,
2) after coming to a halt, as agreed with the signaller, the train driver shall inspect the pantograph on which the ADD system was triggered.

Having noticed a flash on the overhead contact line above track no. 1 and confirmed that the ADD system on pantograph no. 2 had been triggered, the train driver did not stop the train at the point where this occurred, but reduced the speed to 60 km/h and drove the train without power, using the momentum, to Puławy Azoty station, where it came to a halt. The train driver reported the flash, the activation of the ADD system and the need to stop the train to the signaller.
After stopping at Puławy Azoty station, the train driver carried out a visual inspection of the train, during which he noticed that three external glass panes in windows on the right-hand side (in the direction of travel) of the third carriage from the front of the train had been broken, and he waited for power supply staff to assess the damage to pantograph no. 2. The emergency staff secured pantograph no. 2. The driver continued travel using front pantograph no. 1. The train was travelling at speeds of up to 120 km/h because the external glass panes in one of the carriages had been broken.

The duties of the signaller are set out in, among others, § 53 of the Instruction on operating railway traffic (Ir-1). The signaller was notified by the driver of train no. 21100, travelling on track no. 2, that the overhead contact line had been severed on track no. 1 at km 112.800. Following this notification, at 20.15 hrs, he closed the tracks and notified the competent railway authorities.

3.4. Environmental factors

The occurrence at km 112.887 on the Zarzeka – Puławy Azoty mainline route took place during after dark in cloudy conditions, which resulted in reduced visibility and limited the train driver's ability to spot the damage to the overhead contact line and bring the train to a halt before the point of damage.
While travelling at 159 km/h, the driver of train MPE 83100/1 did not notice any obstacles to the journey or any other irregularities in the condition of the overhead contact line or the track infrastructure.

None of the train drivers of the trains travelling earlier had noticed the metal sheet or other foreign objects lying on track no. 1 at km 115.507 of the Zarzeka–Puławy Azoty mainline route. However, the traces of rust on the cut edge of the metal sheet indicate that the metal sheet found was cut by the wheelsets of one of the trains that had passed earlier. Based on the information available, the Investigation Team has determined that the metal sheet and smartphone were placed there between 8 and 16 November 2025. By the time the investigation was concluded, the exact date and time when the metal sheet and foreign objects were placed there, nor the details of the train whose wheel flanges cut through the metal sheet, had been established. The investigation is being conducted by the public prosecutor.

3.5. Any other factors relevant for the purpose of the investigation

In the course of the investigation, the Investigation Team identified an external factor relating to the incidents. The main factor was interference by third parties. It involved cutting out and attempting to steal the contact wire from the overhead contact line on tensioning cables between the anchor and overlap masts. Another instance of third-party interference was the placement on the track of items which were not part of the railway infrastructure and which posed a threat to railway safety.

4. Feedback and control mechanisms, including risk and safety management as well as monitoring processes

The relevant regulatory framework conditions::

4.1. The processes, the methods, the content and the results of risk assessment and monitoring activities, performed by any of the involved actors: railway undertakings, infrastructure managers, entities in charge of maintenance, maintenance workshops, other maintenance providers, manufacturers and any other actors, and the independent assessment reports referred in Article 6 of Implementing Regulation (EU) No 402/2013

As part of the Safety Management System (SMS), the infrastructure manager PKP Polskie Linie Kolejowe S.A. draws up an annual Safety Improvement Programme. The aim of the Railway Safety Improvement Programme is to achieve an acceptable level of safety by reducing the risk of railway occurrences and eliminating breakdowns and faults. In the Railway Safety Improvement Programmes for 2024 and 2025, the infrastructure manager identified threats and set out measures aimed at preventing the adverse effects of third-party actions that affect the level of railway safety:

1) monitoring the status of SRK equipment for unauthorised external interference,
2) inspections of scrap metal collection points with regard to the trade in railway infrastructure components originating from theft,
3) identification of locations where theft and vandalism of infrastructure components occur repeatedly,
4) increased SOK patrols in areas where there is a heightened risk of third-party activity.

Furthermore, the infrastructure manager maintains the so-called *Hazard Record*. The record contains the following elements: hazard name, hazard number, hazard source, outcomes, risk control measures, hazard source manager, and risk acceptance rules.

In section 11.1, the infrastructure manager has identified a hazard relating to breaches of the rules on maintaining order and discipline on railway premises, including in relation to:

1) presence of unauthorised persons in railway areas,
2) theft or attempted theft of railway infrastructure components,
3) vandalism of railway infrastructure,
4) placement of an obstacle within the railway infrastructure (buildings and structures) elements,
5) suspension of an obstacle within the railway infrastructure (buildings and structures) elements,
6) unauthorised tampering with energised electrical circuits.

In section 11.5, the infrastructure manager has identified the hazard of criminal acts being committed in railway areas, including attacks on railway infrastructure components and on facilities and buildings intended for passenger services.

In 2024, one case of theft of a central anchor cable for the catenary system (approx. 450 m) was reported on the area Railway Line Plant in Lublin on the Sadurki–Motycz mainline route of railway line no. 7. In 2025, one case of theft of the contact wire used to tension the overhead line (approx. 240 m) was reported between an overlap mast and an anchor mast on the Zaklików–Lipa mainline route of railway line no. 68. In the area of Railway Line Plant in Lublin, no previous acts of sabotage were recorded in 2024 or 2025.

4.2. The safety management system of the involved railway undertaking(s) and infrastructure manager(s) including the basic elements stated in Article 9(3) of Directive (EU) 2016/798 and any EU legal implementing acts

The entities involved in the railway occurrences that took place on 16 November 2025 on railway line no. 7 Warszawa Wschodnia Osobowa – Dorohusk, mainline route Zarzeka – Puławy Azoty, at 20:02 hrs on track no. 1, km 112.887, and at 23:53 hrs on track no. 1, km 115.507, have Safety Management Systems (SMS) approved by the President of the Railway Transport Office.

4.3. The management system of the entity/entities in charge of maintenance and maintenance workshops including the functions stated in the Article 14(3) and Annex III of Directive (EU) 2016/798 and any subsequent implementing acts

Not applicable.

4.4. The results of supervision performed by the national safety authorities in accordance with Article 17 of Directive (EU) 2016/798

No factors influencing the occurrence were identified on the side of the national safety authority.

4.5. The authorisations, certificates and assessment reports granted by the Agency, the National Safety Authorities or other conformity assessment bodies

The Investigation Team does not raise any reservations regarding certificates held by the infrastructure manager and railway carrier. Locomotive EU160-016 has authorisation for entry into service no. PL 51 2020 0078. The YC150-2CS150 overhead contact line has railway traffic construction type approval No. B/2008/0049 issued on 5 June 2008.

5. Previous occurrences of a similar character

A brief description of occurrences, their causes and preventive measures.

1. On 3 March 2025 ,while train no. 69567 (electric multiple unit 48WEc-044) was travelling to Węgliniec station on track no. 1, the train driver heard a loud thud in the area of the vehicle's roof. He immediately applied emergency braking and lowered the pantograph. At the same time, he noticed that the overhead contact line had started to sway. He reported the stoppage to the signaller and, after making sure that the overhead contact line had not been severed, set out with the train manager to check the condition of the train. As he was making his way to the end of the train, he came across a SOK patrol, who informed him of a theft of the overhead contact line on the track branching off from track no. 1.
   The railway commission determined the following causes of the occurrence:
   direct: a train colliding with a lowered overhead contact line, following the theft of the contact wire and the supporting cable;
   root: none.
   The railway commission did not issue any preventive recommendations.
2. On 9 March 2025, train no. 660014/49455 (pulled by locomotive X4EA-384) ran over a flex cable, which had been cut by third parties and was hanging below the contact wire. An inspection of the overhead contact line revealed a cable entangled round the contact wire, a broken flexing cable, and damaged and detached

suspension cables at site 3-12. On inspecting the pantograph, the train driver found that it was damaged (bent) and that the windscreen was damaged (burnt).
The railway commission determined the following causes of the occurrence:
direct: train no. 660014 collided with a flex cable hanging below the contact wire as a result of an attempted theft;
root: none.
The railway commission issued the following preventive recommendation: DB Cargo Polska S.A. shall publish details of the occurrence concerned in its Information Bulletin.

3. On 9 April 2025, at around 00:05 hrs, a brief power outage was detected in the overhead contact line above the Brzeg Dolny – Księginice mainline track, on tracks no. 2 and 4 at Brzeg Dolny station, on track no. 2 of the Księginice – Brzezinka Średzka mainline route, and on track no. 2 of the Brzezinka Średzka – Wrocław Pracze mainline route. There were no trains on the aforementioned section. At 00:26 hrs, train no. 664090 (pulled by locomotive ST44-3000) departed from Wołów station. At 00:42 hrs, the signaller at Brzeg Dolny station informed the train driver that there was no power on track no. 2 and that he should drive with caution, and then dispatched the train towards the junction Księginice. At 00:50 hrs, the driver of train no. 664090 reported that the overhead contact line over track no. 2 on the Ksieginice–Brzezinka Średzka mainline route had sagged, and that the train had collided with it. Following an inspection of the rolling stock and the overhead contact line, the railway commission concluded that an attempted theft had taken place. During the inspection, hooks were found on track no. 1 between sites 25-11 and 24-31, and on track no. 2 between sites 24-28 up to km 28.750, and a sagged overhead contact line on track no. 2 – due to the theft of 23 metres of contact wire at km 25.220.
The railway commission determined the following causes of the occurrence:
direct: entry of train No. 664090 (Pol-Miedź Trans Sp. z o.o.) travelling on the Głogów Wróblin – Opole Wschodnie in the sagged overhead contact line section on track no. 2 caused by the theft of a suspension cable;
original: theft of a suspension cable.
The railway commission issued the following preventive recommendations:
1. PKP PLK S.A., Railway Line Plant in Wrocław shall discuss the occurrence during its regular briefings with signallers/signalmen.
2. PKP PLK S.A., Railway Line Plant in Wrocław shall send a letter to PGE Energetyka Kolejowa S.A. Zakład Dolnośląski to conduct in-house training by PGE Energetyka Zakład Dolnośląski for power dispatchers aimed at establishing clear communication regarding the information exchanged between employees of PGE Energetyka Zakład Dolnośląski and employees of PKP PLK S.A., Railway Line Plant in Wrocław.
3. Pol-Miedź Trans Sp. z o.o. shall discuss the occurrence during the next periodic training sessions for traction crew members.

A similar occurrence, similar to the second incident, took place within the area of PKP Polskie Linie Kolejowe S.A., Railway Line Plant in Tarnowskie Góry on 11 November 2024 at 05:02 hrs on line no. 137, mainline route Gliwice Łabędy–Taciszów, track no. 2 at km 38.200.
While train No. 4522, pulled by electric multiple unit ED160-027, was in motion, it struck an obstacle placed by unknown perpetrators on the right-hand rail track of track no. 2 at km 38.200. After noticing the obstacle, while travelling at 118 km/h, the train driver applied emergency braking and brought the train to a halt after travelling 451 metres. It was established that the had ran over an obstacle which, upon impact with the train's scraper, became wedged under the underframe in front of the first wheelset and was pushed along the rail by the train until it came to a halt (the wheels did not run over the obstacle). The metal construction was made of rectangular steel sections and bars with approximate dimensions of: 1.95 m in length, 0.30 m in width, 0.30 m in height. The railway commission established that the object placed on the track was not part of the railway infrastructure and had been brought onto the railway premises from outside by unknown perpetrators.
The railway commission determined the following causes of the occurrence:
direct: a railway vehicle running over an obstacle placed on the right-hand track;
root: placement of an obstacle on the right-hand track by unknown perpetrators.

The railway commission issued the following preventive recommendation: ZLK (Railway Line Plant) Tarnowskie Góry shall submit a request to the SOK asking that officers on patrol pay particular attention to any foreign objects in the vicinity of active railway tracks.

V. CONCLUSIONS

1. A summary of the analysis and conclusions with regard to the causes of the occurrence

An analysis carried out by the Commission's Investigation Team showed that the rolling stock involved in the occurrence, as well as the railway infrastructure, including the overhead contact line, were in good working order. Based on the evidence gathered, PKBWK's Investigation Team established the circumstances of the occurrence. The occurrence took place as a result of theft of parts of the overhead contact line by unknown persons. These persons cut off 60-metre sections of one of the contact wires on tensioning cables from the anchor mast to the overlap mast on tracks no. 1 and 2. The DJP contact wire sections were cut at 19:48:29 hrs. This is evidenced by the fact that, as recorded by the line's power monitoring equipment, the circuit breakers on tracks no. 1 and 2 tripped followed by automatic reclosing. The Investigation Team considered damage to the overhead contact line, caused by a section being cut out, as the primary factor contributing to the occurrence. The discarded contact wire sections showed clear signs of mechanical cutting and had no burn marks or other damage that might indicate that the contact wire was in poor technical condition. The Investigation Team concludes that the causal and contributing factors behind the incident involving the severance of the overhead contact line were not related to the technical condition of the line, but to interference by third parties. The driver of train MPE 83100/1, travelling on track no. 1 at 159 km/h, was unable to spot the damage to the contact wire. The video footage recovered from locomotive EU160-016 (front view and pantograph view), provided by the carrier, confirms that it was not possible to determine the location and nature of the damage to the overhead contact line due to limited visibility and the train's speed of 159 km/h. As the driver did not see the damage to the overhead contact line, he did not apply braking before reaching the site of the occurrence, nor did he lower the pantograph, and he entered the damaged section at his scheduled speed. The Investigation Team considered the entry of the train travelling on track no. 1 into a section where the overhead line had been damaged and sagged as a result of theft as the causal factor. A detailed analysis of the evidence showed that the train collided with the sagging DJP contact wire at exactly 20:01:11 hrs; this is confirmed by the tripping of the current protection systems, loss of voltage and the footage recorded by the locomotive's front view camera. On this basis, the Investigation Team revised (compared to the notification received) the kilometre mark and time of the occurrence to km 112.887 and 20:02 hrs. The exact location of the foreign objects found on the track was also identified. The actual kilometre at which the foreign steel element was placed is km 115.507, but the exact time has not been established. The Investigation Team determined this time interval to be the period between the last track inspection and the date on which these elements were found, i.e. between 8 and 16 November 2025. The Investigation Team considered the placement by third parties of the metal sheet on the right-hand rail on track no. 1 at km 115.507 as the causal factor of the second incident. The locations and times of the occurrences included in the Report are factual and confirmed by the investigation findings, and although they differ from the locations indicated in the notification and the decision, they relate to these occurrences.

2. Measures taken since the occurrence

There was no need for additional measures during the course of the investigation by the PKBWK Investigation Team. After the occurrence date, PKP Polskie Linie Kolejowe S.A. introduced additional emergency diversions using a railway handcar, including on the Zarzeka–Puławy Azoty mainline route.

3. Additional comments

In the course of the investigation, the Investigation Team identified an external factor relating to the incidents. The main factor was interference by third parties. It involved cutting out and attempting to steal the contact wire from the overhead contact line on tensioning cables between the anchor and overlap masts. Third parties also placed items on the track that were not part of the railway infrastructure. According to the Investigation Team,

these occurrences are linked to third-party interference with elements of the railway infrastructure, involving theft, vandalism, hooliganism and terrorist acts, and pose a threat to railway safety. The investigation in question found that modern anti-theft systems for the railway overhead contact line were not in use.

VI. SAFETY RECOMMENDATIONS

1. PKP Polskie Linie Kolejowe S.A. shall prepare a programme for the implementation of modern anti-theft systems for the railway overhead contact line on railway lines of national importance, utilising:
   - electronic anti-theft systems,
   - structural safeguards,
   - other organisational actions.
2. PKP Polskie Linie Kolejowe S.A., in cooperation with the Railway Security Guard and other competent bodies responsible for the security of railway infrastructure, shall take actions to increase the level of surveillance on selected railway lines of national importance, in particular critical infrastructure elements, by intensification of foot and motorised patrolling and other forms of preventive actions.
3. As part of the construction of new and the modernisation of existing overhead contact lines, PKP Polskie Linie Kolejowe S.A. shall implement modern anti-theft systems for the overhead contact line network.
4. As part of training and periodic briefings for its staff, PKP Polskie Linie Kolejowe S.A. shall cover issues relating to the protection of railway infrastructure against theft and terrorist activity.

CHAIRMAN, STATE COMMISSION ON RAILWAY ACCIDENT INVESTIGATION

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Rafał Leśniowski

List of entities and acronyms that appear in Report No. PKBWK 03/2026

No.	Symbol (acronym)	Explanation
1	*2*	*3*
1.	EUAR	European Union Agency for Railways
2.	PKBWK	State Commission on Railway Accident Investigation (Polish: Państwowa Komisja Badania Wypadków Kolejowych)
3.	UTK	Office of Rail Transport (Polish: Urząd Transportu Kolejowego)
4.	PKP PLK S.A. Railway Line Plant in Lublin	Infrastructure manager
5.	PGE Energetyka Kolejowa S.A. Zakład Mazowiecki	Overhead contact line operator
6.	SOK	railway Security Guard (Polish: Straż Ochrony Kolei)
7.	PKP Intercity S.A.	Railway carrier
8.	DJP	Grooved contact wire
9.	ADD system	Emergency pantograph dropping system
10.	SHP	Safety system – Automatic Train Stop (Polish: Samoczynne Hamowanie Pociągu)
11.	SPZ	Automatic Protection System – Auto Reclosing (Polish: Samoczynne Ponowne Załączenie)
12.	EMU	Electric Multiple Unit