



PKP POLSKIE LINIE KOLEJOWE S.A.

Zarządca narodowej sieci linii kolejowych

Annual report for 2021

TABLE OF CONTENTS

Foreword by the President of the Management Board	4
Composition of the Company's Supervisory Board and Management Board	5
Financial result	6
Company's assets.....	7
Source of assets financing.....	9
Equity.....	9
External capital.....	10
Economic and financial results activity of the company.....	13
Train path sales	15
Sharing railway infrastructure.....	16
Data concerning completed international carriages.....	17
Data concerning completed national carriages.....	18
Infrastructure	19
Rail roads.....	20
Automatics and Telecommunication.....	22
Electrical power devices.....	27
Diagnostic Centre.....	30
Infrastructure Repair Company.....	32
Track Machinery Plant.....	33
Important achievements in the scope of research and technological development	34
Passenger service facilities.....	36
Safety	40
Statistics of railway events.....	41
Measures taken to improve railway traffic safety.....	43
Technical railway rescue.....	48
Railway Security Guard.....	49
Development prospects	52
Strategic framework.....	53
Predicted development prospects	54
Support for investment undertakings.....	54
Measures against traffic exclusion.....	55
Development of freight corridors.....	55
International cooperation.....	56
EU legislation and strategy.....	57

Significant computerisation activities.....	57
Geoinformation.....	59
Environmental protection.....	61
Investments.....	63
General information.....	64
Implementation of the National Railway Programme.....	64
Sources of financing.....	71
Personnel.....	73
Employment analysis.....	74
Improving employee qualifications and employee development.....	77
Railway education.....	77
Corporate Social Responsibility activities.....	79
Social campaign "Safe rail-road level crossing".....	80
Railway tradition.....	82
External communication.....	83
14th International Railway Fair TRAKO in Gdańsk.....	84
20th Anniversary of Activity of PKP Polskie Linie Kolejowe S.A.....	84
PLK SA is an active participant in economic and industry events.....	84
Main events in 2021.....	86
Contact details.....	90
Map of Railway Lines	91

FOREWORD

Ireneusz Merchel
President of the Management Board
PKP Polskie Linie Kolejowe S.A.



Ladies and Gentlemen,

I am submitting to you the Annual report of PKP Polskie Linie Kolejowe S.A. Traditionally, the publication provides information on all areas of the Company's activity in 2021 – ranging from maintenance of the railway lines, implementation of the timetable, provision of railway infrastructure, financial data, investment activity, discussion of development prospects, to the employment data.

In 2021, PKP Polskie Linie Kolejowe S.A. celebrated the anniversary of its activity. The 20-year activity of PKP Polskie Linie Kolejowe S.A. shows the changes that have taken place on the Polish railways. Improvement of the condition of the railway infrastructure translated into shorter journeys – thanks to higher train speeds, better accessibility to the railways – thanks to dozens of new and rebuilt stations and stops, greater possibilities of cargo transport – thanks to a significant improvement of the condition of engineering structures. The level of safety has also increased significantly – thanks to new equipment, systems and work organisation. The activity of PKP Polskie Linie Kolejowe S.A. is of strategic importance for society and the functioning of the country's economy. The company plays a significant role in the development of railways, and thus in increasing the position of the safest and ecological means of transport.

2021 was a landmark year, as the Company is close to completing the National Railway Programme, which is very important for the Polish railways – the largest ever investment programme in railway infrastructure, which restores railways to their rightful place on the Polish transport map. As in 2020, last year was also dominated by the coronavirus epidemic. However, the epidemic did not have a significant impact on the investment process – we carried out investments, handed over completed works, signed further contracts and announced tenders.

The effective use of EU and budget funds is the improvement of travel conditions by rail, the most ecological means

of transport. The residents of every voivodeship, cities and towns, have gained better access to trains and a better travel offer. December 2021 marks one year since the electrification of the Lublin – Stalowa Wola line and two years since the introduction of electric trains on the section Węglińiec – Zgorzelec. We also travel shorter from Warsaw to the Tricity, from Krakow to Katowice, from Poznań to Wrocław or from Warsaw to Olsztyn.

The Company recognises the need to develop railways evenly across the country. The residents in eastern Poland have gained better travel conditions thanks to the implementation of projects from the Operational Programme Eastern Poland. In other regions, we have used the opportunities offered by regional operational programmes or the Operational Programme Infrastructure and Environment. We use the "Connecting Europe" Facility CEF to change lines of international importance, but they are always used by residents of towns next to rail routes, e.g. on Rail Baltica. After many years, the railway has returned to unused routes and increases transport accessibility, e.g. on the lines: Legnica – Rudna Gwizdanów, Lublin – Łuków, Mielec – Dębica. In December 2021, after more than 20 years, trains returned to the Lower Silesian line from Wrocław to Jelcz through Wrocław Swójczyce.

The National Railway Programme also provides for projects dedicated in particular to the development of freight transport and many of them have already been completed. This means that the tracks for the freight transport are used more efficiently and with a guarantee of greater safety. Among other things, lines in the Silesian voivodeship have been reconstructed, e.g. Toszek Północ – Rudziniec Gliwicki – Stare Koźle, Chybie – Żory – Rybnik – Nędza/Turze, the lines Stalowa Wola Rozwadów – Lublin and Węglińiec – Zgorzelec have been modernised and electrified. The works for freight transport also required reconstruction of control devices, bridges and viaducts. Funds – largely from EU projects – were used, among

other things, for the construction and modernisation of nearly 600 bridges, e.g. on the international Rail Baltica route on the Bug River, on the Vistula River in Kraków on the E 30 route, or on the San River on the Lublin – Stalowa Wola route. Investments in rail freight transport mean benefits for ecology and increased safety also on roads.

In 2021, PKP Polskie Linie Kolejowe S.A. signed contracts worth more than PLN 4.4 billion. On the railway network, e.g. over 900 km of tracks were modernised, over 1,100 turnouts were built and over 220 rail-road level crossings were modernised.

In 2021, the Company continued the implementation of programmes under the aegis of the Ministry of Infrastructure, aimed at counteracting and combating traffic exclusion and increasing the accessibility of railways – the Programme to Supplement Local and Regional Railway Infrastructure – Railway Plus until 2028 and the Government Programme for the Construction or Modernisation of Railway Stops for 2021-2025. From the very beginning of the Company's activity, a strong emphasis has been placed on issues related to railway traffic safety. In this respect, we carry out a wide range of tasks and constantly undertake new initiatives in the technical and personnel areas to increase the safety level of railway operations, thus influencing the safety of the entire railway system.

PKP Polskie Linie Kolejowe S.A. consistently strengthen its own technical and performance potential by investing in the purchase of, among other things, machinery and equipment. In 2021, the share capital of all four subsidiaries of the PKP Polskie Linie Kolejowe S.A. Group of Companies was increased. For the purchase of modern machinery and equipment or real property to increase its potential in carrying out works on the railway network. Support in the amount of PLN 850 million was received by: Dolnośląskie Przedsiębiorstwo Napraw Infrastruktury Komunikacyjnej DOLKOM sp. z o.o., Pomorskie Przedsiębiorstwo Mechaniczno-Torowe sp. z o.o., Przedsiębiorstwo Napraw i Utrzymania Infrastruktury Kolejowej w Krakowie sp. z o.o., Zakład Robót Komunikacyjnych – DOM w Poznaniu sp. z o.o. This is the largest-ever subsidy for the subsidiaries of the PLK Group of Companies, with the recapitalisation funds coming from the state budget.

More information on the activity of PKP Polskie Linie Kolejowe S.A. can be found on the following pages of the document. I encourage you to read this publication. I hope that you will enjoy reading it.

Ireneusz Merchel
President of the Management Board
PKP Polskie Linie Kolejowe S.A.

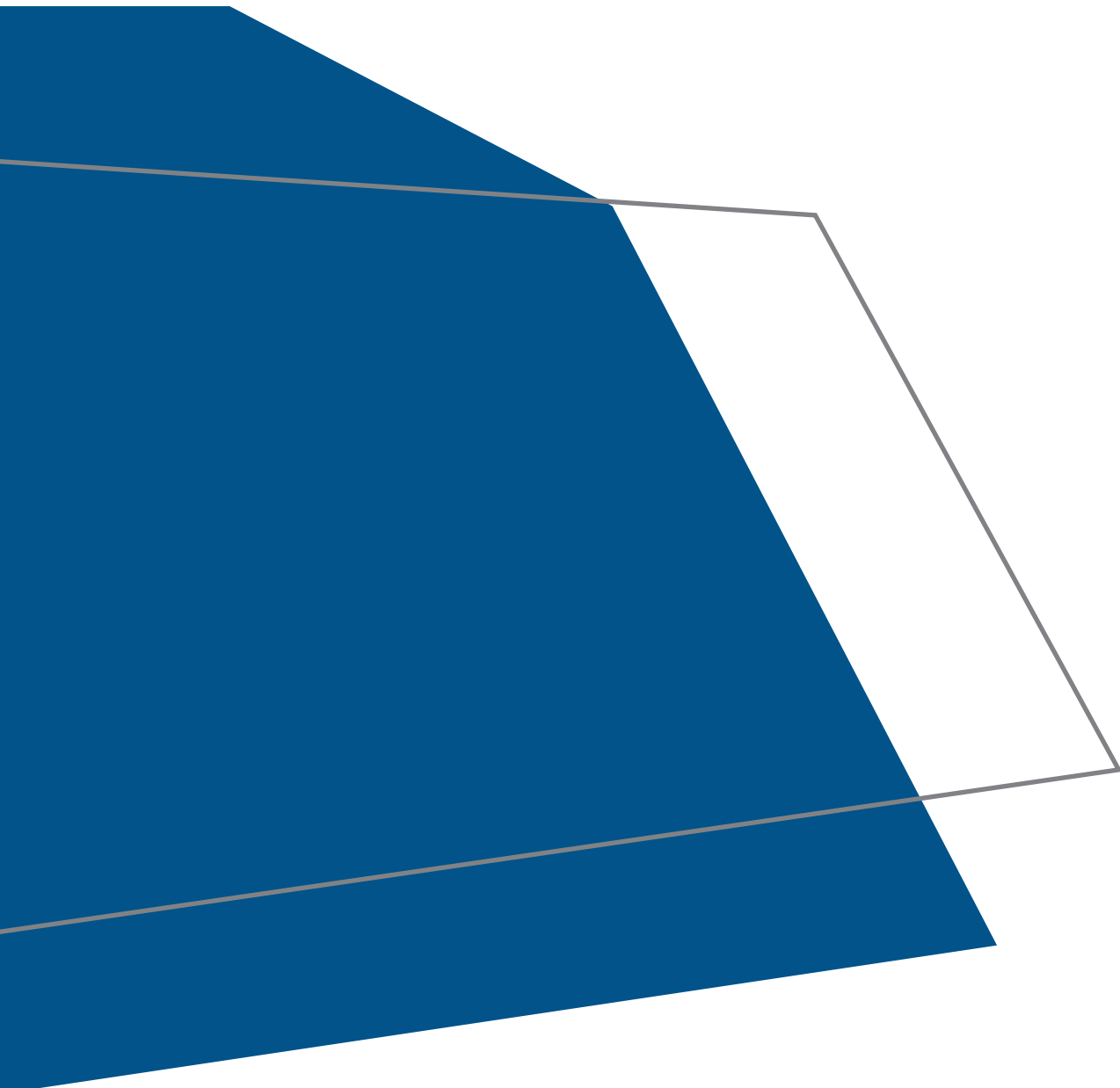
SUPERVISORY BOARD OF THE COMPANY

- **Mariusz Andrzejewski**
Chairman of the Supervisory Board
- **Artur Kawaler**
Secretary of the Supervisory Board
- **Magdalena Błaszczyk**
Member of the Supervisory Board
- **Piotr Gebel**
Member of the Supervisory Board
- **Jakub Kapturzak**
Member of the Supervisory Board
- **Joanna Klekot**
Member of the Supervisory Board
- **Marcin Piwowarski**
Member of the Supervisory Board
- **Tomasz Rurka**
Member of the Supervisory Board
- **Henryk Sikora**
Member of the Supervisory Board

MANAGEMENT BOARD OF THE COMPANY

- **Ireneusz Merchel**
President of the Management Board
- **Mirosław Skubiszyński**
Vice President of the Management Board –
Director for Operational Affairs
- **Arnold Bresch**
Member of the Management Board – Director
for Investment Implementation
- **Radosław Celiński**
Member of the Management Board – Director
for Financial and Economic Affairs
- **Grzegorz Kurdziel**
Member of the Management Board – Director
for Operational Support
- **Piotr Majerczak**
Member of the Management Board – Director
for Infrastructure Maintenance

(as at 30 December 2022)



FINANCIAL RESULT

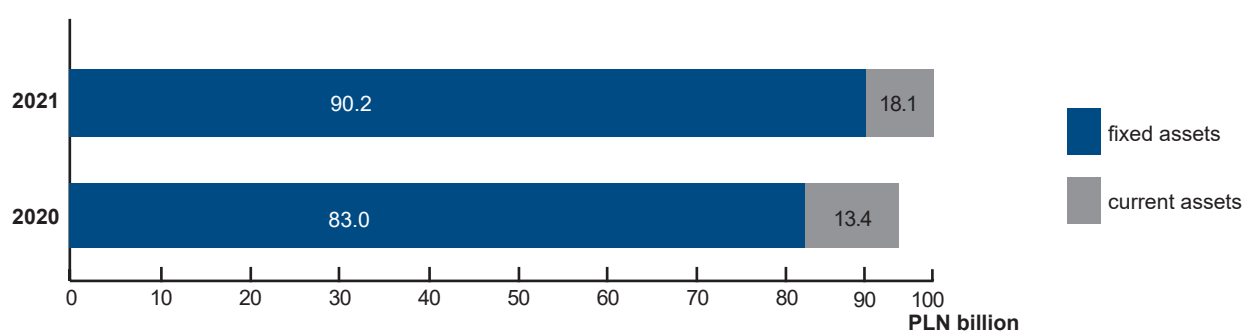
COMPANY'S ASSETS

The Company's economic and financial position was assessed based on financial reports representing its status as at 31 December 2021.

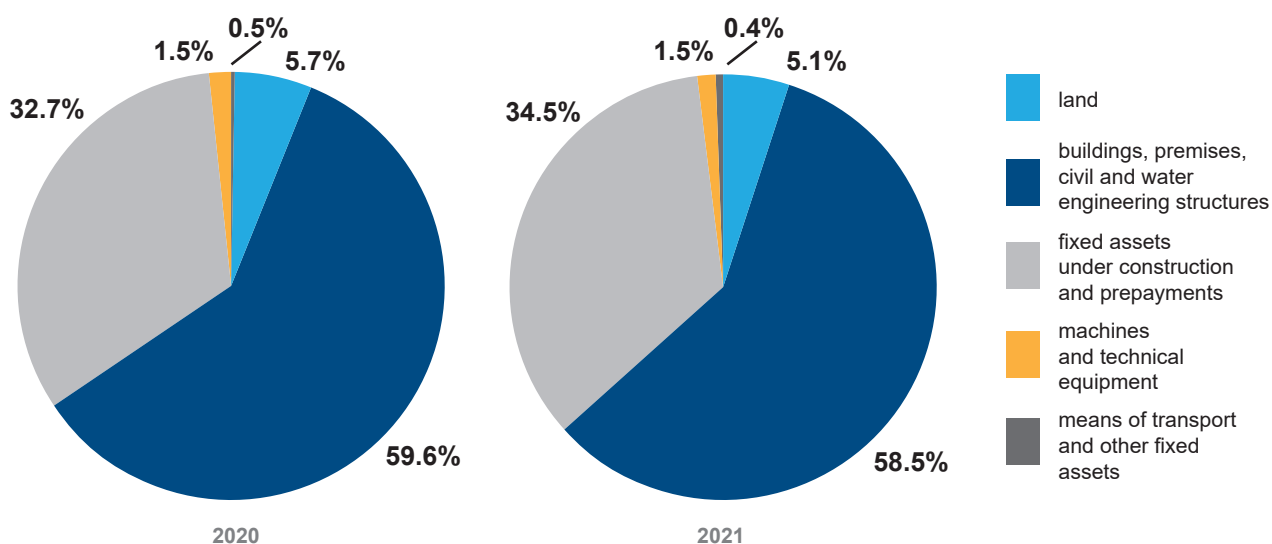
The book value of the assets owned by PKP Polskie Linie Kolejowe S.A., as at 31 December 2021, amounted to PLN 108,325.5 million and was 12.4% higher than in 2020.

The structure of what the Company owns is asset-based, which is typical for railway infrastructure managers, which mostly comprises buildings, premises, as well as civil and water engineering structures. In 2021, the Company's fixed assets comprised approximately 83.3% of its total assets. During the financial year, fixed assets increased by 8.7% as a result of the modernisation of the infrastructure, i.e. investments that have been completed and commissioned on railway lines.

The assets of PKP Polskie Linie Kolejowe S.A. in 2020-2021



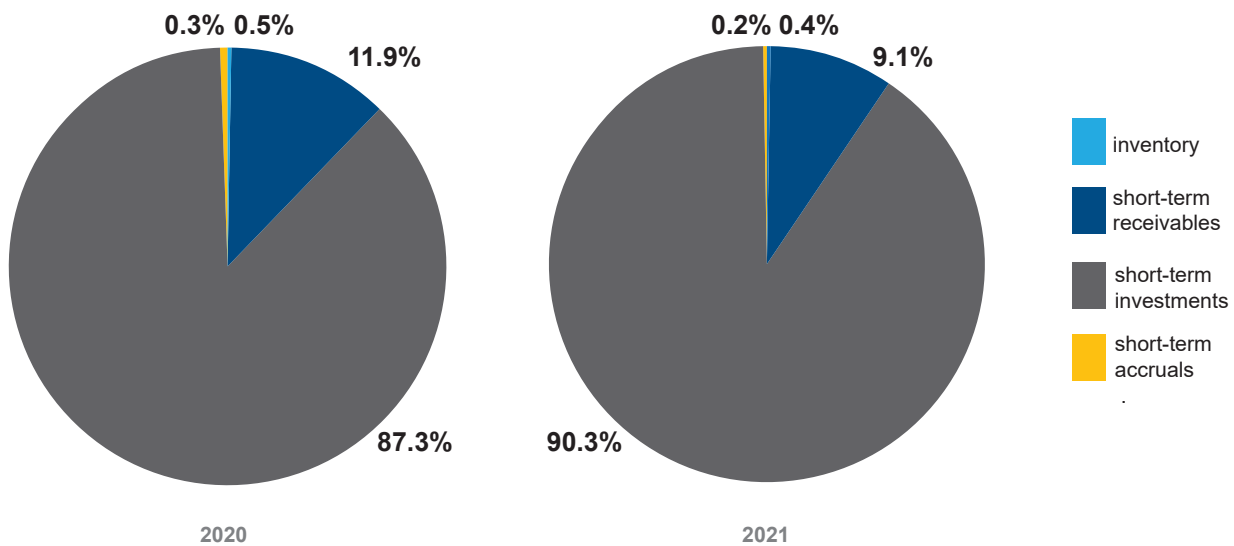
Structure of tangible fixed assets in 2020-2021



The current assets of PKP Polskie Linie Kolejowe S.A. in 2021 represented 16.7% of all assets. Compared to 2020, their carrying value increased by 35.2%. Essentially, this increase was the result of an increase in cash and cash equivalents, consisting of such things as funds from the Railway Fund and the state budget for current expenses related to infrastructure management tasks, funds from the recapitalisation of the Company, loans from

the European Investment Bank (EIB) and refunds of funds involved in investment projects within the Regional Operational Programmes (ROPs), the Operational Programme Infrastructure and Environment (OPI&E), the "Connecting Europe" Facility (CEF), and the Operational Programme Eastern Poland (OP EP).

Structure of current assets in 2020-2021



In 2021, PKP Polskie Linie Kolejowe S.A. held shares reported as long-term investments in the following subsidiaries:

1. Przedsiębiorstwo Napraw i Utrzymania Infrastruktury Kolejowej w Krakowie sp. z o.o. (100% of shares in share capital).
2. Dolnośląskie Przedsiębiorstwo Napraw Infrastruktury Komunikacyjnej DOLKOM sp. z o.o. with its registered office in Wrocław (100% of shares in share capital).
3. Zakład Robót Komunikacyjnych – DOM w Poznaniu sp. z o.o. (100% of shares in share capital).
4. Pomorskie Przedsiębiorstwo Mechaniczno-Torowe sp. z o.o. with its registered office in Gdańsk (100% of shares in share capital).

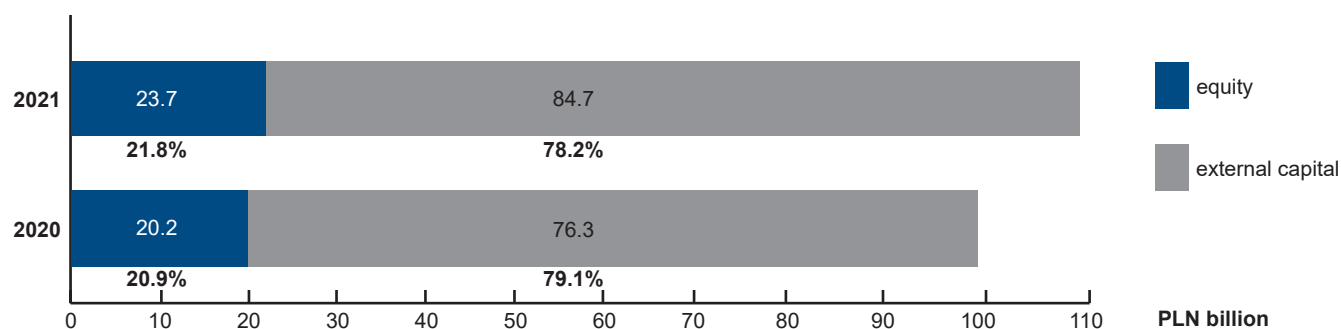
The carrying value of the above assets as at 31 December 2021 was PLN 1,079.9 million.

The maintenance and repair companies are the necessary potential of PKP Polskie Linie Kolejowe S.A. that is used to:

1. maintain the required technical condition of tracks;
2. carry out modernisation and restoration investment projects on railway stations and routes;
3. respond rapidly to the need to carry out construction works in emergency situations.

SOURCE OF ASSETS FINANCING

Sources of assets financing of PKP Polskie Linie Kolejowe S.A. in 2020-2021



EQUITY

Equity accounted for 21.8% of the Company's assets in 2021 and increased by 0.9 percentage points (p.p.) compared to 2020.

In 2021, the share capital was increased to PLN 30,659.0 million as a result of:

- a cash contribution of PLN 1,850.0 million by the State Treasury, which was registered as an increase in the share capital of PKP Polskie Linie Kolejowe S.A. on 11 February 2021 (recorded as other reserves in 2020). These funds are intended to:
 - capital investments consisting in increasing the share capital of subsidiaries of PKP Polskie Linie Kolejowe S.A. (amount of PLN 850.0 million). The subsidiaries will use the funds from the share capital increase to purchase fixed assets in the form of machinery and equipment or real property in order to increase the potential of their investment projects,

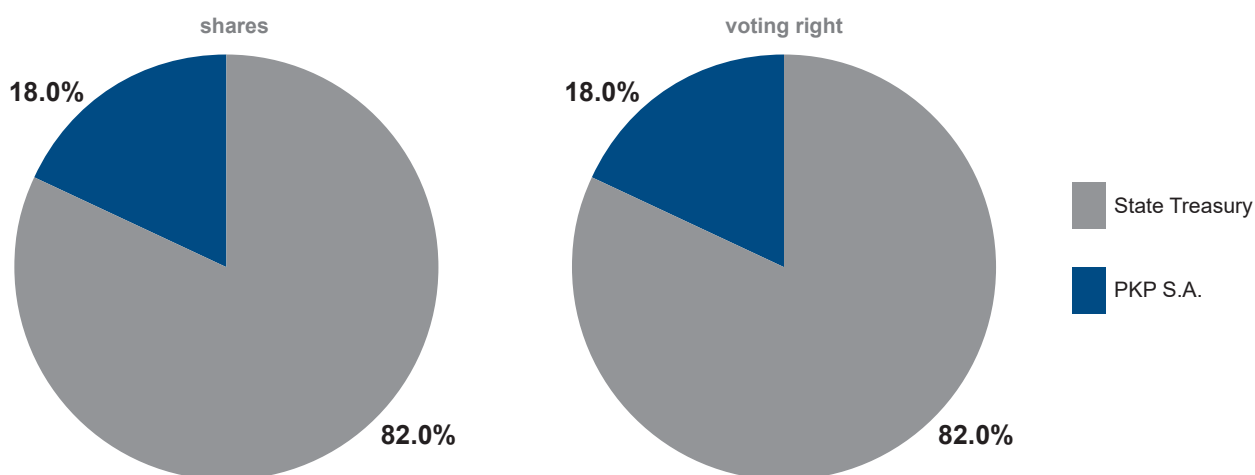
- activities related to the construction, reconstruction, expansion or modernisation of railway stops and associated infrastructure, implemented under the multi-annual programmes referred to in Article 136 of the Act of 27 August 2009 on public finance, particularly for the implementation of investment activities resulting from the "Government Programme for the Construction or Modernisation of Railway Stops for 2020-2025" (amount of PLN 1,000.0 million).
- an in-kind contribution by the State Treasury in the form of treasury securities in the amount of PLN 2,295.0 million, allocated under the Letter of Issue No. 9/2021 of the Minister of Finance, Development Funds and Regional Policy of 5 February 2021 on the issue of zero-coupon bonds with redemption date in on 25 April 2023. The funds obtained from the issue of treasury securities may only be used to finance investments implemented by PKP Polskie Linie Kolejowe S.A. under the multi-annual programmes referred to in the

provisions of the Act of 27 August 2009 on public finance;

3. a cash contribution of PLN 1,249.5 million by the State Treasury for investments in railway infrastructure, implemented under the multi-annual programme – "National Railway Programme until 2023". The capital increase was related to the entry into force of the provisions of the Act of 14 October 2021 amending the Act on special solutions for the implementation of

the Budget Act for 2021 and the Act on revenues of local self-government units (Dz. U. /Journal of Laws/ of 2021, item 1672, as amended), which in Article 1 (18) indicates that in 2021 the Minister competent for infrastructure will transfer additional funds from the state budget in the amount of PLN 1,249.5 million for the acquisition of shares in PKP Polskie Linie Kolejowe S.A. by the State Treasury represented by the Minister competent for infrastructure.

Shareholding structure of PKP Polskie Linie Kolejowe S.A. as at 31 December 2021

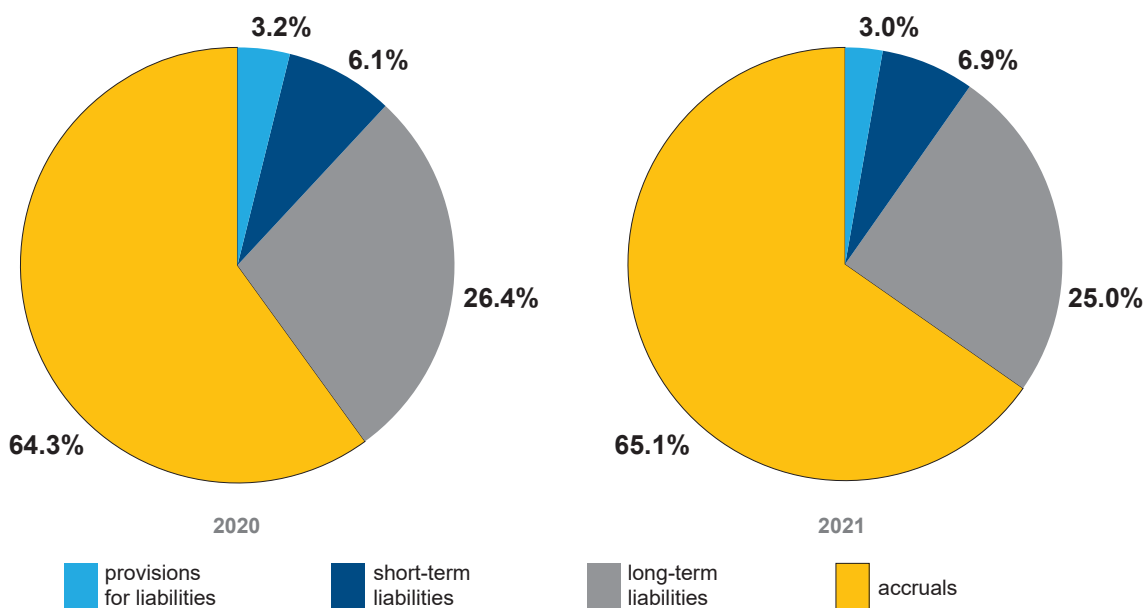


EXTERNAL CAPITAL

The main source of financing for the investment expenditures of PKP Polskie Linie Kolejowe S.A. in 2021 was external capital, just like in previous years. As at 31 December 2021, external capital amounted to PLN 84,657.7 million, covering the Company's assets resources in 78.2%. In 2021, compared to 2020, the share of external capital in the financing of the Company's assets decreased des-

pite a significant increase in long-term accruals for railway infrastructure modernisation funds obtained from state subsidies, Railway Fund, EU funding, as well as other public financing sources and long-term credit and loan liabilities.

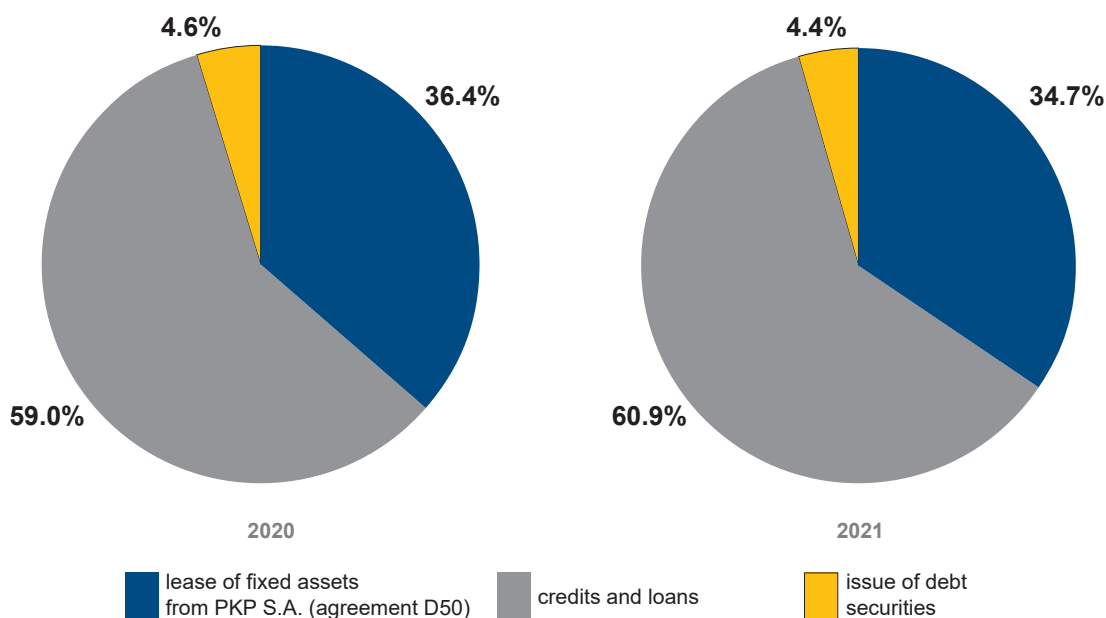
Structure of external capital in 2020-2021



As at 31 December 2021, long-term liabilities amounted to PLN 21,133.4 million and their share in external capital was 25.0%. The highest share in long-term liabilities (60.9%) was represented by loans received from the EIB to co-finance and pre-finance the modernisation of railway lines; 34.6% of these liabilities were liabilities under a 2001

agreement on the transfer for paid use of railway lines and other real property needed for railway management entered into with PKP S.A. (agreement D50-KN-1L/01).

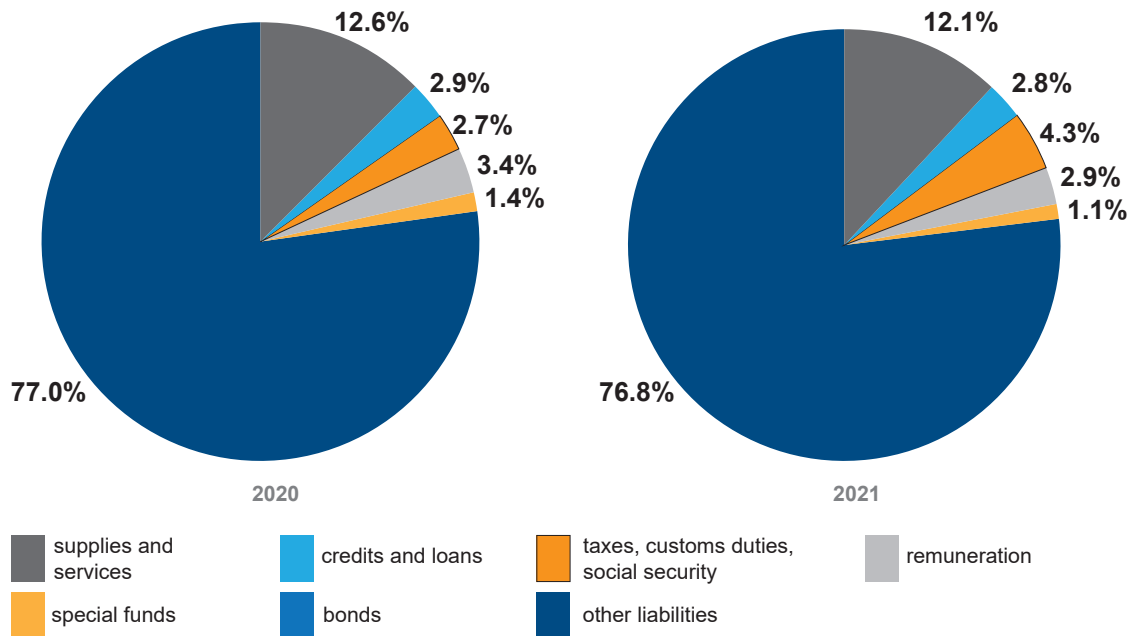
Structure of long-term liabilities in 2020-2021



The short-term liabilities at the end of 2021 amounted to PLN 5,877.7 million and were higher by 27.2% compared to 2020. The recorded increase in short-term liabilities was mainly due to the invoices for investment works related to

the modernisation of railway infrastructure, covered mainly by EU and state budget funds and from EIB loan tranches.

Structure of short-term liabilities in 2020-2021



ECONOMIC AND FINANCIAL RESULTS ACTIVITY OF THE COMPANY

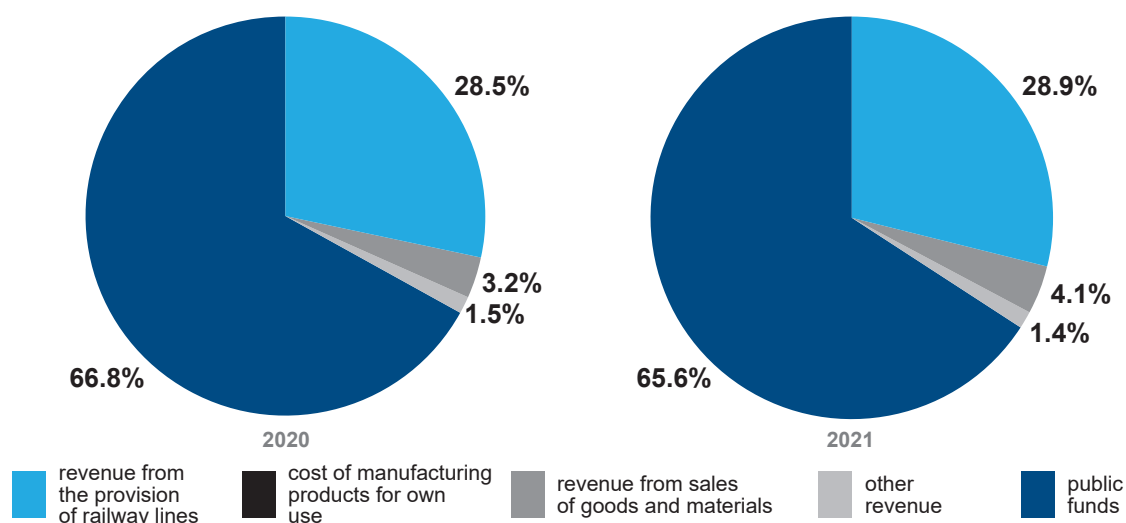
Financial results of the economic activity of PKP Polskie Linie Kolejowe S.A. (in PLN million)

No.	Item	2021	2020	Change	
				2021-2020	%
1.	Revenue from sales and equivalent	7,447.7	6,756.0	691.7	10.2
2.	Costs of operating activity	8,662.3	8,012.5	649.8	8.1
3.	Result on sales	-1,214.6	-1,256.5	41.9	-3.3
4.	Other operating revenue	1,702.3	1,476.1	226.2	15.3
5.	Other operating costs	511.4	341.3	170.1	49.8
6.	Result on other operating activity	1,190.9	1,134.8	56.1	4.9
7.	EBIT	-23.7	-121.7	98.0	-80.5
8.	EBITDA	2,087.2	1,873.2	214.0	11.4
9.	Financial revenue	53.6	69.5	-15.9	-22.9
10.	Financial costs	65.1	439.4	-374.3	-85.2
11.	Result on financing activity	-11.5	-369.9	358.4	-96.9
12.	Gross result	-35.2	-491.6	456.4	-92.8
13.	Income tax	0.0	0.0	0.0	-
14.	Net result	-35.2	-491.6	456.4	-92.8

In 2021, PKP Polskie Linie Kolejowe S.A. achieved a financial result on business activity in the amount of PLN -35.2 million. The achieved financial result was higher than that in 2020 by PLN 456.4 million. The improvement in the result was mainly due to the generation of a lower loss on financial

activity (increase by PLN 358.4 million compared to 2020), resulting primarily from the lack of negative exchange rate differences (in 2020 there were negative exchange rate differences in the amount of PLN 406.7 million).

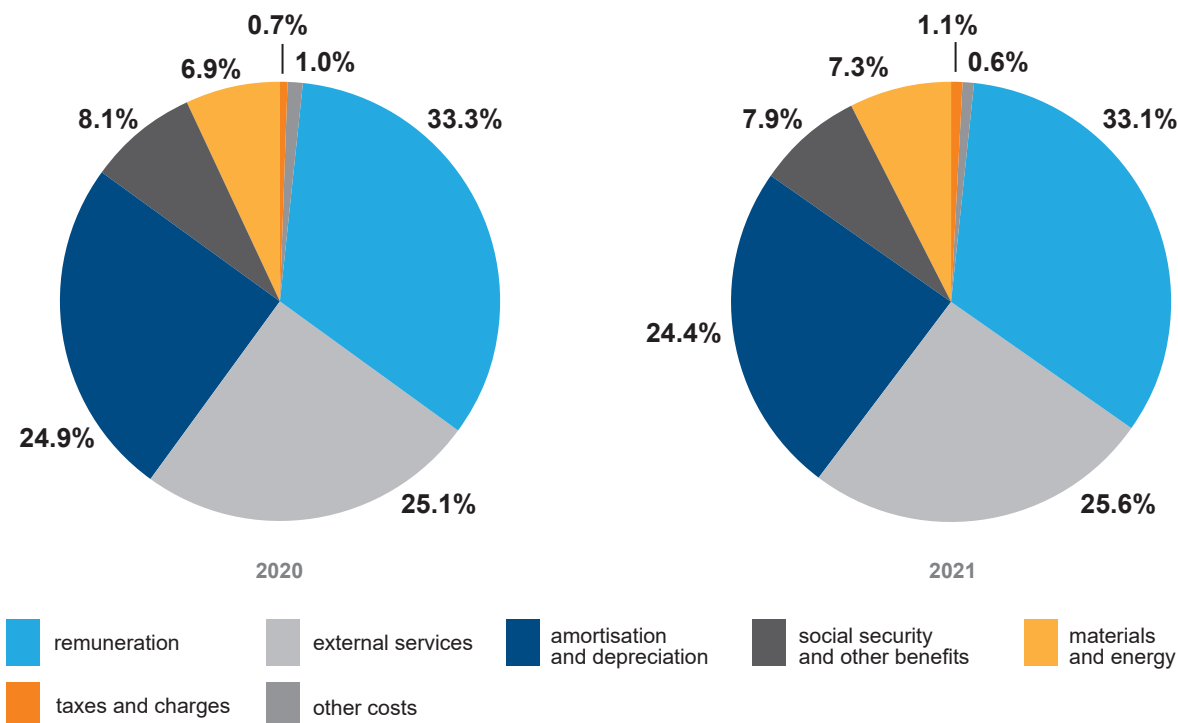
Sales revenue and equivalent revenue in 2020-2021



The revenue from the provision of railway lines earned in 2021 amounted to PLN 2,150.2 million and were higher by PLN 223.7 million compared to 2020, mainly as a result of an increase in operational work. For passenger carriers, this increase is due to the increase in the transport offer as a consequence of the lifting of restrictions introduced in

connection with the spread of the SARS-CoV-2 virus. For freight carriers, the increase in operational work is due to the increased demand for freight, particularly intermodal units.

Cost structure by type in 2020-2021



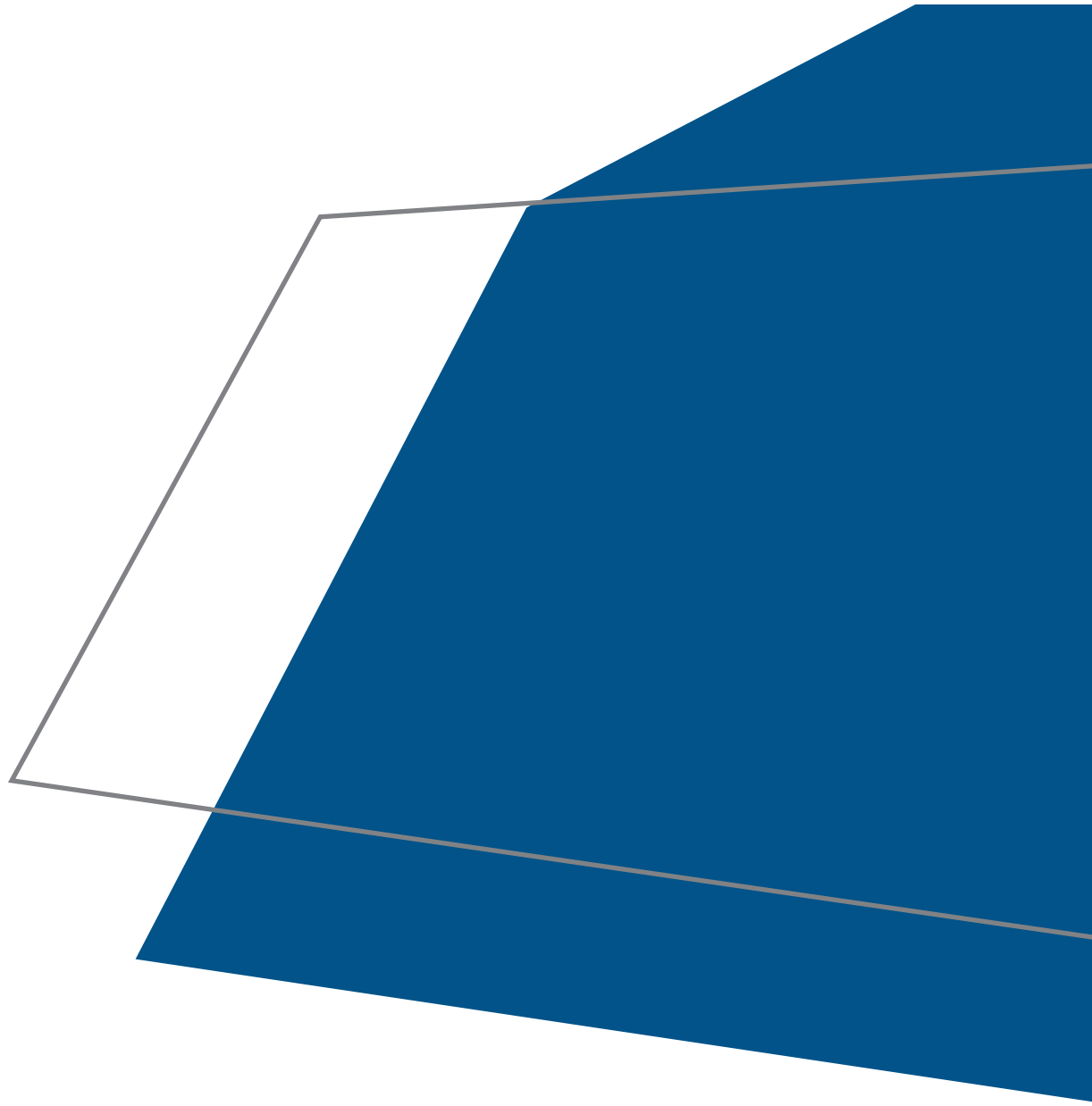
PKP Polskie Linie Kolejowe S.A. incurred 8.1% higher operating costs in 2021 compared to 2020.

The increase in operating costs concerned such things as:

1. labour costs – the effect of the increase in the minimum wage since 1 January 2021, which is the basis for the payment of allowances;
2. costs of external services – their increase was mainly due to a higher level of sectoral costs resulting from the implementation of tasks included in a multi-annual programme "Government programme to support the tasks of railway infrastructure managers, including maintenance and repair, until 2023";
3. depreciation and amortisation costs – resulting from the increase in the value of capital expenditures settled.

In 2021, PKP Polskie Linie Kolejowe S.A. recorded an improvement in the result on other operating activity. Higher

other operating revenue was obtained from the settlement of non-refundable EU and national funds allocated for the modernisation of railway infrastructure and the revaluation of non-financial assets. Other operating costs also increased in 2021, mainly due to the creation of provisions for legal claims, but the growth rate of other operating revenue was higher than the growth rate of other operating costs.



TRAIN PATH SALES

SHARING RAILWAY INFRASTRUCTURE

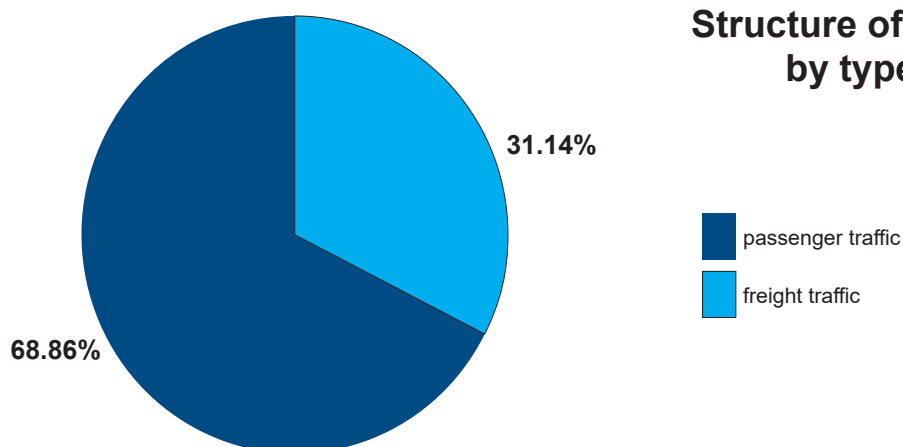
PKP Polskie Linie Kolejowe S.A. is the manager of the national railway infrastructure, which it makes available on equal terms. In 2021, access was granted subject to the principles established in the Act on Railway Transport and the regulation of the Minister competent for rail infrastructure of 7 April 2017 on sharing railway infrastructure. The amended Act on Railway Transport, which came into force on 30 December 2016, expanded the group of entities authorised to procure capacity by introducing the concept of an "applicant", which may be a railway undertaking, but also an international economic interest grouping comprising railway undertakings or another entity interested in obtaining capacity, in particular, a public rail transport organiser, a freight forwarder, a shipper or a combined transport operator. The use of railway infrastructure is still only available to railway undertakings. Non-undertaking applicants must indicate the undertaking that will make the train run. Consequently, the infrastructure manager shall conclude a capacity allocation contract with the applicant and a capacity usage contract with the undertaking.

Based on the train timetables provided to the applicants, a total of 2,595,394 train rides were made in 2021, including on the basis of:

1. Annual Timetable prepared based on applications submitted by applicants and updated during its validity period on set dates – 1,768,353 train rides;
2. Individual Timetable prepared by PKP Polskie Linie Kolejowe S.A. when there is some throughput available, upon request made by applicant for train routes allocation – 827,041 train rides.

In 2021, the Company made its railway lines available to 119 undertakings, including 18 in passenger traffic (11 regular passenger traffic carriages), 94 in freight traffic, and 7 in both passenger and freight traffic. 12 new customers launched their business activity on the network managed by PKP Polskie Linie Kolejowe S.A. The basic reference value in terms of measuring access to railway lines is operating performance expressed in train-kilometres [train-km]. In 2021, 252.96 million train-km were achieved, including 174.18 million train-km in passenger traffic and 78.78 million train-km in freight traffic.

In 2021, PKP Polskie Linie Kolejowe S.A. recorded an increase by 9.43% in the total volume of operational work performed by customers compared to 2020 (there was an increase by 11.27% in passenger transport, and by 5.59% in freight transport). The significant increase in the passenger transport segment results from the increase in the transport offer as a consequence of the lifting of restrictions introduced in connection with the spread of the SARS-CoV-2 virus.



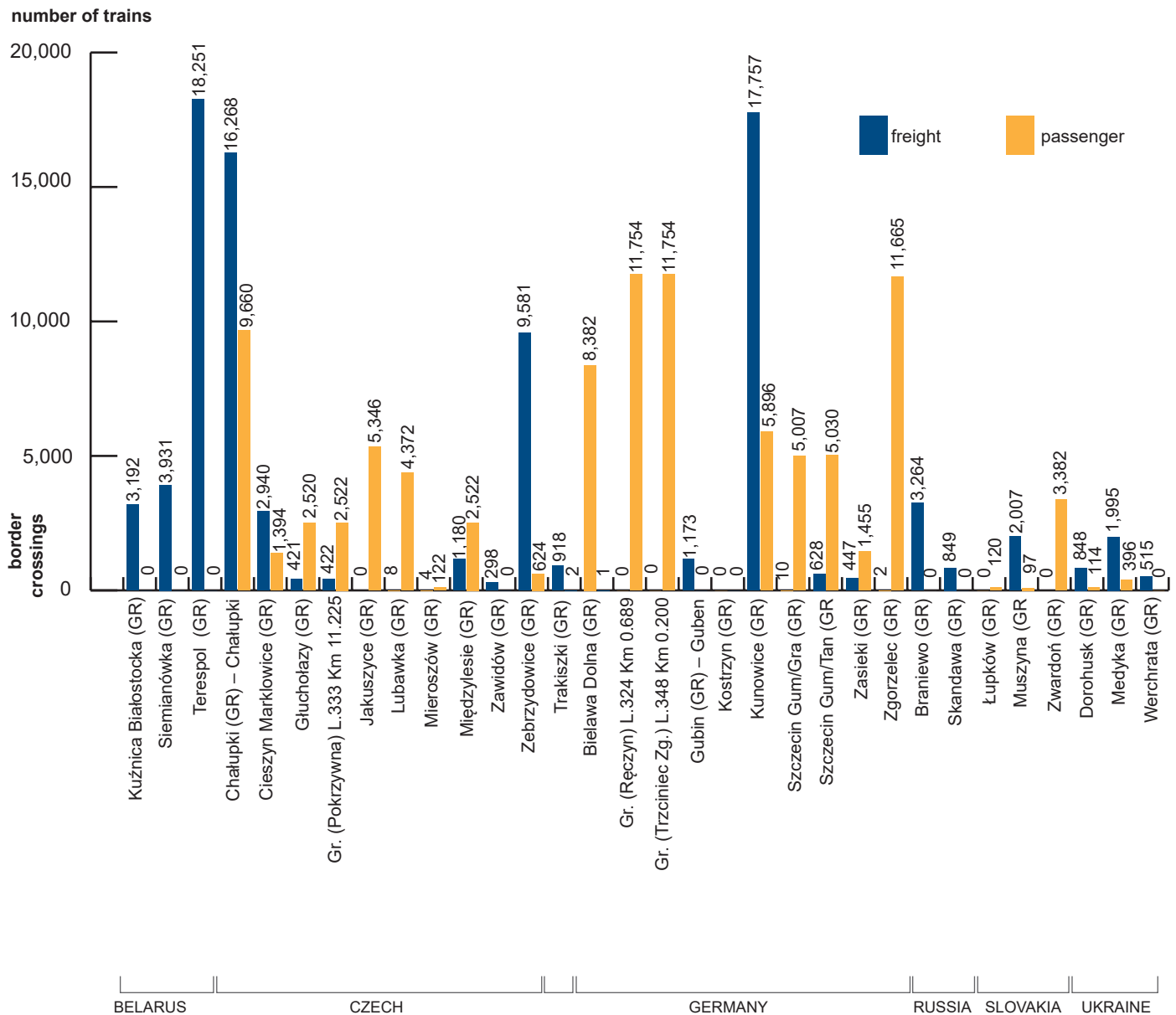
Structure of operational work by type of traffic in 2021

DATA CONCERNING COMPLETED INTERNATIONAL CARRIAGES

International transport services in cross-border traffic in 2021 were performed by 56 undertakings that in most cases used the following border crossings:

1. for passenger traffic: Zgorzelec (Poland – Germany), Chałupki (Poland – Czech Republic), and transit journeys: Hirschfelde – Trzciniec Zgorzelecki – Ręczyn – Hagenwerder;
2. for freight traffic: Kunowice (Poland – Germany), Terespol (Poland – Belarus), Chałupki (Poland – Czech Republic) and Zebrzydowice (Poland – Czech Republic).

International transport services in cross-border traffic in 2021



In 2021, 181,046 train rides were made in border traffic, including 85,755 in passenger traffic and 95,291 in freight traffic. The rides across the German-Polish border comprised 45.65% (80,961) of all international railway crossings, those across the Polish-Czech border accounted for 33.95% (60,204), the Polish-Belarusian border – 14.31% (25,374), the Polish-Russian border – 0.23% (409), the Polish-Ukrainian border – 2.18% (3,868), the Polish-Slovak border – 3.16% (5,606), while in the case of the Polish-Lithuanian border, it was below 0.52% (920).

In 2021, PKP Polskie Linie Kolejowe S.A carried out an average of 495 train rides per day in international traffic under the Individual and Annual Timetable.

To make it easier for the railway undertakings to use international train routes, the One Stop Shop (OSS) unit at PKP Polskie Linie Kolejowe S.A., which is part of the international OSS network within the association of European railway infrastructure managers RailNetEurope (RNE), offers comprehensive information about the conditions that need to be met to obtain access to the RNE members' infrastructure as well as to the services and products they

have on offer. A customer who is interested in an international train ride may turn to one of the OSS, which will then take over the process of allocation along the entire train route.

PKP Polskie Linie Kolejowe S.A. cooperates with neighbouring railway infrastructure managers in terms of annual and individual timetables in both passenger and freight traffic. The cooperation with the railways RŽD (Russia), BC (Belarus) and UZ (Ukraine) is based on bilateral agreements, while that with DB Netz (Germany), LG (Lithuania), SŽ (Czech Republic) and ŽSR (Slovakia) is carried out both on the basis of bilateral agreements and regulations of international organisations.

Trains rides under Individual Timetables are arranged in a separate way:

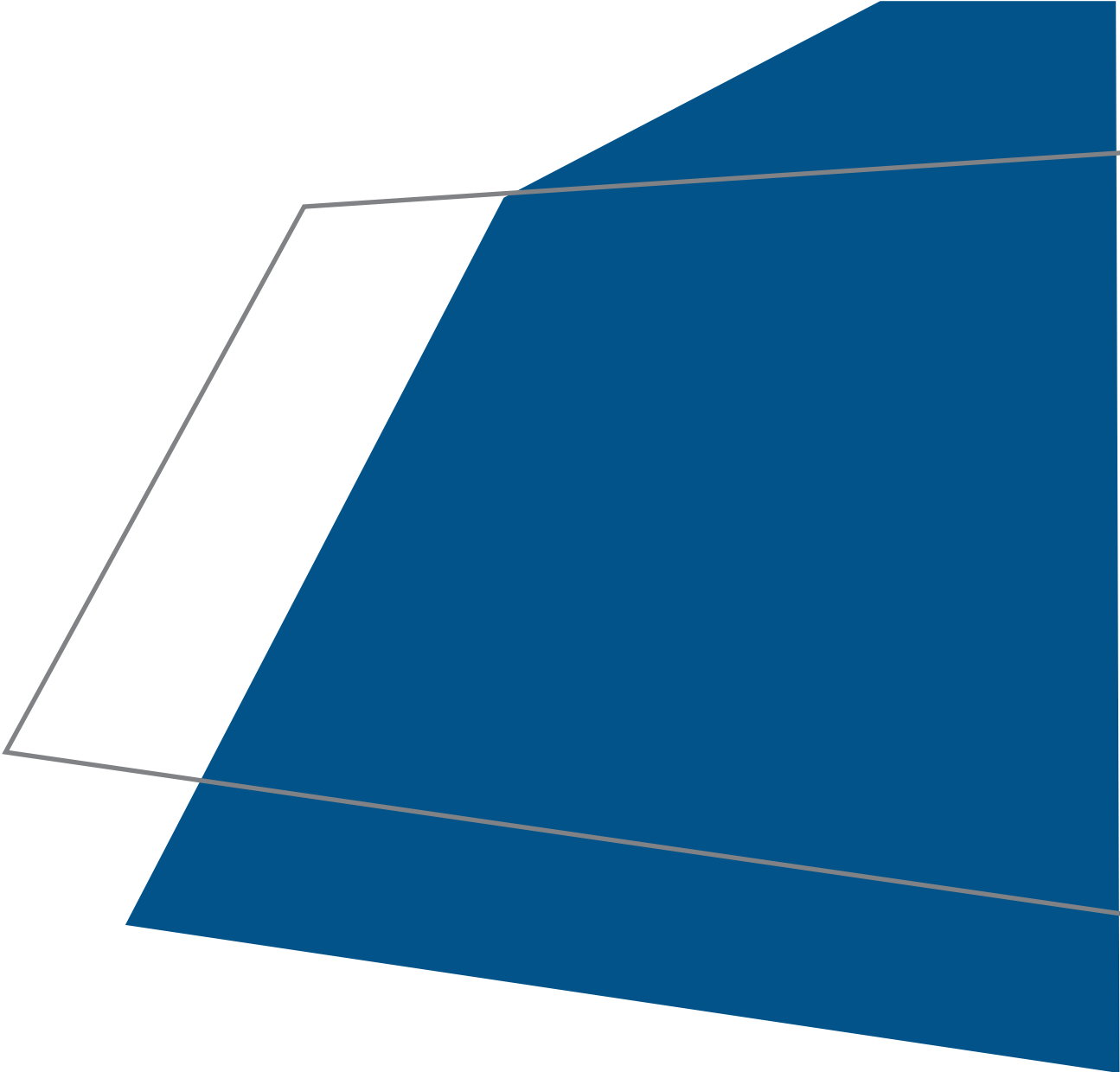
1. between PKP Polskie Linie Kolejowe S.A. and DB Netz, LG, SŽ and ŽSR, i.e. they are based on a common procedure (24h/a day via the Railway Traffic Management Centre being coordinated in Warsaw);
2. for the remaining infrastructure managers – by the OSS unit at the RailwayTraffic Management Centre in Warsaw.

DATA CONCERNING COMPLETED NATIONAL CARRIAGES

In 2021, the network managed by PKP Polskie Linie Kolejowe S.A. was used by the following number of trains:

- for passenger traffic – 1,665,424 trains (there was an increase by 155,277 compared to 2020);
- for freight traffic – 445,508 trains (there was an increase by 26,243 compared to 2020).

In 2021, passenger train timeliness reached the rate at the level of 89.68% (there was a decrease by 4.71% compared to 2020). In freight traffic, the train timeliness in 2021 was 41.68% (timeliness decreased by 4.30% compared to 2020).



INFRASTRUCTURE

RAIL ROADS

In 2021, the length of railway lines in operation increased by 3.86 km compared to 2020. The modification was a result of the need to adapt infrastructure to the changing transport needs.

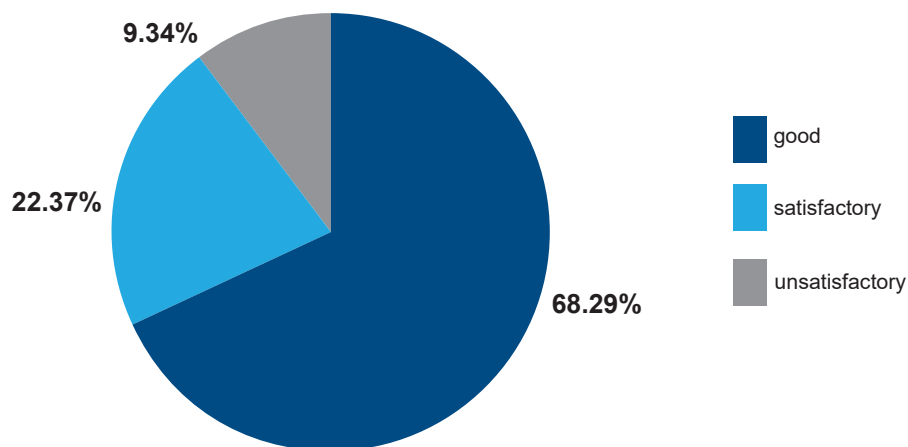
List of railway infrastructure in use, managed by PKP Polskie Linie Kolejowe S.A. (as at 31 December 2021):

- 18,570 km of railway lines, i.e. 35,987 km of tracks, including:
 - 27,301 km of route tracks and main principal tracks at stations;
 - 8,686 km of station tracks;
- 38,256 turnouts, including:
 - 17,900 turnouts in route tracks and main principal tracks;
 - 20,356 turnouts in station tracks.
- 13,402 crossings in the rail level, including lines in operation:
 - totalling 11,671, including rail-road level crossings of the following categories:
 - A – 2,180;
 - B – 1,491;
 - C – 1,581;
 - D – 5,181;
 - F – 788;
 - pedestrian crossings of cat. E – 450.

ROAD INFRASTRUCTURE TECHNICAL CONDITION

As a result of the maintenance and repair works and investment project activities in 2021, the length of railway tracks graded as good in terms of technical condition (as at 31 December 2021) accounted for 68.29% of the total

length of tracks in operation, which is an increase by 0.08% compared to the situation as at 31 December 2020; at that time, 68.21% of the tracks were graded as good.



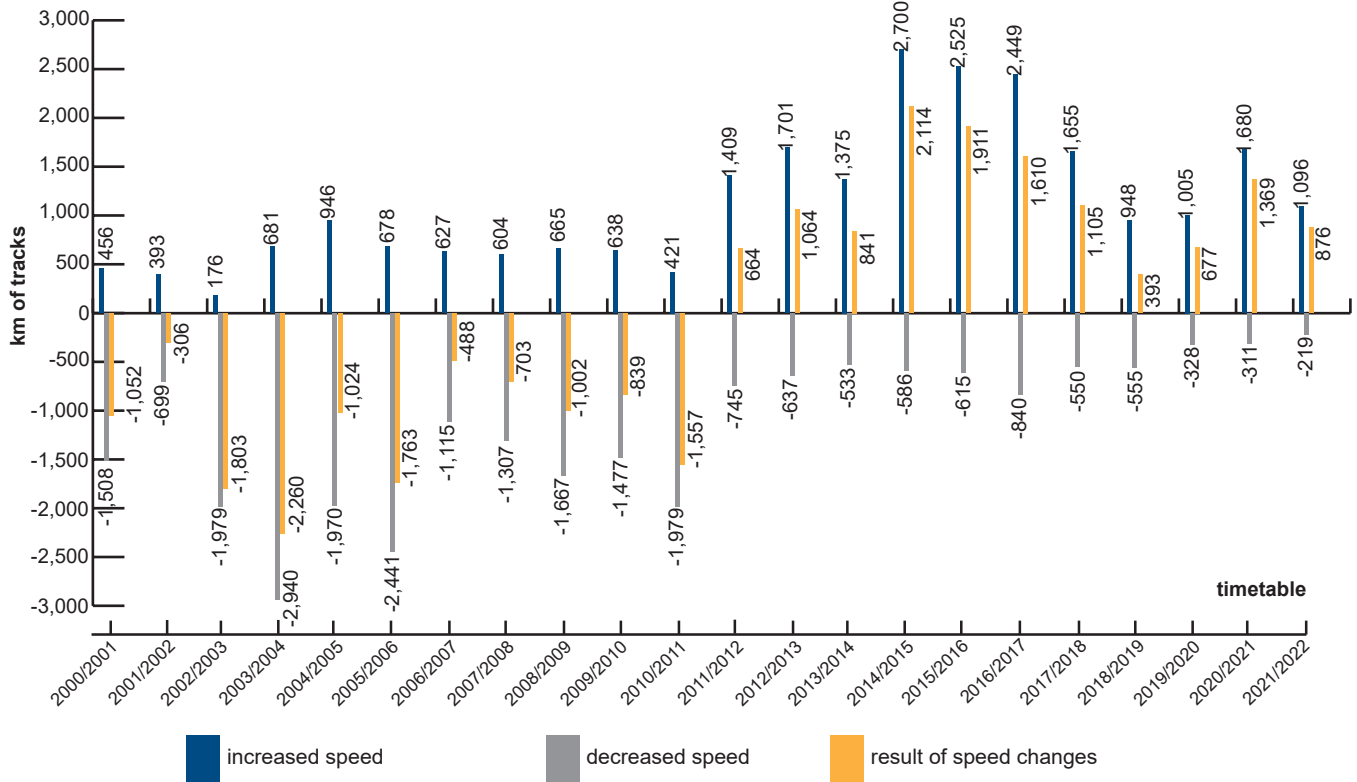
The diagram above was developed based on the following criteria:

- good** – railway lines operated in line with the assumed parameters, only maintenance work is required;
- satisfactory** – railway lines with lower operation parameters (reduced maximum scheduled speed, local speed limits); apart from maintenance works, it is necessary to carry out ongoing repairs consisting in the replacement of damaged track elements in order to restore maximum operational parameters,
- unsatisfactory** – railway lines with significantly lowered operating parameters (low scheduled speeds,

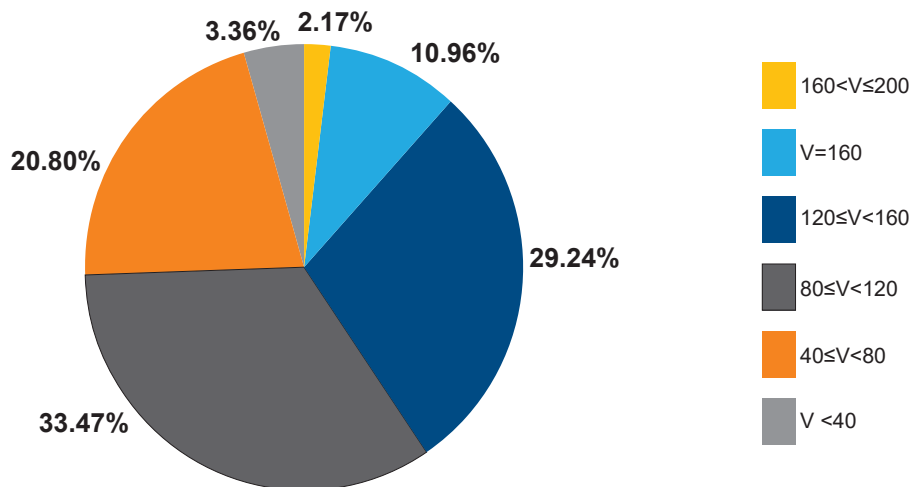
a large number of local speed limits, reduced permissible loads); this qualifies the tracks on the given line to be replaced.

As a result of the improvement in the technical condition of the tracks, in the 2021/2022 Train Timetable, the maximum scheduled speed for passenger trains was increased at 1,096 km of the tracks and reduced at 219 km of the tracks.

The length of railway line tracks in operation managed by PKP Polskie Linie Kolejowe S.A., on which changes to maximum scheduled speeds have been introduced (as of the introduction of the 2021/2022 Train Timetable)



Percentage structure of maximum scheduled speeds as of the introduction of the 2021/2022 Train Timetable



For several years there has been a systematic increase in the length of tracks allowing a maximum scheduled speed $V_{max} \geq 120$ km/h. At the end of 2021, the length of such tracks was 11,566 km; by the end of 2020, it was 11,131 km; at the end of 2019, there were 10,605 km of such

tracks and 10,278 km of them by the end of 2018. In total, from 2018 to the end of 2021, 1,288 km of tracks were added with the applicable maximum scheduled speed $V_{max} \geq 120$ km/h.

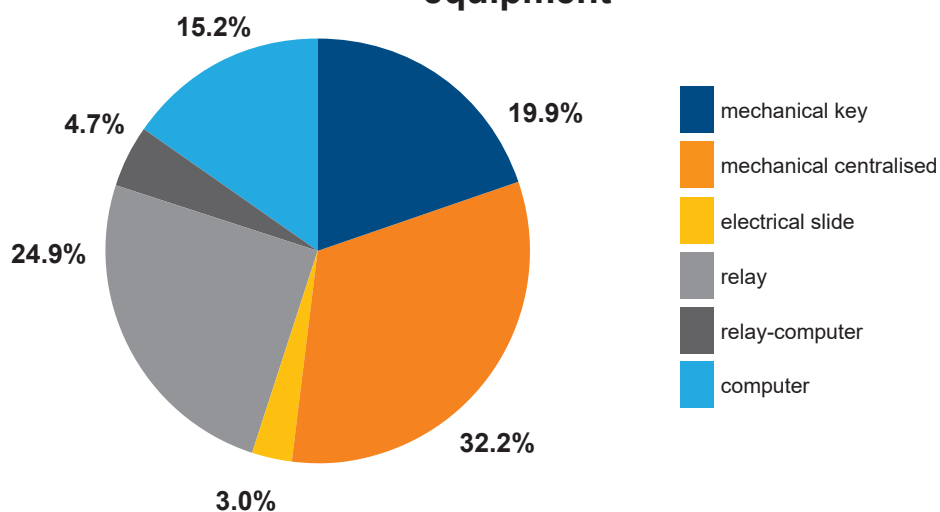
AUTOMATICS AND TELECOMMUNICATION

CONTROL COMMAND AND SIGNALLING (CCS) EQUIPMENT

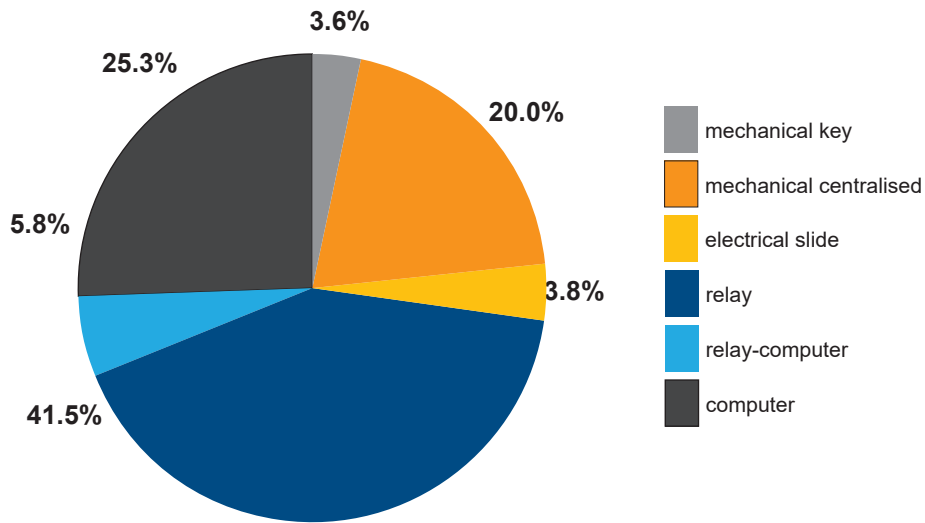
The CCS equipment still predominantly use relay and mechanical equipment. However, the dynamic development of computer technology allows for changes. The latest generation of the CCS equipment comprises computer systems and relay-computer (hybrid) systems which combine cutting-edge features, reliability and extended functionality in addition to ensuring a high level of traffic safety. As at 31 December 2021, 44 Local Control Command and

Signalling Centres (LCS) were in operation, including 4 LCS with a dedicated CCS system for lightly loaded lines and 37 line sections had remote control solutions in place. A total of 276 signal box control areas with a total of 5,154 switches and 7,352 signallers per 2,720 km of railway lines are remotely controlled.

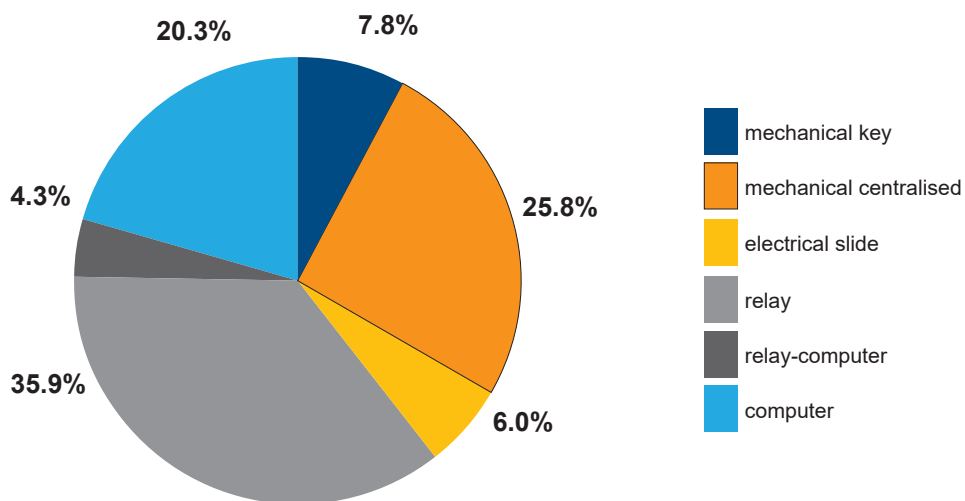
The signal box control areas are equipped in various types of station CCS equipment



Signallers in various types of station CCS equipment



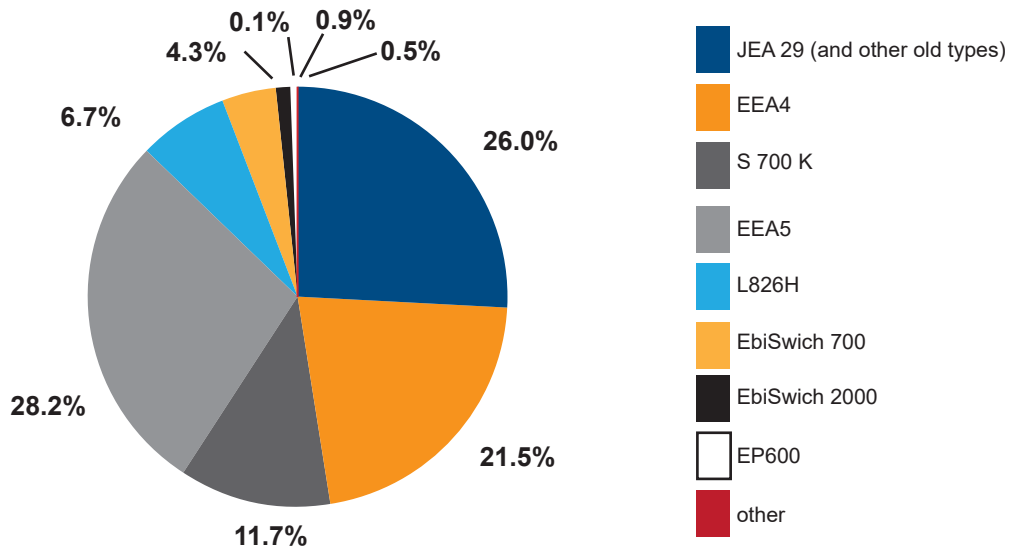
Switches in various types of station CCS equipment



Point machines play an important role in safe and efficient rail traffic management. As a result of the modernisation works carried out and purchases made as part of maintenance works on the railway line network managed by PKP Polskie Linie Kolejowe S.A., a total of 1,253 new point machines were installed in 2021.

As at the end of 2021, the railway line network managed by the Company had a total of 38,672 mechanical and electric point machines, out of which 81.2% were electric and 18.8% were mechanical. The diagram below shows the share of each type of electric point machines.

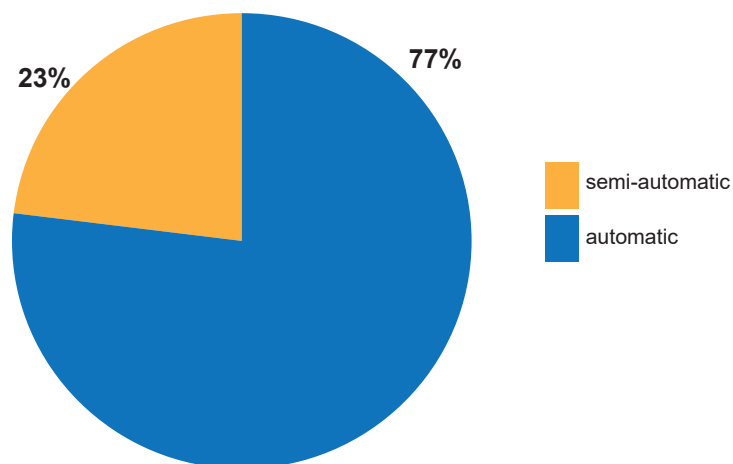
Types of electric point machines used



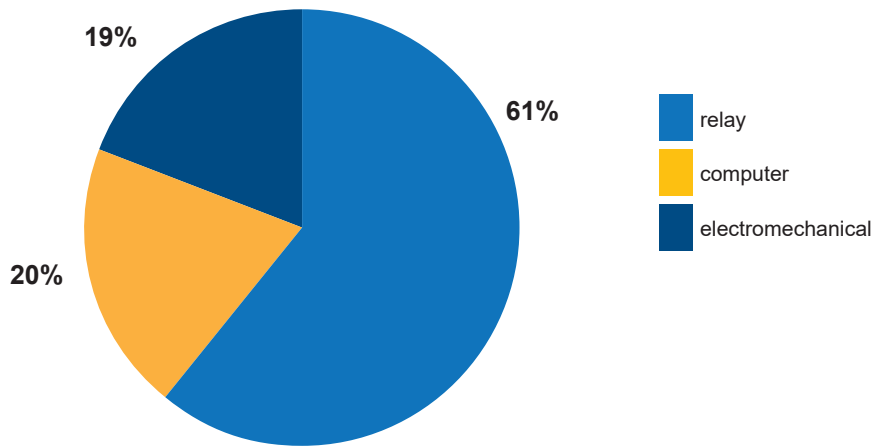
The safety of train rides between operating control points is ensured by block signalling systems – single block and multi block – which have been installed on 15,816 km of railway lines. The railway lines managed by PKP Polskie Linie Kolejowe S.A. are dominated by single block signalling block systems, with 12,246 km of railway lines equipped with such systems, of which 954 km are equipped

with block systems using the latest computer technology. Multi-block systems have been installed on 3,570 km of railway lines, of which 2,236 are computer-based block systems, equipped with integrated remote diagnostics systems, controlling and recording technical and operational parameters of the system.

Types of signalling block systems used



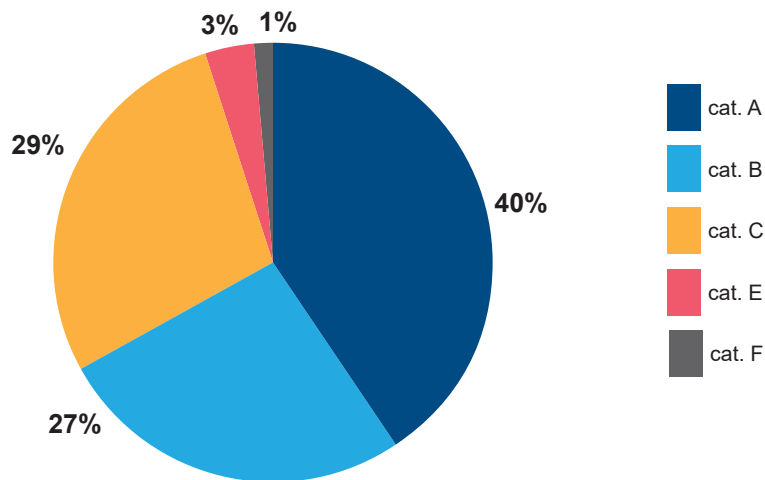
Signalling block systems by system technologies in 2010-2021 [in km]



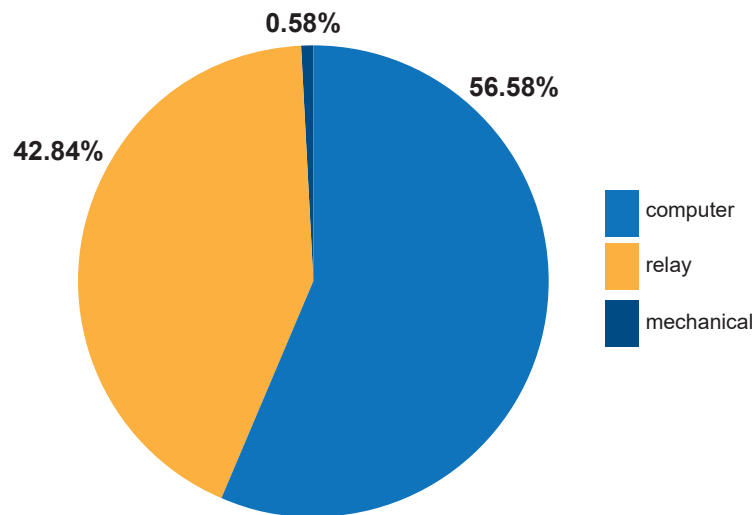
The railway line network managed by the Company has 11,671 rail-road crossings, of which 5,591 are equipped

with traffic safety systems, which accounts for 45% of the total number of rail-road level crossings in use.

Division of rail-road level crossings equipped with traffic safety systems by category



Number of crossing devices in terms of construction technology [set]



The computer technology is also used in traffic safety systems at rail-road crossings. The new generation of equipment used at crossings features auto-diagnostic systems,

systems that register all operation events as well as full control of the operation of the entire system.

ETCS

By 2021, the ERTMS/ETCS system has been installed on 884 km of railway lines.

The Company operates the ERTMS/ETCS equipment on both Level 1 (covering 308 km of lines) and Level 2 (cove-

ring 535 km of lines). The ERTMS/ETCS Level 1 Limited Supervision is installed on 51 km of lines.

In 2021, the installation of the ERTMS/ETCS on approximately 1,700 km of railway lines was in progress.

ROLLING STOCK EMERGENCY DETECTION EQUIPMENT (dSAT)

To increase the existing level of train operating safety, the modernised railway lines are being equipped with rolling stock emergency detection equipment (dSAT). The modernisation activities involve the replacement of worn-out dSAT equipment with new equipment made with modern technologies and the installation of equipment in new locations with new functionalities, in accordance with the principles specified in the "Technical and operational guidelines for devices for the detection of states of emergency in rolling stock (Ie-3)". Currently, dSAT equipment is installed in 233 locations on 52 railway lines. Depending on the functionality installed, the equipment allows areas on the moving train with an increased probability of failure to be indicated:

- failure of axle bearings (GM function),
- failure of block and disc brakes (GH function),
- deformation of wheel rims (PM function),

- dynamic overloads (PD function),
- excessive axle and line loads (OK function).

Key achievements in the dSAT area in 2021 include:

- installation of the dSAT equipment in 6 locations (as part of the modernisation of railway lines) – in the area of the Company's organisational units (two sets of equipment each at: Railway Line Plant in Siedlce, Railway Line Plant in Kraków and Railway Line Plant in Lublin);
- modernisation of the oldest generation of the dSAT equipment in 5 locations within the Railway Line Plant in Bydgoszcz.

ELECTRICAL POWER DEVICES

Electrical power devices managed by PKP Polskie Linie Kolejowe S.A. in 2021 compared to 2020

Item	Unit of measurement	2021	2020
Traction network devices:			
length of electrified railway lines	km	12,064	11,989
length of traction network	tkm	25,100	24,995
traction network disconnectors	pcs	20,153	20,185
including controlled	pcs	13,430	13,595
3 kV DC devices (leased to PKP Energetyka S.A.):			
Traction substations/sectional cabins	pcs	11	11
Modernised traction substations/sectional cabins	pcs	26	26
Turnout electric heating (eor) equipment:			
single turnouts, including locking devices	pcs	37,331	35,199
External lighting and electrical installations in the facilities:			
points of external lighting	pcs	212,534	210,293
installation points and internal lighting	pcs	223,264	206,144
MV distribution lines:			
non-traction lines (NTL)	km	832	784
Electric power delivery points:			
number of electric power delivery points	pcs	17,141	16,934
contracted capacity	kW	416,212	398,442

TECHNICAL CONDITION ASSESSMENT

In the scope of the basic groups of electrical power devices, the technical condition characteristics are shown in the tables below. The technical condition assessment cri-

teria for individual groups of devices have been defined on the basis of the assumptions of the operating instructions for the given type of devices.

TRACTION NETWORK

Technical condition of the traction network (in percentages)

Item	Technical condition	2021	2020	2021 vs. 2020
		%	%	
Traction network devices	Good	26.4	25.1	1.3
	Satisfactory	48.6	47.2	1.4
	Unsatisfactory	23.4	25.8	-2.4
	Inadequate	1.6	1.9	-0.3

The "old" types of traction network, which do not meet the current requirements, are successively eliminated from operation. The effect of the actions taken, i.e. the standardisation of the contact lines used in route tracks and the main principal tracks at stations and junction crossings

between these tracks, will be the standardisation and leaving in operation of 5+7 types of traction network. In route tracks and main principal tracks at stations, it is assumed to use a network with a cross-section of min. 420 mm² or 450 mm².

NON-TRACTION ELECTRICAL POWER DEVICES

Turnout electric heating (eor) equipment

Technical condition of the turnout electric heating (eor) equipment (in percentages)

Item	Technical condition	2020	2019	2020 vs. 2019,
		%	%	
Electric turnout heating equipment	Good	56.2	53.5	2.7
	Satisfactory	42.2	44.4	-2.2
	Unsatisfactory	1.0	1.2	-0.2
	Inadequate	0.6	0.9	-0.3

The turnout electric heating (eor) equipment is being systematically equipped with weather stations that streamline their proper use, which translates into increased efficiency

and reduced electricity consumption. 75.75% of the turnout electric heating (eor) equipment is controlled automatically, and the rest is controlled manually.

External lighting equipment for railway grounds

Technical condition of the external lighting equipment for railway grounds (in percentages)

Item	Technical condition	2021	2020	2021 vs. 2020
		%	%	
External lighting equipment for railway grounds	Good	34.2	33.1	1.1
	Satisfactory	27.4	25.8	1.6
	Unsatisfactory	16.8	19.3	-2.5
	Inadequate	21.6	21.8	-0.2

In external lighting equipment, old lighting fixtures with inefficient light sources (incandescent/mercury, mercury, sodium or fluorescent) are replaced with new lighting fixtures with LED light sources. This measure improves the Company's energy efficiency.

In 2021, there was the continuation of the programme consisting in the replacement of external lighting fixtures and poles. As part of the repair works and the Energy Efficiency Improvement Programme, 1,097 lighting fixtures were replaced with energy-saving fixtures, including LEDs. These measures ensure more efficient lighting of railway grounds and reduce electricity consumption.

ELECTRICITY CONSUMPTION

As part of its primary activity – ensuring the proper operation of the railway infrastructure – the Company purchases energy across the country. In 2021, electricity was purchased through 17,141 power connections, for which 416,212 kW of electrical power were ordered.

Compared to 2020, this is an increase of connections by 207, with an increase of installed capacity by 17,770 kW. This significant increase in installed capacity is due to the modernised railway infrastructure being put into service.

The extension of the catalogue and the number of installed devices, despite striving to use energy-efficient devices and their increasing power, contributes to an increase in consumption, and thus an increase in the Company's electricity costs. This trend is forecast to continue in the near future due to the significant scope of modernisation works in the area of railway lines.

ENERGY AUDIT OF THE ENTERPRISE

In 2021, a second energy audit of the enterprise was carried out, in accordance with the requirements of the Energy Efficiency Act. The auditors identified the potential for energy savings in two areas: external lighting and buildings. In the scope of external lighting, a priority action is to replace old light sources with modern LED solutions. As a result of this improvement, the potential to reduce energy

consumption is 19.9% (in relation to total lighting energy consumption). In the scope of thermal modernisation of buildings, the estimated savings should amount to 14.5% of the currently consumed final energy in this area.

INCREASE IN THE SHARE OF SUBSIDIARIES IN THE IMPLEMENTATION OF REPAIR TASKS IN THE ENERGY INDUSTRY

In 2021, there was a significant increase in the share of subsidiaries belonging to the PKP Polskie Linie Kolejowe S.A. Group of Companies in repairs carried out in the energy industry, in particular in repair works of

the traction network. Approximately 82% of the traction network repairs announced in 2021 were carried out by subsidiaries.

LEASE OF THE COMPANY'S ASSETS

The Company manages the infrastructure used to distribute electricity, which is leased by PKP Energetyka S.A. – the entity using this infrastructure to act as Distribution System Operator. In 2021, power processing devices were leased to PKP Energetyka S.A. As part of the agreement, PKP Energetyka S.A. used 885 power processing and distribution devices in 2021.

In addition, in 2021 PKP Polskie Linie Kolejowe S.A. leased part of the premises in the managed buildings to PKP Energetyka S.A. under a contract for USb2 control cabinets used for local control of traction network disconnectors. In 2021, the contract covered 802 facilities with 1,855 USb2 cabinets installed.

GREEN ENERGY

The extent of the infrastructure managed by the Company enables the safe development of photovoltaic installations in the vicinity and on buildings managed by the Company, until 2021 the Company operated 23 installations of this

type. Another 15 photovoltaic installations were built in 2021.

DIAGNOSTIC CENTRE

To guarantee safe railway transport and comfort of travel, required technical condition of the railway infrastructure must be ensured through its appropriate maintenance. Railway diagnostic system equipped with appropriate tools monitors the degree of wear and tear and degradation of the infrastructure.

The assessment of the technical condition of the railway infrastructure for the planning of maintenance and repair processes results from the analysis of the current values of the technical parameters of the infrastructure elements, obtained from the results of measurements and diagnostic tests. This analysis determines the compliance of the current parameter values with the normative parameters and the established safety tolerances.

Railway diagnostics is carried out in PKP Polskie Linie Kolejowe S.A. by:

1. diagnostic teams in the Company's organisational units – Railway Lines District Units, which use manual instruments and devices to carry out measurements and testing of the track bed, railway surface, engineering structures, buildings and railway structures, as well as the power network equipment and CCS equipment;
2. Diagnostic Centre in Warsaw, which is a unit within the Company that specialises in railway infrastructure diagnostics. The Diagnostic Centre ensures the safety of railway traffic through constant inspections and analysis of the technical condition of the railway infrastructure during its operation. In addition, the unit supervises the compliance with technical standards for the construction of railway surface elements during maintenance and investment works.

The Diagnostic Centre performs measurements, tests and analyses of the technical condition of the infrastructure in the areas of maintenance and investment regarding:

1. track geometry and elements of rail road infrastructure (structure gauge), measurements of the transverse and longitudinal profile of rails (i.e. unevenness and/or waviness) and other specialised measurements, such as of the roughness or hardness of the rails, the chemical composition of welds, etc;
2. the geometry of the traction network, the wear of the overhead wire and the defects and deficiencies of certain elements;
3. defectoscopy of the rails, their connections and certain turnout elements (detecting defects in terms of surface and internal damage);
4. functional diagnostics of the dSAT equipment (rolling stock emergency detection) by simulating emergencies with special equipment installed on the measuring wagon;
5. calibration of measuring instruments such as track gauges and steel rulers with a length of 1,000 mm;
6. supervision and control of welding of rails and turnouts and the assessment of the rail joints;
7. field and laboratory tests of the quality of rail connections and the training of technical personnel to meet the Company's needs in this area;
8. technical acceptance of railway surface elements to be incorporated into railway infrastructure;
9. relay maintenance (RM) for relays used in the CCS equipment;
10. implementation of the SMS-PW-17 procedure in the area of railway surface welding;
11. preparing opinions and expert reports in the above-mentioned areas.

**In 2021, the Diagnostic Centre performed – as part of its primary activity
– among others:**

No.	Task	Quantity	Unit of measure	
1.	Measurement of track geometry both vertically and horizontally using a DP-560 multifunction vehicle, 2 EM120 measuring vehicles and a UPS-80 special vehicle	49,297	km of tracks	
2.	Inspection of internal rail structure in a track using a track defect detection wagon	11,608	km of tracks	
3.	Inspection of internal rail structure in a track using a track defect detection detection bogie	42,874	km of tracks	
4.	Defect detection test on railway track elements	Welds	2,450	pcs.
		Padding welds	193	pcs.
		Turnouts Crossings	3,124	pcs.
	Specialist test on railway surface elements	Longitudinal rail profile	37,400	metres
		Transverse rail profile	862	pcs.
		Running surface roughness	266	pcs.
		Measuring the straightness of rail joints	849	pcs.
Eddy current testing of rails	18,127	metres		
5.	Checking the operation of hot axle box detection units by driving a DSAT wagon simulating an axle box failure	358	devices	
6.	Participation in inspections of bridge structures using a specialised vehicle Volvo – SRS Svabo, for the purposes of inspectors from the Railway Line District Units	128	facilities	
7.	Laboratory testing of rail joints on which thermite-welding, welding and hardfacing was used	28	reports	
8.	Field testing of rail joints on which thermite-welding, welding and hardfacing was used	24	reports	
9.	Testing of welded rail joints on open testing grounds for welded and pressure welded joints (2 tests per year)	2	reports	
10.	Training and courses in rail welding and welding supervision	70	persons	
		12	courses	
11.	Periodic and certification exams in rail welding	165	persons	
12.	Instruction and issuing of competence certificates, identification cards for welding supervision	149	pcs.	
13.	Calibration	of rail gauges	1,070	pcs.
		Of rulers	171	pcs.
14.	Technical acceptance of railway surface elements	749	sets	
15.	Relay maintenance	Own units	42,413	pcs.
		External units	8,425	pcs.

The above-mentioned values are planned annually based on obligatory regulations and the information on demand submitted by Railway Line District Units.

The important projects carried out by the Diagnostic Centre in 2021 include: completion of the construction and supply of a new rail-road vehicle with an installed aerial platform intended for inspection of engineering structures. The Diagnostic Centre makes available to the Company's organisational units, the Railway Line District Units, this

specialised vehicle enabling the inspection of railway bridges and viaducts. The rail-road vehicle, which moves on the road and rail track and is equipped with a suitable multi-fold broken aerial boom, makes it possible to inspect elements of engineering structures in inaccessible places that are not visible from track or road level. It enables testing and/or measurements of upper or lower elements of engineering structures, e.g. bottoms of structures, bearings, expansion joints, pillars, abutments, etc.

INFRASTRUCTURE REPAIR COMPANY

The Infrastructure Repair Company is a specialised organisational unit of PKP Polskie Linie Kolejowe S.A. that carries out tasks in the area of day-to-day repairs and maintenance of railway lines, performing track works using high-performance track machinery, other equipment and manual labour.

In 2021, the Infrastructure Repair Company carried out the typical maintenance and repairs works, such as:

- adjusting 874,246 m of tracks vertically and horizontally;
- adjusting 1,315 r.o.u. of turnouts vertically and horizontally;
- cleaning the ballast in the amount of 50,832 m, joining rails in the track with thermite welding and pressure welding method in the amount of 781 pieces, chemical weed control of the tracks with the CHOT unit (set) in the amount of 4,060,481 m;
- comprehensive surface replacement of 12,288 m.

The works were carried out, among others, on the following railway lines:

- No. 1 Warszawa – Katowice;
- No. 2 Warszawa Zachodnia – Terespol;
- No. 3 Warszawa Zachodnia – Kunowice;
- No. 6 Zielonka – Kuźnica Białostocka;
- No. 26 Łuków – Radom;
- No. 33 Kutno – Brodnica;
- No. 134 Jaworzno Szczakowa – Mysłowice.

In 2021, the existing high-performance devices and wagons were also modernised and comprehensively repaired. In addition, the Company's potential has also been enhanced through the purchase of new equipment and machinery, and the modernisation and repairs of existing ones. In order to ensure greater safety during the work, further Machinery Warning Systems were purchased, thus increasing the number of machinery equipped with this system to 4 pieces. The Machinery Warning System significantly improves safety when carrying out railway infrastructure maintenance works.

TRACK MACHINERY PLANT

The Track Machinery Plant in Kraków is a specialised organisational unit of PKP Polskie Linie Kolejowe S.A. that carries out tasks comprising ongoing repairs, maintenance of railway lines and engineering structures as well as investments. The Plant is equipped with specialist machinery and equipment as well as process lines for regeneration and welding of rails.

The maintenance of railway lines and engineering structures along with investment tasks are implemented using high-performance specialist machinery for track and track bed works. An important advantage of the machinery sets is that the repairs are carried out in a single operational passing without the need to dismantle the railway track, which significantly reduces the repair time, while ensuring uniform and stable high parameters of the railway track geometry. This is important in terms of environment protection and the impact of the railway line on the surroundings, as there is no need to disturb the structure of the areas adjacent to the repaired section, destroy access roads or set out technological routes for transporting materials and spoil.

Rails are regenerated at a specialist unit – the Rail Welding Section in Bydgoszcz. In the process, the correct profile of the rail head is restored, and the rails are then welded together to form a 210 m long rail. In 2021, 93,549 m of old rails were welded at the Rail Welding Section in Bydgoszcz after the reprofiling process. This makes it possible to recycle old material from modernised railway lines and to replace the rails on lower-load railway lines while minimising costs. Welding of new rails is carried out at the Rail Welding Section in Kędzierzyn Koźle, where 70,504 m of rails were welded in 2021.

Workshops of the Track Machinery Plant in Kraków perform inspections of the P2, P3 level of railway vehicles and the planned and emergency repairs of working units of track works machinery. Track machinery and welding plants are operated by an experienced and qualified team of employees, who ensure high quality work corresponding to high reliability, which results in failure-free operation. As a confirmation of the quality of the services provided by the Plant, the company has the ISO 9001:2015 certification.

Machinery operation of the Track Machinery Plant in 2021

Machinery	Quantity	Unit
AHM 800 R	29,278	r.m.
P-93 and P-95	77,156	r.m.
CSM 09	230,780	r.m.
ZTU 300	174,305	r.m.
DGS 62 N	38,380	r.m.
OT 800 + RM 80	90,956	r.m.
USP [r.m.]	256,470	r.m.
USP [r.o.u.]	24	r.o.u.
UNIMAT [r.m.]	7,361	r.m.
UNIMAT [r.o.u.]	487	r.o.u.

IMPORTANT ACHIEVEMENTS IN THE SCOPE OF RESEARCH AND TECHNOLOGICAL DEVELOPMENT

One of the most important activities carried out by the Company in 2021 was the continuation of cooperation with the National Centre for Research and Development (NCBR). As part of the implementation of the joint project entitled: "BRIK – Research and Development in the Railway Infrastructure", 10 research and development projects are being conducted with a total value of over PLN 42.9 million (including the financial contribution of PKP Polskich Linie Kolejowe S.A. of approximately PLN 17.6 million).

In 2021, the partners updated the documents formalising the cooperation and thus extended its time horizon to 2033 and its budget to PLN 100 million (PLN 50 million from each partner).

In addition, a second competition for the implementation of research and development projects under BRIK was announced in 2021. A total of PLN 50 million (PLN 25 million from each partner) was allocated to support projects in the competition.

ACHIEVEMENTS IN THE FIELD OF AUTOMATICS AND TELECOMMUNICATION

1. In the scope of automatics and telecommunication, the supervision was exercised over the implementation of testing grounds for the purpose of carrying out operational tests in order to obtain use permission certificates issued by the President of the Office of Rail Transport, and operating opinions were prepared for the ATE-ZS computer control panel for relay CCS equipment with the remote control function manufactured by Zakład Produkcyjno-Handlowo-Uslugowy "ATE" sp. z o.o.
2. Preparations were carried out for the start of testing grounds for:
 - a) Signalling block system of the UniBL type manufactured by voestalpine SIGNALING Poland Sp. z o.o.;
 - b) Westrace Mark II computer interlocking system with integrated signalling block system manufactured by Siemens Mobility sp. z o.o.;
 - c) RMZSIKD type remote control system manufactured by Siemens Mobility sp. z o. o.;
 - d) ACM250 axle counting system with ZP D 43 sensors manufactured by Siemens Mobility sp. z o.o.
3. In the scope of the SMS-PW-17 procedure, the supervision was carried out over the implementation of testing grounds for:
 - a) FadC R2 advanced axle counter manufactured by Frauscher Polska Sp. z.o.o.;
 - b) AUTOPROWA type Automatic Track Warning System in cable, radio, FALKON version, manufactured by Zollner Signal GmbH;
 - c) LED modules of type TLT-8/K for railway signal lanterns manufactured by TELKO Sp. z.o.o.

ACHIEVEMENTS IN THE FIELD OF ENERGY

PKP Polskie Linie Kolejowe S.A. implements under BRIK the following projects dedicated to the area of railway energy sector:

- development of an innovative control system for the lighting infrastructure on the network managed by PKP Polskie Linie Kolejowe S.A.;
- self-cleaning, efficient photovoltaic panels on a flexible surface integrated with an acoustic screen and intelligent monitoring system;

- development and implementation of elements of an anti-theft system for the contact line in rail transport.

The project entitled "Self-cleaning, efficient photovoltaic panels on a flexible surface integrated with an acoustic screen and intelligent monitoring system" was completed in Q4 2021, and was then submitted for final evaluation by, among others, external experts from NCBR. The project resulted in the construction of a prototype photovoltaic panel installation and its basic testing carried out on infrastructure managed by the Company.

ACHIEVEMENTS IN THE FIELD OF ENVIRONMENT PROTECTION

In 2021, the research work was continued on new solutions and equipment to protect people and buildings from noise and vibration caused by railway operations. The joint project under BRIK will enable developing effective vibro-acoustic solutions other than standard noise barriers. The implementation of innovative solutions in the future will minimise the noise nuisance as well as the impact of the equipment used on the natural landscape. Research work

is carried out under two projects: "New solutions for the protection of people and the environment against noise" and „New solutions for the protection of people and the environment against vibrations”.

PASSENGER SERVICE FACILITIES

PKP Polskie Linie Kolejowe S.A. undertakes a number of initiatives involving passenger infrastructure with a view to providing travellers with better comfort on platforms, access routes and with convenient access to trains. Clear signposting of stations and railway stops as well as access to information on train traffic is provided. Stations and passenger stops are equipped with elements necessary for comfortable waiting for the train, and are adapted to the needs of persons with reduced mobility.

In 2021, the Company managed platforms and access routes at 2,790 stations and passenger stops, as well as 5 railway stations: Bystra Podhalańska, Jerzmanice Lubuskie, Łódź Fabryczna, Turowo Pomorskie, Włoszczowa Północ.

STOPS ON REQUEST

In accordance with the expectations of regional railway undertakings, in 2021, by Decision No. 2/2021 of the Vice President of the Management Board of PKP Polskie Linie Kolejowe S.A. – Director for Operational Affairs of 12 July 2021 the "Internal procedure of qualifying a passenger stop as a request stop" was introduced, an extract of which was published in Annex 17 to the Network Statement.

The service covered 32 facilities selected by railway undertakings, characterised by a minimum exchange of passengers: Batowice Lubańskie, Bierkowice, Błazkowa,

Bolesławice Świdnickie, Czarna Mała, Doboszowice, Gierałtów, Gorzelin, Gorzuchów Kłodzki, Górzyniec, Jedlina Górna, Kłodzko Książek, Kłodzko Zagórze, Kopalina, Krzyżowa, Kulin Kłodzki, Kwieciszowice, Lewin Kłodzki, Minkowice Oławskie, Młyńsko, Nowa Ruda Przedmieście, Nowa Ruda Zdrojowisko, Nowa Wieś Legnicka, Piechowice Dolne, Solniki Wielkie, Stary Wielisław, Studzianka, Suszka, Ubocze, Unisław Śląski, Wierzchowice, Zabrzeg Czarnolesie.

DYNAMIC PASSENGER INFORMATION

PKP Polskie Linie Kolejowe S.A. is gradually implementing the Central Dynamic Passenger Information System (CSDIP) at railway stations and passenger stops. CSDIP is a centralised system that is a collection of all the devices installed at the stations and passenger stops to present information to passengers. A part of the CSDIP system is the Central Application of the Dynamic Passenger Information System (CASDIP), which provides it with timetable data and information about possible delays in train traffic.

In addition to providing the CSDIP devices with source data, CASDIP provides content display and message output via an implemented speech synthesiser. In 2021, 11 locations were added to the CSDIP system, including, but not limited to: Warszawa Główna, Warszawa Gdańska, Lublin Główny and Dęblin.

VIDEO MONITORING

In 2021, the project for the construction of the Video Monitoring System (SMW) at the stations of railway line No. 351 (on the sections Wronki – Słonice and Słonice – Szczecin Dąbie, as well as at the Warsaw Railway Node at the Warszawa Zachodnia station and the Warszawa Targówek passenger stop) continued. The works related to the construction of the SMW on the section Poznań Wola – Wronki were also continued. In addition, the detailed designs for the SMW for the Wrocław Szczecin passenger stop and the Poznań Główny station were prepared.

Moreover, design works were carried out on the construction of the SMW on railway lines No. 6, 28, 182, 131, 2, 3, 275 and 282, as well as works on the project involving the establishment of the Passenger Infrastructure Safety Centre (CBIP), which will serve as a central point for the supervision of national video monitoring system belonging to PKP Polskie Linie Kolejowe S.A.

NAMES OF STATIONS AND PASSENGER STOPS

In 2021, in accordance with current regulations, as part of organising and shaping the public space in which the traveler moves, 22 new stations and passenger stops were named, i.e.: Bańska Niżna, Boguszów-Gorce Dzikowiec, Chabówka Stadion, Dąbrówka Jezioro Mucharskie, Gdów, Gruszów, Kasina Wielka Północna, Koszary, Mordarka, Nowy Dwór near Orneń, Nowy Sącz Dąbrówka, Nowy Sącz Gorzków, Otomino, Podłęże Balachówka, Poronin Misiągi, Stróża

near Dobra, Szczyrzyc, Świdnica Zawiszów, Warszawa Grochów, Wiatowice, Zagórze near Niepołomice, Zręczycze.

In addition, 2 facilities were renamed:

- Końskowola (formerly Pożóg),
- Radom Główny (formerly Radom)

EQUIPMENT AND MAINTENANCE OF PLATFORMS AND PLATFORM ACCESS ROUTES

In 2021, the implementation of tasks aimed at improving the comfort of passengers waiting for trains at stations and passenger stops was continued, including:

1. installation of 148 platform shelters in 114 locations;
2. installation of approximately 1,670 litter bins in 657 locations;

3. installation of approximately 350 platform benches in 155 locations;
4. installation of approximately 990 bicycle racks in 242 locations;
5. installation of 700 information showcases in 380 locations;
6. installation of new permanent signposts at more than 270 locations.

ADAPTATION OF PASSENGER INFRASTRUCTURE TO THE NEEDS OF PERSONS WITH DISABILITIES AND PERSONS WITH REDUCED MOBILITY (PRM)

In 2021, PKP Polskie Linie Kolejowe S.A. implemented actions to eliminate architectural barriers at stations and passenger stops in order to adapt them to the needs of persons with disabilities and persons with reduced mobility.

As part of the restoration and revitalisation tasks carried out by the Company, 149 platforms were reconstructed and 62 new platforms were constructed, taking into account their adaptation to the needs of persons with reduced mobility, including: installation of 79 passenger lifts and 101 ramps leading to the platforms, construction of paths for the visually impaired and blind, and adjustment of platform heights to the applicable guidelines.

In addition, in 2021 the Company continued its cooperation with Polskie Koleje Państwowe S.A. (PKP S.A.) with regard to providing assistance to persons with disabilities and persons with reduced mobility at passenger stations by security guards for protection of persons and property employed by PKP S.A. As part of this cooperation, more than 20,600 persons with reduced mobility were assisted at 58 passenger stations in 2021.

A summary of the effects of the measures taken to adapt the stations and passenger stops managed by the Company to the needs of persons with disabilities and persons with reduced mobility is as follows:

1. 2,261 platforms were modernised;
2. 463 passenger lifts were installed;
3. 84 vertical platform lifts were installed;
4. 157 stair lifts were installed;
5. 89 escalators were installed;
6. 8 travelators were installed;
7. at more than 1,000 stations and passenger stops, ramps leading to platforms and outdoor areas were installed;
8. approximately 300 stations and passenger stops were provided with information in Braille.

INSPECTIONS AND AUDITS OF PASSENGER INFRASTRUCTURE

PKP Polskie Linie Kolejowe S.A. carries out ongoing passenger infrastructure inspections and audits, which are conducted in order to identify and rectify non-compliance with the Company's internal passenger infrastructure regulations, as well as to obtain current and reliable information on the condition of passenger infrastructure. Conducting inspections and audits of railway stations and passenger stops is an ongoing process that identifies possible irregularities and defects so that they can be rectified as quickly as possible.

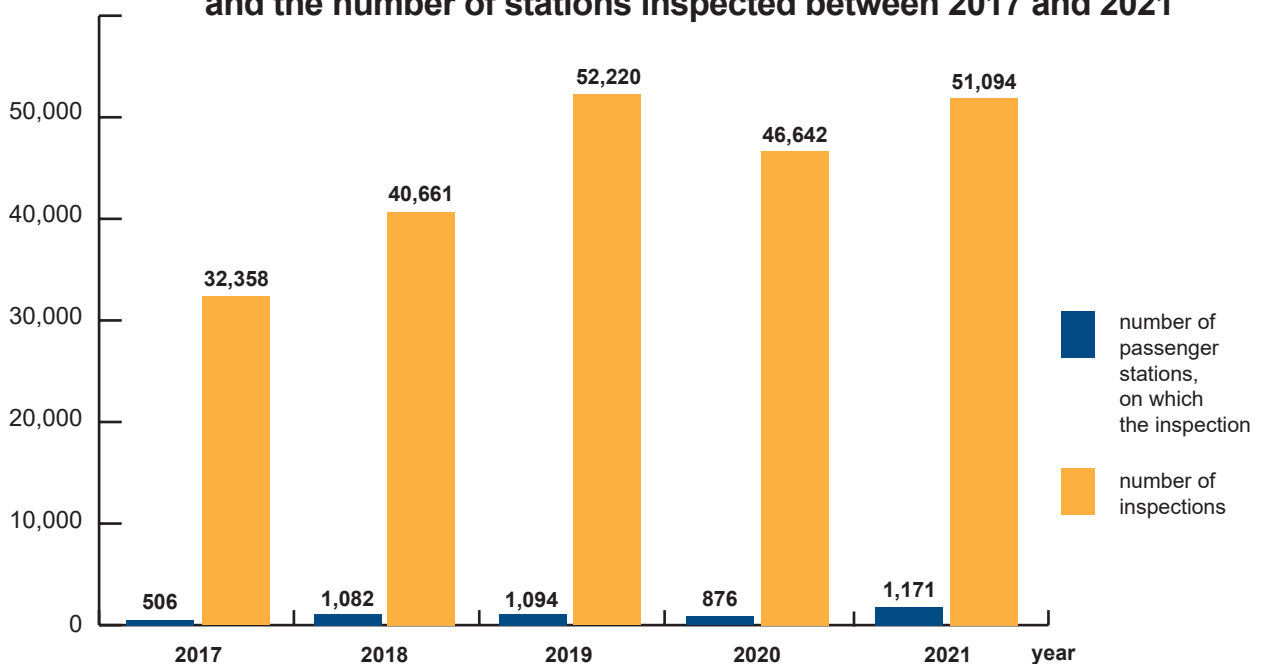
In 2021, nearly 4,260 inspections were carried out each month. A total of 51,094 inspections of 1,171 facilities and audits of 2,579 facilities were carried out.

Audit and verification activities are undertaken primarily out of concern for the traveller. They are aimed at ensuring the required level of cleanliness and proper maintenance of passenger infrastructure elements for the comfort of passengers using railway transport.

The inspections and audits involved checking passenger infrastructure, in particular in the areas of:

1. the level of maintenance of cleanliness, including:
 - platforms, access paths, intertrack space, slopes,
 - landscaping elements, platform markings, SDIP elements,
 - removal of graffiti from buildings and landscaping elements,
 - PRM equipment;
2. the level of winter maintenance, including:
 - platforms, access paths,
 - landscaping elements, platform markings, SDIP elements,
 - PRM equipment,
3. the technical condition of passenger infrastructure:
 - landscaping elements, marking of platforms and access paths, information showcases, shelters;
 - platforms and access paths, railway underpasses, footbridges, other traffic routes,
 - bicycle racks,
 - PRM equipment;
4. publication of various types of train timetables, including:
 - line timetable (detailed),
 - route timetable,
 - future timetable;
5. the efficiency of the dynamic visual and voice information system and timing signaling network;
6. presence of illegal advertising.

Comparison of the total number of passenger infrastructure inspections and the number of stations inspected between 2017 and 2021



MAINTENANCE OF CLEANLINESS AT PASSENGER STATIONS

In 2021, the project to maintain cleanliness at railway stations and passenger stops continued (together with PKP S.A.). The performance and supervision of the service are carried out in accordance with the current "Book of Standards for Maintaining Cleanliness at PKP Passenger Stations", describing the required standard of maintenance of cleanliness of each element of passenger infrastructure.

The audit structure of PKP Polskie Linie Kolejowe S.A. is used in the process of controlling the level of performance of the cleaning service at railway stations and passenger stops. Employees checking the cleanliness level are equipped with mobile devices with a special audit application allowing them to send the assessment and any comments to the service contractor in real time.

COMMERCIAL DEVELOPMENT OF PASSENGER INFRASTRUCTURE

The Company leases passenger infrastructure space on an ongoing basis for commercial purposes. These activities are carried out in accordance with the "Guidelines for commercial development of passenger infrastructure

managed by PKP Polskie Linie Kolejowe S.A.", which define the principles of commercial, service and advertising space development in passenger infrastructure areas.

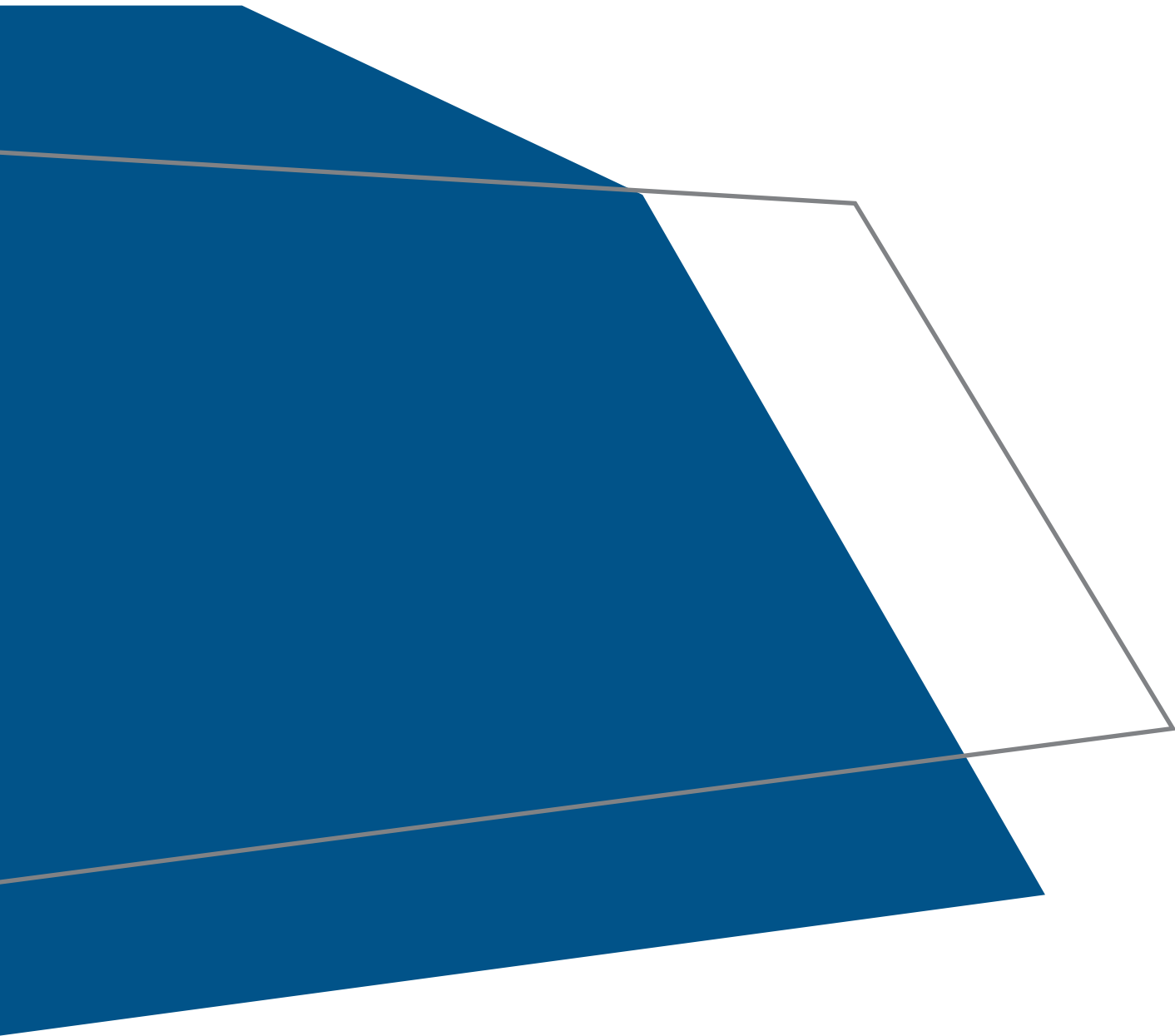
WINTER PROTECTION OF RAILWAY LINES

Difficult weather conditions, such as: intense snowfall, low temperatures and strong winds can cause disruption to the operation and transport process on the railway.

In order to remove or mitigate the effects of winter, a winter standby service is introduced in the Company for the period from 15 November to 31 March. Depending on the impact of weather conditions on the operation of trains, an appropriate winter standby phase is initiated. Initiating a specific phase involves incorporating sufficient staff, machinery and snow removal equipment into the winter works. Communication routes that are economically and socially important are under special winter protection. The railway lines were divided into three groups based on the order of winter maintenance. Priority is given to railway lines with regional traffic related to commuting to work and schools.

For conducting winter works in the 2021/2022 season, PKP Polskie Linie Kolejowe S.A. secured nearly 13.5 thousand people (its own employees and external entities). The primary element of the technical protection of the railway lines are the snow removal machines, such as: snow harvesters collecting snow from the track directly onto train sets as well as snowploughs and snowblowers pushing or throwing snow to the side of the track. In total, the Company had a total of 275 of the aforementioned machines in 2021. The areas of railway lines exposed to snow drifting (a total of 891 km of tracks) were covered with snow screens.

To ensure smooth switching of railway turnouts during low temperatures and snowfall, more than 18,800 turnouts were equipped with the turnout electric heating (eor) equipment. All railway turnouts are also lubricated with an agent with a low freezing point. In 2021, 179 rapid response teams (to deal with breakdowns and faults in the railway surface and (CCS) equipment) were also available for the winter standby service. For traction network maintenance, there were 66 trains equipped with percussion wire de-icing equipment and pantographs with reinforced strips for de-icing frost and rime frost. Contact lines wires, especially on railway lines where high-speed trains run, were treated with an anti-icing agent to reduce the effects of rime frost and ice build-up.



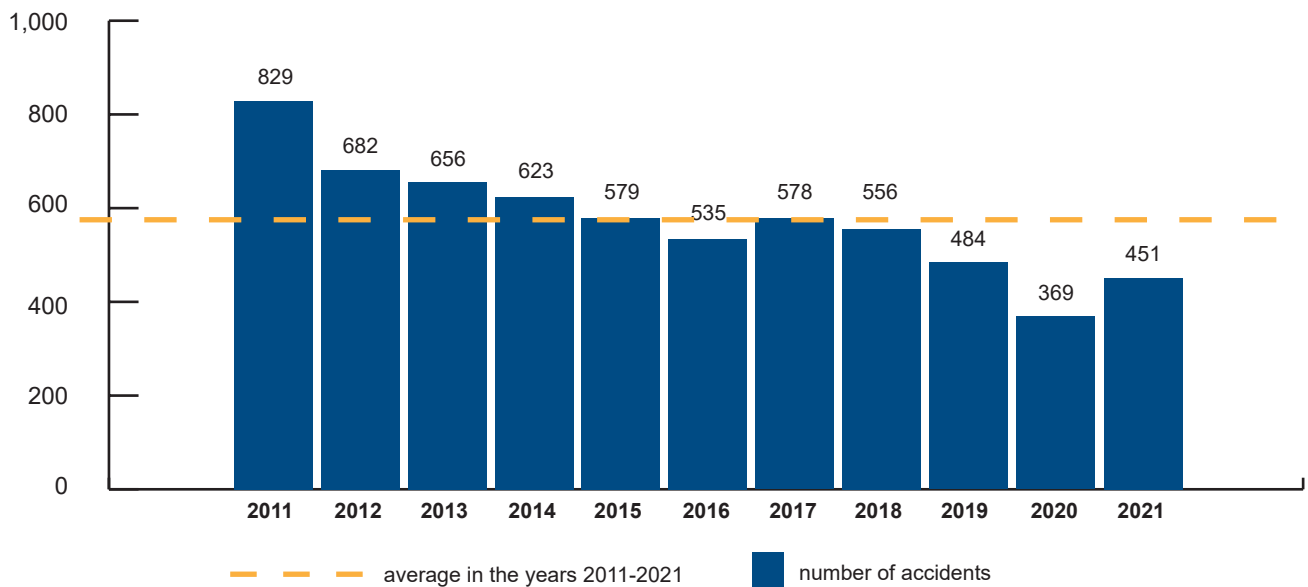
SAFETY

STATISTICS OF RAILWAY EVENTS

In the period from 1 January to 31 December 2021, on the railway network managed by PKP Polskie Linie Kolejowe S.A., there were 451 accidents (excluding suicides).

Compared to 2020, the number of accidents increased by 82 (22%).

Comparison of the number of accidents that occurred between 2011 and 2021 on the railway network managed by PKP Polskie Linie Kolejowe S.A.

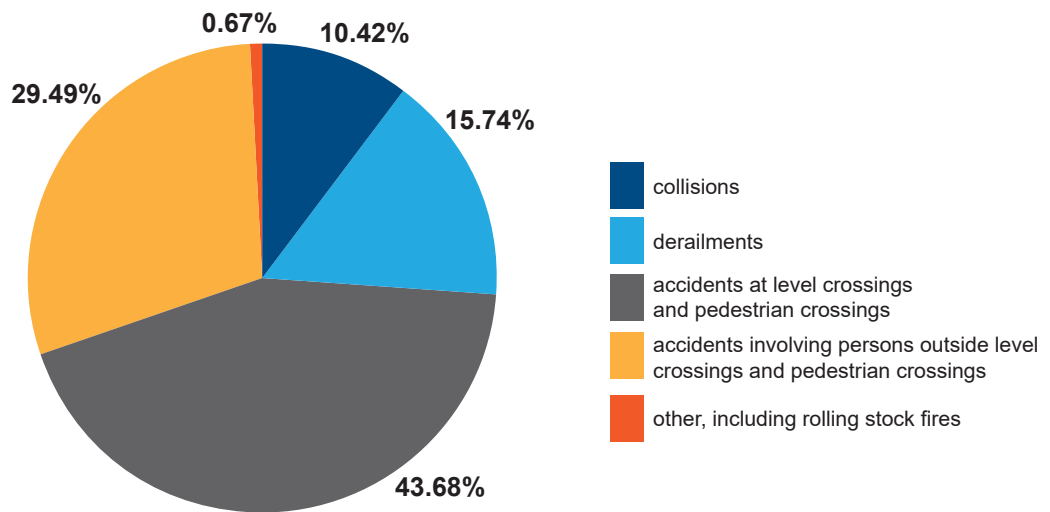


ACCIDENTS AND SERIOUS ACCIDENTS BY TYPE

The type classification of accidents used by PKP Polskie Linie Kolejowe S.A., compliant with the requirements of the Office of Rail Transport (UTK) and European Railway Agency (ERA) includes:

1. collisions;
2. derailments;
3. accidents at level crossings and pedestrian crossings;
4. accidents involving persons outside level crossings and pedestrian crossings (excluding suicides);
5. rolling stock fires;
6. other accidents.

Quantitative structure of accidents on the rail network managed by PKP Polskie Linie Kolejowe S.A. in 2021 by type



The diagram above shows that by far the largest groups of accidents on the railway network managed by PKP Polskie Linie Kolejowe S.A. were accidents at rail-road level crossings and pedestrian crossings, as well as accidents involving persons outside level crossings and pedestrian crossings (people being hit while staying on railway premises or jumping in/out of trains). Collisions and derailments accounted for just over 26% of railway accidents in 2021. These are incidents that usually occur because of the broadly understood railway system, i.e. technical devi-

ces, procedures and/or human and organisational factors (on the part of the railway undertaking or the infrastructure manager). The possibility to reduce these two types of accidents depends directly on the measures taken by railway market participants – infrastructure managers and railway undertakings, but also designers, producers, suppliers and contractors of construction and maintenance works.

PERSONS INJURED IN RAILWAY ACCIDENTS

The number of persons injured in accidents on the railway network managed by PKP Polskie Linie Kolejowe S.A. in 2021 amounted to 181, of which 141 were fatalities and 40 seriously injured. Compared to 2020, the number of fatalities decreased by 2, and the number of persons seriously injured also decreased – by 4. The largest groups of fatalities that occurred in 2021 were unauthorised persons on railway premises (95 killed, exactly the same as in 2020)

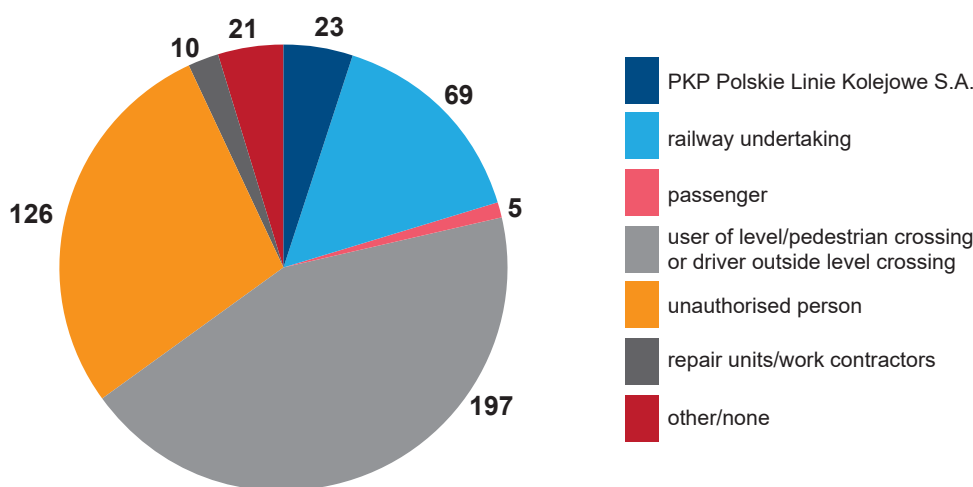
and users of level crossings and pedestrian crossings (46 killed, i.e. 1 more than in 2020). Among persons seriously injured in railway accidents, the largest group (25 persons, i.e. 2 more than in 2020) were also unauthorised persons on railway premises and users of level crossings and pedestrian crossings (15 persons, i.e. 5 less than in 2020).

ACCIDENTS BY FAULT ATTRIBUTION

The statistics show that the vast majority of railway traffic accidents are caused by users of level crossings and pedestrian crossings and unauthorised persons on railway premises – compared to other categories, they make up an

overwhelming number of entities at fault for accidents on the railway network managed by the Company.

**Quantitative structure of accidents on the network managed
by PKP Polskie Linie Kolejowe S.A.
in 2021 by fault attribution**



In 2021, there were 23 accidents involving PKP Polskie Linie Kolejowe S.A., including 5 collisions, 15 derailments, 2 accidents at rail-road level crossings. The most frequent causes of incidents burdening the Company were mistakes

of employees in charge of railway traffic and damage to or poor technical condition of the surface of railway tracks.

MEASURES TAKEN TO IMPROVE RAILWAY TRAFFIC SAFETY

IMPROVEMENT OF INFRASTRUCTURE SAFETY PARAMETERS AS A RESULT OF INVESTMENT WORKS ON RAILWAY LINES

PKP Polskie Linie Kolejowe S.A. is implementing a large-scale programme for the modernisation and revitalisation of railway lines. The scope of works under individual investment projects usually involves the comprehensive replacement of the railway surface, control-command

and signalling equipment, electric power equipment (both traction and non-traction) as well as the modernisation of rail-road level crossings and their removal and replacement with two-level crossroads. The replacement of old, worn-out and degraded elements of the railway

infrastructure and technical equipment with new elements and equipment made using modern technologies allows to significantly improve the operating parameters of railway lines (mainly maximum permissible speeds) while at least maintaining and usually increasing the level of safety. The modernisation and revitalisation works carried out on railway lines reduce the risk of occurrence of events (accidents and incidents) and potentially dangerous situations caused by poor technical condition or infrastructure breakdowns. Similarly, the frequency of accidents at rail-road level crossings is reduced by equipping them with additional safety and user warning devices.

As part of the modernisation and revitalisation projects implemented by the Company on railway lines, the elements of infrastructure which are critical in terms of the risk of derailment, i.e. turnouts, are being replaced and retrofitted. In 2021, the investment activities on the network managed by PKP Polskie Linie Kolejowe S.A. covered a total of 1,098 turnouts. In order to ensure greater reliability and safety of rail transport in difficult weather conditions, all the turnouts installed as part of the aforementioned project were equipped with turnout electric heating (eor) equipment. They prevent the freezing of moving turnout elements and facilitate the

removal of snow and ice, and they are equipped with modern technology which enables automatic activation of the heating system depending on temperature changes.

In addition, as part of the modernisation and revitalisation of railway lines, the Company is reconstructing rail-road level crossings and pedestrian crossings, equipping them with additional safety and/or warning devices; moreover, some level crossings and pedestrian crossings are being removed and replaced with viaducts, footbridges and tunnels.

In 2021, investment activities (under the aforementioned project entitled "Improvement of safety at intersections of railway lines with roads") covered a total of 211 crossings, and at various locations, the scope of modernisation covered also: the installation of automatic crossing signalling (SSP) devices, the installation of closed-circuit television devices (CCTV) and/or replacement of the surface of the crossing. In addition, 590 engineering structures were constructed, modernised or revitalised, including 60 two-level crossroads.

INCREASING THE LEVEL OF SAFETY DURING THE IMPLEMENTATION OF INVESTMENT AND MAINTENANCE WORKS

The implementation of investment works and other works on the tracks requires the closure of track sections. The proper organisation of those operations is crucial in terms of the safety of railway traffic on the active track adjacent to the closed track, as well as on other adjacent routes and in the area of traffic posts. Track closure entails the need to introduce appropriate restrictions in railway traffic and, in case of long-term closures, changes to the train timetables. In certain adverse conditions, this may be an additional risk factor for an occurrence of a railway event.

In 2021, on the network managed by PKP Polskich Linie Kolejowe S.A., there have been a total of 68,509 track closures (2% less than in 2020). The operation of train traffic on railway lines where investment works or other works are carried out in the vicinity of active tracks requires the application of additional risk control measures.

The company is undertaking many activities aimed at ensuring the highest level of safety during investment works and other works, both in terms of railway traffic safety and the safety of people working in the vicinity of active tracks. The activities implemented to this end in 2021 include:

- increasing personnel at traffic posts during the implementation of investments on the station/routes, in a total of 47,088 hours;

- thematic internal audits of the Safety Management System (SMS) related to railway traffic safety during the performance of investment works (7 such audits were conducted in 2021);
- inspections concerning railway traffic safety in locations where investment works are carried out – in 2021, inspectors representing the Company's organisational units and cells have performed 7 inspections with respect to security and signalisation on the investment work sites from the side of tracks open to train traffic, with particular focus on the sites of works carried out by various economic entities (subcontractors);
- application of the "Safety rules during the performance of investment, revitalisation, maintenance and repair works by employees of foreign companies on the premises of PKP Polskie Linie Kolejowe S.A." and "Guidelines for providing information and informing the employee of another employer about threats concerning safety and health while performing works on the premises of PKP Polskie Linie Kolejowe S.A." lbh-105.

PURCHASE OF SPECIALIST TECHNICAL EQUIPMENT FOR THE DIAGNOSTICS AND REPAIR OF INFRASTRUCTURE FAULTS

In 2021, the Company performed contracts for the purchase and supply of 2 track tamping machines, 1 turnout tamping machine, 1 ballast profiling machine and 42 motor bogies with tooling (36 bogies were accepted). In addition, the contract for the supply of 1 rail-road vehicle for the ins-

pection of engineering structures was completed. The new machines will increase the safety and punctuality of train traffic, allowing infrastructure failures and their consequences to be quickly removed.

INSTALLATION OF TRACK OCCUPANCY CONTROL SYSTEMS

In 2021, in order to reduce the risk of rolling stock collisions on station tracks, the works consisting in the installation of track occupancy control systems at the stations not

yet equipped with such devices were continued. In 2021, occupancy control systems were installed on 360 tracks of 73 railway stations.

INTERLOCKING OF THE LEVEL CROSSING EQUIPMENT IN STATION CONTROL-COMMAND AND SIGNALLING EQUIPMENT

In order to improve safety at rail-road level crossings located within railway stations, a measure was initiated in 2016 and continued in 2021 consisting in installing the so-called interlocking in CCS equipment, thanks to which it is possible to display signals that enable trains to run on semaphores only

if the boom barriers of the level crossing have been closed. In 2021, the aforementioned technical solution was applied at 102 rail-road level crossings.

MARKING OF RAIL-ROAD LEVEL CROSSING ACCESS ROADS WITH HORIZONTAL LINES SLOWING DOWN THE TRAIN

The purpose of strips placed on the pavement of the access road at an appropriate distance from the railway line is to warn the driver of a road vehicle that they are approaching a crossing with a railway line – a high-risk area where particular caution must be exercised. Thanks to the slight convexity, the strips generate characteristic vibrations and sound, while their bright red colour is an informational and warning factor. The main focus of this measure is to increase the level of safety at category D

rail-road level crossings (without barriers and light and sound signalisation), however, in justified cases, the signs are also placed at category B and C crossings. Since the initiation of the project in 2014 until the end of 2021, the signs have been placed on access roads to 521 rail-road level crossings.

ACTIONS TO IMPROVE STAFF COMPETENCES AND DEVELOP THE SAFETY CULTURE

PKP Polskie Linie Kolejowe S.A. is implementing a programme of actions aimed at developing the safety culture within the Company and among its stakeholders. The actions taken in this area in 2021 include:

- continuing the "Safe rail-road level crossing" social campaign, including the implementation of workshops on safety at rail-road level crossings for representatives of driver training centres and Voivodeship Road Traffic Centres;
- holding safety talks and safety meetings;
- providing training on a simulator of the CCS and communication equipment;

- implementing job placements within the scope of basic information about the Safety Management System, risk management, human factor and safety culture;
- providing all employees of the Company with semi-annual and annual information on the safety on the railway network managed by PKP Polskie Linie Kolejowe S.A.;
- developing Information Bulletins concerning railway events that have occurred and distributing them to employees responsible for railway traffic safety;

MONITORING THE SAFETY MANAGEMENT SYSTEM

PKP Polskie Linie Kolejowe S.A. implemented a monitoring process for their "Safety Management System", laid down in procedure SMS/MMS-PD-04 "Monitoring and Continuous Development of the Safety Management System (SMS) and the Maintenance Management System" (MMS), in order to meet the requirements laid down in Commission Regulation (EU) No 1078/2012 of 16 November 2012 on a common safety method for monitoring to be applied by, inter alia, infrastructure managers after receiving a safety authorisation. Moreover, in accordance with the requirements of the aforementioned Regulation, the Company implements a Monitoring Strategy establishing, among others, the principles for selecting tools and methods of SMS monitoring for problem areas as well as qualitative and quantitative indicators used in the process of SMS monitoring. Main areas subject to the monitoring process include:

1. the safety of railway traffic on the railway network managed by PKP Polskie Linie Kolejowe S.A.;
2. the correct and effective application of SMS procedures at the Company;
3. the introduction of technical, operational and organisational changes considered as significant in the change management process;
4. the cooperation with suppliers and contractors whose products/services have a direct or indirect impact on railway traffic safety;
5. the effectiveness of implementation of preventive and corrective measures, including:
 - the implementation of guidelines and recommendations of National Railway Accident Investigation Board;
 - the implementation of guidelines of railway committees included in the Final Memorandum of Understanding (PUK);

- the implementation of post-inspection conclusions from inspections carried out by the Office of Rail Transport or other public administration authorities;
 - the implementation of conclusions and recommendations from SMS audits, SMS controls, SMS inspections;
 - the implementation of recommendations issued by risk analysis teams;
 - the implementation of conclusions from the previous monitoring process application;
 - the implementation of tasks provided for in the Safety Improvement Programme;
 - the implementation of training, periodic instructions and ad hoc instructions.
6. the effectiveness of the implemented risk management measures and actions implemented as part of the continuous improvement of the SMS.

The basic tools and methods of SMS monitoring at the Company include:

1. maintaining an Accidents & Events (WiW) database and performing statistical analyses of data collected therein;
2. running the Operating Performance Registration System (SEPE) application and performing statistical analyses of data collected therein;
3. analysing common safety indicators (CSI) and how they change over time;
4. SMS audits;
5. SMS controls, taking into consideration all internal regulations concerning the performance of inspections at the Company;
6. SMS inspections.

RISK MANAGEMENT MEASURES

In 2021, a total of 806 change significance assessments have been performed, an increase of 7.03% compared to 2020. The increase in the number of completed change significance assessments was mainly due to the change significance assessment regarding the liquidation of rail-road level crossings.

313 risk assessments were also performed (an increase by 27.76% compared to 2020) with regard to railway traffic safety, as part of the SMS and MMS in force at the Company, in order to determine, in justified cases, additional risk control measures and minimise the level of risk (increasing the level of safety) in the Company's activity.

The Company also updated the "Hazard Register" twice, which is one of the basic documents used during the conducted risk assessments and change significance assessments.

As part of raising the level of staff competences in the area of change and risk management, a series of training courses for the Company's staff was conducted, i.a. in the scope of:

- correctness and effectiveness of the procedures for change significance assessments, as well as risk assessments;
- actions to improve the risk-based approach to safety management;
- correct inclusion of the scope of criteria for change significance assessment;
- identification of safe integration in the context of the change and risk management process.

IMPLEMENTATION OF THE RAILWAY TRAFFIC SAFETY IMPROVEMENT PROGRAMME

In 2021, the implementation of the Railway Traffic Safety Improvement Programme was aimed at ensuring an optimum level of safety for passengers and transported freight, employees and contractors, improving the technical condition of the infrastructure and continuously improving the level of safety of railway traffic operations. The Programme was also intended to have a practical, positive impact on the safety of the entire railway system. The measures included in the Programme were aimed at the implementation of the priority safety objectives for the year 2021, laid down in Resolution No. 686/2020 of the Management Board of the Company of 27 October 2020, i.e.:

1. reducing safety threats resulting from the technical condition of the infrastructure;
2. improving infrastructure safety parameters as a result of investment processes on railway lines;
3. reducing safety threats occurring during maintenance and investment works;
4. developing safety culture and threat awareness;
5. limiting the occurrence of events involving the Company, among other things, by improving railway traffic safety supervision;
6. increasing the level of safety at rail-road level crossings;
7. reducing the number of accidents involving unauthorised persons on railway premises;
8. eliminating the causes of long-term traffic management based on substitute signals and written orders;

9. preventing the negative effects of random events and third party actions affecting railway traffic safety;
10. monitoring and improving the operation of the Maintenance Management System (MMS).

Apart from measures allocated to individual initiatives and objectives, the Programme also includes indicators that allow monitoring the objective achievement progress on an ongoing basis. These indicators have been designed in such a way, so as to enable their comparison in cumulative periods with the state at the end of the base year. For each indicator, warning and alarm values have also been determined in reference to all periods. Organisational units and cells conducted quarterly reporting on the implementation of the Programme in 2021.

In these reports, units participating in the implementation of the Programme presented quantitative (expressed in percentages) and qualitative information concerning the performance of tasks included in individual initiatives and provided the values of main safety objective achievement indicators in relation to their own activity. Quarterly reports from the implementation of the Programme for the year 2021 were based on the verification and analysis of information provided and subject to the approval of the Vice President of the Management Board, Director for Operational Affairs.

TECHNICAL RAILWAY RESCUE

The technical railway rescue teams with special equipment are located at node stations throughout the entire network managed by PKP Polskie Linie Kolejowe S.A., so that they can reach accident sites as quickly as possible. At the end of 2021, there were 18 such teams (11 Special Technical Rescue Trains and 7 Technical Rescue Trains). The main tasks of the technical railway rescue teams include removing the consequences of railway events which have interrupted or restricted railway traffic and transporting railway vehicles damaged as a result of technical failures to the nearest station. These teams are prepared to work in all weather conditions. The distribution and types of the railway rescue teams were adapted to the needs and volume of traffic on the railway network. In 2021, the railway technical rescue had at its disposal, among other things, 17 UniRoller-S road-rail vehicles and 2 Uniman vehicles. The vehicles are equipped with equipment for removing the consequences of railway accidents (mainly hydraulic lifts, rerailing bridges, control desks, spreaders, cutting and lighting equipment and wood for substructure). Rail vehicles and equipment are adapted to work in all weather conditions prevailing throughout the year in our country. These vehicles also carry the crew performing the tasks of railway vehicle rerailing. They travel at speeds of up to 80 km/h on roads and up to 50 km/h on tracks.

The railway technical rescue also has at its disposal 9 WM-15A/PRT technical rescue vehicles. These vehicles are equipped with devices for quick removal of consequences of accidents on the railway network. They have their own drive with the possibility to drive in two directions. The vehicles with a load capacity of 18 tonnes are equipped with rerailing equipment. In addition, each vehicle also has a mechanical workshop equipped with, among other things, a welder, grinder and table drill, and a three-phase power generator is installed to supply the equipment with electricity. Moreover, it is equipped with a set of technical gas cylinders. A crane installed on the front of the vehicle allows handling and loading/unloading of various elements as needed. Equipping the vehicle with side loading platforms allows the necessary equipment to be quickly loaded and unloaded with little effort on the part of the employees.

The aforementioned equipment is extremely useful for vehicle rerailing, allowing for independent rescue operations of considerable size. In addition, social back-up facilities enable long-term activities in difficult weather conditions. The vehicle also has the ability to assemble and operate a snowblower, a branch-cutter, a mower and a grass and brushwood grinding head. Therefore, it may

perform works related to the aesthetics of the area around the railway lines, including the removal of tree branches falling into the structure gauge and clearing snow from the tracks. It travels on the tracks at a maximum speed of 80 km/h and can take a 7-person crew.

In 2021, the railway technical rescue had at its disposal 16 railway cranes with a maximum lifting capacity of 125 tonnes (6 EDK 750 cranes and 9 EDK 1000 cranes) and one EDK 2000 crane with a maximum lifting capacity of 250 tonnes. Furthermore, the technical railway rescue has also 10 WZT technical recovery vehicles on a tank chassis, which are intended for removing from the tracks destroyed or damaged railway vehicles that, due to the damage, cannot be put back on the tracks. In addition, the teams are equipped with 61 technical and utility wagons, including 10 platforms for transporting caterpillar tractors on a tank chassis, the remaining ones for transporting the equipment and tools necessary to remove the consequences of railway accidents, including for transporting railway cranes, and some of these wagons are social facilities for the railway technical rescue crews.

In 2021, technical railway rescue staff underwent training in road traffic management – this is especially useful when a rail-road vehicle enters the track at rail-road level crossings going to remove the consequences of railway events.

RAILWAY SECURITY GUARD

According to the analysis of the scope of incidents recorded by the Railway Security Guard (SOK) in 2021, it should be stated that compared to 2020:

- the number of recorded incidents increased by 9.33% (from 6,443 in 2020 to 7,044 in 2021, i.e. 601 more incidents),
- there was an increase in the detection of incidents occurring in the railway area by 2.41% (from 23.05% in 2020 to 25.46% in 2021).

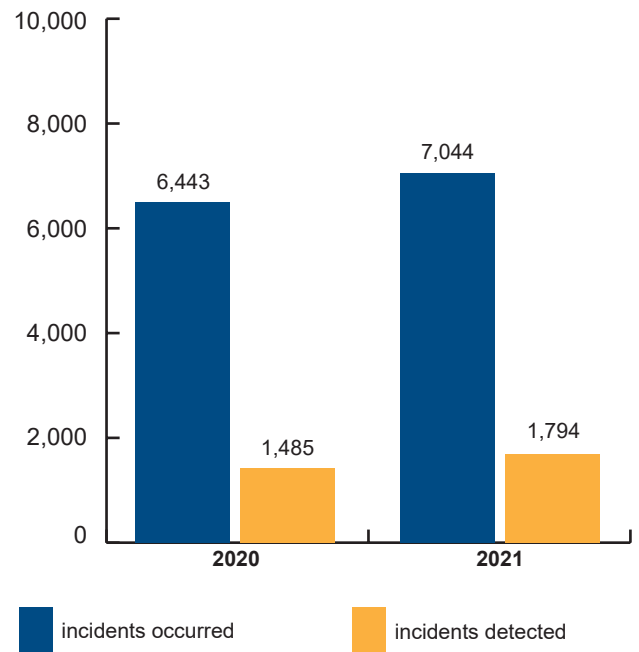
In terms of the estimated value of losses incurred in 2021 as a result of crimes and offences committed in the railway area, there was a decrease by 32.89% (by PLN 5,832 thousand) compared to 2020.

In 2021, devastation and other hooliganism accounted for the largest proportion of all incidents (43.49%). Compared to 2020, the number of recorded incidents increased by 3.13% (from 2,971 in 2020 to 3,064 in 2021, i.e. 93 more incidents).

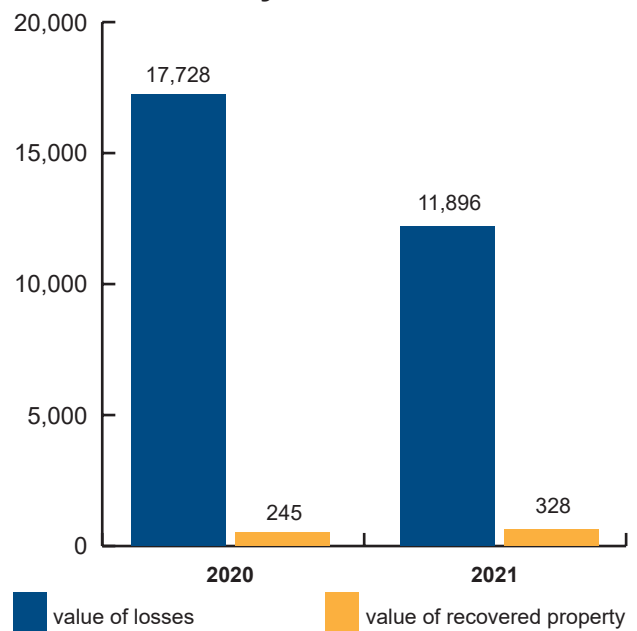
Further groups that are distinguished by the number of recorded incidents were:

- obstacles on tracks – 11.11% of all incidents recorded in 2021. Compared to 2020, the number of incidents recorded in this category increased by 84.23% (from 425 in 2020 to 783 in 2021, i.e. 358 more incidents);
- theft and devastation of equipment at rail-road level crossings – 10.80% of all incidents recorded in 2021. Compared to 2020, the number of recorded incidents increased by 16.53% (from 653 in 2020 to 761 in 2021, i.e. 108 more incidents);
- apprehension of wanted persons having drugs, smuggling, illegal migration – 9.14% of all incidents recorded in 2021. Compared to 2020, the number of recorded incidents increased by 22.66% (from 525 in 2020 to 644 in 2021, i.e. 119 more incidents);
- theft and devastation of equipment on active railway lines – 8.17% of all incidents recorded in 2021. Compared to 2020, the number of recorded incidents increased by 2.12% (from 564 in 2020 to 576 in 2021, i.e. 12 more incidents);
- theft of rolling stock surface elements, materials, tools, work items and unattended parcels – 5.15% of all incidents recorded in 2021. Compared to 2020, the number of recorded incidents decreased by 5.95% (from 386 in 2020 to 363 in 2021, i.e. 23 less incidents);
- theft to the detriment of travellers – 3.83% of all incidents recorded in 2021. Compared to 2020, the number

Incidents recorded by the Railway Security Guard in 2020-2021



Value of losses due to crimes and offences committed in the railway area in PLN thousand



of recorded incidents decreased by 9.69% (from 299 in 2020 to 270 in 2021, i.e. 23 less incidents);

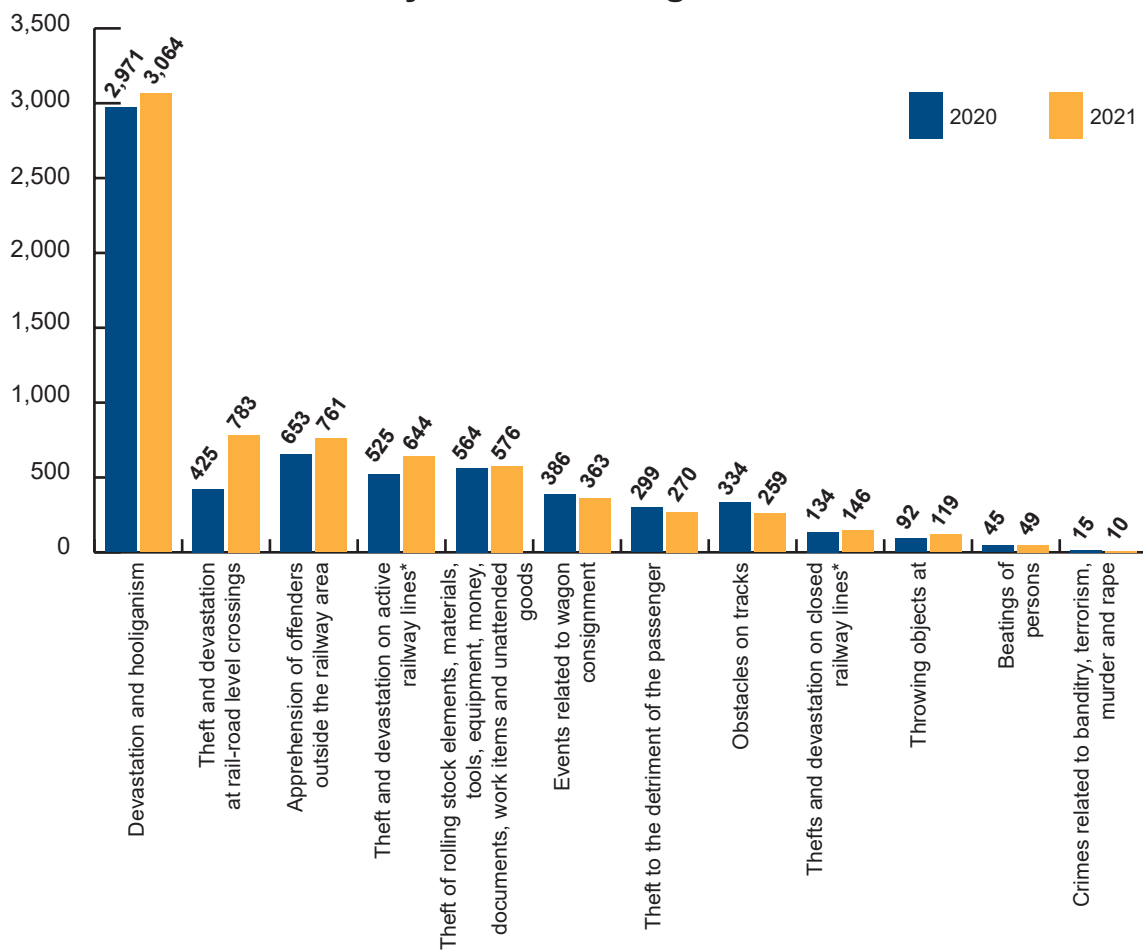
- incidents related to goods shipment – 3.67% of all incidents recorded in 2021. Compared to 2020, the number of recorded incidents decreased by 24.70% (from 334 in 2020 to 259 in 2021, i.e. 85 less incidents);
- throwing objects at trains –2.07% of all incidents recorded in 2021. Compared to 2020, the number of recorded incidents increased by 8.95% (from 134 in 2020 to 146 in 2021, i.e. 12 more incidents);
- theft and devastation of equipment on closed railway lines – 1.68% of all incidents recorded in 2021. Compared to 2020, the number of recorded incidents increased by 29.34% (from 92 in 2020 to 119 in 2021, i.e. 27 more incidents);
- beatings of persons – 0.69% of all incidents recorded in 2021. Compared to 2020, the number of recorded incidents increased by 8.88% (from 45 in 2020 to 49 in 2021, i.e. 4 more incidents);

- banditry, terrorism, murders and rapes – 0.14% of all incidents recorded in 2021. Compared to 2020, the number of recorded incidents decreased by 33.33% (from 15 in 2020 to 10 in 2021, i.e. 5 less incidents).

In 2021, the Railway Security Guard officers:

- checked 14,472 persons;
- instructed 28,813 persons;
- imposed 27,377 fines by way of a penalty ticket;
- carried out a total of 14,966 inspections of scrap yards, which revealed 19 cases of railway property from theft of a total value of PLN 23,684. As a result of the actions, 9 purchasers and 11 sellers of illegally acquired rail infrastructure elements were apprehended;
- apprehended 2,268 perpetrators of crimes and offences;
- carried out 48,227 patrols on passenger trains;
- carried out 188,392 patrols of routes;

Incidents in the railway area in 2020 and 2021 by incident categories



- carried out 215,307 patrols of stations and passenger stops;
- carried out 57,353 patrols of freight stations;
- checked 947,950 freight wagons.

In addition, the Railway Security Guard officers took an active part in the following actions:

- “Safe rail-road level crossing” – during the actions, the Railway Security Guard officers secured 32,028 railway crossings and intervened with regard to 2,776 persons who committed offences;
- “Safe rail-road level crossing – Wild crossings” – during the actions, the Railway Security Guard officers secured 51,417 so-called “wild crossings” and intervened with regard to 5,193 persons who crossed the railway tracks in a place not designated for this purpose;
- “Safe Tracks” – actions aimed at controlling the rights to stay in the railway area – during the activities, the Railway Security Guard officers inspected 6,586 employees performing works in the railway area and 2,911 unauthorised persons. A total of 18,572 Railway Security Guard officers took part in the actions;
- “Infrastructure” – within country-wide activities, the Railway Security Guard officers inspected 12,563 railway routes and 6,929 scrap yards. In the course of its actions, 13 perpetrators of theft were apprehended;

- 493 lectures were held, with 18,387 children and young people taking part.

The Railway Security Guard is also constantly concerned with the safety of passengers travelling by rail during mass events. In 2021, the Railway Security Guard officers secured the railway area during the passage of 715 trains. 8,422 Railway Security Guard officers and 20,256 police officers maintained order during the travels of football fans.

The Central Headquarters of the Railway Security Guard, there is a nationwide emergency telephone (22 474 00 00), which receives reports of events in the railway area. In 2021, 3,605 reports were recorded.

ACTIONS TAKEN BY THE RAILWAY SECURITY GUARD DURING THE COVID-19 PANDEMIC:

- ongoing patrols of railway stations, stations, stops and passenger trains, conducting nationwide actions at the same time throughout the country;
- carrying out actions in terms of enforcement by the Railway Security Guard officers of the obligation to cover mouths and noses on trains and in railway stations introduced in connection with the epidemic state in order to ensure safe travel conditions for all persons using rail transport services;

- continuing cooperation with the Border Guard at the border crossing in Medyka in the scope of measuring body temperature in crews of cross-border freight trains (actions started on 18 July 2020). In accordance with the Decision of the Podkarpackie Voivode of 7 October 2021, the obligation to measure the body temperature of persons entering the territory of the Podkarpackie Voivodeship on trains carrying passengers on international routes, as well as the crews of freight trains, was lifted.

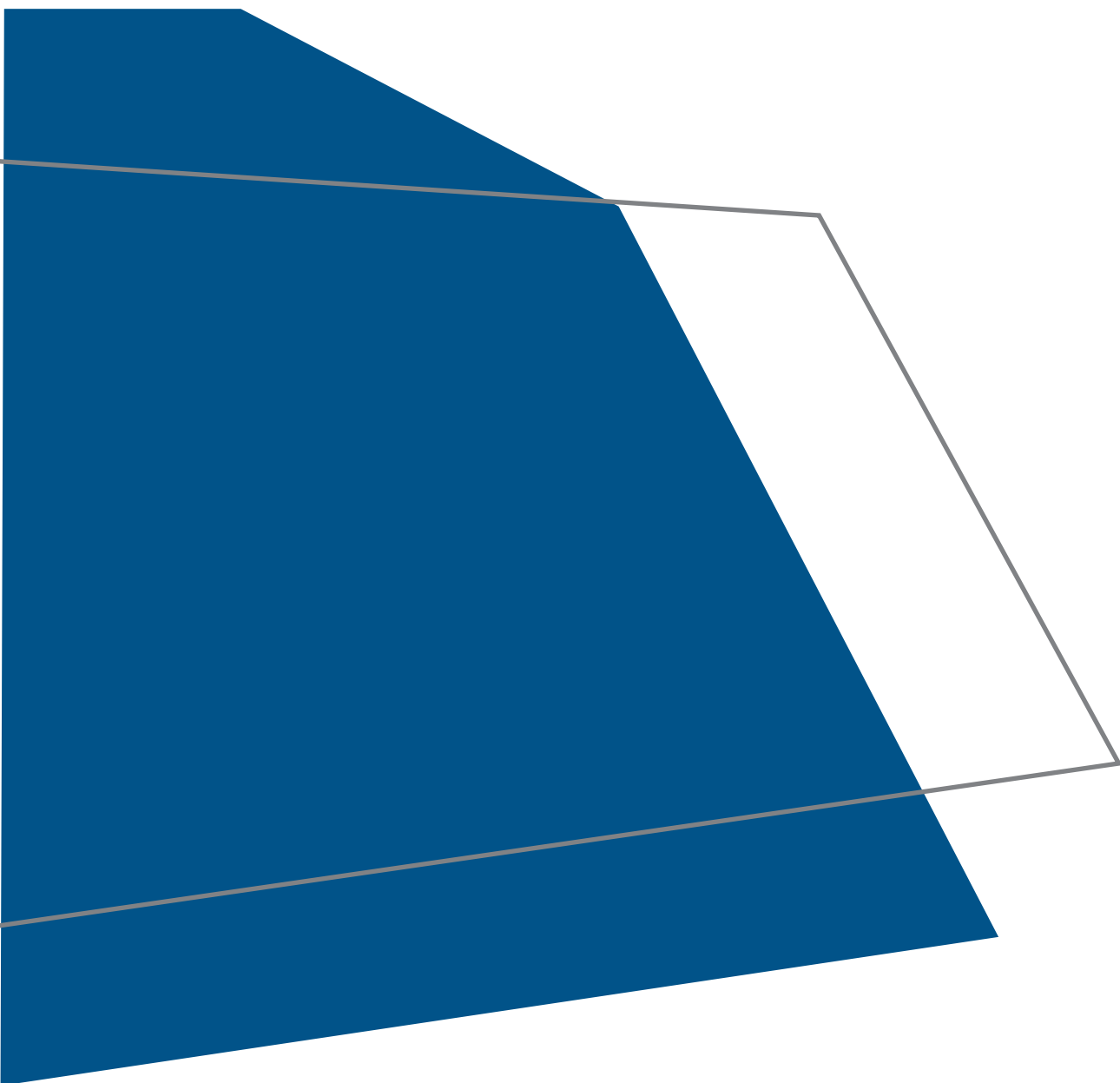
ACTIONS OF THE RAILWAY SECURITY GUARD ON THE BORDER WITH THE REPUBLIC OF BELARUS

In 2021, due to the migration crisis on the Polish-Belarusian border, the Railway Security Guard intensified its cooperation with the Border Guard, including, but not limited to:

- delegating officers and equipment to support the railway area within the border with the Republic of Belarus,
- monitoring the railway area with the use of modern equipment,

- securing border crossings and the railway area against illegal border crossings.

The tasks were also carried out in close cooperation with the Police, the Territorial Defence Forces and other services.



DEVELOPMENT PROSPECTS

STRATEGIC FRAMEWORK

PKP Polskie Linie Kolejowe S.A., in accordance with its statutory obligations, fulfils the functions of the national railway infrastructure manager and implement the state policy in the field of railway transport.

The Strategy for Responsible Development for the period up to 2020 (including the perspective up to 2030) defines strategic programmes for the railway sector. Two of them relate directly to the Company's activity. These are: "National Railway Programme until 2023. Railway infrastructure managed by PKP Polskie Linie Kolejowe S.A." (KPK), and the multi-annual programme "Support for financing the costs of railway infrastructure management, including its maintenance and repairs until 2023" (in accordance with the Resolution No. 1/2021 of the Council of Ministers of 5 January 2021, operating under a changed name: "Support for tasks of railway infrastructure managers, including maintenance and repairs, until 2023"). The National Railway Programme includes investment projects co-financed from EU funds under the 2014-2020/23 financial perspective and other investments in railway infrastructure managed by PKP Polskie Linie Kolejowe S.A. financed from public funds, while the other of the aforementioned programmes – is intended to ensure the sustainability of operational parameters of railway infrastructure, stability of financing and effective management of infrastructure.

The multi-annual programme entitled "Support for tasks of railway infrastructure managers, including maintenance and repairs, until 2023" is being implemented complementarily to the activities carried out under the National Railway Programme, ensuring co-financing of costs of railway infrastructure management until 2023, especially in the area of maintenance and repairs. This will improve the quality of the railway infrastructure and shorten journey times, increase passenger safety and as a result – increase the competitiveness of railway transport. The implementation

of the programme in question is the contract concluded between PKP Polskie Linie Kolejowe S.A. and the Ministry competent for infrastructure of 21 December 2018.

In 2021, the multi-annual programme dedicated to the development of railway infrastructure, established in 2019, was continued. The programme entitled "Programme to Supplement Local and Regional Railway Infrastructure – Railway Plus until 2028" (the Rail + Programme) is a tool for achieving objectives of state policy in the scope of ensuring transport accessibility of regions. The Programme consists, among others, of a basic investment component, under which PKP Polskie Linie Kolejowe S.A. in cooperation with local self-government units will carry out projects focused on the development of a network of railway connections in smaller towns. Investment activities can be financed in 85% from the programme's funds and in 15% from local self-government funds.

On 19 May 2021, the Resolution No. 63/2021 of the Council of Ministers established the "Government Programme for the Construction or Modernisation of Railway Stops for 2021-2025" (the Stops Programme). The aim of the programme is to increase the access of local communities to railway transport. The available funds will be used for the construction, modernisation or relocation of railway stops, as well as financing tasks related to the availability of parking spaces for travellers.

The development and detailing of the most important strategic objectives of the government in the field of transport is presented in the Strategy for Sustainable Transport Development until 2030 (SRT2030), a horizontal, integrated sectoral strategy within the system of nine integrated strategies for national development.

¹ Document adopted by resolution of the Council of Ministers of 14 February 2017.

² Document adopted by resolution of the Council of Ministers of 15 September 2015.

³ Contract of 21 December 2018 for the implementation of "The support for financing the costs of railway infrastructure management, including its maintenance and repairs until 2023" multi-annual programme.

PREDICTED DEVELOPMENT PROSPECTS

The directions of development of PKP Polskie Linie Kolejowe S.A. result from provisions on railway transport adopted in EU and national strategic documents. It is assumed that they will be implemented on a continuous basis in the following years.

The main development activities in 2021 focused on the implementation of investments specified in the KPK and in the KPK Detailed Implementation Plan, including planned expenditures and sources of financing for individual investment projects.

In connection with the ongoing preparations of the National Recovery and Resilience Plan (KPO) in 2021, which is to become a comprehensive programme of reforms and strategic projects aimed at strengthening social and economic resilience, the Company conducted analyses that enabled the preparation of a list of investment projects dedicated to improving the efficiency of the railway infrastructure through the digitalisation of railway transport, increasing the level of safety, reducing travel time, eliminating bottlenecks on the railway network, and reducing the negative impact on the environment.

The primary directions for the Company's development are also determined by activities aimed at improving railway traffic safety, enhancing the quality of the infrastructure offer and developing cooperation with railway undertakings and business partners. Further work is envisaged to improve the efficiency of the Company's activity. Particular attention will be paid to preventing traffic exclusion and taking the needs of railway undertakings and the expectations formulated by the society and the economy as fully as possible into account. The activities related to ensuring compliance of technical solutions with the requirements of the Technical Specifications for Interoperability (TSI) will also be continued.

In the long term, the Company's activities will continue to focus on the implementation of investment projects aimed at modernising the railway network and ensuring that the infrastructure offer meets market demand and society's expectations.

SUPPORT FOR INVESTMENT UNDERTAKINGS

In 2021, PKP Polskie Linie Kolejowe S.A. continued activities to implement the Integrated Transport Model CUPT – ZMR. The Integrated Transport Model (ZMR) is a multi-modal passenger model that maps the average daily annual traffic between all communes in Poland, broken down into private and public transport, including rail and bus connections. The computation process takes into account the

interaction of the competing means of transport, which are private transport and public transport. This is a key element from the point of view of traffic forecasts, where road and rail investments can be taken into account in parallel.

MEASURES AGAINST TRAFFIC EXCLUSION

In 2021, the Company implemented activities that are part of the reduction of the phenomenon of traffic exclusion in connection with the provisions of multi-annual programmes, i.e. the Rail + Programme and the Stops Programme. The Rail+ multi-annual programme, for which PKP Polskie Linie Kolejowe S.A. is responsible, is a direct tool for improving transport accessibility of regions. In 2021, the Local Self-Government Units submitted the application documents required for the second stage of the call.

The documents submitted by local self-governments, including declarations of transport, declarations of co-financing

of investments and preliminary planning and forecasting studies, enabled the Company to assess and classify the projects submitted to the Programme, which allowed the creation of a ranking list, which was approved by the Minister in charge of infrastructure. The approved list is the basis for qualifying projects for implementation under the Programme.

In 2021, as part of the Stops Programme, PKP Polskie Linie Kolejowe S.A. completed the modernisation of one railway stop and signed contracts for tasks included in the Programme for 20 locations. At the end of 2021, tender procedures were conducted for another 24 locations.

DEVELOPMENT OF FREIGHT CORRIDORS

Freight corridors operate under the Regulation (EU) No. 913/2010 of the European Parliament and of the Council of 22 September 2010 concerning a European rail network for competitive freight. Freight corridors connect terminals, ports and major industrial centres in Europe. They are intended to make international rail freight more competitive through organisational improvements and better cooperation between infrastructure managers.

Three freight corridors run through Poland:

- Rail Freight Corridor No. 5 Baltic Sea – Adriatic Sea (RFC5),
- Rail Freight Corridor No. 8 North Sea – Baltic Sea (RFC8),
- Amber Rail Freight Corridor No. 11 (RFC11).

In 2021, there was a recovery of the freight market on each corridor.

In 2021, RFC5 completed a Capacity Study, which demonstrated the continued need for cooperation at a national and international level. As part of the development of the offer, the corridor has offered innovative solutions to meet customers' expectations, as a result of which, heavier than standard trains can run (1800 t instead of 1600 t).

In 2021, the management board of RFC8 worked on an agreement to extend the routes of the Corridor to Medyka and to the Belgian and Dutch ports of Ghent (Terneuzen) and Zeebrugge. The extension of the corridor to the Polish-Ukrainian border via a modernised line has become an important step towards connecting Ukraine with the European Union.

RFC11, after 3 years of operation, has become an important member of the RFC freight corridor network, continuing work on improving the offer to meet customer requirements.

INTERNATIONAL COOPERATION

In terms of international cooperation, in 2021, the Company participated in the work of the most important international organisations: the International Union of Railways (UIC), the Organisation for Cooperation of Railways (OSJD), the Association of European Rail Infrastructure Managers RailNet Europe (RNE), the Community of European Railway and Infrastructure Companies (CER), European Rail Infrastructure Managers (EIM), United Nations Economic Commission for Europe (UNECE), Colpofer (the European organisation set up in 1980 bringing together railway companies and police forces) and the Platform for European Rail Infrastructure Managers (PRIME).

Highlights of the Company's activities in international organisations and bodies in 2021 included the participation of its representatives in, among others, the RNE General Assembly, the EIM General Assembly, the EIM CEO Club Meeting and the PRIME Plenary Meeting and the HLIM. Due to the epidemic situation, these meetings were held remotely. The Company's experts continued their work in selected committees and working groups of UIC, OSJD, EIM, PRIME, RNE, CER, UNECE projects. In addition, since 2021, the Company has its representative as project manager for the TER (Trans-European Railway) Project carried out under the UNECE.

In terms of cooperation with German partners, the most important events in 2021 include the meetings of the Joint Infrastructure Group. The Company cooperated with DB Netz AG in the scope of planning and implementation of infrastructure projects in the border area, as well as day-to-day matters concerning the planning and implementation of rail transport between Poland and Germany.

In terms of cooperation with the Czech Infrastructure Manager, there was a meeting between the representatives of PKP Polskie Linie Kolejowe S.A. and Správa železnic, státní organizace as well as there was a technical visit to the Railway Traffic Management Centre of PKP Polskie Linie Kolejowe S.A. The works also continued on updating the Local Border Agreements.

As part of cooperation with the Lithuanian partner (AB LTG Infra), the most important events in 2021 included a meeting between the representatives of PKP Polskie Linie Kolejowe S.A. and AB LTG Infra, during which the issues concerning the infrastructure parameters of the Rail Baltica line at the border section between Poland and Lithuania and the priorities of cooperation between the companies were discussed.

In 2021, PKP Polskie Linie Kolejowe S.A. continued the cooperation, concerning the operations at the junction of the two 1,435 mm/1,520 mm technical railway systems, with Russian Railways (RŽD), Belarusian Railways (BCz) and Ukrainian Railways (UZ). The bilateral cooperation concerned: the cross-border traffic safety, capacity of railway border crossings, implementation of joint investment projects, implementation of investment projects in border areas on both sides of the state border, preparation of bilateral legal documents.

In 2021, cooperation with the Hungarian infrastructure manager NIF Zrt. concerning the exchange of experience and good practices in the area of investment preparation and implementation was continued. As part of this cooperation, investment workshops were held in June 2021.

In terms of cooperation with Rail Baltica in 2021, the most important events were the meetings of the Rail Baltica Task Groups and the Rail Baltica Global Forum. The purpose of the meetings at various levels was to continue and strengthen the cooperation and to exchange information on the implementation of the Rail Baltica project.

In 2021, the Company was involved in the works of the Visegrad Group rail experts team for high-speed rail and the team of 7 railways (Belarus, China, Kazakhstan, Mongolia, Germany, Poland and Russia) for the development of the New Silk Road.

In 2021, the activity of the representative office of PKP Polskie Linie Kolejowe S.A. was continued in Belarus (with an extension to Lithuania, Russia and Ukraine), supporting, among others, key investment projects implemented on the Polish-Belarusian border and activities related to the increasing volume of railway traffic across this border.

In 2021, the representatives of the Company participated in a number of international meetings with partners from, including but not limited to, the Netherlands, Sweden, Japan, Azerbaijan and Kazakhstan, supporting cooperation in the field of cross-border investments and development of railway connections, e.g., on the Rail Baltica line. The Company's experts were involved in the implementation of the twinning project for Georgia conducted by the Ministry competent for infrastructure. There was also an ongoing exchange of information and experience with partners from Slovakia, Denmark, Norway and Portugal.

International cooperation enabled the exchange of experience and good practice, as well as allowed for the

creation of opportunities to expand the market of potential contractors for the Company's ongoing and planned investments. Furthermore, the cooperation contributed to

strengthening the image of PKP Polskie Linie Kolejowe S.A. as a partner open to dialogue and new technologies.

EU LEGISLATION AND STRATEGY

In 2021, the Company carried out works related to proposals for the revision of the Regulation on Union guidelines for the development of the trans-European transport network (TEN-T).

The Company was also involved in EU legislative and non-legislative initiatives regarding the EU climate policy under the European Green Deal, taxonomy for sustainable investments, sustainable development reporting and the Fit for 55 package. The Company also monitored legislative proposals on critical infrastructure and cybersecurity, the directive on the certification of train drivers operating locomotives and trains on the EU railway system, and the European Pillar of Social Rights. The Company continued to provide the necessary information to the EU structures on

the effects of the pandemic and the actions taken (including data resulting from Regulation No. 1429/2020 of 7 October 2020 establishing measures for a sustainable rail market in view of the COVID-19 outbreak, amended by Regulation No 2022/1036).

PKP Polskie Linie Kolejowe S.A. also participated directly or through sector organisations in selected public consultations of the European Commission. In addition, the activities of the PRIME KPI project continued, resulting in another Report with a benchmarking analysis of the performance of railway infrastructure managers in the EU.

SIGNIFICANT COMPUTERISATION ACTIVITIES

SYSTEMS AREA – RAILWAY DOMAIN

1. As part of the maintained and developed "Running Network Description" (POS, e-POS) system and the Change of Operating Parameters of Railway Lines (ZMIPEL) application, the e-POS system module was developed and implemented to request changes in operating facilities on railway lines and braking routes, the Technical Regulations module was extended to include the possibility of generating further plots, the POS system forms were migrated to the latest version of OracleForms, mechanisms for converting and importing data from the Merits system were developed and implemented, interfaces between the POS database and the Enterprise Asset Management system were developed.
2. In order to support the process of the In-kind Contribution of the Organised Part of the Enterprise (ZCP) regarding PKP S.A.'s plots and structures, the ICT tool Simultaneous Description of Land and Infrastructure (JOGI) was extended with new functionalities: reports with in-kind contribution lists for appraisers, linking with the National Register of Boundaries (PRG).
3. As part of the maintained and developed Timetable Construction System (SKRJ), the data exchange mechanisms were adapted to cooperate with the Operational Work Record System 2 (SEPE 2), a module for linking freight train routes and a module for assigning and controlling authorisations to the SKRJ forms was developed and implemented, the scope of information presented in reports was modified, and important improvements for constructors were introduced. A preview of the invoice specification before its issue was developed and implemented, the traffic diagram

- module was rebuilt to include timetable validity periods, and the possibility of individually setting the minimum time for connecting or switching wagons was introduced. Assumptions were prepared and tests were carried out on the new SKRJ system functionality concerning the routing of trains on designated station tracks.
4. As part of the maintained Accidents and Events (WiW) system, the scope of stored and processed information on events was extended, and the scope of filtering and presenting data was extended. The scope of data and functionalities of the module concerning preventive requests was redeveloped and extended. A new functionality was added to the system consisting in the daily creation and transfer of event data to the SAP system.
 5. As part of the maintained Crossing Keeper Assistance System (SWDP), a new mechanism for searching for trains passing through a selected level crossing was developed and implemented.
 6. Programming work was completed on the new version of SEPE 2, which replaced the Operational Work Record System (SEPE), which has been used in the Company for 21 years. The new system is a web application divided into six modules: Planning, Traffic Diagram, Authorisation, Implementation Plan (Quality), Reports and Event Book. The application has been implemented in the new .Net technology and is a web application developed taking into account the standards for the area of cybersecurity. The application is also used, among others, by railway undertakings.
 7. As part of the implemented Electronic Traffic Log (EDR) system, a production transition was carried out from the existing integration with the SEPE to integration with the SEPE 2.
 8. As part of the maintained and developed Re-Marshalling Operation Sheet Database (BAZKART) system, the domain login functionality was implemented and used in production.
 9. As part of the developed and maintained "Central Dynamic Passenger Information System" (CSDIP), a dedicated TTS (Text-To-Speech) solution was implemented in production for PKP Polskie Linie Kolejowe S.A. It includes dedicated, synthesised voices in Polish, English, German and Russian.
 10. As part of the developed and maintained system of the Passenger Portal (PDP), new functionalities were implemented for selecting in the connection search criteria to the virtual station name corresponding to the administrative name, e.g. "Warszawa", for defining new types of PRM equipment and, in the PDP mobile application, a "Quick Connections" widget in PL/EN.
 11. As part of the developed Railway Line Information System (SILK), an feasibility analysis of updating the desktop software was performed, tools for maintaining newly designed lines in the SILK system were developed, a mechanism for updating spatial data for the needs of the map showing investments presented at www.plk-inwestycje.pl was implemented. The functionalities of sharing Open Street Map background maps have been transferred to the SILK system servers. Data on location decisions were implemented on the MILK interactive map and corrections were made to the data regarding EPM Management Reports. In cooperation with the project team of the pilot implementation of the system for railway infrastructure maintenance – Enterprise Asset Management (EAM), the assumptions of the interfaces making geospatial data available from the SILK system to EAM were made.

SYSTEMS AREA – BUSINESS DOMAIN

1. A new structure for the Standard Audit File for Tax sent to the Tax Office in accordance with the requirements of the Ministry of Finance was implemented.
2. Implementation of changes in the SAP system related to new sources of financing (Railway Fund).
3. Implementation of the Incidental Revenue solution in accordance with the guidelines received from the Centre for EU Transport Projects (CUPT).
4. Implementation of an IT solution supporting the qualification and settlement of materials from the activity of PKP Polskie Linie Kolejowe S.A. – management of recovered metals.
5. Implementation of ZTC's digital identity management system.
6. Provision of support and development services for business process support systems.

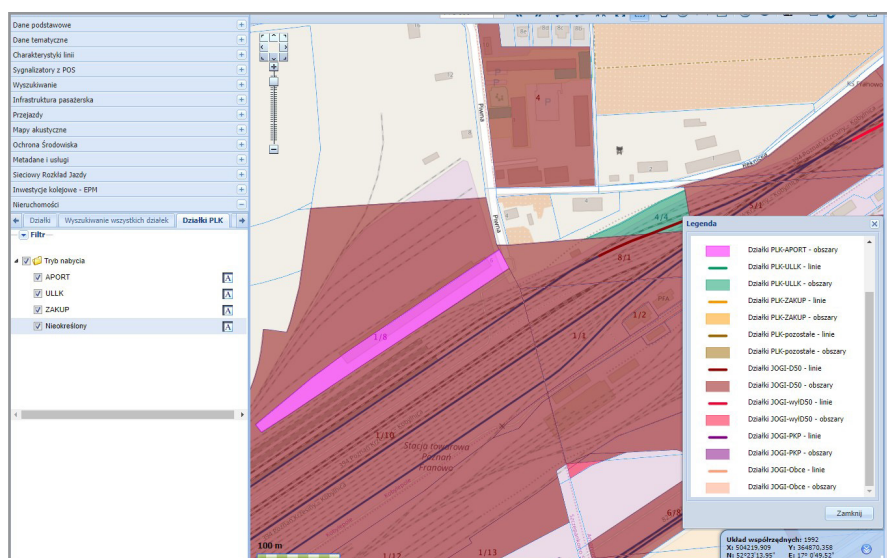
IT ENTERPRISE ARCHITECTURE AND INTERNATIONAL COOPERATION AREA

1. As part of the preparatory works for the implementation of the architectural approach in IT enterprise architecture management in the Company, a number of workshops were conducted with the Company's employees, which included the development of: "Strategic development plan for enterprise architecture/IT enterprise architecture at PKP Polskie Linie Kolejowe S.A." and "Catalogue of principles of enterprise architecture/IT enterprise architecture at PKP Polskie Linie Kolejowe S.A.".
2. A description metamodel has been developed for the IT enterprise architecture, with the help of which, a description of all IT services from the Company's ICT Service Catalogue is kept.
3. In terms of the TAF TSI system (Telematic Applications for Freight Services), the option of sending domestic trains to the TIS (Train Information System) system at the railway undertaking's request has been added. The codes of the sent train types were also matched to the new PDM (Path Detailed Message).

GEOINFORMATION

2021 is the time to disseminate in the Company new functionalities of the Railway Line Information System (SILK) implemented as part of the SILK 2020 project carried out by PKP Polskie Linie Kolejowe S.A. The Company's employees were provided with a number of new functionalities, including the expansion of the scope of available data in the SILK applications, thanks to which the information analysis and decision-making processes were significantly supported.

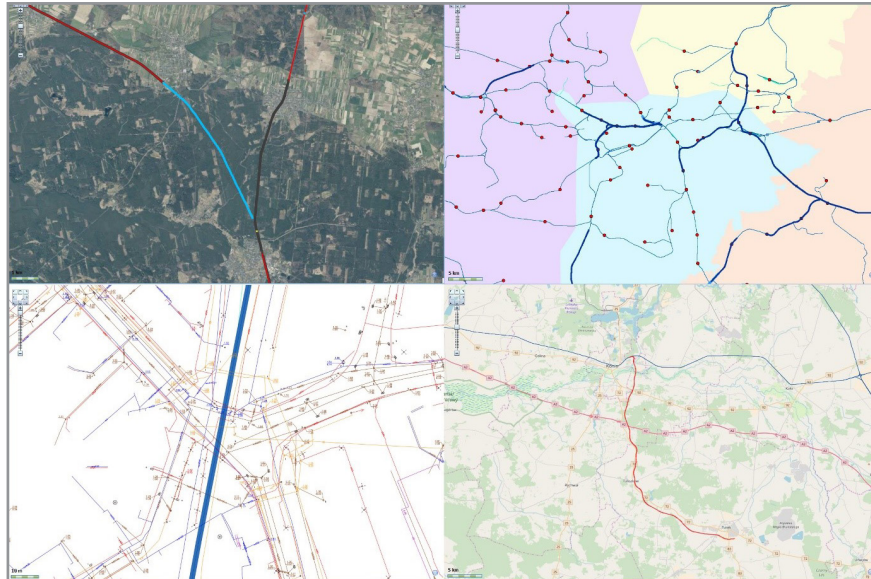
From the point of view of the needs of the Company's organisational units and cells, it was important to implement many new thematic layers on the Interactive Railway Line Map (MILK). The MILK portal shows layers presenting the boundaries of record parcels in the railway area, which are significant from the point of view of the Company. As part of these works, it was necessary to extend the integration of the MILK with other internal systems that maintain real property data.



Presentation of record parcels from the Real Property and JOGI Module

In addition to the layers with the boundaries of record parcels, new thematic data was implemented on a pilot basis, including: a layer showing information on location decisions for railway lines, a layer with the route of newly

designed lines, layers related to the traction network, and new data on the National Underground Utilities Records provided by the Surveyor General of Poland was connected to the MILK.



Presentation of new thematic layers on the MILK map

From the point of view of integration of the SILK system with other systems of the Company, it was important to make the functionality of the LRS Module more widely available, which enabled the provision of current data from the source system to systems publishing data in the form of an interactive map.

As part of the development work in the LRS Module, new tools were provided to application administrators, thanks to which the process of maintaining the route of railway tracks in the system was improved and reports support-

ting the process of verifying the entered and updated data were provided.

2021 also enabled further development of the SILK System application. As part of the new project, the first tasks were completed – the preparation of a suitable IT environment providing up-to-date geographical data for the purposes of the "Preparation and development of a prototype of an Enterprise Asset IT Solution" (EAM) project implemented in the Company.

ENVIRONMENTAL PROTECTION

Environmental protection is a particularly important part of PKP Polskie Linie Kolejowe S.A. activities due to the high requirements of applicable regulations at each stage of maintenance of railway lines and implementation of investment projects. This primarily affects the timing and cost of investment preparation and implementation. Preparation for construction works requires decision on environmental conditions, and often an environmental impact assessment with public participation, for which detailed environmental documentation must be prepared. However, this requires analysis of the natural environment along the railway line (including identification of natural conditions) and assessment of the impact of the planned investment on the environment.

In 2021, the implementation of the last Implementing Contract signed under the Framework Contract of 2015 for the preparation of environmental documentation was completed (although the guarantee period for some implementing contracts was still ongoing). In order to obtain a decision on environmental conditions for railway investments carried out by PKP Polskie Linie Kolejowe S.A. from the EU 2014-2020 perspective in 2021, one framework contracts concluded in 2018 was implemented. The purpose of the framework contracts and the implementing contracts concluded on the basis thereof is to provide services consisting in the preparation of environmental documentation for the purpose of obtaining decisions on environmental conditions for railway investment projects. In particular, the identification of natural conditions is carried out – a nature inventory and project information sheets.

In 2021, 10 implementing contracts were signed, including:

- 7 contracts for nature inventories;
- 3 contracts for project information sheets with a nature inventory.

The implementing contracts signed in 2021 amount to a total of PLN 1,602,749.42 net. Due to the upcoming termination date of the Framework Contract concluded in 2018, the Company has undertaken works to select a contractor for the next contract.

In 2021, PKP Polskie Linie Kolejowe S.A. obtained 31 decisions on environmental conditions and 1 decision amending the decision on environmental conditions, as well as 11 decisions setting out conditions for the implementation of the investment, at the stage of reassessing the environmental impact. These decisions allowed further

administrative steps to be taken, aimed at obtaining further necessary decisions in the investment preparation process.

The issued decisions on environmental conditions determine, in some cases, the need to monitor the environment after the completion of the investment by implementing the obligation to conduct a post-execution analysis and environmental monitoring. In 2021, PKP Polskie Linie Kolejowe S.A. commenced 7 post-execution analyses and environmental monitoring for 5 completed investment projects, including 5 acoustic impact studies and 2 for environmental monitoring. In 2021, studies for which contracts were concluded in previous years also continued. These were two studies on environmental impacts and one on acoustic impacts. Out of 10 studies, 4 have been completed.

In 2021, the proceedings were initiated under Article 362 of the Act of 27 April 2001 – Environmental Protection Law (consolidated text: Dz. U./Journal of Laws/ of 2021, item 1973 as amended) aimed at issuing administrative decisions on imposing on the Company the obligation to reduce the impact on the environment and its threats and to restore the environment to the proper state in terms of noise emissions, in connection with the post-execution analyses provided in the previous years, i.e.:

- post-execution analysis for the task "Modernisation of the E65/C-E65 railway line, section: Warsaw - Gdynia - within the boundaries of the Warmińsko-Mazurskie Voivodeship";
- post-execution analysis for the task "Modernisation of the E65/C-E65 railway line, section: Warsaw - Gdynia - within the boundaries of the Pomorskie Voivodeship".

In 2021, PKP Polskie Linie Kolejowe S.A. launched an investment task entitled "Design and construction of a noise barrier at the Łuków station as part of the project "Modernisation of the E20 railway line, section: Siedlce – Terespol, stage II". Completion is scheduled for the Q2 2023. The implementation of the task is a result of the decision of the Regional Director for Environmental Protection in Lublin of 3 February 2020, ruling on the necessity of reducing the impact on the environment through the implementation of a noise barrier, which was the result of administrative proceedings on the basis of the Post-execution analysis for Modernisation of the E20/C-E 20 railway line, section Siedlce – Terespol (stage II LCS Łuków) – Lublin Voivodeship – Łuków station.

In addition, Resolution No. XXIV/385/21 of the Sejmik of the Warmińsko-Mazurskie Voivodeship of 16 February 2021 was adopted on the establishment, within the boundaries of the Warmińsko-Mazurskie Voivodeship, of a limited use area on two sections of the E65 railway line on the section Warsaw – Gdynia in the kilometre from 182+900 to 183+400 and from 230+650 to 231+100, on the basis of the Post-execution analysis for the task "Modernisation of the E65/C-E65 railway line, section: Warsaw – Gdynia – within the boundaries of the Warmińsko-Mazurskie Voivodeship".

In 2021, the strategic document entitled "PKP Polskie Linie Kolejowe S.A. – investment intentions for 2021-2030 with a view to 2040" and the environmental impact forecast were updated, public consultation was conducted again and opinions were obtained from the competent authorities. The document together with the environmental impact forecast was adopted by the Management Board of the Company on 29 June 2021 and published.

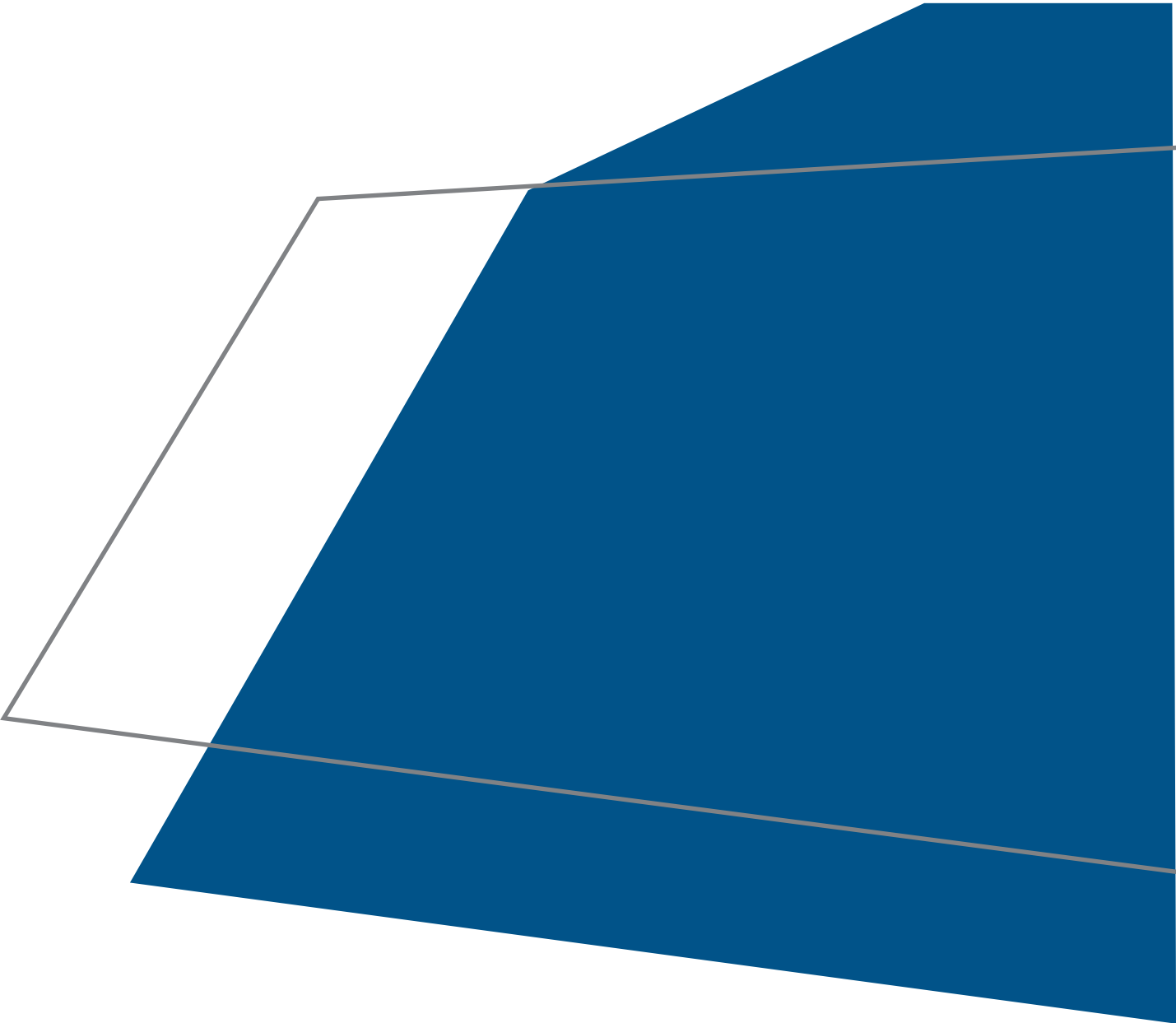
Extension and reconstruction of railway infrastructure, and thus an increase in train speeds and traffic flows may change the nature of the impact – particularly the acoustic impact. This is important in view of the observed increase in urbanisation of areas located in the immediate and close vicinity of the railway area and the approximation of the first line of development, especially in urban areas, to the railway area. Locating new acoustically protected buildings in the immediate vicinity of railway lines increases the number of people exposed to excessive noise. The

Company actively participate in issuing opinions on planning documents, in particular on local spatial development plans and studies of conditions and directions of spatial development of municipalities, with a view to limiting the introduction of residential development in very close proximity to railway lines.

The ongoing analysis of railway noise levels, especially in situations requiring clarification, as well as analysis of environmental documentation is supported by a specialised Laboratory, which carries out measurements of railway noise in the environment. The Laboratory's competences have been certified by the Polish Centre for Accreditation (PCA).

In 2021, the Laboratory carried out noise level measurements at 98 different locations throughout the country (including 61 measurement points as part of the "Strategic noise maps for sections of railway lines with a traffic volume of over 30,000 trains per year" developed by the Company).

In 2021, the Laboratory conducted a study on the impact of installing STRAILastic_A synth rail dampers by KRAIBURG STRAIL GmbH & Co. KG on noise emissions from the railway line. The aim of the study was to carry out an acoustic analysis of the impact of the installation of rail dampers on noise emissions from the railway line, based on the results of the study. The study covered the assessment of the built-in subsystem elements in terms of their continued use on the railway lines managed by the Company.



INVESTMENTS

GENERAL INFORMATION

PKP Polskie Linie Kolejowe S.A. as the manager of the national railway infrastructure, aimed at improving the accessibility, efficiency and performance of the Polish transport system through the implementation of an extensive investment programme including modernisation of numerous railway lines.

2021 was the eighth year in which PKP Polskie Linie Kolejowe S.A. implemented the investment projects included in the National Railway Programme until 2023 (KPK). This Programme was adopted in September 2015, and was updated several times thereafter, with the last update was adopted by the Resolution of the Council of Ministers No. 82/2022 of 20 April 2022.

The KPK aims to strengthen the role of the railway transport in the integrated national transport system by creating a coherent and modern network of railway lines, which results directly from the provisions of the "Transport Development Strategy until 2020 (with a perspective until 2030)" in terms of rail transport.

The period of implementation and settlement of investments within the KPK corresponds to the EU financial perspective 2014-2020 and takes into account the n+3 rule, which means that the period of expenditure eligibility will, in principle, end on 31 December 2023.

The KPK assumes maximum use of EU funds to finance projects within the scope of: Operational Programme Infrastructure & Environment for the years 2014-2020 (OPI&E 14-20), Connecting Europe Facility (CEF 14-20), Ope-

rationale Programme Eastern Poland for the years 2014-2020 (OP EP 14-20), and the Regional Operational Programmes for the years 2014-2020 (ROPs 14-20).

The value of the KPK for the years 2014-2023 in terms of the basic list is PLN 76.7 billion¹. The selected largest projects² implemented under the basic list of the KPK include:

1. works on the C-E 65 railway line, section: Chorzów Batory – Tarnowskie Góry – Karsznice – Inowrocław – Bydgoszcz – Maksymilianowo – OPI&E 14-20;
2. works on railway line No. 7 Warszawa Wschodnia Osobowa – Dorohusk, section: Warszawa – Otwock – Dęblin – Lublin – OPI&E 14-20;
3. works on the E 75 railway line, section: Czyżew – Białystok – CEF 14-20;
4. works on the E 59 railway line, section: Poznań Główny – Szczecin Dąbie – CEF 14-20;
5. construction of the ERTMS/GSM-R system infrastructure on railway lines of PKP Polskie Linie Kolejowe S.A. within the framework of ERTMS NPW; – OPI&E 14-20;
6. works on the E20 railway line, section: Warszawa – Poznań – remaining works, section: Sochaczew – Swarzędz – CEF 14-20;
7. works on the Warsaw cross-city line, section: Warszawa Wschodnia – Warszawa Zachodnia – OPI&E 14-20.

IMPLEMENTATION OF THE NATIONAL RAILWAY PROGRAMME

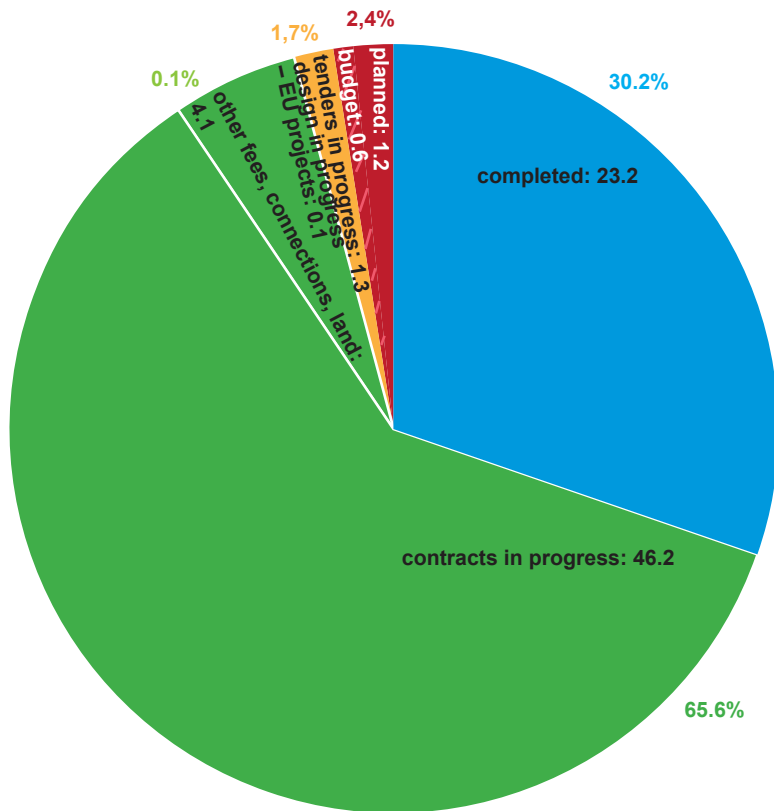
In 2021, the Company carried out investment projects throughout the country on the basis of contracts concluded with contractors. Activities related to the comprehensive monitoring of all projects in the basic list of the KPK continued to be carried out, in particular with regard to key

issues such as the implementation of works on construction sites, forecast execution of expenditure, public procurement procedures, timely execution of milestones and project schedules.

¹ In accordance with the Resolution of the Council of Ministers No. 82/2022 of 20 April 2022. Table 1 Planned expenses in years according to target sources of funding

² with the value of expenditure exceeding PLN 2 billion

Status of KPK implementation as at 31 December 2021



Completed – value of completed contracts

Contracts in progress – value of contracts signed

Other fees and connections – value of expenditures made on an ongoing basis on projects without the need for procurement proceedings

Tenders in progress – value of ongoing tenders (estimated net contract values)

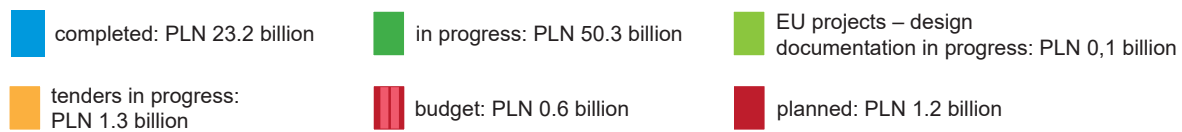
EU projects with the design documentation in progress – the value of tenders planned to be announced for construction works for which design documentation is being prepared

FS – EU projects – value for which feasibility studies are prepared

Planned – contracts prior to the announcement of procurement proceedings

Budget – value of contracts planned to be implemented in the following years according to the budget limits for particular years until the end of the implementation of the National Railway Programme

The list includes values of orders for projects included in the KPK up to the limit of financing provided for in the basic list of the KPK.



At the end of the eighth year of the current EU perspective, out of the total amount of the KPK of PLN 76.7 billion, approx. 96% were in the implementation stage (at various levels of progress) or were completed. In 2021, contracts

were signed for projects included in the KPK for a net value of PLN 4.4 billion.

* The total value of contracts concluded in 2020, including the scope financed solely by the Company, is PLN 10,756.3 million (net), including the value of OPI&E 14-20 of PLN 4,723.5 million.

The largest contracts signed in 2021 (PLN million)

No.	Project name	Investment	Name of procurement	Net value of the contract with the Contractor
1.	Works on railway line No. 38 section: Elk – Korsze with electrification	OPI&E 14-20	Performance of construction works for Stage I of the project "Works on railway line No. 38, section: Elk – Korsze with electrification"	648,698.9
2.	Works on the E-75 railway line, section: Białystok – Suwałki – Trakiszki (state border), stage I, section: Białystok – Elk, phase I	CEF 14-20	Development of detailed designs and performance of construction works for phase I	586,991.9
3.	Works on railway line No. 7 Warszawa Wschodnia Osobowa – Dorohusk, section: Warszawa – Otwock – Dęblin – Lublin, stage I, phase I	OPI&E 14-20	Performance of construction works as part of the OPI&E 5.1-11.2 Project entitled "Works on railway line No. 7 Warszawa Wschodnia Osobowa – Dorohusk, section: Warszawa – Otwock – Dęblin – Lublin, stage II", section: Warszawa Wschodnia Osobowa – Warszawa Wawer	422,355.5
4.	Works on railway line No. 216, section: Działdowo – Olsztyn	OP EP 14-20	Implementation of construction works for task: "Modernisation of the track and platform system and railway infrastructure at Olsztyn Główny station"	382,114.4
5.	Improvement of traffic flow on the Łódź Railway Junction (TEN-T), stage II, section: Łódź Fabryczna – Łódź Kaliska/Łódź Żabieniec	OPI&E 14-20	Design and performance of works for the task entitled extension of the launching shaft at Włókniarzy Street for the purposes of the Łódź Koziny (working name) passenger stop	179,580.0
6.	Works on the alternative transport route Bydgoszcz – Tricity	OPI&E 14-20	Lot D – Construction works on railway line No. 229, section: Glinicz – Kartuzy	179,265.0
7.	Works on railway lines nos. 220 and 221, section: Olsztyn – Gutkowo – Dobre Miasto	ROP 14-20	Design and performance of construction works for the investment "Revitalisation of railway line No. 221, section: Gutkowo – Dobre Miasto"	165,436.0

The vast majority of contracts signed in 2021 were construction work contracts – over 95%. At the same time, more than 85% of them were co-financed from the EU funds

under the 2014-2020 perspective (CEF 14-20, OPI&E 14-20, OP EP 14-20, ROP 14-20).

Contracts signed in 2021, broken down by programmes and types (PLN million)

	OPI&E 7-13	Budget	CEF 14-20	OP EP 14-20	OPI&E 14-20	ROP 14-20	Total
Supplies	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Construction works	2,859.4	642,441.8	932,061.1	393,160.0	1,797,584.5	437,650.9	4,205,757.8
Services	0.0	27,017.2	89,464.6	7,750.2	86,423.0	14,035.6	224,690.7
Total	2,859.4	669,459.0	1,021,525.8	400,910.3	1,884,007.5	451,686.5	4,430,448.5

INVESTMENTS IN 2021

The basis for the Company's investment activity in 2021, as in previous years, was the Company's Investment Plan (PI2021) which assumed the implementation of projects financed by the Cohesion Fund, the state budget, the Railway Fund and the Company's own funds.

PI2021 was adopted as an element of the Company's Plan of Activities by the Management Board of PKP Polskie Linie Kolejowe S.A. by resolution No. 82/2022 of 20 April 2022. The most significant group in PI2021 were projects financed from CEF and OPI&E. In 2021, the capital expenditures amounted to PLN 11.6 billion. The largest projects include:

1. works on the Warsaw cross-city line, section: Warszawa Wschodnia – Warszawa Zachodnia, stage I (PLN 704.7 million);
2. works on the C-E 65 railway line, section: Chorzów Batory – Tarnowskie Góry – Karsznice – Inowrocław – Bydgoszcz - Maksymilianowo (PLN 666.3 million);
3. works on the E59 railway line, section: Poznań Główny – Szczecin Dąbie (PLN 600.1 million);
4. works on primary passenger lines (E 30 and E 65) in the Śląskie Voivodeship, stage I: E 65 railway line, section: Będzin – Katowice – Tychy – Czechowice Dziedzice – Zebrzydowice, LOT C (PLN 517.1 million);
5. works on the E75 railway line, section: Czyżew – Białystok, phase I (PLN 513.1 million);
6. improvement of railway access to the Port of Gdynia (PLN 480.3 million);
7. works on the E59 railway line, section: Wronki – Słonice (PLN 467.2 million);
8. Improvement of railway access to the Port of Gdańsk (PLN 425.5 million);
9. improvement of railway access to sea ports in Szczecin and Świnoujście (PLN 414.0 million);
10. installation of the ERTMS GSM-R system infrastructure on PKP Polskie Linie Kolejowe S.A. railway lines within the framework of NPW ERTMS (PLN 320.4 million)

INVESTMENT EXPENDITURES BY WORK

The scope of individual investment projects carried out by PKP Polskie Linie Kolejowe S.A. involves the comprehensive replacement of railway surface, control command and signalling equipment and electric power equipment (both traction and non-traction) as well as the modernisation of one-level rail-road level crossings and their removal and replacement with two-level crossings. The replacement of old, worn-out and degraded elements of the railway infrastructure and technical equipment with new elements and equipment made using modern technologies allows to significantly improve the operating parameters of railway

lines (mainly maximum permissible speeds) while maintaining and increasing the level of safety.

As part of the implementation of PI2021, investment works have been carried out on the railway network managed by PKP Polskie Linie Kolejowe S.A., including in particular the modernisation, revitalisation or construction of nearly 915 km of tracks, 226 crossings and 185 platforms.

Performance of physical indicators in 2021

No.	Indicator	Unit of measure	Performance
1.	Modernisation of railroad (including: repair of railway surface, track bed, OC [heat treated] rails)	km of tracks	914.48
2.	Installation of turnouts	pcs.	1 116
3.	Engineering structures, including:	pcs.	604
	Bridges	pcs.	117
	Viaducts	pcs.	106
	Culverts	pcs.	381
4.	Platforms	pcs.	185
5.	Traction network	tkm	698.62
6.	Railway crossings	pcs.	226

THREATS AND RISKS AS WELL AS ACTIONS TAKEN

In 2021, PKP Polskie Linie Kolejowe S.A., as part of the implementation of the KPK, carried out numerous investments across the country. During the implementation of the investments, there were not only threats typical for the construction industry, but also those whose sources lie in the scale and number of simultaneously implemented projects included in the KPK. The scale and complex multi-industry nature of the investments significantly affect the number of threats identified during the process of preparing documentation, obtaining administrative decisions and carrying out construction works.

An important factor in the implementation of the KPK is the upcoming end of the 2014-2020 financial perspective, which in 2021 translated into an intensification of simultaneous implementation of projects. The implementation of the works requires the coordination of projects with particular focus on the need to maintain passenger and freight traffic on the existing infrastructure.

PKP Polskie Linie Kolejowe S.A. carries out risk monitoring to support strategic decision-making in investment project management.

Key risks identified in 2021 include:

1. Impact of the state of the epidemic on the implementation of investments

The works performed were directly affected by:

- delays in the issue of administrative decisions;
- prolonged appeal procedures at the National Appeals Chamber;

- restrictions on crossing the border by subcontractors and foreign workers;
- difficulties in the supply of specialised equipment manufactured outside the country;
- infection or quarantine of key personnel.

It should be noted that still in 2022 contractors submit notifications of claims and interim claims, and on this basis it is not possible to determine the final effects for ongoing contracts. These notifications relate to the impact of the pandemic on both the costs and the completion dates of the investments, and are not in each case finally quantified, as the impact of the force majeure in question continued until the end of 2021. The Company continued the measures taken in 2020 to mitigate the impact of force majeure on the implementation of the investments, including:

- recommendations were issued on how to conduct remote meetings construction committee meetings, as well as how to safely organise the acceptance of completed works;
- videoconferences are held with contractors in order to respond quickly to current problems affecting ongoing investments;
- Pursuant to Article 15r of the Act of 2 March 2020 on special solutions related to preventing, counteracting and combating of COVID-19, other infectious diseases and the crisis situations caused by them, solutions were introduced to improve financial flows during the pandemic (streamlining the process of provision of performance security and enabling a higher ceiling for payment for construction materials).

2. Delays in the performance of construction works

In the scope of investments carried out by the Company, problems are most often caused by:

- insufficient equipment and personnel potential of the contractor, including restrictions resulting from the state of epidemic introduced in Poland and abroad, which was in force throughout 2021;
- improper organisation of the works by the contractor and its mobilisation in their implementation;
- collisions with underground infrastructure;
- worse than estimated technical condition of the existing infrastructure revealed during the performance of construction works;
- different soil conditions than those identified at the stage of the tender procedure;
- prolonged waiting time for administrative decisions in authorities, due to the state of epidemic.

Intensified monitoring of the progress of the work is being carried out on the part of the Company. In the event of observed irregularities, actions are carried out to mobilise the contractor, including under the contract set out in Sub-Clause 15.1 (Notice to Correct). If it is necessary to perform additional construction works due to a change in the original assumptions of the design resulting from the disclosure of an additional scope of works, the Company conducts negotiations with contractors to perform the necessary additional activities under the contract or commissions additional scopes of works under competitive procedures. The Company coordinates and corrects the schedules of planned track closures, which allows for the commencement of works in order to optimally use the contractors' potential.

3. Increase in the costs of the works

Changes in prices result in financial risks including an increase in the cost of performance of the works and exceeding the estimated contract value in the tender procedure. The performance of works in the construction industry is subject to the risk of unexpected costs that were impossible to determine during the design planning phase, including, for example, previously unidentified collisions with underground infrastructure, technical condition of engineering structures worse than originally assumed or the need to perform scopes not included in the basic contract. The emergence of such threats entails the need to obtain additional financing for the implementation of works and the revaluation of contracts. The financing of the change in remuneration included in the contract with the contractor due to additional works often forces PKP Polskie Linie Kolejowe S.A. to look for new sources of financing. When additional costs are required, an analysis is carried out to determine the possibility of financing the task from new sources. In order to ensure efficient implementation of contracts, it is allowed to divide the investment into phases and stages, allowing for the implementa-

tion of lots of the contract as part of the originally assumed costs, planned to be incurred, and the remaining part at a later date, after obtaining financing for the full scope of the project. In addition, in the case of projects co-financed by Local Self-Government Units, PKP Polskie Linie Kolejowe S.A. is renegotiating agreements aimed at increasing the financial participation of the local self-government in the project.

4. Prolonged process of preparing design documentation

The risks associated with the prolonged process of preparing design documentation developed by contractors were most often initiated by:

- insufficient personnel potential of the documentation contractor;
- low quality or deficiencies in the prepared documentation, so that supplementations were required;
- need to obtain a new or alternative environmental decision, revisions to the documentation. The prolonged process of preparing design documentation affects project completion dates, resulting in the generation of further areas of deadline risks, such as delays in submitting applications for administrative decisions and, consequently, delays in the implementation of investment works.

In order to mitigate the risks regarding the prolongation of the documentation preparation process, the Company continuously verifies and evaluates the documentation submitted by project documentation contractors. The work progress is monitored with regard to the implementation schedules of the individual contracts. The Investment Project Evaluation Team (ZOPI) is established individually for each project or group of projects, whose key tasks include a multi-industry and comprehensive evaluation of the studies submitted by the contractor.

5. Prolonged procedure for obtaining administrative decisions

The scale of investment projects and their multi-industry nature make it necessary to obtain many administrative decisions during their implementation, e.g. decisions on environmental conditions, decisions on determining the location of the railway line, water permits, decisions on construction permits. The prolongation of the procedure for obtaining administrative decisions was most often caused by:

- the state of epidemic affecting the activities of administrative authorities and the prolongation of the procedure for submitting, supplementing and obtaining documents,
- change of assumptions regarding solutions adopted at the initial stage of investment, which resulted in the necessity to obtain new decisions,

- delays of authorities responsible for issuing administrative decisions in considering applications,
- deficiencies in submitted applications and the need to supplement them.

PKP Polskie Linie Kolejowe S.A. constantly supervises the activities of contractors so that activities related to obtaining administrative decisions are carried out in accordance with the adopted schedule, and the submitted applications and documents are prepared according to the high quality. The Company cooperates with the authorities responsible for issuing decisions, such as the Regional Directorates for Environmental Protection, Regional Water Management Boards, Powiat Starosty Offices, Voivodeship Offices. The care for the high quality of documentation is taken both in the area of internal supervision, through involvement in the process of the Company's technical units, as well as in the support of activities commissioned to external entities on the basis of implemented contracts, e.g. designer's and project owner's supervision. Contractors are being mobilised to develop the materials necessary to obtain consents and permits. Contracts are divided into sections, which allows for efficient obtaining of administrative decisions for individual locations.

6. Delay in awarding the tender

The risk occurring at the stage of the tender procedure is the delay in awarding the tender, which, if occurs, affects the date of signing the contract with the contractor, and consequently a later-than-expected commencement of the project. Factors triggering the risk related to the delay in awarding the tender include, among others: the level of detail of the provisions contained in the tender documentation, which affects the number of questions submitted as part of the tender procedure and appeals submitted by tenderers to the National Appeals Chamber.

PKP Polskie Linie Kolejowe S.A. continuously eliminate systemic problems and improve the provisions of the reference documents on the basis of which the tender documentation is prepared. The tender procedure is closely monitored and tenders are thoroughly verified at the stage of their submission. Precise answers to questions submitted by potential tenderers translate into fewer appeal proceedings initiated by tenderers.

7. Delay in the implementation of connection agreements

The implementation of connection agreements is often a key element of an investment and the execution of energy connections is essential to achieve the assumed objectives of the investment project. Simultaneous performance of works on two or more independent contracts covering power grids and railway lines generates the risk of delays in the implementation of contracts resulting from the need to coordinate projects.

In order to mitigate risks, PKP Polskie Linie Kolejowe S.A. carries out monitoring of connection agreements and ensures coordination between the Distribution System Operator and the contractors involved in the project or related projects. In addition, the Company has decided to construct new traction substations as part of line tasks, which will be owned by the Company. One of the first projects in this area is the tender announced by PKP Polskie Linie Kolejowe S.A. for the construction of traction substations as part of the task entitled "Construction of a new railway line Podłęże – Szczyrzyc – Tymbark/Mszana Dolna and modernisation of the existing railway line No. 104 Chańbówka – Nowy Sącz".

INVESTMENT MONITORING

While monitoring the work progress of the investments carried out in 2021, the use of modern technology and the innovative solution, i.e. investment monitoring with the use of Unmanned Aerial Vehicles (UAV), was continued. Drone flights were carried out over a distance of 7,672 km, which translates into a total of 574 missions. Flights are performed over the majority of investment projects implemented by PKP Polskie Linie Kolejowe S.A. At the end of 2021, the

works started on the training of current and new UAV pilots in the specific category nSTS 05, nSTS 06. Upgrading drone pilots' licences from the current VLOS (visual line of sight) to BVLOS (beyond visual line of sight) licences will allow for more efficient and effective use of the equipment. Additional licences will increase the possibilities in the field of investment monitoring.

In addition, in 2021, the Company joined a joint venture with the National Centre for Research and Development (NCBR) entitled Research and Development in Railway Infrastructure – BRIK II, consisting in supporting research and development works in the area of railway infrastructure. The main objective is to increase the innovation and competitiveness of rail transport by 2033. Under Issue 4.4 – Development of an innovative Railway Infrastructure Monitoring System (SMSIK), there is the Company's proprietary project regarding autonomous drone swarms for monitoring the condition of railway infrastructure.

In 2021, the field monitoring also continued at the construction sites of the most important investments from the National Railway Programme. Despite the state of epidemic and the related restrictions, the monitoring teams performed, regardless of the ongoing and daily supervision of dedicated project structures, a total of 96 dedicated monitoring visits on the ground. They were focused on the most complex projects and projects of key importance for railway traffic operation.

SOURCES OF FINANCING

APPLICATIONS FOR EU FUNDING AND GRANT AGREEMENTS IN 2021

In 2021, the Company submitted 4 applications for funding under the 5th call under the Connecting Europe Facility (CEF). All submitted projects were qualified for imple-

mentation, as a result of which 4 Grand Agreements were signed, in accordance with the table below.

List of applications for which GA was signed under the CEF 2014-2020 in 2021 (EUR thousand)

No.	Project name	Date of submission of the application	Total net cost of the project under GA	Amount of CEF funding in accordance with GA
1.	"Adaptation of the Krzyż station to the parameters of the TEN-T core network - design documentation"	2021-03-22	2,059.0	1,030.0
2.	"Works on railway line C-E30, section: Opole Groszowice – Jelcz – Wrocław Brochów – design documentation"		4,745.0	2,372.0
3.	"Works on railway line E59, section: Kędzierzyn Koźle – Chałupki – design documentation"		21,410.0	18,198.0
4.	"Works on railway line E30, section: Rzeszów – Medyka – design documentation"		2,305.0	1,153.0
Total			30,519.0	22,753.0

Trilateral grant agreements were signed for the above-mentioned projects at the national level (between the Centre for EU Transport Projects (CUPT), the Ministry

competent for funds and regional policy and PKP Polskie Linie Kolejowe S.A.) in accordance with the table below:

List of GA signed under CEF 2014-2020 in 2021 (PLN thousand)

No.	Project name	Total estimated cost	including CEF	including national part
1.	"Adaptation of the Krzyż station to the parameters of the TEN-T core network - design documentation"	9,294.0	4,647.0	4,647.0
2.	"Works on railway line C-E30, section: Opole Groszowice – Jelcz – Wrocław Brochów – design documentation"	21,410.0	10,705.0	10,705.0
3.	"Works on railway line E59, section: Kędzierzyn Koźle – Chałupki – design documentation"	96,605.0	82,114.0	14,491.0
4.	"Works on railway line E30, section: Rzeszów – Medyka – design documentation"	10,401.0	5,201.0	5,200.0
	Total	137,710.0	102,667.0	35,043.0

In 2021, PKP Polskie Linie Kolejowe S.A. concluded 2 grant agreements with the CUPT under OPI&E for the total

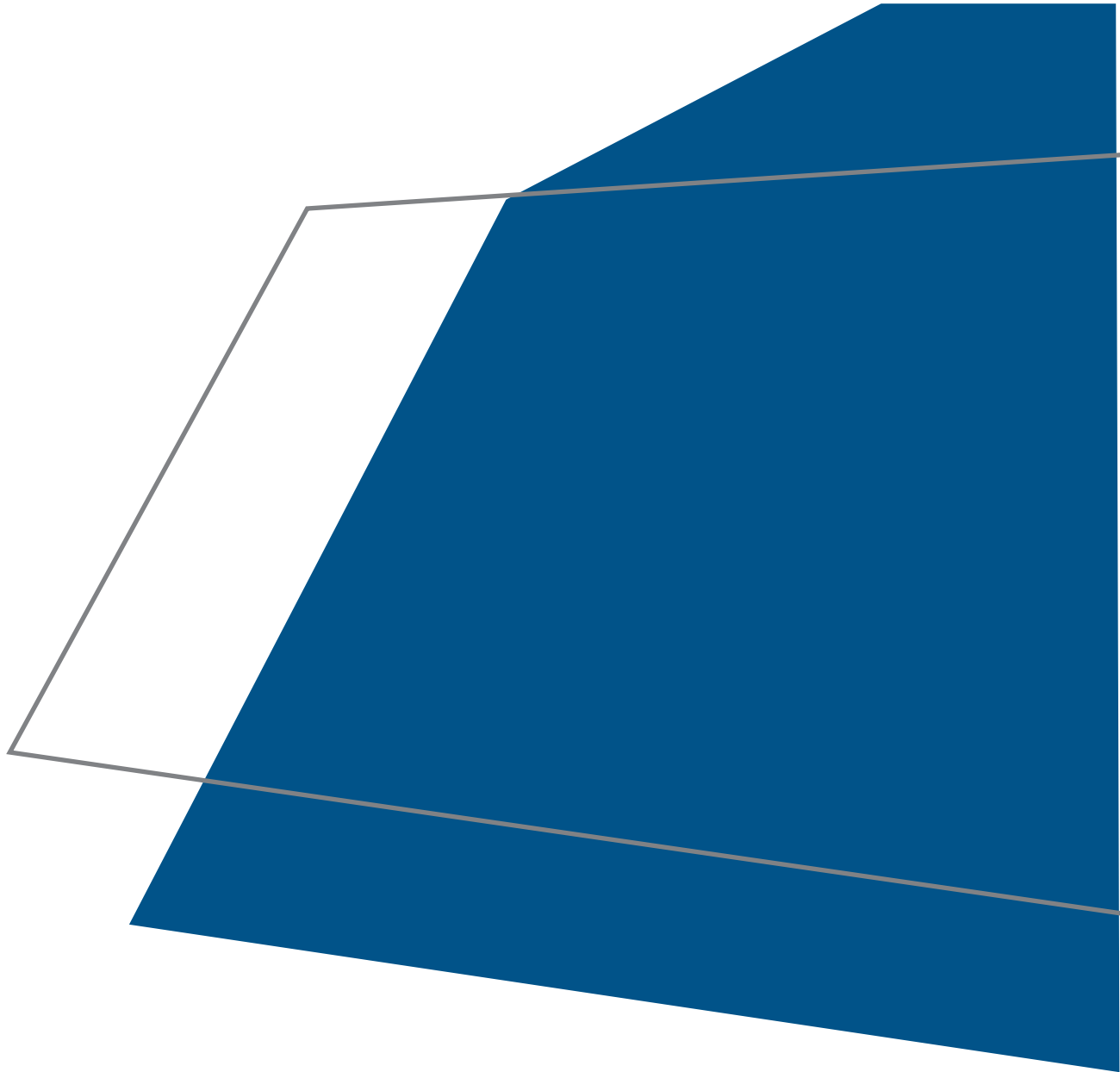
net amount of PLN 833,021 thousand, including EU funds of PLN 642,217 thousand – as shown in the table below.

Grant Agreements concluded under OPI&E in 2021 (PLN thousand)

No.	Project name	Total cost	Net eligible costs	Total funding	EU funding
1.	"Improvement of the technical condition of engineering structures – stage II"	110,925.0	110,625.0	110,625.0	94,031.0
2.	"Works on railway line No. 38 section: Elk – Korsze with electrification – PHA-SE I"	722,096.0	722,096.0	644,924.0	548,186.0
	Total:	833,021.0	832,721.0	755,549.0	642,217.0

At the end of 2021, the Company had EU funds allocated for 78 projects (additional 6 projects compared to 2020), according to the following, with a distinction of individual EU aid programmes, i.e.:

1. Operational Programme Infrastructure and Environment (OPI&E) – 41* projects with a total EU funding of PLN 16,264,680 thousand;
2. Operational Programme Eastern Poland (OP EP) – 9 projects with a total EU funding of PLN 1,575,509 thousand;
3. Connecting Europe Facility (CEF) – 28 projects with a total EU funding of EUR 3,613,123 thousand.



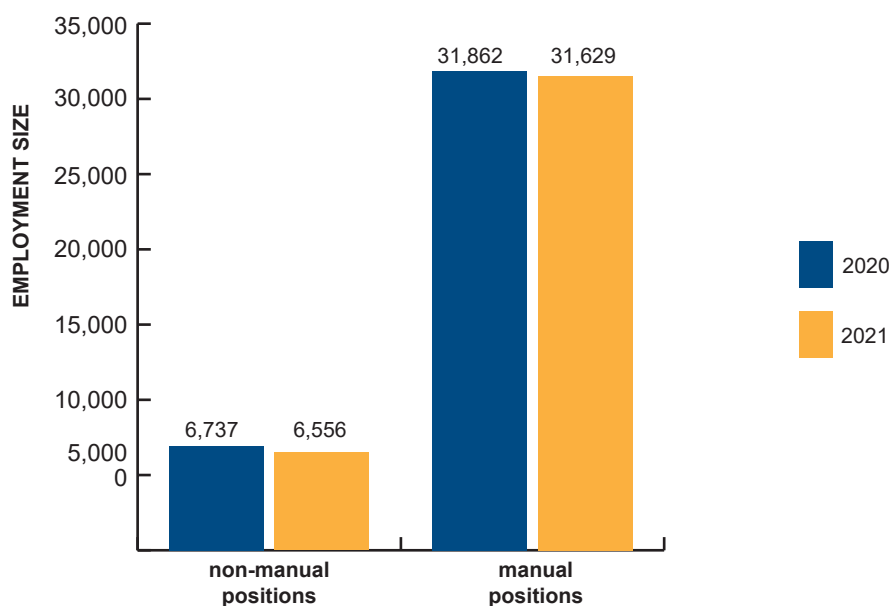
PERSONNEL

EMPLOYMENT ANALYSIS

The level of employment in PKP Polskie Linie Kolejowe S.A., as at 31 December 2021, was 38,185 employees and was lower by 414 persons (1.07%) compared to 31 December 2020. In manual positions, the level of employment decreased from 31,862 employees (as at 31 December 2020) to 31,629 employees (as at 31 December 2021), i.e., there was a decrease by 233 persons (0.60%). The level of employment in manual positions was lower due to the on-

going technological changes consisting of the introduction of new equipment and gradual automation of processes. In non-manual positions, the level of employment decreased from 6,737 employees (as at 31 December 2020) to 6,556 employees (as at 31 December 2021), i.e., there was a decrease by 181 persons (0.47%).

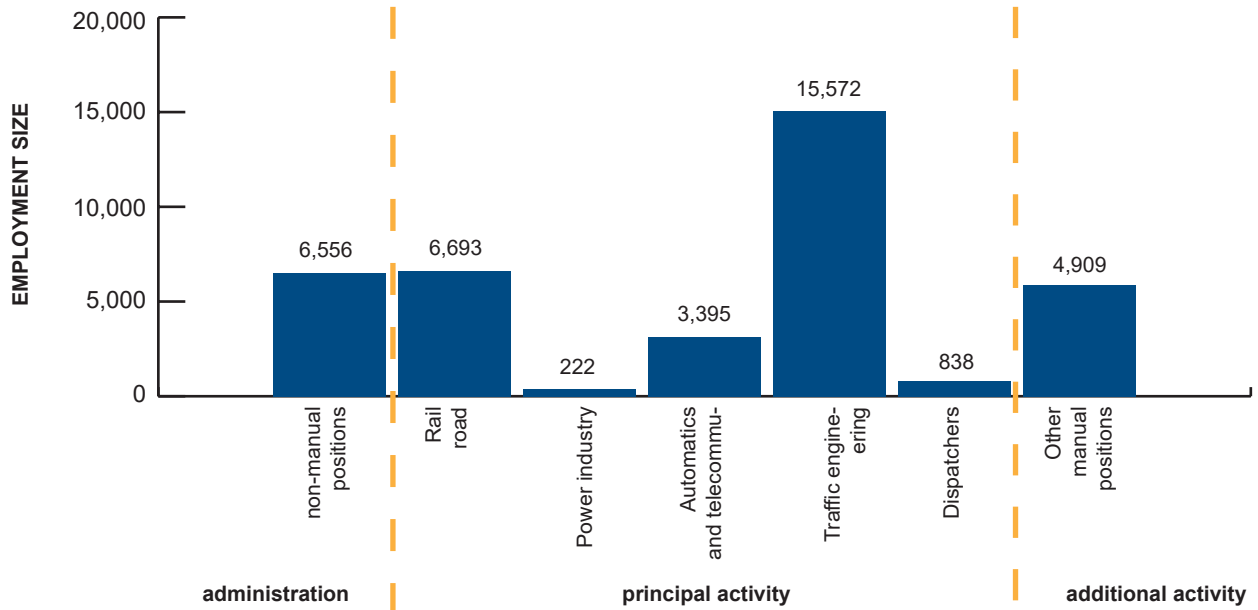
**Employment in professional groups
(as at 31 December 2021 – in persons)**



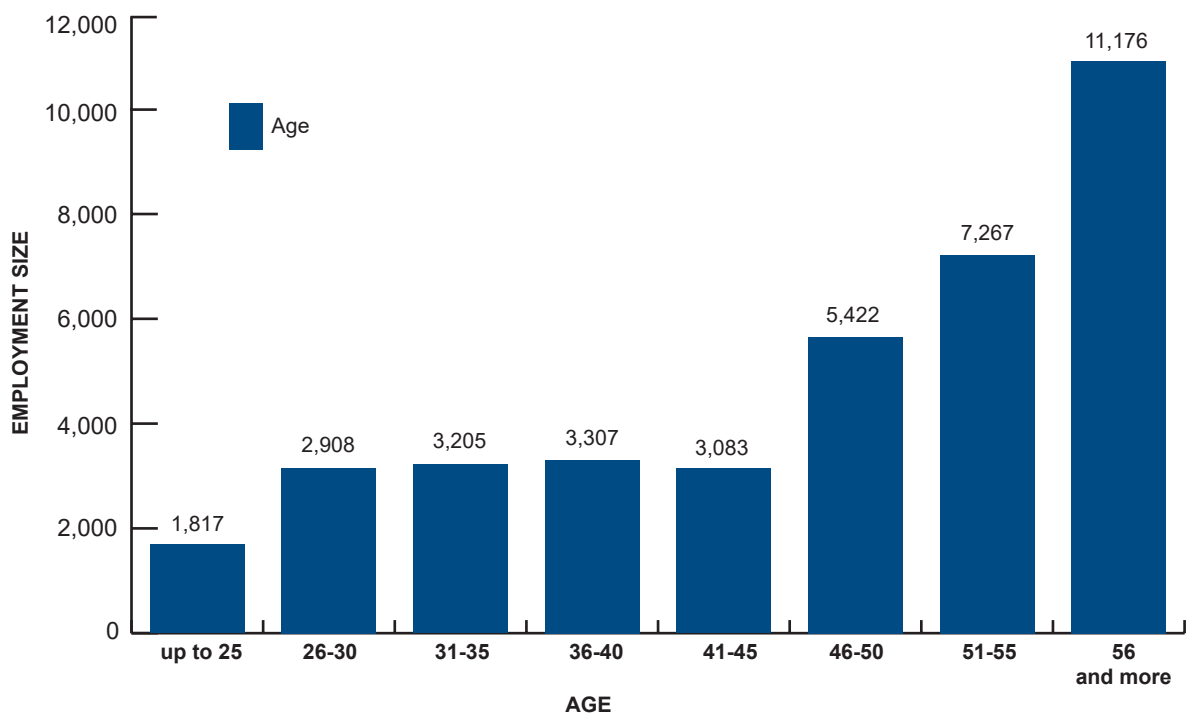
The most numerous group in the employment structure in the Company are employees aged over 51. In 2021, they accounted for 48.30% of the total number of employees (18,443 employees). Compared to 2020, the level of employment in that group decreased by 96 employees, i.e., by 0.25%. In 2021, employees in the 26-50 age group, that is, in the period of their highest professional activity, accounted for 46.94% of the personnel (17,925

employees). Compared to 2020, there was a decrease in the level of employment in that group by 338 employees, i.e., by 0.87%. In 2021, employees at the age of 25 or less represented 4.76% of the personnel (1,817 employees). Compared to 2020, there was an increase in the level of employment in that group by 20 employees, i.e., by 0.05%.

Employment in professional groups (as at 31 December 2021 – in persons)



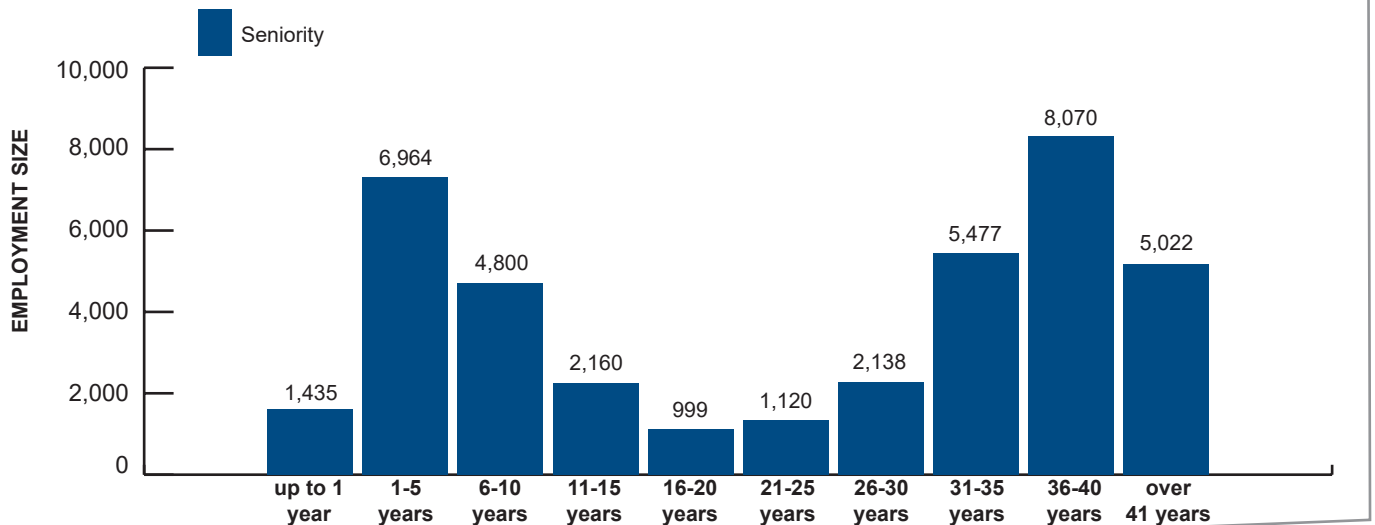
Employment structure by age (as at 31 December 2021 – in persons)



Employees with up to 10 years of seniority accounted for 34.57% of the personnel (13,199 employees) – compared to 31 December 2020, there was an increase in the level of employment in that group by 604 employees, i.e., by 1.56%. Employees with 11 to 20 years of seniority accounted for 8.27% of the personnel (3,159 employees) – compared to 31 December 2020, there was an increase in the

level of employment in that category by 351 employees, i.e., by 0.91%. The largest group at the Company were employees with seniority over 21 years, who accounted for 57.16% of the total number of employees (21,827 employees) – compared to 31 December 2020, the level of employment in that group decreased by 1,369 employees, i.e., by 3.54%.

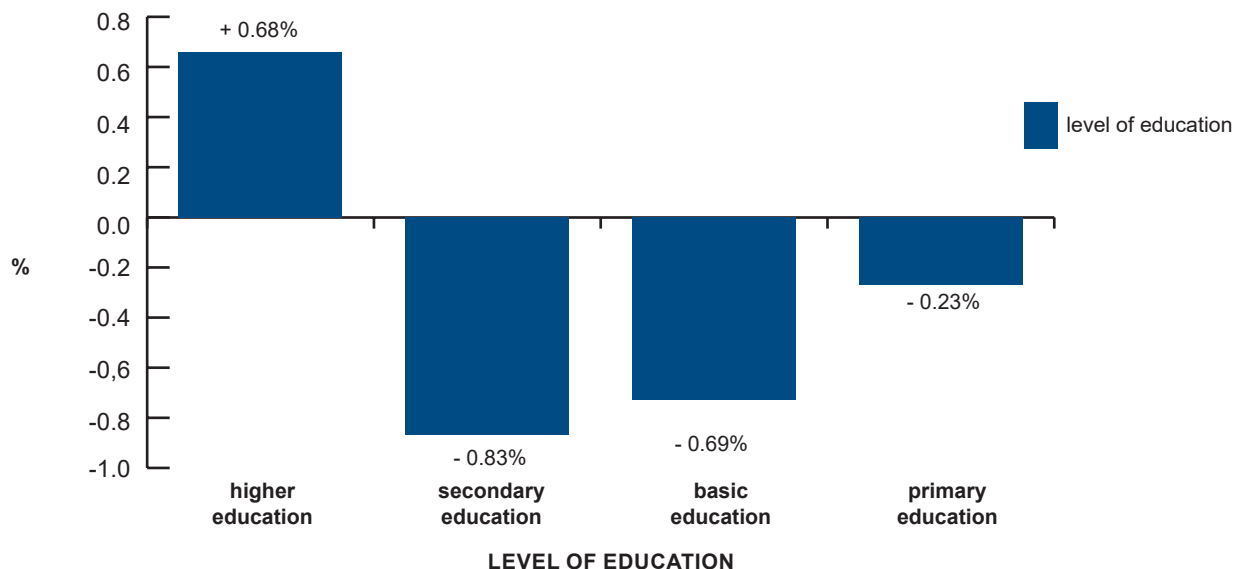
Employment structure broken down by seniority (as at 31 December 2021 – in persons)



The structure of employment in PKP Polskie Linie Kolejowe S.A. by education is steadily improving. In 2021, the share of employees with higher education increased by 0.68% compared to 2020, with a decrease in the number of

persons with secondary, basic vocational and primary education. This results from conscious employment policy to hire highly-qualified employees as well as the Company's system of training.

Change in education in 2021 (%)



IMPROVING EMPLOYEE QUALIFICATIONS AND EMPLOYEE DEVELOPMENT

PKP Polskie Linie Kolejowe S.A. has been investing in the development of employees for many years by enabling them to improve their competences and professional qualifications and to acquire new licences necessary to perform work. The opportunities to participate in training courses, study at universities and learn foreign languages are very popular each year.

Employees who participate in various types of professional courses and trainings are keen to use the acquired knowledge in their subsequent daily work and they translate it into specific actions. Training and development is also one of the incentive components. In 2021, the Company allocated PLN 7.5 million to improve the qualification of the employees.

PKP Polskie Linie Kolejowe S.A. has also been cooperating with the Association of Railway Employers in the area of referring the employees to MBA studies. Moreover, the Company launched the third edition of postgraduate studies in human resources management in cooperation with Gdansk Foundation for Management Development and CS Natura Tour Sp. z o.o.

In connection with the ongoing investment process carried out by PKP Polskie Linie Kolejowe S.A., the Company's employees must have the most up-to-date knowledge in

this area. Thus, the employees who participate in the investment process can count on cyclical training each year, thanks to which their knowledge and competences are increased, which has an impact on the effectiveness of the tasks performed. Last year, the Company financed 91 training cycles from which 1,234 employees benefited. These trainings covered the following topics:

- Fraud in EU Projects;
- Construction Law;
- Cost Estimating (FIDIC);
- Public Procurement Law – Amendment to the Law.

The Company also focuses on the long-term development of its employees by, among other things, co-financing studies, e.g. master degree, engineer degree or post-graduate studies. In 2021, 590 employees took advantage of this opportunity for further training and education. Due to the prevailing COVID-19 pandemic, the possibility of learning by employees had to be adapted in terms of various forms of education to the applicable guidelines. The majors that are most popular among employees include: Infrastructure Project Management in Railway Construction, Human Resources Management, Project Management, Transport, and Construction. In addition, nearly 740 employees of the Company benefited from open training courses.

RAILWAY EDUCATION

PKP Polskie Linie Kolejowe S.A. acquires new employees using various possibilities, including, for example, by granting scholarships to the most talented secondary school students. In 2021, the company cooperated with 48 secondary schools throughout the country, which educate young people in railway majors, i.e.:

- Rail Transport Technician
- Electrical Power Technician for Rail Transport
- Railway Construction Technician
- Railway Traffic Control Automation Technician

As part of the cooperation with secondary schools, the Company granted scholarships for 275 students in 2021.

All students have the opportunity to undergo internships and work placements in the Company's organisational units, i.e. Railway Line Plants. They can also improve their knowledge and skills, e.g. on a modern simulator of control command and signalling equipment. The Company assists in the development of teaching facilities at schools and also provides qualified lecturers of vocational subjects. PKP Polskie Linie Kolejowe S.A. provides, for the needs of school professional lab rooms, among other things, elements of the railway infrastructure such as control command and signalling equipment, rails, turnouts or semaphores to help students prepare for work in the rail industry.

VOCATIONAL TRAININGS

In 2021, PKP Polskie Linie Kolejowe S.A. continued to prepare employees to work in positions related to the operation and safety of railway traffic, mainly through the internal system. Due to the epidemic situation, the qualification courses for the following positions: train dispatcher, signalman, points operator, crossing keeper, trackman, trackmaster, automation specialist and maintenance and work train manager, were organised using a hybrid system. The theoretical classes were conducted in the form of video-conferences, while the practical ones – individually at the employee's place of employment. In 2021, 63 qualification courses were organised for 1,181 employees.

The Company also carried out trainings under a contracted system, e.g. in the operation and driving of the WZT-2 armoured recovery vehicle (40 persons took part in the training), operation and maintenance of railway cranes (20 persons took part in the training). To supplement the personnel authorised to operate rail vehicles on an ongoing basis, the Company also organised under a contracted system, 6 trainings for the train driver's certificate, in which

80 candidates participated and 47 employees were referred to the examination to obtain the train driver's certificate. In addition, 60 employees have completed the first stage of vocational preparation for the position of train driver, which is training to obtain a train driver's licence. All employees completed the training and passed the examination with a positive result and started the second stage of preparation.

In 2021, periodic tests of knowledge and skills for train drivers were carried out for the first time in the Company. A total of 839 employees with an active train driver's certificate participated in the periodic tests, which are necessary to maintain their licences.

In connection with the Company's purchase of new rolling stock and the modernisation of the rolling stock already in service, 89 employees underwent knowledge and skills tests in order to obtain licence to operate them.



CORPORATE SOCIAL RESPONSIBILITY ACTIVITIES

SOCIAL CAMPAIGN "SAFE RAIL-ROAD LEVEL CROSSING"

In 2021, the activities performed as part of the social campaign "Safe rail-road level crossing" focused mainly on media activities, cooperation with influencers or conducting training courses for driving instructors and lecturers of

Driver Training Centres. The previously implemented projects were also continued, i.e. "Safe Friday" and "October: the Month of Education".

MEDIA CAMPAIGN

The campaign spot "Listen to your voice of reason" resounded in the largest nationwide TV stations. It was posted on VoD websites and YouTube, where it reached over 5.5 million views. In multiplexes, studio and local cinemas, over 1 million persons watched the above-mentioned video. Moreover, the subject of the campaign was mentioned in television programmes "Question for breakfast".

More than 870,000 people were the recipients of the posts regarding level crossing safety on social media, while the campaign material was viewed nearly 1,680,000 times during advertising activities. In addition, 9 advertisements were placed in the nationwide and regional press and a series of 4 radio broadcasts was carried out.

#YELLOWSTICKERPLK SUPPORTS THE USERS OF RAIL-ROAD LEVEL CROSSINGS

One of the key projects implemented as part of the 2021 campaign was the #YellowStickerPLK. PKP Polskie Linie Kolejowe S.A. marked over 14 thousand of rail-road level crossings with special stickers containing an individual identification number which makes it possible to locate the level crossing. In addition, the database was integrated with the IT system used by the operators of the 112 emergency number. The identification number of the level crossing placed on the yellow sticker, quoted by a person reporting a threat or an accident, allows the operators of the 112 emergency number to find the exact location of the level crossing or pedestrian crossing, and to provide rapid response of railway workers and, if necessary, emergency

services. Immediate response increases the chance of, for example, stopping a speeding train at a safe distance from the level crossing, and thus prevent an accident.

In 2021, the stickers were used 7,107 times by persons who called the 112 emergency number to provide information on the stickers. In 458 cases, train drivers were instructed about train speed limits and asked to drive carefully, and in 160 cases, train traffic was suspended to prevent a tragedy.

numer
skrzyżowania:

003 299 660

W razie wypadku lub zagrożenia wypadkiem tel.:

112

W razie awarii tel.: +48 012 345 678, +48 01 23 45 678

ABOUT SAFETY ON THE LEVEL CROSSINGS – FOR CHILDREN AND ADULTS

An important aspect of activity of PKP Polskie Linie Kolejowe S.A. as part of the social campaign "Safe rail-road level crossing", in 2021, were workshops and trainings attended by safety specialists, including representatives of local Driver Training Centres, Voivodeship Road Traffic Centres, Railway Security Guards, Voivodeship Headquarters of: Police, State Fire Service and emergency medical service teams. During the meetings, topics related to road traffic law were discussed in the context of rail-road level crossings, different categories of level crossings and the most common traffic offences of drivers were presented in detail, and CCTV footage showing dangerous driving behaviour was shown.

Another project carried out as part of the 2021 campaign was "Safe Friday", organised across the country every year, every Friday of the summer holidays, at the country's busiest level crossings and along the tracks, at the so-called "wild passages". As part of the project, 726 information and prevention campaigns were carried out, the recipients of which were over 60,000 traffic participants. This extremely important initiative is intended to remind every road user of

their duty to act in accordance with traffic regulations and their common sense.

The Company's representatives also reached children with the message of the "Safe rail-road level crossing" campaign by organising educational lectures in schools and nursery schools. In 2021, nearly 1,400 educational lectures were conducted, involving 43,584 children. During the educational meetings, the youngest children learned the basic rules for crossing rail-road level crossings, got to know traffic signs, and learned what not to do on railway area, also thanks to a series of new educational notebooks, colouring books and an animation entitled "Railway Adventures with the Ambassador of Safety".

In 2021, cooperation was established with the creator of the online channel "Zabawkowicz", which resulted in a video entitled "Will Amelia pass her cycling proficiency test?", illustrating, among other things, the issue of cyclists' safety behaviour at rail-road level crossings. The video reached more than 587 thousand views.

"SAFE RAIL-ROAD LEVEL CROSSING" IN NUMBERS

- 4,000,000 views of the spot as part of the video advertising campaign on YouTube;
- more than 1,500,00 views of advertisements as part of 2-week spot campaign on VoD platforms;
- more than 1,061,521 persons watched campaign spots in cinema multiplexes across Poland;
- more than 587,000 views of the educational material recorded in cooperation with the influencer (online channel "Zabawkowicz");
- #YellowStickerPLK campaign and project was placed in the morning television programmes "Question for breakfast";
- 1 series of 4 radio broadcasts was carried out;
- 9 advertisements were placed in the nationwide and regional press;
- 1,676,091 views of campaign material during advertising activities on social media, and 873,891 recipients viewed posts on social media;
- a new series of children's materials has been produced: educational notebooks, colouring books and a series of 3 animations entitled "Railway Adventures with the Ambassador of Safety";
- 249,248 materials (information leaflets and brochures, drivers' guides, educational notebooks and colouring books for children) were distributed;
- 1,389 educational lectures were conducted (including 978 lectures as part of the project: "October: the

Month of Education"), 43,584 children were educated (including 30,812 children as part of the project "October: the Month of Education");

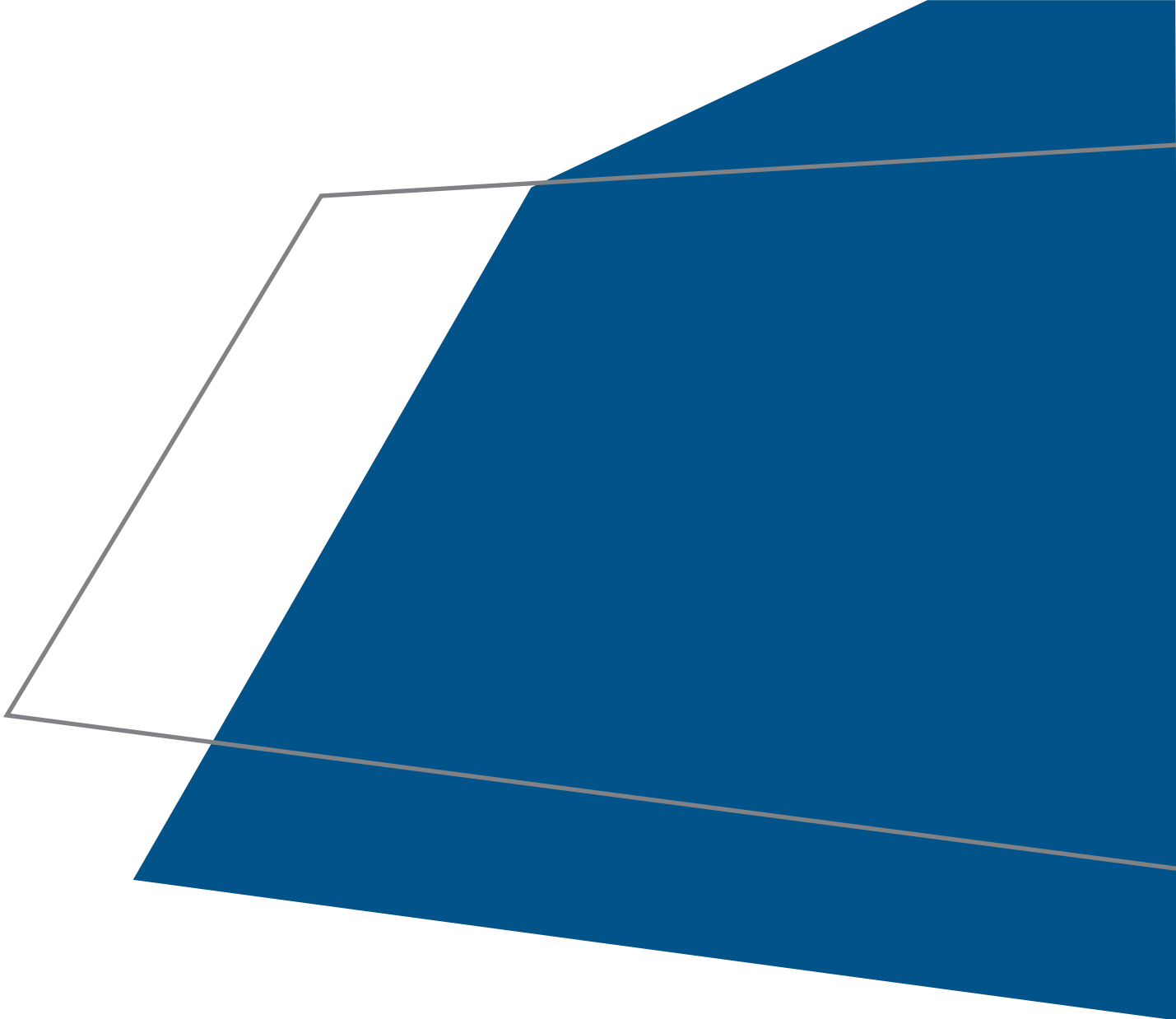
- 847 information and promotion campaigns were carried out at rail-road level crossings (including 726 as part of the project "Safe Friday"), involving 68,095 persons (153 persons received ticket, 438 persons received warnings, 723 sobriety checks were carried out);
- a promotional stand for the campaign was organised at 4 automotive events and 39 outdoor picnics;
- 330 defects were reported using the "Report a defect" form.

RAILWAY TRADITION

In 2021, PKP Polskie Linie Kolejowe S.A. made 20 donations of over PLN 260,000 to institutions that care about railway history and tradition. The used-up railway equipment was donated to, among others, the Central School of the State Fire Service in Częstochowa (sleepers and tracks), thanks to which a training station for practising rescue operations during rail accidents is being set up. The Grodzisk Draisine Railway, meanwhile, received track elements – rails, sleepers, bolts and screws. The materials will be used at the station in Ujazd Wielkopolski to build a 200-metre-long siding to display historic vehicles. Towarzystwo Przyjaciół Wolsztyńskiej Parowozowni received an over-100-year-old lever frame. This unique piece of equipment from the Zduny station on the Oleśnica – Chojnice railway line will create an interactive exhibition of railway signalling equipment in the museum room at Świętno station.

In addition, donations were made to, among others, the Wielkopolska Railway Society in Jarocin (a type 3F/201C baggage car and a PWM-5 motorised trolley trailer), Club of Railway Enthusiasts in Wrocław (a type 101A technical and utility wagon (a baggage car) and three platform wagons), Czernice Borowe municipality (track elements), "Podgórzanin" Przeworsk Railway Commuter (track elements), Polish Association of Railway Enthusiasts in Warsaw (railway traffic control equipment, type E control panel, track \ elements), Grodzisk Commuter Railway (track elements) and the District Headquarters of the State Fire Service in Zgierz (non-reinforced pine sleepers).

PKP Polskie Linie Kolejowe S.A. has so far made more than 115 donations to institutions that care for the history and tradition of the railways.



EXTERNAL COMMUNICATION

14TH INTERNATIONAL RAILWAY FAIR TRAKO IN GDAŃSK

Between 21 and 24 September 2021, representatives of PKP Polskie Linie Kolejowe S.A. participated in the 14th edition of the International Railway Fair TRAKO in Gdańsk. The TRAKO fair is considered to be the largest and most prestigious event of the rail transport industry in Poland and second in Europe. The 14th edition of the event was the largest rail industry meeting during the European Year of Rail, promoting rail as the most environmentally friendly mode of transport.

PKP Polskie Linie Kolejowe S.A. presented at the event together with its subsidiaries at a joint exhibition stand as part of PKP Polskie Linie Kolejowe S.A. Group of Compa-

nies. The stand of PKP Polskie Linie Kolejowe S.A. Group of Companies was very popular with Fair visitors.

PKP Polskie Linie Kolejowe S.A. Group of Companies actively participated in meetings and conferences on the development and future of the Polish railway and the exchange of experience in the railway industry in Poland and Europe during the Fair.

The acceptance of modern tamping machines (tracks and turnouts) also took place during the Fair. The equipment increased the Company's machinery stock (of the Track Machinery Plant in Kraków).

20TH ANNIVERSARY OF ACTIVITY OF PKP POLSKIE LINIE KOLEJOWE S.A.

2021 was a special year for PKP Polskie Linie Kolejowe S.A., as the Company celebrated its 20th anniversary. A number of activities were undertaken to commemorate the anniversary. The anniversary was also an opportunity

to recap the effects of PKP Polskie Linie Kolejowe S.A.'s operations to date and a symbolic start to implementing prepared plans.

PLK SA IS AN ACTIVE PARTICIPANT IN ECONOMIC AND INDUSTRY EVENTS

PLK SA AT THE EUROPEAN ECONOMIC CONGRESS IN KATOWICE

PKP Polskie Linie Kolejowe S.A. actively participated in the European Economic Congress 2021 in Katowice, which took place from 20 to 22 September 2021. The event amounted to a three-day series of debates, meetings and side events with guests from Poland and abroad. Discussions covered the issues most relevant to Europe's economic and social development.

Representatives of the Company's Management Board took part in three debates: "Transport Strategy for Poland", "Polish Seaports – An Alternative to the Largest Sea Hubs of North-Western Europe" and "The Green Railway. 2021 – The European Year of the Railway".

PLK SA TAKES PART IN THE ECONOMIC FORUM IN KARPACZ

The company once again actively participated in the Economic Forum in Karpacz, which took place from 7 to 9 September 2021. The Economic Forum in Karpacz is the most important and largest international conference in Central and Eastern Europe, hosting a three-day series of debates, meetings and side events with guests from Poland and abroad to discuss the most important issues for Europe's economic and social development.

During the Economic Forum in Karpacz, a representative of the Management Board of PKP Polskie Linie Kolejowe S.A. participated in three debates: "European Year Of Rail – a Chance for Development", "High Speed Rail – A New Quality of Domestic Travel" and "New Silk Road, Via Carpatia, Rail Baltica – What do Poland and Europe Need?".

PLK SA PRESENT AT CONGRESS 590

In 2021, the 6th edition of Congress 590 had two iterations: the spring edition from 5 to 6 May, organised in a hybrid formula, and the autumn edition from 5 to 6 October in Warsaw.

Congress 590 is a recurring economic event, bringing together representatives of Polish business, science, politics and legislation and foreign guests. It provides a forum for exchanging thoughts, views and experiences of Polish entrepreneurs, managers, politicians, scientists and economy experts.

During the spring edition of the Congress, representatives of the Management Board of PKP Polskie Linie Kolejowe S.A. participated in three panels: "Countering Traffic Exclusion", "The Impact of Infrastructure Investments on

the Freight Market" and "Poland as a Global Transport Hub"; while in the autumn edition of the Congress, representatives of the Company's Management Board took part in two panels: "Cybersecurity and Digital Identity" and "A Decade of Major Infrastructure Investments".

The participation of representatives of the Company's Management Board in the European Economic Congress, the Economic Forum and Congress 590 enabled the presentation of activities of PKP Polskie Linie Kolejowe S.A. as the entity implementing the largest ever investment programme in rail infrastructure, and allowed us to emphasise the role of the Company as the manager of the national network of railway lines.

MAIN EVENTS IN 2021

January

- Start of works under the project "Revitalisation and reconstruction of the partly closed railway line No. 182 Tarnowskie Góry – Zawiercie" with a net value of PLN 660 million, which will provide railway access to Pyrzowice Airport. The project is co-financed by the European Union from the Cohesion Fund under the Operational Programme Infrastructure and Environment.

February

- Signing by PKP Polskie Linie Kolejowe S.A. and AB LTG Infra (the Lithuanian railway infrastructure manager), a letter of intent to establish a Polish-Lithuanian Infrastructure Group. The two companies will work together to improve the quality of railway connections and implement cross-border projects, including the modernisation of the Rail Baltica route.
- Signing by PKP Polskie Linie Kolejowe S.A. a contract worth PLN 91.5 million for design documentation and construction works on the so-called Kartuzy bypass, as part of the project: "Preparation of railway line No. 234 on the Gdańsk Kokoszki - Stara Piła section and No. 229 on the Stara Piła - Gliniec section as a bypass route" for the duration of the project: "Works on the alternative transport route Bydgoszcz – Tricity". The project is co-financed by the European Union from the Cohesion Fund under the Operational Programme Infrastructure and Environment.

March

- PKP Polskie Linie Kolejowe S.A. received a renewal of five-year safety authorisation by the decision of the President of the Railway Transport Office. The document confirms the compliance of the safety management system implemented by the infrastructure manager with the applicable legislation and the ability to meet the requirements necessary for the safe design, operation and maintenance of the railway infrastructure.

- Opening of the reconstructed Warszawa Główna station to travellers. The investment was carried out as part of the project: "Works on the Warsaw cross-city railway line between Warszawa Wschodnia and Warszawa Zachodnia stations", co-financed by the European Union from the Cohesion Fund under the Operational Programme Infrastructure and Environment.
- Commissioning of news stops: Łódź Radogoszcz Wschód and Łódź Andrzejów Szosa. The investment was carried out as part of the project: "Construction of integrated multimodal nodes together with the construction and reconstruction of railway stops in the Łódzkie Voivodeship - with a passing loop in the area of the Łódź Marysin stop", co-financed by the European Union as part of the Regional Operational Programme of Łódzkie Voivodeship.
- Inaugural meeting of the Coalition of CEOs of Infrastructure Managers (including ones from France, Germany, Italy, Hungary and Poland). The new initiative aims to strengthen cooperation in rail transport.

April

- Signing by PKP Polskie Linie Kolejowe S.A. a contract worth over PLN 165 million for the design and works on the Olsztyn Gutkowo - Dobrze Miasto section. The project is co-financed by the European Union from the European Regional Development Fund under the Regional Operational Programme of Warmińsko-Mazurskie Voivodeship.
- Signing by PKP Polskie Linie Kolejowe S.A. a contract for the design of two new stops on the Warsaw cross-city railway at the Charles de Gaulle roundabout and between Solec and Wybrzeże Kościuszkowskie streets. The project: "Works on the cross-city railway line between Warszawa Wschodnia and Warszawa Zachodnia stations", for which a request has been submitted to the European Union for co-financing from the Cohesion Fund under the Operational Programme Infrastructure and Environment.

May

- Commissioning of a road viaduct in Topór on route Warsaw to Białystok (Rail Baltica). The investment is being carried out as part of the project "Works on the E75 line on the route Sadowne - Czyżew, together with other works on the route: Warszawa Rembertów - Sadowne", co-financed by the "Connecting Europe Facility" (CEF).
- Signing by PKP Polskie Linie Kolejowe S.A. a contract worth 42.7 million net for the design and execution of construction works on the Ostrowy - Toruń Główny section, Stage IV, as part of the task "Works on railway line No. 18 on the Kutno - Toruń Główny section". Financed from the budget.

June

- Completion of works under the project "Works on railway lines No. 153, 199, 681, 682 and 872 on the Toszek Północ - Rudziniec Gliwicki - Stare Koźle section" worth over PLN 265 million. The project is co-financed by the European Union from the Cohesion Fund under the Operational Programme Infrastructure and Environment.
- Signing an agreement with the Municipal Greenery Authority in Kraków for the lease of the first area under the flyover along Blich Street. It will feature routes for pedestrians and cyclists, greenery and areas for relaxation, play and meetings.
- The Management Board of PKP Polskie Linie Kolejowe S.A. adopted the document "PKP Polskie Linie Kolejowe S.A. – investment intentions for 2021-2030 with a view to 2040" together with the documentation prepared as part of the strategic environmental assessment. The document aims to identify priorities for developing the rail network with a view to 2040 by identifying the investment projects that best serve the objectives set for rail transport.
- Commissioning of two railway viaducts in Rawicz and one in Kościan. Investments as part of the project: "Works on the E-59 railway line, Wrocław - Poznań section, stage IV, border of Dolnośląskie Voivodeship - Czempin", co-financed by the European Union under the "Connecting Europe Facility" (CEF).
- Announcement of tender for the modernisation of the route Mielec to Padew as part of the project: "Revitalisation of railway line No. 25 on the Padew – Mielec – Debica section". The project is co-financed by the European Union from the European Regional Development Fund under the Regional Operational Programme of Podkarpackie Voivodeship.

- Commissioning of new stops: Olsztyn Redykajny, Olsztyn Likusy, Olsztyn Jezioro Ukiel. Investment as part of the project: "Works on railway line No. 220 on the Olsztyn - Gutkowo section" carried out with funding from the European Regional Development Fund under the Regional Operational Programme of Warmińsko-Mazurskie Voivodeship.
- Opening of the stops: Kraków Opatkowice and Skawina Jagielnia for travellers. Investment as part of the project: "Works on the railway line No. 94 on the section Kraków Płaszów – Skawina – Oświęcim section", financed from budget funds.

July

- PKP Polskie Linie Kolejowe S.A. increased the share capital of four subsidiaries by PLN 850 million for the purchase of modern machinery and equipment for maintenance and investment in the railway network. All four subsidiaries of the PKP Polskie Linie Kolejowe S.A. Group of Companies received support: Dolnośląskie Przedsiębiorstwo Napraw Infrastruktury Komunikacyjnej DOLKOM sp. z o.o., Pomorskie Przedsiębiorstwo Mechaniczno-Torowe sp. z o.o., Przedsiębiorstwo Napraw i Utrzymania Infrastruktury Kolejowej w Krakowie sp. z o.o., Zakład Robót Komunikacyjnych – DOM w Poznaniu sp. z o.o.
- Signing by PKP Polskie Linie Kolejowe S.A. contracts for the preparation of documentation and implementation of works and funding from the Regional Operational Programme of Wielkopolskie Voivodeship for the project: "Revitalisation of railway line No. 357 on the Drzymałowo – Wolsztyn section".

August

- Signing by PKP Polskie Linie Kolejowe S.A. a contract for the construction of a third stop (Łódź Koziny) in the tunnel between Łódź Fabryczna and Żabieniec and Kaliska stations. The project is co-financed by the European Union from the Cohesion Fund under the Operational Programme Infrastructure and Environment.
- Signing by PKP Polskie Linie Kolejowe S.A. a contract worth almost PLN 587 million net for the reconstruction of Elk station, Elk Szyba Wschód stop and Elk Towarowy station. The project co-financed by the European Union under the "Connecting Europe Facility" (CEF).
- Signing of a contract worth PLN 442 million for the modernisation of the Warszawa Wschodnia Osobowa - Warszawa Wawer section as part of the project: "Works on railway line No. 7 Warszawa Wschodnia Osobowa –Dorohusk on the Warsaw – Otwock –

Dęblin – Lublin section, stage II", Warszawa Wschodnia Osobowa – Warszawa Wawer section. The project is co-financed by the European Union from the Cohesion Fund under the Operational Programme Infrastructure and Environment.

- Commissioning of new stops: Radom Gołębiów and Radom Północny. The project "Works on railway line No. 8, section: Warka – Radom LOT (C, D, E)" is co-financed by the European Union from the Cohesion Fund under the Operational Programme Infrastructure and Environment.

September

- Visit of the Connecting Europe Express train in Poland as part of the celebrations of the European Year of Rail – an initiative of the European Commission.
- Completion of modernisation works on line 25, section: Mielec – Dębica and the return of passenger trains on this route after 12 years. The investment "Revitalisation of railway line No. 25, section: Padew – Mielec – Dębica" is included in the Regional Operational Programme of Podkarpackie Voivodeship 2014-2020.
- Signing by PKP Polskie Linie Kolejowe S.A. a contract for the implementation of task entitled Lot D – Construction works on railway line No. 229, section: Glinicz – Kartuzy, as part of the project "Works on the alternative transport route Bydgoszcz – Tricity". The project is applying for co-financing by the European Union from the Cohesion Fund under the Operational Programme Infrastructure and Environment.
- Signing between PKP Polskie Linie Kolejowe S.A. and State Water Management Board "Polish Waters" a contract for the implementation of investment entitled "Improvement of the permanent connection between the country and the port of Szczecin: construction of a railway bridge over the Regalica River". The project co-financed by the European Union from the "Connecting Europe Facility" (CEF).
- Commissioning of the reconstructed platform at the station in Niemojki in the Mazowieckie Voivodeship. This is the first completed investment under the "Government Programme for the Construction or Modernisation of Railway Stops for 2021-2025".
- Commissioning of a road viaduct in Małkinia. The investment as part of the project "Works on the E75 line on the route Sadowne – Czyżew, together with other works on the route: Warszawa Rembertów – Sadowne", co-financed by the European Union under the "Connecting Europe Facility" (CEF).

October

- Subsidiaries of the PKP Polskie Linie Kolejowe S.A. Group of Companies: Przedsiębiorstwo Napraw Infrastruktury Komunikacyjnej DOLKOM sp. z o.o., Pomorskie Przedsiębiorstwo Mechaniczno-Torowe sp. z o.o., Przedsiębiorstwo Napraw i Utrzymania Infrastruktury Kolejowej w Krakowie sp. z o.o., Zakład Robót Komunikacyjnych – DOM w Poznaniu sp. z o.o. signed contracts worth approximately PLN 40 million for the purchase of 5 modern trains for works on the traction network.
- Commissioning of a road viaduct in Łochów. The investment as part of the project "Works on the E75 line on the route Sadowne – Czyżew, together with other works on the route: Warszawa Rembertów – Sadowne", co-financed by the European Union under the "Connecting Europe Facility" (CEF).
- Signing an amendment by PKP Polskie Linie Kolejowe S.A. and the National Centre for Research and Development to the agreement on implementation of the Joint Venture BRIK – Research and Development in the Railway Infrastructure. The document increases the budget of the research and development joint venture to PLN 100 million (PLN 50 million from each partner). The cooperation was extended until 2033.

November

- Completion of Stage II of the call for the Programme to Supplement Local and Regional Railway Infrastructure – Railway Plus until 2028.
- Signing a contract worth almost PLN 400 million for the reconstruction of the Olsztyn Główny station. The project "Modernisation of the track-platform system and railway infrastructure at the Olsztyn Główny station" is co-financed by the European Union as part of the Operational Programme Eastern Poland.
- Signing contracts worth PLN 68 million for the construction of three viaducts and an underground passage on the Kraków – Katowice route. The investment as part of the project "Modernisation of railway line E30, section: Zabrze – Katowice – Kraków, stage IIb", co-financed by the European Union under the "Connecting Europe Facility" (CEF).

December

- Signing by PKP Polskie Linie Kolejowe S.A. a contract for approximately PLN 650 million for the reconstruction and electrification of the section: Elk – Giżycko. The project "Works on railway line No. 38, section: Elk – Korsze with electrification", co-financed from the

funds of the European Union under the Operational Programme Infrastructure and Environment.

- Completion of works on the line Wrocław Sołtysowice – Jelcz Miłoszyce and the return of passenger rail connections on this route after 20 years. The investment as part of the project "Revitalisation of railway line 292, section: Jelcz Miłoszyce – Wrocław Sołtysowice in order to restore passenger transport services in the Wrocław Functional Area", co-financed by the European Union under the Regional Operational Programme of Dolnośląskie Voivodship.
- Completion of works on the route from Skarżysko-Kamienna to Tomaszów Mazowiecki and the return of passenger connections on this route after 12 years. The works carried out as part of the task "Revitalisation of platforms on railway line No. 25 Łódź Kaliska – Dębica, section: Tomaszów Mazowiecki – Skarżysko-Kamienna (various locations)", project "Improvement of safety and elimination of operational threats on the railway network". Financing from the budget.
- Summary of Stage II of the call for applications for the Programme to Supplement Local and Regional Railway Infrastructure – Railway Plus until 2028.

- Completion of electrification of the line route Ocice – Rzeszów. The project "Works on railway line No. 71 Ocice – Rzeszów". Financing from the budget.
- Signing a contract worth PLN 98 million for the modernisation of the route Mielec – Padew Narodowa with the construction of a viaduct over Sienkiewicza Street in Mielec. The project is co-financed by the European Union from the European Regional Development Fund under the Regional Operational Programme of Podkarpackie Voivodeship.
- Announcement by PKP Polskie Linie Kolejowe S.A. and the National Centre for Research and Development of the 2nd competition for research and development projects as part of the Joint Venture BRIK – Research and Development in the Railway Infrastructure.
- Announcement of the tender for development of the document entitled "Planning Study for the Extension of the Warsaw Railway Junction with particular emphasis on the new cross-city line".

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MAP OF RAILWAY LINES

