

# Infrastructure sector in Poland – planned investments and market overview

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# **Roads**

By the end of this year, the government is planning to open for service another 133 km of roads built as part of the National Road Construction Programme in 2014–2023. There are still contracts for 243 km of express routes and ring roads waiting to be signed – this is more than a dozen road contracts. Of all the tenders to be announced this year, only the one for S1 bypass of Węgierska Górka has not yet been effectuated.

The National Road Construction Programme for the years of 2014–2023 (with a perspective to 2025), adopted by the government in 2015, contained a list of tasks. The amount of PLN 107 billion was secured for their implementation. The actual value of the investments, as calculated by the current government, is PLN 198 billion. The infrastructure ministry assured that despite the obvious gap in financing, no tasks will be removed from the list.

On 20 June 2017, the Council of Ministers decided to increase the financial cap for road construction from PLN 107 billion to 135 billion. Once the decision was made, roads were indicated that were to be built within the enhanced financial pool. The priority was to complete the construction of the already existing routes, including motorways, launch cross-border transport routes, relieve agglomerations, and to build expressways in Eastern Poland.

The changes introduced to the National Road Construction Programme 2014–2023 reflected the investment priorities in the new financial environment. Given the still insufficient funds, the tasks specified in the so-called Attachment 1 to the Programme were divided into two groups. The first group comprises tasks that will definitely be implemented as part of the current financial limit. The other group contains tasks that will be implemented only if additional funds are secured, e.g. as a result of savings made in the bids.

### What has been added?

To the first group, among others, the following sections of expressway S19 were added: state border - Białystok, Białystok - Lubartów, Choroszcz - Ploski - Chlebczyn and Podlaskie Province border - Łosice - Lubelskie Province border. The listed priorities include the sections located along the future S19: border of the Mazowieckie and Lubelskie Provinces - Lubartów, Lubartów Północ node - Lublin Rudnik node, Rzeszów Południe - Babica node - Barwinek.

Also, the A2 from Mińsk Mazowiecki to Siedlce and from Siedlce to Biała Podlaska, and the S17: Piaski - Hrebenne, were marked as priorities within the already reserved PLN 135 billion.

Moreover, the list of priorities included: S3, Świnoujście - Troszyn, S7 Płońsk - Czosnów, S11 Koszalin Zachód - Bobolice, S16 Borki Wielkie - Mrągowo and S17 Drewnica node -



Zakręt node. Funds were also earmarked for the S52 Krakow Northern Ring Road, S74 Przełom/Mniów - Kielce and DK-75 section Brzesko - Nowy Sącz.

The inflated limit is to be beneficial for the ring roads of: Olesno, Chełm, Opatów, Sępólno Krajeńskie and Kamień Krajeński, Zator, Nowy Sącz, and Chełmiec. Moreover, the government wishes to build the ring roads of Kędzierzyn-Koźle, Ostrowiec Świętokrzyski, Radomsko, Praszka, Niemodlin, and Myślina. The following bypasses will be implemented: Kołbiel, Łochów, Morawica and Wola Morawiecka, along with Poręba and Zawiercie ring roads. The financing for these tasks is planned in the available financial cap. The remaining ones are to be prepared, but the construction is to take place at some point in the future.

## Tasks under implementation

To date, 23 tasks have been completed under the National Road Construction Programme. The value of the completed investments is over PLN 8.5 billion. The road network expanded by more than 273 km.

There are 89 tasks being implemented, the value of which exceeds PLN 47 billion. The length of all the sections included totals 1,195 km.

Since the start of this year, the national road investor has entrusted contractors with the construction of 124.6 km of roads. Their value – together with the costs of land purchases – is approx. PLN 4.6 billion.

The task for which a contract has been signed this year is the S61 on the section from Suwałki ring road end to Budzisko. The over 24 km-long section of the expressway is to be implemented by a consortium led by Impresa Pizzarotii & C from Italy, partnered by Pizzarotti from Switzerland. The contract value is PLN 605.5 million.

A contract has also been signed for the other carriageway of the Szczuczyn ring road along the S61 route. It will be built by Polaqua at the expense of PLN 75 million.

Furthermore, the General Directorate of National Roads and Motorways (GDDKiA) has executed contracts for the implementation of motorway A2 between the Lubelsko node and the Mińsk Mazowiecki ring road. The two sections, with the total length of 15 km, will be implemented by Polaqua. The company will receive PLN 502.5 million in return. The Lubelsko node itself (2 km of road) will be built by Porr, which offered the price of PLN 190.3 million (the contract was signed this summer).

Contractors have also been commissioned with the three segments of the S7 between Warsaw and Grójec (total length: nearly 30 km). The first one – from the Airport node to Lesznowola node – will be handled by Rubau Polska. The contract is worth PLN 221 million.



The section between the Lesznowola node and Tarczyn Północ node will be built by IDS-Bud for the remuneration of PLN 338.7 million. The section from Tarczyn to Grójec will be implemented by Mota Engil, whose remuneration will amount to PLN 203 million.

The General Directorate of National Roads and Motorways has also executed a contract to continue the investment related to the construction of the road viaduct in Legionowo, along the DK-61 route. Skanska will modify the road (1.8 km) for PLN 45.7 million.

Furthermore, among the contracts already signed this year, there is the Inowrocław ring road link connecting the DK-15 with DK-25. Przedsiębiorstwo Budowy Dróg i Mostów Kobylarnia and Mirbud will receive PLN 93.9 million for a nearly 5 km-long road.

The construction of the ring road of Stalowa Wola and Niska within the DK-77 route is a contract comprising 15.3 km of roads, worth PLN 199 million. It was awarded to the consortium of companies: Mostostal Warszawa and Acciona Construcción.

This year, another contractor has been entrusted with implementation of the section S3/A6 - Kijewo node and S3/A6, section Kijewo - Dąbie - Rzęśnica. This order went to Energopol Szczecin. The total value of the two contracts is PLN 92 million.

In the Zachodniopomorskie Province, a contract has been signed for the construction of the second carriageway on the Kobylanka, Morzyczyn, and Zieleniewo ring road. For the 6.4 km-long section, the consortium of Strabag companies will receive PLN 57.2 million.

Quite recently, a contract has been signed for the implementation of the last piece of the S7 in the Świętokrzyskie Province, i.e. between the province border and Skarżysko-Kamienna. The contract was awarded to Budimex. The investment covers the construction of 7.6 km of road and costs PLN 259.8 million.

Przedsiębiorstwo Usług Technicznych Intercor has entered into a contract with the GDDKiA in Opole, covering the construction of the second stage of the Kępno ring road. The route is 7 km-long and it is to be built within the S11 route. The contract value is PLN 122.606 million.

#### What else is to come this year?

By the end of the year, over a dozen contracts are yet to be signed comprising the construction of roads under the National Road Building Programme 2014–2023. They are to cover 243 km of roads.

And so, the following tasks are to be implemented: construction of the S1 Pyrzowice - Podwarpie, Brzozowa ring road with the Brzozowo - Miękowo section, and the Miękowo - Rzęśnica section on road S3.



According to the plans, the contracts will be executed for four sections of expressway S7 between Napierki and Płońsk. The Contractor is also taking over the sections of road S7: Szczepanowice node - Widoma node and Widoma node - Nowa Huta node.

A contract is to be signed for the short section of S17 along the eastern ring road of Warsaw, i.e. the route Zakret node - Lubelska node.

Also this year, contracts are to be signed for the sections of the S19 road, which is seen as a priority road by the government. The sections are: Kraśnik Południe - Janów Lubelski Północ, Janów Lubelski ring road (Janów Lubelski Północ - Janów Lubelski Południe), and the section Janów Lubelski Południe - Lasy Janowskie.

The contracts planned for signing will cover the S61 road Kolno - Stawiski and Stawiski - Szczuczyn, as well as the ring roads of: Tomaszów, Warzymice, Przecław, and Nowe Miasto Lubawskie.

## What has been put on the back burner?

It is obvious that the tenders for several important routes that are now at the bidding stage will not be resolved this year. Among others, this concerns the S3 to the state border with the Czech Republic. This road is an important element of the connection between the Polish ports on the Baltic Sea and the south of Europe. It will be built in two implementation sections. In one of them, two tunnels need to be built. The longer tunnel will be over 2 km long. The cost of the investment is estimated at approx. PLN 2.5 billion.

The S14 – the western ring road of  $\pm odz$  – is still at the tender stage. The first procedure in this case was annulled due to overly high prices of the bids. The investor opened another procedure, wherein the investment scope was limited when compared to the initial scope.

A tender for the last sections of the A1 motorway between Tuszyn and Częstochowa is still in progress. In this case, the government gave up on the idea of the construction being carried out by a special purpose company. Instead the construction will be financed from the National Road Fund.

In all of these cases, the GDDKiA has not opened the bids yet. The opening dates have been postponed several times. The Employer has informed that this was caused by the large number of questions from contractors.

It is now estimated that the contracts in question are to be signed in mid-2018.



# **Tenders almost empty**

There are currently 49 tasks in tenders, the amount of which covers PLN 27.5 billion, while the length is 679 km. The value of the tasks awaiting tender announcements is PLN 52 billion.

Of all the tenders that were to be announced in 2017, only the one for the S1 bypass of Węgierska Górka is yet to be launched. The remaining ones are in progress.

In late December, new roads are planned for opening. The Ministry of Infrastructure and Construction anticipates that in November and December as many as 9 sections will be completed, with the total length of 133 km.



# **Railways**

In the summer of this year, the government accepted a report on the performance of the National Railway Programme (NRP) until 2023 for the year of 2016. The report contains much interesting information about the stage of advancement of many investments carried out on the Polish railway network.

Of crucial importance for the performance of the NRP was the update of the programme's base document, adopted by the Council of Ministers in November 2016. The aim of the update was to, first of all, verify the investment schedules, level out the so called "investment peak" (i.e. accumulated expenses in 2019–2020), and bring up-to-date the implementation status of the projects still in progress under the financial perspective 2001–2013. The important thing was the assumption that the total expenditure cap from the state budget earmarked for the Programme implementation would not be increased.

## 95% completion

The key data on the performance of the NRP:

- implementation of the expenditure plan according to the investment plan for 2016 amounted to 95%. The PKP Polskie Linie Kolejowe Company intended to spend PLN 5,183,700,100 while the actual spending was PLN 4,932,586,800. Particularly important was the fact that the initial plan, included in the Detailed Implementation Plan for the NRP on 15 September 2015, assumed that the amount would be PLN 7,013,973,200. This means that performance has reached 70%.
- in total, in 2016, the value of completed projects was PLN 1,592,266,900. This set of undertakings comprises 39 projects, including:
  - 24 implemented from the funds of the Operational Programme Infrastructure & Environment,
  - 2 implemented from the funds of the Regional Operational Programmes,
  - 12 implemented from the funds of the State Budget,
  - 1 implemented with the use of the funds from the Connecting Europe Facility (CEF).

In total, from the onset of the Programme implementation (2015), 75 projects were completed, the total value of which was PLN 2,8533,806,100.

- due to the prices offered by infrastructure companies in the tenders organised by PKP PLK, which were lower than the amounts the company planned to spend on the implementation of particular investments, the national infrastructure manager was able to save approximately PLN 330 million in 2016. Of this amount, approx. PLN 190 million was already earmarked for additional investment tasks. Moreover, in case of some projects, not all the planned outlays were made. The most prominent here were the works on rail line E75 on the Czyżew - Białystok section, modernisation of rail line E59 on the Wrocław - Poznań section, stage III on the Czempiń - Poznań section Phase II,

modernisation of rail line E75 Rail Baltica Warszawa - Białystok - state border with Lithuania, works on rail line no. 7 Warszawa Wschodnia Osobowa - Dorohusk on the section: Warszawa - Otwock - Dęblin - Lublin.

- when it comes to the achievement of the NRP objectives, the status as at the end of December 2016 was:

- to reinforce the role of rail transport in the national integrated transport system 429.5 km of railway lines were modified (with the assumed status as at the end of December 2017 being 500 km). In this case, the target value of the indicator in 2023 was 9,000 km of upgraded rail lines.
- to reinforce the efficiency of rail transport measured with the length of railway lines allowing passenger train traffic with the technical speed of 160 km/h or more 90 km of rail lines were modified (with the assumed status as at the end of December 2017 being 250 km). In this case, the target value of the indicator in 2023 is 350 km.
- to increase the safety of rail transport functioning ERTM/ETCS was deployed on 331 km of rail lines (with the assumed status as at the end of December 2017 being 500 km). Here, the target value of the indicator in 2023 is 2,000 km.
- Moreover, at the end of 2016, 11 out of the 18 provincial centres in Poland were
  joined by rail lines upgraded to the minimum average speed of 100 km/h for
  passenger trains. Ultimately, in 2023, the infrastructure of such standard is to
  connect all the 18 capital cities of the Polish regions.

Meeting these targets has ensured, among others: the possibility to operate passenger trains at the speed of 160 km/h on rail line no. 4 Grodzisk Mazowiecki - Zawiercie (section: Olszamowice - Zawiercie, length: 89.6 km), deployment of ETCS on 331 km of rail lines (rail line no. 4 Grodzisk Mazowiecki - Zawiercie: 224 km, rail line no. 64 Kozłów - Starzyny: 33 km, rail line no. 295 Węgliniec - Bielawa Dolna: 12 km, rail line no. 282 Miłkowice - Węgliniec: 62 km), reaching an average travel time of passenger trains at the level of 100 km/h between Warsaw and 11 provincial centres (Poznań – 124 km/h, Krakow – 124 km/h, Katowice – 122 km/h, Gdańsk – 119 km/h, Wrocław – 112 km/h, Opole – 111 km/h, Zielona Góra – 109 km/h, Rzeszów – 109 km/h, Łódź – 102 km/h, Szczecin – 101 km/h, Kielce – 100 km/h).

#### PLN 11 billion in 2016

Last year, PKP Polskie Linie Kolejowe announced tender procedures for the total amount of PLN 11,059,600. As highlighted in the governmental documents, unlike in the previous years, the national infrastructure manager had full tender documentation in place already at the time of tender announcement. What is more, the data show that the company announced proceedings for projects of greater value than originally planned. The early 2016 assumptions mentioned tenders of the total amount of approx. PLN 9 billion. The procedures of the greatest total value covered the projects financed from the OPI&E (PLN 3,462,800). They were followed by CEF projects (PLN 3,408,800), State Budget projects (PLN 1,915,100), Operational Programme Eastern Poland (PLN 1,595,400), and Regional Operational Programmes (PLN 677,500 million).

# The largest tenders in 2016

The tenders announced in 2016 (and completed, in most cases, in the following year) included:

- Improving the throughput of the Łódź Railway Node TEN-T, stage II, on the Łódź Fabryczna - Łódź Kaliska - Łódź Żabieniec section – PLN 1,763,000,
- deployment of ERTMS-ETCS on the rail lines of the core TEN-T network PLN 1,276 000,
- works on rail line E20 on the Siedlee Terespol section, stage III LCC Terespol PLN 538,500,
- works on rail line no. 1 on the Częstochowa Zawiercie section PLN 491,800,000,
- works on rail lines nos. 14 and 811 on the Łódź Kaliska Zduńska Wola Ostrów
   Wlkp. section, stage I: Łódź Kaliska Zduńska Wola value: PLN 469,600,000,
- works on rail line E30 on the Kędzierzyn Koźle Opole Zachodnie section PLN 478 million.

In 2016, PKP Polskie Linie Kolejowe signed contracts for approx. PLN 2,595,500. Of this amount: PLN 1,210,900 was funds from the State Budget, PLN 1,006,800 from CEF, PLN 319.7 million from the OPI&E, and PLN 58.1 million from the Regional Operational Programmes.

The most substantial contracts signed in 2016 include:

- modernisation of rail line E30, Zabrze Katowice Krakow section, stage IIb three contracts were signed for the total amount of PLN 830.1 million,
- improvement of the technical condition of the engineering facilities stage I –
   modernisation of the railway viaduct in Gorzów Wielkopolski PLN 90.5 million.

The projects with an adjusted value specified in the NRP included:

- moving of the project "Deployment of ERTMS/ETCS on the TEN-T core network lines" to the basic list in the part provided for financing from the OPI&E due to the importance of the project and its necessity (and hence the feasibility of securing funds in the event of the lack of CEF funding). The project value was determined to be PLN 1,359.1 million,
- increase from PLN 1,000,000 to PLN 2,133,000 of the value of the project: "Works on rail line C-E 65 on the Chorzów Batory Tarnowskie Góry Karsznice -Inowrocław Bydgoszcz Maksymilianowo section; section: Chorzów Batory Zduńska Wola Karsznice",
- increase from PLN 399.8 million to PLN 650 million of the value of the project: "Improved safety on level crossings",
- reduction from PLN 2,000,000 to PLN 1,320,000 of the means earmarked for the project "Works on rail line no. 202 on the Gdynia Chylonia Słupsk section",
- values of 14 CEF projects were changed, due to savings made,
- reduction from PLN 3,957.5 million to PLN 3,556.2 million of the value of the task "Work on rail line no. 7 Warszawa Wschodnia Osobowa – Dorohusk on the Warszawa – Otwock – Dęblin – Lublin section,
- reduction from PLN 500 million to PLN 400 million of the value of the task "Works on rail line no. C-E59 on the Wrocław Brochów / Grabiszyn Głogów section",



- reduction from PLN 593.4 million to PLN 474.6 million of the value of the task "Works on rail line no. 8 on the Skarżysko Kamienna - Kielce - Kozłów section".

#### 26% value of the OPI&E in 2016

In 2016, PKP PLK submitted applications for additional funding from the CEF for 10 projects, the total value of which was PLN 2,073,678,300, and for 11 projects from the OPI&E, the total value of which was PLN 8,319,669,200, and for one project within the Operational Programme Eastern Poland. At the same time, the company signed 4 contracts for co-funding, the total net value of which was PLN 4,363,919,200. Towards the end of the last year, the national infrastructure manager contracted funds for 12 projects of the total value of PLN 7,596,130,400. This is 26% of the value of the OPI&E 2014–2020 projects.

#### What does the future have in store?

The next few years, in the context of the planned investments, will certainly see preparations for the implementation of major projects announced by the government. These include the Central Transport Port and the construction of new rail lines. The time required to build the Central Transport Port is 10 years; the project needs to be linked to the implementation of the HSR project. The question is whether the infrastructure really needs to allow trains to reach the speed of 330–350 km/h, as it had been assumed. In Western European countries, such speeds are usually achieved by trains running on the routes linking agglomerations with populations of several millions. In the opinion of Ireneusz Merchel, President of PKP PLK, who was interviewed by *Rynek Kolejowy*, such speeds are unnecessary in Poland. "I believe that in the course of a decade or so we should build new lines for trains travelling at 200–250 km/h – e.g. between Warsaw and Wrocław. If such a rail line connects the capital city with Poznań, it should be routed further on, to Szczecin.

The Central Main Line will be adjusted to such maximum speed, along with routes going in other directions," said the head of the national infrastructure manager. Merchel also mentioned the necessity to build new rail lines, e.g., Modlin - Płock - Włocławek - Bydgoszcz, or Podłęże - Piekiełko. Further modernisations of the TEN-T rail lines for freight traffic will also be vital. All the stations along those lines should be able to handle 740-metre-long freight trains (which is a standard in the West). A multi-annual investment plan addressing this issue is soon to be presented to the Minister of Infrastructure and Construction. The plan would cover projects outside the time frame of the next UE budget perspective. Some rail lines are planned for electrification. These will be, among others, rail line no. 68 on the Stalowa Wola - Lublin section, rail line no. 38 on the Korsze - Ełk section, rail line no. 203 the so-called Kościerski Corridor and the Piła - Krzyż - Gorzów Wielkopolski - Kostrzyn route. The projects listed above will surely formulate the directions of investments in the Polish railway network in the years to come, unless a fundamental change in the transport policy occurs, e.g., as a result of political events.



Apart from the implementation of investment projects included in the National Railway Programme, PKP PLK also allows for implementing reserve undertakings. They are not included in the National Railway Programme but they could be commenced in case of any problems with the implementation of any investment project covered by the National Railway Programme. According to the information given by PKP PLK, feasibility studies of the total value of PLN 16 billion for tasks not included in the National Railway Programme were conducted in June 2017.

Despite optimistic announcements made by the national infrastructure manager, the industry experts, as well as some officials of the Ministry of Infrastructure and Construction, claim that the potential of PKP PLK itself and the Polish railway industry is too little to unlock investments for the amount of PLN 66 billion. The spending of about PLN 40 billion is expected, while the contractors assess their capabilities for approximately PLN 10 billion. In addition, the upcoming Brexit may be a problem. It is likely to shorten the current financial framework of the European Union.

However, it is also worth mentioning the restart of discussion over the construction of high speed rail in Poland, which is not only conducted in the railway industry but it also perceived, e.g. by the Ministry of Development, as a boost for economy in the forthcoming years (together with the investment project of so-called Central Communication Port).



# **Seaports**

In the area of maritime economy, a lot has recently been going on in the Gdańsk Seaport. In October 2017, Marcin Osowski, CEO at the company, announced that a tender to conduct a feasibility study for the central port in the Gdańsk Seaport may be launched even this year, certainly in the 1<sup>st</sup> quarter of 2018. The Central Port is a new investment project run by the seaport in Gdańsk, which is situated between the outlet of the seaport channel and the Naftoport. Due to the seaport development, several hundred hectares of the bay area will be intended for the construction of brand new, universal terminals.

The above-described investment project is to be completed in the coming 10 years. The management board of the Gdańsk seaport (Zarząd Morskiego Portu Gdańsk) assumes the division of this project into several separate phases. The first step towards the construction of the Central Port is to tender out the development of an engineering concept regarding the shape of the central port, mainly within the scope of the first stage, i.e. the construction of two or three terminals, depending on the number of partners that would be willing to participate in the project implementation.

In September 2017, one of the handling terminals in Gdańsk, i.e. Deepwater Container Terminal (DCT), achieved the highest monthly result in its history. In the said month, the DCT Gdańsk transhipped 159,945,000 TEU. The terminal also announced its ambitious development plan, the value of which is PLN 280 million.

In recent months, there has also been a breakthrough in the debates on the future of the port in Elbląg. Nowy Świat, a nearby small town, has been chosen as the future location of the excavation of the Vistula Spit. The investor, i.e. the Maritime Office in Gdynia, and the Ministry have chosen Nowy Świat as the best location for the implementation of this investment project. According to Marek Gróbarczyk, Minister of Maritime Economy and Inland Waterways, the investment project is currently being smoothly implemented and the works are being carried out as planned.

The statement of the Minister refers to the fact that the aforementioned investment project has both many supporters and opponents. The initiative is criticised mainly by ecologists, Russian authorities and inhabitants of Krynica Morska. The government is, however, determined to complete it. The key drawback of the project is said to be its high impact on the natural environment. On the other hand, its advantages include the possibility of gaining independence from Russia and greater possibilities for the development of the Vistula Lagoon and the port in Elblag.

According to Polish authorities, the excavation of the Vistula Spit is to have been completed by 2022, while the cost of this investment project is to reach PLN 800 million.



# **Airports**

Despite constantly breaking new records in terms of the number of passengers served by regional ports (both positive – like in Wrocław, Szczecin, and negative – like in Łódź), the most burning issues concerning the Polish airport infrastructure are currently being witnessed in Warsaw.

In October 2017, the company named LS Airport Services, which is supervised by the Ministry of Development, built a new courier terminal for DHL. The project was carried out in the immediate proximity of the international Fryderyk Chopin Airport. The cargo terminal at the Chopin airport is the largest facility of this kind in Poland. The value of the investment exceeds the amount of EUR 20 million. The terminal has been designed to serve 6,000 packages per hour.

However, the facility constructed in the area, which is owned by LS Airport Services, may encounter operating problems resulting from the launch of the Central Communication Port in Baranów. The land lease agreement has been concluded with LSAS for the period of 15 years. However, according to the announcement, the Central Communication Port will have been completed in the next 10 years. At the same time, the Chopin Airport would probably already have disappeared from the aviation map of our country. According to Mikołaj Wilda, government plenipotentiary for the development of the Central Communication Port, the final decision on the future of the "Okęcie" airport will be taken only in 2025.

The construction of the central port will also considerably affect the operations of the Modlin airport. Due to the ongoing debate regarding the future of this airport, the decision on the commencement of the planned expansion of the Modlin airport, which is situated near Warsaw, will also be delayed.



# **Central Transport Port (CTP)**

The government has decided to locate the Central Transport Port (CTP) in Baranów, near Grodzisk Mazowiecki. From the perspective of rail transport, the decision was the right one – even if the construction of the CTP will not entail reactivation of the High Speed Rail project.

Baranów is situated, in a straight line, approx. 10 km away from Jaktorowo (where there is a stop of the rail service between Warsaw and Łódź, i.e. the first stop behind Grodzisk Mazowiecki, looking from the side of Warsaw), also crossed by the Central Main Line. Moreover, approx. 8 km away from it, there is the rail line linking Warsaw with Poznań (the town of Seroki, located between Błonie and Sochaczew). This means that in the vicinity of the planned airport there are three rail lines with trains running, even at this point, at a speed of 160 km/h (the speed on the Central Main Line is to be increased). Furthermore, these rail lines provide, directly or indirectly, convenient access to all key metropolises in Poland (including those north of Warsaw). PKP Intercity trains currently run on these lines offering links to all provincial cities of Poland.

In the light of all this, Baranów seems a much more favourable location than Mszczonów (which was a very strong candidate, especially when Cezary Grabarczyk was the Minister of Infrastructure). Although the Central Main Line intersects that area, the Poznań line does not. If the central airport was to be built in Mszczonów, the trains from Warsaw to Łódź running near the airport would probably have to bypass, e.g., Żyrardów.

## Railways play the key role in servicing the Central Transport Port

The representatives of the current government often say that changing of the name of the planned airport (from Central Airport to Central Transport Port) reflects the ambition to make Baranów a transport centre for the whole of Poland – also for road transport (which seems like an easy job – the A2 motorway is located in the vicinity of Baranów) and for rail transport. In that case, what should be done to link the Central Transport Port with railway routes in the most effective way?

Obviously, the first step would be discarding some rather ridiculous ideas, such as building new rail lines as radially projecting from the Central Transport Port to all regions. Never mind the gargantuan costs or problems of formal and legal nature – ideas of this sort are infeasible also due to the fact that the Warsaw node is quite conveniently located in this respect. One should then focus on the construction of short sections that would link the Central Transport Port with the neighbouring rail lines.

Obviously, once the Baranów airport is erected, several new lines would have to be built to ensure access to the airport from Grodzisk Mazowiecki, the Central Main Line, Żyrardów (Łódź), and rail line no. 3 – with an exit towards both Warsaw and Sochaczew (Poznań). The railway station by the airport should be a through station, while a combination of new rail lines (and rail links) should be built so that through trains of any

service could run without having to change directions. Thanks to this, all long-distance trains running on those lines (which now provide direct access to all provincial cities, except for Kielce) as well as regional trains linking Warsaw with, e.g., Skierniewice, Sochaczew, and Łowicz, could be directed to run on the route through the airport.

## Exit in all directions possible

The combination of new rail lines must enable exit and entrance to rail lines no. 1, 3, and 4 (Central Main Line) – in each case without having to change directions. This way all trains running on these lines could stop by the airport and continue their journey without changing directions. The mistake made when the Okęcie Airport rail line was being built, or when the rail line to Balice near Krakow was being modified, should not be repeated. In both cases terminal stations were built, despite the fact that there are two major rail lines in their vicinity (Warsaw - Radom, Krakow - Katowice). Now, several years after those investments were completed, it is becoming even more obvious that the decisions not to build through stations by these airports were wrong.

One should emphasise that building the link of rail lines nos. 1 and 3 with a route going via the airport of the new lines would actually be the realisation of the idea of Jaktorów rail line, which was abandoned years ago (the idea was an exit from Warsaw towards Poznań, alternative to the Błonie route). The Jaktorów line was being considered for construction by the Civic Platform – Polish Peasants' Party coalition; however, due to immensely strong pressure from politicians, local governments, and the public from the Łódź Province, who feared that such project would definitely mean the end of the High Speed Rail undertaking, the concept was dropped.

The station by the airport must, obviously, have side tracks for conurbation trains connecting Baranów with Warsaw and finishing their run by the airport. In this respect, an extension of the services of Koleje Mazowieckie trains seems the most natural solution (they now end their runs in Grodzisk Mazowiecki). It will also be logical to extend to the airport the services of trains that are to run on the "ring rail line" in Warsaw in the years to come (the line is currently under modernisation with passenger halts being constructed) and which initially would finish their runs in Ożarów Mazowiecki (from there they would reach Legionowo or Warszawa Rembertów via the ting rail line and Warszawa Gdańska). This decision would make it possible to swiftly reach various areas of Warsaw and the agglomeration from the airport by regional and conurbation trains.

However, if the construction of the Central Transport Port is to be somehow linked to the reactivation of the High Speed Rail project, then a HSR station should naturally be located by the airport. The possible development of HSR will not change the fact that the link with the airport – in the model described above – should be made available to all the existing rail lines.

It is also plausible that the development of the Baranów airport and an increased number of trains on the rail lines in its vicinity will necessitate the construction of new sections of mainline tracks along the existing rail lines. We have been addressing this matter in *Rynek* 

Kolejowy for a long time, namely we have been pointing out that the absence of tracks separated out for conurbation traffic on the lines leaving the main agglomerations is already causing serious problems with reconciling the interests of long-distance, regional, and conurbation operators. In the future, when the demand for efficient conurbation transport intensifies, developing timetables for these sections will be even more problematic and their capacity will be even more inadequate.

In the case in question, it may be necessary to lay new mainline tracks on rail line no. 3, separating conurbation traffic from the remaining traffic – at least on the section between Warsaw and Seroki. At the same time, it should be pointed out that the fact that conurbation traffic between Warsaw and Grodzisk Mazowiecki has been fully separated out is yet another argument in favour of locating the Central Transport Port in Baranów.

## The fundamentals: frequency, travel time, and tariff

A very important issue, on which the success of the Central Transport Port depends, is attractive travel time and high frequency of trains running between the new airport and Warsaw — i.e. the undisputable current benefits of the Okęcie airport. It must be remembered that transferring the airport to a place located at a considerable distance from Warsaw may have advantages (an opportunity to develop a modern hub, which in turn would improve the competitiveness of PLL LOT), but it may involve disadvantages as well. One of them could be reduced attractiveness of short-distance flights — both domestic ones, but also, e.g., to some neighbouring countries. It is worth emphasising that, for instance, in the case of a Berlin-bound flight, the time needed to reach Baranów and go through the check-in may be the same as the time needed to get to Poznań by car (and by train once the modernisation of rail line no. 3 is over), which means one half of the journey to Berlin.

Therefore, the train runs to the airport may not be less frequent than every 15 minutes (just like the current frequency of trains going to the Okecie airport). Also, taking into account the daring assumptions made by this government with respect to the importance of the new airport and the fact that it will not be supported by municipal transport services, the frequency should be higher. However, if the existing offer of agglomeration/regional trains on the Grodzisk and Sochaczew rail lines is relied on (plus the planned new trains to Ożarów), if they are put on the route via airport, then there should be no problems with ensuring such frequency.

Equally important is the attractive travel time. One must remember that today it takes only 20 minutes to get from the Okęcie Airport to Warszawa Centralna (or Śródmieście) by train. When it comes to Baranów, it will be difficult to obtain such result. Even if the agglomeration/regional trains from Grodzisk and Sochaczew rail lines are redirected to the airport, as described above, it is worth considering if shuttle trains should be launched, i.e. trains running non-stop between Warszawa Zachodnia and the airport. With the current state of infrastructure, it should take max. 20–25 minutes to get from the airport to the Warszawa Zachodnia station, or 25–30 minutes to the Warszawa Centralna



station. Certainly, the construction of the Central Transport Port should reduce that time even more.

The role of shuttle trains could be taken over by long-distance trains, on condition that a special, preferential tariff is introduced on the route from Warsaw to the airport, with ticket prices similar to ones used on agglomeration/regional trains, rather than on long-distance trains. Rolling stock would also be an important factor here: conventional cars of the old type, with folding doors and high outside stairs would, not be fit for shuttle trains.

# **Central Transport Ports + HSR North?**

Linking railways with the Central Transport Port may also involve, at some point in the future, the construction of the "KDP North", i.e. HSR line, which would link Warsaw with the TriCity via Płock, Włocławek, Toruń. Since the concept of the HSR North presented in *Rynek Kolejowy* involved modernisation of the rail lines Łódź - Kutno - Płock (so that also Łódź could obtain a fast link to the TriCity), some of the trains running between the TriCity and Warsaw could be sent from Płock via Kutno, rail line no. 3, and the Central Transport Port – and not via Modlin.

Obviously (in addition to extended travel time), it would be disadvantageous to the Modlin airport, but there are experts who claim that once the Central Transport Port is put into service, smaller airports will be hit by a crisis.



# **Energy sector**

In recent months, PSE SA (Polskie Sieci Elektroenergetyczne SA) have announced several tender proceedings, both for the construction of lines, as well as the construction and expansion of stations. The aforementioned tenders constitute part of the development plan for the transmission system in Poland until 2025. The development plan represents a sum of more than PLN 13 billion.

In October 2017, PSE SA alsoo announced its plans to build its new headquarters in Radom. The new seat of the company will be situated within the territory leased from the city council for the period of 40 years.