

Juliusz Engelhardt

Prof. dr hab.

Uniwersytet Szczeciński

Instytut Gospodarki Przestrzennej

i Geografii Społeczno-Ekonomicznej

juliusz.engelhardt@usz.edu.pl

DOI: 10.35117/A_ENG_23_06_07_08_03

Railway infrastructure of the Zachodniopomorskie Voivodship in the transport system of the country

Abstract: The first part of the article presents investment projects in the field of railway infrastructure implemented in the Zachodniopomorskie Voivodeship under the National Railway Program until 2023. While positively assessing the scope of the implemented investments, delays in the completion of some projects were pointed out. In the second part of the article, on the basis of existing documents, numerous modernization and revitalization projects, as well as construction of new sections of railway lines in Western Pomerania in the perspective of 2030-2040 are indicated. The importance of the geopolitical location of the transport infrastructure of the Zachodniopomorskie Voivodeship in the transport system of the country is also indicated.

Keywords: Transport policy; Railway infrastructure; Line and station investments

National Railway Program until 2023 – Toward Better Railways in Western Pomerania

While after Poland's full accession to the European Union, the first EU-wide comprehensive budget perspective for 2007–2013 was overall not very favorable from the perspective of the development processes of railway infrastructure in the West Pomeranian Voivodeship, particularly due to the suspension of modernization of the E-59 line towards Poznań and the modernization of the CE-59 line towards Zielona Góra, the situation significantly improved in the subsequent budget perspective for 2014–2020. In September 2015, the Council of Ministers adopted the National Railway Program until 2023 (KPK 2023) with a total value of PLN 67.5 billion [11], which, among many other initiatives, planned the undertaking of the most important and long-postulated investments in railway infrastructure in Western Pomerania. These included the modernization of the E-59 line (PLN 2.250 billion) and the CE-59 line (PLN 1 billion), modernization of railway access infrastructure to the ports in Szczecin and Świnoujście (PLN 463 million), reconstruction of the main station in Szczecin, modernization of line 210 on the West Pomeranian section Runowo Pomorskie – Szczecinek within the RPO (PLN 380 million), and modernization works on the border sections of lines 408 and 409 (PLN 80 million). The amounts in parentheses represent the initially preliminarily estimated project values.

During the implementation of KPK 2023, it was updated several times, and its total value gradually increased to PLN 75.7 billion. In a November 2016 amendment [12], an additional objective was articulated in the priorities of KPK 2023 related to improving the condition of infrastructure providing access to the port in Szczecin through preliminary works concerning the reconstruction of the Regalica Bridge in Szczecin or the construction of a new high-water bridge on the CE-59 railway line. The works were to be carried out by the Regional Water Management Authority in Szczecin and financed from the funds available to this government agency under the task titled “Reconstruction of the railway bridge at km 733.7 of the Regalica River in Szczecin to ensure a minimum clearance for icebreaking operations using icebreakers” [12].

Meanwhile, in February 2019, within another amendment to KPK 2023, the expanded list of basic projects included a second project on the E-59 line concerning the modernization of the Wronki – Słonice section with a value of PLN 1.289 billion [13]. In the next amendment to KPK 2023 in September 2019, the values of the main projects encompassing the railway infrastructure of Western Pomerania were defined as follows [14]:

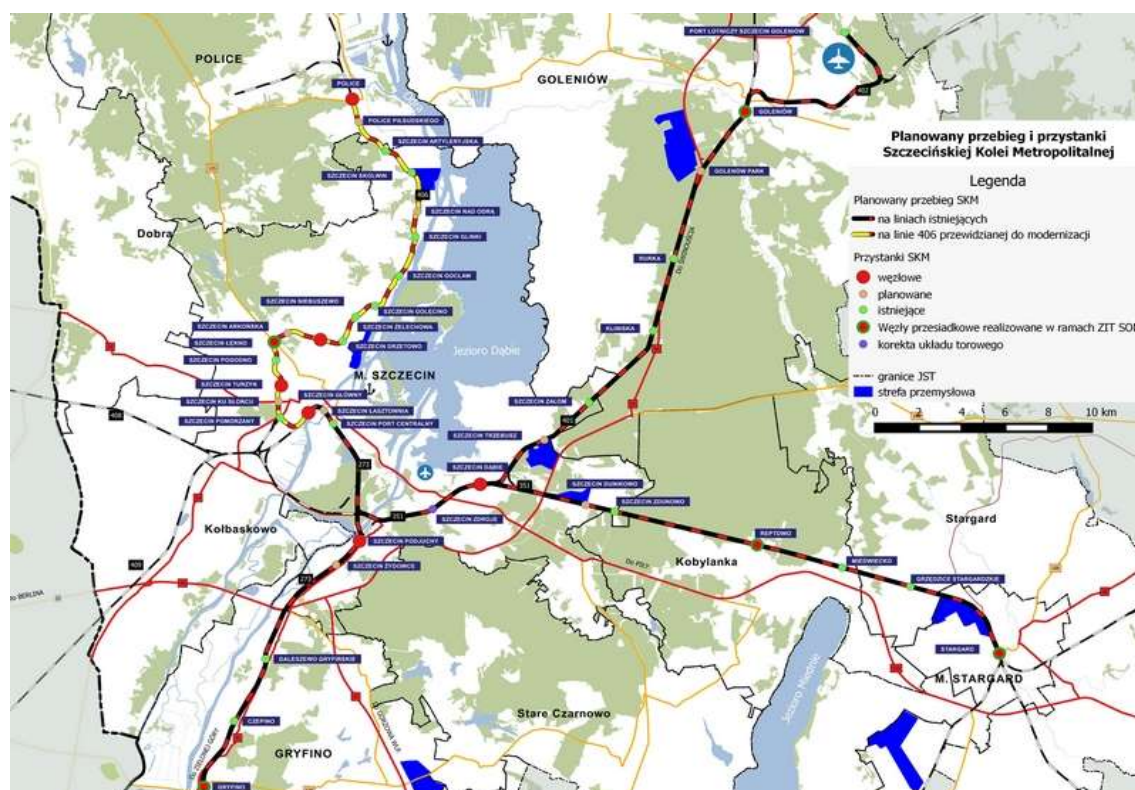
- Reconstruction of the Szczecin Main Railway Station building along with track-platform infrastructure – PLN 1.6 billion,
- Improvement of railway access to the maritime ports in Szczecin and Świnoujście – PLN 1.6 billion,
- Works on the E-59 railway line on the Poznań Główny – Szczecin Dąbie section – PLN 2.7 billion,
- Works on the E-59 railway line on the Wronki – Słonice section – PLN 1.7 billion,
- Revitalization of railway line No. 210 on the Szczecinek – Runowo Pomorskie section – PLN 178 million (RPO),
- Modernization of railway line No. 273 on the Głogów – Zielona Góra – Rzepin – Dolna Odra section – PLN 73 million (national funds),
- Works on railway lines No. 408 and 409 Szczecin Główny – State Border (Tantow) – PLN 30 million (national funds).

As can be observed, the most significant change regarding the financing of investment projects in railway infrastructure in Western Pomerania from 2016 to 2020 was the departure from the previously broadly planned modernization of the CE-59 line and the substantial increase in funding for the modernization of the E-59 line as a result of implementing a second project for this line. However, it should be noted that in January 2023, after extensive preparations, the construction of a new double-track bridge in Szczecin on the Regalica (Eastern Oder) commenced. The construction of this bridge is an investment by the State Water Management Authority (Państwowe Gospodarstwo Wodne Wody Polskie) in close cooperation with PKP Polskie Linie Kolejowe S.A. The works will be carried out within the framework of the government's Flood Protection Project in the Oder and Vistula River Basins. The investment value is approximately PLN 300 million, of which PLK S.A. allocates about PLN 140 million to this undertaking. The ongoing construction is causing significant disruptions in the operation of agglomeration passenger services on the Szczecin Główny – Gryfino route because, contrary to initial assumptions, it was not possible to maintain rail traffic over the Regalica Bridge. Trains heading towards Gryfino and further to Rzepin and Wrocław must run in the classic triangle through Szczecin Dąbie station, where the front of the train is changed, resulting in an extension of travel time on the Szczecin Główny – Gryfino route by approximately 20 minutes. The new Regalica Bridge will be an important component of the CE-59 line, ensuring access to the Szczecin railway hub, particularly to the port in Szczecin from the southern side, as the old bridge had been a critical element of capacity for rail traffic to and from the Szczecin hub on the left bank of the Oder. It should also be noted that the historic structure of this drawbridge from 1877 significantly hindered navigation in the Szczecin Waterway. The new project will increase the bridge clearance to 6.2 meters above the water surface, ensuring unobstructed passages for barges and icebreakers. Along with the construction of the new bridge, the modernization of the track systems at Szczecin Podjuchy station is planned, which should be treated as the beginning of the expanded modernization of the CE-59 Upper Oder Mainline. This modernization will enable an increase in passenger train speeds to 120 km/h and freight trains to 100 km/h, as well as the operation of freight trains up to 750 meters in length. This investment project thus remains one of the important priorities in the current EU perspective 2021–2027.

Within the Operational Program Infrastructure and Environment 2014–2020, an amount of PLN 512.2 million was allocated for co-financing a project with a total value of PLN 907.4

million titled “Construction of the Szczecin Metropolitan Railway using existing sections of railway lines No. 406, 273, 351” [15]. The aim of this project, carried out by the Association of the Szczecin Metropolitan Area, is to create a modern agglomeration railway based on existing lines, complemented by bus and tram lines performing feeder and discharge functions to and from transfer hubs [16]. The SKM’s operational area includes Szczecin, Police, Stargard, Goleniów, and Gryfino, along with adjacent municipalities, whose authorities have jointly agreed to create a network of passenger connections on existing railway lines – see Fig. 1:

- Line No. 351 on the Stargard – Szczecin Główny section,
- Line No. 273 on the Gryfino – Szczecin Główny section,
- Line No. 401 Szczecin – Goleniów with a branch to Szczecin-Goleniów Airport,
- Line No. 406 with its modernization on the Szczecin – Police section and the construction of a second track on the Szczecin Główny – Szczecin Turzyn section.



1. Szczecin Metropolitan Railway – project from 2014 – 2016 [16]

Overall, within the framework of the project, approximately 24 km of railway lines were planned to be reconstructed or modernized, the construction of integrated hubs and stations with P&R and B&R parking lots (elevators, ramps for disabled persons), and other necessary facilities (ticket machines/cashiers) [16].

During the implementation of the Szczecin Metropolitan Railway construction project, which according to the signed agreements was to be completed by September 2022, a series of difficulties arose concerning the implementation of its railway infrastructure component, and as a result, the deadline was not met.

Setting aside the merits of the disputes in this context, their final outcome is such that, with further positive progress of the project from 2023 onwards, the railway part of the investment may be completed in 2024–2025. At the end of 2022, the Association applied to CUPT (Central European Programme for Transport) for phasing the task with the scope divided into two phases: Phase I – to be carried out by December 31, 2023, on railway lines No. 273 to

Gryfino, 351 to Stargard, and 401 to Goleniów, and Phase II – works on railway line No. 406 to Police, to be completed by December 31, 2025 [10].

Phase I is funded by the Operational Program Infrastructure and Environment 2014–2020. However, to carry out the works covered by Phase II, additional funding from the European Funds for Infrastructure, Climate, Environment 2021–2027 is necessary. It should be noted that the estimated cost of constructing the SKM (Szczecin Metropolitan Railway) at the beginning of 2023 increased to approximately PLN 1.184 billion, of which the already granted co-financing through aid measures amounts to PLN 512 million, and the requested amount for Phase II is PLN 307 million. In 2022, the cost of executing the task increased by PLN 335.7 million, i.e., by almost 40% [10].

The project of modernizing the E-59 line on the Poznań – Szczecin sections, with an investment of approximately PLN 4.4 billion, is undoubtedly the largest investment in railway infrastructure in the modern history of Western Pomerania. The primary assumption of the entire line modernization is a significant improvement in the access of goods and passengers from Poznań and southern Poland, as well as southern and central Europe, to the Baltic ports in Szczecin and Świnoujście by adapting to a maximum speed of 160 km/h for passenger trains and 120 km/h for freight trains. Ultimately, the shortest travel time for a passenger train covering the 220 km route between Poznań Główny and Szczecin Główny is intended to be 1 hour and 51 minutes. According to many declarations by PKP PLK S.A., the entire project should have been completed in 2022, but this deadline was not met. The infrastructure manager cautiously speaks about the possible full completion date, while some experts estimate it could be 2024 [9].

During the project's implementation, significant disruptions occurred in the railway communication between Szczecin and Poznań and the rest of the country, particularly with Warsaw. Compared to the travel times of trains from Szczecin to Warsaw being slightly longer than 5 hours before modernization, during its execution, especially during the period of total closure of the Poznań section, the operator offered passengers 7-8 hour or even longer travel times to the capital via Rzepin, but also through Wrocław or Gdynia, often without providing a bar car in the train. This caused social irritation and disapproval towards the institutions responsible for organizing railway communication and unfriendliness from the media, despite the general understanding and support for the necessity of the investment.

The KPK 2023 project titled “Improvement of railway access to the maritime ports in Szczecin and Świnoujście” had great complementary significance regarding the linear investments being carried out, particularly on the E-59 line. In substantive terms, this project included the construction of 61 km of tracks at Szczecin Port Central Station, of which nearly 5 km were within the Szczecin Port area, modernization of 12 level crossings, installation of approximately 180 new switches along with their electric heating devices, construction of 50 km of new traction network, and centralization of traffic control by eliminating five signal boxes and building a new central signal box [17]. Meanwhile, at Świnoujście Port Station, 35 km of tracks were constructed, of which 2 km were within the Maritime Port area, 10 level crossings were modernized, 108 switches were replaced, and 34 km of new traction network was built. Additionally, as part of the centralization of traffic control, three signal boxes were eliminated, and a new central signal box was constructed [17].

It can be added that this project was executed by a single contractor within the planned deadline, which unfortunately is not often the case with linear infrastructure investments. In some projects carried out in Western Pomerania, tasks were divided into smaller assignments that, after tendering, involved different contractors, some with greater and others with lesser potential or experience. An author's hypothesis in this regard, which by early 2023 would have been difficult to verify, is that the extensive dispersion of contractors on a large investment

project significantly increases the risk of missing project completion deadlines, which undoubtedly occurred on the Poznań section of the E-59 line to Szczecin.

The revitalization project of railway line No. 210 on the Szczecinek – Runowo Pomorskie section is another important investment in the railway infrastructure of Western Pomerania, having particular significance for passenger transport relations from Szczecinek, Czaplonek, Złocieniec, and Drawsko Pomorskie to and from Szczecin. The project was carried out in two stages. Stage I, from 2017–2019, involved the restoration of double-track operation on the Szczecinek – Łubowo (25 km) section and increasing the maximum speed of passenger trains to 120 km/h, which required the reconstruction of 51 level crossings and various track works over a length of 70 km, as well as the modernization of the railway traffic control system along with the construction of a semi-automatic linear block on 5 tracks and the construction of 16 platforms fully equipped with shelters, seating areas, passenger information, and adaptations for persons with limited mobility [4]. Stage II of the revitalization of line 210, carried out in 2020–2021, concerned the Czaplonek – Złocieniec (14 km) section, with the main goal of increasing the maximum speed of passenger trains to 120 km/h and building facilities to improve passenger service quality [2].

The necessity of revitalizing line 210 arose from years of neglect in its maintenance and operation in the 1990s and 2000s, which is completely incomprehensible in the context of its significance not only for passenger transport but also for military transport. This is because it is a primary railway line serving one of the largest military training grounds in Poland, namely the Drawsko military training ground, and is intensively used by allied forces moving to this training ground by rail from the ports in Gdynia and Szczecin, as well as by the Polish Army moving units of the 12th Mechanized Division from Szczecin, the 16th Mechanized Division from Elbląg from Chojnice side, and the 7th Coastal Defense Brigade in Słupsk by rail to Drawsko Pomorskie.

Works on railway lines No. 408 and 409 Szczecin Główny – State Border (Tantow) are among the national projects of KPK 2023, which were not fully realized within the planned timeframe. The expansion of a second track and electrification of lines No. 408 and 409 leading from Szczecin towards Berlin has been discussed for many years, and optimistic plans have been introduced, but the actual execution of these projects is dragging out over time. In 2022, the tender was awarded for the preparation of documentation for this investment with a very broad scope of work, including the modernization of the entire section with the construction of a second track on previously single-track sections (railway line No. 408 Szczecin Główny – Szczecin Gumieńce and No. 409 Szczecin Gumieńce – State Border (Tantow)). The latter is to be electrified and adapted to a speed of 160 km/h for passenger trains and 120 km/h for freight trains. Szczecin Gumieńce Station will be adapted to receive and dispatch trains up to 750 meters in length [3]. The construction of grade-separated two-level crossings is planned in place of existing level crossings, including along Cukrowa Street (on railway line No. 408) and along the Przylep – Ostoja – Rajkowo – Szczecin road (on railway line No. 409), as well as three new passenger stops: Szczecin Pomorzany Południowe, Warzymice, Przeclaw, and a station in Kołbaskowo, where agglomeration trains will terminate their routes. The commencement of construction works is planned for mid-2024. Completion of works on railway line No. 409, which connects to the German side, is planned by the end of 2025 [3].

Toward Better Railways in Western Pomerania – Perspectives for 2030–2040

In 2021, the railway infrastructure manager PLK S.A. published a document titled “Investment Intentions for 2021–2030 with a Perspective to 2040,” which broadly defines all necessary investment undertakings on the Polish railway network and in the areas of individual voivodeships, as deemed necessary by the manager. Table 1 summarizes the investment intentions specified in the cited document for the West Pomeranian Voivodeship area.

Tab. 1. PLK S.A.'s Investment Intentions for the Modernization and Construction of Railway Lines in the West Pomeranian Voivodeship Area until 2040 [5]

Overregional Projects and Projects Related to CPK	Regional Projects
<ul style="list-style-type: none"> • Works on Railway Lines No. 408 and 409 on the Szczecin Główny - Szczecin Gumieńce - (State Border) Section – Expansion (TEN-T Core Network) • Works on the CE-59 Corridor on the Świnoujście - Szczecin Dąbie - Szczecin Podjuchy Section – Reconstruction (TEN-T Core Network) • Works on the CE-59 Corridor – Railway Line 273 on the Rzepin - Szczecin Podjuchy Section – Reconstruction (TEN-T Comprehensive Network) • Works on the Trójmiasto – Szczecin Transport Corridor Phase I: Railway Line No. 202 on the Słupsk – Koszalin Section – Construction (TEN-T Comprehensive Network) • Works on the Trójmiasto – Szczecin Transport Corridor Phase II: Railway Line No. 402 on the Koszalin – Goleniów Section – Construction • Works on the Trójmiasto – Szczecin Transport Corridor Phase III: Railway Line No. 202 on the Koszalin – Stargard Section – Expansion (TEN-T Comprehensive Network) • Creation of Railway Access to the Maritime Port in Police – Construction • Works on the Gorzów Wielkopolski - Szczecin Corridor Covering Lines 415, 422, and 411 – Construction • Works on Railway Lines 404 and 405 on the Piła - Szczecinek - Kołobrzeg Section – Reconstruction (CPK) • Construction of the Szczecin Dąbie - Szczecin Port Centralny Line – Construction (CPK) 	<ul style="list-style-type: none"> ○ Revitalization of Railway Line No. 210 on the Szczecinek – Runowo Pomorskie Section, Stage III – Reconstruction ○ Revitalization of Railway Line No. 405 on the Szczecinek - Voivodeship Border Section – Reconstruction ○ Works on Railway Line No. 403 Ulikowo - Piła on the Voivodeship Border Section – Ulikowo Reconstruction ○ Revitalization of Railway Line No. 410 on the Drawno - Choszczno Section – Reconstruction ○ Works on Railway Line No. 407 Wysoka Kamieńska - Kamień Pomorski Section – Reconstruction ○ Construction of New and Modernization of Existing Railway Stations in the West Pomeranian Voivodeship Area – Construction ○ Inclusion of Połczyn Zdrój Spa in Railway Services – Construction ○ Revitalization of Railway Line No. 210 Szczecinek - (Człuchów) Section – Reconstruction ○ Restoration of the Złocieniec - Drawno Connection – Construction ○ Works on Railway Line No. 418 Sławno - Darłowo with Extension to Darłówek – Expansion ○ Restoration of the Stargard – Myślibórz Connection – Construction ○ Modernization of Railway Line No. 404 Szczecinek - Białogard – Kołobrzeg Section – Reconstruction ○ Works on Railway Line No. 410 Grotniki Drawskie – Złocieniec Section – Reconstruction

Assuming that the omission in PLK S.A.'s "Investment Intentions" regarding the continuation of the project on line No. 406 (Szczecin Metropolitan Railway) is merely a formal oversight and that this project will be fully realized since it has already commenced, the remaining projects listed in the table—in the author's opinion—accurately identify all priority investment needs in the scope of railway infrastructure in Western Pomerania. This is particularly true concerning the necessity to complete the modernization and reconstruction of all sections of lines E-59, CE-59, lines No. 202, 402, 405, the construction of the Szczecin Dąbie – Szczecin Port Centralny section, and the construction of the western railway bypass of Szczecin. These projects aim to create railway access to chemical plants and the port in Police, thereby eliminating the transport of hazardous materials through the central districts of the voivodeship's capital. Similarly, the regional projects necessary for implementation in the West Pomeranian Voivodeship were aptly identified in the document. Overall, the projects indicated in PLK S.A.'s "Investment Intentions" are highly aligned with the expectations of the regional

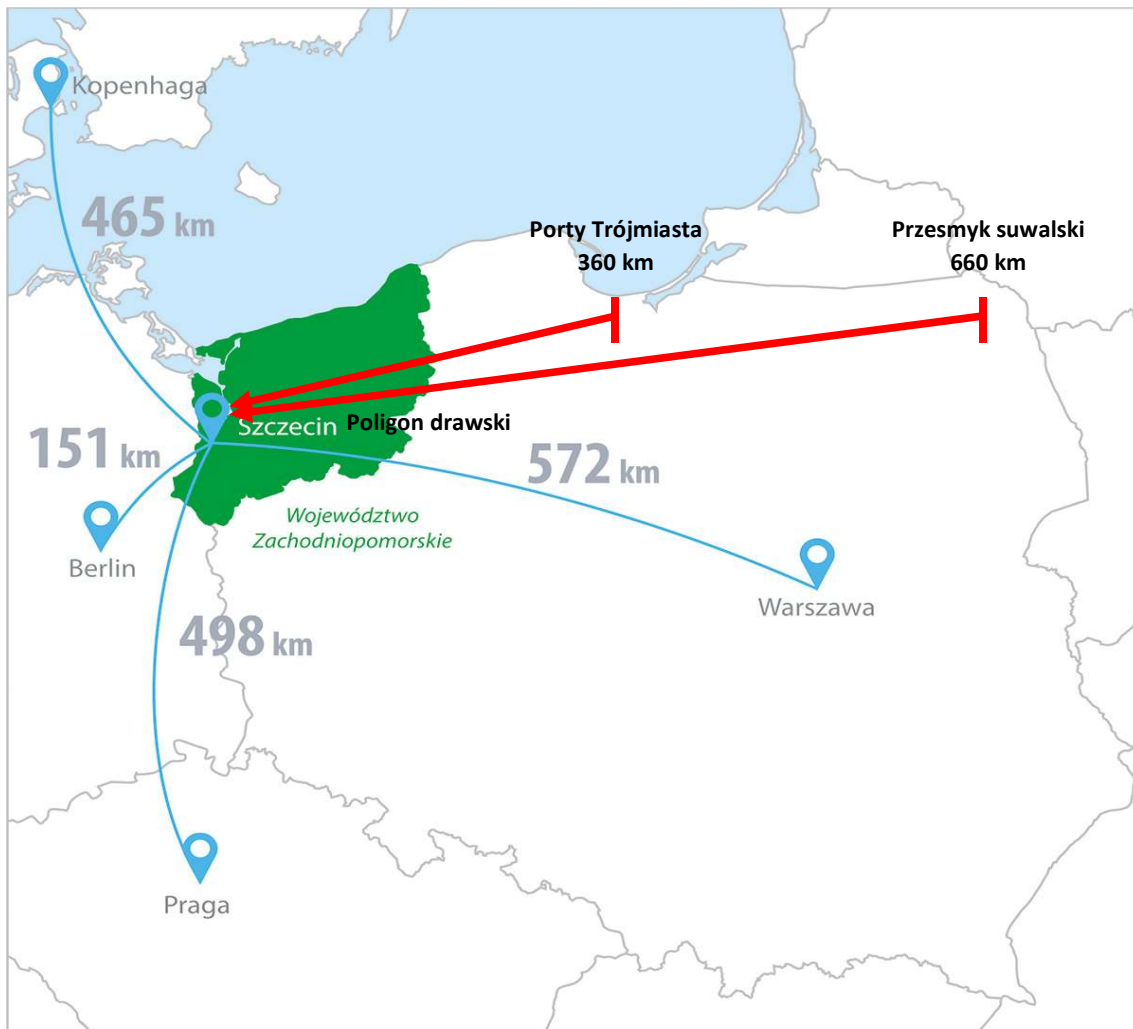
transport policy expressed in the 2021 document by the Marshal's Office in Szczecin titled "Transport Policy of the West Pomeranian Voivodeship" [6].

It should be noted that the PLK S.A. document merely highlights existing needs for the development of an official government investment program in the field of railway infrastructure. Therefore, some concepts of prospective high-speed railway network development, including the proposed construction of a new KDP line from Gorzów to Szczecin by the West Pomeranian local authorities, are not reflected in it [6]. It can be added that such a possibility—a relatively distant future scenario—would arise when, after the completion of high-speed lines to Poznań, the government would decide to expand the Polish KDP network westward, for example, to Gorzów and further to Berlin and Szczecin. Currently, such expectations are unlikely, even in the form of non-binding declarations. Regarding this railway connection, it should be emphasized that the PLK S.A. document recognizes the need to build it by addressing the missing sections of the conventional line No. 415 along with the revitalization of lines No. 422 and 411, thereby including it in the list of overregional projects [5].

In the cited document by the West Pomeranian Voivodeship's local government, there is an intention to expand and partially revitalize the Coastal Narrow-Gauge Railway [6], which is undoubtedly a tourist attraction on its currently active section from Pogorzelica to Trzęsacz to Gryfice. However, such projects remain outside the scope of PLK S.A.'s interests. It therefore seems that narrow-gauge railways will continue to be the domain of local authorities, who will undertake the modernization of these historic lines independently. In the discussed case, the local authorities, however, point to an interesting alternative that could become the foundation for the concept of building a new, relatively short railway line directly connecting the Szczecin coastal area of the Baltic Sea in the future. This refers to the single-track electrified line No. 407 from Wysoka Kamieńska to Kamień Pomorski, which the document proposes to extend to Dziwnówko (8 km) and then to build a new standard-gauge line from Dziwnówko to Trzebiatów to connect with line 402 [6]. In this way, the entire strip along the coast from Dziwnówko and Kamień Pomorski through Kołobrzeg to Koszalin would gain a direct railway connection in the future, serving as an alternative to the increased summer road traffic.

Recap and Conclusions

The processes of modernizing the railway infrastructure of the West Pomeranian Voivodeship, which began on a small scale concerning regional lines after Poland's accession to the European Union and subsequently expanded to include the main railway lines in the voivodeship—E-59, CE-59, No. 202—as well as access infrastructure to the ports in Szczecin and Świnoujście, along with a range of other projects under the National Railway Program until 2023, should be completed in the coming years. This is indicated both in PLK S.A.'s document "Investment Intentions for 2021–2030 with a Perspective to 2040" [5] and in the 2021 document by the Marshal's Office in Szczecin titled "Transport Policy of the West Pomeranian Voivodeship" [6]. Both documents indicate that in the current years, it is necessary to undertake not only the modernization and revitalization of railway lines, which should be completed as quickly as possible, but also, in some cases, the construction of additional tracks (e.g., lines No. 202, 402, 408) as well as the construction of new sections of railway lines, both overregional and regional in nature.



2. West Pomeranian Voivodeship – geopolitical location [14]

Modernizations of the Main Railway Lines in Western Pomerania, along with the modernization of railway access infrastructure to the ports in Szczecin and Świnoujście, although delayed by at least a decade relative to the country's actual investment capabilities, are currently gaining particularly significant importance in the context of Russia's military aggression against Ukraine. This importance is not only from a socio-economic perspective, generating obvious benefits but also from a geopolitical standpoint – see Fig. 2.

In the light of a hypothetical armed conflict between NATO countries—Poland and the Baltic States—and Russia, which cannot be entirely ruled out due to Russia's aggressive stance and neo-imperial policies, the Russian Kaliningrad Oblast poses a significant military threat. This is a Russian territory on the Baltic Sea that constitutes the westernmost outpost towards Europe with a high degree of militarization, particularly saturated with military infrastructure, including nuclear weapons installations [1,7]. In the event of a hypothetical conflict with Russia, the ports of the Tricity (Gdynia and Gdańsk) are geographically located within the immediate threat zone. In this situation, the defensive significance of the ports in Szczecin and Świnoujście, which are 360 km away from the Tricity, as well as smaller full-sea ports in Police and Kołobrzeg, becomes even more crucial.

It goes without saying that these West Pomeranian ports, in the event of a hypothetical conflict, could handle not only the country's normal commercial turnover but also, to a large extent, allied military forces. Utilizing, among others, Railway Line No. 210 as well as the A6

highway, the S6 express road, and the S3 and S10 roads, these forces could move eastward toward the presumed concentration area in the vicinity of the Drawsko training ground.

Source materials

- [1] J. Ciślak, Armia rosyjska – armia agresora: Wojsko w Obwodzie Kaliningradzkim (raport) – www.defence24.pl ((10.04.2023.))
- [2] J. Madrjas, NDI wraca na linię 210 – www.rynek-kolejowy.pl (30.05.2020.).
- [3] J. Madrjas, Startują przygotowania do elektryfikacji linii ze Szczecina do Berlina – www.rynek-kolejowy.pl (05.08.2022.).
- [4] NDI: Malownicza linia 210 już użytkowana – www.rynek-kolejowy.pl (30.10.2019.).
- [5] PKP POLSKIE LINIE KOLEJOWE S.A. – zamierzenia inwestycyjne na lata 2021-2030 z perspektywą do 2040 roku, Warszawa 2021 r.
- [6] Polityka transportowa Województwa Zachodniopomorskiego, Urząd Marszałkowski Województwa Zachodniopomorskiego, Szczecin 2021 r. – www.wzp.pl (01.03.2023.).
- [7] Potencjał militarny Federacji Rosyjskiej w obwodzie kaliningradzkim, komentarze Instytutu Europy Środkowej – www.ies.lublin.pl ((02.04.2023.))
- [8] Region w liczbach – www.coi.wzp.pl (01.03.2023)
- [9] J. Rösler, Od grudnia z Poznania do Szczecina jeździmy... dłużej – www.rynek-kolejowy.pl (24.01.2023.).
- [10] Szczecińska Kolej Metropolitalna donikąd – www.nik.gov.pl (30.01.2023.).
- [11] Uchwała nr 162/2015 Rady Ministrów z dnia 15 września 2015 r. w sprawie ustanowienia Krajowego Programu Kolejowego do 2023 roku wraz z załącznikiem – www.mi.gov.pl (01.02.2016.).
- [12] Uchwała Rady Ministrów nr 144/2016 dnia 23 listopada 2016 r. zmieniająca uchwałę w sprawie ustanowienia Krajowego Programu Kolejowego do 2023 roku wraz z załącznikiem – www.mi.gov.pl (16.01.2017.).
- [13] Uchwała nr 17/2019 Rady Ministrów z dnia 19 lutego 2019 r. zmieniająca uchwałę w sprawie ustanowienia Krajowego Programu Kolejowego do 2023 roku – www.mi.gov.pl (05.05.2019.).
- [14] Uchwała nr 110/2019 Rady Ministrów z dnia 17 września 2019 r. zmieniająca uchwałę w sprawie ustanowienia Krajowego Programu Kolejowego do 2023 roku – www.mi.gov.pl (10.01.2020.).
- [15] www.mapadotacji.gov.pl (30.03.2023.).
- [16] www.skm.szczecin.pl (15.12.2021.).
- [17] Zwiększają się możliwości linii kolejowych do portów w Szczecinie i Świnoujściu – www.rynek-kolejowy.pl (27.07.2022.).