Bydgoszcz in TEN-T core network COMPENDIUM



New Amber Trail Association

Preface

Strategic goal: Bydgoszcz in the TEN-T core network

The definition of the goal is what allows us to move from theoretical considerations about the future to their practical implementation. Therefore, if we want to implement the dreams already present in the public debate of Bydgoszcz as an important multimodal hub to put into practice - we must begin to set goals that strive beyond divisions, so that in the event of changes at the helm, the main principle will not change. Such a goal is certainly building a strong position in the Trans-European TEN-T Transport Network.

The European Commission is planning a revision of the TEN-T network for 2023, which will be preceded by extensive consultations. Does Bydgoszcz has a chance to be promoted to the core network during this revision? It will mostly depend on whether we are aware of this opportunity and whether we take sufficient measures in this direction.

What is at stake is an acceleration in the development of Bydgoszcz by as much as a dozen or so years, because the UE wants to implement a core network by 2030, and a comprehensive one by 2050. It follows, therefore, that the main financial support in the next decade will be directed to the core network.

Opportunities

The history of Bydgoszcz has always been associated with international communication routes. Probably already 2 thousand, years ago, the Amber Trail ran through Bydgoszcz. Taking a closer look at modern times, the 18th century becomes crucial, into which Bydgoszcz entered, devastated by wars, but it came out with a new development impulse, which was the construction of the Bydgoszcz Canal - a waterway connecting the Vistula and the Oder. Sea exports played a special role, for the development of which in the 1930s the Coal Main Line running through Bydgoszcz was established, to connect the port of Gdynia with Silesia. To this day, the Coal Main Line is still an important route for rail freight exchange in Europe, being also an element of the trans-European transport network TEN-T. In the Second Polish Republic, Bydgoszcz was the main base for the seaport in Gdynia, which was a sea window to the world not only for Poles, but also Czechs, Slovaks and Hungarians.

However, let's look to the future, in which the development of the logistics hub around Bydgoszcz may be another opportunity not only for the city, but also for the Kuyavian-Pomeranian Voivodeship. Bydgoszcz is perfectly located to play the role of an external port for seaports in Gdansk, Gdynia and the planned one in Elblag. The future of European transport lies in the development of intermodality and multimodality, which can bring cost optimization and environmental effects. It is cheaper to send one large train from Bydgoszcz,

with containers from Gdańsk and Gdynia, to the destination point than to send separate trains from each of these ports. The development of rail and road infrastructure may also contribute to the servicing of seaports in Szczecin and Świnoujście by the Bydgoszcz node.

The EU White Paper assumes an aspiration for a model in which freight transport will be used typically for transport to destinations, after prior transhipment by rail or waterway - the golden mean is the use of road transport on the last 350 km of delivery. Due to the location in central Poland, it will be possible to service almost the entire territory of Poland by road from Bydgoszcz.

Going back to the tradition of the Amber Road and the role played by the Coal Main Line in the 1930s, the logistics hub in Bydgoszcz can also play an important international role, thanks to the Gdynia-Karlskrona maritime highway initiative, extending the Baltic-Adriatic corridor to Scandinavia. Better communication with the Budapest junction will in turn open the way to ports on the Mediterranean Sea, Aegean Sea and the Black Sea, and further to Asian markets.



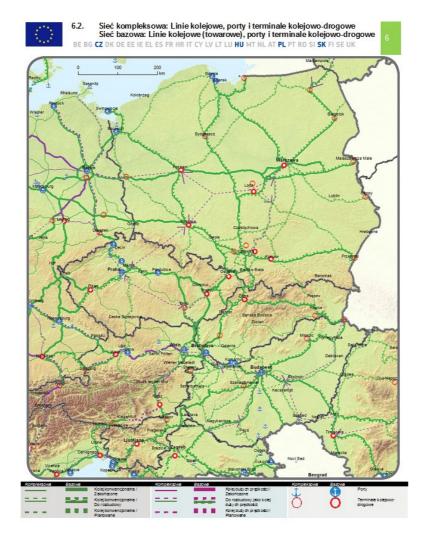
1. Baltic Link Map

Current conditions

The TEN-T network was designated by the Regulation of the European Parliament and of the Council No. 1315/2013 of December 11, 2013. The regulation has established nodes within the TEN-T network as well as key rail, road, river / sea and air routes. Bydgoszcz has been recognized as a rail-road junction of the core network and an air hub of the core network.

The railway line of the core network connecting Silesia with Gdańsk and Gdynia (railway line No. 131) and the line of the comprehensive network (No. 201) from Nowa Wieś Wielka through Kościerzyna to Gdynia run through Bydgoszcz. This line may play a special role in freight transport, because the aforementioned line No. 131 in the Polish transport system is dedicated mainly to passenger transport, as an important route: Tricity - Bydgoszcz - Poznań - Berlin.

The TEN-T comprehensive network will also include the S-5 expressway from the motorway junction in Nowe Marzy (with the A1 motorway), via Bydgoszcz and Poznań to Wrocław (junction with the A4 motorway). The TEN-T comprehensive network will also include the S-10 expressway from the Warsaw bypass via Toruń (intersection with the A1 motorway junction) to Bydgoszcz and Szczecin.





Pic.3. TEN-T road network

Key projects and postulates

Bydgoszcz as a TEN-T rail-road-air-river core network node

Regulation 1315/2013 established Bydgoszcz as a rail-road and air junction of the TEN-T comprehensive network. However, this node has the potential for being a core network node, also playing a future role in inland navigation, the development of which is indicated by the priorities of the Polish government and the ratification of the AGN convention in 2017.

In the Strategy for the Development of the Kuyavian-Pomeranian Voivodeship 2030+, adopted on 21 December 2020, a task related to the construction of the "Bydgoszcz Logistic Node" was included. The key investment project will be the creation of a road and rail transhipment terminal in Emilianów near Bydgoszcz - in September 2019, an agreement was

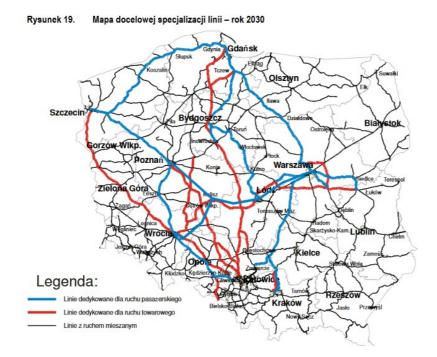
concluded in Brzoza to create a transshipment infrastructure, which was signed by: PKP SA, PKP CARGO, Gdynia Sea Port, Bydgoszcz Industrial and Technological Park and the National Center Support for Agriculture. The presence of the agricultural agency here is not accidental, because the use of the infrastructure in Emilianów for international export of Polish food is seriously considered. Emilianowo is located next to the railway line No. 201 (former Coal Main Line) and the planned junction of the S-10 expressway.

The second element of the Logistics Hub in Bydgoszcz is the concept of a river port on the Vistula River in Bydgoszcz and Solec Kujawski, developed under the EMMA (Interreg) project. This infrastructure, after the modernization of the E-40 waterway, may complement the potential of Emilianów.

Railway line 201 in the core network

Railway line no. 201 plays a key role in the TEN-T Baltic-Adriatic corridor, but has only the rank of a secondary node of a comprehensive network. In Polish railway documents, line no. 201 is indicated as being dedicated to serving primarily freight transport, while the status of line no. 131 north of Nowa Wieś Wielka is dedicated primarily to passenger transport. Line No. 201 starts at the port in Gdynia, while in Łęg it crosses the line No. 203 running from Tczew, which in turn is dedicated to servicing the port in Gdańsk and the planned one in Elbląg. Line no. 201 runs through Bydgoszcz in the vicinity of industrial areas, forming the so-called freight bypass of Bydgoszcz. Line no. 201 ends in Nowa Wieś Wielka, where it connects to line no. 131 (which has the status of an element of the TEN-T core network). PKP PLK is currently preparing to add another 2 tracks (altogether there will be 4) on the section from Nowa Wieś Wielka, which will enable separation of freight and passenger traffic on this section.

On line 201, with the help of European Union funds, a second track will soon be built between Maksymilianowo and Gdańsk Osowa, and a third track will be constructed from Gdańsk Osowa to Gdynia Główna. Another important investment will be the electrification of the entire line, which is expected to set the speed standard for freight trains at 120 km/h.



Pic. 4. Masterplan for Rail Transport to 2030 /government document

S-5 expressway in the core network

The construction of the S-5 expressway is nearing completion - the Bydgoszcz bypass has recently been put into operation. The road has been included in the TEN-T network in a comprehensive status. However, considering that it will be the main road linking the ports of Gdańsk and Gdynia with other TEN-T nodes, such as Bydgoszcz, Poznań and Wrocław, it should be granted the status of the core network road.

There are plans to extend the road to Olsztyn, from where it will be connected by the S-7 road with Elblag (planned seaport) and a further network of expressways with the Baltic States. This creates the potential for the S-5 road in the North Sea-Baltic TEN-T corridor to play an important role.

In the south, the S-5 express road connects with the S-8 road and the A1 motorway near Wrocław. The Polish government plans to build the S-3 road to the border with the Czech Republic by 2023, while the Czech authorities plan to extend it to the D11 motorway. The planned investments would be in line with the idea of the Baltic-Adriatic TEN-T corridor. From the logistic point of view, it will be an attractive connection of Prague with the ports in Gdańsk and Gdynia.

E-40 waterway in the TEN-T network

In 2017, the Polish government, by ratifying the AGN Convention, pledged to achieve at least Class IV navigability status on the E-40 waterway, which would allow the reactivation of inland navigation. Currently, the E-40 waterway is not included in the TEN-T network at all. Granting it the status of at least a node of the comprehensive network would make it possible to intensify development activities.

Railway line no.18, 203 and 351 in the TEN-T network

The Logistics Hub in Bydgoszcz is also attractively located from the point of view of the ports of Szczecin and Świnoujście. It seems that the logistic cooperation of the Bydgoszcz hub with these ports will naturally increase, but the problem is the worse condition of the infrastructure. A large section of the railway line is not electrified and is therefore dominated by diesel rolling stock. The Polish government is currently carrying out studies on possible electrification and modernisation of the route. However, if this transport corridor is to be developed it should be included in the TEN-T network. Otherwise transport between Szczecin, Świnoujście and Bydgoszcz will be carried out by less environmentally friendly road transport. The S-10 expressway planned between Bydgoszcz and Szczecin will have the status of a TEN-T comprehensive network road according to Regulation 1315/2013.

The Budapest node on the Baltic-Adriatic Corridor

The Hungarian capital Budapest was established in Regulation 1315/2013 as a node of the TEN-T core network, rail-road river and air. Budapest is located in the TEN-T rail corridor RFC7, also called "Oriental", which connects German seaports with the Mediterranean Sea, Aegean Sea and the Black Sea via Romanian and Greek ports. The importance of the Budapest hub will also increase with the development of the investment supported by the Chinese government - the high-speed railway Budapest - Sarajevo, whose intention is to quickly connect the Hungarian capital with the port of Piraeus in Greece, which is dominated by Chinese capital.



The extension of the Baltic - Adriatic corridor, including RFC5 from the Budapest junction would be beneficial both for Budapest, due to greater openness to Polish ports, but also for Polish logistics, due to better connections with the port in Piraeus or land routes through Turkey towards Asian markets.

Gdynia-Karlskrona

In 2018, efforts to create the Gdynia-Karlskrona motorway of the sea, which would extend the Baltic-Adriatic corridor to Scandinavia, were officially inaugurated. The idea is based on building efficient ferry transhipments in Gdynia and Karlskrona. Currently the motorway of the sea is not included in the TEN-T network, but in addition to the support of Polish organisations operating in the TEN-T network such as the Association of Polish Regions of the Baltic-Adriatic Corridor and the Association of Amber Motorway Cities (A1), the idea is supported by the Swedish organisation Baltic - Link.

Critical issues

- Six rail and two road cross-border sections require particular attention with regard to their modernisation and upgrading to comply with all EU requirements
- 2 missing links at the Alpine crossings in Austria (Semmering, Koralm)
- National bottlenecks

 (in particular railway network
 in PL and SI; road network in PL, CZ, SK)

