



MINISTRY
of INFRASTRUCTURE and CONSTRUCTION

Rail Baltica – E75

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According to the Regulation (EU) No 1316/2013 Rail Baltica is part of Core Network Corridor North Sea – Baltic Sea

Rail Baltica is a key railway transport chain of mixed traffic

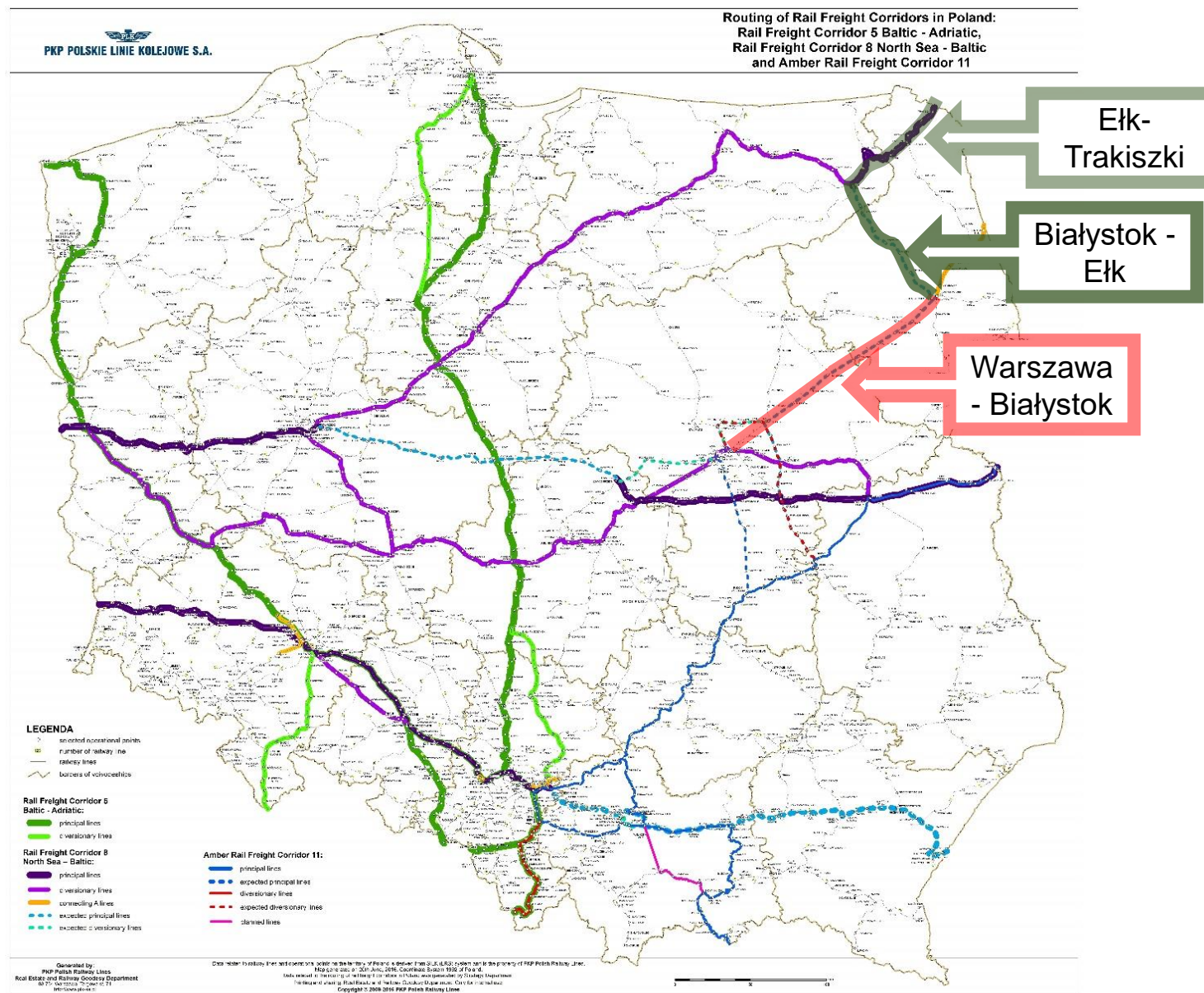
The Rail Baltica Line was mentioned in the Action Plan of CNC North Sea - Baltic Sea (Work Plan) among the most important issues for the smooth functioning of the entire corridor and using its potential



Rail Baltica in the context of rail freight corridor North Sea – Baltic



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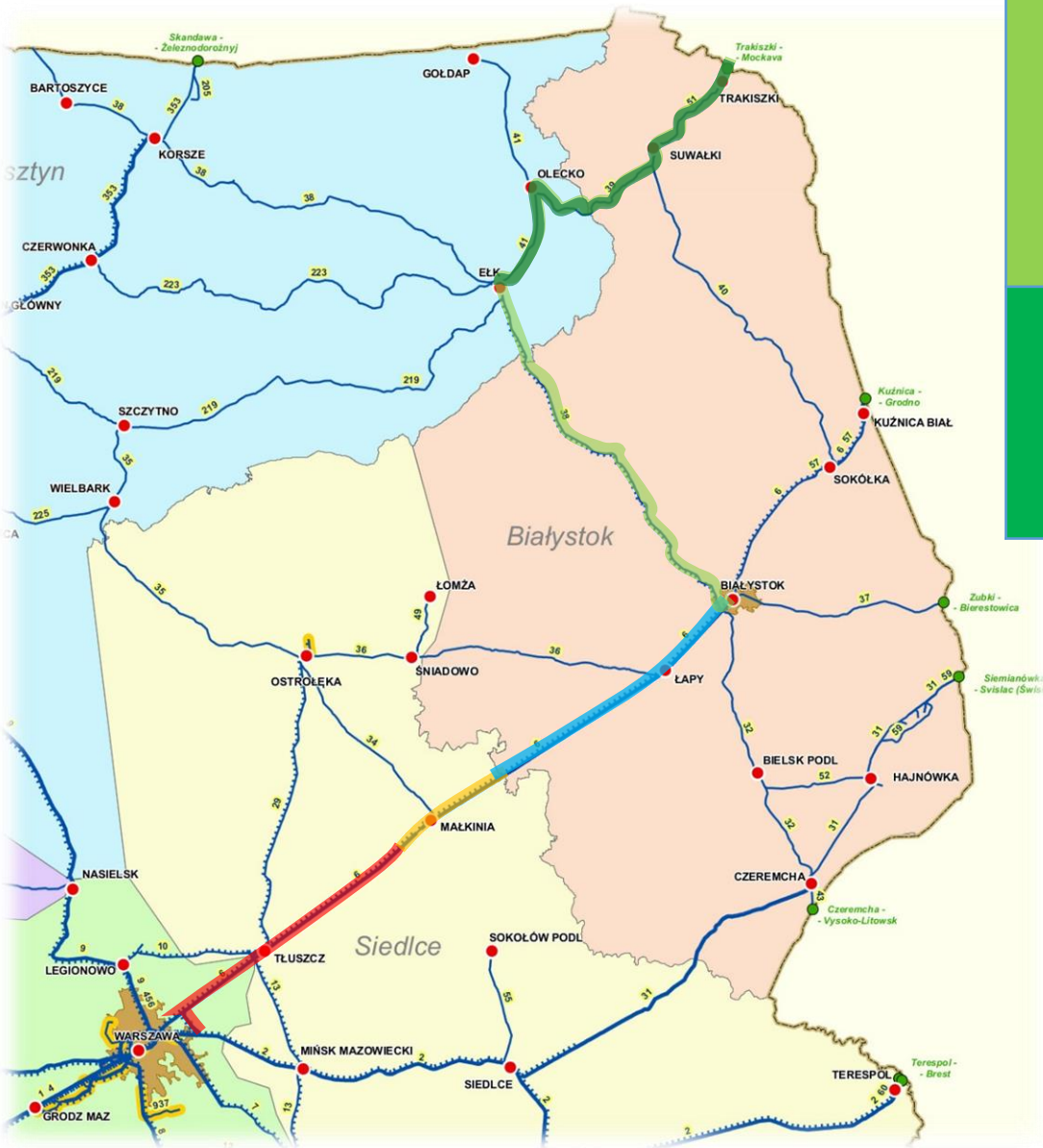


Progress of works on the Rail Baltica line



Modernisation of the railway line E 75 Rail Baltica Warszawa – Białystok – Lithuanian border, stage I, section Warszawa Rembertów – Zielonka – Tłuszcz (Sadowne) Phase II	Ongoing (end of works – May 2017) Approx. EUR 325 m	Designing and installation of ETCS on the section Warszawa Rembertów – Białystok planned for the years 2021 – 2023.
Works on the section Sadowne – Czyżew of the E 75 line along with other works on the Warszawa Rembertów – Sadowne section	Preparation of detailed design is ongoing. Realisation of works planned for the years 2017-2020. Approx. EUR 240 m	
Works on the section Czyżew – Białystok of the E 75 line	Project documentation is in the process of preparation. Execution of works planned for the years 2017-2021. Approx. EUR 393 m	

Progress of works on the Rail Baltica line



<p>Works on the railway line E 75 on the section Białystok – Suwałki – Trakiszki (state border), stage I section Białystok - Elk</p>	<p>Preparation of results of feasibility study is completed. An application for funding under the third CEF call has been submitted on 6th of February 2017. Execution of works planned for the years 2020 – 2023.</p> <p>Approx. EUR 395 m</p>	<p>The ERTMS/ETCS installation within the project.</p>
<p>Works on the railway line on the section Białystok – Suwałki – Trakiszki (state border), Elk – Trakiszki section</p>	<p>Feasibility study is completed (120/140 kph variant). Application for EU funds is planned.</p> <p>Approx. EUR 420-600 m</p>	<p>Realisation of ERTMS/ETCS installation will be analysed in addition to the feasibility study.</p>

Altogether approx.
EUR 1.76 – 1.94 bn

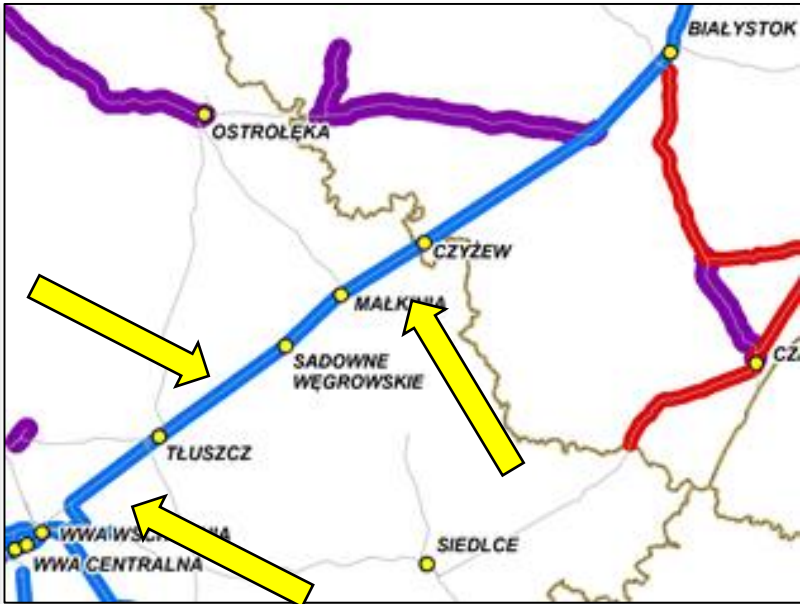


Basic parameters (currently):

- Double track line, electrified;
- Length of the section **66 km (Warszawa – Sadowne)**, **36 km (Sadowne – Czyżew)**;
- Maximum speed:

Speed	% of length (passenger trains)	Speed	% of length (freight trains)
		120	
160	59	100	7
120	41	80	34

- Axle load **221 kN**.



CHARACTERISTICS OF THE INVESTMENT

Continuation of works on Warszawa – Białystok line. The works began in the EU 2007 – 2013 financial perspective.

End of works: May 2017 (Warszawa-Sadowne), 2020 (Sadowne-Czyżew)

Most important problems affecting the section:

- Technical condition of track superstructure, making it impossible to raise the speed;
- Technical condition of engineering structures.

Investment aims at modernization and includes:

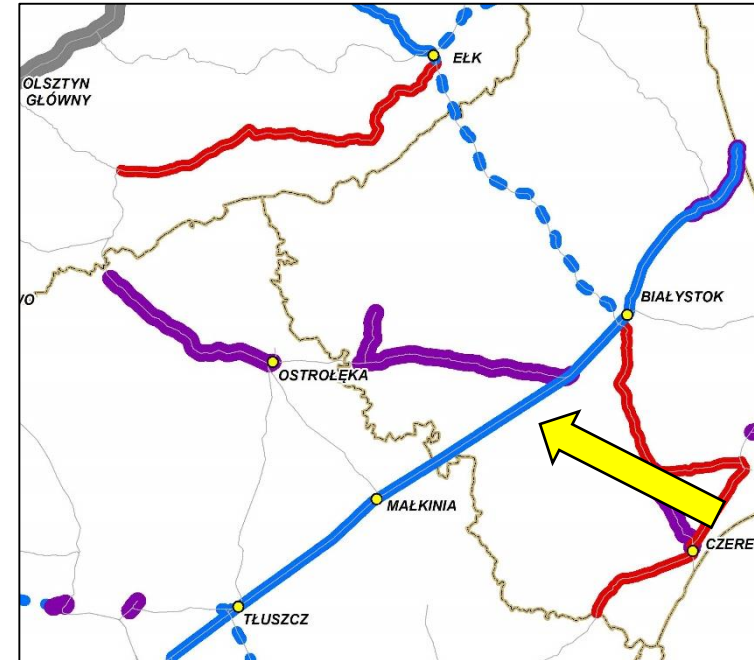
- Raising the speed to **160 kph** for passenger trains and **120 kph** for freight trains;
- Adjusting traffic control systems for cooperation with ERTMS/ETCS;
- Reconstruction of track superstructure and track substructure, engineering structures and catenary;
- Construction of a new bridge over Bug river and the second track on Prostyn Bug – Małkinia section;
- The project: *Works on E 75 at Sadowne – Czyżew section, along with other works at Warszawa Rembertów – Sadowne section* was positively evaluated in the first call of CEF and the Grant Agreement was signed.

Basic parameters (currently):

- Double track line, electrified;
- Length of the section **72 km**;
- Maximum speed:

Speed	% of length
120	66
100	34

- Axle load **205 kN**.



CHARACTERISTICS OF THE INVESTMENT

Most important problems affecting the section:

- Technical condition of track superstructure, making it impossible to raise the speed;
- Axle load below 221 kN;
- No possibility to handle trains with a length of 740 m;
- Technical condition of engineering structures.

Investment aims at modernization and includes:

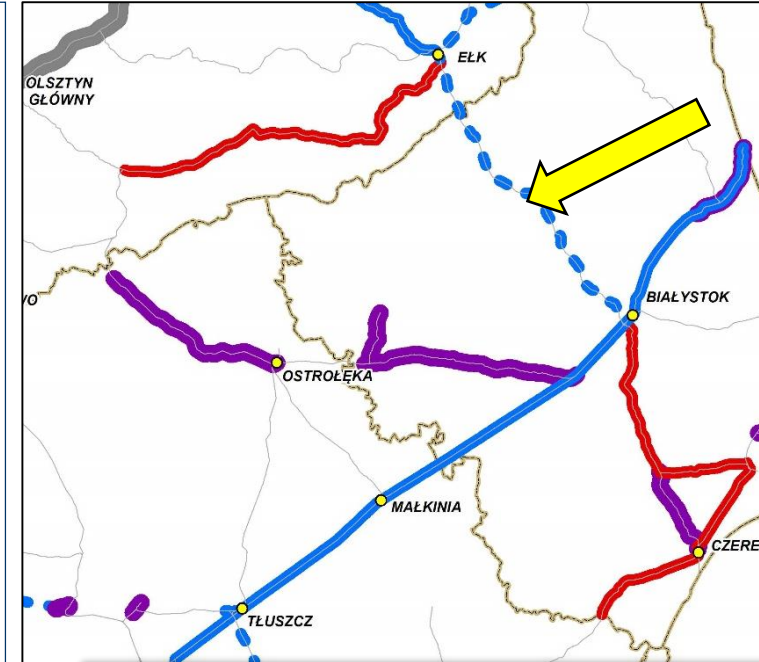
- Raising the speed to 160 kph for passenger trains and 120 kph for freight trains;
- Increasing axle load limit to **221 kN**;
- The project was positively evaluated in the second call of CEF and the Grant Agreement was signed.
- **End of works: 2021**

Basic parameters (currently):

- Line electrified, single track;
- Length of the section ca. **105 km**;
- Maximum speed:

Speed	% of length (passenger trains)	Speed	% of length (freight trains)
120	15	100	18
100	85	100	82

- Local speed limits to **20 – 50 km/h**;
- Axle load **205 - 206 kN (221 kN on line no 38)**.



CHARACTERISTICS OF THE INVESTMENT

Most important problems affecting the section:

- Technical condition of track superstructure;
- Technical condition of engineering structures.

Investment aims at modernization and includes:

- Construction of the second track at Białystok – Elk section (on line no 38);
- Adjusting technical infrastructure to the speed of **160 kph** for passenger traffic and to **100 kph** for freight traffic;
- Increasing axle load limits to **221 kN**;
- Enabling operation of trains with a length of **740 m**;
- Fulfilling demands indicated in Directive 2008/57/EC of the European Parliament and of the Council of 17 June 2008 on the interoperability of the rail system within the Community, along with regulations and decisions of the EC;
- Increasing the efficiency of traffic control system.

The application under the third CEF call has been submitted (submission date: 6.02.2017). **End of works: 2023**

Evolution of analysed variants

Speed

160 km/h



120/140 km/h

Number of tracks

2



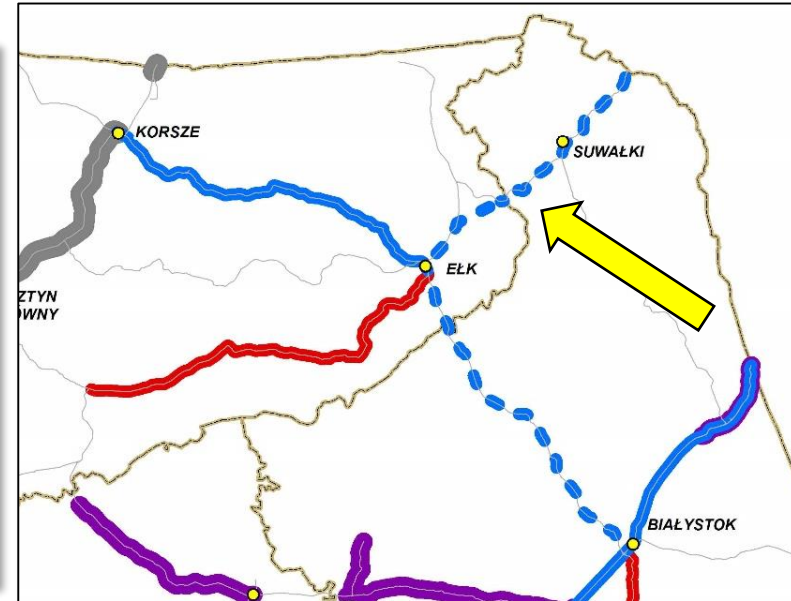
1 or 2 tracks on
different parts

Basic parameters (currently):

- Line not electrified, single track;
- Length of the section approx. **100 km**;
- Maximum speed:

Speed	% of length (bus-trains)	Speed	% length (passenger and freight trains)
80	28%	80	26%
60	35%	60	34%
50	16%	50	17%
40	21%	40	2%
30	–	30	21%

- Axle load **205 kN**.



CHARACTERISTICS OF THE INVESTMENT

Most important problems affecting the section:

- Technical condition of track superstructure and of engineering structures, which prevents from raising the speed;
- Low axle load.

Investment aims at modernization and includes:

- Construction of another track on Elk – Trakiszki section and construction of Olecko and Suwałki bypasses;
- Electrification;
- Adjusting technical infrastructure to the speed of **120/140 kph** for passenger traffic and to **100 kph** for freight traffic or adjustment to $v = 160$ kph which would require a new pre-design documentation;
- Enabling operation of trains with a length of **740 m**;
- Fulfilling demands indicated in Directive 2008/57/EC of the European Parliament and of the Council of 17 June 2008 on the interoperability of the rail system within the Community, along with regulations and decisions of the EC;
- Increasing the efficiency of traffic control system.

EU funding is needed.

Works on railway line E 75 – section Ełk – Trakiszki

v=140 km/h vs. v=160 km/h variants



Parameter	Variant v=140 km/h	Variant v=160 km/h
Travel time Warszawa Centralna – Trakiszki	approx. 193 min	approx. 181 min
Travel time Ełk – Trakiszki	approx. 50 min	approx. 38 min
Cost Ełk - Trakiszki	approx. PLN 1.8 bn EUR 420 m	approx. PLN 2.6 bn EUR 600 m
Announcement of tendering on feasibility study	IIIQ 2014	IIQ 2017
Possible decision on variant in the feasibility study	IIIQ 2016 / IQ 2017 (after correction)	IIIQ 2018
Environmental Impact Assessment	IIQ 2015 – IIQ 2016	IIIQ 2017 – IVQ 2018
Environmental decision	IVQ 2018	IQ 2020
Construction projects	IVQ 2019	IIQ 2021
Completion of construction works	IIQ 2023	IVQ 2024
Start of use along with ERTMS / ETCS	IIQ 2024	IVQ 2025
Risks	<ul style="list-style-type: none"> • No CEF funding • Low risk of protests at the stage of obtaining administrative decisions 	<ul style="list-style-type: none"> • No CEF funding • High risk of protests at the stage of obtaining administrative decisions • Long time for land acquisition

Rail Baltica on the Białystok – Suwałki – Trakiszki – State Border section adjoins to or crosses the following protected areas:

- **Wigierski National Park:**
railway line 51 on a section Suwałki–state border – the line neighbours the border's buffer zone.
- **Biebrzański National Park:**
line is adjacent to the border of BPN on 1,3 km (total length); crosses the BPN on a section of 1,35 km.
- **Natura 2000 Dolina Biebrzy PLH200008:**
line crosses the area on a section of 12,500 km.
- **Natura 2000 Ostoja Biebrzańska PLB200006:**
line crosses the area on a section of 19,625 km.
- **Natura 2000 Ostoja Augustowska PLH200005:**
line crosses the area on a section of approx. 0,9 km.
- **Natura 2000 Puszcza Augustowska PLB200002:**
line crosses the area on a section of approx. 0,9 km.



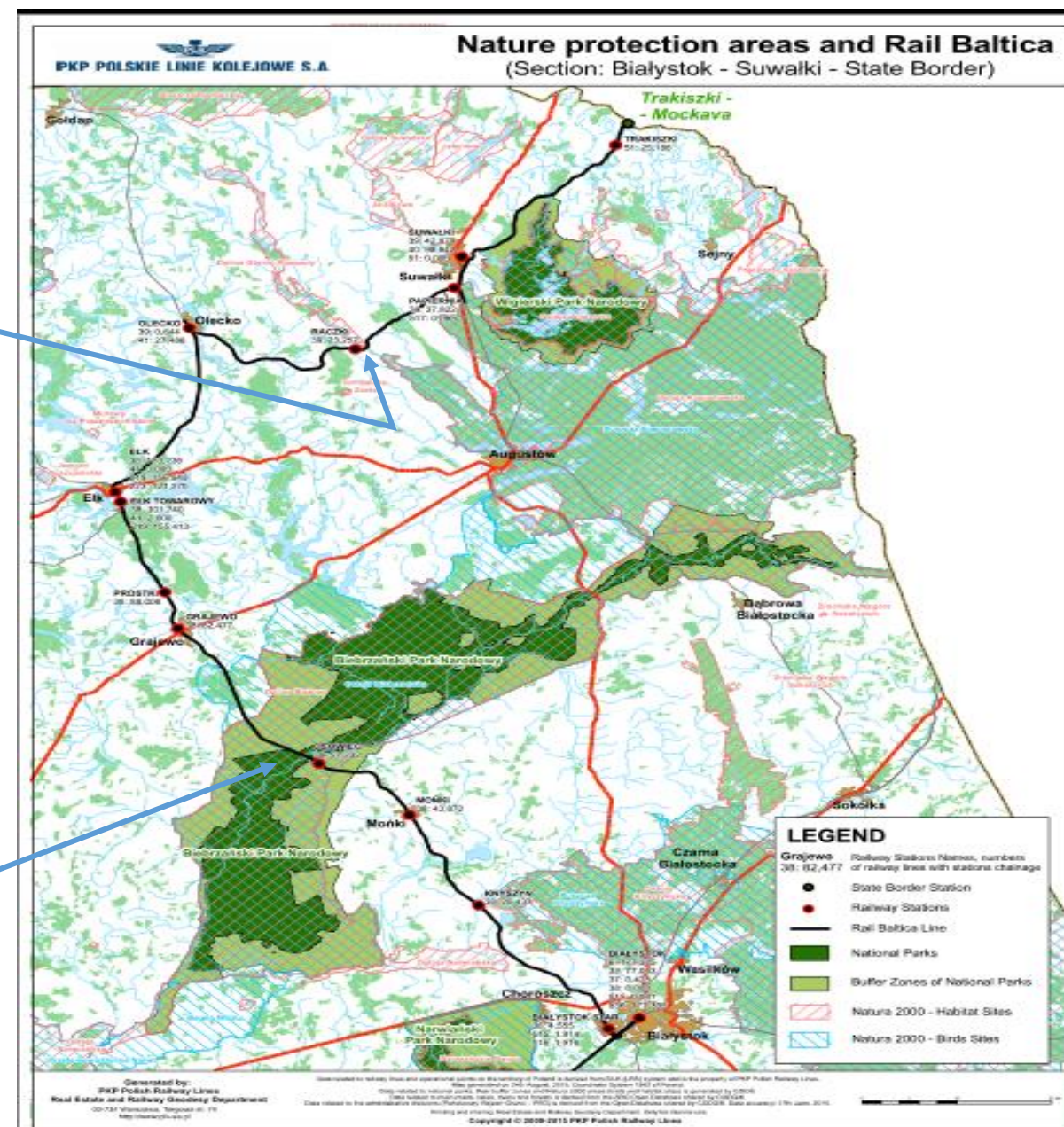
The line runs in direct vicinity of Natura 2000 areas:
Ostoja Narwiańska, Dolina Górnej Rospudy

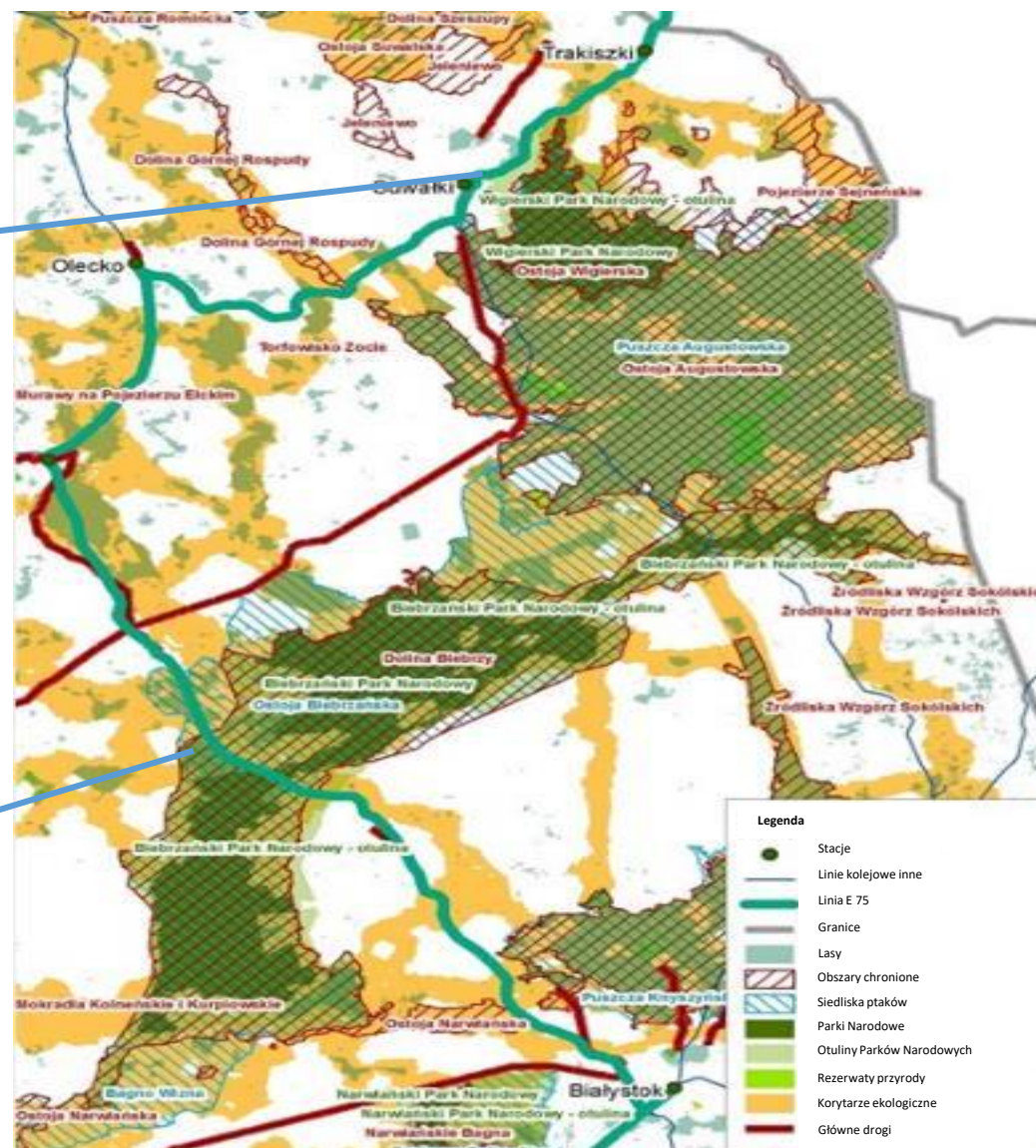


Bridge on km 24,475 LK 39



Biebrzański National Park



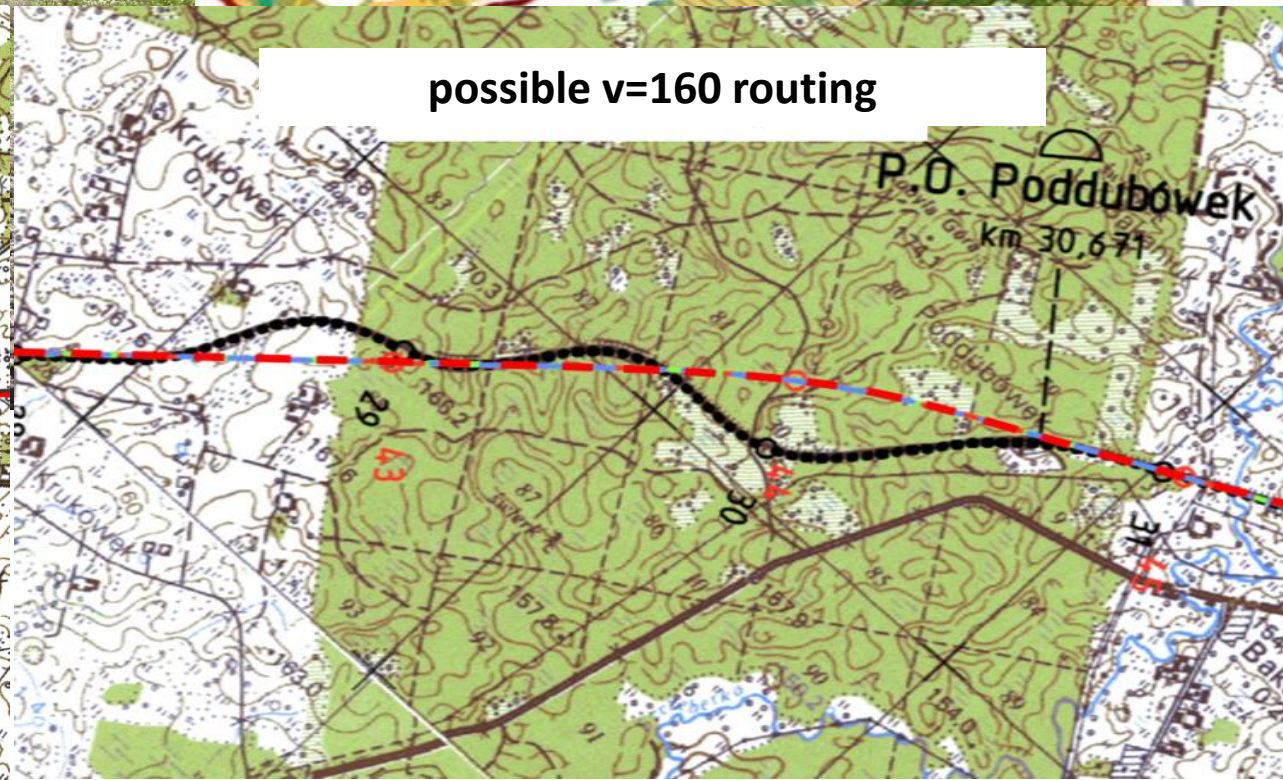
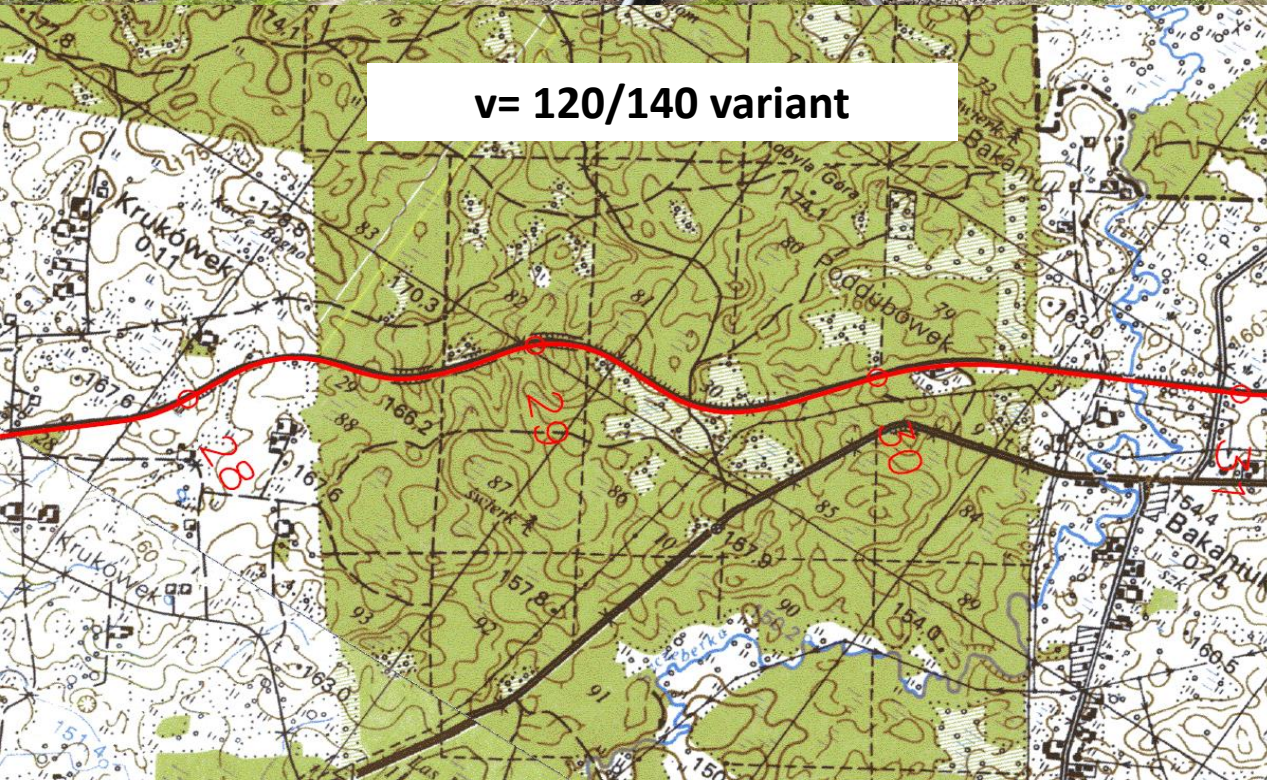


Works on the E 75 railway line on the Ełk - Trakiszki section

Routing and environmental considerations: Ełk - Suwałki



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Works on the E 75 railway line on the Etk - Trakiszki section

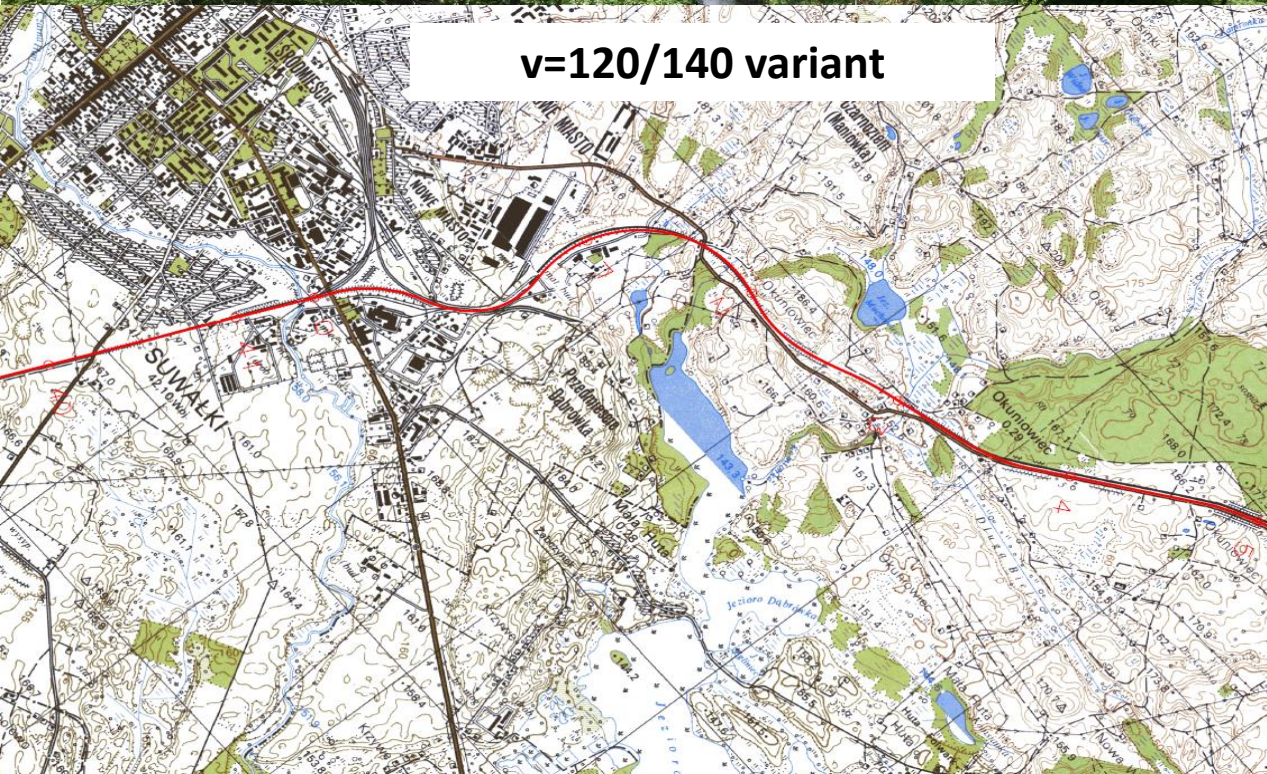
Routing and environmental considerations: Suwałki area



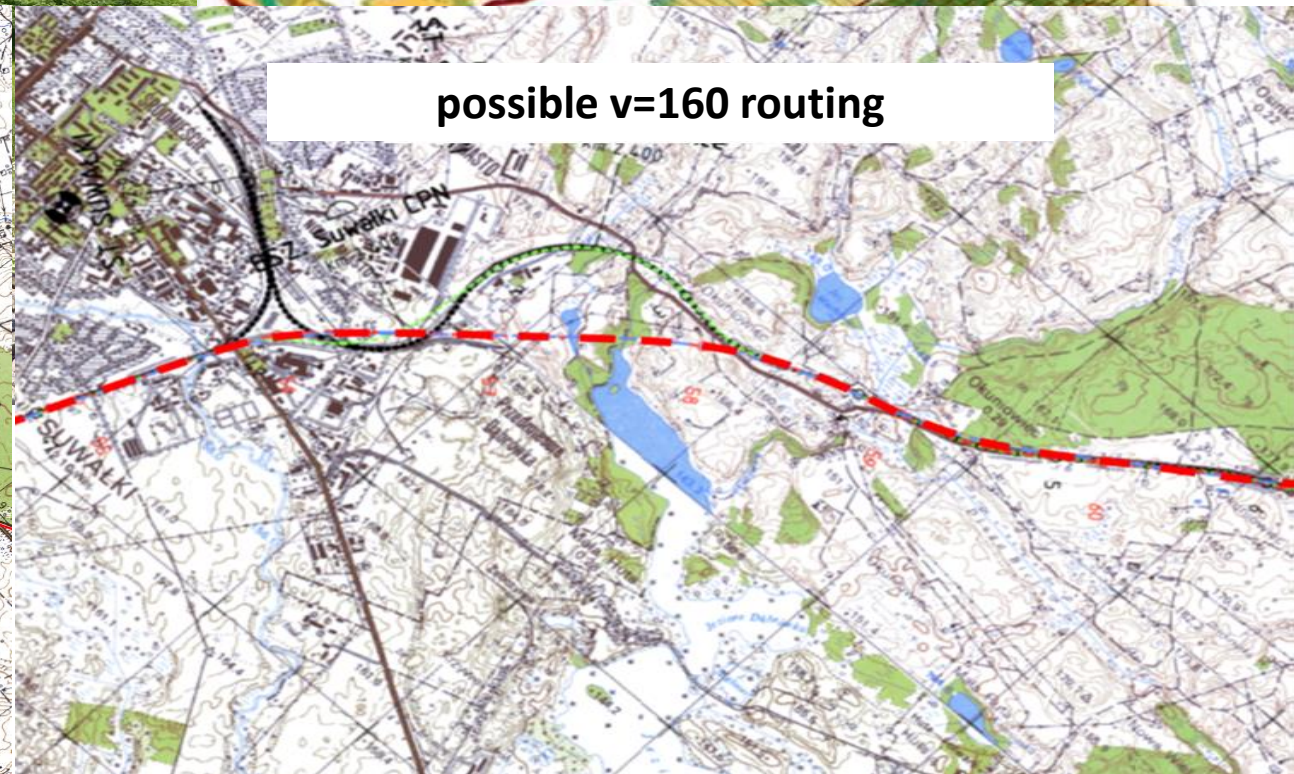
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LK 51 km 10,504



v=120/140 variant



possible v=160 routing

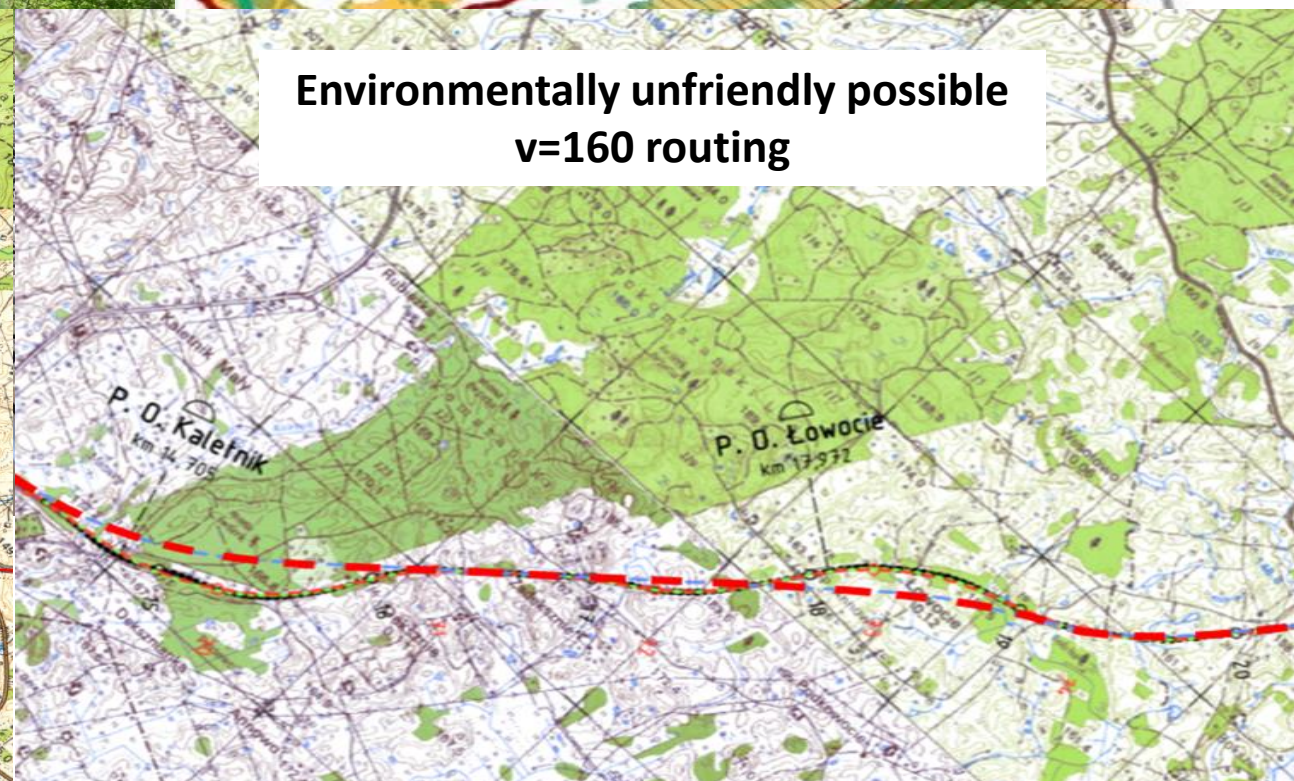
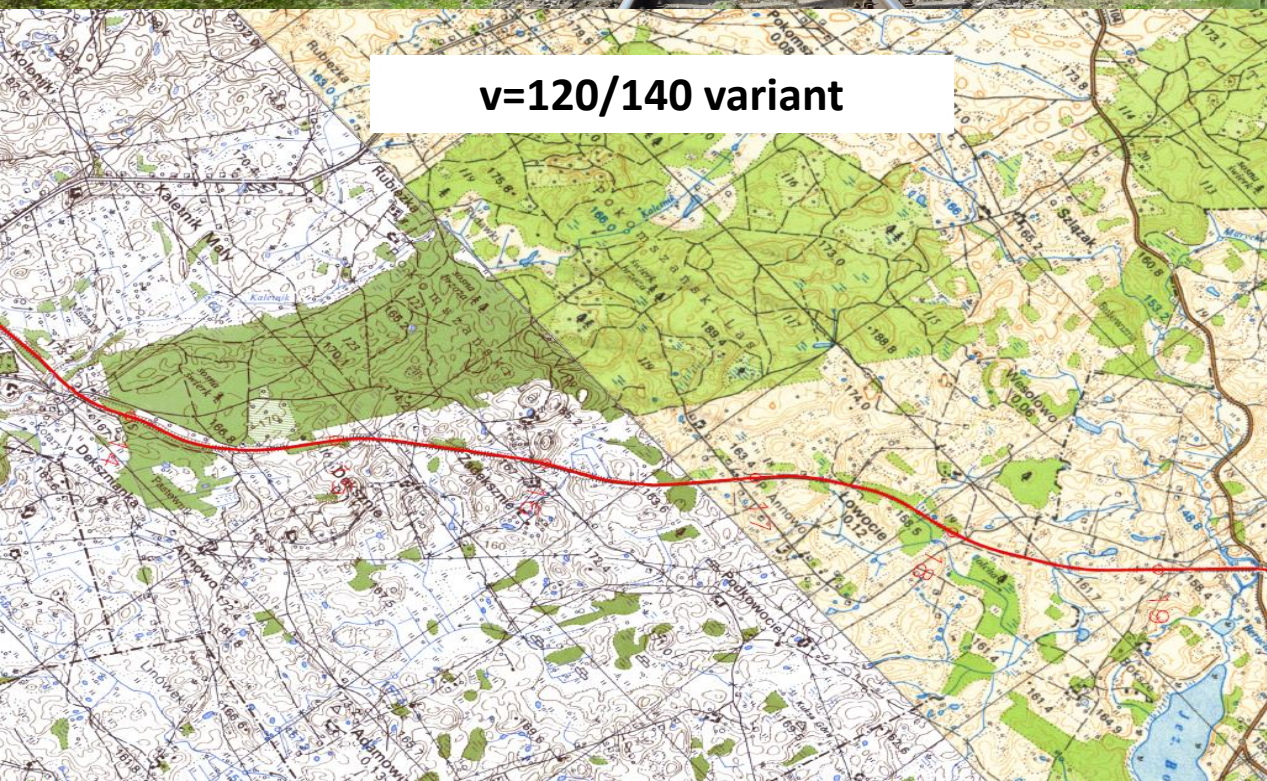


Works on the E 75 railway line on the Ełk - Trakiszki section

Routing and environmental considerations: Suwałki - Trakiszki



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Works on the E 75 railway line on the Etł - Trakiszki section

Routing and environmental considerations



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Biebrzański National Park

Rail Baltica adheres to the Park's border from app 58,250 km up to app. 58,500 km; it crosses the Park from app. 58,500 up to app. 59,850 km and then again adheres to the Park from app. 59,850 km to app. 60,900 km.

It is the biggest national park in Poland, protecting the natural character of Biebrza river and its swamps and peatbogs. One of the most precious in Europe refuges of wetland avifauna. The area is included in the Ramsar Convention.



Natura 2000 Site Dolina Biebrzy (Biebrza Valley) PLH200008

Rail Baltica crosses the site from app. 54,725
to km up to 67,225 km.

One of the last wildlife refuges in Europe. Covered by marshes, peatbogs and swamp sites. 15 types of habitats from the Habitats Directive were identified. The biggest share of intermediate mires and swamps. Birds refuge at the European scale. Precious corridor of wildlife migration.



Natura 2000 Site Ostoja Biebrzańska (Biebrza Refuge) PLB 200006

Rail Baltica crosses the site from app. 54,725 km up to app. 74,350 km.

One of the biggest Natura 2000 sites in Poland, preserves extended areas of open swamps. In the refuge at least 43 species from Annex I of Birds Directive were found. The biggest refuge of aquatic warblers and greater spotted eagles in Europe.



Natura 2000 Site Ostoja Augustowska (Augustów Refuge) PLH200005

Rail Baltica crosses the site from app. 37,520 km up to app. 38,480 km.

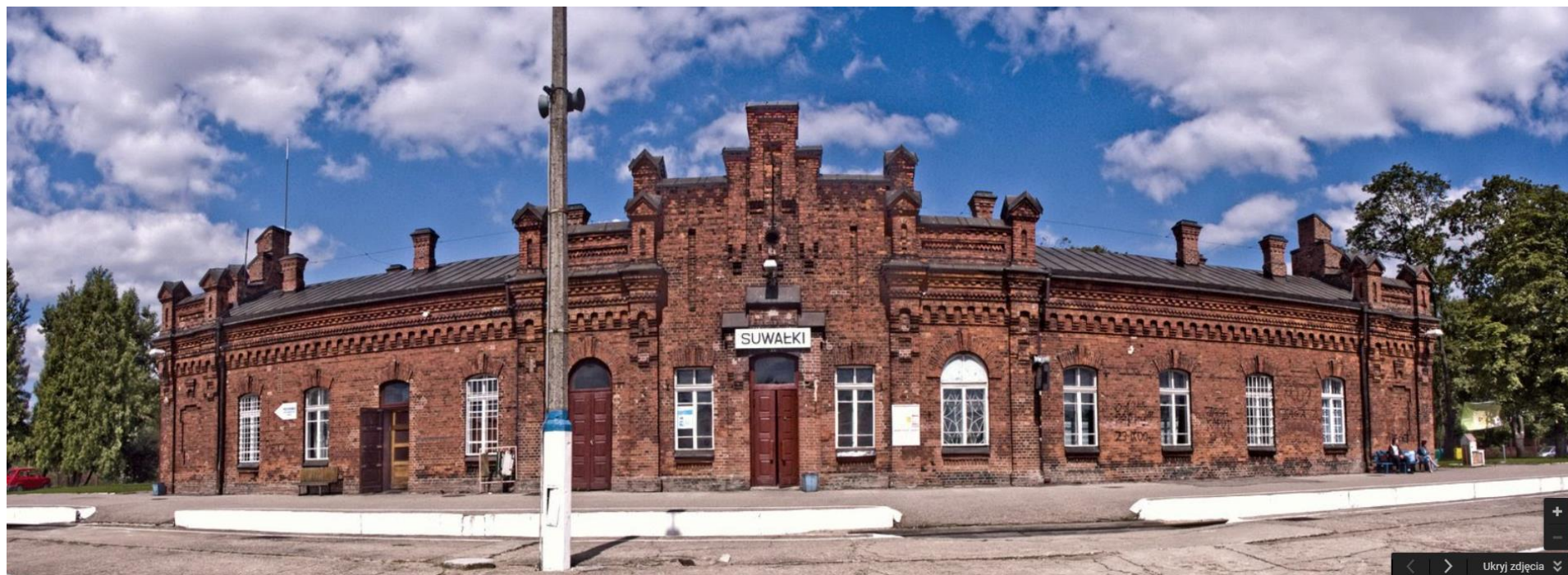
One of the biggest and the best preserved forests in Europe, 10 species of animals and 7 species of plants from the Annex II of Habitats Directive. Types of forest sites from Annex I of this Directive cover 12 % of this area.
An important corridor of wildlife migration.

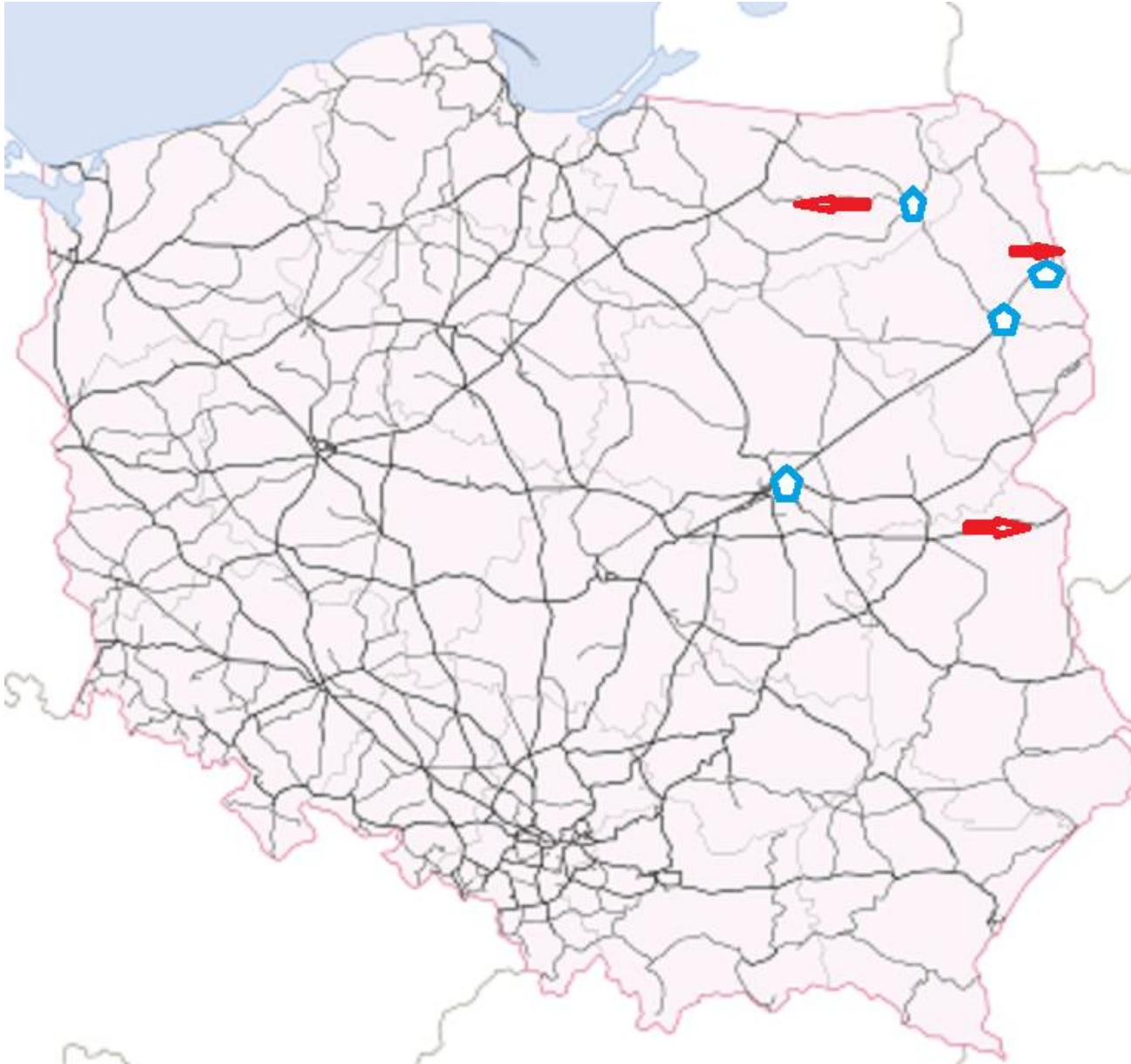


Natura 2000 Area Puszcza Augustowska (Augustów Primeval Forest) PLB200002

Rail Baltica crosses the site from app. 37,520 km up to app. 38,480 km.

The site includes the territory in 90% covered by natural tree stand with domination of moist and swampy forests. 40 species of birds from the Annex I of Birds Directive live there. The area important for maintaining the western capercaillie, lesser spotted eagles, snake eagles, woodpeckers and cranes.





Warsaw is currently the most important location in hubs, intermodal terminals for railway transport.

In Białystok there is now more than 20 terminals and depots, there terminals in Kuźnica Białostocka and Sokółka and near the border with Kaliningrad area but these one are not to facilitate trade with Baltic States.

With the RB routing through Ełk the project is connected with Polish harbours of Tricity.