Rail Baltica

ENVIRONMENTAL IMPACT ASSESSMENT OF THE CONSTRUCTION PROJECT OF THE SECTION OF THE RAIL BALTIC RAILWAY LINE "KABLI - ESTONIAN/LATVIAN BORDER"

TRANSLATED SUMMARY OF THE PROGRAMME IN THE TRANSBOUDARY EIA CONTEXT

Final version

INSPIRING ENVIRONMENT

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1 INTRODUCTION

Rail Baltic is a rail infrastructure project aiming to build a high-speed electrified double-track railway with a track gauge of 1435 mm (design speed 249 km/h) on the Tallinn-Pärnu-Riia-Kaunas-Lithuania/Poland border route. The construction of the railway and related infrastructure will allow the integration of the Baltic States, including Estonia, into the European rail network. The construction of the Rail Baltic will create opportunities for better movement of people and goods.

The county-wide spatial plans for Rail Baltic have established a 213 km long north-south corridor running through Harju, Rapla and Pärnu counties in the direction of Riga. The **present environmental impact assessment (EIA) is being carried out for the 12.7 km section in Estonia from Kabli to the Estonian-Latvian border** (Figure 1). Environmental impact assessment will be carried out as part of the preparation of construction project and the aim of the EIA is to minimise the environmental impact of the construction and operation of the railway. The official notification about initiation of the EIA was published in the Official Gazette on 10.06.2024.

According to the Estonian EIA legislation, the EIA process is divided into two stages:

1. Preparation of the EIA programme (scoping document).

   The EIA programme is the baseline plan that describes how the environmental impact assessment is planned to be carried out. The EIA programme describes the purpose and location of the proposed activity, the alternatives, the environment expected to be affected, the relationship with strategic planning documents, the expected areas of impact and their extent, the assessment methodology, the necessary studies, the timetable for carrying out the EIA, and the plan for engagement with the different parties involved in the impact assessment process.

2. Carrying out an environmental impact assessment and preparing a report. The EIA report is a document summarising the whole assessment process and describing the results of the EIA.

This document is a summary of the Estonian version of the programme for the transboundary EIA process, translated into English.

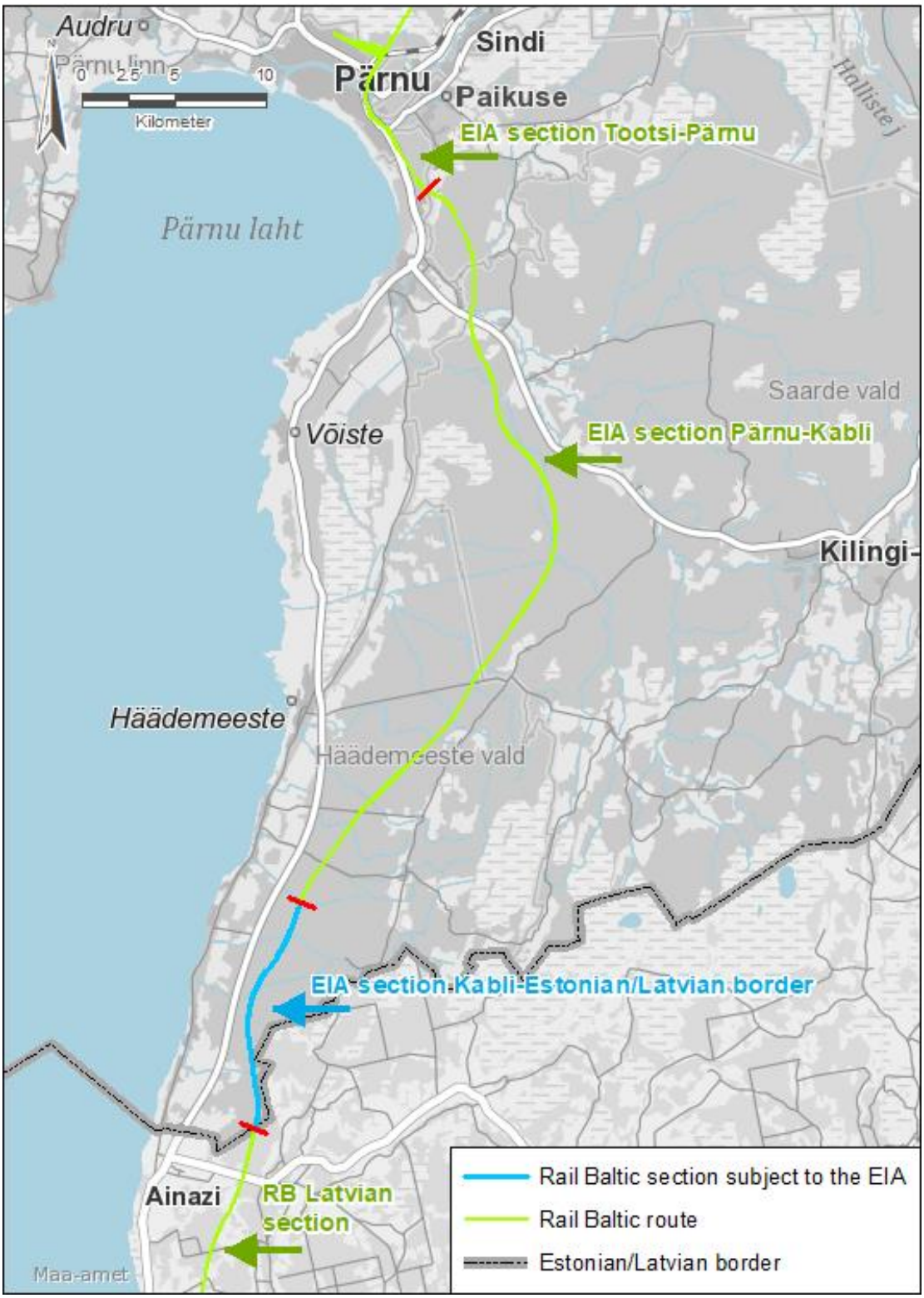

Figure 1. The section of the Rail Baltic EIA in question is marked in blue

2 PURPOSE AND LOCATION OF THE PROPOSED ACTIVITY

The proposed activity of the present EIA is the construction and operation of a high-speed railway (Rail Baltic) in the southern part of Pärnu County on a 12.7 km section from Kabli to the Estonian-Latvian border (Figure 2).

Rail Baltic is a rail transport project that aims to build a 1435 mm gauge railway with associated infrastructure to integrate the Baltic States, including Estonia, into the European rail network.

The section covered by this EIA is part of a route that runs through the territory of Estonia (total length in Estonia is 213 km). The railway section runs in the municipality of Häädemeeste, starting from Kabli river in Penu village and ending in Ikla village on the Estonian-Latvian border, from where on the railway line runs on the territory of the Republic of Latvia. The connection point at the border is fixed and will not be modified in this project to respect the fact that the EIA for the Latvian section was completed in 2016, and the design work has been ongoing since then.

Previously compiled Rail Baltic county-wide spatial plans have defined the proposed rail corridor[1] and the basic design of the railway.

[1] The corridor of the railway line, as defined in the county-wide spatial plans, is the land needed for the construction of the railway and the railway protection zone with the "displacement zone" of the line. The „displacement zone“ is the area within which the route may be displaced during the design phase. The width of the alignment corridor is 350 m in most cases and 150 m in densely populated areas.

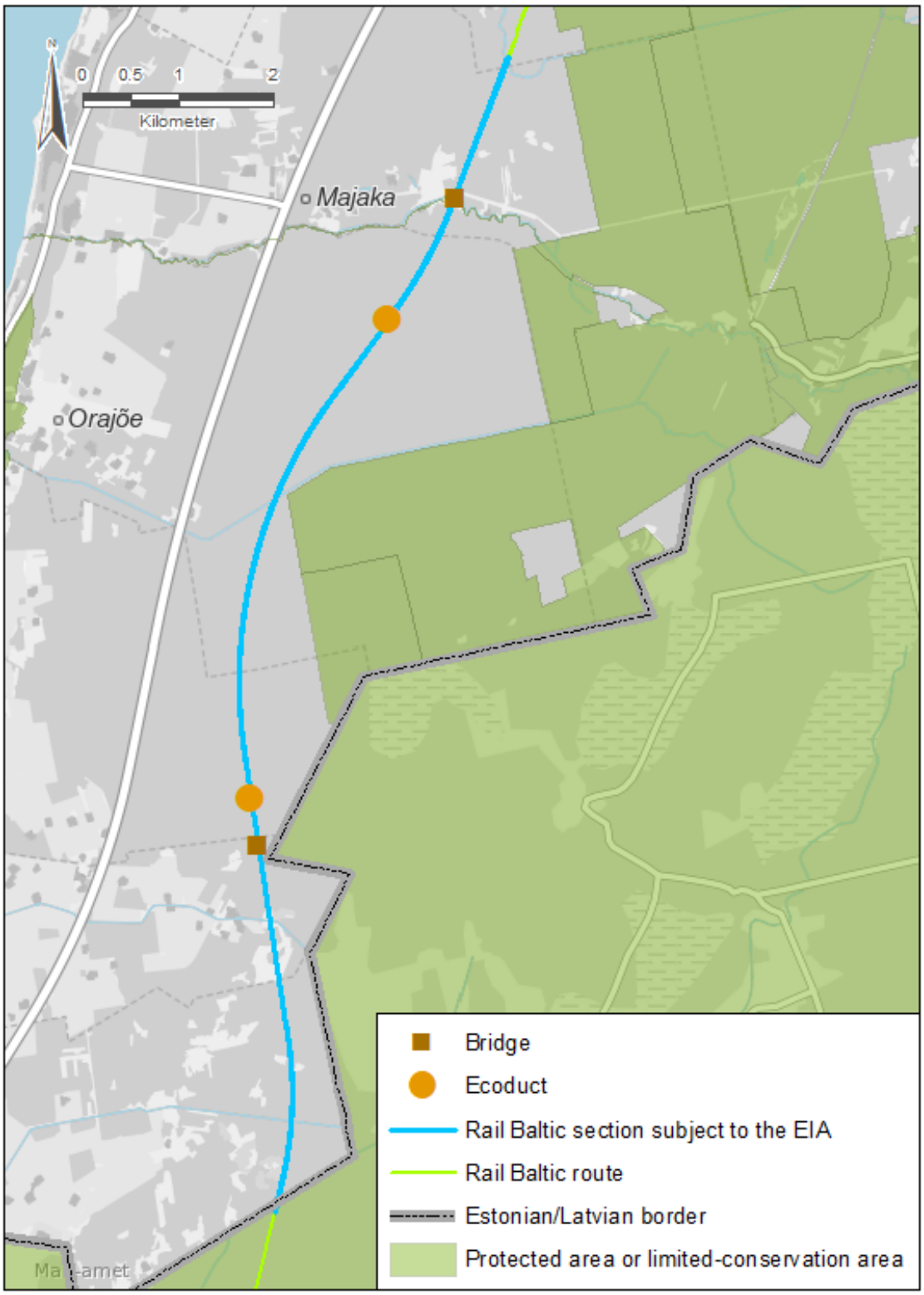

Figure 2. Location of the section of the Rail Baltic route subject to the EIA and the crossings (bridges and ecoducts) planned in the preliminary design[2]

[2] Base map: Maa- ja Ruumiamet (Land and Space Administration) 15.01.2025; Estonian protected areas and nature reserves: EELIS (Estonian Nature Information System), Environment Agency 15.01.2025; Latvian protected areas: Dabas aizsardzības pārvalde (Latvian Nature Protection Agency) 15.01.2025.

3 BRIEF DESCRIPTION OF THE ALTERNATIVES AVAILABLE

The purpose of environmental impact assessment is to give to the issuer of the development consent information on the significant environmental impact of the proposed activity and its reasonable alternatives and regarding the choice of the most suitable solution for the proposed activity, which makes it possible to prevent or minimise adverse impact on the environment and to promote sustainable development. This EIA does not consider alternatives outside the route corridor identified in the planning process, nor the 'no-action' alternative, as the location of the railway line to be assessed has been selected and established in the RB County-wide Spatial Plan[3], which included a Strategic Environmental Assessment (SEA). The RB County-wide Spatial Plan assessed, inter alia, the 'no-action' alternative and the 'locational' alternatives and selected the most appropriate corridor. For all the alternatives, this EIA takes into account the fact that the route is within the 350 m displacement zone established in the county-wide spatial plan.

The EIA considers two main alternatives:

1) preliminary design solution;
2) value engineering design (the final design will be finalised during and after the preparation of the EIA report).

The main objective of the EIA is to assess more precisely the environmental impact of the construction and use of the railway and to find solutions that have the least possible impact on the environment.

The section of the RB railway line (12.7 km long) runs through the territory of the villages of Ikla, Metsapoole, Treiman, Orajõe, Majaka and Penu in the municipality of Häädemeeste, Pärnu County.

3.1 Alternative 1: Preliminary design solution

According to the RB County-wide Spatial Plan, a total of 4 railroad crossings have been designed in the preliminary design solution: 1 road bridge, 1 railway bridge and 2 ecoducts (see Figure 2).

Special level crossings are designed at junctions with the following local roads:

- a road bridge at the junction with the forest road at km 3.9 of the route;
- railway bridge at the crossing of the Loigu road at km 11.1 of the route, the bridge also crosses the Lemme river.

The railway is fenced on both sides and 2 ecoducts have been designed on the section in question (at km 4.3 in Treimani village and km 9.7 in Orajõe village) to ensure wildlife passage.

In the case of smaller water bodies (ditches), the project design includes culverts to ensure that the water regime in the area is maintained and that the land drainage systems function properly. At the crossing of the railway, 21 culverts will be constructed in this section

[3] Pärnu County Plan "Determination of the location of the Rail Baltic railway line corridor" has been established by Decree No 1.1-4/40 of the Minister of State Administration on 13.02.2018.

according to the preliminary design. These solutions also consider the requirements of the SEA to ensure passage for different animal groups.

The embankment will be formed from layers of well drainable soil transported from nearby quarries. The layers are smoothed and compacted. A protective layer with a minimum thickness of 0.4 m shall be formed on top of the embankment. Ditches will be dug on both sides of the embankment to drain off surface water. Figure 3 illustrates the change in the relative height (in metres) of the railway embankment of the preliminary design over this 12.7 km section. The figure illustrates how high the railway embankment appears to the human eye at a given location.

Figure 3. Height of the railway from the Estonian-Latvian border to Kabli according to the preliminary design[4]

No noise barriers are designed for the section in the preliminary design solution.[5]

3.2 Alternative 2: Value engineering design solution

At the time of the preparation of the EIA programme for this section and its submission to the decision-maker, the design is at an intermediate stage, where a value engineering design solution has been prepared for the transition from the preliminary design to the master design, based primarily on a more efficient railway solution, and taking into account, where possible, the environmental measures for the preliminary design as set out in the SEA of the county-wide spatial plan. Alternative 2 will be further specified during the preparation of the EIA and the corresponding inputs will be included in the EIA report.

The design of the master design solution is expected to start in the second quarter of 2025. The value engineering design solution, together with the requirements of the EIA, will form the basis for the preparation of the subsequent master design, and the master design will also take into account the recommendations already made in this EIA.

[4] Preliminary design, RB-EP-01-RW-3PP-01.
[5] Annex V of the Rail Baltic County-wide Spatial Plan SEA Report, https://maakonnaplaneering.ee/maakonna-planeeringud/parnumaa/parnu-mp-rail-baltic/

The EIA will be based on the principle that the value engineering solution and the master design solution must be at least as good as or better than the preliminary design in terms of environmental impact.

4 DESCRIPTION OF THE ENVIRONMENT

The route under consideration runs in the municipality of Häädemeeste, in Southern section of Pärnu County, near the Latvian border, in an area with scattered settlements. The route crosses some local and forest roads, ditches and small watercourses. From north to south, the route passes through the villages of Penu, Majaka, Orajõe, Treiman, Metsapoole and Ikla.

The Rail Baltic railway corridor passes by several protected natural objects, including Natura 2000 sites, for which a Natura preliminary assessment has been carried out (see chapter 5). The affected areas include the Kiusumetsa limited-conservation area, the Lemmejõe limited-conservation area, the Laulaste nature conservation area and the Kivikupitsa landscape conservation area on the territory of Estonia and the North Vidzeme biosphere reserve and Mernieku dumbraji nature reserve on the territory of Latvia. In the latter case, the area of influence of the railway includes the habitats and nesting sites of several endangered bird species, for which the impact of the construction and use of the RB will be assessed according to the request of the relevant authorities of the Republic of Latvia.

There are no cultural monuments of national protection in the corridor. The section of the Riiselja-Ikla railway line is a heritage site. Archaeological monitoring of excavations is necessary.

The relief is predominantly flat along the whole section, with a slight gradient to the south, sloping towards the river near the rivers. The relief is characterised by moraine plains and marine and wind-formed landforms (dunes) replacing former lagoons. Absolute ground elevations range from 12 to 16 m. The surface cover is dominated by moraine, with patches of fine sand and, in areas with excess humidity, peat. The thickness of the surface cover is variable, mostly less than 1 m and less than 2 m along the Latvian border. In the Treimani river valley, the surface cover thickness reaches up to 70 m. The bedrock is Central Devonian sandstone.

The area is located in the West-Estonian basin. There are no standing water bodies in the corridor and its area of influence. As the route runs parallel to the coastline and the slope of the land is generally seawards, the railway crosses the catchment areas of many watercourses that flow into the sea. Among the most important watercourses, the railway crosses the Kabli stream, the Lemme river, the Loode stream, the Treimani stream and the Ikla main ditch. It also crosses areas of the land drainage system.

Groundwater protection varies along the route, from unprotected groundwater to relatively protected groundwater.

The route crosses green network base areas and green corridors that connect base areas of national and regional importance.

5 SUMMARY OF THE NATURA 2000 SCREENING

Natura 2000 is a pan-European network of protected areas designed to ensure the conservation or, where necessary, restore the favourable status of rare or endangered birds, animals and plants and their habitats and natural habitats. Natura 2000 sites and sites for birds have been established on the basis of Council Directives 92/43/EEC[6] and 2009/147/EC .[7]

The purpose of the Natura 2000 assessment is to assess the impact of the proposed railway line on the Natura 2000 network of sites and their conservation objectives, site integrity and connectivity. An operation is considered to have an adverse effect if, as a result of the operation, the conservation objectives will be compromised or will not be achieved.

The first stage of Natura assessment is the Natura screening, which aims to predict the potential impacts of a proposed activity. The pre-assessment will determine whether or not there are significant adverse impacts on the protection objectives of the species and/or habitats, site integrity and connectivity. In the case of the likelihood of a significant adverse effect, an appropriate assessment is required to identify the circumstances in which the adverse effect will occur and, if necessary, to propose mitigation measures. When the screening has identified that the significant impact could not be possibly avoided, an appropriate assessment will be carried out in parallel with the environmental impact assessment and results will be summarised in the EIA report.

The results of the Natura 2000 screening are summarised below.

The Natura sites within the potential impact area of the railway on section 9 of the EIA are as follows (see**Error! Reference source not found.** Figure 4):

- Põhja-Liivimaa (North Livonia) Special Protection Area (SPA) (EE0040344),
- Lemmejõe Special Area of Conservation (SAC) (EE0040342),
- Laulaste Special Area of Conservation (EE0040309),
- Kivikupitsa Special Area of Conservation (EE0040317),
- Kabli Special Protection Area and Special Area of Conservation (EE0040305),
- Orajõe Special Area of Conservation (EE0040340),
- Metsapoole Special Area of Conservation (EE0040330),
- Mērnieku dumbrāji Special Protection Area and Special Area of Conservation (LV0522000) on the territory of Latvia.

[6] Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (Habitats Directive).
[7] Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (Birds Directive).

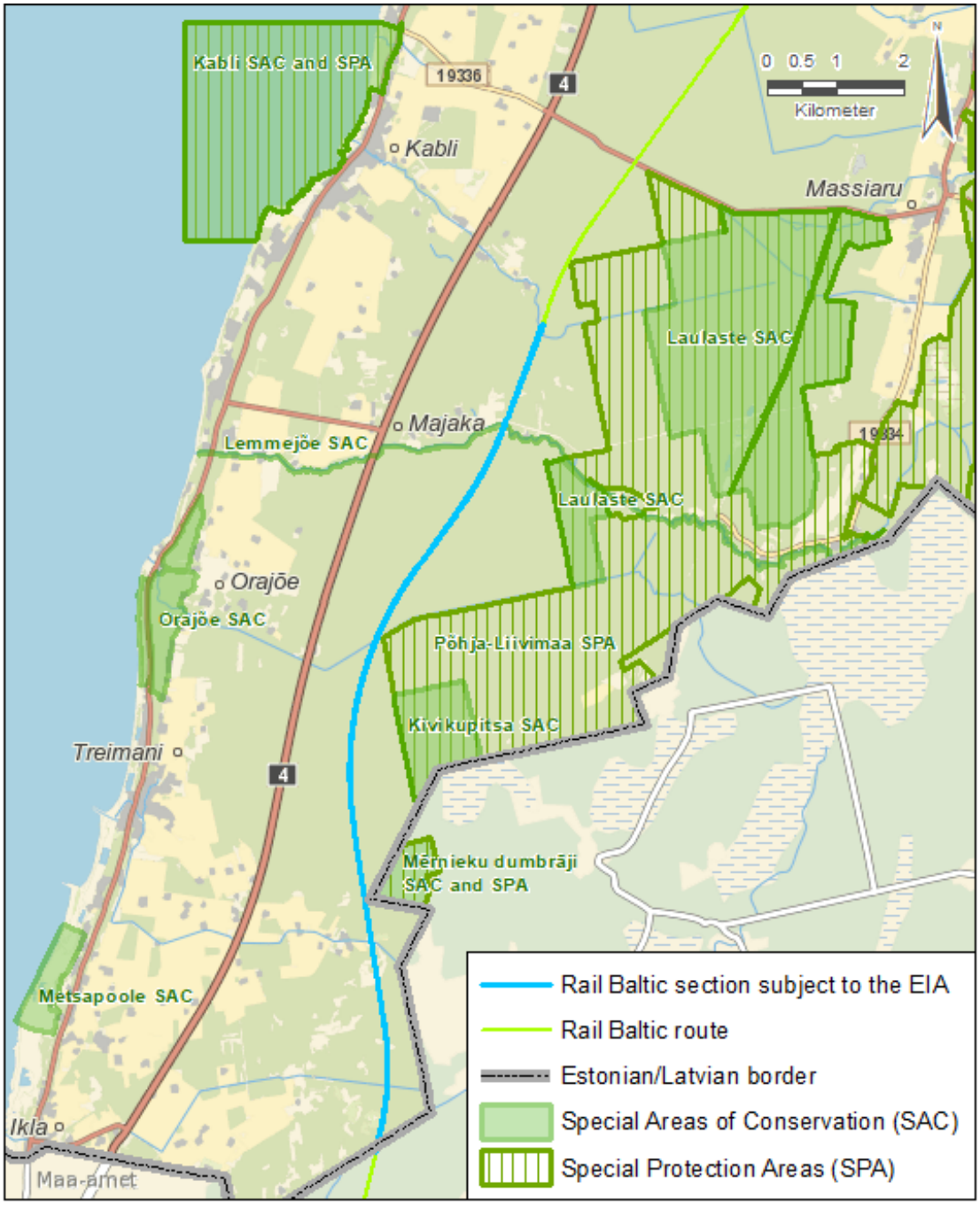

Figure 4. Rail Baltic corridor and Natura sites in the area

The construction of the proposed railway line is not linked to or necessary for the management of any Natura 2000 site and will not contribute directly or indirectly to the conservation objectives of the sites.

Conclusion of the Natura preliminary assessment for the Põhja-Liivimaa (North Livonia) Special Protection Area

The North Livonia SPA is a large area with 31 bird species, including both resident and migratory birds. The railway passes to the west of the site. The nearest edge of the site is 80 m from the north-south railway line. Due to the distance, the majority of the area is outside the expected direct impact of the proposed activity.

The preliminary Natura assessment found that, on the basis of the available information, significant adverse effects on the conservation objectives of breeding species in the North Livonia SPA cannot be excluded as a result of the proposed activities (construction and operation of the Rail Baltic railway line and associated infrastructure). Therefore, **an appropriate Natura assessment of** the breeding species of North Livonia **is required** at the stage of the preparation of the EIA report.

As a result of the Natura 2000 screening, significant adverse effects on the following migratory bird species conservation objectives of the site can be excluded: the Greater white-fronted goose (*Anser albifrons*), the Lesser white-fronted goose (*Anser erythopus*), the Bean goose (*Anser fabalis*), the Whooper swan (*Cygnus cygnus*) and the Common crane (*Grus grus*).

Conclusion of the Natura preliminary assessment for the Lemmejõe Special Area of Conservation

Lemmejõe SAC is established at the lower course of Lemme river. The total length of the Lemme river is 22.7 km from which the lower course is a part of the Lemmejõe Natura site. The river also crosses brief stretch of the Laulaste SAC at a distance of 6.9 km from the river mouth, for a length of about 277 m. The Lemmejõe Natura site conservation objective is the Rivers and streams habitat (3260) and the protection objectives include species of the Eurasian otter (*Lutra lutra*), the European river lamprey (*Lampetra fluviatilis*) and the Thick shelled river mussel (*Unio crassus*).

The railway crosses the Lemme River approximately 5.1 km upstream of the river mouth. The railway therefore crosses the Lemmejõe SAC. The river crossing has been designed as a relatively long and high railway bridge crossing simultaneously both the Lemme river and the Loigu road.

The Natura preliminary assessment found that, on the basis of the available information, no significant adverse effects on the conservation objectives of the Lemmejõe SAC can be excluded. Therefore, **an appropriate Natura assessment is necessary**.

Conclusion of the Natura preliminary assessment for the Laulaste Special Area of Conservation

Three habitats - rivers and streams (3260), western taiga (*9010), fennoscandian deciduos swamp woods (*9080) - and three species – the Eurasian otter (*Lutra lutra*), the European river lamprey (*Lampetra fluviatilis*) and the Thick shelled river mussel (*Unio crassus*) - are protected in the Laulaste SAC.

The western edge of the SAC, which is closest to the proposed railway line, is 750 m to the east, and the main part of the nature reserve is further away. A section of the Lemme River, 1.9 km upstream of the proposed activity area, runs through the Laulaste SAC.

The Natura preliminary assessment found that significant adverse effects on the forest habitat types (old growth forests and swampy and broad-leaved forests) targeted for protection in the Laulaste SAC can be excluded. On the basis of the available information, significant adverse impacts on aquatic habitats and species cannot be ruled out as a consequence of the proposed activities (construction of the Rail Baltic railway line and associated infrastructure).

Therefore, **an appropriate Natura assessment is required for the rivers and streams habitat type (related to Lemme River) and species of the Laulaste SAC, the thick shelled river mussel, the European river lamprey and the Eurasian otter**.

Conclusion of the Natura preliminary assessment for the Kivikupitsa Special Area of Conservation

The Kivikupitsa SAC has been created to protect three types of forest habitats - western taiga (*9010), Fennoscandian hemiboreal natural old broad-leaved deciduous forests (*9020), and coniferous forests on, or connected to, glaciofluvial eskers (9060).

The SAC is located about 300 m from the proposed railway line, and the protected habitat types even further. The proposed activity will have no significant adverse effects on the Kivikupitsa SAC. Significant adverse effects on the habitats, integrity and coherence of the conservation target are excluded. **An appropriate Natura assessment is not necessary**.

Conclusion of the Natura preliminary assessment on the Kabli Special Protection Area

The Kabli SPA was created to protect four species of birds – the Common goldeneye (*Bucephala clangula*), the Long-tailed duck (*Clangula hyemalis*), the Tundra swan (*Cygnus columbianus bewickii*) and the Common merganser (*Mergus merganser*).

The eastern boundary of the Kabli SPA, which is closest to the railway, lies more than 3.7 km north-west of the section of the RB line subject to the EIA. The target birds are all primarily associated with marine habitats. Due to this distance, none of the impacts associated with the construction and use of the RB will reach the SPA and will not threaten the habitats of the target species or pose a significant threat to their functions (breeding, feeding, migration, etc.).

The proposed activity will have no significant adverse effects on the Kabli SPA. Significant adverse effects on the target species, habitats, site integrity and connectivity are excluded. **An appropriate Natura assessment is not required.**

Conclusion of the Natura 2000 preliminary assessment for the Kabli Special Area of Conservation

The Kabli SAC protection objectives include ten habitat types - mudflats and sandflats not covered by seawater at low tide (1140), Boreal Baltic coastal meadows (*1630), Embryonic shifting dunes (2110), hifting dunes along the shoreline with Ammophila arenaria (‘white dunes’) (2120), Fixed coastal dunes with herbaceous vegetation (‘grey dunes’) (*2130), wooded dunes (2180), Humid dune slacks (2190), Fennoscandian lowland species-rich dry to mesic grasslands (*6270), Western Taïga (*9010), Fennoscandian deciduous swamp woods (*9080) - and six species – the Eurasian otter *(Lutra lutra*), the Pond bat (*Myotis dasycneme*), the European river lamprey (*Lampetra fluviatilis*), the Scarce fritillary (*Hypodryas maturna*), the Marsh angelica (*Angelica palustris*), the Sand pink (*Dianthus arenarius subsp. arenarius*).

Due to the sufficient buffer zone between the railway section subject to the EIA and the Natura site (more than 3.7 km), both direct and indirect significant adverse impacts on all conservation objectives are excluded during the construction and operation phase of the RB EIA section subject to the EIA. Significant adverse impacts on target species, habitats, site integrity and connectivity are excluded. **An appropriate Natura assessment is not necessary.**

Conclusion of the Natura preliminary assessment on the Orajõe Special Area of Conservation

The Orajõe SAC has been created to protect two habitat types - wooded dunes (2180), western taiga (*9010) - and one species – the Pond bat (*Myotis dasycneme*).

The outer border of the Natura site is more than 2.7 km from the proposed railway line. Adverse impacts on protected habitat types and species are excluded during the construction and operation phase of the railway. Significant adverse effects on the target species, habitats, site integrity and connectivity are excluded. **An appropriate Natura assessment is not necessary.**

Conclusion of the Natura preliminary assessment on the Metsapoole Special Area of Conservation

The conservation objectives of the Metsapoole SAC include four habitat types: Coastal lagoons (*1150), Boreal Baltic coastal meadows (*1630), Lowland hay meadows (6510) and Fennoscandian wooded pastures (9070).

The outside border of the Metsapoole SAC is more than 4 km from the proposed railway line. It can be concluded that there will be no physical impacts on the SAC during the construction and operation of this section of railway. Significant adverse effects on the habitats, integrity and coherence of the site are excluded. **An appropriate Natura assessment is not necessary.**

Conclusion of the Natura preliminary assessment for the Mērnieku dumbrāji Special Protection Area and Special Area of Conservation

The Mērnieku dumbrāji Natura 2000 site is a Category C site, where both bird species and habitats are protected.

Five species of birds are protected in the Mērnieku dumbrāji SPA: the Hazel grouse (*Bonasa bonasia*), the Black stork (*Ciconia nigra*), the White-backed woodpecker (*Dendrocopos leucotos*), the Black woodpecker (*Dryocopus martius*) and the Eurasian three-toed woodpecker (*Picoides tridactylus*). The area overlaps with the Mērnieku dumbrāji SAC.

In the Mērnieku dumbrāji SAC, three habitat types are protected: western taiga (*9010), Fennoscandian hemiboreal natural old broad-leaved deciduous forest (*9020), and Fennoscandian deciduous swamp woods (*9080).

The western boundary of the SPA and SAC is only 100 m from the railway corridor in its closest section. The planned activities do not directly affect the area, but indirect impacts on the conservation objectives of the Natura area cannot be excluded. **An appropriate Natura assessment is necessary**.

Summary of the Natura 2000 screening

The following table (Table 1) summarises the results of the Natura screening, which summarises the need/necessity for an appropriate Natura assessment.

Table 1. Need for an appropriate Natura assessment at the stage of the preparation of the EIA report

Name of the SPA or SAC	Need for an appropriate Natura assessment
Põhja-Liivimaa (North Livonia) Special Protection Area (EE0040344)	Appropriate Natura 2000 assessment is needed
Lemmejõe Special Area of Conservation (EE0040342)	Appropriate Natura 2000 assessment is needed
Laulaste Special Area of Conservation (EE0040309)	Appropriate Natura 2000 assessment is needed
Kivikupitsa Special Area of Conservation (EE0040317)	Natura appropriate assessment not needed
Kabli Special Protection Area (EE0040305)	Natura appropriate assessment not needed
Kabli Special Area of Conservation (EE0040305)	Natura appropriate assessment not needed
Orajõe Special Area of Conservation (EE0040340)	Natura appropriate assessment not needed
Metsapoole Special Area of Conservation (EE0040330)	Natura appropriate assessment not needed
Mērnieku dumbrāji Special Protection Area and Special Area of Conservation (LV0522000)	Appropriate Natura 2000 assessment is needed

6 IMPACT AREAS TO BE ASSESSED

The Kabli-Estonain/Latvian border railway section has been subject to a Strategic Environmental Assessment (SEA), the results of which will be taken into account in the preparation of the EIA. Amongst other things, the need for mitigation measures already foreseen in the SEA report of the Pärnu County-wide Spatial Plan, will be taken into account and, if necessary, refined and updated.

Impacts will be assessed in the following areas, among others:

1. Climate impact;
2. Impact on Natura 2000 network area (to the protection objectives of the sites where the Natura 2000 screening has identified that significant adverse impacts cannot be avoided, connectivity and integrity of the sites);
3. Impact on protected natural objects (including species of international and national significance, impact to their functions and habitats);
4. Impact on fauna;
5. Impact on vegetation (including forests) and habitat loss;
6. The impact of clear cutting;
7. Impact of the spread of alien species;
8. Impact on groundwater (groundwater quality and quantity);
9. Impact on surface water (water quality and flow);
10. Impact on soil and topography (including impact by accidents on soil);
11. Noise impact;
12. Impact on ambient air quality;
13. Vibration impact;
14. Electromagnetic impact;
15. Light pollution;
16. Waste management and recycling options;
17. Impact on material use;
18. Potential impacts of accidents;
19. Impact on people's mobility, barrier effect;
20. Secondary impacts on people's well-being, health and property through changes in environment;
21. Impact on land use;
22. Impact on mineral resources;
23. Impact on cultural heritage (e.g. cultural monuments, archaeological sites, etc.);
24. Impact on landscapes (including valuable landscapes, visual impacts);
25. Transboundary effects (impact on significant environmental values identified by the Latvian cross-border EIA process).

For each of the impact areas/environmental elements identified, the EIA will assess the construction and in-use environmental impacts of the proposed activity.

As the location and solutions of the Rail Baltic railway along the corridor will be refined during the design process, and new information on environmental conditions may emerge during that process, the information listed above may not be definitive and will be refined as necessary when significant impacts occur.

The EIA will be carried out in accordance with the requirements of the relevant legislation in force in Estonia and the European Union. In determining the significance of the impacts, the standards laid down in the legislation are taken as a basis, or, in their absence, the expert opinion.

The EIA analyses, assesses and compares natural, cultural and socio-economic factors and highlights their interrelationships. The likely impacts will be assessed according to the magnitude of the impacts, their duration (short and long term), the nature of the impacts, their cumulative nature and their significance.

The assessment of impacts will also take into account the possible cumulative effects of other known and planned activities (e.g. detailed plans, transport infrastructure in the area, etc.) in the area of this section (the border between the Republic of Estonia and the Republic of Latvia), including projects related to the Rail Baltic project but not considered as planned activities in this EIA.

The assessment of the combined effects of railway lines shall update and provide an assessment of at least the following issues to the extent necessary for the licensing decisions:

- climate impact;
- the impact on the connectivity of animal populations as a whole;
- loss of forest land;
- use of mineral resources.

The EIA report shall set out the measures proposed to prevent and mitigate significant negative effects on the environment from the proposed activities and give suggestions for the environmental monitoring where appropriate.

The EIA process is public and inclusive. The process is communicated to the public and all affected and interested parties have the opportunity to submit suggestions, objections and questions. Public outreach and public consultations will be organised to present the EIA programme and the draft EIA report and to obtain the views of the parties involved in the process. The public consultations will be carried out using a moderated discussion method. Questions, suggestions and objections submitted in writing during the public consultation and the responses to them will be included in the EIA report.

6.1 Studies carried out

A number of studies have been carried out during the earlier phases of the Rail Baltic project, and the information and results of these studies will be taken into account in the preparation of the EIA:

1. Natural assets survey (Rewild OÜ, 2013-2014). Available as an annex to the SEA https://maakonnaplaneering.ee/maakonna-planeeringud/parnumaa/parnu-mp-rail-baltic/
2. Cultural Heritage Survey (Hendrikson & Ko OÜ, 2013). Available as an annex to the SEA https://maakonnaplaneering.ee/maakonna-planeeringud/parnumaa/parnu-mp-rail-baltic/

3. Archaeological Values Study (University of Tartu, 2013). Available as an annex to the SEA https://maakonnaplaneering.ee/maakonna-planeeringud/parnumaa/parnu-mp-rail-baltic/
4. Settlement Structure Study (Hendrikson & Ko OÜ, 2014). Available as an annex to the SEA https://maakonnaplaneering.ee/maakonna-planeeringud/parnumaa/parnu-mp-rail-baltic/
5. Construction geological studies for the preparation of a preliminary railway project (Reaalprojekt OÜ, 2015-2017).
6. Inventory of known occurrences of protected species of plants, fungi and mosses adjacent to the Rail Baltic railway line (Nordic Botanical, 2018).
7. Study on climate change impact assessment for the design, construction, maintenance and operation of Rail Baltica railway[8] (Hendrikson & Ko OÜ, 2019)
8. Technical feasibility of Rail Baltic level crossings (Rewild OÜ and Hendrikson & Ko OÜ, 2017).
9. Strategic environmental assessment of the Harju, Rapla and Pärnu county-wide spatial plans for the 1435 mm Rail Baltic railway line. Fauna survey. Need for and location of mitigation measures (OÜ Rewild, 2015). Available as an annex to the SEA https://maakonnaplaneering.ee/maakonna-planeeringud/parnumaa/parnu-mp-rail-baltic/
10. "Report on the preliminary archaeological study for the selection of the Rail Baltic railway line. I stage", (University of Tartu, 2013-2014, responsible author Prof. V. Lang). Available as an annex to the SEA https://maakonnaplaneering.ee/maakonna-planeeringud/parnumaa/parnu-mp-rail-baltic/
11. Analysis of ecoducts and small animal tunnels on the Rail Baltica section Pärnu - Estonian/Latvian border. (Environment Agency Viridis OÜ, 2024)
12. Rail Baltica DS3 DPS3 section specific requirements for fences and overhead lines (OÜ Rewild, 2024)
13. Final report of the preliminary archaeological investigations of the Rail Baltic route, Phase II, Report on the archaeological baseline survey and detailed investigations of the Rail Baltic Pärnumaa sections (Kriiska, A., et al, 2015).
14. Amphibian habitats in Pärnu County on the RB DS3 DPS3 section (OÜ Rewild, 2024)
15. Distribution, extraction and use of construction minerals in Pärnu County. Research report (Estonian Geological Survey, 2020). Available from https://fond.egt.ee/fond/get-file/9333/128435/Parnumaa-ehitusmaavarade-aruanne_2020.pdf
16. Study on the security of supply of construction materials for the construction of Rail Baltic (Teede Tehnokeskus AS, 2017)

[8] Study on the assessment of climate change impacts in the design, construction, maintenance and operation of the Rail Baltic.

17. Technical suitability and economic justification of limestone aggregate and ash from Eesti Energia Estonia mine as base material or stabilisation of Rail Baltic embankment and side roads (TalTech Institute of Civil Engineering and Architecture, Institute of Geology, Institute of Business Administration and Innovation and Entrepreneurship Centre Mektory, 2019).
18. Factual Report of Geotechnical Investigation Results Initial Investigations for Value Engineering Stage (Obermeyer, 2021)
19. Factual Report of Geotechnical Investigation Results Remaining First Stage Investigation Phase (for track) (Obermeyer, 2023)
20. Factual Report of Geotechnical Investigation Results Remaining First Stage Investigation Phase (for structures) (Obermeyer, 2023)
21. Hydrological site investigations (Obermeyer, 2021)
22. Topographical survey (Obermeyer, 2021)

6.2 Further studies

Planned additional studies:

1. Environmental noise modelling (including modelling of noise abatement measures).

Studies may be added at the stage of preparing the EIA report if new facts emerge.

7 PARTIES TO THE EIA

The parties to the EIA are listed in theTable 2.

Table 2. EIA parties

Participant	Institution	Contact	Contact
Decision-maker*	Republic of Estonia Consumer Protection and Technical Regulatory Authority	Raili Kukk, Chief Specialist	Endla 10a, 10122 Tallinn, Estonia Phone: +3726672186 raili.kukk@ttja.ee
Developer	OÜ Rail Baltic Estonia	Andrus Paat, leading environmental expert	Veskiposti 2/1, 10138 Tallinn, Estonia Phone: +3725044560 andrus.paat@rbe.ee
Expert (Performing the EIA)	Estonian, Latvian & Lithuanian Environment OÜ	Katrin Ritso Senior Expert Project Manager	Tõnismägi 3a-15, 10119 Tallinn, Estonia Phone: +3725104401 katrinr@environment.ee

** the decision-maker of the decision to declare the EIA programme and report compliant with requirements*

The transboundary environmental impact assessment is carried out by the Ministry of Climate. For more information on cross-border cooperation, see 7.1.

The EIA will be carried out by Estonina, Latvian & Lithuanian Environment OÜ (ELLE OÜ). The leading expert for the EIA is Mr Toomas Pallo (Senior Expert Project Manager at ELLE OÜ, EIA licence KMH0090).

Experts on the relevant habitats and species will be involved in the assessment. The assessment of transboundary impacts on the Mērnieku dumbrāji Natura site in Latvia will involve Latvian habitat and species experts. If necessary, additional specialist experts will be involved during the work.

7.1 Cross-border cooperation

Transboundary EIA in Estonia is carried out in accordance with the procedures laid down in international agreements, the Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention) and the Environmental Impact Assessment and Management Act.

The Ministry of the Environment of the Republic of Estonia informed the Environment State Bureau[9] of the Republic of Latvia (the competent authority) of the initiation of the environmental impact assessment of the section of the Rail Baltic railway line "Pärnu-Estonian-Latvian border" by letter No 7-12/19/1964-5 of 18.06.2019. The Environment State Bureau of the Republic of Latvia replied by letter No 5-01/601 of 19.07.2019 (Annex 2) that extensive public and transboundary consultations have been carried out during the SEA procedure of the Harju, Rapla and Pärnu county-wide spatial plans and the EIA procedure of the Latvian Rail Baltic section, in the course of which the main sensitive cross-border

[9] Since February 1, 2025, the Energy and Environment Agency

environmental issues have already been discussed and resolved. Nevertheless, the Latvian competent authority wishes to participate in the EIA process that has been initiated. In its letter, the Environment State Bureau of the Republic of Latvia did not raise any further issues to be addressed in the EIA, but pointed out that the EIA that has been initiated should take into account the results of the environmental impact assessment carried out for the Rail Baltic route on Latvian territory and the selected route corridor. The letter pointed out that Latvian legislation, in particular the Latvian Law on Environmental Impact Assessment, provides for a 30-day public consultation period for the EIA report. The public consultation will take place no earlier than 7 days after the publication of the public notice and no later than 10 days before the end of the public consultation process. The letter requested a translation into Latvian of the summary of the EIA report and the information needed for the assessment of the transboundary impacts (including graphic material and maps related to transboundary impacts).

The Ministry of Climate of the Republic of Estonia informed the Environment State Bureau of the Republic of Latvia by its letter No 6-3/24/2872-3 of 21.06.2024 about the initiation of the environmental impact assessment of the Rail Baltic railway section "Kabli–Estonian-Latvian border". The Environment State Bureau of the Republic of Latvia confirmed by letter No 6-01/969/2024 of 12.08.2024 (Annex 3), referring to previous correspondence (No. 5-01/601 of 19.07.2019), that it wishes to participate as an affected party in the EIA process.

The Environment State Bureau of the Republic of Latvia published the information related to the EIA on its website and forwarded it to the relevant authorities (the Ministry of Foreign Affairs of the Republic of Latvia, the Ministry of Defence of the Republic of Latvia, the Ministry of the Interior of the Republic of Latvia, the State Environmental Service, the Nature Conservation Agency, the Limbaži District Municipality and AS "RB Rail" in cooperation with SIA "*Eiropas Dzelzcela Linijas*" (the national implementer of the Rail Balitc project in Latvia)). The Environment State Bureau of the Republic of Latvia did not receive any suggestions or comments from the public. The table below (Table 3) presents the comments of the Latvian authorities, which will be taken into account in the assessment of the transboundary impacts of this EIA.

Table 3. Proposals from the relevant Latvian authorities and how they are taken into account in cross-border EIA[10]

Authority concerned	Comment by the relevant authority	Consideration / non-consideration in this EIA
The State Environment Service	An EIA has been carried out for the Rail Baltic route in Latvia, which has identified the various impacts, their significance and the necessary measures. The State Environment Service is of the opinion that the construction and operation of the Rail Baltic Estonia route should not give rise to significantly different impacts compared to those identified in the EIA carried out in Latvia, provided that planning principles and technical solutions are implemented to avoid negative	To be taken into account in the preparation of the EIA report for the Rail Baltic route section Kabli-Estonian-Latvian border.

[10] Proposals of the relevant Latvian authorities are taken from the letter of the Environment State Bureau of the Republic of Latvia No 5-01/969/2024 of 12.08.2024.

Authority concerned	Comment by the relevant authority	Consideration / non-consideration in this EIA
	environmental impacts. The State Environment Service stresses that the Rail Baltic infrastructure in Estonia must be synchronised with the Rail Baltic infrastructure in Latvia.	
The Nature Conservation Agency	Points out that: • The Mērnieku dumbrāji Nature Reserve is created for the protection of wet broadleaf forests, where it is prohibited to drain mires, forest stand in wet mineral soils and wet peat soils. • The Mērnieku dumbrāji nature reserve is home to a number of Annex I species of the EU Birds Directive (Black Stork (*Ciconia nigra*), White-backed Woodpecker (*Dendrocopos leucotos*), etc.). The micro reserve of the Lesser Spotted Eagle (*Clanga pomarine*) (site code 2481) is located about 450 m south of the Mērnieku dumbrāji Natura site. In the framework of the EIA, particular attention will need to be paid to the potential impacts on these sites. • In the vicinity of the Latvia-Estonian border (up to 3 km distance), according to the Owl and Woodpecker conservation plans, there are priority areas for the Urla Owl (*strix uralensis*), critically endangered Eurasian Eagle Owl (*bubo bubo*), Eurasian Pygmy Owl (*glaucidium passerinum*), White-backed Woodpecker *(Dendrocopos leucotos*), Middle Spotted Woodpecker (*leiopicus medius*) and Eurasian Three-toed Woodpecker (*picoides tridactylus*), as well as the territories to be inventoried for the Ural Owl (*strix uralensis*), Boreal Owl (*aegolius funereus*) and Eurasian Pygmy Owl (*glaucidium passerinum*). One of the important causes of death of owls is collisions with vehicles, including trains. When assessing the impacts, the location of these territories must be taken into account and research of owls and woodpeckers must be carried out in accordance with the methodologies mentioned in the species protection plans. • In addition, it should be noted that an increase in noise pollution in the environment is expected during the modernization of the railway line. Sound pollution (noise) reduces the audibility of the sound of potential food objects or the audibility of the territory defence song, reducing the territory protection function, detection of food objects and the probability of successful hunting for various species of owls.	To be taken into account in the preparation of the EIA report for the Rail Baltic route section Kabli-Estonian-Latvian border.

Authority concerned	**Comment by the relevant authority**	**Consideration / non-consideration in this EIA**
	• In general, within the framework of the EIA, it is necessary to evaluate the impact of noise and vibrations on the nesting bird species, habitat loss and the increase of the edge effect, as well as the risks of collisions and the placement of bird flight paths in relation to the risks of collisions. For example, Lesser Spotted Eagle can search for food 3 km from the nesting site, these flights can cross the railway line. If the implementation of the Project increases the risks of collisions of Lesser Spotted Eagles or other birds, such as Black Storks, it is necessary to foresee effective mitigation measures.	
AS "RB Rail"	The potential impact must be assessed: • Mērnieku dumbrāji nature reserve; • Lesser Spotted Eagle (*Clanga pomarine*) micro reserve (site code 2481).	To be taken into account in the preparation of the EIA report for the Rail Baltic route section Kabli-Estonian-Latvian border.
The Limbaži District Municipality	There are no further proposals for a transboundary EIA.	Note taken

8 EIA TIMETABLE

Table 4 timetable is provisional and subject to change. The actual timetable will depend on the time actually spent on the steps of the procedure.

Table 4. Estimated timeline for the EIA process

	2024		2025												2026		
	Nov	Dec	Jan	Feb	March	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	
Initiation of an EIA Decision-maker (TTJA/CPTR)	07.06.2024 Decision No 1-7/24-184																
EIA programme																	
Drafting and updating the draft EIA programme EIA expert																	
The decision-maker checks the compliance of the programme with the legislation																	within 10 days
Notification of the public consultation of the EIA programme, including consultation with the relevant authorities. Decision-maker																	within 14 days
Cross-border consultation on the EIA programme The Ministry of Climate																	
Public display of the EIA programme Decision Maker																	21 days
Public hearing of the EIA programme EIA expert, developer																	1 day
The decision-maker will consider the proposals, objections and questions submitted and the views received from the relevant authorities and the Latvian party to the EIA through the Ministry of Climate, and will give its opinion.																	within 14 days

Consideration/justification in writing of the suggestions made by the relevant authorities, the decision-maker and the public during the public consultation and the public inquiry EIA expert, developer																	within 21 days
Amendments to the EIA programme (EIA expert, developer) Submitting it for approval (developer)																	
Recognition of the EIA programme as compliant Decision Maker																	within 30 days
Notification of the conformity of the EIA programme Decision Maker																	within 14 days
Environmental Impact Assessment, preparation of the EIA report																	
Preparation and submission of the EIA report EIA expert																	
The decision-maker checks the EIA report for compliance with the requirements Decision-maker																	within 14 days
Notification of the public consultation of the EIA report, including informing the relevant authorities and requesting their opinion Decision-maker																	within 14 days
Asking for an opinion on the EIA report in the context of a transboundary EIA The Ministry of Climate																	
Public display of the EIA report Decision Maker																	At least 30 days
Public hearing on the EIA report EIA expert, developer																	1 day
The decision-maker examines the proposals, objections and questions submitted, together with the opinions of the authorities concerned, and gives its opinion																	within 21 days

Taking into account/justification in writing of the views and suggestions made by the public during the public scrutiny and consultation, the decision-maker and the relevant authorities, and the views and suggestions made by the parties during the cross-border assessment EIA expert, developer																	within 30 days
Amendments to the EIA report (*EIA expert, developer)* and submitting it for compliance check (*developer)*																	
The decision-maker checks the conformity of the report, based on the approvals received from the relevant authorities, and takes a decision on the conformity of the EIA report																	within 30 days
The decision-maker notifies the decision on the conformity of the EIA report																	within 14 days