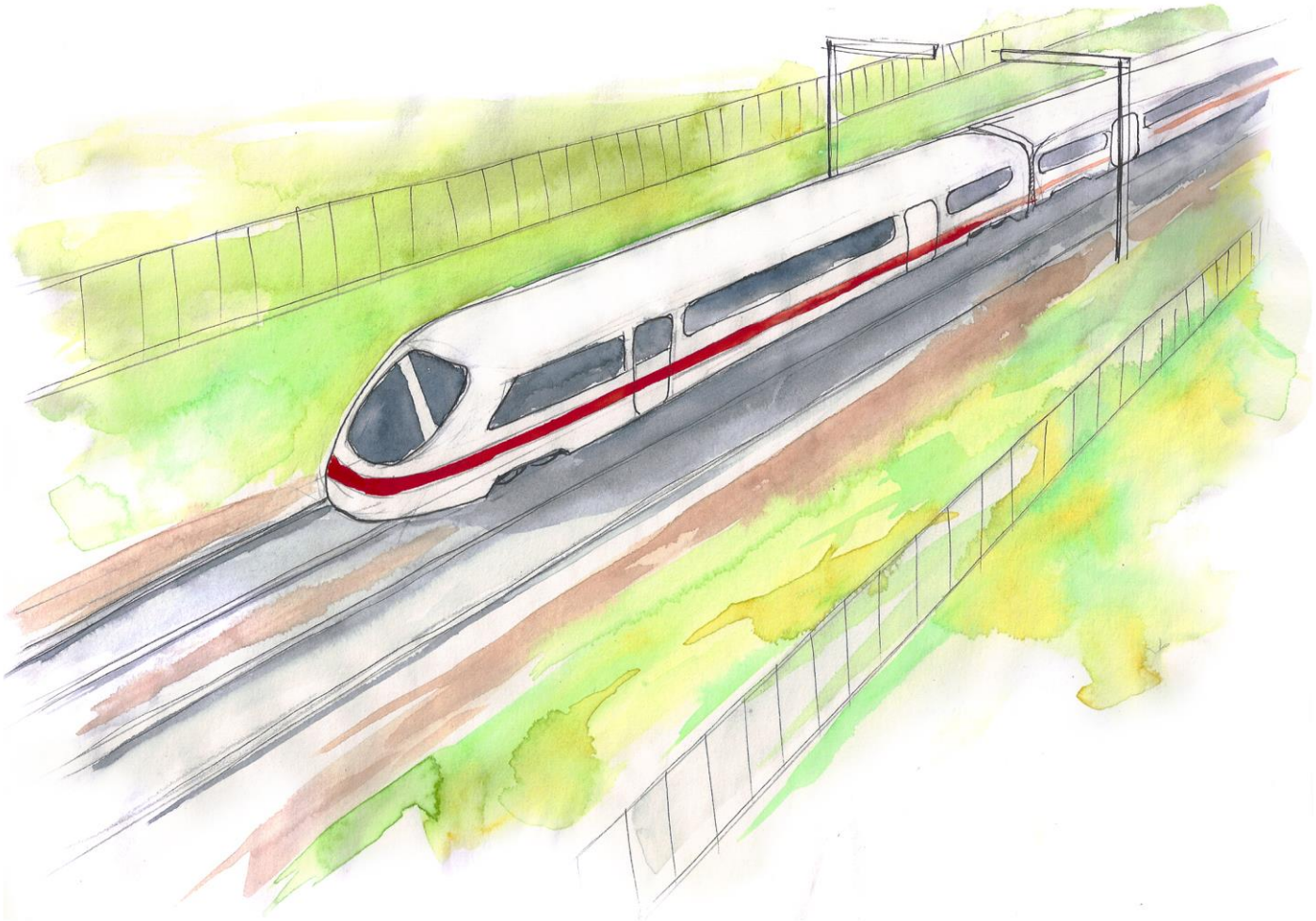
Co-financed by the European Union's TEN-T programme



Rail Baltic Harju, Rapla and Pärnu county plans. Summary.

TEHNILISE JÄRELEVALVE AMET
ESTONIAN TECHNICAL SURVEILLANCE AUTHORITY

MAJANDUS- JA KOMMUNIKATSIOONI-MINISTEERIUM

Harju Maavalitsus

PÄRNU MAAVALITSUS

Rapla Maavalitsus
Rapla County Government

RAIL BALTIC HARJU, RAPLA JA PÄRNU COUNTY PLANS. SUMMARY.

August 2016

Reaalprojekt Hendrikson & Ko NOVARC KELPROJEKTAS WSP

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1. AIM OF THE COUNTY PLANS

Rail Baltic is an international rail connection that will connect Estonia with Central and Western Europe and its neighbours. Rail Baltic is one of the biggest investments in the years to come in improving the travel opportunities of Estonian people as well as developing business and trade, tourism and the exchange of goods. The railway route ensures speeds of up to 240 km/h and provides the opportunity to travel comfortably and quickly to Latvia and Lithuania and onwards to Central Europe and further.

Rail Baltic prospective connections

The purpose of county plans of Harju, Rapla and Pärnu is to find the best suitable location for the route corridor of Rail Baltic railway line in Estonia.

County plans provide the basis for engineering design process of the railway corridor. Due to the complexity of the project, it is necessary to consider the technical details already in regional planning stages. Therefore the preliminary designs of the railway and railway infra-structure construction works and the strategic environmental assessment and environmental impact assessment of the county plans are done virtually at the same time.

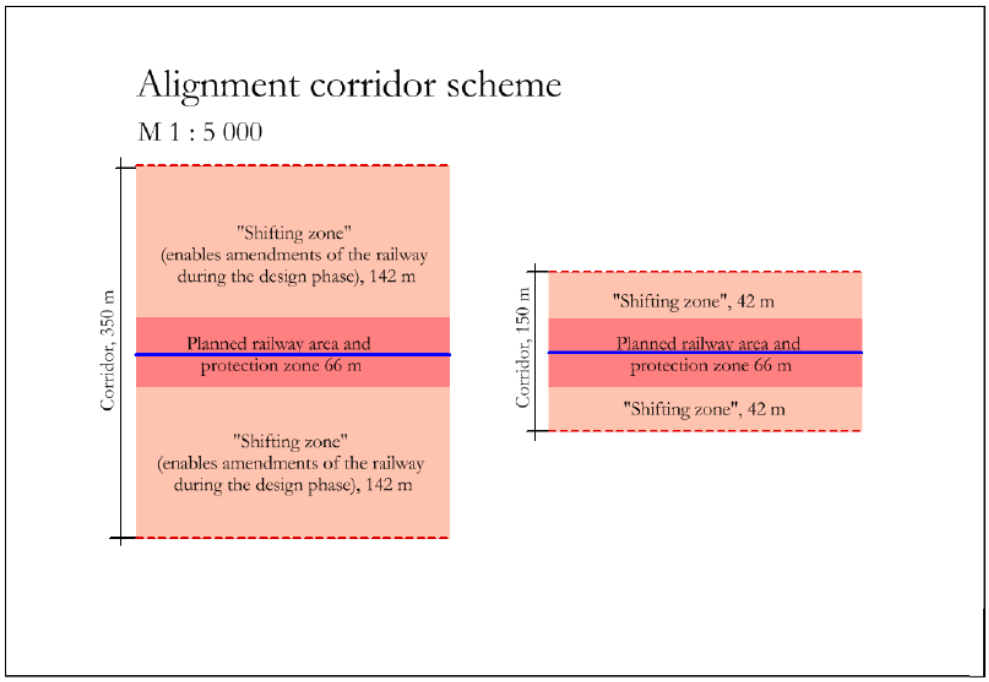
County-wide spatial planning was started (according to Planning Act § 10 subsection 3 and in accordance with § 291 subsection 1

clause 2 and subsection 2 and Environmental Impact Assessment and Envi-ronmental Management System Act § 35 subsection 1) by the order nr 173 "Initiation of county-wide spatial plan to locate Rail Baltic railway route corridor" of Government of the Republic. In the same order it was determined that Harju, Rapla, and Pärnu county governor will initiate strategic environmental assessment of the spatial plan.

2. OVERVIEW OF THE PLANNING PROCESS

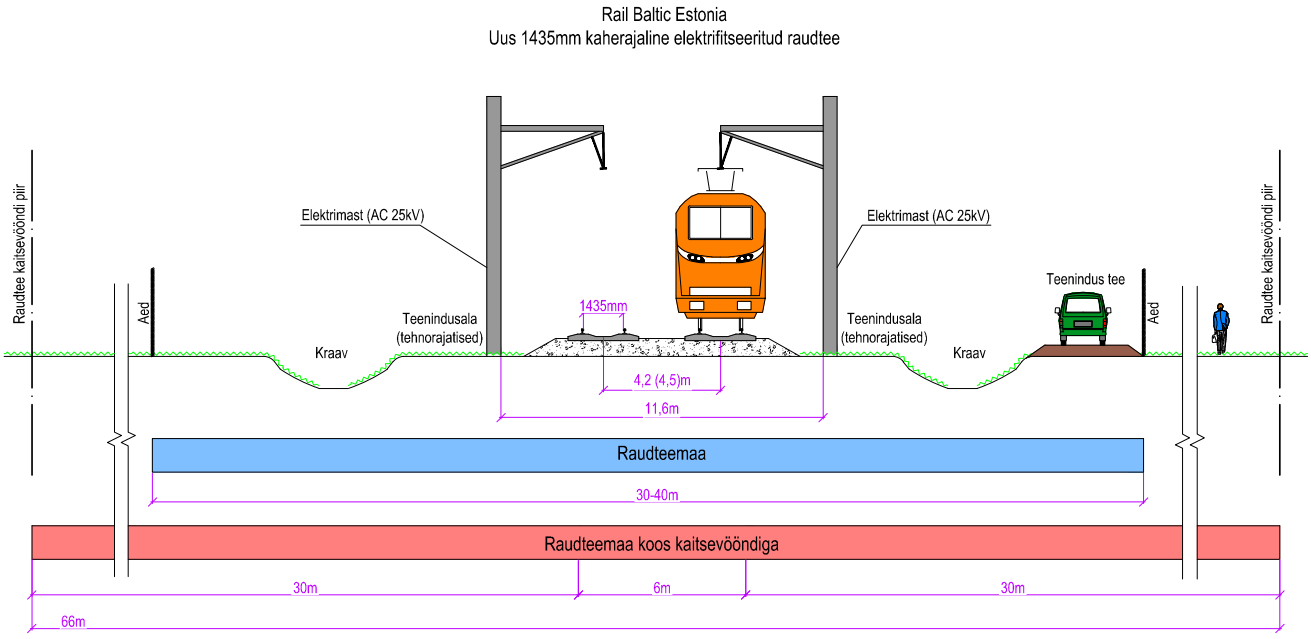
Composing the planning proposals was carried out in close co-operation with local municipalities and interested parties. Numerous public meetings and working seminars were organized during the different stages of planning process. The feedback of local residents with regard to actual necessities was taken into consideration when elaborating the specific solutions. To provide continuous updated information about the planning process and project as a whole, website www.railbaltic.info was created.

Rail Baltic railway corridor was defined in the county plans as a 350 m wide corrider in sparsely populated areas, a 150 m wide corridor in urban areas (see figure below). The corridor consists of so-called shifting zone, which enables amendments of the location if needed during the design phase and planned railway area (incl railway protection zone) (see figure below).

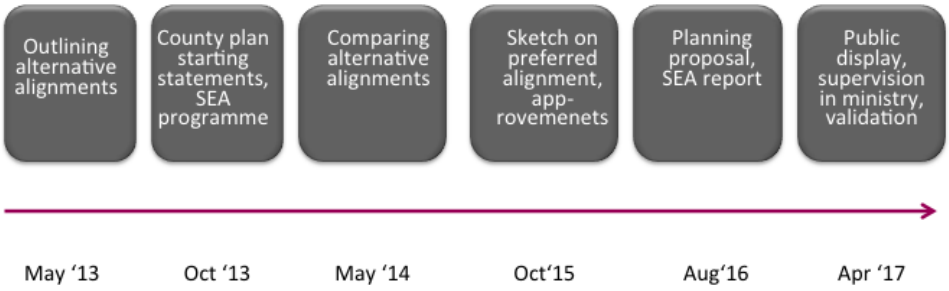


Rail Baltic corridor scheme

Inside the planned railway area and protection zone (width 66 m), railway and all the necessary railway facilities should be located (see figure below).

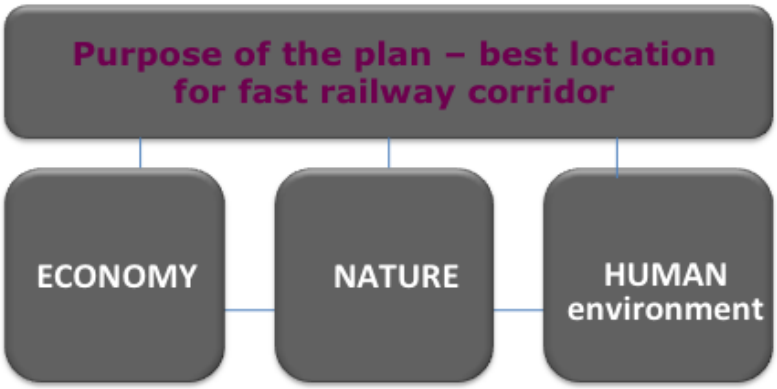


Cross-section of planned railway area in Rail Baltic corridor. The red line below marks the area necessary for planned railway and railway protection zone (66 metres), blue line stands for land needed for railway only (30-40 metres).



Planning process timeline

As the task of the county plans was to find the most suitable route for the railway considering both socio-economic and natural circumstances, major part of the process was dedicated to comparing alternative railway alignments.



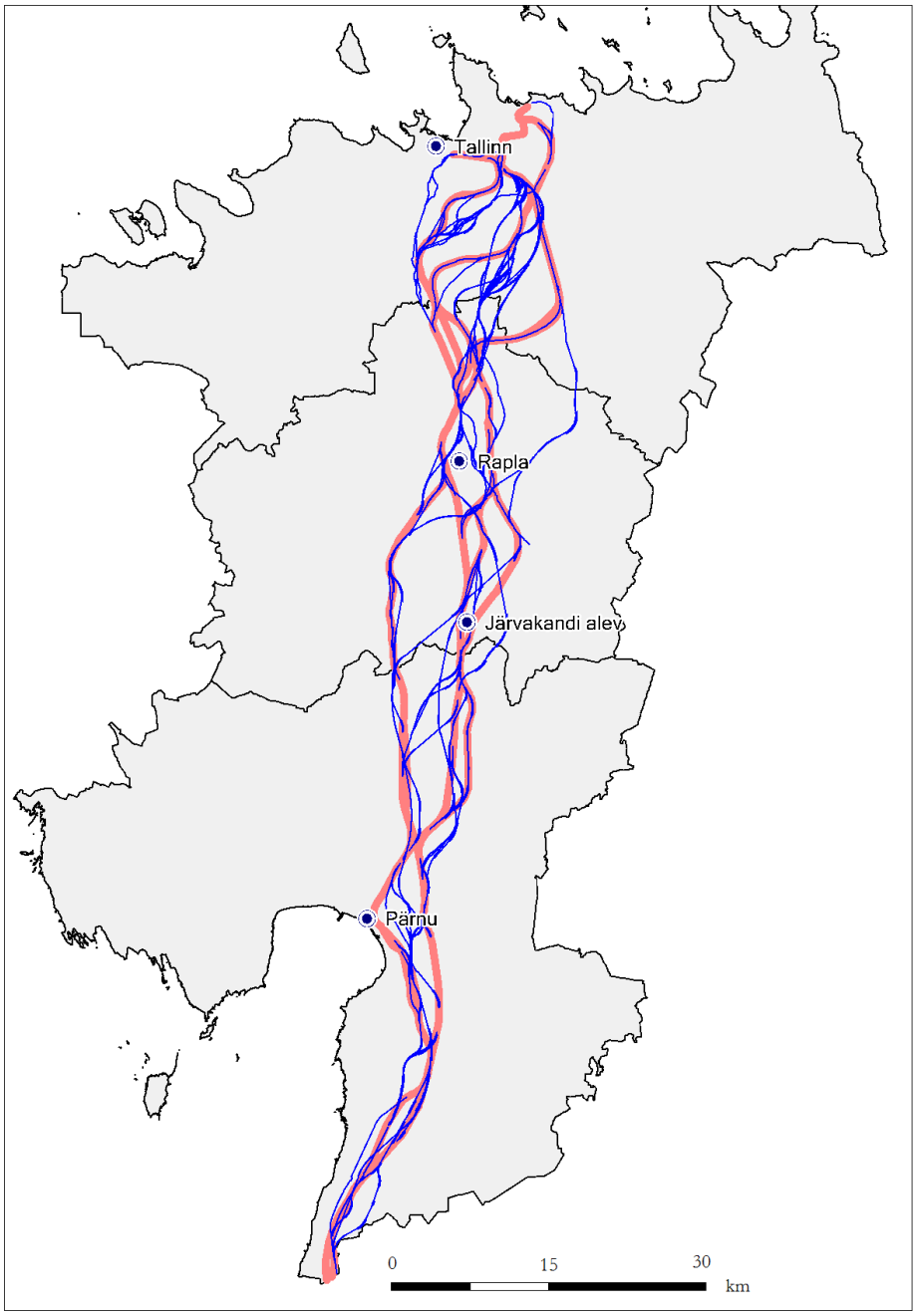
Basic principle for finding Rail Baltic corridor – a balance between economical, natural and human environment issues

The following site selection criteria were used in the corridor location development phase:

- Residential houses and other buildings (including buildings with community services, business and industrial production functions);
- Cemeteries;
- Nature conservation objects with protection zone;
- Natura 2000 areas;
- Objects of cultural heritage with protection zones;
- Areas with approved detailed plans (when building permits have been already issued)

During the county planning and SEA process a great number of location alternatives of Rail Baltic corridor were compared (see figure below) based on following criteria: SEA human and natural environment, technical feasibility, building cost, socio-economical gain over 30

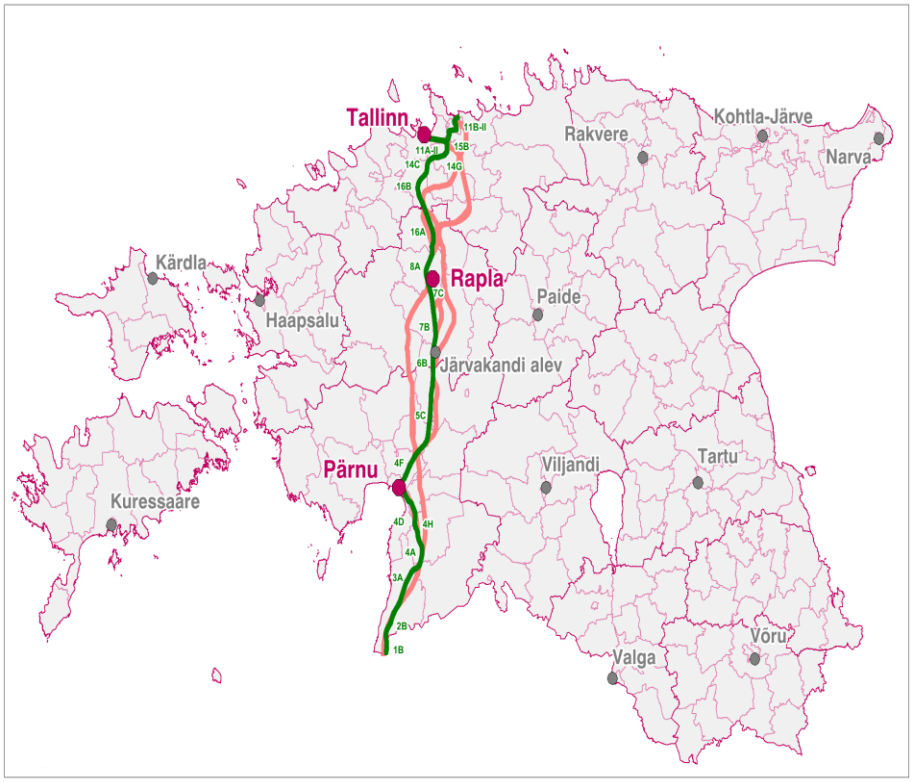
years period. Overall preference was developed by careful weighing of different groups of criteria. Important principle for the development of preferred alignment was purposefulness of the railway- alignment enabling development of fast railway connection, taking into account relevant human and natural environment criteria.



Alternative alignments of Rail Baltic corridor analysed during the county planning/SEA process in Harju, Rapla and Pärnu county

As a result of extensive planning and impact assessment process, the route of Rail Baltic corridor which runs through Pärnu, nearby Järvakandi and Rapla and enters Tallinn Ülemiste terminal from the east side was chosen

(see figure below).



Rail Baltic corridor (marked with green line), which was selected as a result of planning and SEA process

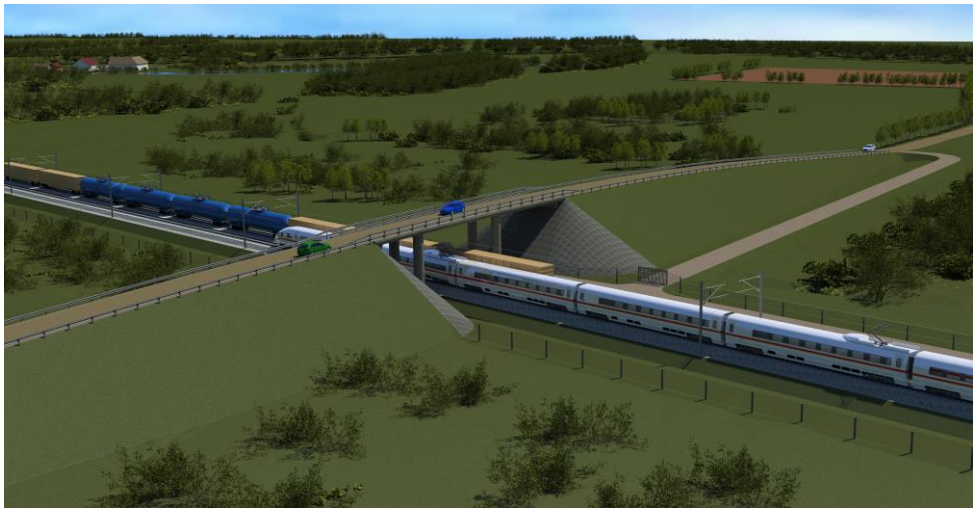
Planned railway infrastructure is presented in maps and drawings added to the summary as separate files (General map of Rail Baltic in Harju, Rapla and Pärnu county, M 1:220 000; separate maps for each county, M 1:80 000), the legends of the maps are translated in English. Detailed planning solution in every municipality is given in drawings (M 1:20 000), which can be found in Rail Baltic website (http://railbaltic.info/et/materjalid/maakonnaplaneeringud/category/284-joonised).

3. GENERAL PRINCIPLES OF RAIL BALTIC RAILWAY

Rail Baltic railway corridor is intended to serve both passenger and freight transport. The railway is double-track and uses the European standard gauge 1,435 mm. Trains are powered by electricity, making it one of the most environmentally friendly means of transport. Trains can travel at speeds of up to 240 km/h. There is a passenger terminal planned in Tallinn, Ülemiste; a cargo terminal in Tallinn, Muuga and passenger terminal in Pärnu. Additional possi-

bility for a train station is reserved in Rapla. Trains take less than an hour to travel from Tallinn to Pärnu and less than two hours to Riga.

Rail Baltic as planned is a modern railway that generates less noise and vibration than the current Estonian routes. The railway will have no level crossings and will be fenced (see image below) meaning it will be safer than the current Estonian railways.



Viaduct

Avoiding any built-up areas was the first objective when drafting the route options. However, it is possible that the railway will lengthen the familiar traffic routes in some regions. Opportunities to cross the railway from below and above, including pathways and access routes to agricultural and forest land, will be created in order to alleviate the 'barrier effect' caused by the railway (see image below).

Passage for pedestrians

Additionally, animal passages are designed to preserve the main directions of movement and coherence of green networks (see image below).

Ecoduct

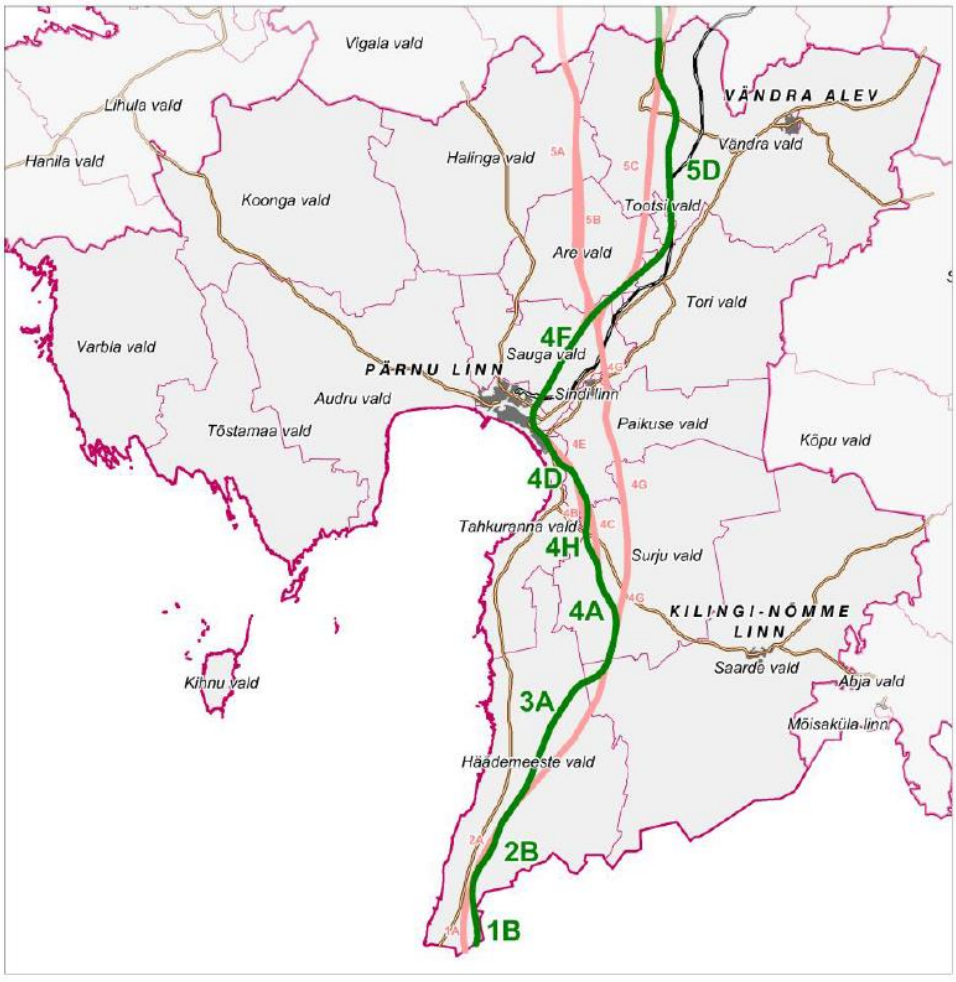
Rail Baltic county plans set following pre-conditions for the municipal comprehensive and detailed plans and the railway design phase:

- The location of the railway has to be acknowledged in further comprehensive and detailed planning. The railway corridor as defined in county plan will be entered in the valid muncipal comprehensive plans.
- Land acquisition will be performed based on preliminary design which is carried out according to the county plans
- Until the land acquisition process for Rail Baltic has been completed, all building acitivities need official opinion from the Ministry of Economic Affairs and Communications.
- Requirements for the activities in railway protection zone are set by Building Act
- Pre-conditions for preliminary design:
    - To specify the locations and technical solutions for railway infrastructure (stations, powerstations and –lines, power substations/converter stations, passages, bridges, culverts)
    - To specify the need for reconstructions (passages, road network etc) and give technical solutions
    - When reconstructing road, give comprehensive solutions for the infrastructure (incl busstops, bycicle and pedestrian roads)

- To specify the height of the railway (common embankment, high embankment or recess)
- To specify the organisation of roads in the viaduct
- To specify the exact locations of ecoducts and noise mitigation measures and give technical solutions
- Solve the functioning of amelioration systems
- To specify the extent of land needed for the railway and railway protection zone
- To take into consideration the Natura 2000 areas, the railway can not be designed on Natura 2000 site.

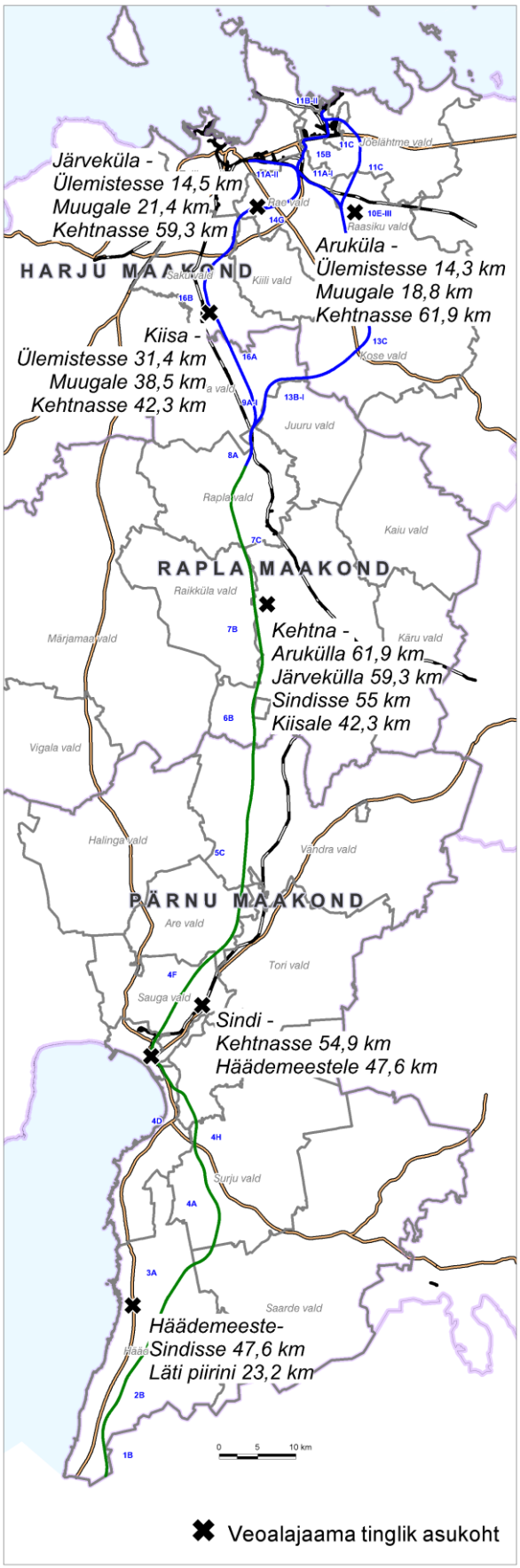
4. LOCATION OF RAIL BALTIC RAILWAY IN PÄRNU COUNTY

In Pärnu county the alignment which enters Pärnu town was prefferred because of social and economical reasons. SEA had no principal objections to this location (in case the mitigation measures are taken into consideration) and it was supported by local municipality.



Preferred alignment in Pärnu county

For the railway two power substations are planned in Pärnu county (see the image below and maps of Pärnu county plan).



Principal locations of power substations/converter stations (marked with X) for Rail Baltic

Border-crossing area between Lativa and Estonia has been agreed upon since 2013, the area is marked on the Pärnu county map and Häädemeeste municipality map as a principal location.

In Häädemeeste, bordering municipality to Latvia, the route passes mostly through unpopulated forests (see image below), however numerous crossings with roads demand viaducts (marked with green dots).

Location of Rail Baltic in Häädemeeste municipality