

General characteristics of Rail Baltica project

Rail Baltica is a new 870 km long, fast, conventional double-track electrified and ERTMS-equipped railway line with maximum design speed of 249 km/h (the maximum operational speed of 234 km/h) on the route from Tallinn (EE) through Pärnu – Rīga – Panevėžys – Kaunas to the Lithuanian-Polish border, with a connection from Kaunas to Vilnius. The new railway line will be designed with 1435 mm gauge and conforming to all requirements of the Technical Specifications for Interoperability (TSIs).

Types of services planned*: high speed (HS), regional, including cross-border regional, night, freight

Train type	Regional Express		High speed	
Train formation	Single	Double	Single	Double
Seating capacity	200-300	400-600	350-450	700-900
Max length over buffer	75-105 m	150-210 m	200	404 m
Max operating speed	200 km/h	200 km/h	250 km/h	250 km/h
Deceleration (operational brake)	0.8 m/s ²	0.8 m/s ²	0.8 m/s ²	0.8 m/s ²
Starting acceleration	0.964 m/s ²	0.964 m/s ²	0.8 m/s ² (0-60 km/h)	0.8 m/s ² (0-60 km/h)

**indicative, based on the Operational Plan (2018)*

Night trains: up to 600 m long, speed 160-200 km/h (passenger coaches + carrier wagons)

Freight trains: up to 1050 m long, speed 100-120 km/h, tonnage 800-2500 tons

Train signalling and traffic management system: ERTMS Level 2, possibility to introduce FRMCS as well.

Platform height: 760 mm

For information on technical parameters please see Rail Baltica website

<https://www.railbaltica.org/about-rail-baltica/technical-parameters/>

Indicative number of trainsets required:

	2027-2030	2036	2046	2056
High speed units	18*	23	23	29
Regional units	23	27	27	35
Night service (locomotives 200 km/h)	5*	5	5	5
Night service (coach wagons/sleepers)	29*	29	29	29
Car carrier wagons	15*	15	15	15

**starting from 2030*

Indicative yearly mileage (million km) for HS and regional services:

	2027-2030	2036	2046	2056
High speed service	7.0*	11.0	11.0	15.0
Regional service	6.0	8.8	9.0	15.0

**starting from 2030*

For more information please see the Operational Plan (2018) located in the RB Rail Documentation Library <https://www.railbaltica.org/about-rail-baltica/documentation/>