# Finnish Mainline 2060

## Aiming for an international double-track main line

April 15th 2026

PÄÄRATA
FINNISH MAINLINE

# Contents

Aiming for an international
double-track main line

# Why the Mainline?

## Approximately four million people live in the area served by the Mainline

The Mainline of Finland is an 800-kilometre railway connection from Helsinki via Hämeenlinna, Tampere, Seinäjoki, Kokkola and Oulu to Tornio. With its most important branch lines (Pori, Vaasa, Jyväskylä, Rovaniemi), it forms a system that moves the whole of Finland.

## A sound choice from the regional, geopolitical and macroeconomic perspective

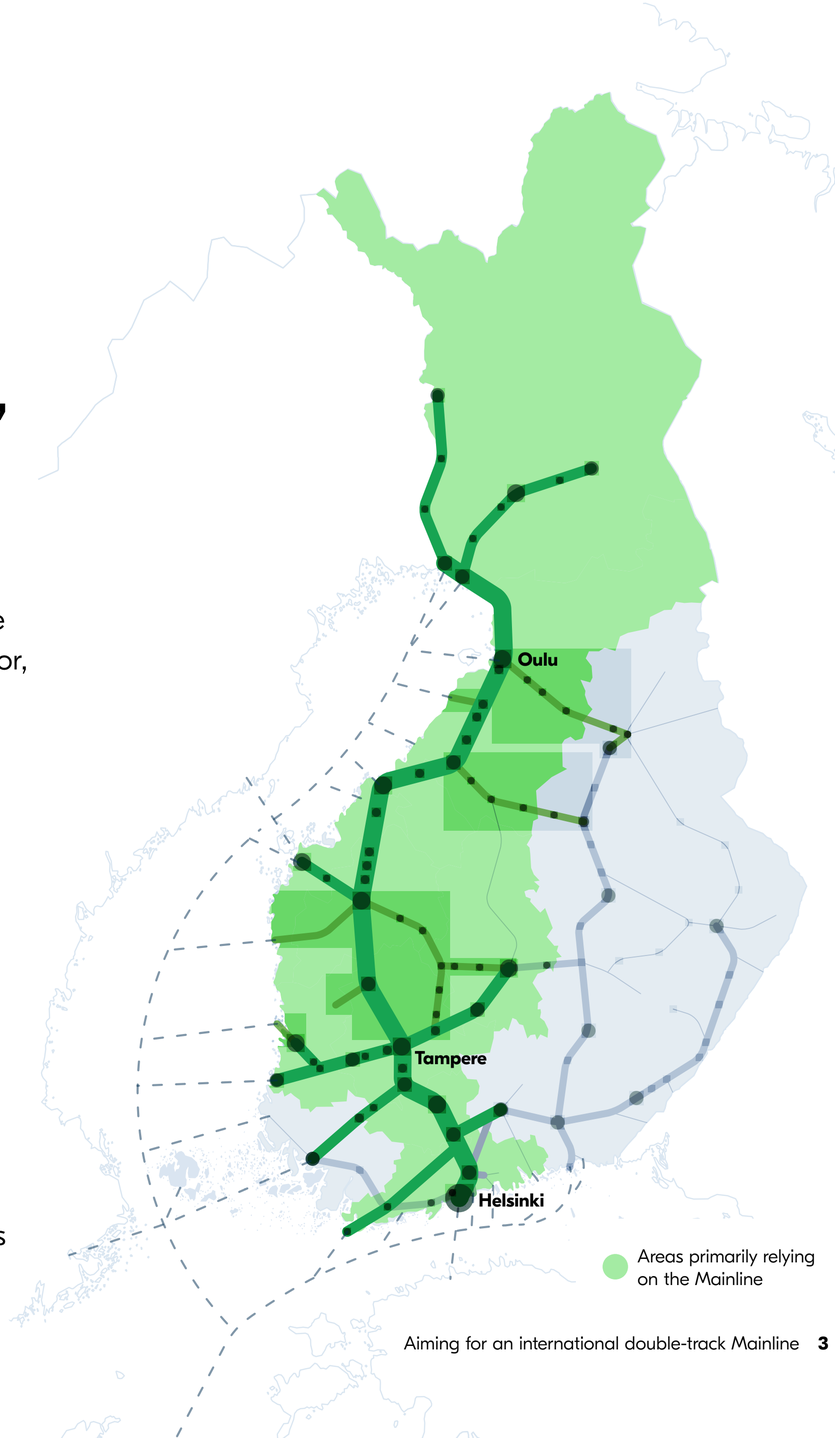
It joins the majority of Finland's growth centres, as well as the regions estimated as the most dynamic in various future scenarios. As a well-established TEN-T land transport corridor, the development of the Mainline makes sense from both a geopolitical and macroeconomic perspective. The growth, vitality, EU support and users are already there.

## Rail travel on the Mainline is booming

Compared to the period before the COVID-19 pandemic, more than one million more train journeys are made in the southern parts of the line annually, and the relative growth in the north has been as high as 30—45%. Rail travel is on the rise, and more and more people are choosing to travel by train — a climate-friendly option — for work, errands and leisure.

## Finland's rail logistics is outdated

Approximately 10% of transport in Finland and 20% of port transport is by rail. With its branch lines, the Mainline connects the majority of Finnish ports and several industrial operators. Under the right conditions, rail transport can be the most environmentally friendly and cost-effective option, but the current rail network does not enable this. Businesses also need the Mainline.



# The areas relying on the Mainline account for

**70 %**
of the Finnish population

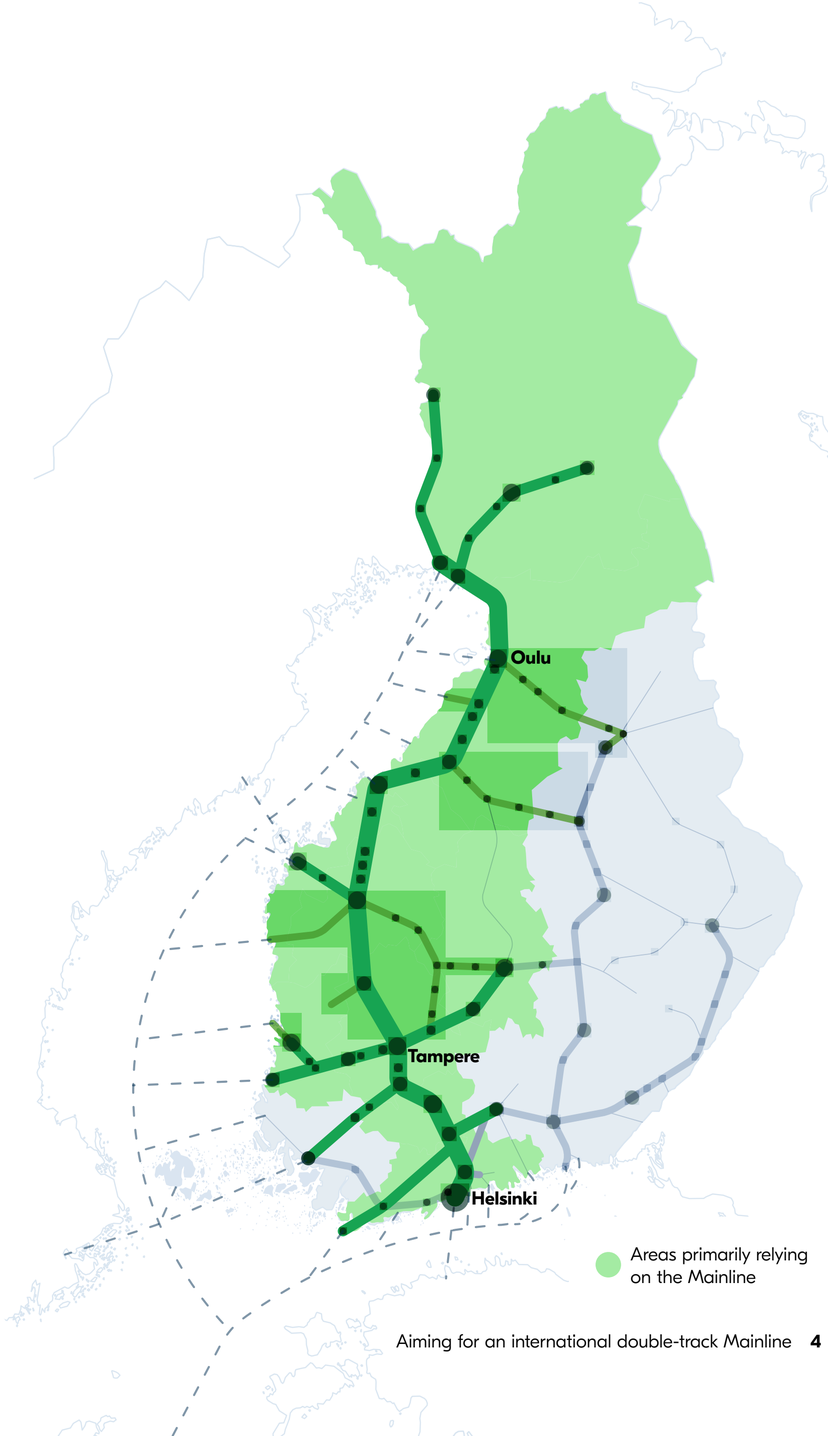
**85 %**
of RDI activities

**75 %**
of Finland's exports

**80 %**
of all new residences

**90 %**
of Finland's population growth

**80 %**
of ports' tonnage




# The Mainline moves the whole of Finland

# Investments in the Mainline!

## 01

### Perseverance and consistency of transport policy

**Perseverance and consistency of transport policy — the Mainline is the backbone of the Finnish transport system and an ongoing national spearhead project.** The Mainline moves the whole of Finland, either directly or indirectly. This can be seen as spillover effects at the latest when problems arise on the Mainline. The Mainline also serves as Finland's fixed rail link to Europe. Measures to improve the capacity, reliability and service level of the Mainline are in the best interests of the entire country. At the national level, this must be reflected as a consistent principle that transcends parliamentary terms and the timeframe of the Transport 12 plan.

## 02

### The Mainline is a cohesive whole

**The Mainline is a cohesive whole — the projects do not compete with one another, but rather support each other.** The effects of the Mainline's development are national: given the long distances, rolling stock rotation and the cumulative effects of disruptions, any and all development contributes to the whole. Elimination of the bottlenecks in southern Finland will also offer significant cumulative benefits in northern Finland, and reliable connections in the north could be a lifeline for Finland during a crisis. It is not a question of choosing priorities, but a matter of the big picture.

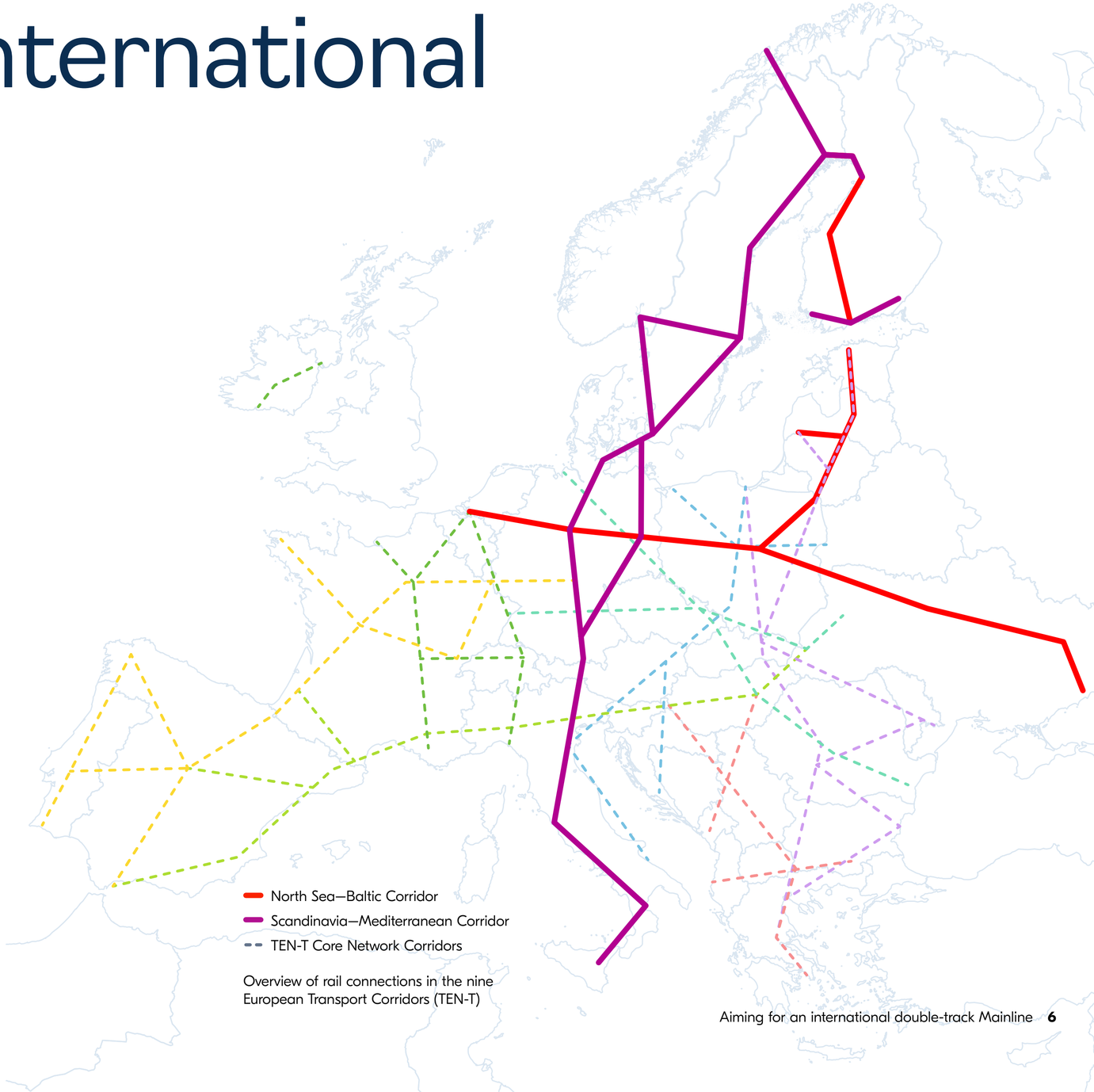
## 03

### The attraction starts from the basics

**The attraction of a rail network starts from the basics — the system must function as a seamless whole from the start to the end of travel and transport chains.** In social and transportation policy discussions, attention is often drawn to various projects worth several billions of euros: direct lines, tunnels and bridges. However, the starting point for big visions is having the basics in order. The rail network must be in good condition, the travel experience must be comfortable and the service must be reliable.

# The Mainline is an international transport corridor

- Part of the European North Sea—Baltic Corridor and Scandinavian—Mediterranean Corridor (TEN-T). This means opportunities for significant EU funding.
- Connects to Scandinavia in the north (Tornio—Haparanda) and to the Baltic states by sea in the south. The possibility of connecting the Mainline and Rail Baltica is currently being investigated.
- An integral part of connections for ports of export and the logistics system linked to the European single market.
- Finland's most important south-north transport corridor with the task of ensuring Finland's security of supply under all circumstances.
- The development of the Mainline supports both national and international climate targets.




Overview of rail connections in the nine European Transport Corridors (TEN-T)

# Current status and starting points

### Finland's most travelled and heavily used railway connection

The Mainline is Finland's most travelled and heavily used railway connection. Municipalities and regions have strengthened its position with long-term development of the regional and urban structures based on the rail network.

### The condition and capacity do not currently reflect its status

However, the condition, capacity and service level of the Mainline do not currently reflect its status as the country's most important transport route. There is a significant backlog of investments and repairs for the entire length of the Mainline.

### The current situation is limiting the ability to unlock its potential

The current state of the rail network does not allow for all of the planned and targeted additional traffic, nor does it allow for the utilisation of the Mainline's full potential. Some of the problems can only be resolved through major infrastructure projects, but smaller, cost-effective measures will suffice for others.

### Single track limits capacity

With the exception of the Helsinki–Tampere and Kokkola–Ylivieska sections, the Mainline is single track. Between Tampere and Tornio, there is a single-track section of more than 600 kilometres that is highly susceptible to disruptions and has insufficient capacity.  There are also service issues on the Helsinki–Tampere line, even though it has several tracks.

### The condition of the branch lines varies

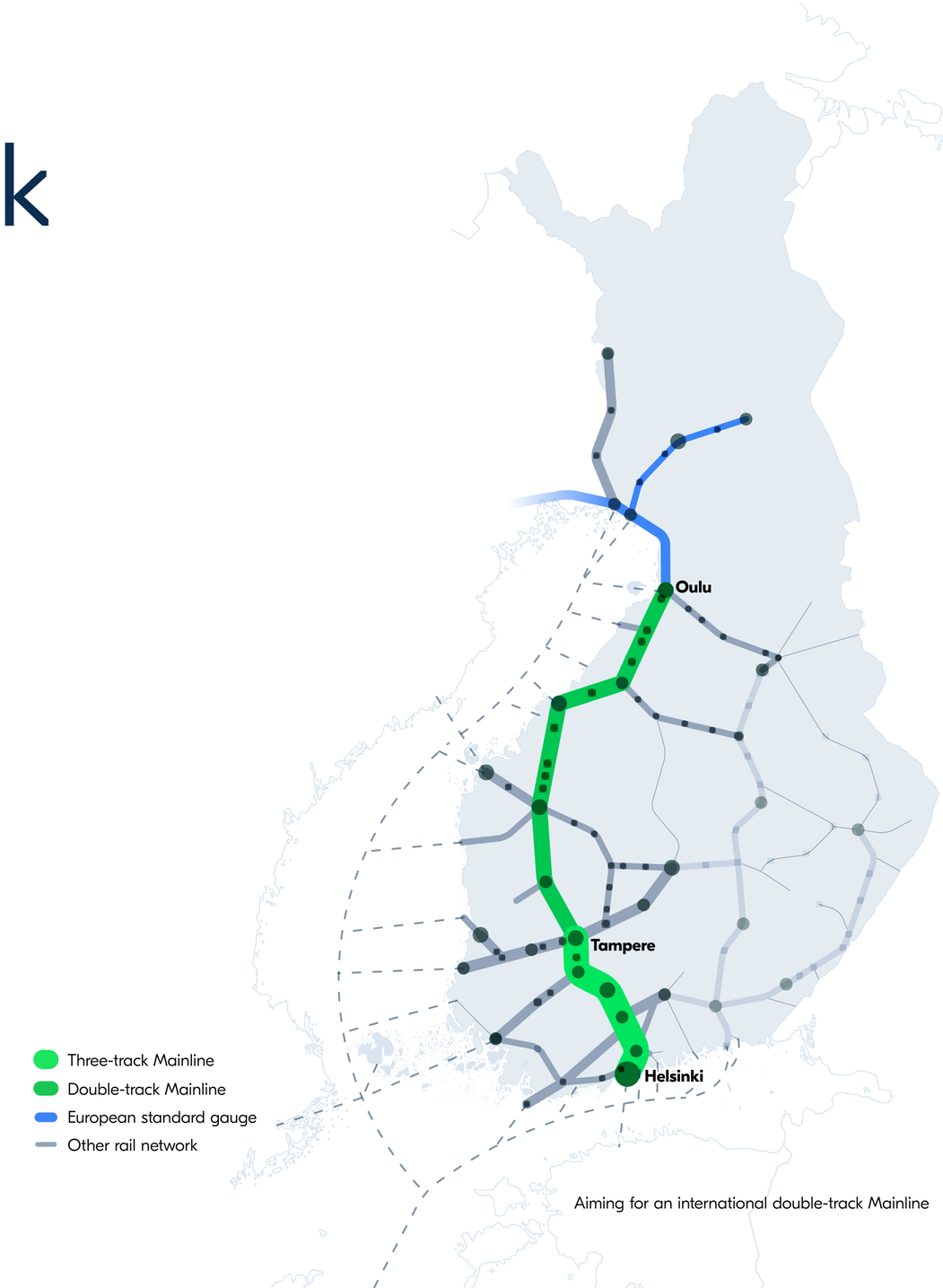
The condition of the branch lines varies: some require only minor repairs, while others are congested or have fallen into disrepair due to the repair backlog to the extent that they have almost become unusable. Almost all of the branch lines are single track.

# Aiming for a double-track Mainline in 2060

## A high-quality Mainline that is fast and reliable will be double-track along its entire length and at least triple-track between Helsinki and Tampere.

In addition to the double-track Mainline, the goal is to supplement the Mainline with the Airport Line and the western bypass line in Tampere, as well as to implement the European standard gauge from Tornio at least up to Oulu and Rovaniemi. A broader gauge transition is underway on the Mainline.

***Achieving these goals requires a commitment that extends across government terms, future-oriented development of the transport system, and ongoing identification and implementation of new spearhead measures.***



# The whole will be built one piece at a time

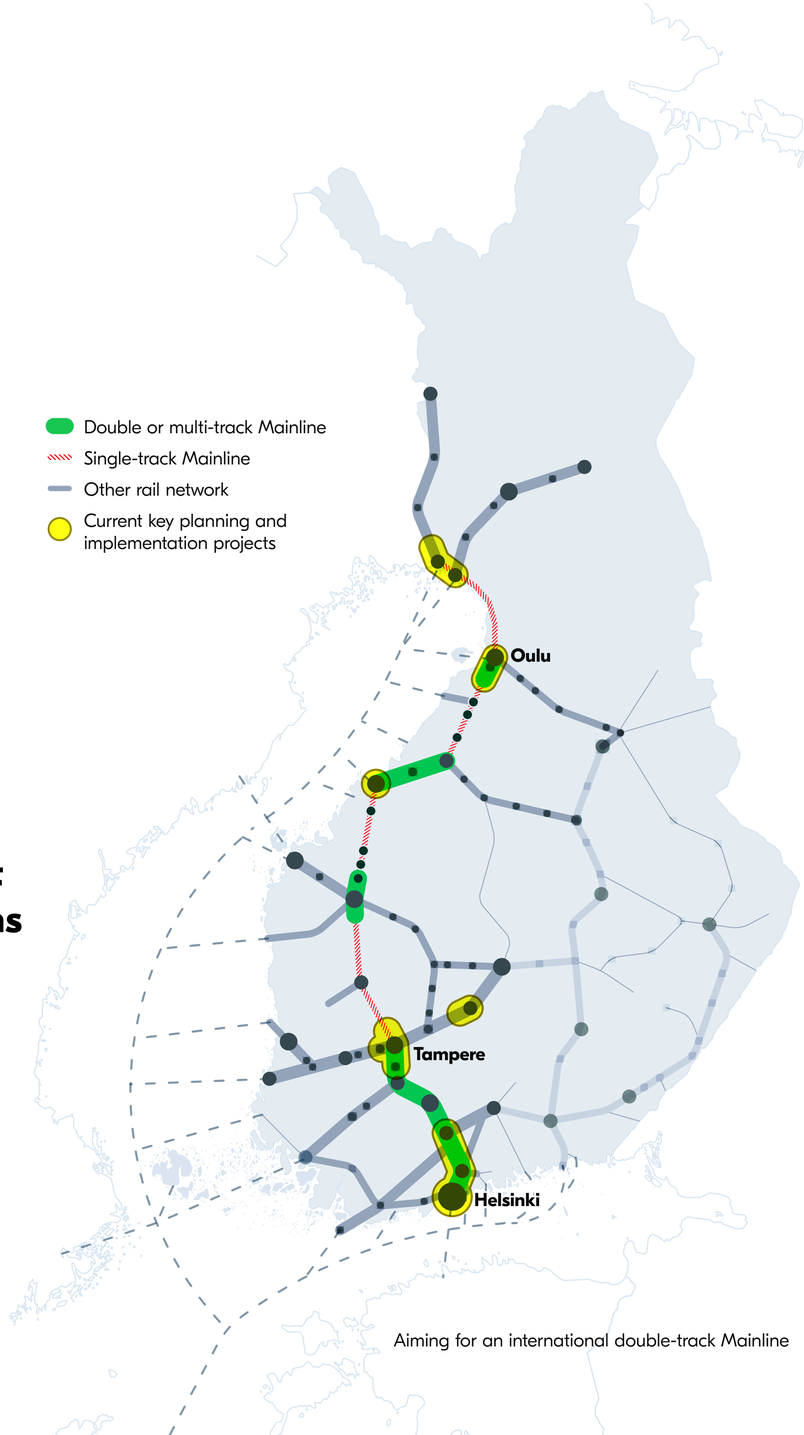
The development of the Mainline will proceed systematically, one project at a time, towards the target state identified at the section level. The development efforts should be promoted in the form of sufficiently large-scale, ambitious and long-term projects. The whole will be created step by step through persistent work. The spearhead measures for the coming years are:

**Continuous identification and prioritisation of the most up-to-date planning and implementation objects based on constantly updated planning and investment programmes of the Finnish Transport Infrastructure Agency (Appendix 8).**

**Ensuring the continuity of the renovation and development of the Mainline in Government Programmes, in the Transport 12 plan and in a transport policy that spans across multiple government terms.**

**Planning the Airport Line up to the implementation stage and making the decision to proceed with its implementation.**

**Ensuring the development of the branch lines while taking into account the rail network as a whole.**



# Along the Mainline to Europe

There are three options, each with different effects, for developing the Mainline into an international transport corridor in addition to the Tornio—Haparanda connection:

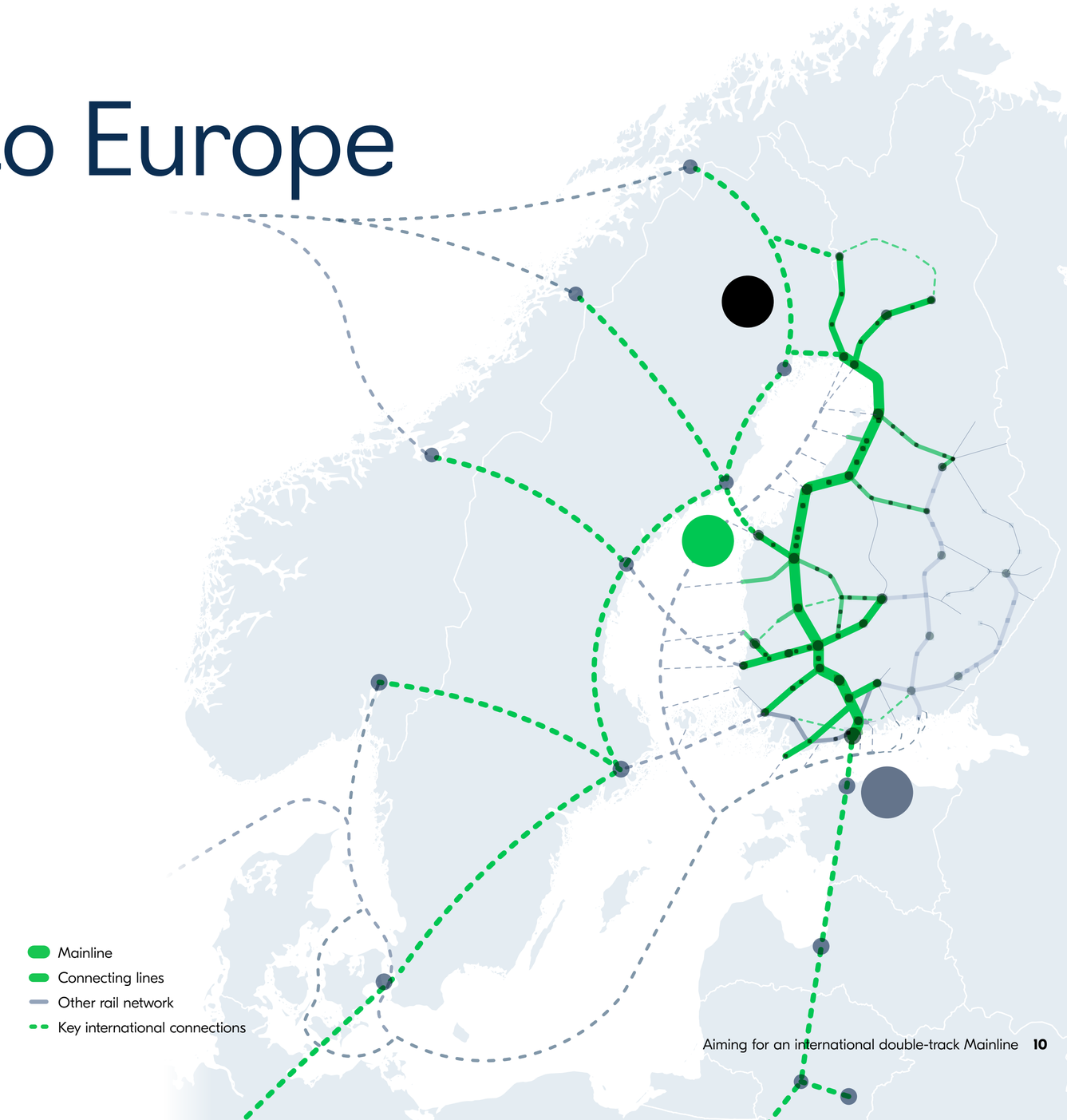
**A Helsinki—Tallinn tunnel connection and a Tampere—Warsaw railway corridor**

**A fixed connection between Vaasa and Umeå**

**A Kolari—Kiruna connection and a Tunturirata connection to Narvik**

Mega-projects are an extension of the Mainline: only a significantly upgraded domestic Mainline will enable the full utilisation of the potential offered by the international connections.

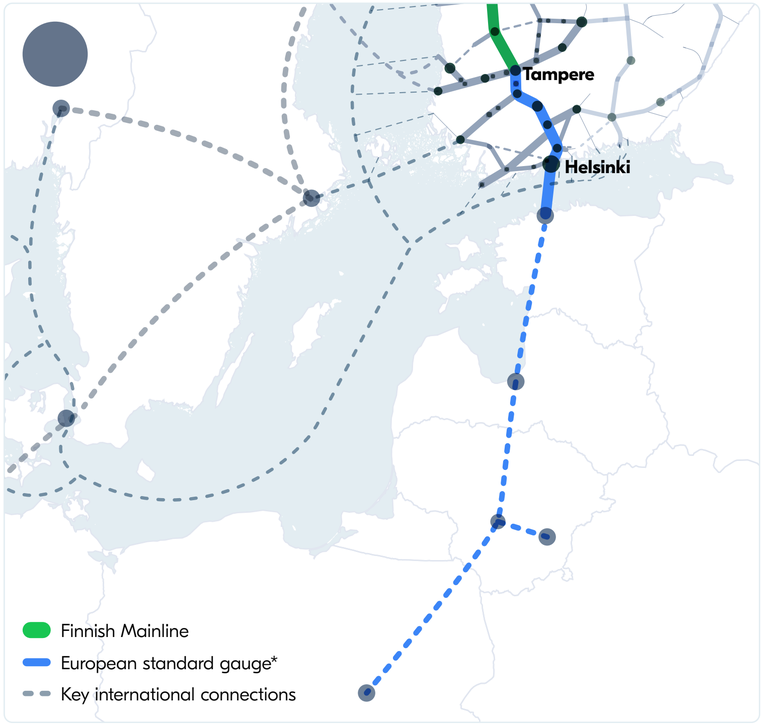
To bring these projects to fruition, a unified national message and a shared vision are needed regarding how Finland will be fully integrated into the rest of Europe and how the gauge transition will be advanced beyond the first target level (Oulu/Rovaniemi).



# Along the Mainline to Europe

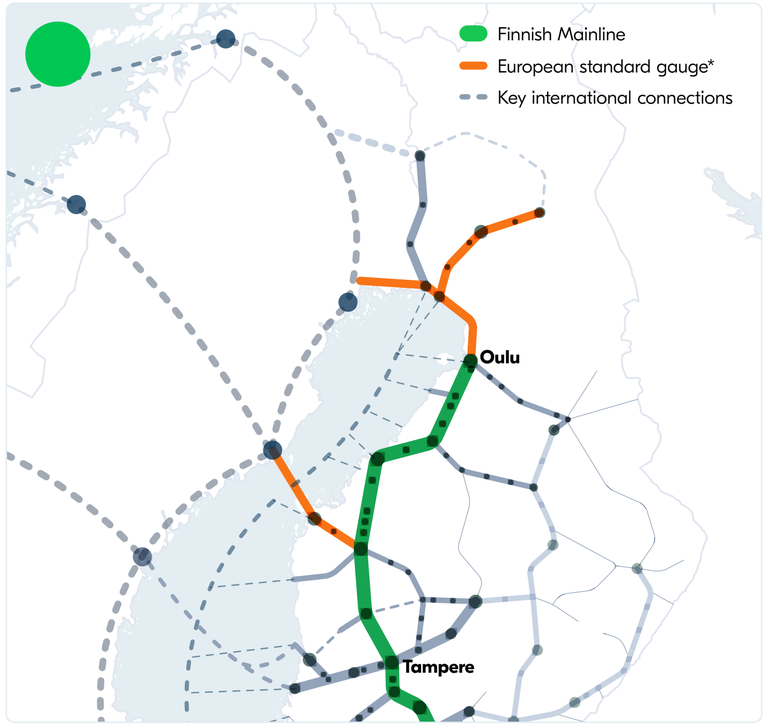
## To the European single market via the Baltic States

Realising the Helsinki—Tallinn tunnel connection and the Tampere—Warsaw railway corridor



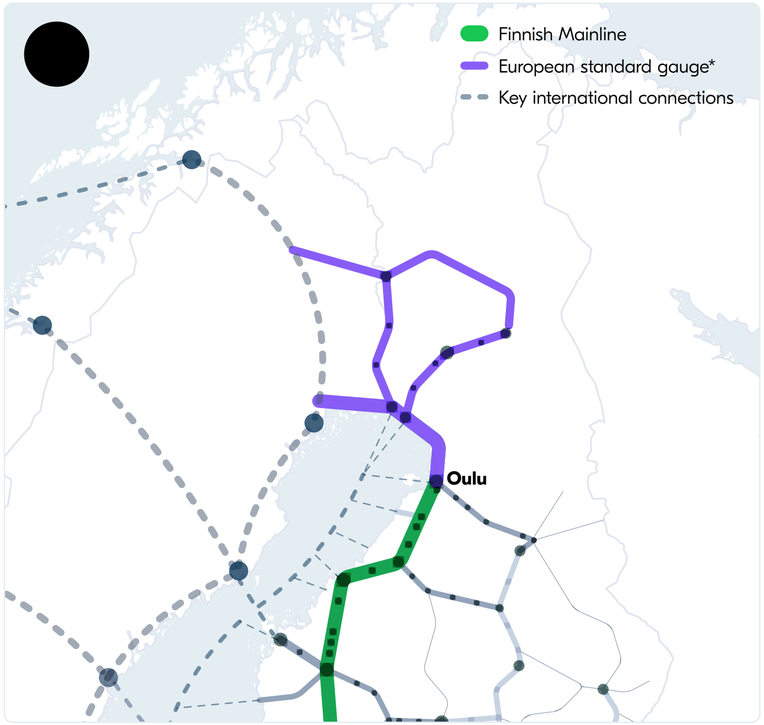

## Nordic Connector — Nordic vitality with a fixed connection

The fixed connection between Vaasa and Umeå




## Security of supply through northern connections

The Kolari—Kiruna connection and the Tunturirata connection to Narvik




*Visualizations of European standard gauge are indicative. The progress of international projects will influence how and where gauge transition should be advanced and prioritized.

# The attraction of a rail network starts from the basics

## A Mainline that serves everyone can be achieved by promoting cost-effective, themed and in many cases local measures:

### The complete travel experience

The everyday travel experience must be based on comfortable and accessible station environments, modern and comfortable rolling stock, reliable schedules and mobile connectivity that works throughout the entire journey.

### Foundation for prosperity

A reliable rail connection is vital for many municipalities, urban areas and businesses. Land use planning, economic policy and image are all based on the railway and rail transport.

### A user-oriented whole

Rail transport must be a user-oriented whole: connections to stations must be seamless, ticketing and scheduling systems must be integrated, and real-time communications must be smooth.

### The freight transport operating environments

The railway network operating environment for freight transport is outdated: the transfer of logistics onto the rails must be boosted by the development of infrastructure such as loading areas, terminals, spur lines and passing lanes.

### Sustainable travel by rail

Not all travel is commuting: the Mainline has a great deal of untapped potential for the development of sustainable tourism and memorable train journeys.

# The Mainline strategy is the result of cooperation

The Mainline Group includes representatives from 20 organisations: joint municipal authorities, central cities, chambers of commerce and ports.

The Group aims to ensure the development of the Mainline and its branch lines as a unified, nationwide artery.

## The Finnish Mainline Group promotes Finland's most important main artery

Hundreds of representatives from businesses, chambers of commerce, ports, municipalities, joint municipal authorities, government agencies, associations and organisations shared their views on the development of the Mainline.

To support the development of the strategy, a survey that garnered 240 responses and a workshop attended by approximately a hundred persons were arranged.

The extensive background materials gathered during the process provide a solid foundation for further deepening of the Mainline collaboration.

## Based on extensive dialogue and hundreds of viewpoints

# Finnish Mainline 2060

## Maps and materials

Appendix 1

# The Mainline and the Finnish transport network

## Railways, main roads, ports and airports

### Busiest passenger train stations 2025

Total number of passengers who arrived, departed or transferred using VR's tickets. The figure and percentage of change do not include trips with HSL and Nysse tickets.

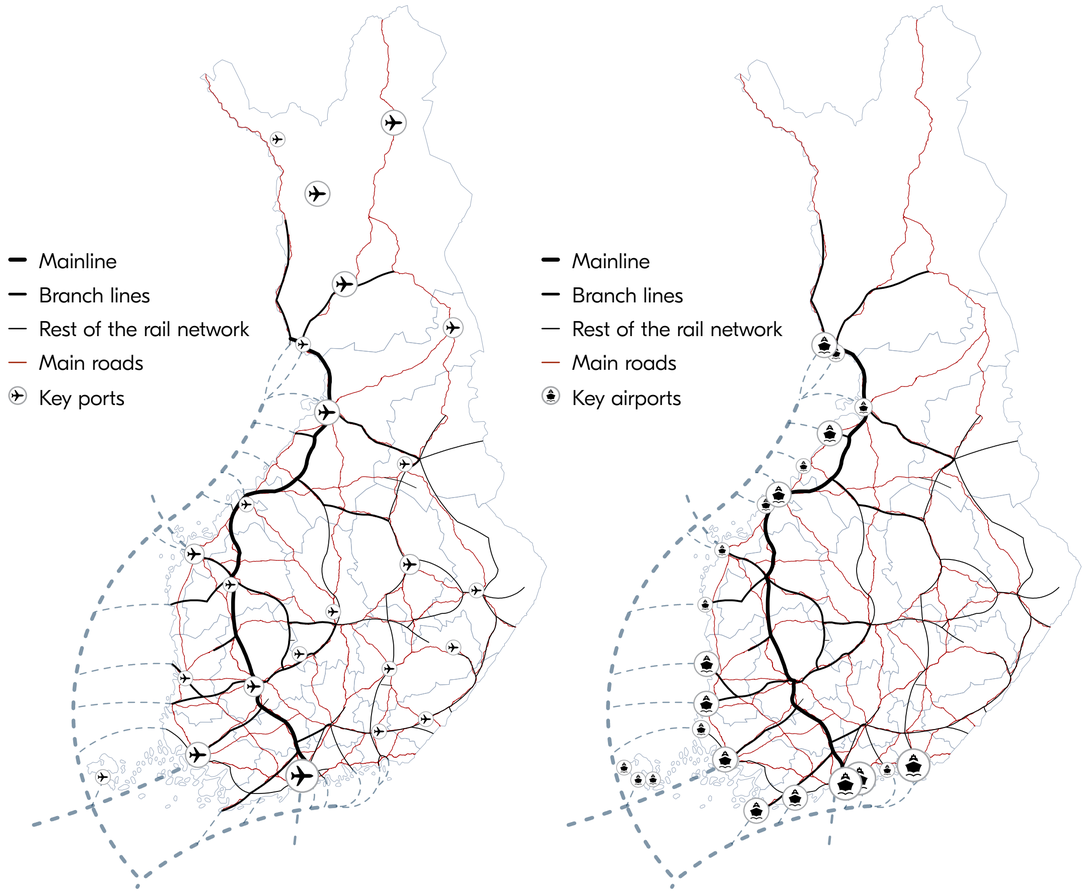
| # | Station | Passengers | Change compared to 2019 |
|---|---|---|---|
| 1 | Helsinki | 8 467 000 | -15 % |
| 2 | Tampere | 6 545 800 | 29 % |
| 3 | Tikkurila | 2 245 000 | 9 % |
| 4 | Pasila | 2 188 900 | 54 % |
| 5 | Lahti | 2 087 100 | 2 % |
| 6 | Hyvinkää | 1 719 200 | -14 % |
| 7 | Riihimäki | 1 556 600 | -2 % |
| 8 | Oulu | 1 478 500 | 21 % |
| 9 | Turku | 1 455 600 | -11 % |
| 10 | Hämeenlinna | 1 144 200 | 25 % |
| 11 | Jyväskylä | 1 130 800 | 33 % |
| 12 | Järvenpää | 1 091 600 | -52 % |
| 13 | Seinäjoki | 1 086 700 | -1 % |
| 14 | Lentoasema | 884 300 | 26 % |
| 15 | Kouvola | 827 900 | -5 % |
| 16 | Kupittaa | 778 600 | 242 % |
| 17 | Kuopio | 716 200 | 7 % |
| 18 | Rovaniemi | 692 500 | 33 % |
| 19 | Vaasa | 624 900 | 16 % |
| 20 | Joensuu | 604 800 | 7 % |

Source: VR

### Passenger numbers at Finnish airports 2025

| Airport | Passengers |
|---|---|
| Helsinki | 16 980 287 |
| Rovaniemi | 1 120 022 |
| Oulu | 545 034 |
| Kittilä | 445 911 |
| Turku | 278 503 |
| Ivalo | 249 056 |
| Vaasa | 169 431 |
| Kuopio | 144 119 |
| Tampere | 140 664 |
| Kuusamo | 129 373 |
| Kajaani | 43 116 |
| Mariehamn | 42 062 |
| Joensuu | 41 302 |
| Kemi-Tornio | 34 624 |
| Kokkola-Pietarsaari | 32 131 |
| Jyväskylä | 28 321 |
| Pori | 12 856 |
| Savonlinna | 6 792 |
| **Yhteensä** | **20 443 604** |

Source: Finavia



Appendix 2

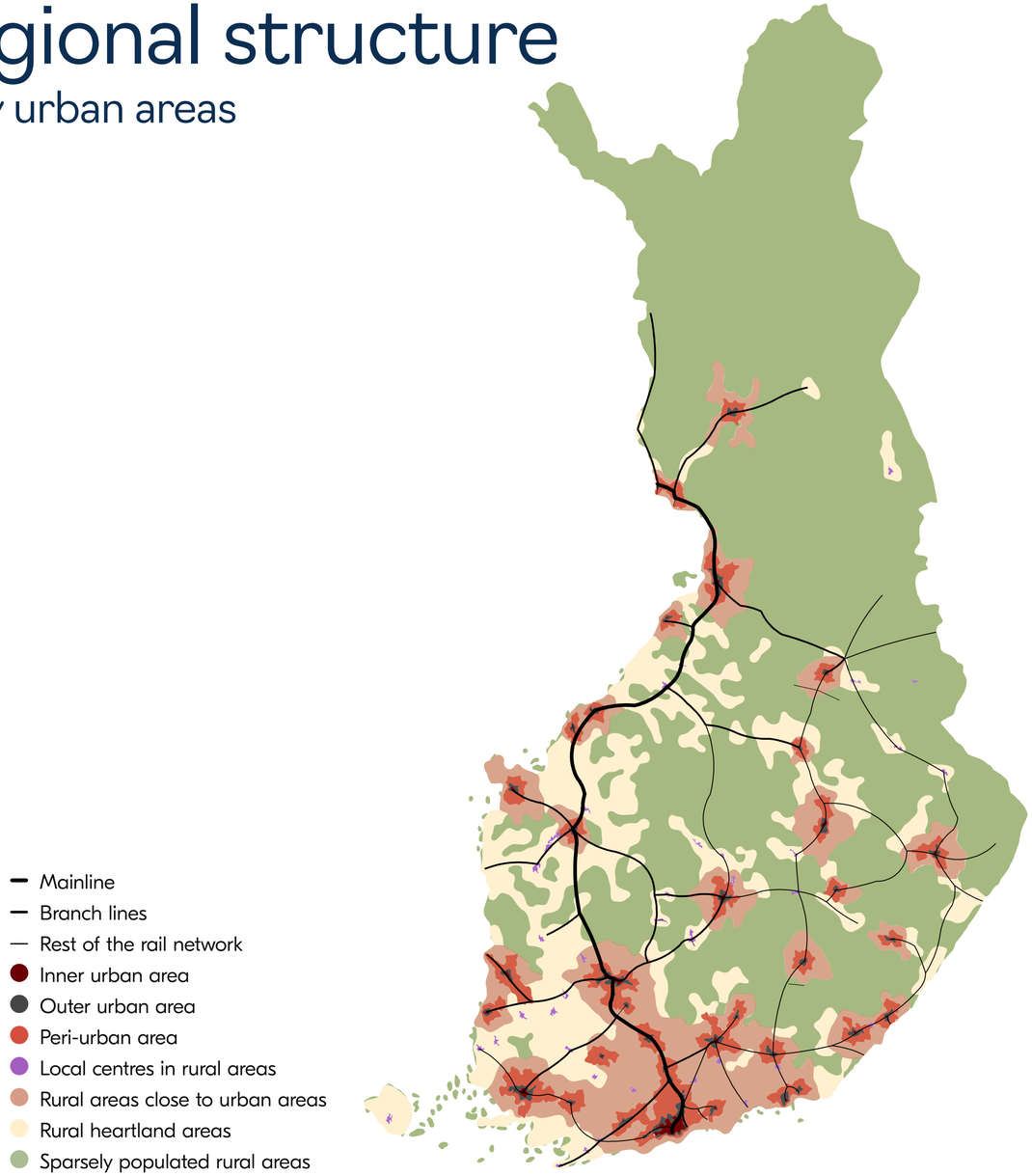
# The Mainline and Finland's regional structure

## The Finnish Environment Institute's urban-rural classification and key urban areas

### Eleven largest urban areas along the Mainline and branch lines

| Urban area | Population of the central urban area in 2025 | Population of the core city in 2025 |
|---|---|---|
| Helsinki | 1 396 899 | 695 526 |
| Tampere | 369 233 | 263 526 |
| Oulu | 217 350 | 217 556 |
| Jyväskylä | 136 164 | 149 967 |
| Pori | 83 325 | 83 044 |
| Vaasa | 71 577 | 71 281 |
| Rovaniemi | 56 061 | 66 201 |
| Seinäjoki | 54 300 | 67 258 |
| Hämeenlinna | 52 417 | 68 622 |
| Hyvinkää | 43 925 | 47 031 |
| Kokkola | 37 708 | 48 355 |
| **Total** | **2 518 959** | **1 778 367** |
| **Share of Finnish population** | **45 %** | **31 %** |

Source: Statistics Finland



Appendix 3

# Long-distance passenger volumes

**Long-distance passenger volumes and changes from 2019 to 2025. In 2025, a total of 16.1 million long-distance journeys were taken in the whole of Finland.**

### Track sections with the relatively highest growth

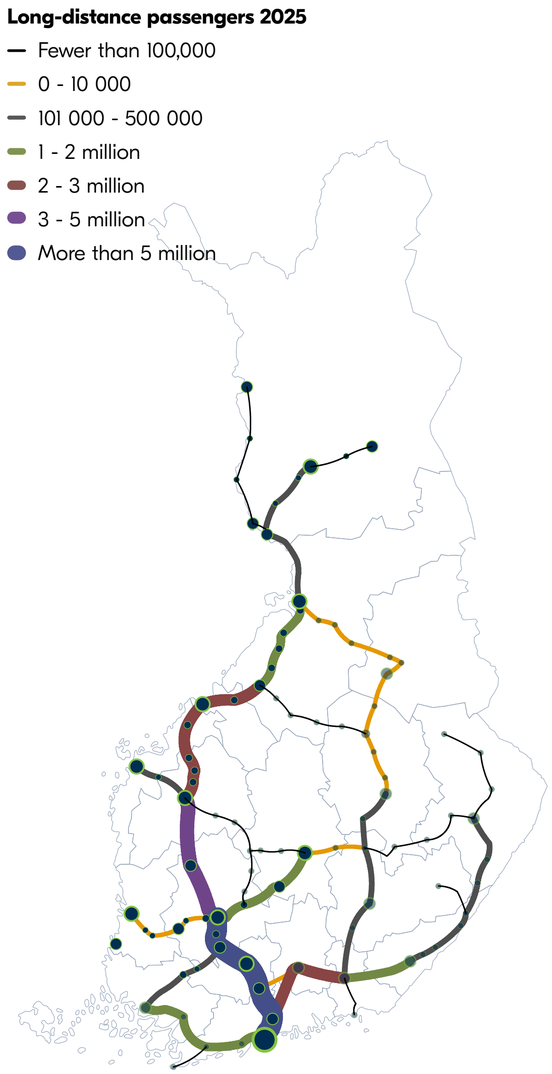
| Track section | Growth (%) vs. 2019 |
|---|---|
| Ylivieska-Oulu | + 44 % |
| Turku-Toijala | +43 % |
| Kokkola-Ylivieska | +40 % |
| Kemi-Rovaniemi | +36 % |
| Oulu-Kemi | +33 % |
| Seinäjoki-Kokkola | +33 % |
| Tampere-Orivesi-Jyväskylä-Pieksämäki | +31 % |
| Oulu-Kontiomäki | +27 % |
| Iisalmi-Kajaani | +26 % |

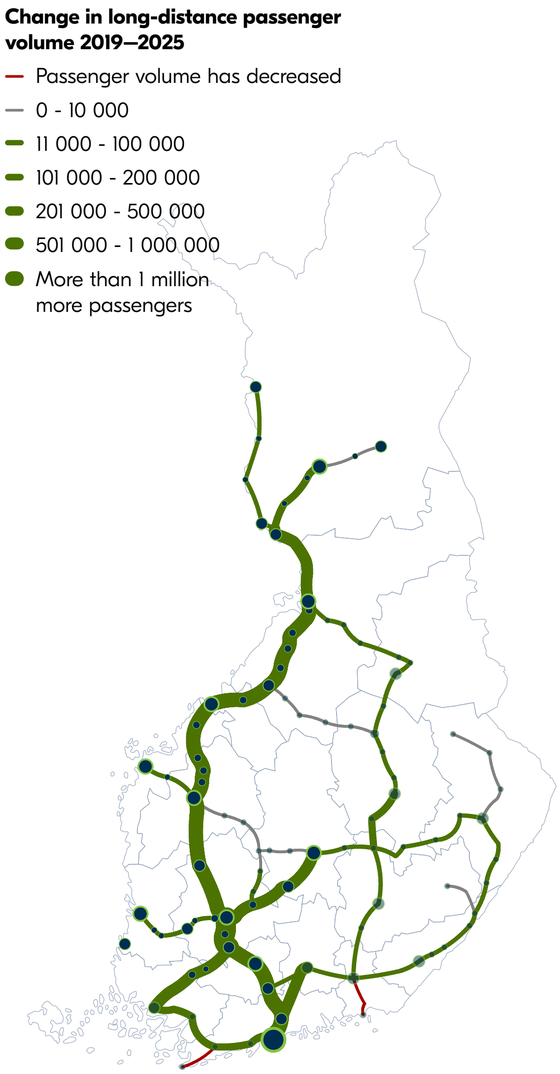
Source: VR, Finnish Transport Infrastructure Agency

### Track sections with the highest growth by volume

| Track section | Passenger volume 2025 | Growth vs. 2019 |
|---|---|---|
| Toijala-Tampere | 6,6 M | +1,2 M |
| Riihimäki-Toijala | 6 M | +1 M |
| Kerava-Riihimäki | 6 M | +0,9 M |
| Helsinki-Kerava | 7,9 M | +0,7 M |
| Tampere-Parkano | 3,7 M | +0,6 M |
| Parkano-Seinäjoki | 3,6 M | +0,6 M |
| Ylivieska-Oulu | 1,9 M | +0,6 M |
| Seinäjoki-Kokkola | 2,4 M | +0,6 M |
| Kokkola-Ylivieska | 2 M | +0,6 M |

Source: VR, Finnish Transport Infrastructure Agency



Appendix 4

# Service level and travel times for passenger rail service

**Service levels and travel times for passenger trains between the Mainline and regional centres served by branch lines.**

| Section | Trains per direction per day | Travel time of the fastest train | Typical travel time, rounded off |
|---|---|---|---|
| Helsinki-Hämeenlinna | 30 | 1 h 3 min | 1 h 10 min |
| Helsinki-Tampere | 43 | 1 h 38 min | 1 h 40 min |
| Helsinki-Seinäjoki | 20 | 2 h 45 min | 3 h |
| Helsinki-Kokkola | 14 | 3 h 49 min | 4 h |
| Helsinki-Oulu | 16 | 5 h 25 min | 6 h |
| Helsinki-Pori | (change of trains in Tampere) 9 | 3 h 24 min | 3 h 30 min |
| Helsinki-Jyväskylä | 9 | 3 h 13 min | 3 h 30 min |
| Helsinki-Vaasa | 6 | 3 h 39 min | 4 h |
| Helsinki-Rovaniemi | 6 | 8 h 3 min | 8 h 30 min |
| Hämeenlinna-Tampere | 31 | 36 min | 45 min |
| Tampere-Seinäjoki | 20 | 1 h 3 min | 1 h 10 min |
| Tampere-Kokkola | 14 | 2 h 7 min | 2 h 30 min |
| Tampere-Oulu | 13 | 3 h 43 min | 4 h 15 min |
| Tampere-Rovaniemi | 6 | 6 h 21 min | 6 h 45 min |
| Tampere-Pori | 9 | 1 h 32 min | 1 h 35 min |
| Tampere-Jyväskylä | 10 | 1 h 27 min | 1 h 35 min |
| Seinäjoki-Vaasa | 10 | 49 min | 55 min |
| Seinäjoki-Kokkola | 15 | 58 min | 1 h 10 min |
| Seinäjoki-Oulu | 13 | 2 h 35 min | 3 h |
| Seinäjoki-Rovaniemi | 6 | 5 h 10 min | 5 h 40 min |
| Kokkola-Oulu | 13 | 1 h 33 min | 1 h 45 min |
| Oulu-Rovaniemi | 6 | 2 h 19 min | 2 h 30 min |

Source: VR's schedules (15 April 2026)

Appendix 5

# Freight tonnage transported by rail in 2025

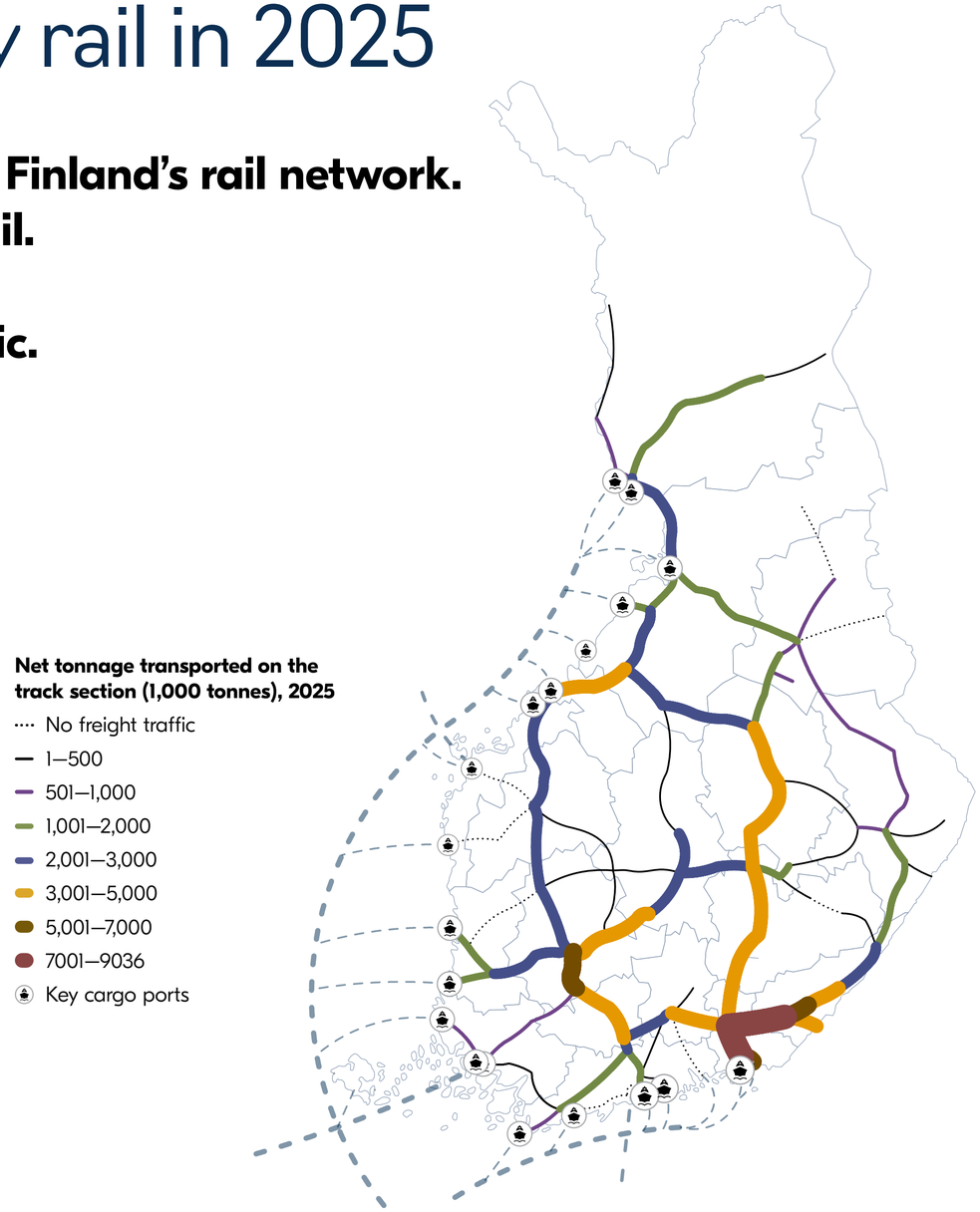
**In 2025, 28 million tonnes of freight was transported in the whole of Finland's rail network.**
**Approximately 10% of all freight transported in Finland travels by rail.**
**Approximately 20% of all port transports are by rail.**
**Approximately 65% of freight traffic on the rail network is port traffic.**

### International cargo traffic at ports 2025

| Port | Million tonnes |
|---|---|
| Sköldvik | 22,5 |
| Helsinki | 13,2 |
| Haminakotka | 13,1 |
| Raahe | 6,1 |
| Hanko | 5,2 |
| Rauma | 4,6 |
| Pori | 2,9 |
| Kokkola | 2,9 |
| Naantali | 2,9 |
| Tornio | 2,6 |
| Inkoo | 2,5 |
| Oulu | 2 |

| Port | Million tonnes |
|---|---|
| Uusikaupunki | 1,8 |
| Kemi | 1,5 |
| Turku | 1,4 |
| Pietarsaari | 1,3 |
| Vaasa | 0,9 |
| Kaskinen | 0,6 |
| Kalajoki | 0,4 |
| Eurajoki | 0,4 |
| Kantvik | 0,2 |
| Tolkkinen | 0,2 |
| **Total** | **89** |

Source: Finnish Ports Association / Statistics Finland



Appendix 6

# Speed limits and electrification

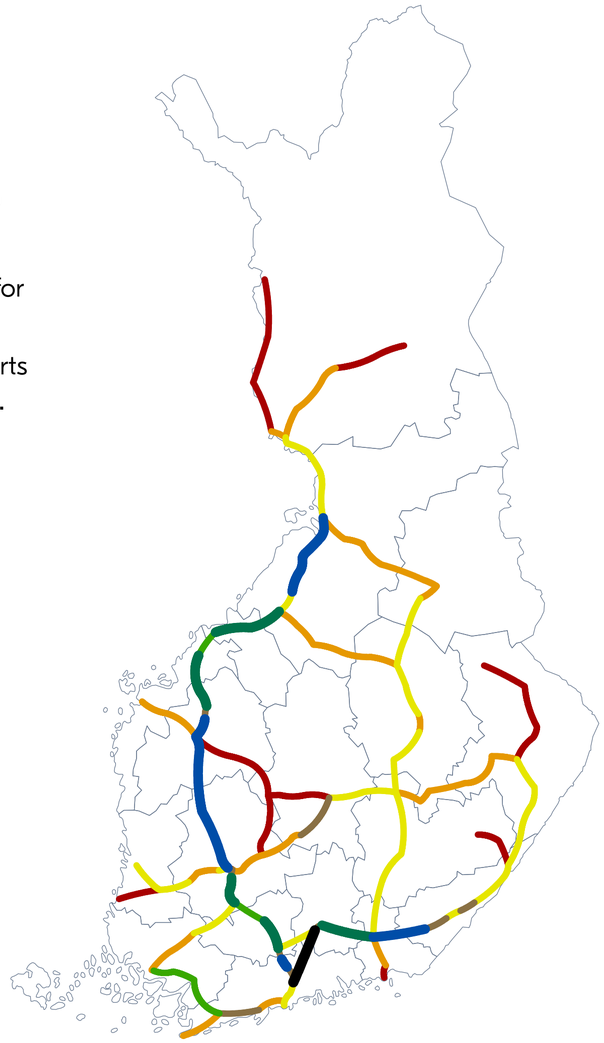
## Speed limits on the sections operated by passenger trains in 2027

As a rule, the TEN-T core network must aim for a speed of 160 km/h in passenger traffic.

Where possible, long-term development efforts must aim for higher speeds, up to 250 km/h.

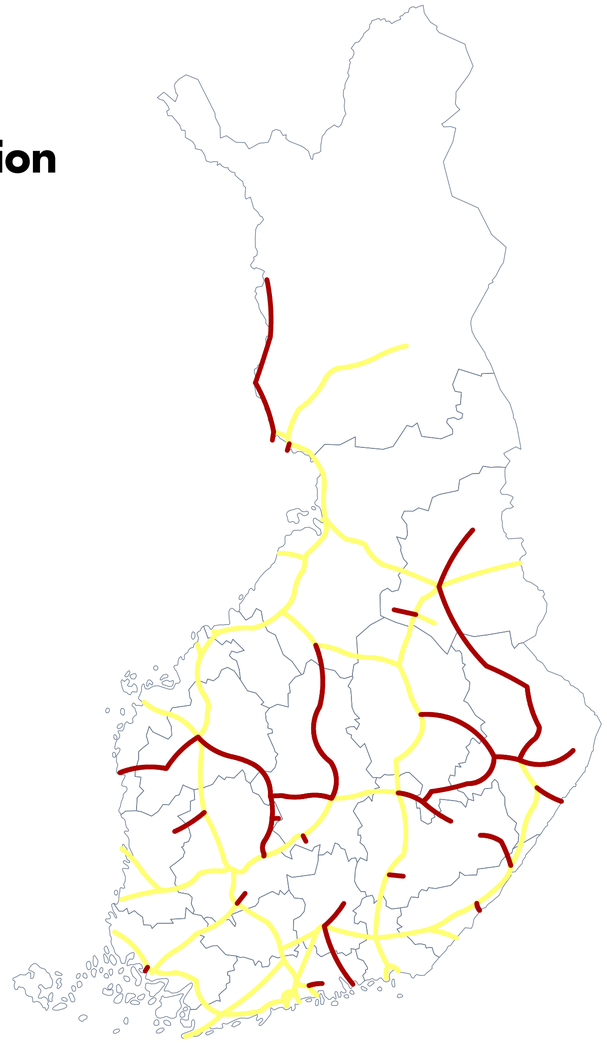
**Track section's speed limit (km/h)**

- 80-100
- 120-130
- 140
- 160
- 170
- 180
- 200
- 220



## Status of railway network electrification in 2026

- Non-electrified track section
- Electrified track section



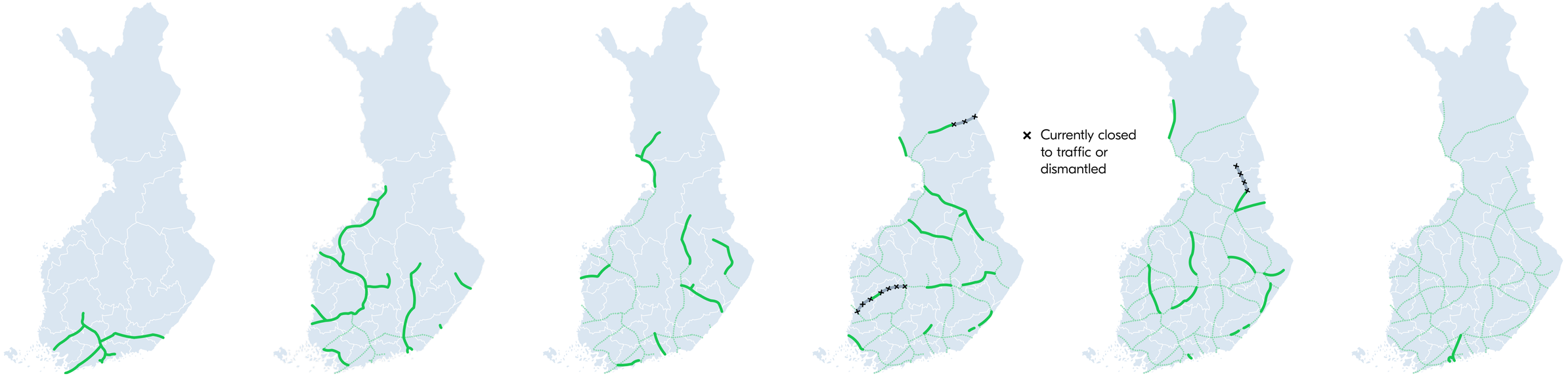
# Appendix 7 Backbone of the transport system since 1862

The history of the Mainline and Finnish rail transport started in 1862 when the Helsinki—Hämeenlinna section was opened to traffic. The travel time of less than five hours revolutionised accessibility and commerce between regions.

The expansion of the railway network was a flagship project for the Grand Duchy of Finland: the railway line to St. Petersburg was completed as early as 1870, to Tampere in 1876 and to Oulu in 1886. By the early 20th century, the current rail network had almost taken shape. The time span of a little less than 40 years is the same as that of this strategy.

Railways have played a huge role in Finnish history. Many cities exist solely because the rail network made building them possible. Railways have had a direct impact on Finnish culture, the regional structure and the turning points in the country's history.

The criteria for the development of the Mainline have changed surprisingly little: in both the 1860s and the 2020s, the goal has been to create a whole that will improve the country's competitiveness, accessibility and security of supply.



Appendix 8

# Railway project status 2026

## Projects and sections currently being actively planned or at the study stage

Several projects with a smaller scale are also being planned or ready for implementation in the railway network, such as new interchanges between Tampere and Oulu, the development of the Kokkola station area and several branch line development projects.

| International section projects | Status in March 2026 | Cost estimate |
|---|---|---|
| Helsinki—Tallinn tunnel connection | Several studies completed, included in the regional land use plan for Uusimaa. | Approximately EUR 20 billion |
| Vaasa—Umeå — fixed connection | Preliminary studies on the available alternatives for the road and rail connection completed in 2025. | EUR 5—29 billion |
| New Kolari—Kiruna rail connection | Preliminary study completed. | EUR 1—2 billion |
| Turku—Stockholm — fixed connection | Preliminary study ongoing. | Tens of billions of euros |

| Projects concerning the entire rail network | Status in March 2026 | Cost estimate |
|---|---|---|
| Transition to the European track gauge | Stage 1 planning underway (Rail Nordica), various studies on the wider transition. | Several billion euros for the entire rail network |
| Modernisation of the train control system | Implementation underway, will continue in stages until approximately 2040. | EUR 1.5 billion |

| Project company projects | Status in March 2026 | Cost estimate |
|---|---|---|
| West Railway | An agreement on financing of stage 1 has been made; no construction decision has been made. | EUR 3.5 billion |
| Airport Line | Line planning started in 2026. | EUR 3 billion |
| East Railway | General planning and the environmental impact assessment are ongoing. | EUR 1.6—3 billion |

# Appendix 8 Railway project status 2026

| Mainline projects | Status in March 2026 | Cost estimate |
|---|---|---|
| Pasila—Riihimäki, stage 3 | Ready to start at the end of stage 2. | EUR 244 million |
| Lempäälä—Sääksjärvi, 3rd track | Development of the section between Riihimäki and Tampere was studied in 2025. The additional track projects and their cost estimates are as presented in the report. There is still planning funding available for the further planning of the priority phases. | EUR 63.2 million |
| Kuurila—Lempäälä, 3rd track | | EUR 152.4 million |
| Turenki—Sammalisto, 3rd track | | EUR 128.5 million |
| Hämeenlinna—Turenki, 3rd track | | EUR 89.3 million |
| Kuurila—Vinnilä, 3rd track | | EUR 43.7 million |
| Vinnilä—Hämeenlinna, 3rd track | | EUR 132.3 million |
| Tampere—Lempäälä, 4th track | | EUR 71.6 million |
| Renovation of the section between Riihimäki and Tampere | Financing for the first renovation stage was acquired in 2025. The cost estimate and stages are further specified in the report. | EUR 534 million |
| Tampella—Lielahti, 3rd track | Further planning will proceed in connection with the further planning of the additional track between Lielahti and Nokia. | EUR ~54 million |
| Lielahti—Lakiala, 2nd track | General plan and EIA completed, the next stage is the railway plan. | EUR ~200 million |

| Branch line development projects | Status in March 2026 | Cost estimate |
|---|---|---|
| Lielahti—Nokia, 2nd track | EIA and railway plan to be launched in 2026 | EUR ~150 million |
| Realignment and double track for the section between Lahdenperä and Jämsä | The railway plan will be completed in 2026 | EUR 227 million |
| Electricifcation of tracks at Haapajärvi | Needs assessment and project evaluation in 2025 | EUR 153 million |
| Renovation and speed increase in the section between Seinäjoki and Vaasa | The railway plan will be completed soon | EUR 157 million |
| Electrification of the section between Tornio and Kolari | Railway planning underway | EUR 113 million |

| Identified domestic railway connection needs | Status in March 2026 | Cost estimate |
|---|---|---|
| Western railway connection in Tampere and transfer of the marshalling yard | Preliminary study in 2016, various detailed studies. Included in the regional land use plan for Pirkanmaa. | Approximately EUR 2 billion |
| Reopening the Pori—Parkano—Haapamäki line for traffic | Needs assessment will be completed in 2026 | Approximately one billion euros |
| Aaltorata (Turku—Pori—Vaasa—Kokkola) | Preliminary study ongoing | Approximately EUR 2 billion |
| Tunturirata (Sodankylä—Kittilä—Ylläs) | Rail connection study in 2023; included in the regional land use plan for Northern Lapland | Approximately one billion euros |

# Finnish Mainline 2060

## Aiming for an international double-track main line

PÄÄRATA
FINNISH MAINLINE