

Finland's Digirata: Building the Foundation for ERTMS Deployment

Finland's journey towards nationwide ERTMS implementation – from national programme and system development to deployment on the rail network.

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Vöylävirasto
Trafikledsverket



What is Digirail?

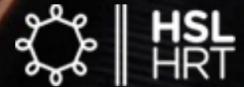
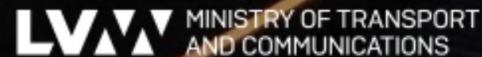
- Digirail is a must make investment to replace the end of its lifecycle Class B ATP in Finland including all signalling systems.
- Digirail pushes for a more efficient and smoother railway traffic.
- Digirail covers the Finnish ERTMS implementation mandatory in EU.
- Digirail is an investment to future railways; more traffic and passengers, better services, less disturbances and lower emissions.
- Digirail is a sector-wide possibility to rethink the railways and to lay foundation for the future further development.



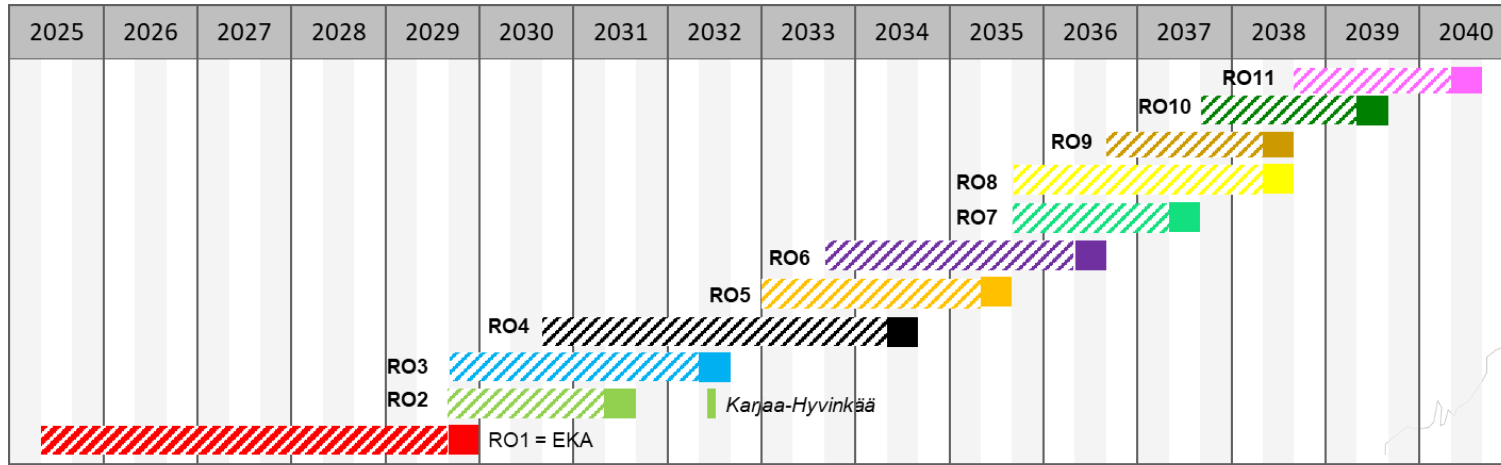
Working together – the Finnish superpower

Taking the journey together

In addition to these actors, many other organisations, experts and partners that provide supporting functions are involved in the planning of Digirail.

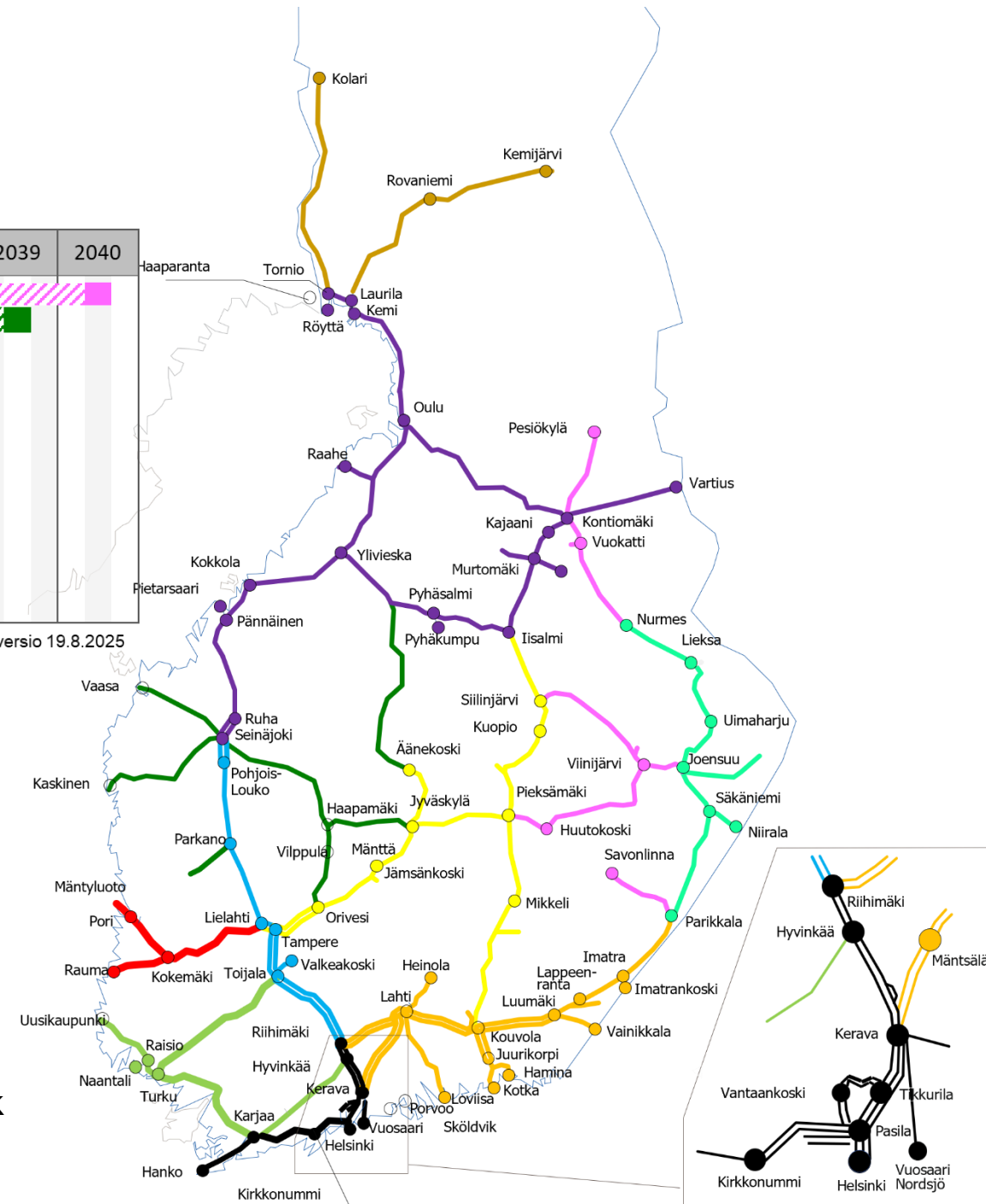


ERTMS Roll out



Digirata-hankkeen käyttöönottojen ajankohdat, versio 19.8.2025

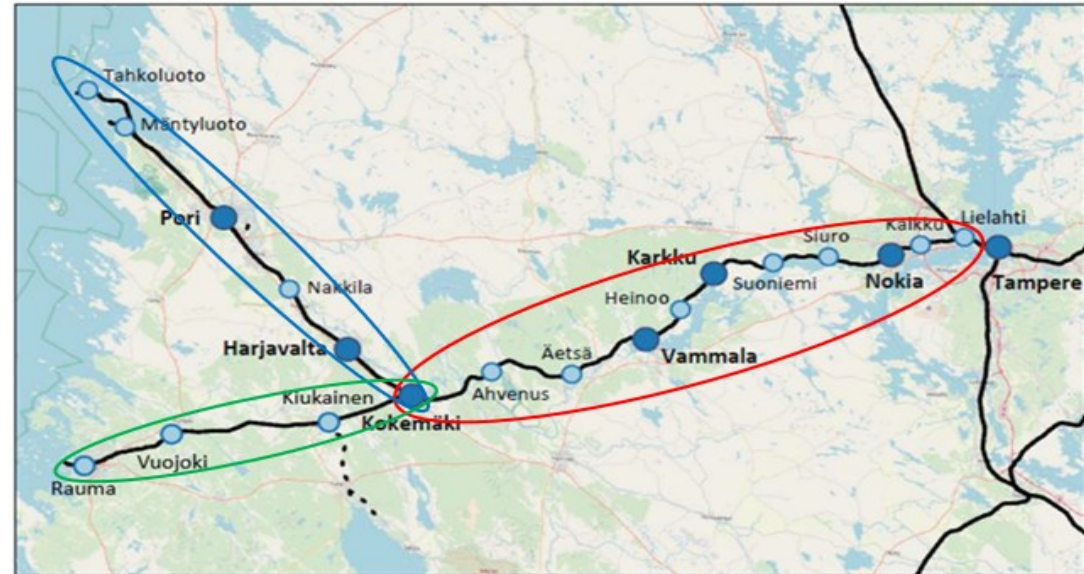
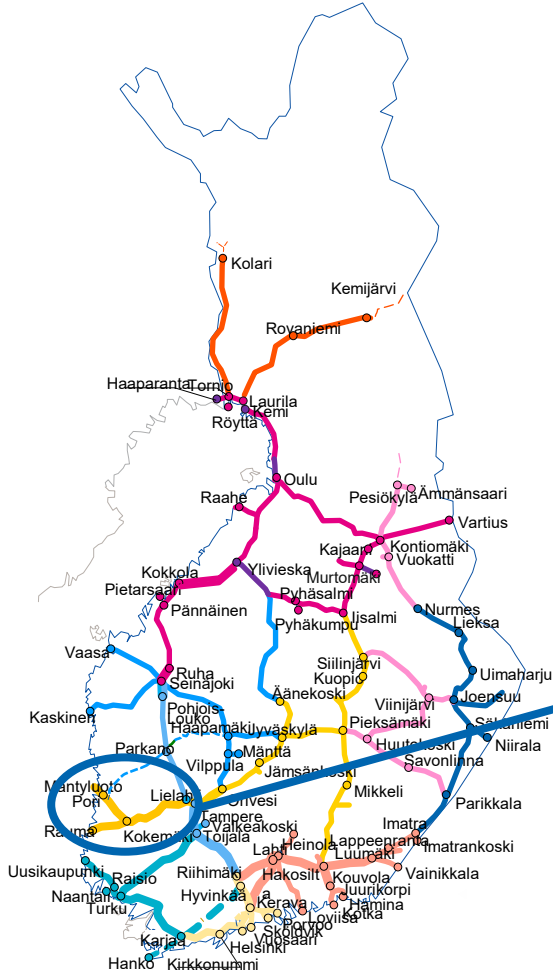
- Roll out plan describes the phases in which ERTMS is planned to be taken into use
- The plan is based on “rolling stock first” principle
- Railway traffic in Finland is network-wide, not corridor based
 - Whole rolling stock long haul fleet is used all around the network



Tampere-Pori/Rauma – The first commercial section

- 190 kilometers of single-track railway
- 18 stations
- 14 level crossings to be connected to ETCS

Sub-area 1 (Kokemäki) - Rauma (approx. 47 km)
Sub area 2 (Kokemäki) - Mäntyluoto (approx 57 km)
and (Mäntyluoto) - Tahkoluoto (approx. 11 km)
Sub area 3 (Lielähti) - Kokemäki (approx. 90 km)



Lielähti - Rauma/Pori

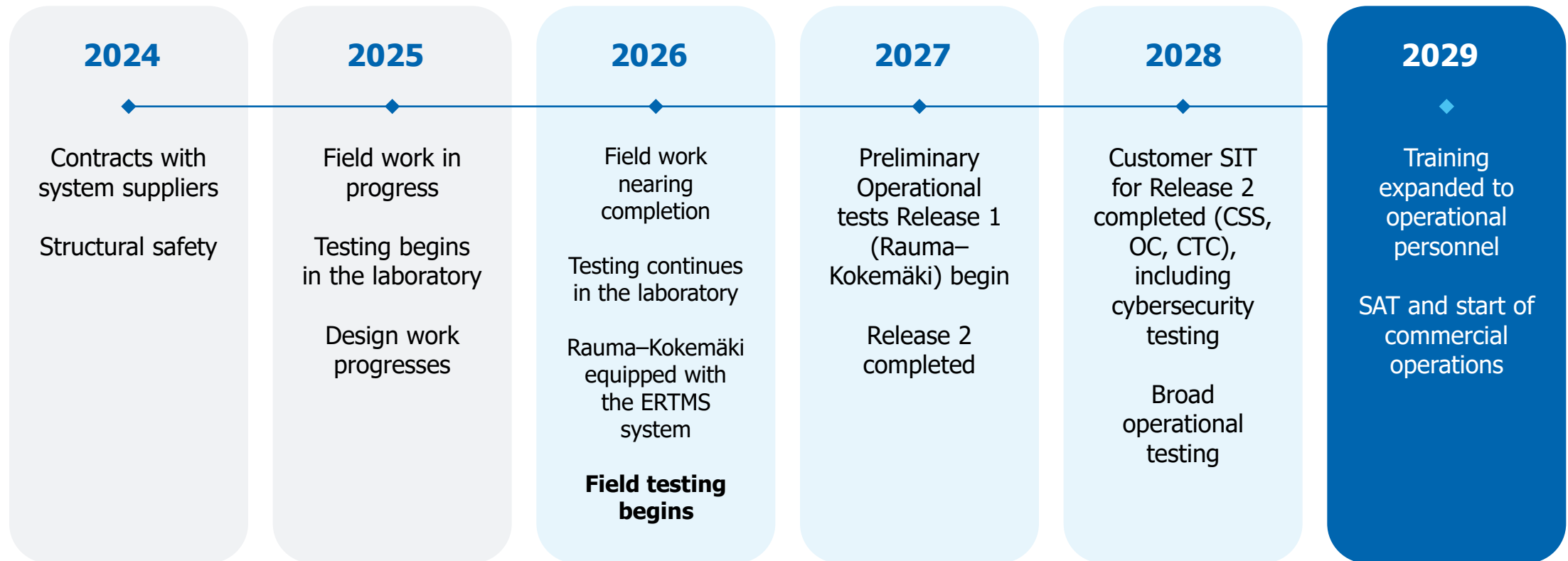
- Passenger
- Technical
- Track

Tampere–Pori/Rauma Track Section: A Brief Overview

- Key takeaways:
 - Separate supplier for OC (Mipro) and CSS (Siemens)
 - Wide use of EULynx interfaces
 - PreFRMCS using commercial mobile network connections
 - HTD implementation aimed for testing
 - ATO functionalities to be tested in the track section
 - Hot georedundancy
- >Project aims to verify that Digirail's chosen solutions and ways of working are efficient in Digirail's nationwide implementation

Tampere-Pori/Rauma track section will be ready for operation in September 2029

First Commercial Track Section Tampere-Pori/Rauma



What Is Happening on the Tampere–Pori/Rauma Railway Section Right Now?

- Factory acceptance sessions have been held for specific applications on both OC and CSS systems in beginning of 2026
- Integration tests in laboratory environment have been held in April 2026 using EULynx interfaces
- SIT readiness has been achieved for Rauma – (Kokemäki) section. SIT has begun in June 2026 with element testing
- First trial runs were run in October 2026
- Preliminary operational testing will start in December 2026
- Construction works are being finalized in 2026 (Marker board installations and installations outside of Rauma – (Kokemäki) section)



Väylävirasto
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osarahoittama

*Tämän julkaisun sisällöstä vastaa yksin Väylävirasto, eikä se
välttämättä vastaa Euroopan Unionin mielipidettä*