

# **Railway Network Statement 2025**



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## **Foreword**

In compliance with the Rail Transport Act (1302/2018 (in Finnish)) and in its capacity as the manager of the state-owned railway network, the Finnish Transport Infrastructure Agency is publishing the Network Statement of Finland's state-owned railway network (hereafter the 'Network Statement') for timetable period 2025. The Network Statement describes the state-owned railway network, access conditions, the infrastructure capacity allocation process, the services supplied to railway undertakings and their pricing as well as the principles for determining the infrastructure charge. The Network Statement is published for each timetable period for applicants requesting infrastructure capacity. This Network Statement covers the timetable period 15 December 2024 – 13 December 2025.

The Network Statement 2025 has been prepared on the basis of the previous Network Statement taking into account the feedback received from users and the Network Statements of other European Infrastructure Managers. The Network Statement 2025 is published as a PDF publication. The Finnish Transport Infrastructure Agency updates the Network Statement as necessary and keeps capacity managers and known applicants for infrastructure capacity in the Finnish railway network up to date on the document. RINF data and the Finnish Transport Infrastructure Agency's register information have been used to create a map service giving information about the characteristic features of the Finnish railway network.

The 2025 Network Statement follows the general European content structure. The Network Statement comprises the following chapters:

- 1. General
- 2. Rail network
- 3. Access conditions
- 4. Capacity allocation
- 5. Services and charges
- 6. Use of the railway network
- 7. Service facilities

The Finnish Transport Infrastructure Agency is responsible for preparing the Network Statement. A large number of experts working in different sectors of the Finnish Transport Infrastructure Agency and outside the agency have been involved in the drafting process.

Helsinki, 08 December 2023

Finnish Transport Infrastructure Agency

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# Definitions, signals and abbreviations

<u>Fintraffic Railway Ltd.</u> is a subsidiary of the traffic control company Fintraffic, which provides railway traffic control and management services. Fintraffic Railway Ltd's services include railway traffic control, traffic planning, capacity management, catenary system operating centre activities and passenger information services related to rail passenger traffic.

**JKV** is a class B system 'ATP-VR/RHK - Junankulunvalvonta (JKV)' under Appendix B to the technical specification for interoperability relating to the control-command and signalling subsystem of the trans-European conventional rail system of 28 March 2006.

**JETI** is a system for advance information on train traffic, in which the advance notifications of and information on changes affecting traffic are drafted, shared and maintained. The system is also used for creating and approving works and advance plans concerning the railway network. JETI is also used to reserve capacity on railway yards and main lines for storage of rolling stock, trials or other special needs.

**Ad hoc infrastructure capacity** means infrastructure capacity requested for temporary, short-term and varying train paths. Example: trains operating on individual days; machinery and trains with deviating routes or stopping behaviour.

**KUPLA** is an application for transmitting essential information on driving the unit to the train driver.

**LIIKE** is the railway line capacity management system currently in use in Finland.

**Traffic Planning** coordinates the state-owned railway network's track work in accordance with the FTIA's principles and guidelines for railway traffic. Traffic Planning plans track possessions as efficiently as possible and provides information and holds dialogue on these with stakeholders. Traffic Planning processes and approves the advance plans for track work, traffic safety plans and voltage cut-offs as well as maintains situation awareness on the traffic impacts of track work. In addition, during office hours Traffic Planning processes capacity requests for temporary storage at operating points. The service is provided by Fintraffic Railway Ltd.

**Traffic control** protects and secures operations and track work. Traffic control grants permits for track work and operations and gives notifications to them.

**Traffic control company** refers to Fintraffic Ltd. Most of the tasks of the traffic control company referred to in this Network Statement are performed by Fintraffic Railway Ltd, a subsidiary of the Group.

**Museum train traffic** means small-scale train traffic in the railway network by non-profit museum train associations. Museum trains mean rolling stock registered as museum trains in the Finnish Transport and Communications Agency Traficom's rolling stock register.

Through **OSS** (One Stop Shop), customers can manage all matters concerning international railway traffic, such as access to the railway network, requests for international infrastructure capacity or reporting on operations. Each RNE member state has its own OSS. In Finland, the OSS also functions as a point of contact in matters concerning domestic railway operations. The email address of the point of contact is oss@ftia.fi.

**Service applicant** means the competent authority referred to in section 182 of the Act on Transport Services (320/2017), an educational institution providing education and training services, another service facility operator, and another party requiring services that submits an application to the service facility operator for rail traffic support and maintenance services provided by the service facility operator in question for its own use or for the use of another railway operator or for the educational institution and to which the Commission Implementing Regulation (EU) 2017/2177 on access to service facilities and rail-related services applies.

**Infrastructure management** means the construction, maintenance and development of tracks, structures, equipment and systems connected with them, as well as the immovable property needed for infrastructure management.

**RAILI** is an integrated railway communication service, which can be accessed with VIRVE phones and smart phones containing the RAPLI application.

**RAPLI** is an application through which the RAILI service can be accessed with login information on smartphones in the general network.

**Track work** is work carried out in the railway network that requires the interruption of railway operations. In class 1 traffic control areas, track work requires a track work permit granted by traffic control. Railway operations are interrupted at the track work site for the duration of the validity of the track work permit. In class 2 traffic control areas, the track work permit is not granted by traffic control. Instead the track work manager is responsible for the track work and for ensuring that the work can be carried out without interruptions. The requirements for a track work permit are described in <u>safety instructions for infrastructure management</u> (TURO).

Under the Rail Transport Act, **infrastructure capacity** means the chance to use the railway network and to prepare timetables for train paths in the railway network. It can also be defined as the train traffic capacity on a train path during a certain period depending on the characteristic features of the railway network.

**An applicant for infrastructure capacity** means a railway operator, the competent authority referred to in section 182 of the Act on Transport Services and shippers, consignors, or other senders, freight forwarders, integrated transport operators and a railway sector training institute that wish to obtain infrastructure capacity for reasons related to the provision of a public service or for commercial reasons.

The <u>Rail Traffic Management Centre is</u> a national rail traffic control and management service that is part of the traffic control company. The service is provided by Fintraffic Railway Ltd.

The **Track Data Service (previously the Railway Information Extranet)** contains information for traffic control, supervisors, maintenance providers, constructors and operators that they need in infrastructure management and transport operations. Registration is required to access the site (in Finnish)...

**Railway network** means the state-owned railway network managed by the Finnish Transport Infrastructure Agency.

**Infrastructure manager** means the Finnish Transport Infrastructure Agency or a railway infrastructure manager of a private siding coming under the Rail Transport Act.

**RATO** means the technical instructions for railway tracks, comprising the basic information on the design, inspection and maintenance of the tracks and track equipment. RATO is based on the regulations issued by the Finnish Transport and Communications Agency. <u>RATO</u> is published by the Finnish Transport Infrastructure Agency (The list is in Finnish).

**Railway operator** means railway undertakings, railway maintenance undertakings, infrastructure managers operating in the railway network and museum train traffic operators. Other companies and associations operating in the railway network for whom railway operations are not part of their core activities, are also railway operators.

**Railway operations** mean the services operated by a railway undertaking, operations related to railway maintenance, operations by a museum train traffic operator, a company or other association for whom railway operations are not part of their core activity, or the operations of an infrastructure manager in the railway network.

The **Railway Instructions** ('Rautatieohjeet' in Finnish) contain the regulations and instructions issued by the Finnish Transport Infrastructure Agency that are currently in effect. For an up-to-date list of the instructions, visit the agency's website (the list is in Finnish).

**Railway undertaking** means a company or other association, either public or under private law, whose main activity is to operate rail passenger or freight services. The company must have an appropriate licence issued in the European Economic Area and it is obliged to provide traction services. Undertakings providing only traction services are also considered as railway undertakings.

**RINF** or the Register of Infrastructure means the centralised EU-wide register of the Member States' railway infrastructure. In practice, RINF is made up of national registers (NREs). The Finnish Railway Register is abbreviated as NRE-FI. RINF is made up of collected data, which can basically be divided into data on the following topics: a) railway network; b) detailed railway network; c) railway line; d) line section; e) operational point; f) running track; and g) siding.

**RNE** (<u>RailNetEurope</u>) is a non-profit organisation of European railway infrastructure managers and bodies allocating infrastructure capacity. Its purpose is to promote international traffic in the European railway infrastructure. The Finnish Transport Infrastructure Agency rejoined the organisation in 2021.

**RUMA** or the mobile platform for track work contractors is an application containing the track work permit documentation. RUMA is used to request and end the track work permit, to determine the location of the track work site, and to submit RT and LR notifications. RUMA is also used to manage voltage cut-offs and traffic safety plans and to prepare the advance plans for track work. In 2024, also annual plans will be prepared in the RUMA application.

**SAAGA** is a new information system in use for track capacity management in railway yards.

**A line section with section block** is a line divided into block sections. The traffic control system ensures that a train can safely enter a block section. Only one train may occupy a block section at a time. The system of block sections allows successive trains to move between traffic operating points.

**Capacity for regular train services** means infrastructure capacity requested for regular, long-term and identical train services. Example: services required all year round from Monday to Saturday or on each Tuesday and Thursday for three months.

**TUTKA** is the Finnish Transport Infrastructure Agency's information system for safety-related anomalies and risk management. Railway operators and the Finnish Transport Infrastructure Agency's service providers use this system to report safety-related anomalies to the Finnish Transport Infrastructure Agency.

**TURO** means safety instructions for infrastructure management. The Finnish Transport Infrastructure Agency publishes the instructions on its website (see the Railway Instructions).

**VIRVE** is a network based on TETRA technology supplying radio communication services for elevated security, safety and preparedness levels and for joint use by the authorities and operators using critical infrastructure that have been granted permission to use the network.

**Private siding** means a track not managed by the Finnish Transport Infrastructure Agency.

## 1 General

## 1.1 Introduction

The Finnish Transport Infrastructure Agency is a central government agency operating in the administrative branch of the Ministry of Transport and Communications. It is responsible for maintaining and developing the service level of the transport infrastructure administered by the State of Finland. The agency promotes the smooth functioning of the Finnish transport system, traffic safety, balanced regional development and sustainable development. The Finnish Transport Infrastructure Agency acts as the infrastructure manager for the state-owned railway network in Finland. According to the information available at the publication date of the Network Statement, the Finnish Transport Infrastructure Agency also operates as an infrastructure manager in Haparanda, Sweden, on tracks with a track gauge of 1,524 mm and on the line section between the national border and the Haparanda traffic operating point.

Provisions on the publication of the Network Statement are laid down in section 131 of the Rail Transport Act and in the <u>Directive 2012/34/EU of the European Parliament and of the Council</u> establishing a single European railway area. The Network Statement is published for each timetable period.

# 1.2 Purpose of the Network Statement

The Network Statement is published for applicants of infrastructure capacity. The Network Statement describes the access conditions, the state-owned railway network and its characteristic features, capacity allocation, services supplied to railway operators, and the charging principles concerning access to the railway network.

Applicants may request infrastructure capacity for domestic freight transport, for international transport within the European Economic Area, and for transit traffic between Finland and Russia.

# 1.3 Legal framework

#### 1.3.1 Current legislation

In accordance with section 131 of the Rail Transport Act, the infrastructure manager publishes information in the Network Statement such as that on the provisions and regulations issued under the Rail Transport Act concerning:

- 1. the right of access to the railway network
- 2. the principles of determining the infrastructure charges
- 3. requesting for infrastructure capacity and the related deadlines
- 4. the requirements for and authorisation of railway rolling stock
- 5. other matters concerning the management of railway operations and prerequisites for starting railway operations.

The infrastructure manager publishes the details on the characteristic features and extent of the railway network in the Network Statement for each timetable period. The information can be found in chapter 2 of this Network Statement. The following decisions issued by the infrastructure manager under the Rail Transport Act are also published in the Network Statement:

- 1. specialised infrastructure capacity (section 2.4.1)
- 2. order of priority applied to congested train paths (section 4.6)
- 3. threshold quota for the minimum use of infrastructure capacity on each train path (section 4.8.3).

#### 1.3.2 Legal status

The Network Statement is a legally binding document in so far as it contains regulations on matters laid down in section 131 of the Rail Transport Act. Railway operators also pledge to comply with the Network Statement when signing network access agreements.

The information published in the Network Statement does not affect the instructions issued by the infrastructure manager or the regulations issued by the Finnish Transport and Communications Agency. The information on the third parties given in the Network Statement may also change during the timetable period. The Finnish Transport Infrastructure Agency reserves the right to transfer or change maintenance and development projects and charges pertaining to the railway network as a result of political decisions.

## 1.3.3 Appeal procedure

The appeals procedure concerning the infrastructure manager's decisions is described on the website of the Finnish Rail Regulatory Body. A claim for rectification must be submitted to the following Finnish Transport and Communications Agency address within 30 days of receipt of the infrastructure manager's decision: Rail Regulatory Body, PO Box 467, 00101 Helsinki, Finland or by email to kirjaamo@traficom.fi.

A claim for rectification may be submitted to the Rail Regulatory Body if the infrastructure manager's decision concerns the following matters laid down in the Rail Transport Act:

- 1) congested train path or part of it or order of priority (section 120)
- 2) allocation of infrastructure capacity (section 122)
- 3) allocation of ad hoc infrastructure capacity (section 123)
- 4) cancellation or withdrawal of infrastructure capacity (section 125)
- 5) infrastructure charge (section 139)
- 6) reductions and increases in the basic infrastructure charge (section 140)
- 7) additional charges (section 141).

## 1.4 Structure of the Network Statement

This Network Statement follows the common structure set for network statements by RailNetEurope (RNE). The purpose is to ensure that applicants requesting infrastructure capacity can find the same information in the same place in all network statements.

The Network Statement consists of seven chapters as well as appendices.

- Chapter 1 presents the Network Statement and the railway operators
- Chapter 2 describes the functional and technical characteristics of the railway network
- Chapter 3 describes the conditions for accessing the railway network
- Chapter 4 describes the process of allocating infrastructure capacity
- Chapter 5 describes the charges for using the railway network and the infrastructure services
- Chapter 6 describes the operations and traffic management in the state-owned railway network
- Chapter 7 describes the services provided for the users of the railway network.

The Network Statement contains appendices that provide more details of the characteristics of the railway network and other issues related to railway operations, as well as a separate <u>map service describing the characteristic features of the railway network (in Finnish)</u>.

# 1.5 Validity, updating and publication of the Network Statement

#### 1.5.1 Validity

The Network Statement is valid for one timetable period and it is published no later than four months before the expiry of the deadline for submitting capacity requests (12 months before the change of the timetable period). This Network Statement covers the timetable period 2025: 15 December 2024–13 December 2025. The Network Statement 2026 will be published no later than 14 December 2024.

#### 1.5.2 Updates

Any changes to information in chapter 1.3 will be published on the <u>website of the Finnish Transport Infrastructure Agency</u>. Every effort is made to keep the Network Statement up to date. The most important changes of the year are introduced on two preliminary adjustment dates: at the beginning of December and June. The Finnish Transport Infrastructure Agency will consult the parties involved before introducing updates on these adjustment dates. There may be updates on the Network Statement and the appendices to it after the publication. The updates are published on the website of the Finnish Transport Infrastructure Agency.

This Network Statement contains references to the instructions issued by the infrastructure manager, which will also be updated during the timetable period as necessary. If there are any discrepancies between the instructions and the Network Statement, the valid instructions take precedence over the Network Statement.

#### 1.5.3 Publication

The Network Statement is prepared in Finnish and published in Finnish and English. If there are any discrepancies between the language versions, the Network Statement published in Finnish takes precedence over other versions. The language versions of the Network Statement can be viewed and downloaded free of charge on the Finnish Transport Infrastructure Agency website.

# 1.6 Railway sector operators and contact information

The ownership/steering relationships between the Finnish railway sector operators are detailed on the website <u>Finnish railway market</u> -> Railway sector operators.

#### **Finnish Transport Infrastructure Agency**

The Finnish Transport Infrastructure Agency is responsible for maintaining and developing the state-owned transport infrastructure, and it acts as the manager of the state-owned railway network. The Finnish Transport Infrastructure Agency and Traffic control company Fintraffic Ltd have concluded a service agreement on the provision of traffic management and control services. The Finnish Transport Infrastructure Agency also purchases construction and maintenance work related to the infrastructure as well as regional property management services from private sector service providers.

You can contact OSS in all matters concerning this Network Statement, market entry and railway traffic (oss(at)ftia.fi). For other contact information, see the Finnish Transport Infrastructure Agency website at <a href="https://www.ftia.fi">www.ftia.fi</a>.

You can give feedback on matters falling within the purview of the Finnish Transport Infrastructure Agency and Fintraffic Railway Ltd. via <u>Traffic Customer Service</u>.

#### **Ministry of Transport and Communications**

The Ministry of Transport and Communications prepares the legislation and the budget of its administrative branch in cooperation with the agencies in the administrative branch. The Finnish Transport Infrastructure Agency, the Finnish Transport and Communications Agency, and the Finnish Meteorological Institute are the agencies in the ministry's administrative branch. Traffic control company Fintraffic Ltd. is part of the ownership steering of the Ministry of Transport and Communications.

Internet: www.lvm.fi

#### **Transport and Communications Agency (Traficom)**

The Finnish Transport and Communications Agency Traficom is a central government agency that operates in the administrative branch of the Ministry of Transport and Communications. It is responsible for the regulatory duties and permit matters in the field of transport and communications.

Internet: www.traficom.fi

#### **Finnish Rail Regulatory Body**

Railway regulatory bodies monitor, supervise and promote the smooth functioning of, and equilibrium and non-discrimination within, the rail market.

Internet: www.saantelyelin.fi

#### Rail transport purchasers

At the time of the publication of the Network Statement, there were two bodies purchasing rail transport services in Finland: Ministry of Transport and Communications and Helsinki Regional Transport (HSL). The HSL is a joint municipal authority acting as the competent authority referred to in the Regulation (EC) 1370/2007 of the European Parliament and of the Council, and in the Act on Transport Services. HSL is responsible for planning and providing public transport services in the Helsinki region and for drawing up the regional transport system plan.

Internet: www.hsl.fi

#### **Finnish Competition and Consumer Authority**

The task of the Finnish Competition and Consumer Authority is to implement competition and consumer policy, ensure the proper functioning of the markets, enforce competition legislation and EU competition rules, and protect the financial and legal position of the consumers. The supervisory duties of the Consumer Ombudsman are also the responsibility of the agency.

Internet: www.kkv.fi

#### **Traffic control company Fintraffic Ltd**

Fintraffic Railway Ltd. is responsible for the management and traffic control of railway traffic in accordance with the service agreement between the group and the Finnish Transport Infrastructure Agency. The agreement covers such railway traffic sectors as the control service, passenger information service, infrastructure capacity management service, catenary system use service, monitoring service for the railway network's technical systems, monitoring service for the railway network's safety systems, and the development and life cycle management of the railway network systems.

Website: www.fintraffic.fi

#### MaaS (Mobility as a Service) operators

Under the Act on Transport Services, providers of road and rail passenger transport services, providers of brokering and dispatch services, or actors managing a ticket or payment system on behalf of the above parties must give mobility service providers and providers of integrated mobility services access to the sales interface of their ticket and payment systems, through which passengers may without restrictions: 1) purchase a ticket product at a basic price, which, at a minimum, entitles the passenger to a single trip; the travel right based on this ticket must be easily verifiable using generally applied technology; or 2) reserve a single trip or a transportation, the exact price of which is unknown when the service begins or which for some other reason will be paid by mutual agreement after the service has been provided.

#### Railway undertakings

The railway undertakings are responsible for the planning, marketing and sales of their services, for their operations and for real-time traffic control. In matters concerning licences, safety certificates and registration of rolling stock in Finland, a new railway undertaking can contact the Finnish Transport and Communications Agency Traficom and in matters concerning the use of the railway network, the Finnish Transport Infrastructure Agency.

#### **Stock companies**

The Metropolitan Area Rolling Stock Ltd owns the rolling stock required for passenger services in the Helsinki region (HSL region).

#### Infrastructure managers of private sidings and service facility operators

The links to the network statements published by the infrastructure managers of private sidings and descriptions of the service facilities by service facility operators can be found on the Finnish Transport Infrastructure Agency website. The private sidings are connected with the state-owned railway network in areas such as in the vicinity of industrial facilities. Ports are currently service facilities operators.

#### Station area development company Senate Station Properties Ltd

The company works together with cities and other municipalities to find the best way to ensure that each of the station areas managed by the company can make a maximum contribution to sustainable urban development in its area. The company primarily develops the station areas by means of land use planning so that the areas can be extensively used for residential building construction and business operations and as transport hubs. For more information on the development of station areas, go to <a href="https://www.asemanseutu.fi">www.asemanseutu.fi</a> (in Finnish).

### One Stop Shop (OSS)

Each member state has an RNE OSS contact point or contact person. Customers can select an OSS contact point or contact person with whom they can manage all matters concerning international rail traffic, such as network access, international path requests and operations as well as all matters concerning operations on the planned route (including cross-border services).

You can also contact the Finnish OSS for matters concerning domestic railway traffic. The email address for the OSS point is oss(at)ftia.fi.

For the addresses of the OSS contact persons of infrastructure managers, visit the website of RailNetEurope at www.rne.eu.

# 1.7 International cooperation between infrastructure managers

## 1.7.1 Rail freight corridors in Finland

Finland's railway network is not connected with the European-wide <u>Rail Freight</u> Corridors network.

#### 1.7.2 RailNetEurope

<u>RailNetEurope (RNE)</u> is a non-profit organisation of European railway infrastructure managers and bodies allocating infrastructure capacity. Its purpose is to promote international traffic in the European railway infrastructure.

For links to the network statements published by the infrastructure managers of the other member states, see the <u>website of RailNetEurope (RNE)</u>.

RNE IT Tools are not currently used in Finland.

#### 1.7.3 Other international cooperation.

<u>European Rail Infrastructure Managers (EIM)</u> is a Brussels-based association representing the interests of the European railway infrastructure managers. The EIM is a lobbying organisation acknowledged in an EU Regulation and should be consulted by EU institutions. Through EIM, the Finnish Transport Infrastructure Agency can play a role in the preparation of the European railway legislation, both at the political and technical level. The Finnish Transport Infrastructure Agency can influence the contents of the Fourth Railway Package, the technical specifications for interoperability and the common safety methods through both EIM and national channels.

<u>PRIME</u> (Platform for Rail Infrastructure Managers in Europe) is a joint platform between the Commission and infrastructure managers where the Commission and infrastructure managers proactively discuss the Commission's future legislative proposals. At the meetings, the parties also discuss the effectiveness of the current legislation.

## 2 Rail network

## 2.1 Introduction

The state-owned railway network managed by the Finnish Transport Infrastructure Agency is described in the Network Statement. The Finnish Transport Infrastructure Agency's infrastructure management comprises the planning, construction and maintenance of tracks and their structures and equipment as well as of the immovable property needed for infrastructure management.

Under the <u>Commission Implementing Regulation (EU) 2019/777</u>, the infrastructure manager must publish the up-to-date details of the infrastructure in a single webbased application. The state-owned railway network is described in the <u>map service of the Network Statement</u>, in the <u>open data sets (in Finnish)</u>, in the <u>Track Data Service</u> and in Appendices 2A–2L.

# 2.2 Extent of the railway network

#### **2.2.1** Limits

The Network Statement describes Finland's state-owned railway network. The infrastructure available to railway operators is presented in this chapter. The description is identical with the descriptions found in railway infrastructure registers.

#### 2.2.2 Connected railway networks

The railway networks of Finland and Sweden are connected in Tornio. The management of traffic and instructions on the line section Tornio—Haparanda are described in the Jt rules issued by the Finnish Transport Infrastructure Agency.

The railway networks of Finland and Russia are connected in Vainikkala, Imatrankoski, Niirala and Vartius. Provisions on the direct international railway traffic between Finland and Russia are laid out in the railway traffic agreement between the two countries. Railway traffic between Finland and Russia is not international traffic within the European Economic Area.

Under the Commission Decision of 20 February 2015, <u>private sidings at ports with international trade and private sidings owned by VR</u> are part of the Finnish local railway infrastructure of strategic importance, as referred to in Article 2(4) of the Railway Market Directive.

Pursuant to rail market regulation, ports became service facilities as a result of an amendment to the Rail Transport Act in February 2021.

Services provided by infrastructure managers and service facility operators are described in chapter 7.

# 2.3 Network description

The railway network infrastructure is detailed in the map service of the Network Statement, in open data sets, in the Track Data Service and in the appendices to the Network Statement. Basic information on line sections is given in Appendix 2A. Route book information is maintained in the Track Data Service.

## 2.3.1 Geographical description

#### **Track typologies**

In 2022, the state-owned railway network in Finland measured 5,918 km, of which 5,645 were in transport use. Of the tracks 5,205 km were single-tracks and 713 km had two or more adjacent tracks.

#### The double-track line sections are as follows:

- Leppävaara-Kirkkonummi
- Huopalahti-Havukoski
- Kytömaa-Ainola
- Purola-Riihimäki asema
- Sammalisto–Sääksjärvi
- Kouvola–Juurikorpi
- Pohjois-Louko–Seinäjoki asema–(Lapua)
- Kytömaa–Hakosilta
- Riihimäki asema–Luumäki
- Joutseno–Imatra tavara
- Tampere tavara–Lielahti
- Tampere Järvensivu–Orivesi
- Kokkola–Ylivieska

#### The three-track line sections are as follows:

- Riihimäki asema–Sammalisto
- Sääksjärvi–Tampere tavara

#### The four-track line sections are as follows:

- Ainola–Purola
- Helsinki asema–Leppävaara
- Helsinki asema–Kytömaa

#### 2.3.2 Track gauges

The nominal track gauge in the railway network is 1,524 mm.

A European track gauge of 1,435 mm is also available between Tornio and Haparanda.

#### 2.3.3 Railway traffic points

The traffic operating points in the state-owned railway network are shown in Appendix 2B and in the map service. Track diagrams are available in the Track Data Service.

#### 2.3.4 Loading gauge and structure gauge

The FIN1 loading gauge (KU, Appendix 2C) and the structure gauge (ATU, Appendix 2D) described in Annex F to the standard EN15273 are used throughout the railway network. On private sidings, there may be both loading and structure gauge limitations, and railway operators must clarify these matters separately before transport operations.

For more information on the structure gauge and the vehicle gauge (LKU), see part 2 'Radan geometria' and part 21 ' Liikkuva kalusto' of the Finnish Transport Infrastructure Agency's publication 'Ratatekniset ohjeet (RATO). For more information on the track work gauge, see <u>TURO (safety instructions for infrastructure management) (in Finnish)</u>.

#### 2.3.5 Weight limits

#### **Axle loads**

The axle load 225 kN is permitted in most parts of railway network. The maximum permitted axle loads on individual line sections and the maximum permitted speeds on different axle loads are shown in the map service of the Network Statement. The axle loads and restrictions applying to overweight loads and the wagons built in accordance with OSJD/GOST standards are described in Appendices 2E and 2F.

#### Metre load

The permitted rolling stock metre load throughout the state-owned railway network is 80 kN/m.

#### 2.3.6 Gradient

On the main lines, the maximum dominant gradient is 20 mm/m. There are higher gradients in a number of places. On secondary lines, the maximum gradient is 22.5 mm/m. The maximum gradient on line sections measured over a distance of 1,200 metres is described in Appendix 2A.

The gradient between the traffic operating points Leinelä and Kivistö on the Ring Rail Line is 40 mm/m.

Line gradients on sidings at traffic operating points are shown in the Track Data Service's track diagrams.

#### 2.3.7 **Speed**

The maximum speed for passenger trains is 220 km/h and for freight trains 120 km/h. The maximum speed on tracks without ATP is 80 km/h. The speeds permitted for passenger and freight trains in the railway network are shown in the

map service of the Network Statement. The maximum permitted speeds for different rolling stock categories are given in Appendix 2G. The maximum permitted speeds in turnouts and standard diamond crossings on different superstructure categories are given in Appendix 2H. The maintenance provider may limit maximum permitted axle loads and speeds in accordance with the track condition.

#### 2.3.8 Maximum train lengths

The maximum train length permitted on a line section must be such that trains can also use sidings at the traffic operating points on the line section. However, the train does not need to fit on the sidings of all traffic operating points, if other train schedules and incident management permit its operation. Trains with a length of 1,100 metres are allowed on the line section Vainikkala–Kotka/Hamina. The maximum useful length of the sidings at individual traffic operating points is shown in Appendix 2B and in the map service. The useful lengths of all interlocked tracks at traffic operating points are shown in the track diagrams (see Track Data Service).

#### 2.3.9 Power supply

The nominal voltage on electrified line sections is 25 kV/50 Hz AC. On all electrified line sections, power is taken from the contact line above the track so that one or both of the running rails and the return conductors form the return circuit. Neutral sections are located between the feeding sections of the contact line feeder stations, and rolling stock cannot collect current from the neutral sections. The main switch of the electric locomotive or electric train unit must be opened at the neutral sections. The electric traction units of the trains may not stop at neutral sections.

The maximum current supply capacity of the overhead line for electrically hauled stock is between 350 and 800 A. The available current depends on the number and location of the rolling stock using electric power simultaneously in the power supply area.

The fixed electrification installations are described in part 5 'Sähköistetty rata' of the publication 'Ratatekniset ohjeet' (RATO) (see the Railway Instructions).

The electrical equipment of the electric locomotives and train units is described in the regulation 'Rautateiden liikkuva kalusto' issued by Traficom (TRAFI-COM/224601/03.04.02.00/2021). The regulation can be found in the Finlex service (in Finnish) and in part 21 'Liikkuva kalusto' of the instructions 'Ratatekniset ohjeet (RATO) issued by the Finnish Transport Infrastructure Agency (see the Railway Instructions).

All new electric traction stock must be equipped with an energy measurement system complying with invoicing requirements and the standard EN 50463-1...5 (2017). Data transmission to the Finnish Transport Infrastructure Agency's measurement and balance management system must comply with part 4 in Standard EN 50463. Data can also be transmitted in a UTILTS message.

Electrified line sections are shown in the map service and in Appendix 2A.

#### 2.3.10 Signalling systems

The signalling systems used in the state-owned railway network are described in Appendix 2A, in the map service and in <a href="mailto:part-6">part 6 ('Turvalaitteet')</a> of the publication <a href="mailto:Ratatekniset ohjeet">Ratatekniset ohjeet (RATO)</a> (see the Railway Instructions). The manuals for safety installations can be found in the Track Data Service.

On the (Lielahti)-Kokemäki-Rauma/Pori line section, commercial traffic is due to start at ERTMS level 2 (see OHM TSI) on 1 April 2027. The operative location of the JKV and ERTMS will be on the line section between Siuro and Suoniemi traffic operating points. The exact date of for commissioning the ERTMS will be determined later in connection with the progress of the Digirata project. The system version that ensures the compatibility of the infrastructure and rolling stock essentially related to ERTMS is determined in accordance with Finnish Transport Infrastructure Agency Publication 67/2023 Järjestelmäversiosuunnitelma. After the ERTMS has been commissioned in traffic, it will no longer be possible to travel from Siuro in the direction of growing track kilometres with anything other than the rolling stock with the ERTMS equipment outlined in the aforementioned Järjestelmäversiosuunnitelma.

### 2.3.11 Traffic control systems

As part of the partnership agreement between the Finnish Transport Infrastructure Agency and Traffic Management Finland, Traffic Management Finland makes <u>data system services</u> and interfaces available to railway operators free of charge. Traffic Management Finland supplies the data and instructions required to use the data system services. Railway operators are responsible for the competence of their own staff and must arrange or purchase the training required to ensure the competence.

The infrastructure capacity management system (LIIKE) is a key data system for operating rail services in Finland as the train driver's data terminal application (KUPLA) and the passenger information system rely on the data from this system.

The line sections equipped with Centralised Traffic Control are shown in the map service However, on sidings and loading and storage sidings, units may have to secure routes locally.

The regulation 'Määräys ohjaus-, hallinta- ja merkinanto-osajärjestelmästä'; (TRAFICOM/251470/03.04.) issued by Traficom (in Finnish) is applied in the state-owned railway network. 02.00/2019).

#### Advance Information System (JETI)

Information on anomalies is provided via the Advance Information System (JETI) (in Finnish), maintained by the traffic control company, and through notifications given by the traffic control. Real-time information on track work and train operations is maintained in JETI. Track work managers and train drivers must have knowledge of the advance notifications and contact details for traffic control that are valid for the duration of the work site/journey and in the working area/line sections of the journey.

#### Train drivers' data terminal application (KUPLA)

The infrastructure manager requires that the train drivers' terminal application (KUPLA) is used in all units operated in train traffic as well as in units used for shunting operations between traffic operating points. For the time being, use of the KUPLA application is not required for units moving between Tornio and Haparanda with a track gauge of 1435 mm.

The parties must separately agree on operator-specific interfaces and services and the charges payable for them. Connecting a railway operator's DAS system with the KUPLA system via an interface is an example of an operator-specific interface.

For more detailed descriptions of the technical requirements of the <u>train drivers'</u> <u>terminal application (KUPLA)</u> and the principles for purchasing and using the application, visit the website of the traffic control company (in Finnish).

#### Railway contractors' mobile platform (RUMA)

In the infrastructure manager's class 1 traffic control area, the RUMA application must be used for track work performed with the permission of traffic control. The requirements for using the RUMA application in connection with track work are specified in the <u>safety instructions for infrastructure management (TURO; in Finnish)</u>.

RUMA is used to locate the track work managers, contact persons of track work teams and track construction/maintenance machines. RUMA is also used for submitting track work notices and for drawing up voltage cut off reports and advance plans for track work. In 2024, also annual plans will be prepared in the RUMA application. All data types related to track work, including advance notifications prepared in JETI, are shown in the RUMA application's map view.

#### **TUTKA**

Railway operators and the infrastructure manager's service providers use the TUTKA system to report safety-related anomalies to the infrastructure manager. The TUTKA system is managed by the Finnish Transport Infrastructure Agency. Read more about the TUTKA system (in Finnish).

#### 2.3.12 Communication systems

#### **Differential Global Navigation Satellite System (RAILI)**

The RAILI service is only used for communications related to traffic safety.

**The integrated railway communications system RAILI** can be used on VIRVE phones and smart phones. For use on smart phones, the RAPLI application must be installed. The VIRVE network is used for communications between trains and traffic control. Railway operators wishing to install VIRVE phones in their rolling stock to which train traffic rules apply must submit an application for a **VIRVE licence** to Traficom. For more information on the system, see Appendix 2J (Use of the VIRVE network in train traffic).

Railway operators must obtain a **permit to use the RAILI service** from the Finnish Transport Infrastructure Agency and familiarise themselves with the permit conditions of the service (in Finnish) (see the Railway Instructions). In addition to

the VIRVE network, other commercial networks can also be used in the communications between shunting foremen and traffic control and between track work managers and traffic control on the basis of the RAPLI application referred to above. For more information on traffic communications, visit the website of the Finnish Transport Infrastructure Agency (in Finnish).

Traficom issues regulations on such matters as traffic operations, track work and communications. <u>All valid regulations can be found in the Finlex service (in Finnish)</u>.

The Finnish Transport Infrastructure Agency issues instructions supplementing regulations on traffic control, railway operations, track work, other work carried out on the tracks and communications. All valid instructions can be found on the website of the Finnish Transport Infrastructure Agency (see the Railway Instructions). Contact details for traffic control are available in the Finnish Transport Infrastructure Agency's Track Data Service.

#### 2.3.13 Train control systems

Automatic Train Protection (ATP) is a system that supervises compliance with speed restrictions and signalling.

Locomotives running on the State railway network must have an ATC locomotive device that conforms to the specifications of Finnish Class B (ATP-VT/RHK) or a combination of a European TCS locomotive device and telecommunications adapter module (ETCS+STM) that offers equivalent functionality. For information about the availability and terms of delivery of the on-board units meeting the requirements of the class B Finnish system (ATP-VR/RHK), contact Bombardier Transportation Finland Oy. For information about the availability and terms of delivery of the ETCS+STM combination, contact Bombardier Transportation Finland Oy or Hitachi Rail STS.

The special permit referred to in section 41 of the Rail Transport Act is required for operations without an ATP on-board unit or similar equipment. Traficom may grant a special permit provided that the operations do not endanger the safety of the rail system. In cases concerning the use of an ATP on-board unit, a fixed-term special permit may be granted if the case involves a need for exceptional and temporary train services or if an ATP on-board unit or spare parts for the equipment are not available. No special permits are granted to train units or locomotives that are used in passenger or commercial freight traffic not directly connected with infrastructure management. No ATP on-board unit is required for rolling stock that is only used for shunting.

More information on ATP systems and operations and on instructions applying to museum train traffic are provided in the regulations issued by <u>Traficom (in Finnish)</u>.

# 2.4 Traffic restrictions

## 2.4.1 Specialised rail capacity

Under section 118 of the Rail Transport Act and Article 49 of the Railway Market Directive, the infrastructure manager may designate a train path or a part of it as specialised infrastructure if there are sufficient alternative train paths for other traffic. Specialised infrastructure means a train path or a part of it on which priority is given to the traffic for which the infrastructure is intended.

The following train paths in Finland are designated as specialised infrastructure: Helsinki–Kerava (easternmost track and eastern middle track), Helsinki–Leppävaara (southernmost track and southern middle track) and Huopalahti–Havukoski (both tracks). These urban tracks are primarily reserved for Helsinki region commuter traffic. Passenger trains may not use the line section Kerava–Vuosaari and freight trains may not use the line section Havukoski–Huopalahti. Platform tracks 1–4 and 13–19 at the Helsinki Central Railway Station are also designated as specialised infrastructure and reserved for Helsinki region commuter traffic. Access to tracks 4 and 13–16 in particular requires coordination between applicants.

#### 2.4.2 Restrictions relating to the environment

The regulations and instructions issued by the Finnish Transport and Communications Agency Traficom apply to the registration of rolling stock. The regulations set out general and special requirements for rolling stock concerning noise, vibration, electromagnetic interference, emissions, environmentally hazardous substances and the use of recycled construction materials. For more information about the regulations, visit the website of the Finnish Transport and Communications Agency Traficom (in Finnish).

Speed restrictions prompted by vibration have been introduced in different parts of Finland. The restrictions apply wagons in accordance with the GOST/OSJD standards that are on trains exceeding 2,500 tonnes gross weight. The vibration-related speed restrictions are presented in Appendix 2K.

#### 2.4.3 Dangerous goods

Provisions, regulations and supervision

The following legislation and regulations apply to the domestic transport of dangerous goods: the Act on the Transport of Dangerous Goods (541/2023), which applies to all transport modes, the Government Decree on the Transport of Dangerous Goods by Rail (925/2023) and the <u>regulation on the carriage of dangerous goods by rail issued by the Finnish Transport and Communications Agency (TRAFI-COM/474029/03.04.02.00/2022)</u>.(in Finnish).

The purpose of the Act on the Transport of Dangerous Goods is to prevent and avert potential damage or risks to people, the environment or property caused by the transport of dangerous goods. The Act includes provisions on the responsibilities of different transport parties and the tasks and powers of the authorities. The

Decree on the Transport of Dangerous Goods contains provisions supplementing the Act on the requirements to be observed in the transport of dangerous goods. The appendix to the regulation contains detailed provisions on such matters as the classification of dangerous goods, packaging, required documentation and equipment, markings in the bill of lading and on the packages, as well as placarding and marking of vehicles/wagons.

Finland's national regulations on transport by rail are based on the international RID regulations.

The Finnish Transport and Communications Agency Traficom supervises the carriage of dangerous goods by rail and the related temporary storage. Dangerous goods arriving to and departing from Finland by rail are also supervised by the Finnish Customs and the Finnish Border Guard in their respective areas of responsibility. Supervision is carried out together with Traficom.

The infrastructure manager restricts the temporary storage of dangerous goods to national railway yards and other temporary storage sites for which an internal rescue plan has been drawn up and a person responsible for temporary storage has been appointed (see Appendix 2B). Railway yards handling dangerous good are primarily used for the temporarily storing wagons loaded with dangerous goods. In case of congestion of dangerous goods transports, or if there are other needs for storing dangerous goods, other rolling stock must be moved elsewhere at the request of the infrastructure manager. The obligation to report the temporary storage of dangerous goods wagons to rail traffic control and to ensure that the wagons remain stationary is the responsibility of the transport undertaking. For more information about the notification obligation, see the rules 'Junaliikenteen ja vaihtotyön turvallisuussäännöt' (Jt) (see the Railway Instructions). An internal emergency plan prepared for temporary storage will guide preparedness and operations in possible accident situations and the prevention and limitation of the impacts and consequences of accidents.

#### **Special agreements**

<u>RID special agreements</u> signed by the countries involved in the transport operation may also be applied to the carriage of dangerous goods.

An RID special agreement signed by Finland may also be applied to domestic rail transports of dangerous goods. At present, there are no valid RID special agreements signed by Finland.

#### Safety adviser

Those carrying out road or rail transport of dangerous goods and packaging, dispatch or any other activity related to the safety of the transport of dangerous goods shall designate one or more safety advisers, as appropriate. Traficom must be notified of the appointment of a safety adviser. A person appointed as a safety adviser must obtain written consent for the task, and the person must take a test that Traficom organises. The safety adviser must have a valid certificate of having completed the safety adviser's examination. For more information, see Traficom's web page for the Safety Adviser for the Transport of Dangerous Goods.

#### Conventions on international carriage of dangerous goods by rail

<u>Up-to-date information about the conventions on international carriage of dangerous goods by rail can be found on the Traficom website.</u>

#### **Temporary storage sites for dangerous goods**

Railway yards used for the transport of dangerous goods are defined in the Ministry of the Interior Decree on External Rescue Plans (1286/2019, amending Decree 916/2023). The railway yards for dangerous goods listed in the appendix to the Decree are Hamina, Joensuu (Joensuu Sulkulahti), Ykspihlaja (Ykspihlaja tavara, Ykspihlaja väliratapiha), Kotka (Kotolahti, Kotka Mussalo), Kouvola (Kouvola freight, Kouvola sorting, Kullasvaara), Niirala, Oulu (Oulu freight, Oulu Nokela), Riihimäki (Riihimäki freight, Riihimäki sorting), Sköldvik, Tampere (Tampere Viinikka, Tampere freight), Turku (Turku station, Turku freight), Vainikkala (Vainikkala station, Vainikkala freight). In addition, there are temporary storage facilities for dangerous goods in Harjavalta, Pieksämäki and Talvivaara. The storage locations are shown in Appendix 2B. For more detailed information on storage sidings, see the internal rescue plan.

Those operating in the railway yard must be able to comply with the legislation on the transport of dangerous goods and the internal emergency plan drawn up for the temporary storage of dangerous goods. If necessary, the parties involved must participate in emergency exercises in the area, the time and duration of which must be agreed on separately.

Steam locomotives may not be used in the Sköldvik railway yard. More information about operations in railway yards handling dangerous goods can be found in the Jt rules (see the Railway Instructions).

#### 2.4.4 Tunnel restrictions

The tunnel restrictions on the line sections Helsinki–Turku and Orivesi–Jyväskylä are described in Appendix 2K.

Only freight trains and track work machinery may use the tunnels of the Vuosaari line. Passenger transport and the use of steam locomotives is prohibited in the tunnels of the Vuosaari line.

Only passenger trains and track work machinery may use the tunnel of the Ring Rail Line. Passenger trains between the traffic operating points Leinelä and Kivistö may only be operated with electric traction units. Occasional diesel locomotive transfers are permitted. Steam locomotives may not use this line section.

#### 2.4.5 Bridge restrictions

Bridge restrictions are described in Appendix 2K.

#### 2.4.6 Other restrictions

The axle loads and restrictions applicable to the carriage of overweight loads and wagons built in accordance with OSJD/GOST standards are described in Appendices 2E and 2F.

The substations of the electrified line sections have a limited capacity to supply power to the contact line. The power supply will shut down automatically in overload situations, which will cause a temporary power failure in the contact line. The nominal power of each feeder station is available for electric train operations in the feeding section. If the maximum power taken by electric trains in the feeding section exceeds the normal demand, the protection built into the electrified railway network will minimise the damage caused by the overload.

In the Helsinki region commuter area, the maximum input power of the electric trains substantially exceeds the maximum power supply available on the line sections. Thus, to ensure the safety of the electrified railway network and to prevent malfunctions, the protection built into the feeder stations may cause feeder station switches to be momentarily disconnected. As a rule, the switches are disconnected because of excessive power demand by the electric rolling stock units running in the railway network.

# 2.5 Availability of the infrastructure

The restrictions affecting traffic are described in Appendices 2K and 2L and in the JETI system. Information on track work impacting railway operations, is published on the external website of the infrastructure manager in connection with the publication of the Network Statement.

Traffic control service hours at individual traffic operating points are listed in the LIIKE application.

Intensified maintenance helps to keep a number of line sections with low traffic levels in operable condition. The technical condition of a line section at the end of its life-cycle may, however, deteriorate rapidly and the maintenance provider may have to impose significant traffic restrictions on the line section. Applicants for infrastructure capacity must be prepared for traffic restrictions and even

service breaks on the following line sections:

- Saarijärvi–Haapajärvi
- Mynttilä-Ristiina
- Niinisalo–Parkano
- (Lahti)-Loviisa
- (Raisio)–Naantali
- (Ihala)–Viheriäinen
- Seinäjoki-Kaskinen, operation permitted with an axle load of 200 kN
- Kesälahti-Puhos (restrictions on the Syrjäsalmi bridge)
- Olli-Porvoo, museum traffic only

The following line sections are closed to traffic:

- Aittaluoto–Niinisalo
- Parkano–Haapamäki
- Pesiökylä–Taivalkoski
- Kolari–Äkäsjoki
- Niesa–Rautuvaara

- Kiukainen–Säkylä
- Isokylä–Kelloselkä
- Lautiosaari–Elijärvi
- Lohja–Lohjanjärvi
- Otava-Otavan satama
- Yläkoski–Iisvesi
- Rantasalmi–Savonlinna
- The enhanced maintenance of the Ahonkylä (approximately km 425+000)
   Kaskinen (km 530+522) section of the (Seinäjoki)-Kaskinen railway line will be continued until the new loading facilities are completed/at most until the end of 2024.
- Joutjärvi–Mukkula (maintenance restricted starting 1 January 2023)
- Lieksa–Pankakoski (maintenance restricted starting 1 January 2023)
- Mänttä-Vilppula (maintenance restricted starting 1 January 2023)
- Pesiökylä–Ämmänsaari

Track sections where maintenance is restricted but can be commissioned when separately agreed:

Mänttä-Vilppula

The infrastructure manager will provide information on changes introduced during the timetable period by separate decisions, which will be listed on the website of the Finnish Transport Infrastructure Agency.

The impacts of track work on infrastructure capacity are described in chapter 4.3.

# 2.6 Infrastructure development

#### **National Transport System Plan**

The first 12-year National Transport System Plan, the Transport12 plan was adopted by Parliament on 1 July 2021. The plan was prepared under the guidance of a parliamentary steering group and in extensive interaction with stakeholders. The current plan extends from 2021 to 2032 and the plan will be updated every four years for 12 years at a time. The plan was prepared in accordance with the General Government Fiscal Plan for 2021-2024 and budgetary decisions for 2021-2024. The central government expenditure presented in the plan is an estimate and its implementation will depend on future budgetary decisions.

The National Transport System Plan for 2021-2032 is a strategic plan for developing the transport system. It has been drawn up in accordance with section 15b of the Highways Act (503/2005). The National Transport System Plan contains a description of the current state of the transport system and changes in the operating environment, a vision for the development of the transport system until 2050, the objectives set for the plan and the strategic guidelines specifying these and the strategic guidelines for the attainment of the objectives set out in the programme containing measures by the state and municipalities. The plan also includes the state funding programme and a summary of the impact assessment.

The update of the national transport system plan was launched in late summer 2023 in accordance with PM Orpo's Government Programme 2023.

#### Website of the national transport system plan (in Finnish)

#### Strategic situational picture for the transport network

A transport system analysis is maintained for the needs of the National Transport System Plan, one part of which is the strategic situational picture of the transport network. The strategic situational picture describes such things as, the state of transport networks and the most significant challenges at the national level. The situational picture is updated 1-2 times a year. Traficom and the Finnish Transport Infrastructure Agency are responsible for compiling the situational picture.

Strategic situational picture of the transport network on the Traficom website

#### **Transport network investment programme**

According to the National Transport System Plan, the Finnish Transport Infrastructure Agency is responsible for preparing an investment programme for stateowned transport infrastructure for the next 6-8 years based on the objectives, criteria and funding levels of the transport infrastructure planning programme and National Transport System Plan, the needs identified in the transport network's strategic situational picture and the quality requirements laid down in infrastructure legislation. The investment programme covers both large development investments and smaller improvement projects implemented with funding for basic infrastructure management. This is a concrete formulation of the National Transport System Plan for the implementation and funding of the projects and will be used in the preparation of the budget proposals. The investment programme does not alter Parliament's competence in the preparation of the budget, and Parliament remains responsible for budgetary decisions. The investment programme is updated each year. The Finnish Transport Infrastructure Agency takes into account the most significant service level deficiencies in road and rail traffic and engages in open and transparent interaction with stakeholders in the preparation of the investment programme, such as municipalities and regions responsible for land use, and business operators.

The 2024-2031 investment programme for the network was published in spring 2023. The preparation of the investment programme for 2025–2032 began in summer 2023 and is due to be published in early 2024.

<u>Investment programme of the Finnish Transport Infrastructure Agency</u>

#### Transport infrastructure planning programme

The transport infrastructure planning programme contains information on the planning of railway infrastructure carried out in the Finnish Transport Infrastructure Agency. Programming of the projects ensures adequate and timely planning preparedness for transport infrastructure investments before decisions are made. As a rule, no decisions have yet been made on Budget funding for the infrastructure projects listed in the planning programme. The planning programme is prepared on an annual basis.

Planning programme of the Finnish Transport Infrastructure Agency (in Finnish)

#### Service level of the arterial railways

The Ministry of Transport and Communications decree on arterial routes and their service levels entered into force on 1 January 2019. Under the decree, the infrastructure manager must maintain a sufficient service level on the arterial railways, taking into account the significance of each railway line for the transport system. Arterial railway routes are categorised as passenger and goods routes based on their primary traffic profile. The decree lays down requirements for speed limits and axle loads.

<u>Decree on Arterial Routes and their Service Levels (in Finnish).</u>

#### Reports on the railway network

The Finnish Transport Infrastructure Agency acts as an expert on matters concerning the railway network and examines the issue from different perspectives. To keep the overall picture up to date, the agency regularly produces reports on a wide range of different topics, which can be found in its publications. The entire railway network is examined from time to time in these reports.

#### Railway network development and improvement projects

The following development projects will be underway in the Finnish railway network in 2025:

- Helsinki-Riihimäki capacity increase, phase 2
- Espoo City Rail Link
- Electrification of the line section Laurila—Tornio—Haparanda
- Turku railway yard and Kupittaa–Turku double track
- Digirata project development and verification phase
- Improvement of Tampere-Jyväskylä rail line, phase 1
- Development of Tampere passenger railway yard

#### Reduction of the maintenance backlog in 2025

- Railway network renovations (lines, turnouts, bridges and safety installations)
- Repairs of areas with ground frost damage and soft soils on the main railway network
- Improving safety at level crossings
- Improvements at timber loading facilities
- Renovations of the Jyväskylä-Pieksämäki and Oulu-Laurila track sections

## 3 Access conditions

## 3.1 Introduction

Chapter 3 describes the conditions for accessing the railway network and for operating rail services. The licence, the railway operator's safety certificate, allocated infrastructure capacity and a network access agreement are the requirements for operating rail services. The rolling stock authorisation process

and matters concerning the qualifications of traffic safety staff are also described in this chapter.

The stages of the market access are described at <a href="https://www.finnish.railway.market.fi">www.finnish.railway.market.fi</a> - Railway sector operators.

# 3.2 General access conditions

The conditions for accessing the railway network are described in section 113 of the Rail Transport Act and Article 10 of the Railway Market Directive. The state rail network must comply with Traficom's regulations and the Finnish Transport Infrastructure Agency's instructions. <u>Information on currently valid regulations available on the Finlex website</u> and on the Traficom <u>website</u>. The instructions issued by the Finnish Transport Infrastructure Agency are listed on the Finnish Transport Infrastructure Agency website (see the Railway Instructions).

Government Decree on the interoperability of the railway system (284/2019) contains provisions on such things as the essential requirements concerning the railway system.

A railway undertaking may only operate in the state-owned railway network if it meets the following conditions:

- 1. The railway undertaking must have a licence granted by the Finnish Transport and Communications Agency Traficom and meeting the requirements laid down in the Act on Transport Services or a corresponding licence issued in the European Economic Area.
- 2. The railway operator must have a safety certificate referred to in the Rail Transport Act that has been issued or approved by the Finnish Transport and Communications Agency Traficom and that covers the train paths on which operations are planned.
- 3. Infrastructure capacity has been allocated to the railway operator for the planned traffic.
- 4. The railway undertaking has concluded a network access agreement with the Finnish Transport Infrastructure Agency.
- 5. All other conditions for operating rail services, laid down in and under the Rail Transport Act, are met.

Locomotives operating in the state-owned railway network must be equipped with

a functioning ATP on-board unit. This requirement does not apply to units to which the Finnish Transport and Communications Agency Traficom has granted an exemption to operate without the equipment in question, or units to which the requirement of installing ATP equipment does not apply.

#### **Museum train traffic**

Except for the licence, all requirements applying to rail traffic described in this Network Statement also apply to museum train traffic. A museum train traffic operator must have a safety certificate issued by the Finnish Transport and Communications Agency Traficom. The certificate is issued on application for a maximum of five years at a time. The infrastructure manager requires that museum train traffic operators also conclude access agreements for each timetable period. Museum train traffic operators may only request ad hoc infrastructure capacity.

#### 3.2.1 Requirements for applying for infrastructure capacity

Under section 4, paragraph 27 of the Rail Transport Act, parties who can apply for infrastructure capacity include a railway operator, the competent authority referred to in section 182 of the Act on Transport Services and shippers, consignors, or other senders, freight forwarders, integrated transport operators and a railway sector training institute that wish to obtain infrastructure capacity for reasons related to the provision of a public service or for commercial reasons.

In practice, data systems for infrastructure capacity management allow parties other than railway operators to request capacity for regular services. The party requesting infrastructure capacity must, no later than in connection with the publication of the annual capacity allocation decision for regular services, give the Finnish Transport Infrastructure Agency (kirjaamo(at)ftia.fi) the name of the operator using the allocated capacity and meeting the requirements for railway operations referred to in section 3.2 and hand over the capacity to the operator in the LIIKE system. When changing regular services, the original applicant must apply for the necessary changes to the regular capacity. In the planning of traffic changes at the time of the change and in any negotiations related to these, the railway operator may represent the original applicant of the capacity, if they so agree, but the change application sent to the LIIKE system must come from the original applicant. Ad hoc infrastructure capacity may only be requested by railway operators.

Under section 125 of the Rail Transport Act, parties possessing infrastructure capacity that are not railway operators may hand over the infrastructure capacity granted to them to a railway operator for business operations. A party possessing infrastructure capacity may not otherwise hand over allocated infrastructure capacity to other parties and infrastructure capacity may not be traded.

#### 3.2.2 Conditions for accessing railway infrastructure

A railway undertaking referred to in the Rail Transport Act may use the stateowned railway network for railway operations in domestic passenger and freight traffic and for international rail traffic between countries belonging to the European Economic Area. These railway undertakings may access the railway network in accordance with the Rail Transport Act and the traffic operating points in the state-owned railway network for their services in accordance with the network access agreement. Other railway operators may also use the state-owned railway network, provided that an agreement on the operations has been concluded with the infrastructure manager.

#### 3.2.3 Licence

Provisions on the granting of the licence are laid down in Article 25 of the Railway Market Directive and in chapter 6 of the Act on Transport Services.

A railway undertaking may only operate rail services if it has been granted a <u>licence</u> by the <u>licensing authority</u>. Traficom <u>issues the licences</u> for operating railway services to applicants established in Finland. Licences issued in another member state of the European Economic Area are also accepted and a copy of the licence must also be sent to Traficom.

#### 3.2.4 Safety certificates

Under section 18 of the Rail Transport Act, only a railway operator holding a safety certificate for operating railway services may operate on the railway network. With the safety certificate, the railway operator demonstrates that it has a safety management system in place that complies with the requirements and that it is able to comply with the applicable safety regulations and rules.

If the applicant only intends to operate rail transport in Finland, they may apply for a safety certificate in accordance with section 19 of the Rail Transport Act from the Traficom or the EU Agency. If the applicant intends to operate rail services in the territory of two or more EEA States, they must apply for a safety certificate from an EU Agency. In this case, EU Agency refers to the European Union Agency for Railways (ERA).

However, a safety certificate will not be required for the movement of a vehicle for the purpose of transport of vehicles related to loading, repair or maintenance services and for which access to infrastructure or part of the infrastructure has been closed by the infrastructure manager or infrastructure managers and they have provided instructions on the procedures for movement in the closed area.

If a railway undertaking operates a railway service within the meaning of the Agreement between the Government of the Republic of Finland and the Government of the Russian Federation on direct international rail transport (Agreement 85/2016) only between the national border and the railway border station and on tracks located at the railway border station, and if a railway undertaking is registered in a country other than the EEA, it does not need a safety certificate.

The matters related to security certificates referred to above are described in more detail and explained in the <u>instructions for applying for a safety certificate issued by Traficom</u>.

Read more about applying for a safety certificate.

#### 3.2.5 Obligation to have insurance cover

Under Article 22 of the Railway Market Directive and section 53, subsection 3 of the Act on Transport Services, the railway operator must have adequate insurance cover or make equivalent arrangements for situations in which damage is caused to third parties and the railway operator is liable for the damage under the law or an agreement. The nature and scope of the operations and the risks arising from the operations must be taken into account when the adequacy of the insurance cover or similar arrangements are assessed. The insurance cover or equivalent arrangements must be valid for the whole duration of the operations. For more information on the matter, see the guidelines on liability insurance issued by the Finnish Transport and Communications Agency Traficom (in Finnish).

### 3.3 Network access agreements

#### 3.3.1 Framework agreement

Provisions on framework agreements are laid down in Articles 38 and 42 of the Railway Market Directive, in Commission Implementing Regulation 2016/545/EU, and in section 116 of the Rail Transport Act.

The infrastructure manager may conclude a framework agreement on the use of the infrastructure capacity with the applicant for capacity. The purpose of the agreement is to specify the characteristics of the infrastructure capacity required by the applicant. However, the framework agreement is not binding in that it does not entitle the applicant to the infrastructure capacity set out in the agreement.

Parties requesting capacity need to apply for the infrastructure capacity specified in their framework agreement separately for each timetable period. The infrastructure manager also allocates the infrastructure capacity specified in the framework agreement in accordance with the procedure described in the Rail Transport Act. Correspondingly, the network access agreement is concluded for each timetable period separately regardless of the framework agreement. The framework agreement notwithstanding, the provisions of the Rail Transport Act can be applied to other applicants for infrastructure capacity.

The framework agreement is concluded for a maximum of five years. For special reasons, the infrastructure manager may, however, also conclude framework agreements for longer periods in situations described in the provisions laid down in section 116, subsection 2 of the Rail Transport Act.

The Finnish Transport Infrastructure Agency does not currently conclude framework agreements.

#### 3.3.2 Other agreements

Provisions on the agreements between the infrastructure manager and applicants for infrastructure capacity are laid down in section 129 of the Rail Transport Act and Articles 28, 38(3) and 41(1) of the Railway Market Directive.

#### Rail network access agreement

Railway undertakings and museum train traffic operators must conclude an agreement with the infrastructure manager on the access to the state-owned railway network and on the use of the services required for railway operations. such as railway infrastructure, tracks and traffic control services. The parties may also agree on other practical arrangements concerning railway operations.

The railway operator should contact the infrastructure manager to prepare the access agreement and contractual negotiations at an early stage, preferably before requesting infrastructure capacity. The access agreement is concluded separately for each timetable period and it can be changed if required by decisions concerning capacity allocation made during the timetable period or other matters concerning the condition or accessibility of the railway network. The access agreement can only be concluded after all conditions on operating rail services specified in the Rail Transport Act have been met. Transport operation can begin after a rail network access agreement has been signed and infrastructure capacity allocated.

#### Agreement on access to individual traffic operating points

A railway operator, for whom operations in the state-owned railway network are not part of its core activities, must conclude an access agreement with the infrastructure manager on using the state-owned railway network or individual traffic operating points before starting railway operations. The agreement is concluded for one timetable period. A railway operator wishing to conclude an access agreement must send a free-form application to the infrastructure manager (kirjaamo(at)ftia.fi) well before the start date of the planned operations. A separate application must be submitted for each timetable period.

#### Railway yard agreement

At traffic operating points with more than one railway operator, the parties must conclude a railway yard agreement, if necessary. The agreement sets out the common rules for the railway yard and on access to and operation of tracks in the railway yard. The railway yard agreement is appended to the network access agreement and A railway yard agreement is drawn up for each timetable period. The infrastructure manager convenes the parties to negotiate on the railway yard agreement.

#### Network access agreements with maintenance undertakings

Maintenance contractors that have a valid maintenance agreement with the infrastructure manager (or the subcontractor of the maintenance provider of the infrastructure manager) do not need a separate network access agreement for the activities falling within the scope of the maintenance agreement because the maintenance agreement also grants them access to the infrastructure. The contractors must contact the infrastructure manager so that it can be determined whether an access agreement for the activities outside the scope of the maintenance agreement or other similar agreement concluded with the infrastructure manager can be determined.

#### Agreement on storing rolling stock on the tracks of the state-owned railway network

The need and the right to access railway yard tracks are discussed and agreed in the access agreement. In a multi-operator environment, railway yard agreements may be concluded with all operators at the traffic operating point or in the railway yard in question. The JETI system may also be used to request track reservations from Fintraffic Railway Ltd's traffic planning for temporary storage of rolling stock. Longer-term storage is examined separately on a case-by-case basis. For more information, see Appendix 7H. Storage must be temporary, and it may not interfere with other operators' activities at the traffic operating point or in the railway yard. If the situation so requires, the rolling stock must be moved to a storage location assigned by the infrastructure manager within a reasonable time frame.

If a museum train traffic operator needs to store its rolling stock in the state-owned railway network, an agreement on the storage of the rolling stock must be concluded with the infrastructure manager. The need for such an agreement is always determined on a case-by-case basis and the infrastructure manager may refuse to conclude the agreement on reasonable grounds. Applications for the agreement must be sent to: kirjaamo(at)ftia.fi.

#### Agreement between infrastructure managers

The agreement between infrastructure managers contains provisions on traffic between railway networks, traffic control, the dividing line between railway networks and its ownership and maintenance, as well as on the cooperation between infrastructure managers. In order to enter into such an agreement, a private infrastructure manager must submit a free-form request to the Finnish Transport Infrastructure Agency at kirjaamo(at)ftia.fi.

#### Agreement on the use of draisines

Draisines may not be used in the state-owned railway network on line sections with commercial traffic. However, a draisine use agreement may be concluded with an association or company that operated draisines on certain line sections that are closed to traffic, provided that the track conditions are satisfactory and all safety requirements are met. An agreement on the use of draisines on such line sections is always on a case-by-case basis and the infrastructure manager may refuse to conclude the agreement. Inquiries concerning such agreements should be sent to the infrastructure manager well in advance of the planned use (kirjaamo(at)ftia.fi).

#### 3.3.3 General conditions, regulations and instructions

The operational regulations can be found in the Finlex service (in Finnish) and on the website of the Finnish Transport and Communications Agency Traficom. The operational instructions can be found on the websites of the Finnish Transport and Communications Agency Traficom and the Finnish Transport Infrastructure Agency (see the Railway Instructions). The Finnish Transport Infrastructure Agency makes every effort to ensure that the latest versions of the instructions are available to the railway operators no later than two months before they enter into force.

# 3.4 Special requirements

#### 3.4.1 Rolling stock authorisation process

Before rolling stock can be used in the railway network, it must be granted <u>authorisation</u> for <u>placing on the market</u> by Traficom. In Finland, the authorisation is granted under the Rail Transport Act. The Rail Transport Act is in accordance with the provisions laid down in the fourth railway package of the EU. The requirements concerning rolling stock are based on the interoperability requirements for the single European railway system, and Traficom issues regulations supplementing them, as necessary. Before issuing the authorisation, Traficom may, in order to specify any restrictions, request the infrastructure manager's opinion on the compatibility of the vehicle type or unit with the railway network.

The Finnish Transport and Communications Agency Traficom maintains a register to promote rail system safety and identify rolling stock. The purpose is to monitor the validity and traffic safety of the rolling stock. The rolling stock granted the authorisation for placing on the market in Finland is entered in the register maintained by the Finnish Transport and Communications Agency Traficom. The rolling stock register contains information about the owners, holders and lessees of rolling stock.

The special characteristics and features of the railway network in matters concerning the compatibility of the rolling stock with the railway network are described in part 21 ('Liikkuva kalusto') of the instructions 'Ratatekniset ohjeet (RATO)' issued by the Finnish Transport Infrastructure Agency. They must be taken into account when authorisation for new rolling stock in the railway network managed by the Finnish Transport Infrastructure Agency is sought.

# 3.4.2 Approval of personnel performing traffic safety tasks and other safety-critical work

Under the EU railway safety directive (EU) 2016/798, railway undertakings and infrastructure managers are responsible for the training and qualifications of their staff performing safety-critical work. In its capacity as the manager of Finland's state-owned railway network, the Finnish Transport Infrastructure Agency is responsible for setting qualification requirements for persons working in the railway network on behalf of the infrastructure manager and in joint projects involving the infrastructure manager and for ensuring that these persons are provided with adequate training. It is also laid down in section 11 of the Occupational Safety and Health Act (738/2002) that employers must ensure the qualifications of their personnel, especially in tasks involving a particular risk of injury or illness.

The Act on Transport Services only contains provisions on the qualifications of train drivers in the railway system. The train driver's licence demonstrates that the person in question possesses the general qualifications for driving a train. The licence proves that in respect of their health and psychological qualities, the person in question meets the minimum requirements laid down in the act and is suitable for working as a train driver. The train driver must always carry the licence with them when performing their task in the state-owned railway network.

#### Qualification requirements set by the manager of the state-owned railway network

In its instructions 'Valtion rataverkon haltijan osaamis- ja pätevyysvaatimukset' (see the Railway Instructions), the infrastructure manager has set minimum qualification requirements for railway operators and infrastructure managers of private sidings operating in the state-owned railway network. A railway operator must describe the management of the qualifications and training for the tasks that have a critical impact on railway safety and that are laid out in its safety management system. The infrastructure manager requires that shunting personnel possess specific qualifications and that railway operators ensure that these requirements are met. The qualification requirements are set out in the qualifications instructions prepared by the manager of the state-owned railway network.

The qualification requirements issued by the manager of the state-owned railway network also specify the essential tasks concerning the safety of track work and the training for them.

#### **Small-scale train driver operations**

Small-scale train driver operations and the operators' responsibilities are described in <u>Traficom's instructions 'Pienimuotoinen kuljettajatoiminta' (in Finnish)</u>. Provisions on small-scale train driver operations are laid out in the network access agreements between the infrastructure manager and the railway operator. Small-scale train driver operations are in small scale and limited in terms of their geographic area. Areas for small-scale train driver operations at traffic operating points are shown in the Track Data Service (in Finnish).

#### 3.4.3 Oversize loads

Traffic restrictions applying to exceptional transport and requesting a permit for exceptional transport are discussed in chapter 4.7.

#### 3.4.4 Carriage of dangerous goods

Carriage of dangerous goods is discussed in chapters 2.4.3 and 4.7. <u>Regulations on railway traffic and rolling stock can be found in the Finlex service (in Finnish)</u>, on the Traficom <u>website</u> and in the service description of storage sidings for wagons loaded with dangerous goods (Appendix 7J).

#### 3.4.5 Trial runs of rolling stock

Trial runs of rolling stock can be carried out at the Finnish Transport Infrastructure Agency's centre for trial runs in Laajakangas at Kontiomäki. Agreement on the use of the area must be on the basis of the instructions for reserving and using the trial runs centre (see the Railway Instructions). For more information, contact Track and Rolling Stock Technology of the Finnish Transport Infrastructure Agency.

Noise measurements required for the rolling stock approval process can be carried out at Leteensuo (on the line section Riihimäki–Tampere). For more information, contact Environmental and Property Issues of the Finnish Transport Infrastructure Agency.

The permits for trial runs carried out in the railway network as part of the rolling stock approval process are granted by Traficom The Finnish Transport Infrastructure Agency provides details of the railway network for trial runs on request.

Commissioning inspections for track work machinery and equipment used only at track work sites can be carried out in Oulu, Tampere, Kouvola and Kontiomäki.

#### 3.4.6 Machinery operations and storage

The railway network may also be used for moving track machines from depots to work sites, between work sites, and for maintenance purposes. Under the Rail Transport Act, a safety certificate and infrastructure capacity are required for train or shunting operations outside the area reserved for track work.

The instructions on the track work machinery as well as on the persons and railway undertakings involved in infrastructure management duties can be found in the safety instructions for infrastructure management (TURO) and the qualification requirements issued by the manager of the state-owned railway network (both in Finnish).

# 4 Capacity allocation

#### 4.1 Introduction

The legal framework for requesting and allocating infrastructure capacity is laid down in Chapter 4, Section 3 and Annex IV(3) of the Railway Market Directive, in chapter 17 of the Rail Transport Act, in the Government Decree on the Timetable Period in Railway Traffic and Requesting Infrastructure Capacity (1308/2018) and in the decree amending the decree (524/2022).

Infrastructure capacity is requested and allocated for each timetable period. The timetable period in railway traffic starts annually at the second weekend of December, at midnight between Saturday and Sunday, and ends at the same time the following year. The timetable period 2025 starts on 15 December 2024 and ends on 13 December 2025.

#### 4.2 Process overview

#### 4.2.1 Infrastructure capacity for train traffic

Infrastructure capacity in the state-owned railway network must be requested from the Finnish Transport Infrastructure Agency for each timetable period and at specific intervals during the timetable period. The requests must be made in accordance with section 117 of the Rail Transport Act and Article 39 and Annex IV(3) of the Railway Market Directive. Requests for infrastructure capacity can also be submitted on an ad hoc basis for non-regular traffic. The capacity reservation situation and free capacity are shown in the <u>capacity management information systems (in Finnish)</u>, which are the responsibility of the traffic control company.

The principles for requesting infrastructure capacity are described in the legislation referred to above. To specify them, the infrastructure manager has prepared instructions for requesting infrastructure capacity (see the Railway Instructions).

The requests for infrastructure capacity for regular services, for changes in regular services and for ad hoc capacity during the timetable period must be submitted in the LIIKE information system or using the interface specified by the infrastructure manager (for more information, visit the website of the <a href="traffic control company">traffic control company</a> (in Finnish)). The timetables for the trains for which capacity is requested must be included in the request.

The decisions on allocating capacity for regular traffic are made by the Finnish Transport Infrastructure Agency with the support of the capacity management function of the traffic control company. <u>The decisions are published on the Finnish Transport Infrastructure Agency website (in Finnish)</u>.

Ad hoc capacity is allocated by the capacity management of the traffic control company. Urgent capacity requests arising outside office hours must be submitted to the Rail Traffic Management Centre.

If the LIIKE system is inoperative due to a widespread malfunction, the Rail Traffic Management Centre can approve requests for urgent capacity changes by phone. If the JETI system is inoperative due to malfunctions, the Rail Traffic Management Centre instructs users to use the backup systems containing driver timetables and advance notification information.

#### 4.2.2 Shunting capacity

Shunting capacity between railway stations is applied for via the LIIKE system. Capacity must be requested when moving between traffic operating points. In addition, *instructions for requesting infrastructure capacity* (see Railway Instructions) defines the traffic operating point sections between which operators must request capacity. On the basis of a recommendation from the Rail Regulatory Body, the Finnish Transport Infrastructure Agency will launch a study at the beginning of 2024 to verify whether there is a need to extend the capacity allocation practice for some traffic operating points dided into parts.

#### 4.2.3 Railway yard capacity

Track access in Finnish railway yards as well as the capacity request and allocation procedures are described in the service facility descriptions in chapter 7 and in the instructions for requesting infrastructure capacity (see Railway Instructions).

#### 4.2.4 Service facility capacity

Service facility capacity is reserved by contacting the infrastructure manager and the service facility operator in the manner detailed in the service facility description. The service facilities in the state-owned railway network are described in chapter 7. In addition to the Network Statement, information on service facilities is also provided in the open data of the Network Statement (Services at traffic operating points, 'Liikennepaikkojen palvelut') and in the map service.

#### 4.2.5 Developing infrastructure capacity management

#### Line capacity

The development of line capacity planning will be continued by the infrastructure manager. Development work will continue under the TTR concept (see section 4.9).

#### Railway yard capacity

The infrastructure manager will continue development work to define more detailed capacity management for yards (such as track reservation precision, purpose of use, yearly to daily operations). New operating models and system development will enable:

- up-to-date and feasible plan and situational picture of track use for users from the planning stage to operational moment (e.g. arrival and departure tracks, track reservations, rolling stock information, forecasts);
- fair, transparent and flexible infrastructure use decision-making in a multiactor environment;

- a proactive approach to resolving conflicts in track use, taking into account traffic and track work;
- uniform operating models in track-specific capacity management in the state-owned railway network;
- an active link between railway operators and traffic control/passenger information.

A capacity management function and the SAAGA system will be introduced for the management of railway yards in stages starting from the timetable period 2022. The operating models for the storage of machinery will also change as the commissioning progresses nationally, and capacity management should be contacted in matters related to track use planning.

The preliminary implementation plan of the capacity management function and the SAAGA system is as follows and it will be specified on the basis of the changing needs of the multi-actor environment

- Q4/2022 Riihimäki station, Kerava (passenger traffic), Kirkkonummi
- Q2/2023 Kouvola
- Q4/2023 Kuusankoski, Kotka, Lauritsala
- 2024 will be commissioned in stages at the following traffic operating points: Kerava (remaining), Karjaa, Vainikkala, Imatra, Joensuu, Hamina, Inkeroinen, Kaipiainen, Lappeenranta, Kalvitsa, Harju, Joutseno, Heinola, Lahti, Kontiomäki, Lieksa, Iisalmi, Haapamäki, Keuruu, Toijala, Hankasalmi, Jyväskylä, Suolahti, Äänekoski, Jämsä, Jämsänkoski, Orivesi, Harjavalta, Pori/Rauma-Lielahti, Kokemäki, Kurkimäki, Riihimäki (cargo+ sorting), Naarajärvi, Siilijärvi, Pitkämäki
- it is envisaged that the capacity management function and the SAAGA system will be extended to cover the remaining traffic operating points in 2025.

# 4.3 Allocating infrastructure capacity for track work

#### 4.3.1 General principles

In its capacity as the infrastructure manager, the Finnish Transport Infrastructure Agency observes the thresholds laid down in section 124 of the Rail Transport Act and the Commission Delegated Decision (EU) 2017/2075 (10, 11 and 14) when providing information on known track work and on the capacity restrictions arising from them.

	Successive days	Traffic impact (num- ber of cancelled, re- routed or replaced trains)	First pub-
Extremely significant capacity restrictions	> 30 days	> 50%	
Significant capacity re-	> 50 days	2 30 70	x-24
strictions	> 7 days	30–50%	

	Successive days	Traffic impact (num- ber of cancelled, re- routed or replaced trains)	First pub-
Moderate capacity restrictions	≤ 7 days	10–30%	x-12
Minor capacity re- strictions	not specified	< 10%	x-4

The announced capacity restrictions should be seen as a factor guiding traffic planning. The applicant must take the restrictions into account when preparing its capacity request. Before the request for annual capacity is submitted, the infrastructure manager and the capacity applicant must jointly determine which capacity restrictions are taken into account in the request for annual capacity.

A separate working group convened by the Finnish Transport Infrastructure Agency serves as the cooperation forum for infrastructure managers.

#### **Using diversionary routes**

Diversionary routes, as referred to in the Commission Delegated Decision (ANNEX VII(11)), to which trains can be rerouted during track work, are not available in Finland because most of the railway network is single track and only a small number of lines can be used as alternatives. For this reason, an effort is made to carry out track work causing traffic disruptions during low traffic. When diversionary routes are available, the infrastructure capacity is prioritised in accordance with the arrangement used in Finland. Occasionally, trains also have to be replaced with other modes of transport. However, in these cases, arranging replacement transport and the costs arising from it are the responsibility of the railway operator.

#### **Updating track work information**

Updated details of the capacity restrictions are maintained and published in the <u>advance information system (JETI; in Finnish)</u>. From this system, information is relayed to the LIIKE system and published in the <u>open data of the traffic control company</u>.

#### **Communication on track work**

Each party is responsible for its own communication concerning track work. The infrastructure manager is responsible for communication regarding track and rail accessibility and for providing information about track work. The railway undertakings are responsible for providing information on their own train services and timetables. The parties must coordinate and, if necessary, review the practical measures concerning the provision of information on the track work before starting the work.

# 4.3.2 Deadlines for providing notification of capacity restrictions

# Specifying information on track work before the start of a new timetable period

The capacity restrictions arising from track work in 2028 (first consultation round) and in 2027 (second consultation round) will be published in autumn 2025 in accordance with the available information and the publication and consultation procedure for capacity restrictions laid down in the Commission Delegated Decision (EU) 2017/2075 (Annex VII(8)). The first and second consultation rounds will be held as part of the meetings specified for the purpose and the national traffic and track work coordination meetings. The details of the capacity restrictions are published on the infrastructure manager's external <a href="website">website</a>. The publication of the capacity restrictions is the best estimate of the track work affecting traffic during the timetable periods 2025 and 2026 and of the capacity needs for railway infrastructure management arising from the work.

Track work affecting the timetable period that has been known to the infrastructure manager at least six months before the change of the timetable period and that will result in capacity restrictions is reported in connection with the publication of the proposal for allocating infrastructure capacity (EU 2017/2075, APPENDIX VII section (12)).

The infrastructure manager conducts negotiations with applicants for infrastructure capacity, railway undertakings, and maintenance and transport providers on the timing of track work, track possessions, speed limits and other capacity restrictions arising from the work. A national meeting discussing the coordination of track work and traffic is the key cooperation forum in this respect. The meetings, which are held four times each year, are convened and chaired by the infrastructure manager. Stakeholder groups are also invited to join the planning of the work stages of rail projects with traffic impacts and, if necessary, the weekly meetings held during track work projects. Based on the results of the negotiations, the infrastructure manager decides on anticipated timings, track possessions and other measures impacting traffic.

#### Specifying track work information during a timetable period

The allocated infrastructure capacity is available to the railway operator unless it overlaps the track possessions required for infrastructure management work. The work programme, timing of the work and the track possessions required may, however, change as the funding and planning are specified. Occasionally, the traffic impacts of the work will have to be reviewed during the timetable period in question, or infrastructure maintenance work not foreseen in the annual plan must be carried out. These situations arise because of the following factors: safe train traffic has to be ensured despite the capacity restrictions; the infrastructure manager has no influence on the timing of the restrictions; application of the time limits is not cost-efficient or causes unnecessary damage to railway asset management; or there are other situations in which all parties concerned approve the change (EU 2017/2075, Annex VII(14)).

In such cases, the infrastructure capacity allocated to railway undertakings that overlaps infrastructure management needs is not available to railway operators or the capacity restrictions affecting track work are made more specific. In that case, notification of the restrictions is provided (in connection with the adjustment dates of the timetable period 2024; (section 4.5.2) no later than

- 12 August 2024 for the period 15 December 2024–30 March 2025
- 15 December 2024 (for the period 31 March 2025–16 June 2025)
- 03 February 2025 (for the period 17 June 2025–11 August 2025)
- 30 March 2025 (for the period 12 August 2025–13 December 2025)

If the traffic impacts of the work will have to be specified so that the time limits referred to above cannot be observed, the infrastructure manager will discuss the matter with railway operators before making its decision. If decisions have to be made at short notice, a representative of the infrastructure manager (Fintraffic Raide Oy's traffic planning or, outside office hours, Fintraffic Raide Oy's Rail Traffic Management Centre ) will conduct the necessary negotiations before decision-making.

In addition to the infrastructure capacity allocations made in connection with annual planning, capacity is also allocated for maintenance during the timetable periods in slots with no traffic, and the capacity is defined in the JETI system. After it has been entered in the advance information system, the required infrastructure capacity has been allocated to track work, and railway operators cannot request or use any of the capacity at the same time.

#### Requesting a track possession affecting traffic

The party requiring the track possession (contractor) must always contact Fintraffic Raide Oy's traffic planning and agree on the track possession and its details in accordance with the infrastructure manager's decision on track

possessions no later than

- two months before the start of the work if the work causes one-off traffic disruptions or affects cross-border traffic
- three months before the start of the work if the work results in daily traffic disruptions lasting several weeks or months or the work affects traffic at several weekends
- 4 months before the start of the work if fast international passenger services are affected.

For contact details of Fintraffic Raide Oy's traffic planning, see the website of the Finnish Transport Infrastructure Agency (in Finnish). The party performing the work must be allocated infrastructure capacity, receive a track work permit, and if necessary, be granted a voltage cut-off before starting the work during the allocated track possessions.

# 4.4 Impact of framework agreements

The infrastructure manager does not currently conclude framework agreements (see chapter 3.3.1).

# 4.5 Capacity allocation

Provisions on the allocation of infrastructure capacity are laid down in section 122 of the Rail Transport Act and Article 43 of the Railway Market Directive and Annexes IV 3(c) and VII to the same directive.

Table 1. Timetable for the capacity process in the timetable period 2025.

Date	Event
FRI 08 December 2023	Network Statement is published
SUN 10 December 2023- MON 15 April 2024	Annual capacity can be requested
MON 15 April 2024–FRI 28 June 2024	Requests for annual capacity are coordinated
FRI 28 June 2024	The proposal for allocating annual capacity is published
MON 01 July 2024– FRI 02 August 2024	Comments on the proposal for annual capacity allocation can be submitted
MON 19 August 2024	The annual capacity allocation is approved and the allocation decision is published
WED 23 October 2024	Requests for adjustment date 1 must be submitted
THU 31 October 2024	Capacity for adjustment date 1 is allocated
WED 04 December 2024	Requests for adjustment date 2 must be submitted
SUN 15 December 2024	Start of the timetable period 2024 Allocation decision for adjustment date 1 enters into force

Date	Event
THU 12 December 2024	Capacity for adjustment date 2 is allocated
MON 03 February 2025	Allocation decision for adjustment date 2 enters into force
WED 05 February 2025	Requests for adjustment date 3 must be submitted
THU 13 February 2025	Capacity for adjustment date 3 is allocated
SUN 30 March 2025	Allocation decision for adjustment date 3 enters into force
WED 30 April 2025	Requests for adjustment date 4 must be submitted
THU 08 May 2025	Capacity for adjustment date 4 is allocated
MON 16 June 2025	Allocation decision for adjustment date 4 enters into force
WED 25 June 2025	Requests for adjustment date 5 must be submitted
THU 03 July 2025	Capacity for adjustment date 5 is allocated
MON 11 August 2025	Allocation decision for adjustment date 5 enters into force
WED 10 September 2025	Requests for adjustment date 6 must be submitted
THU 18 September 2025	Capacity for adjustment date 6 is allocated
SUN 26 October 2025	Allocation decision for adjustment date 6 enters into force
SAT 13 December 2025	Timetable period 2025 ends

#### 4.5.1 Annual capacity

Under section 117 of the Rail Transport Act, infrastructure capacity must be requested from the infrastructure manager for each timetable period no earlier than 12 months and no later than eight months before the entry into force of the timetable period.

Based on the requests received, the Railway Network Access Unit of the Finnish Transport Infrastructure Agency will prepare the proposal for allocating infrastructure capacity (referred to as the 'draft working timetable' in the Rail Transport Act) for the next timetable period within four months after the deadline for submitting the capacity requests. European railway infrastructure managers have, however, jointly decided that a maximum of 2.5 months should be used for coordinating the requests.

The infrastructure manager must inform all applicants how the infrastructure capacity has been allocated between the applicants. If the infrastructure manager has decided to reserve part of the capacity as spare capacity to be allocated later, all applicants must also be informed of this. For more information about requesting, allocating and cancelling infrastructure capacity, see the instructions for requesting infrastructure capacity.

#### Appealing against the decision on allocating infrastructure capacity

The applicant for infrastructure capacity may appeal against a capacity allocation decision made by the infrastructure manager by submitting a claim for rectification to the Rail Regulatory Body (see chapter 1.3.3).

#### 4.5.2 Requests received after the deadline

On the adjustment dates, the requests received after the deadline (15 April 2024) are processed in accordance with the following process and the timetable presented at the start of chapter 4.5. An applicant can change or supplement their regular services for the remainder of the timetable period during the timetable period in question on specific adjustment dates, provided that the changes have been approved by all parties concerned and the changes do not affect the infrastructure capacity allocated to other capacity applicants or international traffic within the European Economic Area. If there is free infrastructure capacity available and more than one capacity applicant submits requests for this capacity, the infrastructure manager must coordinate the requests and if this is not possible, it may allocate the capacity by applying the order of priority after the train path has been declared as congested infrastructure.

The infrastructure manager decides on the adjustment dates for regular traffic, taking into consideration the needs of the capacity applicants.

The infrastructure manager will inform all infrastructure capacity applicants, the Ministry of Transport and Communications, the Rail Regulatory Body and all other parties concerned about the adjustment dates for regular traffic in the Network Statement (see the timetable for the capacity request process) and by publishing the decisions on the website of the Finnish Transport Infrastructure Agency (in Finnish).

#### 4.5.3 Requesting ad hoc infrastructure capacity

Under Article 48 of the Railway Market Directive and section 123 of the Rail Transport Act, ad hoc infrastructure capacity for traffic for which no regular capacity has been requested can be requested for the nearest adjustment date, to the extent that free capacity is still available. Ad hoc capacity requests are processed in the order of arrival. Under section 123 of the Rail Transport Act, requests for ad hoc capacity must be processed within five working days.

Ad hoc capacity can also be requested for the next adjustment date after the allocation decision for that adjustment date has been published. Ad hoc capacity for museum train traffic may, however, be requested four months in advance.

Capacity for individual trains for the adjustment dates following the next adjustment date can be applied for with the regular application period for an adjustment date.

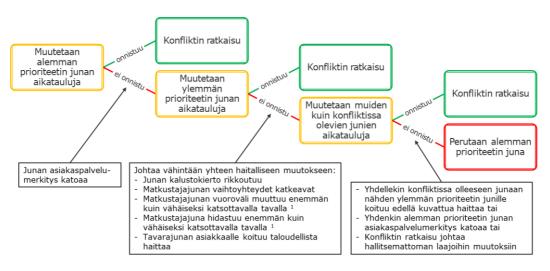
Infrastructure capacity for infrastructure management, museum train traffic and trial runs must always be requested on an ad hoc basis.

For a more detailed description of requesting ad hoc capacity, see the Instructions for requesting infrastructure capacity (see Rautatieohjeet in Finnish).

#### 4.5.4 Coordination procedure and dispute resolution

If there are conflicts between requests for regular infrastructure capacity, the infrastructure manager must work to ensure the best possible matching of all requests in accordance with section 128 of the Rail Transport Act and Article 46 and Annex IV 3(d) of the Railway Market Directive and to resolve any conflicts concerning the requested regular service timetables through consultation with the applicants in connection with the coordination procedure. Particular consideration in these negotiations must be given to the needs of passenger and freight traffic and track maintenance (such as track possessions) as well as the efficient use of the railway network.

In the coordination procedure, the infrastructure manager also has the right to propose alternative infrastructure capacity that differs from the original request Every effort is made to resolve each conflict on a case-by-case basis without any coordination rules agreed in advance in a manner that is in the best interests of the capacity applicants. If necessary, the principles described in the following figure can be used in support of the coordination negotiations.



Priority order of trains is presented in Appendix 4A. The minor slowing down of the running time referred to in the figure or irregular train intervals are case-specific and depend on customer needs. If necessary, they can be given reference values in future Network Statements. For the time being, a change that can be shown to have a measurable impact on the number of service customers is not a minor change.

Cancelling a lower-priority train means that the train path concerned has been declared as congested (chapter 4.6).

During the coordination procedure, the infrastructure manager must provide the capacity applicants with the following information within a reasonable time frame, free of charge and in written form:

- 1) train paths requested by the applicants on the same route sections
- 2) train paths that have been preliminarily assigned to the applicants on the same route sections
- 3) alternative infrastructure capacity proposed on relevant train paths
- 4) criteria applied to the capacity allocation.

The infrastructure manager will send the capacity allocation proposal to the applicants and other interested parties by a specific deadline. The consultation period (at least one month) starts when the infrastructure manager announces the completion of the timetable proposal on its website. In addition to the allocation proposal, detailed information on the comment procedure is also published on the website.

Based on the capacity allocation proposal and the comments presented by the parties involved, the infrastructure manager must decide on the allocation of the infrastructure capacity on a fair and non-discriminatory basis.

The process will be implemented primarily in the coordination of regular services in connection with annual applications during the timetable period, but it can also be used, where applicable, in connection with the coordination of change dates, taking into account a considerably shorter period of time, which is then available for the coordination.

If capacity has been requested for and granted to museum train traffic in such a way that the decision on the allocation of regular services for that period have yet to be published at the time of application, the capacity of museum trains and regular services will be coordinated, if necessary, after the publication of the allocation decision.

# 4.6 Congested train path

If the conflicting requests for infrastructure capacity for the timetable period cannot be adequately satisfied on the basis of negotiations and compromises (see instruction for requesting infrastructure capacity), the infrastructure manager must declare the section of infrastructure in question as congested, as laid down in section 120 of the Rail Transport Act and Article 47 and Annex IV 3(e) of the Railway Market Directive. This procedure is also followed in the case of infrastructure that is expected to become congested during the timetable period. The infrastructure manager may introduce a higher basic infrastructure charge for the congested infrastructure section. If a higher charge has not been introduced or it has not led to the elimination of the congestion, the infrastructure manager may apply priority criteria under which specific traffic types may be given priority when capacity on the congested infrastructure section is allocated. When the priority criteria are applied, consideration must be given to the societal importance of the service in relation to other transport services. When the priority criteria are established, every effort must be made to treat all service providers in a fair and nondiscriminatory manner.

Non-disclosure provisions notwithstanding, the infrastructure manager has the right to obtain the necessary confidential information from the capacity applicants in order to establish the priority criteria. The infrastructure manager must establish the priority criteria within ten days of the conclusion of the negotiations on the congested infrastructure section.

After the infrastructure has been declared as congested, the infrastructure manager must initiate a capacity analysis, as referred to in section 127 of the Rail Transport Act. The focus in the analysis is on diverting the railway traffic to other line sections, drawing up a new timetable plan, changes in speed limits and improving the condition of the railway network.

The infrastructure manager must prepare a capacity enhancement plan within six months of the completion of the capacity analysis.

#### Priority order in congested infrastructure used in Finland

The priority order used on the state-owned railway network is based on the following framework:

- Trains are divided into nine categories, which are based on their key features as part of the transport service.
- Each part of the railway network is divided into five route profiles.
- The order of priority between train categories varies depending on the route profile.
- An order of priority for trains in each train category is determined using the key features of the trains as a basis. If it proves impossible to categorise trains on the basis of these features, the remaining categories are applied so that all operators are provided with a level playing field.
- On some line sections, a capacity quota may be introduced for trains belonging to a low-priority category so that at least a certain number of trains of this category may use the line section.
- In certain exceptional cases, the infrastructure manager has a statutory right to derogate from the priority rules if applying them would lead to an unreasonable situation.

Note! The order of priority will be updated when necessary each year as the railway network changes. These changes may also be temporary due to e.g. track work. Capacity quotas for different line sections can also be updated annually if necessary. The priority order and capacity quotas valid for timetable period 2025 are described in Annex 4A.

# Derogation from the order of priority laid down in the Network Statement

The infrastructure manager may derogate from the order of priority in favour of an applicant operating international services or services that otherwise help to maintain or improve the functioning of the rail transport system or public transport or if the rejection of the request would cause unreasonable inconvenience to applicants or to the business operations of their customers. Derogations from the order of priority in line capacity are described in more detail in Appendix 4A.

# 4.7 Exceptional transports and dangerous goods

A permit for exceptional transports is always required for transports that exceed the loading gauge. The permit is issued by the Finnish Transport Infrastructure Agency's Track and Rolling Stock Technology Unit and the request for the permit should be submitted well in advance of the transport. Applications must be sent to: <a href="mailto:kirjaamo@vayla.fi">kirjaamo@vayla.fi</a>. The following information must be included in the request: weights and dimensions of the transport; vehicles, line sections and tracks to be used; and the estimated time of transport. A fee based on the <a href="mailto:Government decree-applying to the chargeable performances of the infrastructure manager (in Finnish)">Finnish</a>) is charged for the permit. The fees are based on the amount of work required and they are calculated separately for each transport. The amount of work depends on the background work required for the permit as each exceptional transport is different.

After the infrastructure manager has granted a permit for the exceptional transport, the permit applicant must submit at least the track diagrams of the

hindrance report attached to the permit to regional traffic control units. The number of the exceptional transport permit must be given when the documents are submitted.

The following information must be entered in the basic details of the capacity request for exceptional transport:

- the request concerns exceptional transport
- the permit number of the exceptional transport and
- in the text field for additional schedule information: the special conditions applying to the driver and/or traffic control (for example, the

transport must not meet another transport exceeding the loading gauge on the adjacent track).

track diagrams of the hindrance report

When infrastructure capacity is allocated, it must be ensured that all necessary information on the exceptional transport is included in the request.

The railway operator may, however, at its own risk and without the permit granted by the infrastructure manager, carry exceptional transports, which horizontally exceed the loading gauge by a maximum of 300 mm at a height of 1,300–4,300 mm above the rail surface. The railway operator must notify the infrastructure manager and the traffic control company of such transports in their infrastructure capacity request. The railway operator must ensure a smooth traffic flow during the transport, and request the necessary infrastructure capacity from the infrastructure manager. The special characteristic of the transport must be considered in the request for the infrastructure capacity. Two exceptional transports that exceed the loading gauge must not meet on adjacent tracks.

A permit issued by the infrastructure manager is always required for exceptional transports on heavy load wagons.

The terms and conditions for transports on vehicles exceeding the loading gauge are detailed in Appendix 2C. The terms and conditions for transports on overweight wagons are detailed in Appendix 2E.

# 4.8 Changing allocated infrastructure capacity

#### 4.8.1 Changes made by railway operators

Railway operators may change regular infrastructure capacity by requesting a change on the regular traffic adjustment date. Day-to-day changes applying to adjustment dates in effect can also be made before that by cancelling the regular capacity and by requesting the replacement capacity as ad hoc capacity.

The railway operator must change capacity in the situations specified in the instructions for requestion infrastructure capacity. Technically, capacity is changed by cancelling the existing capacity in the capacity management information system and by requesting new capacity to replace it.

#### 4.8.2 Changes made by the infrastructure manager

The infrastructure manager may not change the infrastructure capacity allocated to a railway operator after the coordination stage and the regular infrastructure capacity will remain in effect until the end of the timetable period in accordance with the infrastructure capacity allocated to the operator. However, in daily traffic management, changes in traffic may have to be made in the manner required by the operative situation so that, for example, problems arising from delays can be cleared as quickly as possible in accordance with operational traffic management instructions (in Finnish).

In exceptional situations, the infrastructure manager may require that the railway operator should change or cancel the capacity that it has received due to unforeseen capacity restrictions. In such a situation, the modified capacity shall be considered as previously granted capacity in relation to any new applications.

#### 4.8.3 Non-usage

Provisions on unused capacity are laid down in section 125 of the Railway Transport Act and Articles 36 and 52 (2) of the Railway Market Directive.

The capacity manager must notify the infrastructure manager of the unused infrastructure and service facility capacity without delay and cancel the capacity in the LIIKE system.

The infrastructure manager may cancel the infrastructure capacity allocated to an applicant or part of it for the rest of the timetable period or the corresponding infrastructure capacity for the following timetable period if the applicant has used less than the required threshold quota over a period of at least 30 days. At the time of the publication of the Network Statement, the threshold quota for the minimum capacity use in Finland was 95% for passenger trains and 50% for freight trains. The threshold quotas refer to infrastructure capacity for regular services, which are monitored on a monthly basis. If the threshold quotas have not been reached, the infrastructure manager may ask the capacity manager to explain the reasons for not having used the capacity. However, action will only be taken if a train service has been cancelled more than three times within a period of 30 days.

The infrastructure manager may not, however, cancel the infrastructure capacity if the failure to use it is due to non-economic reasons beyond the applicant's or the railway operator's control.

The use of the allocated infrastructure capacity is monitored in connection with the monitoring of the network access agreement and, if required, at other times during the timetable period.

#### 4.8.4 Cancelling allocated capacity

The party possessing infrastructure capacity may cancel the capacity allocated to it at any time. A notification of the unused capacity must be submitted to the infrastructure manager without delay and the capacity must be cancelled in the LIIKE system.

In exceptional situations, the infrastructure manager may cancel or change already allocated infrastructure capacity in accordance with section 125 of the Rail Transport Act if the capacity is unavailable due to unforeseen infrastructure-related problems.

The infrastructure manager must always cancel the infrastructure capacity of a railway operator for the time during which the general requirements for railway operations described in chapter 3.2.1 are not met.

Provisions on the right of the Finnish Transport and Communications Agency to suspend or restrict rail traffic are laid down in section 180 of the Rail Transport Act.

# 4.9 Redesign of the International Timetabling Process (TTR)

The infrastructure manager will develop the rail capacity and track work planning process within the framework of RailNetEurope's TTR planning process, taking into account local needs and conditions. The project for the development of the planning process is under way and as part of it, there is close cooperation with applicants for infrastructure capacity and other parties and they are consulted to take the needs of different parties into account. The development of the TTR process is divided into three main areas:

- Track work process
- Pre-planning of traffic
- Infrastructure capacity process.

The EU Commission issued a proposal on 11 July 2023 on the Regulation of the European Parliament and of the Council on the use of railway infrastructure capacity in the single European railway area, amending Directive 2012/34/EU and repealing Regulation (EU) No 913/2010 The Commission's proposal is based in many respects on the RailNetEurope TTR project. Therefore, depending on the final form of the legislation that will enter into force, the development of the TTR will facilitate the implementation of the future legislation.

The aim of the proposal is to reform the legal framework for infrastructure capacity management to make the management and allocation of infrastructure capacity more systematic. This aims to ensure that the scant infrastructure capacity can be used as efficiently as possible. In addition, the aim is to better prepare for various disruptions and crisis situations. Efforts will also be made to reconcile the allocation of infrastructure capacity and the allocation of capacity of service facilities.

Further information on the TTR project: <a href="https://ttr.rne.eu/">https://ttr.rne.eu/</a>. Questions on the TTR project of the Finnish Transport Infrastructure Agency can be sent to <a href="mailto:TTR@ftia.fi">TTR@ftia.fi</a>.

# 5 Services and charges

#### 5.1 Introduction

Provisions on services supplied to railway operators are laid down in chapter 18 of the Rail Transport Act, Article 13 of the Railway Market Directive, the Commission Implementing Regulation (EU) 2017/2177 on access to service facilities and railrelated services and in the Government Decree on services supplied to railway operators (1489/2015) (in Finnish).

The services available for the service applicants are described in chapters 5 and 7, in Appendix 2B and in the map service of the Network Statement. These services may be provided by the Finnish Transport Infrastructure Agency or other parties. The Finnish Transport Infrastructure Agency and the railway operator usually agree on the services provided by the agency in the network access agreement The agency enters into an agreement with other parties on the use of services. Any changes introduced after the signing of the agreement are agreed on separately with the railway operator/operators and updated as required in the form of an appendix to the network access agreement. The Finnish Transport Infrastructure Agency agrees on the use of its services with parties other than railway operators in the manner described below.

Descriptions of the services supplied by the Finnish Transport Infrastructure Agency are published in the Network Statement. Descriptions of the service facilities of other service facility operators in the state-owned railway network are published on the agency's website (in Finnish).

# 5.2 Charge criteria

Provisions on the criteria for the infrastructure charge are laid down in chapter 19 of the Rail Transport Act and in Articles 29 and 31–36 and Appendix IV to Directive 2012/34/EU. The basic infrastructure charge is levied on the use of the services included in the minimum access package described in chapter 5.3 using the costs directly incurred by the Finnish Transport Infrastructure Agency as a basis. The basic component of the basic infrastructure charge is set using a cost model that calculates how much one additional transport performance unit (one gross tonnekilometre) increases the costs of railway infrastructure management. The additional charge levied on the use of electric supply equipment included in the basic infrastructure charge are determined using a subtraction method. In this method, expert evaluation has been used to separate the network-wide separate costs of infrastructure management of the electrified rail network from the costs directly incurred from rail traffic operations and these costs have been divided by the kilometres operated in rail traffic using electric supply equipment. The method of calculating the basic infrastructure charge is described in Appendix 5A. The Finnish Transport Infrastructure Agency does not collect the additional charges described in section 141 of the Rail Transport Act.

The operator of a service facility may charge compensation for the service facility and track access in the service facilities, as well as for the services provided in

them, as laid down in section 133(3) of the Rail Transport Act. The track access required to access the service facilities is provided in return for the basic infrastructure charge.

Provisions on the pricing of additional and ancillary services supplied by the Finnish Transport Infrastructure Agency are laid down in the Act on Criteria for Charges Payable to the State (150/1992) and in the Decree of the Ministry of Transport and Communications on chargeable performances in the Finnish Transport Infrastructure Agency (1254/2021) issued under it. The services are invoiced on a monthly basis unless otherwise specified in the network access agreement or the lease agreement.

Providers of additional and ancillary services are entitled to charge a fee for the use of services in accordance with section 132, subsection 4 of the Rail Transport Act.

The Finnish Transport Infrastructure Agency uses an index adjustment procedure that takes into account changed infrastructure management costs when adjusting the basic infrastructure charge (sub-index 'Railway maintenance' of Statistics Finland's cost index of civil engineering works). The basic infrastructure charges for 2025 are determined on the basis of the 2022 point figure (124.64).

# 5.3 Services and charges included in the minimum access package

#### 5.3.1 Minimum access package

In return for the basic infrastructure charge referred to in section 139 of the Rail Transport Act, the Finnish Transport Infrastructure Agency must provide all railway undertakings, in a fair and non-discriminatory manner, with the services included in the minimum access package laid down in point 1 of Annex II to the Railway Market Directive . In return for the basic infrastructure charge, the Finnish Transport Infrastructure Agency must also provide access to the service facilities referred to in section 133 of the Rail Transport Act.

#### **5.3.2** Services included in the minimum access package

The following services, included in the minimum access package and referred to in section 132 of the Rail Transport Act, are supplied by the Finnish Transport Infrastructure Agency:

- 1) handling of requests for infrastructure capacity
- 2) the right to use the allocated infrastructure capacity
- 3) use of the railway infrastructure, including railway junctions and points
- 4) train control, signalling, traffic control, dispatching and the communication and provision of information on train movements
- 5) connection to the infrastructure manager's transmission network and use of electric supply equipment for traffic on electrified line sections, as referred to in sections 2 and 3
- 6) the information required to operate the services for which capacity has been allocated.

The Finnish Transport Infrastructure Agency levies the basic infrastructure charge on all traffic operations for which infrastructure capacity has been allocated. The basic infrastructure charge will not be charged from companies engaged in track maintenance.

#### **Processing requests for infrastructure capacity**

The processing of requests for infrastructure capacity is described in chapter 4 of the Network Statement.

#### Right to use the allocated infrastructure capacity

Railway operators have the right to use the infrastructure capacity allocated to them.

#### Use of the railway infrastructure

Railway operators have the right to use the railway infrastructure (including railway junctions and points) within the framework of the infrastructure capacity allocated to them.

#### **Traffic control and management**

The Finnish Transport Infrastructure Agency is responsible for traffic control and traffic management in the state-owned railway network. The Finnish Transport Infrastructure Agency has purchased traffic control and management services from Traffic control company Fintraffic Railway Ltd.

The following traffic control services are covered by the infrastructure charge:

Trains departing from their departure station:

- Moving a locomotive to the front of an already coupled set of wagons (including change of locomotives while under way)
- Moving a set of wagons from a storage siding or loading siding to the departure track. This also includes moving a full departing set of wagons in a railway yard to the departure track, if the train cannot depart from the sorting siding due to the infrastructure.

Shunting operations and locomotives looping at intermediate traffic operating points:

- Permission for shunting operations
- Local permissions
- Moving the locomotive from one end of the set of wagons to the other when changing direction.

Removing suddenly damaged rolling stock from the train, immediate action.

Trains arriving at their destination station:

• Moving the locomotive from the front of the set of wagons to a storage siding or yard track (also applies to locomotives changed while

- under way)
- Moving an arriving train, without changing the train formation, from the departure siding to a storage siding, a loading/unloading track (or to a
  - new departure track, see below)
- Moving a locomotive, which has hauled an arriving set of wagons to a storage siding, a loading/unloading track or to a new departure track, to a storage siding or yard track, or to the front of a departing set of wagons (on-call operations are covered by a separate service charge).

#### On-call units:

- Permission for shunting operations
- Local permissions

#### Use of electric supply equipment for traffic on electrified line sections

The railway operator has the right to use the Finnish Transport Infrastructure Agency's electric power supply network on the electrified line sections specified in the Network Statement for the purpose of traction current for rolling stock and heating of wagons and to use the electric supply equipment. The Finnish Transport Infrastructure Agency does not provide electricity, and the traffic operator must enter into an agreement on the supply of power with a service provider.

#### The information required to operate the services

In return for the basic infrastructure charge, the Finnish Transport Infrastructure Agency provides the operators with the information that is needed for the services for which the capacity has been allocated.

#### 5.3.3 Charges levied on the minimum access package

The Finnish Transport Infrastructure Agency levies the basic infrastructure charge on the use of the services included in the minimum access package. The basic infrastructure charge consists of (1) the basic component of the basic infrastructure charge levied on all traffic and (2) the additional charge levied on the use of electric supply equipment for all traffic using electric traction. The method of calculating the basic infrastructure charge is described in Appendix 5A. Between 01 January 2025 and 31 December 2025, the infrastructure charge will be levied as described in Table 2.

Table 2. Basic infrastructure charge

Basic component of the basic infra- structure charge	0.1927 cents/gross tonne-kilometre
Additional charge for the use of electric supply equipment	0.0145 cents/gross tonne-kilometre

### 5.4 Basic services and charges

The basic services comprise the services provided in the service facilities of the Finnish Transport Infrastructure Agency, which are listed in Annex II (2) of the Railway Market Directive. Under the directive, access, including track access, must be given to the following service facilities, when they exist, and to the basic services supplied in these facilities:

- a) passenger stations, their buildings and other facilities, including travel information display and suitable location for ticketing services
- b) Freight terminals
- c) train formation yards and train formation facilities, including shunting facilities
- d) storage sidings
- maintenance facilities, with the exception of heavy maintenance facilities dedicated to high-speed trains or to other types of rolling stock requiring specific facilities
- f) technical facilities other than those referred to in points c and e, including cleaning and washing facilities
- g) maritime and inland port facilities that are linked to rail activities
- h) rescue and assistance functions and the equipment required for these
- i) refuelling facilities and supply of fuel in these facilities, charges for which must be shown on the invoices separately.

The basic services provided by the Finnish Transport Infrastructure Agency and the prices charged for their use are given in chapter 7 of the Network Statement and in the following service facility descriptions:

- passenger stations (description in Appendix 7A)
- timber terminals and timber loading facilities (description in Appendix 7D)
- train formation yards (description in Appendix 7F)
- inclines (description in Appendix 7G)
- storage sidings (description in Appendix 7H)
- railway yards handling dangerous goods (description in Appendix 7J)
- maintenance facilities (description in Appendix 7K).

#### Rescue and assistance functions and the equipment required for these

The FTIA maintains rescue and clearing organisations that take care of rescue and clearance operations on the state-owned railway network, and when necessary provide executive assistance to rescue authorities during office hours. When necessary, the organisation also provides assistance in rail network areas managed by other railway infrastructure managers according to requests they submit. In the case of clearing services, clearance costs can be charged from the party who has cause the damage or another infrastructure manager. The Finnish Transport Infrastructure Agency's Guidelines on how to prepare for railway accidents (OVRO) include instructions on operations and liability in rail accidents. The publication is available in Finnish on the FTIA website. Currently only a limited amount of clearance services according to availability are provided for broken rolling stock.

The FTIA maintains different sprinkler and fire prevention systems in certain railway yards and tunnels. Railway yards where the handling of dangerous goods has been centred have preliminary preventing and extinguishing equipment. More detailed information on these is available in the rescue plans for railway yards and tunnels.

The Finnish Transport Infrastructure Agency does not provide other basic services.

### 5.5 Additional services and charges

#### 5.5.1 Electricity transmission service

The electricity transmission service is described in Appendix 5B.

#### 5.5.2 Heating of rolling stock and socket points

The central heating and electrical outlet service for rolling stock is described in the service description in Appendix 5X.

# 5.6 Ancillary services and charges

#### 5.6.1 Access to telecommunication network

For more information about the RAILI service and how to connect to the service and the VIRVE network, see section 2.3.12 and Appendix 2J.

Pricing of the railway voice communication services is in accordance with the terms of use of the RAILI service and the price list of the RAILI service (in Finnish).

The service description of the RAILI service will be published in connection with the update of the Network Statement in June 2024.

# **5.6.2** Traffic Quality Control Centre and monitoring of rolling stock

The service facility description for the Traffic Quality Control Centre and the monitoring of rolling stock are in Appendix 5F.

# 5.7 Services and charges that are not subject to regulation

The Finnish Transport Infrastructure Agency also provides infrastructure services that are not listed in Annex II to the Railway Market Directive and that are thus outside the scope of the Rail Transport Act or the Commission Implementing Regulation (EU) 2017/2177. The Finnish Transport Infrastructure Agency provides these services to railway operators in a fair and non-discriminatory manner and observes the applicable procedures described in the Rail Transport Act and the Commission Implementing Regulation. Concluding agreements on the services and reserving them are described in service descriptions.

#### 5.7.1 Planning services for track use

Planning services for track use are described in the <u>instructions for requesting track</u> <u>capacity</u>.

#### 5.7.2 Use of buildings and land areas

The use of buildings and land areas is described in Appendix 5D.

#### 5.7.3 Rail Training Centre (RTC)

The use of the Rail Training Centre is described in Appendix 5E.

#### **5.7.4 Security Control Centre**

The service facility description for the Security Control Centre is in Appendix 5H.

### 5.8 Financial penalties and incentives

Except for the performance scheme described in chapter 5.9, the Finnish Transport Infrastructure Agency has not introduced any performance charges or penalty fees in connection with the use of the railway network.

#### 5.8.1 Infrastructure capacity changed by the railway operator

The Finnish Transport Infrastructure Agency does not impose any penalties if a railway operator changes infrastructure capacity allocated by the agency.

# **5.8.2** Infrastructure capacity changed by the Finnish Transport Infrastructure Agency

The Finnish Transport Infrastructure Agency does not pay any penalties if it changes already allocated infrastructure capacity.

#### 5.8.3 Non-usage

The Finnish Transport Infrastructure Agency does not levy any capacity reservation charges or sanctions on unused infrastructure capacity.

#### 5.8.4 Cancelling already allocated infrastructure capacity

The Finnish Transport Infrastructure Agency does not impose any penalties if a railway operator cancels infrastructure capacity allocated to it.

#### 5.8.5 Incentives and discounts

The Finnish Transport Infrastructure Agency does not offer other incentives or discounts.

### 5.9 Performance scheme

Under section 130 of the Rail Transport Act, in order to promote the effective use of the railway network and enhance train punctuality as well as to minimise operational disruptions caused by railway traffic and infrastructure management, a performance scheme has been introduced to encourage railway operators and the infrastructure manager to limit the disruptions arising from their activities and to make more effective use of the railway network. Provisions on the performance scheme are also laid down in Article 35 of the Railway Market Directive and Annexes IV and VI to the same directive. The scheme must respect the principles of fairness, transparency, non-discrimination and proportionality.

Furthermore, under section 130 of the Rail Transport Act, a railway operator must pay a compensation to the infrastructure manager if the operations of the railway operator significantly differ from the infrastructure capacity allocated to the operator for reasons arising from the operator. The infrastructure manager must pay a compensation to the railway operator if, due to traffic disruptions arising from the infrastructure manager, access to the railway network significantly differs from the infrastructure capacity allocated to the railway operator and this interferes with the functioning of the railway system.

According to paragraph 2(e) of Annex VI of the Railway Market Directive, the performance scheme has to take into account the average delay in rail transport according to the same precision requirements. Average delay means the average delay of the train during its journey, excluding the sections where it is running ahead of schedule. The intention is to intervene, if necessary, in delays exceeding the calculated threshold values imposed on railway undertakings causing frequent disruptions. In the procedure, the Finnish Transport Infrastructure Agency will compare average delays by train type and by undertaking with a preset threshold value that substantially differs from the normal value. If the threshold value is exceeded, the Finnish Transport Infrastructure Agency may intervene by means of hearings, which may be followed by sanctions. The procedure, the limit values to be used and the size of the sanction are described in Appendix 5J to the Network Statement.

The performance scheme is applied to passenger and freight traffic of railway undertakings. The compensations based on the performance scheme and their criteria are described in Appendix 5J.

The performance scheme is based on registering delays in rail traffic as disruptions. The disruptions are registered in accordance with the reason codes for railway transport disruptions entries (see the Railway Instructions). The reason codes may be updated during the timetable period, which also affects the performance scheme. Any changes to the reason codes are prepared in cooperation with the railway undertakings.

Any changes to the monitoring stations used for punctuality monitoring (Appendix 5K) are prepared in cooperation with the railway undertakings.

The achievement of the performance scheme targets is discussed at network access agreement monitoring meetings or in another manner set out the access

agreement. The Finnish Transport Infrastructure Agency monitors the functioning of the performance scheme during the timetable period.

There are no provisions in the performance scheme on applying the indemnity legislation on the parties.

Railway operators must agree between themselves on the compensation for damage that they have caused to each other.

If a railway operator and the infrastructure manager disagree on an issue related to the performance scheme they must request the Rail Regulatory Body to act as a conciliator in the dispute, as laid down in section 130 of the Rail Transport Act. The Rail Regulatory Body must make its decision on the matter within 10 working days after receiving all relevant documents from the railway undertaking or the infrastructure manager.

# 5.10 Changes to infrastructure charges

Information on the upcoming changes to the infrastructure charge are posted by the infrastructure manager on its <u>website</u> and its Network Statement (in Finnish). The changes to the infrastructure charge may concern the basic infrastructure charge,

prices determined for basic, additional and ancillary services and the introduction of additional charges. The amendments comply with the provisions in Article 32 (6) and Annex IV (2) of the Railway Market Directive.

# 5.11 Collection of infrastructure charges

The infrastructure charges are paid to the infrastructure manager retroactively based on the actual performance in each calendar month. The performance is based on the data entered in the infrastructure manager's reporting system. If necessary, the accuracy of the composition messages is reviewed at the access agreement monitoring meetings. The Finnish Transport Infrastructure Agency may use default weights when calculating transport performances if the weight data is missing from the assembly message.

# 6 Use of the railway network

#### 6.1 Introduction

Railway operators can influence traffic-related matters in operational situations and by taking part in the regular infrastructure capacity coordination procedure (section 4.5.4) and in cooperation forums. In operational-level forums, the infrastructure manager provides railway operators and rail transport purchasers with an opportunity to develop operating models in cooperation with the infrastructure manager, the traffic control company and other railway operators.

Operational responsibilities are described in Appendix 6A.

#### **Regulations and instructions**

The instructions on railway operations issued by the Finnish Transport Infrastructure Agency can be found in Railway Instructions and they are prepared in cooperation with different parties. The 'Junaliikenteen ja vaihtotyön turvallisuussäännöt' (Jt) is an example of such instructions.

Moreover, in its instruction <u>'Ohje varautumisesta rautatieonnettomuuksiin' (OVRO)'</u> (<u>in Finnish</u>), the infrastructure manager sets out how to prepare for accidents and what should be done when accidents occur.

Safety issues are discussed in the network access agreement and in Appendix 6B. The instructions issued by the infrastructure manager within its competence must be observed in the state-owned railway network managed by the Finnish Transport Infrastructure Agency.

Finnish is the only language of communications used in FTIA's railway network.

# 6.2 Operational practices

#### 6.2.1 Principles

Good planning and coordination of timetables, track work and traffic operations help to reduce the number, duration and impacts of disruptions. All rail system operators must observe these principles.

The aim in the management of disruptions is also to restore normal operations without delay, minimise harmful impacts, apply transparent operating models and communication procedures, and ensure fairness and high quality. Punctuality of railway traffic, efficient use of infrastructure capacity during infrastructure malfunctions, feedback received from stakeholder groups and high/low media visibility are used as success indicators.

The infrastructure manager may temporarily withdraw the infrastructure capacity or part of it on train paths that are out of use due to technical malfunctions, an accident or damage affecting the infrastructure.

In such situations, the infrastructure manager will offer capacity managers alternative train paths whenever possible. The infrastructure manager is not, however, obliged to compensate the capacity manager for any damage arising from such disruptions unless otherwise agreed in the network access agreement.

Compensation issues arising from disruptions related to the performance scheme are discussed in section 5.8.

#### **6.2.2 Instructions for operational situations**

#### Congested infrastructure and priority criteria

The following order of priority for operations, giving permits and using tracks should be applied in railway yards (unless otherwise agreed concerning specific traffic operating points):

- 1. Use of the infrastructure capacity allocated in the infrastructure capacity management system
- 2. Train traffic
- 3. Moving locomotives in front of a departing fleet at the site of departure
- 4. Shunting operations between traffic operating points
- 5. Shunting traffic between traffic operating point sections/client traffic shunting
- 6. Wagon group shunting operations or train formation/splitting
- 7. Use of loading and unloading tracks
- 8. Moving rolling stock to storage sidings
- 9. Storage of rolling stock on the track

Permits for the same type of traffic are granted in the order in which they have been requested. The traffic operator will consider the permits to move track work units (due to malfunctions, service and other needs) at the traffic operating point on a case-by-case basis. The traffic operator will take the effects of the disruption or the malfunction into account and apply the order of priority when issuing operating permits.

In situations in which a permit to use a storage siding has been issued and it is already used for storage of rolling stock, and the track is needed for operations of higher priority, the Rail Traffic Management Centre first attempts to assign an alternative track for the train traffic/shunting operations. If it is not possible to provide an alternative track, the railway operator must, without any undue delay, move its stationary rolling stock to a location assigned by the Rail Traffic Management Centre. If the railway operator is unable to arrange for its rolling stock to be moved within reasonable time, another party may also move the wagons if this is required to ensure a smooth flow of traffic. The procedure is described below. If necessary, the reasonable time will be determined by the Rail Traffic Management Centre.

The aim is to ensure smooth and predictable use of the railway yard tracks so that sufficient information on track reservations and the general need for usage is available before permits to store rolling stock on individual tracks are issued. In such cases, the conflict situation described above is an exceptional situation that needs to be resolved separately.

Railway operators must contact the infrastructure manager and Fintraffic Railway Ltd's traffic planning to discuss needs to store rolling stock that arise during the timetable period, as referred to in Appendix 7H.

Operators in the railway yard may not intentionally obstruct each other's operations. Rolling stock may not be unnecessarily stored at points or crossovers (for example during breaks). Operations between different parts of the railway yard must be possible at all times.

Railway operators must also ensure that track maintenance work can be performed and that rolling stock can be moved as required by the work. Snow clearing may be prioritised over the storage of rolling stock and other requirements.

#### **Traffic reduction plans**

To prepare for disruptions, the operators (railway operators, the Rail Traffic Management Centre, traffic planning and traffic control) must draw up a traffic reduction plan and enter it in the cards describing how to deal with disruptions or save the plan as a data file for the operational group. The purpose of the plan is to prepare for traffic reductions on days with heavy snowfall when snow clearing and cleaning of turnouts reduce capacity available to traffic. Each railway operator must be prepared to list the train services that it could cancel during major disruptions. The Rail Traffic Management Centre decides on the introduction of the reduction plan with immediate effect or the decision can be made on an anticipatory basis on the previous day. Fintraffic Railway Ltd is responsible for keeping the traffic reduction plans up to date

#### Snow clearing

The maintenance provider is responsible for snow clearing in railway yards and clearing of turnouts and tracks. Day-to-day cleaning is the responsibility of the personnel of the units using the tracks. In snow clearing, priority is given to key railway yards of the main railway network. More detailed winter preparedness plans will be prepared during the autumn. The distribution and storage of snow and ice removal plans for all actors will be guaranteed, and the distribution will be agreed upon in joint winter preparedness meetings. All railway operators participate in the preparation of winter preparedness plans and produce e.g. descriptions of their own regional preparedness for these plans. Especially in exceptional snow conditions, all railway operators must be prepared to accept that the working conditions on the railway network can be challenging and the various operators must prepare for this with efforts such as training of personnel and acquiring the necessary equipment.

#### Moving rolling stock of other operators

The instruction 'Junaliikenteen ja vaihtotyön turvallisuussäännöt' (Jt) (see the Railway Instructions) must be observed when rolling stock belonging to other operators is moved. The parties must agree between themselves on the costs arising as a result and on compensation for any damage.

#### Submission of schedule and formation information

The railway undertaking submits timetable and formation data for shunting traffic between train traffic and railway traffic operating points as well as information on the tonnage transported to the Finnish Transport Infrastructure Agency using the LIIKE information system or a TAF/TAP TSI interface. The railway undertaking shall monitor formation messages and correct any shortcomings it has identified and, if necessary, check and correct any shortcomings raised by the infrastructure manager.

#### 6.2.3 Disruptions

The infrastructure manager and operators have jointly prepared cards describing how to deal with different types of disruptions. The purpose of the cards is to produce a clear situational picture and ensure that decisions can be made on basis of it. Jointly prepared cards speed up the recovery from disruptions and improve the flow of information in connection with the disruptions. All parties must act in accordance with the instructions given in the cards and the guidelines on applying them issued by the Rail Traffic Management Centre. Fintraffic Railway Ltd is responsible for keeping the disruption information cards up to date. The infrastructure manager, Fintraffic Railway Ltd's railway operators and rail transport purchasers work together to keep the operating model for managing disruptions up to date.

The infrastructure manager lays out the rules for managing disruptions between railway operators. Instructions for dealing with individual disruptions are set out in the document '*Rautatieliikenteen hallinta operatiivisissa tilanteissa*' (see the Railway Instructions). The railway operator may submit its own proposal for instructions on how to manage disruptions affecting its trains.

In major disruptions in which a significant part of the infrastructure capacity of a line section is out of use for several days or longer, and the capacity cannot be replaced by offering alternative train paths, the option of transferring transports to other modes must be considered when deciding on the use of the remaining capacity.

In operational situations, the Rail Traffic Management Centre determines the traffic management measures aimed at minimising the disruptions to rail traffic and their impacts and provides instructions for dealing with them.

Railway undertakings and rail transport purchasers must designate the parties that are authorised to resolve operational disruptions on a 24/7 basis. This operational group, working under the auspices of the Rail Traffic Management Centre, is responsible for the coordination of measures and for making the necessary anticipatory decisions on providing train services during major disruptions. The list of the parties is kept up to date by the Rail Traffic Management Centre.

Instructions for using certain VIRVE call groups during disruptions

The calls must be made using **RATA INFO** or **KEHÄRATA YT** call groups.

In the **RATA INFO** call group, the caller must give the other users the name of the **RATA YT 1-3** operational call group that they should connect to if the matter

requires lengthy conversations and the views of more than one participant must be heard. In most cases, the Rail Traffic Management Centre starts the conversation and invites other actors to join it.

**KEHÄRATA YT** is an operational call group used during disruptions affecting the Helsinki region commuter traffic area (especially the Ring Rail Line).

#### Example:

Rail Traffic Management Centre in the RATA INFO call group:

'VR OPK, VR OPK - this is Rail Traffic Management Centre calling'

VR OPK: 'Rail Traffic Management Centre, this is VR OPK'

Rail Traffic Management Centre: 'K train has broken down in Oulunkylä at track 3 and

Connecting to KEHÄRATA YT call group.'

VR OPK: Connecting to KEHÄRATA YT call group.'

After this, the KEHÄRATA YT call group takes over until the situation is normalised or the action is ended.

#### Example:

Rail Traffic Management Centre: 'K train has broken down in Oulunkylä at track 3 and needs assistance.

VR OPK: Assistance will be ordered and takes about one hour to arrive.

The conversation now continues in this call group.

Finally, the Rail Traffic Management Centre announces the end of the disruption in the RATA INFO call group.

The Rail Traffic Management Centre keeps a list of the users and call signs of these call groups in the YKÄ system. Users inform the Rail Traffic Management Centre of the changes and the centre also provides them with updated details of the other call group users.

Operators may request access rights to the call groups from the Rail Traffic Management Centre.

The call groups are managed by the Finnish Transport Infrastructure Agency. The conversations in the call group are not recorded.

#### **Accidents and preparedness**

Under section 173 of the Rail Transport Act, the infrastructure manager must keep the infrastructure in operable condition and eliminate disruptions, and to achieve this, the infrastructure manager may request a railway undertaking to provide assistance to eliminate the disruptions. The railway operator has the right to request a reasonable compensation for the use of its resources.

The infrastructure manager and the railway operators must be prepared for railway accidents in their fields of activity, as laid out in the Finnish Transport Infrastructure Agency's guidelines on how to prepare for railway accidents (OVRO) (see the Railway Instructions).

The infrastructure manager is responsible for the clearing operations concerning the rolling stock and the rail line in the state-owned railway network, and for assisting the rescue authorities in rescue operations as laid down in the Rail Transport Act, the Rescue Act (379/2011)and the Commission Regulation 2015/995. The infrastructure manager has published guidelines on how to prepare for railway accidents (OVRO), and these guidelines apply to both railway operators and all other operators in the state-owned railway network.

The infrastructure manager may perform the clearing operations itself or use its network of service providers and partners. The service providers and partners are subordinated to the infrastructure manager's operative management, unless otherwise provided by law. The Finnish Transport Infrastructure Agency is responsible for the official and prioritisation decisions concerning the clearing operations. The infrastructure manager may issue instructions on the training or certification required for the task.

The railway operator must provide the infrastructure manager with information on the rolling stock that the infrastructure manager can use in the clearing operations or forward to the rescue authorities, as provided in the Commission Regulation 2015/995 (OPE TSI). The information to be provided is described in more detail in WAG TSI (Commission Regulation 321/2013) and in LOC PAS TSI (Commission Regulation 1302/2014). The railway operator must also, if necessary, instruct the breakdown gangs on how to safely recover, de-energise and safeguard the train. This is done to ensure the safety of the rolling stock and the people performing the rescue and clearing operations. In accidents and exceptional situations, the railway operator must, on request, provide specialist technical advice at its own cost.

The costs arising from accidents and clearing operations are shared by the parties in accordance with the Rail Traffic Liability Act (113/1999) and the indemnity legislation.

The infrastructure manager must be prepared to restore the track to an operable condition as quickly as possible and, within a reasonable time, to the condition before the accident. The infrastructure manager must agree on this with other parties when concluding railway network maintenance agreements. Performing several simultaneous tasks and the prioritisation of tasks affects the availability of clearing and rescue services.

If safety deficiencies affecting traffic in the railway network are identified, the infrastructure manager may have to reduce axle loads or speed limits.

The Ministry of Transport and Communications provides guidelines for and oversees the capacity of rail sector operators to deal with accidents and exceptional situations.

## 6.3 Information technology tools

See chapter 2.3.11 and details of information technology tools (in Finnish).

### 7 Service facilities

#### 7.1 Introduction

Provisions on access to service facilities and rail-related services are laid down in the Commission Implementing Regulation (EU) 2017/2177.

## 7.2 Service facility descriptions

Under Article 4 of the Commission Implementing Regulation (EU) 2017/2177, operators of service facilities must establish a service facility description for the service facilities and services for which they are responsible.

#### Serviced provided by infrastructure managers

The services supplied in service facilities are referred to as basic services. The basic services provided by the Finnish Transport Infrastructure Agency are described in the service facility descriptions (Appendices 7A–7K). Details of the services located in the state-owned railway network are listed in Appendix 2B. The service facilities and the services available in them are shown in the map service of the Network Statement and in the track diagrams found in the Track Data Service. The tracks within the service point consist of the sidings of each traffic operating point, which are marked as sidings in the track diagrams. The internal tracks of the service point do not include the main tracks of the traffic operating points in question.

#### Service facilities not managed by the infrastructure manager

The service provider must submit the details of the service, access to it, the charges payable for the service, and the required agreements to the Finnish Transport Infrastructure Agency. The service facility descriptions for services not managed by the Finnish Transport Infrastructure Agency are listed on the FTIA website at: <a href="https://vayla.fi/palveluntuottajat/ammattiliikenne-raiteilla/rautateiden-verkkoselostus">https://vayla.fi/palveluntuottajat/ammattiliikenne-raiteilla/rautateiden-verkkoselostus</a>.

A form for submitting the information is available on the website of the Finnish Transport Infrastructure Agency - RNE Common Template for Service Facilities.

The service providers must submit the information for the Network Statement or a link to the information to the infrastructure manager by the end of September each year (Article 5(2) of the Regulation (EU) 2017/2177).

#### Submitting and updating the service facility information

The Finnish Transport Infrastructure Agency requires that all railway network operators must inform the agency of all changes in, decommissioning of and/or additions to equipment (services) of the service facilities when operating in the area of the Finnish Transport Infrastructure Agency. The notice is not required for changes of short duration, for example in situations in which the access point of a piece of equipment (service) is unavailable due to maintenance work if a similar

access point of a piece of equipment (service) is available at the same traffic operating point and/or its part.

As a minimum requirement, the operators must state where the change, decommissioning or addition takes place, the reason for the change and the location of the object of the change (track number or gauge given in the track diagram of the Track Data Service and separately the GPS coordinates (WGS84 or ETRS-TM35FIN) or other reliable location definition that does not leave any room for interpretation concerning the location, and the date or time of decommissioning. Each notice must include a photograph of the object of the change, decommissioning or addition. For additions, a plan drawing or similar must be submitted instead of a photograph. The notice must be sent to the Finnish Transport Infrastructure Agency's registry by email (kirjaamo@ftia.fi) no later than 30 days before the change, decommissioning or addition. A notice must also be submitted of an item that has already been decommissioned and that can be disassembled as unnecessary.

The party responsible for the change (such as the project manager or area manager) is responsible for submitting the notice. The notice must contain the contact details of the notifier.

Changing information on service facilities is discussed in the following FTIA publications: *Ratakohteiden tietohuolto Ratainfratietojen hallintajärjestelmässä – Urakoitsijan ohje* and *Varusteohje.* 

Maintaining the information on service facilities is the responsibility of Railway Maintenance. Communication with railway operators is the responsibility of the Railway Network Access Unit.

## 7.3 Service facilities of the infrastructure manager

#### **7.3.1** Passenger stations

For the service facility description of passenger stations, see Appendix 7A

#### 7.3.2 Freight terminals

Most of the freight terminals in the state-owned railway network are timber-loading facilities.

For the service facility description of timber loading facilities, see Appendix 7D

#### 7.3.3 Railway yards and train formation

For the service facility description of train formation yards, see Appendix 7F

The service facility description of shunting traffic control is in Appendix 5C

At the traffic operating points of Kouvola and Tampere, the railway operators have access to inclines for the recomposing of train wagons. For the service facility description of inclines, see Appendix 7G

#### 7.3.4 Storage sidings

For the service facility description of storage sidings, see Appendix 7H For a separate service facility description of storing wagons carrying dangerous goods, see Appendix 7J.

#### 7.3.5 Maintenance facilities

The Finnish Transport Infrastructure Agency provides maintenance platforms and the necessary equipment at the Ilmala depot. The services provided by the Finnish Transport Infrastructure Agency at the Ilmala depot are described in the service facility description 'Maintenance facilities and equipment' (Appendix 7K)

The Finnish Transport Infrastructure Agency does not provide other maintenance services.

Agreements on access to maintenance services must be made with the maintenance providers. The infrastructure manager does not provide maintenance services. Maintenance services are provided by Teräspyörä and VR (31 October 2020). For more information, visit the websites of <u>VR</u>. and the <u>Finnish Transport Infrastructure Agency</u> (the information on both websites is in Finnish).

#### 7.3.6 Other technical facilities

Use of other technical equipment (such as weighing equipment and cranes) must be agreed on with the equipment operator. The cranes located at traffic operating points are shown in Appendix 2B.

#### 7.3.7 Services in ports

Ports are service facility operators, and their services are described in the <u>port</u> service facility descriptions.

#### 7.3.8 Rescue and assistance functions

For a description of rescue and assistance functions and the equipment required for them, see chapter 5.4.

#### 7.3.9 Refuelling facilities

The Finnish Transport Infrastructure Agency does not provide refuelling facilities.

The refuelling facilities provided by other parties are shown in Appendix 2B and in the map service. Refuelling facilities are provided by VR (31 October 2023). For more information on the refuelling facilities, visit the VR website (in Finnish).

Liikennepaikka (verkon solmupiste)	Liikennepaikka (verkon solmupiste)	Radan pituus	Määräävä	Max axle load	Sähköistysjärjest		Junan	ERTMS	Kallistuvakoristen junien
Traffic operating point (network node)	Traffic operating point (network node)	Length of line	kaltevuus Max. gradient		elmä Electrification system	ohiattu osuus Section blocking or radio controlled section	kulunvalvontaiäriestelmä ATP		JKV-koodaus ATP-coding for tilting trains
Helsinki station	Havukoski	18	10.0		AC2	Yes	ATP	_	Yes
Havukoski	Kerava station	11	7.0	250	AC2	Yes	ATP	_	Yes
Kerava station	Hyvinkää	29	7.5	250	AC2	Yes	ATP	_	Yes
Hyvinkää	Riihimäki station	12	7.5	250	AC2	Yes	ATP	<b>—</b>	Yes
Kerava station	Vuosaari	19	10.0	250	AC2	Yes	ATP	_	_
Kerava station	Sköldvik	27	10.0	225	AC2	Yes	ATP	_	_
Kerava station	Hakosilta	65	10.0	250	AC2	Yes	ATP	_	Yes
Hyvinkää	Karjaa	99	10.5	225	AC2	Yes	ATP	_	_
Helsinki station	Huopalahti	6	10.0	225	AC2	Yes	ATP	_	_
Huopalahti	Havukoski	27	40.0	No freight tr	AC2	Yes	ATP	_	_
Huopalahti	Kirkkonummi	31	10.5	225	AC2	Yes	ATP	_	_
Kirkkonummi	Karjaa	49	12.0	225	AC2	Yes	ATP	_	Yes
Karjaa	Hanko station	50	10.5	250	AC2	Yes	ATP	_	_
Karjaa	Turku station	107	12.7	225	AC2	Yes	ATP	_	Yes
Turku station	Turku satama	3	7.0	225	AC2	Yes	ATP	_	_
Riihimäki station	Toijala	76	10.0	250	AC2	Yes	ATP	_	Yes
Toijala	Turku station	128	10.5	225	AC2	Yes	ATP	_	Yes
Toijala	Tampere station	40	10.0	250	AC2	Yes	ATP	_	Yes
Toijala	Valkeakoski	18	8.0	225	_	_	_	_	_
Turku station	Raisio	8	7.0	225	AC2	Yes	ATP	_	_
Raisio	Naantali	6	9.0	225	_	_		_	
Raisio	Uusikaupunki	57	9.0	225	AC2	Yes	ATP		
Uusikaupunki	Hangonsaari	3	11.5	225	AC2				_
Tampere station	Lielahti	6	9.0	250	AC2	Yes	ATP		Yes
Lielahti	Kokemäki	91	12.5	250	AC2	Yes	ATP		Yes
Kokemäki	Rauma	47	9.0	250	AC2	Yes	ATP		
Kokemäki	Pori	38	9.5	225	AC2	Yes	ATP		
Pori	Mäntyluoto	21	5.5	225	AC2	Yes	ATP		
Pori	Aittaluoto	6	10.0	225	_	_		_	_
Mäntyluoto	Tahkoluoto	11	5.5	225	AC2	Yes	ATP		
Lielahti	Parkano	69	10.5	250	AC2	Yes	ATP		Yes
Niinisalo	Parkano	42	10.0	200		_	_		_
Parkano	Seinäjoki station	84	10.0	250	AC2	Yes	ATP		Yes
Riihimäki station	Hakosilta	48	8.0	230	AC2	Yes	ATP		_
Hakosilta	Lahti	11	10.0	250	AC2	Yes	ATP		Yes
Lahti	Loviisan satama	77	12.0	225	H02 —	163	ATT		163
Lahti	Heinola	38	12.0	225	_	_	_		
Lahti	Mukkula	7	15.0	225			_		_
Lahti	Kouvola station	61	10.0	250		Yes	ATP		_
Kouvola station	Luumäki	59	10.0	250 250	AC2 AC2	Yes	ATP		_
		33	10.0	250 250	AC2 AC2	Yes	ATP	_	_
Kouvola station	Juurikorpi Katka atatian	18	8.5	250 250			ATP		_
Juurikorpi	Kotka station	18	0.0	250 225	AC2 AC2	Yes	ATP	_	_
Kotka station	Kotkan satama	•				Yes			_
Kotka Hovinsaari	Kotka Mussalo Hamina	5 19	6.0 10.0	250 250	AC2	Voc	ATP		
Juurikorpi Kauvala atatian		-		250 225	AC2	Yes	ATP	_	
Kouvola station	Kuusankoski	10	9.0	_	AC2	Vaa	—	_	
Kouvola station	Mynttilä	86	12.0	225	AC2	Yes	ATP		Yes
Mynttilä	Ristiina	21	12.5	225			—	_	
Mynttilä	Pieksämäki station	105	11,0	225	AC2	Yes	ATP		Yes
Luumäki	Vainikkala station	33	8.0	250	AC2	Yes	ATP	_	_
Luumäki	Lappeenranta	27	9.5	225	AC2	Yes	ATP	_	I—

Lappeenranta	Mustolan satama	18	10.0	225	1	I	1	i	1
Lappeenranta	Imatra cargo	39	9.0		AC2	Yes	— ATP	_	Yes
Imatra cargo	Imatrankoski-raja	10	11.0	225	AC2 —	168	AIP	_	res
•	Parikkala	60	10.0		AC2	Yes	— ATP	_	 Yes
Imatra cargo Pieksämäki station	Huutokoski	31	11.0	225	AC2	Yes	ATP	_	res
Huutokoski		38	12.0	225	_	Yes	ATP	_	_
	Rantasalmi			225 225	_			_	_
Savonlinna	Parikkala	59	12.0			Yes	ATP	_	_
Parikkala	Säkäniemi	93	10.0		AC2	Yes	ATP	_	_
Niirala-raja	Säkäniemi	33	10.5	225		Yes	ATP	_	_
Säkäniemi	Joensuu station	37	10.5		AC2	Yes	ATP	_	_
Joensuu station	Ilomantsi	71	12.0	200	_	_		_	_
Joensuu station	Viinijärvi	32	9.0	225	_	Yes	ATP	_	_
Huutokoski	Varkaus	18	10.0	225	_	Yes	ATP	_	_
Varkaus	Kommila	6	10.0	225	_	_	<del>-</del> _	_	—
Varkaus	Viinijärvi	101	11.0	225	_	Yes	ATP	_	_
Joensuu station	Uimaharju	50	17.6	225	_	Yes	ATP	_	_
Uimaharju	Lieksa	54	11.5	225	_	Yes	ATP	_	_
Lieksa	Pankakoski	6	10.0	225	_	_	_	_	_
Lieksa	Nurmes	56	12.5	225	_	Yes	ATP	_	_
Nurmes	Vuokatti	85	11.5	225	_	_	_	_	_
Vuokatti	Lahnaslampi	12	10.0	225	_	_	—	—	
Vuokatti	Kontiomäki	24	10.5	225	_	_	—	_	_
Pieksämäki station	Suonenjoki	38	9.0		AC2	Yes	ATP	—	—
Suonenjoki	Yläkoski	3	10.0	225	_	_	_	_	_
Suonenjoki	Siilinjärvi	76	12.0	225	AC2	Yes	ATP	_	_
Siilinjärvi	Sysmäjärvi	99	10.5	225	_	Yes	ATP	_	_
Siilinjärvi	lisalmi	60	12.0	225	AC2	Yes	ATP	_	_
lisalmi	Murtomäki	62	12.7	225	AC2	Yes	ATP	_	Yes
Murtomäki	Otanmäki	25	11.0	200	_	_	_	_	_
Murtomäki	Kajaani	20	12.0	225	AC2	Yes	ATP	_	Yes
Kontiomäki	Vartius	95	11.0		AC2	Yes	ATP	_	_
Vartius	Vartius-raja	2	10.0	225	AC2	Yes	ATP	_	_
Kontiomäki	Pesiökylä	74	12.0	225	_	Yes	ATP	_	_
Tampere station	Orivesi	40	12.0		AC2	Yes	ATP	_	Yes
Orivesi	Vilppula	47	12.5	225	_	Yes	ATP	_	_
Vilppula	Mänttä	8	5.0	225	_	_	_	_	_
Vilppula	Haapamäki	26	12.5	225	_	Yes	ATP	_	_
Haapamäki	Seinäjoki station	118	12.0	225	_	Yes	ATP	_	
Haapamäki	Jyväskylä	77	12.0	225	_	Yes	ATP	_	_
Orivesi	Jämsä	56	12.5		AC2	Yes	ATP	_	Yes
Jämsä	Kaipola	7	12.0	250	_	_	_	_	_
Jämsä	Jämsänkoski	4	10.0		AC2	Yes	ATP	_	Yes
Jämsänkoski	Jyväskylä	52	10.5	225	AC2	Yes	ATP		
Jyväskylä	Äänekoski	47	10.5		AC2	Yes	ATP		
Äänekoski	Haapajärvi	164	10.5	200	HO2 —	_	AIT	_	_
Jyväskylä	Pieksämäki station	80	12.5		AC2	Yes	ATP	_	 Yes
•	Kaskinen	112	10.0	200		Yes	ATP	_	165
Seinäjoki station		75	12.0		— AC2	Yes	ATP	_	_
Seinäjoki station	Vaasa Vaskiluoto	5	12.0	225 225	AC2 —	162	AIF	_	
Vaasa					— AC2		— ATP		
lisalmi Dubäkumpu orkanamiavaihda	Pyhäkumpu erkanemisvaihde	63	10.0		AG2	Yes	AIP	_	
Pyhäkumpu erkanemisvaihde	Pyhäkumpu	•	3.0 9.5	225			—	_	_
Pyhäkumpu erkanemisvaihde	Haapajärvi	36			AC2	Yes	ATP	_	_
Haapajärvi	Ylivieska	55	8.0	225	AC2	Yes	ATP		— V
Seinäjoki station	Pännäinen	101	10.0	250	AC2	Yes	ATP	_	Yes

Pännäinen	Pietarsaari	10	6.0	225	AC2	Yes	ATP	<u> </u>	<u> </u>
Pietarsaari	Alholma	4	3.0	225	AC2	_	_	_	_
Pännäinen	Kokkola	33	7.0	250	AC2	Yes	ATP	_	Yes
Kokkola	Ykspihlaja	5	10.0	225	AC2	_	ATP	_	_
Kokkola	Ylivieska	79	10.0	250	AC2	Yes	ATP	_	Yes
Ylivieska	Tuomioja	68	10.0	250	AC2	Yes	ATP	_	Yes
Tuomioja	Raahe	28	10.0	250	AC2	Yes	ATP	_	_
Raahe	Rautaruukki	9	10.0		AC2	_	_	_	_
Tuomioja	Oulu station	54	10.0	250	AC2	Yes	ATP	_	Yes
Oulu station	Kontiomäki	166	10.0	225	AC2	Yes	ATP	_	_
Oulu station	Kemi	105	10.0	225	AC2	Yes	ATP	_	_
Kemi	Ajos	9	10.0	225	_	_	_	_	_
Kemi	Laurila	7	10.0	225	AC2	Yes	ATP	_	<u> </u>
Laurila	Tornio station	19	7.5	225	_	Yes	ATP	_	_
Laurila	Rovaniemi	106	10.0	225	AC2	Yes	ATP	_	_
Rovaniemi	Kemijärvi	85	12.0	225	AC2	Yes	ATP	_	_
Kemijärvi	Patokangas	9	12.0	225	AC2	Yes	ATP	_	_
Tornio station	Tornio-raja	3	4.0	225	_	Yes	ATP	_	_
Tornio station	Röyttä	8	8.0	225	_	_	_	_	_
Tornio station	Kolari	183	10.5	225	_	Yes	ATP	_	_
Sysmäjärvi	Vuonos	7	10.0	225	_	_	<u> </u>	_	_
Viinijärvi	Sysmäjärvi	13	7.5	225	_	Yes	ATP	_	_
Murtomäki	Talvivaara	24	12.5	225	AC2	Yes	ATP	_	_
Kajaani	Lamminniemi	3	10.0	225	_	_	_	_	_
Kajaani	Kontiomäki	26	12.0	225	AC2	Yes	ATP	_	_

### Basic information on line sections

Legend:

On 'yes'
— 'no'

AC2 electrification system 25 kV/50 Hz

ATP Automatic Train Protection

Table columns:

**Network node** is a traffic operating point where the route of the train can be changed.

**Length of line** is the distance between network nodes (in km).

**Max. gradient** is the maximum gradient (mm/m) on the line section measured at a distance of 1,200 m.

**Electrification system** indicates that the line section is electrified.

**Section blocking or radio-controlled section**indicates that the line section is equipped with an automatic system ensuring safe train traffic.

**ATP** indicates that the line section is equipped with Automatic Train Protection.

**ERTMS** indicates that the line section is equipped with the European Rail Traffic Management System.

**ATP coding for tilting trains** indicates a line section on which ATP allows higher speeds for tilting trains in curves.

# Railway traffic points

#### Legend:

( ) in platform columns The platform is not maintained by the FTIA; the safety of and public access to the platform from public areas are the responsibility of the railway operator using the

platform

Y Yes

P Yes, private

K in traffic control columns CTC M in traffic control columns manual

#### Columns:

**Name** is the official name of the traffic operating point used for traffic safety purposes.

**Second name** is the name of the traffic operating point in Finland's second official language (Swedish). Sköldvik is the only locality where the Swedish name is used as the official name of the traffic operating point. The Finnish name 'Kilpilahti' is used as the second name even though the locality has a Finnish-speaking majority.

**Abbreviation** is the abbreviation for the name of the traffic operating point.

**Commercial name** of the traffic operating point is given if it differs from the official name used for traffic safety purposes.

**Km Hki** gives the distance of the traffic operating point from the old station building of Helsinki (demolished in 1918), as measured using a track kilometre system. In this system, the location of all track elements is based on landmarks.

**Municipality** is the municipality in which the traffic operating point is located.

**Traffic control** indicates whether the traffic operating point has the technical facilities for controlling train traffic manually or using CTC. However, even if the facilities are available, traffic control services are not necessarily provided on a regular basis.

The K in **private sidings** indicates that the traffic operating point has at least one connection to a private siding (a siding not owned by the FTIA).

The K in **shunting** indicates that the tracks at the traffic operating point are arranged so that at least a locomotive can move to the other end of a train without having to use the through track.

**Minimum and maximum platform length** indicates the minimum and maximum length of platforms used by passenger trains at the traffic operating point. A passenger train should not be longer than the platform at which it stops. If the platform length is shown in brackets, the platform is not maintained by the FTIA and the services are the responsibility of the railway operator.

**Platform height** indicates the nominal height of platforms used by passenger trains, as calculated from the rail surface.

**Design train length** indicates the longest track of the traffic operating point (other than the through track). The length is measured in such a way that it can be used in both directions.

**Power supply** shows the traffic operating points where a power supply of 400 V or 1,500 V is available (mainly for rolling stock and track machinery).

**Side loading platform** shows the traffic operating points where freight wagons can be loaded from the side, and the maximum platform length at the traffic operating point in question.

**End loading platform** shows the traffic operating points where freight wagons can be loaded from the end of the wagon (combined transports).

**Loading site** shows the traffic operating points where freight wagons can be loaded at rail level. A typical example is the loading of raw timber from a road vehicle or an intermediate depot in the railway yard onto flat wagons.

**Crane** shows the traffic operating points where a crane can be used to load wagons and the maximum capacity of the crane. This service is not provided by the FTIA.

**Fuel** shows the traffic operating points with a refuelling facility. This service is not provided by the FTIA.

**Passenger transport** shows the traffic operating points with facilities for passenger services.

**Freight transport** shows the traffic operating points with facilities for freight services.

**Turntable** shows the traffic operating points where a turntable can be used. If the turntable is privately owned it is marked with Y. If it is owned by the infrastructure manager, the length of the turntable is given.

**Railway yards for dangerous goods** shows the traffic operating points where wagons loaded with dangerous goods can be handled.

Name	Second name	Abbreviation	Commercial name	Туре	Km Hki	Koodi	Line section	Municipality	Traffic control	Private sidings	Possibility for shunting work at
Name	Second name	Abbroviation	Commercial name	Туре	Km Hki	Code	Line section	Municipality	Traffic control	Private sidings	the traffic operating point Shunting
Ahonpää	Second Hame	Aho	Commercial name	Traffic operating point	690+468	01343	Seinäioki–Oulu	Siikaioki	K	riivate siuliigs	K
Ahvenus		Ahv		Traffic operating point	270+960	01000	Lielahti–Kokemäki	Kokemäki	K		"
Ainola		Ain		Seisake/Halt	34+784	00628	Helsinki-Riihimäki	Järvenpää			
Airaksela Aittaluoto		Arl Atl		Traffic operating point	436+985 328+220	00869 00676	Pieksämäki–Kontiomäki Pori–Aittaluoto	Kuopio Pori	K	K	K
Aios		Atio		Traffic operating point Traffic operating point	867+098	00767	Kemi–Aios	Kemi		K	K K
Alapitkä		Apt		Traffic operating point	505+840	00/0/	Pieksämäki–Kontiomäki	Lapinlahti	К	K	ĸ
Alavus		Alv		Traffic operating point	373+445	00284	Orivesi–Seinäioki	Alavus	K		K
Alholma	Alholmen	Alh		Traffic operating point	532+570	00308	Pietarsaari–Alholma	Pietarsaari		K	K
Arola		Aro		Traffic operating point	707+668	00939	Kontiomäki–Vartius-raja	Hyrynsalmi	K		K
Asola Aviapolis		Aso Avp		Traffic operating point Seisake/Halt	31+596 25+135	01340 01331	Huopalahti-Havukoski Huopalahti-Havukoski	Vantaa Vantaa	K		
Dragsvik		Dra		Traffic operating point	171+180	00167	Kariaa-Hanko	Raasepori	к		
Dvnamiittivaihde		Dmv		Liniavaihde/Junction	199+185	00581	Kariaa-Hanko	Hanko	N .	K	К
Eläinpuisto-Zoo		Epz		Seisake/Halt	338+683	00623	Orivesi–Seinäjoki	Ähtäri			
Eno		Eno		Traffic operating point	660+170	00464	Joensuu–Nurmes	Joensuu	K		K
Ervelä		Erv		Traffic operating point	119+816	01004	Helsinki–Turku satama	Salo	K		W.
Eskola Espoo	Esbo	Ela Eno		Traffic operating point Traffic operating point	603+762 20+600	00318	Seinäioki–Oulu Helsinki–Turku satama	Kannus Espoo	K V		K
Haapajärvi	LSUU	Hpi		Traffic operating point	649+205	00330	Iisalmi–Ylivieska, Äänekoski–Haapajärvi	Haapajärvi	K		K
Haapakoski		Hps		Traffic operating point	393+454	00402	Pieksämäki–Kontiomäki	Pieksämäki	K		ĸ
Haapamäen kyllästämö		Hmk		Linjavaihde/Junction	304+940	01008	Orivesi–Seinäjoki	Keuruu		K	
Haapamäki		Hok		Traffic operating point	300+235	00200	Haapamäki–Jvväskvlä. Orivesi–Seinäioki	Keuruu	K	K	К
Haaraioki		Haa		Traffic operating point	39+567	00013	Kerava–Hakosilta	Järvenpää	K		
Hakosilta Haksi	Hay	Hlt Hsi		Traffic operating point Seisake/Halt	119+540 56+737	01014 01015	Kerava–Hakosilta, Riihimäki–Kouvola Olli–Porvoo	Hollola	K		
Haksi Hamina	Fredrikshamn	Hsi Hma		Traffic operating point	243+646	01015	Juurikorpi–Hamina	Porvoo Hamina	м	K	K
Hammaslahti	. reunismullill	Hsl		Traffic operating point	602+199	00327	Kouvola–Joensuu	Joensuu	K	IX.	ĸ
Hanala	Hanaböle	Hna		Traffic operating point	21+394	01018	Helsinki–Riihimäki	Vantaa	K		
Hangonsaari		Hqs		Traffic operating point	268+680	01020	Uusikaupunki-Hangonsaari	Uusikaupunki		K	10 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -
Hanhikoski		Hnh		Liniavaihde/Junction	1047+083	00812	Laurila-Kemiiärvi	Kemiiärvi			
Hankasalmi		Hks		Traffic operating point	418+089	00427	Jyväskylä–Pieksämäki	Hankasalmi	K	K	K
HANKO		Han		Osiin jaettu liikennepaikka/Divided traffic operating point	_	_	Karjaa-Hanko		K		
Hanko station	Hangö	Hnk	Hanko	Liikennepaikan osa (Hanko)/Part of a traffic onerating point (Hanko)	207+119	00073		Hanko		К	K
Hanko cargo		Hnkt		Liikennepaikan osa (Hanko)/Part of a traffic operating point (Hanko)	206+350	01317		Hanko			K
Hanko-Pohjoinen	Hangö Norra	Нкр		Liikennepaikan osa (Hanko)/Part of a traffic operating point (Hanko)	205+935	00879		Hanko			
Hariavalta		Hva		Traffic operating point	295+542	00218	Kokemäki–Pori	Hariavalta	к	К	K
Hariu		Hi		Traffic operating point	201+643	00985	Kouvola-Pieksämäki	Kouvola	K	n'	ĸ
Harviala		Hrv		Traffic operating point	99+456	00622	Riihimäki-Tampere	Janakkala	K		
Haukipudas		Hd		Traffic operating point	775+159	00342	Oulu-Laurila	Oulu	K		K
Haukivuori HAUSJÄRVI		Hau <b>Hjr</b>		Traffic operating point Osiin jaettu	344+442	00549	Kouvola-Pieksämäki Riihimäki-Kouvola	Mikkeli	K		K
				liikennepaikka/Divided traffic operating point		_	Killimaki-Kouvola		<b>X</b>		
Hausjārvi cargo		Has		Liikennepaikan osa (Hausjärvi)/Part of a traffic oneratina noint (Hausjärvi)	86+210	00340		Hausjärvi			K
Ol <del>ti</del>		Oi		Liikennepaikan osa (Hausjärvi)/Part of a traffic operating point (Hausjärvi)	86+809	00092		Hausjärvi			
Haviseva		Hvs		Traffic operating point	208+135	01021	Tampere–Jyväskylä	Kangasala	K		
Heikkilä		Hek		Traffic operating point	34+856	01023	Helsinki–Turku satama	Kirkkonummi	K		
Heinola		Ha		Traffic operating point	167+607	00113	Lahti-Heinola	Heinola	M	K	K
Heinoo Heinävaara		Hno Häv		Traffic operating point Traffic operating point	237+965 648+408	01025 00924	Lielahti–Kokemäki Joensuu–Ilomantsi	Sastamala Joensuu	K		
Heinavaara Heinävesi		Hnv		Traffic operating point	468+135	00924	Pieksämäki–Joensuu	Heinävesi	К		K
HELSINKI		Hel		Osiin jaettu liikennepaikka/Divided	-	-	Helsinki–Turku satama, Helsinki–Riihimäki	ricinavesi	M		
Helsinki station	Helsingfors	Helsinki	Helsinki päärautatieasema	(Helsinki)/Part of a traffic	0+159	00001		Helsinki			K
Pasila station	Böle	Psl	Pasila	oneratina noint (Helsinki) Liikennepaikan osa (Helsinki)/Part of a traffic oneratina noint (Helsinki)	3+230	00010		Helsinki			
Pasila car train-station	Böle biltågstation	Pau		Liikennepaikan osa (Helsinki)/Part of a traffic	4+319	01328		Helsinki			K
Ilmala station		Ila	Ilmala	oneratina noint (Helsinki) Liikennepaikan osa (Helsinki)/Part of a traffic oneratina noint (Helsinki)	4+434	00009		Helsinki			
Helsinki Kivihaka	Stenhagen	Khk		Liikennepaikan osa (Helsinki)/Part of a traffic operating point (Helsinki)	4+701	01028		Helsinki			

Pasila cargo	1	Pslt			4+748	01034	1	Helsinki	ĺ	K	K
=	1	1		(Helsinki)/Part of a traffic			1	1		İ	
				oneratina noint (Helsinki)							
Ilmala raliway yard		Ilr		Liikennepaikan osa	4+950	01030		Helsinki		K	K
				(Helsinki)/Part of a traffic operating point (Helsinki)							
Kāpylā	Kottby	Käp		Liikennepaikan osa	5+840	00977		Helsinki			
Kapyia	nous)	7.00		(Helsinki)/Part of a traffic	5,0,0	00377		71000000			
				operating point (Helsinki)							
Oulunkylä	Åggelby	Olk		Liikennepaikan osa	7+399	00015		Helsinki			
				(Helsinki)/Part of a traffic							
				oneratina noint (Helsinki)	70 . 272		V 111 %		.,		
Henna		Hnn			79+373	01164 00096	Kerava–Hakosilta	Orimattila Hollola	K		
Herrala Hiirola		Hr Hir			115+790 318+957	00997	Riihimäki–Kouvola Kouvola–Pieksämäki	Mikkeli	ĸ		K
Hikiä		Hk		Seisake/Halt	79+743	00091	Riihimäki–Kouvola	Hausjärvi	K		N.
Hillosensalmi		HIs			233+344	00988	Kouvola–Pieksämäki	Kouvola	K		
Hinthaara	Hindhår	Hh		Seisake/Halt	52+150	00561	Olli-Porvoo	Porvoo			
Hirvineva		Hvn		Traffic operating point	715+500	01041	Seinäioki–Oulu	Liminka	K		K
Humppila		Нр		Traffic operating point	188+778	00144	Toijala-Turku	Humppila	K		K
Huopalahti	Hoplax	Hpl		Traffic operating point	6+375	00072	Helsinki-Turku satama, Huopalahti-Havukoski	Helsinki	K		
Huutokoski		Hko			406+988	00430	Pieksämäki–Joensuu. Huutokoski–Savonlinna	Joroinen	K		
Hyrkäs Hyrynsalmi		Hyr Hvs			800+442 704+601	01348 00392	Oulu–Kontiomäki Kontiomäki–Ämmänsaari	Muhos Hyrynsalmi	K M		V
HYVINKÄÄ		Hyv		Osiin jaettu liikennepaikka	704+001	00392	Kontiomaki–Ammansaari Helsinki–Riihimäki, Hyvinkää–Karjaa	Hyvinkää	k		N .
Hvvinkää asema	Hyvinge	Hy		Liikennepaikan osa (Hyvinkää	58+792	00030	Helsinki–Riihimäki, Hyvinkää–Karjaa	Hyvinkää	"	K	K
Hvvinkää tavara	, <i></i> ,	Hvt		Liikennepaikan osa (Hvvinkää		01367		Hvvinkää		K	K
Hyvinkää Paavola		PVI			61+140	01368		Hyvinkää			
Hämeenlinna	Tavastehus	н		Traffic operating point	107+559	00047	Riihimäki-Tampere	Hämeenlinna	K	K	K
Härmä		Hm		Traffic operating point	472+940	00300	Seinäjoki-Oulu	Kauhava	K		K
Höljäkkä		Höl		Seisake/Halt	765+261	00938	Joensuu-Nurmes	Nurmes		K	K
Ii .		Ii		Traffic operating point	789+165	00343	Oulu-Laurila	Ii	K		
Iisalmen teollisuusraiteet	Keveli	Itr		Linjavaihde/Junction	548+611	01049	Pieksämäki–Kontiomäki	Iisalmi		K	K
Iisalmi	Idensalmi	Ilm		Traffic operating point	550+360	00420	Iisalmi–Ylivieska, Pieksämäki–Kontiomäki	Iisalmi	K	K	K
Iittala Ilola		Ita			129+286	00154	Riihimäki–Tampere	Hämeenlinna Valkeakoski			
Ilonantsi	Tinananta	Ioa		Seisake/Halt Traffic operating point	155+102 695+203	01345 00459	Toijala–Valkeakoski				v
IMATRA	Ilomants	Ima		Osiin iaettu	695+203	00459	Joensuu-Ilomantsi Kouvola-Joensuu, Imatra tavara-Imatrankoski-raja	Ilomantsi Imatra	M V	K	K
IPIATRA		IIIIa		liikennepaikka/Divided traffic operating point			Nouvoia-Juensuu, iinatta tavata-iinattainkuski-taja	lillaua	<b>N</b>		
Imatra station		Imr	Imatra	Liikennepaikan osa	323+977	00603		Imatra			
				(Imatra)/Part of a traffic							
Imatra cargo		Imt		Liikennepaikan osa	326+542	00502		Imatra		K	K
				(Imatra)/Part of a traffic							
				onerating point (Imatra)							
Imatrankoski		Imk		Liikennepaikan osa	331+267	00504		Imatra		K	K
				(Imatra)/Part of a traffic							
		-		onerating point (Tmatra)	222 - 622	04050					
Immola		Im		Liikennepaikan osa (Imatra)/Part of a traffic onerating point (Imatra)	332+699	01352		Imatra			K
Pelkola		Pa		Liikennepaikan osa	335+672	01055		Imatra		K	
		1		(Imatra)/Part of a traffic		1				1	
				onerating point (Tmatra)							
Imatrankoski-raja		Imkr			337+095	00503	Imatra tavara–Imatrankoski-raja	Imatra			
Inha		In			341+367	00264	Orivesi–Seinäioki	Ähtäri			
Inkeroinen		Ikr		Traffic operating point	212+781	00530	Kouvola–Kotka	Kouvola	K	K	K
Inkoo	Ingå	Iko			70+620	00062	Helsinki–Turku satama	Inkoo	K		
Isokvrö Jalasjärvi	Storkvro	Ikv Jal			447+488 309+871	00295 00276	Seinäioki-Vaasa Tampere-Seinäioki	Isokvrö Kurikka	K V		
Jaiasjarvi Jenua	lenno	Jai Ina		Traffic operating point Traffic operating point	495+784	00276	Seinäioki–Oulu	Uusikaarlepvv	K		K
JOENSUU	30000	Joe		Osiin jaettu	-	-	Pieksämäki–Joensuu, Kouvola–Joensuu,	Jusikuai ICDVV	m		
		1-2-		liikennepaikka/Divided			Joensuu–Ilomantsi, Joensuu–Nurmes		l · ·	1	
			1				The state of the s			1	
				traffic operating point							
Joensuu Koppola		Крр		traffic operating point Liikennepaikan osa	620+902	01369		Joensuu			
Joensuu Koppola		Крр		traffic operating point Liikennepaikan osa (Joensuu)/Part of a traffic	620+902	01369		Joensuu			
				Liikennepaikan osa (Joensuu)/Part of a traffic oneratina noint (Joensuu)							
Joensuu Koppola Joensuu Sulkulahti		Kpp Sul		Liikennepaikan osa (Joensuu)/Part of a traffic oneratina noint (Joensuu) Liikennepaikan osa	620+902 622+650	01369 01071		Joensuu			K
				Liikennepaikan osa (Joensuu)/Part of a traffic oneratina noint (Toensuu) Liikennepaikan osa (Joensuu)/Part of a traffic							K
Joensuu Sulkulahti		Sul		Liikennepaikan osa (Joensuu)/Part of a traffic operating point (Toensuu) Liikennepaikan osa (Joensuu)/Part of a traffic operating point (Toensuu)	622+650	01071		Joensuu			K
				Liikennepaikan osa (Joensuu)/Part of a traffic oneratina onint (Joensuu) Liikennepaikan osa (Joensuu)/Part of a traffic oneratina noint (Joensuu) Liikennepaikan osa						К	K
Joensuu Sulkulahti		Sul		Liikennepaikan osa (Joensuu)/Part of a traffic oneratina noint (Joensuu) Liikennepaikan osa (Joensuu)/Part of a traffic oneratina noint (Joensuu) Liikennepaikan osa (Joensuu)/Part of a traffic	622+650	01071		Joensuu		К	K
Joensuu Sulkulahti Joensuu Peltola		Sul Plt	Janeary	Lilkennepalkan osa (Joensuu)/Part of a traffic noneratina noint (Thensun) Lilkennepalkan osa (Joensuu)/Part of a traffic noneratina noint (Thensun) Lilkennepalkan osa (Joensuu)/Part of a traffic noneratina noint (Thensun)	622+650 623+540	01071 01070		Joensuu Joensuu		К	K
Joensuu Sulkulahti		Sul	Joensuu	Lilkennepalkan osa (Joensuu)/Part of a traffic oneratina noint (Inensuu) Lilkennepalkan osa (Joensuu)/Part of a traffic oneratina noint (Inensuu) Lilkennepalkan osa (Joensuu)/Part of a traffic oneratina noint (Inensuu) Lilkennepalkan osa	622+650	01071		Joensuu		K K	к к
Joensuu Sulkulahti Joensuu Peltola		Sul Plt	Joensuu	Lilkennepalkan osa (Joensul/Part of a traffic nereatina noint (Inensuu) Lilkennepalkan osa (Joensul/Part of a traffic oneratina noint (Inensuu) Lilkennepalkan osa (Joensul/Part of a traffic noeratina noint (Inensuu) Lilkennepalkan osa (Joensul/Part of a traffic	622+650 623+540	01071 01070		Joensuu Joensuu		K K	K K
Joensuu Sulkulahti Joensuu Peltola Joensuu station		Sul Pit Jns	Joensuu	Likennepalkan osa (Joensuu)/Part of a traffic onerating noint (Joensuu) Likennepalkan osa (Joensuu)/Part of a traffic onerating noint (Joensuu) Likennepalkan osa (Joensuu)/Part of a traffic onerating noint (Joensuu) Likennepalkan osa (Joensuu)/Part of a traffic onerating noint (Joensuu)	622+650 623+540 624+313	01071 01070 00460	Dieksämäki- Ivansuu	Joensuu Joensuu Joensuu		K K	K K
Joensuu Sulkulahti Joensuu Peltola Joensuu station Onttola		Sul Plt	Joensuu	Lilkennepalkan osa (Jeensuu)/Pat of a traffic oneratino noint (Jeensuu) Likennepalkan osa (Jeensuu)/Pat of a traffic oneratino noint (Jeensuu) Lilkennepalkan osa oneratino noint (Jeensuu) Lilkennepalkan osa (Jeensuu)/Pat of a traffic oneratino noint (Jeensuu) Lilkennepalkan osa (Jeensuu)/Pat of a traffic oneratino noint (Jeensuu)	622+650 623+540 624+313 631+177	01071 01070 00460	<i>Pieksāmāki-Joensuu</i> Helsinki-Riihimāki	Joensuu Joensuu Joensuu Joensuu	K	K K	к к к
Joensuu Sulkulahti Joensuu Peltola Joensuu station	Jorois	Sul Pit Jns	Joensuu	Lilkennepalkan osa (Jeensuu)/Pat of a traffic oneratino noint (Jeensuu) Likennepalkan osa (Jeensuu)/Pat of a traffic oneratino noint (Jeensuu) Lilkennepalkan osa (Jeensuu)/Pat of a traffic oneratino noint (Jeensuu) Lilkennepalkan osa (Jeensuu)/Pat of a traffic oneratino noint (Jeensuu) Likennepalkan osa (Jeensuu) Traffic operatino point Linisvalhde/Junction	622+650 623+540 624+313	01071 01070 00460	Helsinki–Riihimäki Huutokoski–Savonlinna	Joensuu Joensuu Joensuu	K	K K	K K
Joensuu Sulkulahti Joensuu Peltola Joensuu station Onttola Jokela	Jorois	Sul  Pit  Jins  Ont Jik	Joensuu	Lilkennepalkan osa (Jeensuu)/Part of a traffic aneratina naint (Jeensuu) Lilkennepalkan osa (Jeensuu) Traffic operatina point (Jeensuu)	622+650 623+540 624+313 631+177 47+937	01071 01070 00460 00443 00028	Helsinki-Riihimäki	Joensuu Joensuu Joensuu Joensuu Tuusula	К	K K	K K
Joensuu Sulkulahti Joensuu Peltola Joensuu station Onttola Jokela Joroinen Jorusen	Jorois	Sul  Pit  Jins  Ont Jik	Joensuu	Lilkennepalkan osa (Jeensuu)/Part of a traffic oneratino noint (Jeensuu) Lilkennepalkan osa (Jeensuu)/Part of a traffic eneratino noint (Jeensuu) Lilkennepalkan osa (Jeensuu)/Part of a traffic oneratino noint (Jeensuu) Lilkennepalkan osa (Jeensuu)/Part of a traffic oneratino noint (Jeensuu) Traffic operatino point Linisvalhdel Junction Seisakel-Halt Traffic operatino point Traffic operatino point	622+650 623+540 624+313 631+177 47+937 414+617 32+322 305+826	01071 01070 00460 00443 00028 00431 00578 00499	Helsinki-Riihimäki Huutokoski-Savonlinna Helsinki-Turku satama Kouvola-Joensuu	Joensuu Joensuu Joensuu Tuusula Joroinen Kirkkonunmii Lappeenranta	K K	<i>к</i> <i>к</i>	К К
Joensuu Sulkulahti Joensuu Peltola Joensuu station Onttola Jokela Jorvias Jorvias Joutseno Jounakoski	Jorois	Sul  Pit  Jns  Ont Jk  Jor Jrs Jk  Jk	Joensuu	Lilkennepalkan osa (Joensuu)/Part of a traffic oneratino nnint (Joensuu) Lilkennepalkan osa (Joensuu)/Part of a traffic oneratino nnint (Joensuu) Lilkennepalkan osa (Joensuu)/Part of a traffic oneratino nnint (Joensuu) Lilkennepalkan osa (Joensuu)/Part of a traffic oneratino nnint (Joensuu) Traffic operatino point Traffic operatino	622+650 623+540 624+313 631+177 47+937 414+617 32+322 305+826 532+005	01071 01070 00460 00443 00028 00431 00578 00499 00414	Helsinki-Raihimaki Huutokoski-Savonlinna Helsinki-Turku satama Kouvola-Joensuu Silimiäri-Viniilärivi	Joensuu Joensuu Joensuu Joensuu Tuusula Joroinen Kirkkonummi Lappeenranta Kuuolo	K K	к к к	K K
Joensuu Sulkulahti  Joensuu Peltola  Joensuu station  Onttola Jokela Joroinen Jorvas Joutseno Juankoski Jutila	Jorois	Sul  Pit  Jins  Ont Jik Jor Jirs	Joensuu	Lilkennepalkan osa (Jeensuu)/Part of a traffic oneratino noint (Jeensuu) Lilkennepalkan osa (Jeensuu)/Part of a traffic oneratino noint (Jeensuu) Lilkennepalkan osa (Jeensuu)/Part of a traffic oneratino noint (Jeensuu) Lilkennepalkan osa (Jeensuu) Traffic operatino point (Jeensuu) Traffic operatino point Traffic operatino point Tra	622+650 623+540 624+313 631+177 47+937 414+617 32+322 305+826 532+005 94+620	01071 01070 00460 00443 00028 00431 00578 00499 00414 01085	Helsinki-Riihimäki Huutokoski-Savonlinna Helsinki-Turku satama Kouvola-Joensuu Siliniärui-Viiniärui Riihimäki-Kouvola	Joensuu Joensuu Joensuu Tuusula Joroinen Kirkkonumni Lappeenranta Kuoolo Kärkölä	K K K	K K	<i>К K K K K K</i>
Joensuu Sulkulahti Joensuu Peltola Joensuu station Onttola Jokela Jorvias Jorvias Joutseno Jounakoski	Jorois	Sul  Pit  Jns  Ont Jk  Jor Jrs Jk  Jk	Joensuu	Lilkennepalkan os a (Joensuu)/Part of a traffic nonatino nnint (Inensuu) Lilkennepalkan osa (Joensuu)/Part of a traffic nonatino nnint (Inensuu) Lilkennepalkan osa (Joensuu)/Part of a traffic nonatino nnint (Inensuu) Lilkennepalkan osa (Joensuu)/Part of a traffic nonatino nnint (Inensuu) Lilkennepalkan osa Lilkennepalkan osa Sessake/Halt Traffic operatino point Traffic operatino point Traffic operatino point Traffic operatino point Traffic operatino point Traffic operatino point Sessake/Halt S	622+650 623+540 624+313 631+177 47+937 414+617 32+322 305+826 532+005	01071 01070 00460 00443 00028 00431 00578 00499 00414	Helsinki-Raihimaki Huutokoski-Savonlinna Helsinki-Turku satama Kouvola-Joensuu Silimiäri-Viniilärivi	Joensuu Joensuu Joensuu Joensuu Tuusula Joroinen Kirkkonummi Lappeenranta Kuuolo	K K K	K K K	К К К

Jyväskylä	1	1.	1	L	1	1	1		L.	L.	L. I
		Jy		Traffic operating point	340+970	00240	Jyväskylä–Pieksämäki, Haapamäki–Jyväskylä,	Jyväskylä	K	K	K
Jämsä		Jäs		Traffic operating point	284+084	00204	Ivväskvlä–Äänekoski. Tamnere–Ivväskvlä Jämsä–Kaipola, Tampere–Jyväskylä	Jämsä	V		K
Jämsänkoski		Jsk		Traffic operating point	287+917	00205	Tampere–Jyväskylä	Jämsä	K	K	K
Järvelä		Jr.		Traffic operating point	103+596	00095	Riihimäki–Kouvola	Kärkölä	K	IX.	K
JÄRVENPÄÄ		Jvp		Osiin jaettu	_	_	Helsinki-Riihimäki		K		
		·		liikennepaikka/Divided traffic operating point							
Järvenpää station	Träskända	Jp	Järvenpää	Liikennepaikan osa (Järvenpää)/Part of a traffic operating point (Järvenpää)	36+786	00025		Järvenpää			
Saunakallio		Sau		Liikennepaikan osa (Järvenpää)/Part of a traffic	38+846	00806		Järvenpää		К	
				operating point (Järvenpää)	40 - 500	22554			"		
Purola		Pur		Liikennepaikan osa (Järvenpää)/Part of a traffic operating point (Järvenpää)	40+533	00564		Järvenpää	^		
Kaipiainen		Kpa		Traffic operating point	214+451	00485	Kouvola–Joensuu	Kouvola	K	K	K
Kaipola		Kla		Traffic operating point	290+303	00656	Jämsä–Kaipola	Jämsä		K	K
Kaitiärvi Kaiaani	Kaiana	Kir Kai		Traffic operating point	226+912	00944 00387	Kouvola–Joensuu Pieksämäki–Kontiomäki, Kajaani–Lamminniemi	Luumäki Kaiaani	K		V.
Kaiaani Kaleton	Kalana	Kai		Traffic operating point Linjavaihde/Junction	633+491 320+875	00387	Haapamäki–Jyväskylä	Kaiaani Keuruu	K		K
Kalkku		Kau		Traffic operating point	199+471	00639	l jelahti–Kokemäki	Tampere	К	K	
Kalliovarasto		Kao		Linjavaihde/Junction	644+770	01090	Pieksämäki–Kontiomäki	Kajaani		K	K
Kalvitsa		Ksa		Traffic operating point	330+634	00548	Kouvola-Pieksämäki	Mikkeli	K		K
Kangas		Kas		Traffic operating point	642+466	01092	Seinäioki–Oulu	Ylivieska	K		
Kannelmäki	Gamlas	Kan		Traffic operating point	9+300	00658	Huopalahti-Havukoski	Helsinki	K		
Kannonkoski		Ksi		Traffic operating point	488+694	00256	Äänekoski–Haapaiärvi	Kannonkoski	M		
Kannus Karheiärvi		Kns Krr		Traffic operating point Traffic operating point	591+582 224+902	00317 01095	Seinäjoki–Oulu Tampere–Seinäjoki	Kannus Ylöiärvi	K		
Karneiarvi Karhukangas		Krr		Traffic operating point  Traffic operating point	622+897	01095	Seinäioki–Oulu	Ylivieska	K V		
Karjaa	Karis	Kr		Traffic operating point	157+817	00060	Helsinki–Turku satama, Hyvinkää–Karjaa, Karjaa–Hanko	Raasepori	K		K
Karkku	Trains	Kru		Traffic operating point	230+733	00178	Lielahti–Kokemäki	Sastamala	K		N.
Karviainen		Kar		Traffic operating point	247+320	01100	Toijala-Turku	Aura	K		
Kaskinen	Kaskö	Ksk		Traffic operating point	530+522	00267	Seinäioki–Kaskinen	Kaskinen	K	K	K
Kattilahariu		Kth		Traffic operating point	205+556	01319	Kouvola–Joensuu	Kouvola	K		
Kauhajoki		Kji		Traffic operating point	472+720	00272	Seinäjoki–Kaskinen	Kauhajoki	K		
Kauhava	14"11	Kha	Kauklahti	Traffic operating point	455+728	00299	Seinäioki–Oulu	Kauhava	K		K
Kauklahti Kaulinranta	Köklax	Klh Klr	Kaukianti	Traffic operating point Traffic operating point	24+277 963+350	00065 00790	Helsinki–Turku satama Tornio–Kolari	Espoo Ylitornio	V		
Kauniainen	Grankulla	Kni		Traffic operating point	16+054	00067	Helsinki–Turku satama	Kauniainen	K		K
Kauppilanmäki	Grankalla	Quantity		Traffic operating point	568+751	00423	Pieksämäki–Kontiomäki	Iisalmi	K		K
Kausala		Ka		Seisake/Halt	169+425	00477	Riihimäki–Kouvola	Iitti			
Keitelepohja		Ktp		Traffic operating point	519+256	00257	Äänekoski–Haapajärvi	Viitasaari	M		K
Kekomäki		Kek		Traffic operating point	79+288	01101	Riihimäki–Kouvola	Hausiärvi	K		
KEMI		Kmi		Osiin iaettu liikennepaikk		<u> -</u>	Oulu-Laurila. Kemi-Aios		K		
Kemi station		Kem	Kemi	Part of a traffic operating point		00347	Oulu-Laurila, Kemi-Ajos	Kemi		K	K
Kemi Sahansaari Lautiosaari		Shs I i		Part of a traffic operating point		01363 00829	Oulu-Laurila Lautiosaari-Elijärvi, Oulu-Laurila	Kemi Kemi	<i>V</i>	K	
<i>Lautiosaari</i> Kemiiärvi				Part of a traffic operating point  Traffic operating point	863+064 1056+399	00367	Kemiiärvi–Kelloselkä. Laurila–Kemiiärvi	Kemilärvi	Λ V	V	K
Kempele		Kiä Kml		Traffic operating point	741+075	00367	Seinäioki–Oulu	Kemnele	K	K	K
Kera		Kea		Seisake/Halt	14+536	00621	Helsinki-Turku satama	Espoo	K		K
KERAVA		Kev		Osiin jaettu liikennepaikka/Divided traffic operating point		-	Helsinki–Riihimäki, Kerava–Hakosilta, Kerava–Sköldvik, Kerava–Vuosaari		К		
Kerava station	Kervo	Ке	Kerava	Liikennepaikan osa (Kerava)/Part of a traffic operating point (Kerava)	28+869	00020		Kerava			κ
Kytõmaa		Kyt		Liikennepaikan osa (Kerava)/Part of a traffic operating point (Kerava)	31+274	01111		Kerava			
Kerimäki		Kiä		Traffic operating point	495+531	00522	Savonlinna–Parikkala	Savonlinna	K		K
Kesälahti		Kti		Traffic operating point	428+003	00966	Kouvola–Joensuu	Kitee	K		K
Keuruu		Keu		Traffic operating point	316+041	00235	Haapamäki–Jyväskylä	Keuruu	K		
Kiiala	Kiala	Kia		Seisake/Halt	60+013	01113	Olli–Porvoo	Porvoo			
Kilo Kilpua		Kil		Seisake/Halt	13+035	00580 01115	Helsinki–Turku satama Seinäioki–Oulu	Espoo Oulainon	v		
Kiipua Kinahmi		Kua Knh		Traffic operating point Liniavaihde/Junction	668+910 508+922	00873	Siiliniärvi–Viiniiärvi	Oulainen Kuopio	N.	K	
Kinanmi Kinni		Knn Kii		Traffic operating point	247+982	01120	Kouvola–Pieksämäki	Mäntyharju	К	I*	
Kiriola		Kii		Liniavaihde/Junction	384+475	01123	Kouvola–Joensuu	Parikkala		К	
Kirkkonummi	Kvrkslätt	Kkn		Traffic operating point	37+503	00063	Helsinki-Turku satama	Kirkkonummi	K		K
Kirkniemi	Gerknäs	Krn		Traffic operating point	136+261	00079	Hyvinkää–Karjaa	Lohja	K	K	K
Kitee		Kit		Traffic operating point	460+016	00453	Kouvola–Joensuu	Kitee	K		K
Kiukainen		Kn		Traffic operating point	297+395	00169	Kokemäki–Rauma	Eura	K		
		Krv		Traffic operating point	583+985	00417	Iisalmi–Ylivieska	Kiuruvesi	K	K	K
Kiuruvesi		Kvi		Traffic operating point	878+146	00378	Oulu-Kontiomäki	Paltamo	K		
Kiuruvesi Kivesiärvi		Ktö		Seisake/Halt	18+279 775+774	01330 00848	Huopalahti-Havukoski Joensuu-Nurmes	Vantaa Nurmes			
Kiuruvesi Kivesiärvi Kivistö											
Kiuruvesi Kivesiärvi Kivistö Kohtavaara		Koh		Seisake/Halt Traffic operating point	7/5+7/4 923±372				K		K
Kiuruvesi Kivesiärvi Kivistö Kohtavaara Koivu	Björkaård	Koh Kvu		Traffic operating point	923+373	00362	Laurila–Kemijärvi	Tervola	К		K
Kiuruvesi Kivesiärvi Kivistö Kohtavaara Koivu Koivuhovi	Biörkaård Biörkhv	Koh Kvu Kvh		Traffic operating point Seisake/Halt	923+373 17+861	00362 00675		Tervola Espoo	К		К
Kiuruvesi Kivesiärvi Kivistö Kohtavaara Koivu	Biörkaård Biörkbv Kumo	Koh Kvu		Traffic operating point	923+373	00362	Laurila-Kemijärvi Helsinki-Turku satama	Tervola	K		K

Kolari	İ	Irli	İ	Traffic operating point	1067+206	00358	Tornio-Kolari	Kolari	K	İ	lk I
Kolho		Klo		Seisake/Halt	286+265	00338	Orivesi–Seinäioki	Mänttä-Vilppula	N.		N.
Kolppi	Kållbv	Kpi		Traffic operating point	525+100	00309	Seinäioki–Oulu	Pedersöre muni	K		К
Kommila		Kmm		Traffic operating point	429+700	00500	Varkaus-Kommila	Varkaus		K	K
Komu		Kom		Liniavaihde/Junction	607+174	00758	Iisalmi–Ylivieska	Pvhäiärvi		K	
Kontiolahti		Khi		Traffic operating point	640+295	00463	Joensuu–Nurmes	Kontiolahti	K		K
Kontiomäki		Kon		Traffic operating point	658+786	00390	Nurmes-Kontiomäki, Oulu-Kontiomäki, Kontiomäki-Ämmänsaari,	Paltamo	K	K	K
							Pieksämäki–Kontiomäki, Kontiomäki–Vartius-raja				
Koria		Kra		Seisake/Halt	185+374	00478	Riihimäki–Kouvola	Kouvola			
Korkeakoski		Kas		Traffic operating point	247+910	00193	Orivesi–Seinäioki	Juupaioki	К	к	к
Korso		Krs		Seisake/Halt	22+740	00019	Helsinki–Riihimäki	Vantaa			·
Korvensuo		Ksu		Traffic operating point	50+500	01128	Kerava-Hakosilta	Mäntsälä	K		
Koskenkorva		Kos		Traffic operating point	442+447	00274	Seinäioki–Kaskinen	Ilmaioki	M		K
котка		Kot		Osiin jaettu	-	-	Kouvola-Kotka, Kotka Hovinsaari-Kotka Mussalo		м		
				liikennepaikka/Divided traffic operating point							
Kotka Hovinsaari		Hos		Liikennepaikan osa	240+400	00980		Kotka		K	K
None none		7,00		(Kotka)/Part of a traffic	2101100	00300		7,00,0		^	
				onerating point (Kotka)							
Kotka cargo		Ktt		Liikennepaikan osa	240+870	01130		Kotka			K
				(Kotka)/Part of a traffic							
D-1		a		oneratina noint (Kotka)	244 . 400	00750					
Palmenportti		Pti		Liikennepaikan osa	241+190	00768		Kotka			
				(Kotka)/Part of a traffic operating point (Kotka)							
Kotka station		Kta	Kotka	Liikennepaikan osa	242+775	00532		Kotka		K	K
7.04.0				(Kotka)/Part of a traffic							
				onerating point (Kotka)							
Kotkan satama		Kts		Liikennepaikan osa	243+579	00644		Kotka		K	K
				(Kotka)/Part of a traffic							
				oneratina noint (Kotka)	245 . 202	04000					
Kotolahti		Koo		Liikennepaikan osa (Kotka)/Part of a traffic	245+203	01329		Kotka		K	K .
				onerating noint (Kotka)							
Kotka Mussalo		Mss		Liikennepaikan osa	247+057	00557		Kotka		K	K
				(Kotka)/Part of a traffic							
				onerating point (Kotka)							
KOUVOLA		Kvi		Osiin jaettu	-	-	Riihimäki-Kouvola, Kouvola-Pieksämäki,		M		
				liikennepaikka/Divided			Kouvola–Kotka, Kouvola–Joensuu,				
W				traffic operating point	404 - 540	00400	Kouvola-Kuusankoski			,,	12
Kouvola station		Kouvola	Kouvola	Liikennepaikan osa	191+540	00480		Kouvola		K	K
				(Kouvola)/Part of a traffic							
Kouvola lajittelu		Kvla		Liikennepaikan osa	192+570	01132		Kouvola		K	K
Nouvoia iajitteia				(Kouvola)/Part of a traffic	1527570	01102		1001010		^	î l
				oneratina noint (Kouvola)							
Kouvola cargo		Kvt		Liikennepaikan osa	194+050	01134		Kouvola		K	K
				(Kouvola)/Part of a traffic							
Kanada Ollaradda		Oik		oneratina noint (Kouvola) Liikennepaikan osa	194+460	01122					
Kouvola Olkoralde		OIK			194+460	01133		Kouvola			
				(Kouvola)/Part of a traffic operating point (Kouvola)							
Kullasvaara		Kuv		Liikennepaikan osa	197+300	01320		Kouvola			K
				(Kouvola)/Part of a traffic							
				onerating point (Kouvola)							
Kovjoki		Koi		Traffic operating point	508+925	00745	Seinäjoki-Oulu	Uusikaarlepyy	K		
Kruunupvv	Kronobv	Kov		Traffic operating point	537+585	00311	Seinäioki–Oulu	Kruunupvv	K	K	К
Kuivasjärvi		Kis		Traffic operating point	276+327	01137	Tampere-Seinäjoki	Parkano	K.		
KUOPIO		Кро		Osiin jaettu liikennepaikka/Divided			Pieksämäki–Kontiomäki		M		
				traffic operating point							
Kuopio station		Kuo	Kuopio	Liikennepaikan osa	464+590	00408		Kuopio			K
1 -	İ	1	,	(Kuopio)/Part of a traffic	1			'		1	
				oneratina noint (Kuonio)							
Kuopio cargo		Kuot		Liikennepaikan osa	465+500	01139		Kuopio		K	K
				(Kuopio)/Part of a traffic							
Kuopio Iloharju		Ilh		oneratina noint (Kuonio)	462+550	01366		Kuonio			
Raupio Ilonalju	İ	241		Liikennepaikan osa (Kuopio)/Part of a traffic	1027330	01300		Kuopio		1	1
	1	1		oneratina noint (Kuonio)							1
Kurkimäki		Krm		Traffic operating point	444+074	00406	Pieksämäki–Kontiomäki	Kuopio	K		К
Kuurila		Ku		Traffic operating point	138+769	00626	Riihimäki–Tampere	Hämeenlinna	K		
Kuusankoski		Kuk		Traffic operating point	199+290	00537	Kouvola-Kuusankoski	Kouvola	M	K	K
Kuusikkoniemi Kylänlahti		Ksn		Traffic operating point Seisake/Halt	906+763	01356	Oulu-Kontiomäki Joensuu-Nurmes	Paltamo	K		
	Kvmmene	Kyn			742+912 233+450	00937 00534	Joensuu–Nurmes Kouvola–Kotka	Lieksa	М	V	V
Kvmi Kyminlinna	rviiiiilene	KIn		Traffic operating point Seisake/Halt	233+450	00534	Kouvola–Kotka Kouvola–Kotka	Kotka Kotka	IYI	N	N
Kyrö		Kö		Traffic operating point	232+875	00139	Toiiala-Turku	Karinainen	K		К
Kälviä	Kelviå	Klv		Traffic operating point	570+273	00316	Seinäioki–Oulu	Kokkola	K		
Köykkäri		Kök		Traffic operating point	486+491	01144	Seinäjoki-Oulu	Kauhava	K		
Laaiavuori		Lav		Traffic operating point	14+527	01341	Huopalahti-Havukoski	Vantaa	K		
Lahdenperä		Lpr		Traffic operating point	267+080	01149	Tampere–Jyväskylä	Jämsä	K	.,	
Lahnaslampi	Labelia	Lhn		Traffic operating point	880+297	00871	Vuokatti-Lahnaslampi	Sotkamo	V	K V	V
Lahti	Lahtis	Lh		Traffic operating point	130+170	00100	Riihimäki–Kouvola, Lahti–Heinola, Lahti–Mukkula, Lahti–Loviisan satama	Lahti	N.	N .	^
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Laihia	Laihela	Lai	Traffic operating point	468+916	00293	Seinäjoki–Vaasa	Laihia	K		K
Lakiala		Lak	Traffic operating point	209+214	00212	Tampere–Seinäioki	Ylöiärvi	K		K
Lamminkoski		Lmk	Traffic operating point	268+785	01151	Tampere–Seinäioki	Parkano	K		
Lamminniemi		Lam	Traffic operating point	636+664	00845	Kajaani-Lamminniemi	Kajaani		K	K
Lapiniärvi Lapinlahti	Lappträsk	Loi	Traffic operating point Traffic operating point	185+432 525+604	00108 00416	Lahti–Loviisan satama Pieksämäki–Kontiomäki	Lapiniärvi Lapinlahti	M		V.
	Villespectrond	Lna			00416			K.	V	K
Lappeenranta Lappila	Villmanstrand	Laa	Traffic operating point Seisake/Halt	287+726 97+693	00094	Kouvola–Joensuu, Lappeenranta–Mustolan satama Riihimäki–Kouvola	Lappeenranta Kärkölä	K	K	K
Lappohia	Lappvik	LDO	Traffic operating point	189+639	00075	Kariaa–Hanko	Hanko	K	K	K
Lapua	Lappo	Lpa	Traffic operating point	441+094	00298	Seinäioki–Oulu	Lapua	K	k	K
Larvakytö	Edobo	Lyö	Traffic operating point	333+057	01153	Tampere–Seinäjoki	Seinäjoki	K	N.	K .
Laukaa		Lau	Traffic operating point	401+193	00249	Jvväskylä–Äänekoski	Laukaa	K		
Laurila		Lla	Traffic operating point	865+776	00360	Laurila-Kemitärvi, Oulu-Laurila, Laurila-Tornio-raia	Keminmaa	K		
Lauritsala		Lrs	Traffic operating point	291+936	00498	Kouvola–Joensuu	Lappeenranta	K	K	K
Leinelä	Leile	Lnä	Seisake/Halt	31+123	01333	Huopalahti-Havukoski	Vantaa			
Airport	Flygplatsen	Len	Seisake/Halt	26+575	01332	Huopalahti-Havukoski	Vantaa			
Lelkola		Lkl		276+011	00993	Kouvola-Pieksämäki	Hirvensalmi	K		
Lempäälä		Lpä	Traffic operating point	165+928	00156	Riihimäki–Tampere	Lempäälä	K		
Leppäkoski		Lk		87+830	00043	Riihimäki-Tampere	Janakkala	K		
Leppävaara	Alberga	LDV	Traffic operating point	11+249	00068	Helsinki–Turku satama	Espoo	K		K
Leteensuo		Lts	Traffic operating point	123+554	01154	Riihimäki–Tampere	Hattula	K		
Lieksa		Lis	Traffic operating point	728+121	00468	Joensuu–Nurmes. Lieksa–Pankakoski	Lieksa	K	K	K
Lieksan teollisuuskylä		Ltk	Liniavaihde/Junction	728+847	01157	Lieksa-Pankakoski	Lieksa	L.	K	V.
Lielahti		Llh	Traffic operating point	193+393	00183	Tampere–Seinäjoki, Lielahti–Kokemäki Jvväskvlä–Pieksämäki	Tampere Laukaa	r.	K K	K
Lievestuore Liminka	Limingo	Lvt Lka	Traffic operating point Traffic operating point	402+191 728+483	00246 00338	Jvvaskvia-Pieksamaki Seinäioki-Oulu	Laukaa Liminka	K	K	K
Liminka Liminpuro	Limitiqu	Lmp	Traffic operating point  Traffic operating point	728+483 864+792	01354	Seinajoki–Oulu Oulu–Kontiomäki	Vaala	K .		<u> </u>
Lohiluoma		Luo	Liniavaihde/Junction	463+619	01354	Seinäioki–Kaskinen	Vaaia Kurikka	IX.		
Lohja	Lojo	Lo	Traffic operating point	122+965	00081	Hyvinkää–Karjaa	Lohja	K		K
Loimaa		Lm	Traffic operating point	208+870	00142	Tojiala-Turku	Loimaa	K		K
Louhela	Klippsta	Loh	Seisake/Halt	13+190	00661	Huopalahti-Havukoski	Vantaa			
Loukolampi	1	Lol	Traffic operating point	360+013	00861	Kouvola–Pieksämäki	Pieksämäki	K		
Loviisan satama	Lovisa hamn	Lvs	Traffic operating point	207+209	00106	Lahti–Loviisan satama	Loviisa	M	K	K
Luikonlahti		Lui	Traffic operating point	557+061	00411	Siilinjärvi-Viinijärvi	Kaavi	K		
Lusto		Lus	Seisake/Halt	509+170	00690	Savonlinna–Parikkala	Savonlinna			
Luumäki		Lä	Traffic operating point	250+540	00487	Kouvola–Joensuu, Luumäki–Vainikkala-raja	Luumäki	K	K	K
Lähessuo		Lhs	Traffic operating point	798+473	01364	Oulu-Laurila	Simo	K		
Länkipohia		Läp	Traffic operating point	256+024	00203	Tampere–Jvväskvlä	Jämsä	K		
Maanselkä		Mlk	Traffic operating point	836+049	00382	Nurmes-Kontiomäki	Sotkamo	M		
Maaria	St. Marie	Mri	Traffic operating point	262+070	01166	Toilala-Turku	Turku	K		
Madesjärvi		Md	Traffic operating point	291+821	00217	Tampere–Seinäjoki	Kurikka	K		
Maiaiärvi		Mii	Traffic operating point	216+317	01168	Tampere-Seinäioki	Ylöiärvi	K		
Maksniemi	Mala	Mkn	Traffic operating point	845+521	01365	Oulu-Laurila	II Uninted a Lid	K		
Malmi Malminkartano	Malm Malmgård	Mio	Traffic operating point Seisake/Halt	10+900 10+730	00017 00659	Helsinki–Riihimäki Huopalahti–Havukoski	Helsinki	K		
Maiminkartano Mankala	Maimoaro	Mka	Traffic operating point	160+050	01336	Riihimäki–Kouvola	Helsinki Titti	v		
Markkala		Mrk	Traffic operating point	403+737	00896	Pieksämäki–Kontiomäki	Suonenioki	r v		
Martinlaakso	Mårtensdal	MrI	Seisake/Halt	14+010	00662	Huonalahti-Havukoski	Vantaa	K K		
Masala	Masaby	Mas	Seisake/Halt	29+561	00064	Helsinki–Turku satama	Kirkkonummi	N.		
Matkaneva	i idodo y	Mtv	Traffic operating point	562+607	01171	Seinäioki-Oulu	Kokkola	K		
Mattila		Mat	Traffic operating point	159+906	01172	Riihimäki–Tampere	Lempäälä	K		
Melalahti		MII	Traffic operating point	893+280	01355	Oulu-Kontiomäki	Paltamo	K		
Metsäkansa		Msä	Liniavaihde/Junction	155+811	00558	Toiiala-Valkeakoski	Valkeakoski			
Mikkeli	St. Michel	Mi	Traffic operating point	305+165	00546	Kouvola-Pieksämäki	Mikkeli	K	K	K
Misi			Traffic operating point	1021+255	00366	Laurila-Kemitärvi	Rovaniemi	M		K
Mommila		Mla	Seisake/Halt	91+430	00093	Riihimäki–Kouvola	Hausjärvi			
Muhos		Mh	Traffic operating point	788+424	00375	Oulu-Kontiomäki	Muhos	K		
Mukkula		Muk	Traffic operating point	140+012	00594	Lahti-Mukkula	Lahti	.,	K	
Murtomäki		Mur	Traffic operating point	613+165	00386	Pieksämäki–Kontiomäki, Murtomäki–Talvivaara,	Kajaani	ĸ		
A4	C 48	lu	Linda with the Characters	142.000	00070	Murtomäki–Otanmäki	December			
Mustio Mustolan satama	Svartå	Mso Mst	Liniavaihde/Junction Traffic operating point	143+000 295+515	00078 00077	Hvvinkää–Kariaa Lappeenranta–Mustolan satama	Raasepori Lappeenranta		V	
Mustolan satama Muukko		Mko	Traffic operating point	295+515	01180	Kouvola–Joensuu	Lappeenranta	K	K	
Muurame		Muu	Traffic operating point	324+768	00433	Tampere–Jvväskvlä	Muurame	K		
Muurola		Mul	Traffic operating point	948+494	00363	Laurila–Kemijärvi	Rovaniemi	K		
Myllykangas		Mvs	Traffic operating point	815+693	01183	Oulu-Laurila	Ti	K		
Mvllvkoski		Mki	Seisake/Halt	203+630	00536	Kouvola-Kotka	Kouvola	K		
Myllymäki		My	Seisake/Halt	333+721	00263	Orivesi–Seinäjoki	Ähtäri			
Mvllvoia		MvI	Traffic operating point	161+727	00606	Lahti-Heinola	Heinola	K	K	
Mynttilä		Myt	Traffic operating point	270+889	00543	Kouvola-Pieksämäki, Mynttilä-Ristiina	Mäntyharju	K		
Mvnämäki		Mvn	Traffic operating point	229+607	00123	Turku-Uusikaupunki	Mvnämäki	K		
Mvvrmäki	Mvrbacka	Mvr	Traffic operating point	12+130	00660	Huopalahti-Havukoski	Vantaa	K		
Mäkkylä		Mäk	Seisake/Halt	9+511	00693	Helsinki–Turku satama	Espoo			
Mäntsälä		Mlä	Traffic operating point	59+210	00027	Kerava–Hakosilta	Mäntsälä	K		
Mänttä		Män	Traffic operating point	282+740	00198	Vilppula-Mänttä	Mänttä-Vilppula			K
Mäntvhariu		Mr	Traffic operating point	262+680	00544	Kouvola-Pieksämäki	Mäntvhariu	K		K
Mäntvluoto	NIR day dal	Mn	Traffic operating point	342+020	00223	Pori-Mäntvluoto	Pori	K	K	K
Naantali	Nådendal	Nnl		213+193	00124	Raisio-Naantali	Naantali	ı,	K	K
Naaraiärvi Nakkila		Nri Nal	Traffic operating point	449+862	00895	Jvväskvlä–Pieksämäki Kolomäki Pori	Pieksämäki Nakkila	K V		K
Nastola		Nai Nsi	Traffic operating point Seisake/Halt	308+091 146+169	00672 00595	Kokemäki–Pori Riihimäki–Kouvola	Nakkila Lahti	N.		
Nastola Niemenpää		NSI Nmp	Traffic operating point	923+605	01185	Kiinimaki–Kouvola Tornio–Kolari	Tornio	v		
Niinimaa		Nii	Linjavaihde/Junction	383+155	00285	Orivesi–Seinäjoki	Alavus	N.		
		Nmä		172+534	01324	Riihimäki–Kouvola	Iitti			
			THATTIC ODCIDENTAL DOUBLE							
Niinimäki Niinisalo			Traffic operating point	386+215	00227	Niinisalo-Parkano	Kankaannää	M	IK .	IK I
Niinisalo Niirala		Nns Nrl	Traffic operating point Traffic operating point	386+215 555+846	00227	Niinisalo-Parkano Niirala-raia-Säkäniemi	Kankaanpää Tohmajärvi	M M	K .	k K

Niirala-raja	ı	Nrlr	İ	Traffic operating point	554+080	00445	Niirala-raja-Säkäniemi	Tohmajärvi	I	ſ	1
Niittvlahti		Nth		Traffic operating point	613+475	00917	Kouvola-Joensuu	Joensuu	v		
Nikkilä	Nickby	NIä		Seisake/Halt	39+176	00022	Keraya–Sköldvík	Sipoo	K		
Niska	THEODY	Nsk			825+300	01353	Oulu-Kontiomäki	Utajärvi	к		
Nivala		NvI		Traffic operating point	676+878	00328	Iisalmi–Ylivieska	Nivala	ĸ		К
Nokia		Noa			204+004	00181	Lielahti-Kokemäki	Nokia	K	K	K
Nummela		Nm			109+368	00084	Hvvinkää-Kariaa	Vihti	К		
Nurmes		Nrm			784+420	00472	Nurmes-Kontiomäki. Joensuu-Nurmes	Nurmes	K	K	K
Närpiö	Närpes	När		Linjavaihde/Junction	518+255	00268	Seinäjoki–Kaskinen	Närpiö			
Ohenmäki		Ohm			542+264	01190	Pieksämäki–Kontiomäki	Iisalmi			K
Olli		Olli			45+734	00570	Kerava–Sköldvik, Olli–Porvoo	Porvoo	K		
Orimattila		Om		Liniavaihde/Junction	150+407	00109	Lahti-Loviisan satama	Orimattila			
Orivesi Orivesi keskusta		Ovk			228+276 231+512	00190 01316	Tampere–Jvväskvlä. Orivesi–Seinäioki Orivesi–Seinäjoki	Orivesi Orivesi	K		K
Otanmäki		Otm		Traffic operating point	638+822	00385	Murtomäki–Otanmäki	Kajaani		V	
Otava		Ot		Traffic operating point	290+521	00545	Kouvola–Pieksämäki, Otava–Otavan satama	Mikkeli	K	N.	K
Oulainen		Ou			657+850	00313	Seinäjoki–Oulu	Oulainen	ĸ		K
OULU		Oul		Osiin jaettu	_	-	Seinäjoki–Oulu, Oulu–Kontiomäki, Oulu–Laurila	Guidinen	м		
				liikennepaikka/Divided							
				traffic operating point							
Ouluniahti		Oll		Liikennepaikan osa (Oulu)/Part of a traffic onerating point (Oulu)	746+876	01351		Oulu	K		
Oulu Nokela		Nok		Liikennepaikan osa (Oulu)/Part of a traffic operating point (Oulu)	750+030	01195		Oulu		K	К
Oulu Oritkari		Ori		Liikennepaikan osa (Oulu)/Part of a traffic	751+180	01196		Oulu		К	K
Oulu cargo		Olt		onerating noint (Oulu) Liikennepaikan osa	751+360	01197		Oulu		V	V
				(Oulu)/Part of a traffic operating point (Oulu)							
Oulu station	Uleåborg	Oulu	Oulu	Liikennepaikan osa (Oulu)/Part of a traffic onerating point (Oulu)	752+778	00370		Oulu			K
Oulu Tuira		Tua		Liikennepaikan osa (Oulu)/Part of a traffic operating point (Oulu)	755+510	00339		Oulu		K	К
Paimio	Pemar	Po		Traffic operating point	171+885	00128	Helsinki-Turku satama	Paimio	к		
Palopuro		Plp		Traffic operating point	54+535	00562	Helsinki-Riihimäki	Hyvinkää	К		
Paltamo		Pto			901+579	00379	Oulu-Kontiomäki	Paltamo	K		
Pankakoski		Pas		Traffic operating point	731+865	00935	Lieksa–Pankakoski	Lieksa		K	K
Parikkala		Par		Traffic operating point	387+302	00510	Kouvola–Joensuu, Savonlinna–Parikkala	Parikkala	K		K
Parkano		Pko			262+483	00215	Parkano–Niinisalo, Tampere–Seinäioki	Parkano	K		K
Parola Patokangas		Pta			115+764 1064+591	00049 01346	Riihimäki–Tampere Kemiiärvi–Patokangas	Hattula Komiliën d	K	K	K
Pello		Pel		Traffic operating point Traffic operating point	1004+591	00356	Tornio-Kolari	Kemijärvi Pello	v	N.	
Peltosalmi		Pmi		Linjavaihde/Junction	545+355	00882	Pieksämäki–Kontiomäki	Iisalmi	K.	K	
Peräseinäioki		Psi			318+481	00687	Tampere–Seinäioki	Seinäioki	к		
Pesiökylä		Psk		Traffic operating point	732+752	00393	Kontiomäki-Ämmänsaari	Suomussalmi	М		K
Petäjävesi		Pvi			343+357	00237	Haapamäki-Jyväskylä	Petäjävesi	K		K
PIEKSÄMÄKI		Pie		Osiin jaettu liikennepaikka/Divided traffic operating point	-	-	Kouvola-Pieksämäki, Pieksämäki-Kontiomäki, Jyväskylä-Pieksämäki, Pieksämäki-Joensuu	Pieksämäki	М		
Pieksāmāki station		Pm	Pieksämäki	Liikennepaikan osa (Pieksämäki)/Part of a traffic operating point (Pieksämäki)	376+000	00400		Pieksämäki		K	K
Pieksāmāki Temu		Tmu		Liikennepaikan osa (Pieksämäki)/Part of a traffic operating point (Pieksämäki)	377+340	01212		Pieksämäki		К	K
Pieksāmāki lajittelu		Pmla		Liikennepaikan osa (Pieksämäki)/Part of a traffic operating point (Pieksämäki)	378+640	01210		Pieksämäki		K	K
Pieksāmāki cargo		Pmt		Liikennepaikan osa (Pieksämäki)/Part of a traffic operating point (Pieksämäki)	379+960	01211		Pieksämäki		K	K
Pietarsaari	Jakobstad	Pts		Traffic operating point	528+780	00306	Pännäinen–Pietarsaari, Pietarsaari–Alholma	Pietarsaari	М		
Pihlajavesi		Ph			312+500	00261	Orivesi–Seinäjoki	Keuruu	K		
Pihtipudas	Dikie	PD		Traffic operating point	540+605	00258	Äänekoski–Haapatärvi	Pihtipudas	M		K K
Piikkiö Pikkarala	Pikis	Pik Pkl		Traffic operating point Traffic operating point	182+785 771+765	00127 00819	Helsinki–Turku satama Oulu–Kontiomäki	Kaarina Oulu	K V		N.
Pitkämäki		Ptk		Traffic operating point  Traffic operating point	7/1+/65 789+619	01350	Nurmes-Kontiomäki	Nurmes	K	K	
Pitkäkallio		Pio		Traffic operating point	204+324	01350	Kouvola-Kotka	Kouvola	ĸ	,	
Pitäiänmäki	Sockenbacka	Pim		Seisake/Halt	8+474	00069	Helsinki–Turku satama	Helsinki			
Pohjankuru	Skuru	Pku		Traffic operating point	94+907	00059	Helsinki–Turku satama	Raasepori	K	K	K
Pohiois-Haaga	Norra Haga	Poh		Seisake/Halt	8+050	00657	Huopalahti-Havukoski	Helsinki			
Pohjois-Louko		Plu		Traffic operating point	329+329	01214	Tampere-Seinäjoki	Seinäjoki	K		
Poikkeus		Pkk			254+744	01216	Tampere–Seinäjoki	Parkano	K		
Poiksilta	Div	Poi		Liniavaihde/Junction	416+728	00965 00220	Kouvola–Joensuu	Kitee	V	I/	W.
Pori	Björneborg Borg 8	Pri			322+278		Pori–Aittaluoto, Pori–Mäntyluoto, Kokemäki–Pori	Pori	K	K	K K
Porvoo Puhos	Boraå	Prv Pus		Traffic operating point Traffic operating point	62+287 452+808	00023 00919	Olli–Porvoo Kouvola–Joensuu	Porvoo Kitee	K	K	K
PulloS		rus		rranic operating point	<del>4</del> 5∠+808	00313	kouvoid-Joensuu	kitee	I.V.	IV.	N

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Puistola	Parkstad	Pla		Seisake/Halt	14+050 9+442	00553	Helsinki–Riihimäki Helsinki–Riihimäki	Helsinki			
Pukinmäki Pulsa	Bocksbacka	Pmk		Seisake/Halt Traffic operating point	262+491	00551 01217	Luumäki–Vainikkala-raia	Helsinki Lappeenranta	V		
Punkahariu		Pun		Traffic operating point	515+111	00517	Savonlinna–Parikkala	Savonlinna	K K	V	v .
Pvhäkumpu		Pvk		Traffic operating point	615+415	00317	Pvhäkumpu erkanemisvaihde–Pvhäkumpu	Pvhäiärvi	K	K	N.
Pyhäkumpu erkanemisvaihde		Pye		Traffic operating point	613+511	01218	Iisalmi-Ylivieska, Pyhäkumpu erkanemisvaihde-Pyhäkumpu	Pyhäjärvi	K	N.	
Pvhäsalmi		Phä		Traffic operating point	615+934	00331	Iisalmi–Ylivieska	Pvhäiärvi	ĸ		ĸ
Pännäinen	Bennäs	Pnä	Pietarsaari-Pedersöre	Traffic operating point	518+604	00305	Pännäinen–Pietarsaari, Seinäjoki–Oulu	Pedersöre mun	K		K
Raahe	Brahestad	Rhe	recursor recursore	Traffic operating point	726+726	00335	Raahe–Rautaruukki, Tuomioja–Raahe	Raahe	K	K	
Raippo	branestad	Rpo			270+052	00490	Luumäki–Vainikkala-raia	Lappeenranta	K	K	
Raisio	Reso	Rai		Traffic operating point	207+829	00125	Turku–Uusikaupunki, Raisio–Naantali	Raisio	K	K	K
Rajamäki		Rm		Traffic operating point	72+267	00088	Hwinkää–Kariaa	Nurmijärvi			K
Raiaperkiö		Rip		Traffic operating point	448+396	01220	Seinäioki–Oulu	Lapua	K		
Rantasalmi		Rmi		Traffic operating point	445+165	00524	Huutokoski–Savonlinna	Rantasalmi	K		K
Rasinsuo		Ras		Traffic operating point	258+510	01222	Kouvola–Joensuu	Luumäki	K		
Ratikylä		Rlä		Traffic operating point	284+344	00596	Tampere–Seinäjoki	Kihniö	K		
Rauha		Rah		Traffic operating point	318+490	00501	Kouvola–Joensuu	Lappeenranta	K		
Rauhalahti		Rhl		Liniavaihde/Junction	380+510	01225	Jvväskvlä–Pieksämäki	Jvväskvlä		K	
Rauma	Raumo	Rma		Traffic operating point	331+659	00165	Kokemäki–Rauma	Rauma	K	K	K
Raunio		Rio		Traffic operating point	464+845	01227	Seinäioki–Oulu	Kauhava	K		
Rautaruukki		Rat		Traffic operating point	730+050	00750	Raahe–Rautaruukki	Raahe		K	K
Rautiärvi Rautpohia		Riä Roh		Traffic operating point	345+788 372+829	00506	Kouvola-Joensuu Haanamäki-Jyväskylä	Rautiärvi Ivväskylä	K		
	Räckhals			Liniavaihde/Junction		01232	Haadamaki-Jwaskvia Helsinki-Riihimäki			K	
Rekola Retretti	RdCKTIdIS	Rkl Ree		Seisake/Halt Seisake/Halt	20+615 507+500	00554 00793	Savonlinna-Parikkala	Vantaa Savonlinna			
RIIHIMÄKI		Rii		Osiin jaettu	30/+300	00/93	Helsinki–Riihimäki, Riihimäki–Kouvola, Riihimäki–Tampe	JavUIIIIIII	V.		
				liikennepaikka/Divided traffic operating point			Name of the state				
Riihimāki Arolampi		Arp		Liikennepaikan osa (Riihimäki)/Part of a traffic onerating point (Riihimäki)	66+600	01235		Hausjärvi			
Riihimāki cargo		Rit		Liikennepaikan osa (Riihimäki)/Part of a traffic operating point (Riihimäki)	68+773	01240		Riihimäki		K	К
Riihimäki lajittelu		Rila		Liikennepaikan osa (Riihimäki)/Part of a traffic	70+068	01238		Riihimäki			K
Riihimāki station		Ri	Riihimäki	onerating noint (Riihimäki) Liikennepaikan osa (Riihimäki)/Part of a traffic	71+410	00040		Riihimäki		К	К
				onerating noint (Riihimäki)							
Riiiärvi		Rir		Traffic operating point	502+567	01327	Seinäioki–Oulu	Uusikaarlepvv	K		
Riippa		Rpa		Traffic operating point	577+477	00747	Seinäjoki–Oulu	Kokkola	K		K
Ristiina		Rst		Traffic operating point	291+162	00770	Mvnttilä–Ristiina	Mikkeli	M	K	K
Ristiiärvi Rovaniemi		Riv			676+804	00391 00364	Kontiomäki–Ämmänsaari Laurila–Kemijärvi	Ristitärvi	K		
Ruha		Roi Rha		Traffic operating point Traffic operating point	971+775 431+132	00364	Seinäioki–Oulu	Rovaniemi Lapua	K	K	K
Runni		Rnn		Seisake/Halt	568+518	00742	Iisalmi–Ylivieska	Iisalmi	K		
Ruukki		Rki		Traffic operating point	705+228	00337	Seinäioki–Oulu	Siikaioki	V		V
Ruusumäki		Rsm		Traffic operating point	20+282	01338	Huopalahti-Havukoski	Vantaa	K		K
Ryttylä		Ry			80+770	00042	Riihimäki–Tampere	Hausjärvi	K	K	K
Rövttä		Röv		Traffic operating point	893+917	00833	Tornio-Rövttä	Tornio		K	K
Saakoski		Saa		Traffic operating point	305+373	00668	Tampere–Jyväskylä	Jyväskylä	K		
Saari		Sr		Traffic operating point	405+246	00964	Kouvola–Joensuu	Parikkala	K		K
Saariiärvi		Sri		Traffic operating point	452+723	00254	Äänekoski–Haapaiärvi	Saariiärvi	M		K
Salminen		SIn		Traffic operating point	426+718	00405	Pieksämäki–Kontiomäki, Pieksämäki–Kontiomäki	Suonenjoki	K		K
Salo		Slo		Traffic operating point	143+981	00055	Helsinki–Turku satama	Salo	K		K
Sammalisto		Sam		Traffic operating point	74+487	01246	Riihimäki-Tampere	Riihimäki	K		
Santala	Sandö	Sta		Seisake/Halt	196+908	00827	Kariaa–Hanko	Hanko			
Saunamäki	1	Smä		Traffic operating point	180+534	01325	Riihimäki–Kouvola	Iitti			
Savio SAVONLINNA		Sav SvI		Seisake/Halt Osiin jaettu liikennepaikka/Divided traffic operating point	26+265 -	00555	Helsinki–Riihimäki Savonlinna–Parikkala, Huutokoski–Savonlinna	Kerava			
Savonlinna station	Nyslott	SI	Savonlinna	Liikennepaikan osa (Savonlinna)/Part of a traffic operating point (Savonlinna)	482+797	00521		Savonlinna	К		
Pääskylahti		Pky		Liikennepaikan osa (Savonlinna)/Part of a traffic operating point (Savonlinna)	484+913	00519		Savonlinna	K		K
SEINÄJOKI		Sei		Osiin jaettu liikennepaikka/Divided traffic operating point	-	-	Tampere–Seinäjoki, Seinäjoki–Oulu, Orivesi–Seinäjoki, Seinäjoki–Vaasa, Seinäjoki–Kaskinen		М		
Seinājoki cargo		Skt		Liikennepaikan osa (Seinäjoki)/Part of a traffic onerating point (Seinäjoki)	416+580	01252		Seinäjoki		К	К
Seinäjoki station		Sk	Seinäjoki	Liikennepaikan osa (Seinäjoki)/Part of a traffic onerating point (Seinäioki)	418+001	00280		Seinäjoki		K	K
Selänpää		Spä		Traffic operating point	209+869	00539	Kouvola-Pieksämäki	Kouvola	K		
Jeiaiibaa					1045+904	00796	Tornio-Kolari	Kolari	K		
Sieppijärvi		Spi		Traffic operating point					IX.		
Sieppijärvi Sievi Siikamäki		Spi Svi Skä		Traffic operating point	613+371 389+747	00796 00319 00429	Seinäjoki–Oulu Pieksämäki–Joensuu	Sievi Pieksämäki	K		

Miles   Mile								Osiin jaettu			10	SIILINJÄRVI
Sample					January Campara, Francisca Romania			liikennepaikka/Divided		J		
Accordance   Acc	К	К	К	Siilinjärvi		00413	489+718	Liikennepaikan osa (Siilinjärvi)/Part of a traffic		Sij		Sillinjärvi station
Simple		К	К	Siilinjärvi		01342	494+735	Liikennepaikan osa (Siilinjärvi)/Part of a traffic		Rsu		Ruokosuo
Sample			K	Simo	Oulu-I aurila	00346	833+715	Traffic operating point		Sim		Simo
Saletion	К	K	K				368+317	Traffic operating point				
Sample   S			K	Mäntsälä		01254	68+697	Traffic operating point				
Survey			K			01257	235+602	Traffic operating point				
Secolary   Secolary			K								Sjundeå	
Sabbuk   Schelard   Schelar   Sche	K		K			00179	213+355					
Sciented   Sciented					Karjaa–Hanko							
Service	K	K	М	Porvoo	Kerava–Sköldvík			Traffic operating point			Kilpilahti	
Selection   Sele	K	K V					472±754					
Social   Social   Social   Triffic operating point   417-796   Social   S	K	K	K									
Sounders   Sounders	ĸ	К	K				417+796	Traffic operating point				
Sundered   Som	K		K				413+842	Traffic operating point				
Serial   Sur			K		Lielahti-Kokemäki							Suoniemi
Semilativi				Heinävesi	Pieksämäki–Joensuu	00435	452+865	Linjavaihde/Junction				
Sakaniemis			K									
Saintainiski	K	K	K							Smj		
Salksipiva   Si			K							Sä		
Tankolutoto	Annual		V				504+931			Skm		
Takolutote	V	V	K K					Traffic operating point		5] To		
Taisolac	N	K	N.									
Talvivara		IX.	K		Piekeämäki-Kontiomäki		537±605					
Taylorara   Ekenâs   Ekenâs   Ekenâs   Ekenâs   Time   Sesisak-Phelit   174-056   00076   Carlorara point   Tampere Cargo   Time   Tampere Cargo   Time   Tampere Cargo   Time   Tampere Cargo   Time   Tampere Cargo   Time   Tampere Cargo   Time   Tampere   Tampere Cargo   Time			lk				247+245					Talviainen
Ekenås   Ekenås   Time   Selsake/Halt   174-1056   00076   Karias-Hankto   Rihimiki-Tampere, Tampere-Seinājoki,   Tampere Cargo   Tipet   Likeningsikan iza   184+100   11273   Tampere Jimikka   Visa   Likeningsikan iza   185+400   11273   Tampere Vilnikka   Visa   Likeningsikan iza   185+400   11274   Tampere Seinājoki,   Tampere   K   Tampere Vilnikka   Visa   Likeningsikan iza   185+400   11274   Tampere Seinājoki,   Tampere   K   Tampere Vilnikka   Visa   Likeningsikan iza   185+400   11274   Tampere Seinājoki,   Tampere   K   Tampere Vilnikka   Visa   Likeningsikan iza   185+400   11274   Tampere Seinājoki,   Tampere   K   Tampere Seinājoki,   Tampere   K   Visa   Likeningsikan iza   185+400   11274   Tampere Seinājoki,   Tampere   K   Visa	K	K		0								
				Raasepori				Seisake/Halt			Ekenäs	
			M			-	-	Osiin jaettu		Tre		
Tampere Vilnikka  Via  Via  Via  Via  Via  Via  Via		V		Tampara		01272	104 : 100	liikennepaikka/Divided traffic operating point		Teat		Tompore cours
Tampere station	Î	^						(Tampere)/Part of a traffic onerating point (Tampere)				
	K	K		Tampere		01274	185+400	(Tampere)/Part of a traffic		Vka		Tampere Viinikka
Tampere Järvensivu	K			Tampere		00160	187+389	Liikennepaikan osa (Tampere)/Part of a traffic	Tampere station	Tampere	Tammerfors	Tampere station
Tapavainola				Tampere		01272	187+814	Liikennepaikan osa (Tampere)/Part of a traffic		Jvs		Tampere Järvenslvu
Tap								Seisake/Halt			Mosabacka	
Tervolo			K				270+405	Traffic operating point		Тар		
Try												
Teso						00294	460+156					
Tetwa			K		Laurila-Kemijärvi	00361	900+521					
Tikkala Traffic operatino point Tikkala Traffic operatino point Tikkarala Traffic operatino point Tikkarala Traffic operatino point Tikkarala Traffic operatino point Traffic operation point Traffic operation operation point Traffic operation operation point Traffic operation											Östsensesti	
Tiko         Traffic coeratino opint         7204-741         01335         Señaloki-Oulu         Liminka         K           Havukoski         Hvk         Lilkennepalkar (Divided traffic oneratino noint Likennepalkar) osa affic (Tikkurla)/Part of a traffic oneratino noint Tikkurla)         17+725         01334         Vantaa         K           Hlekkaharju         Sandkulla         Hkh         Lilkennepalkar osa (Tikkurla)/Part of a traffic oneratino noint Tikkurla)         17+109         00556         Vantaa           Tikkurlla station         Dickursby         Tkl         Lilkennepalkar osa (Tikkurla)/Part of a traffic oneratino noint (Tikkurla)         15+861         00018         Vantaa         K         K			M								Ostermark	
TIK Osiin jaettu   -			K					Traffic operating point				
Havukoski     Hvk     Lilkennepaikan osa (Tikkurila)/Part of a tarfic nevarian noint /Tikkurila)     17+725     01334     Vantaa     K       Hlekkaharju     Sandkulla     Hkh     Lilkennepaikan osa (Tikkurila)/Part of a tarfic nevarian onint /Tikkurila)     17+109     00556     Vantaa       Tikkurila station     Dickursby     Tkl     Lilkennepaikan osa (Tikkurila)/Part of a tarfic oneratina onint /Tikkurila)     15+861     00018     Vantaa     K			K	Limina		-	-	Osiin jaettu liikennepaikka/Divided				
Hlekkaharju Sandkulla Hkh Lilkennepaikan osa 17+109 00556  Tikkurila station Dickursby Tkl Lilkennepaikan osa 15+861 00018  (Tikkurila)/Part of a traffic operating noint (Tikkurila)  (Tikkurila)/Part of a traffic operating noint (Tikkurila)  (Tikkurila)/Part of a traffic operating noint (Tikkurila)			K	Vantaa		01334	17+725	Liikennepaikan osa (Tikkurila)/Part of a traffic		Hvk		Havukoski
Tikkurila station Dickursby Tkl Liikennepaikan osa 15+861 00018 Vantaa K K (Tikkurila)/Part of a traffic one-string onint (Tikkurila)				Vantaa		00556	17+109	Liikennepaikan osa (Tikkurila)/Part of a traffic		Hkh	Sandkulla	Hlekkaharfu
Tohmaiäni Toh Taffic operation point F71+752 00449 Mijala-raja Cākānjomi Tohmaiāni V	K	K	К	Vantaa		00018	15+861	Liikennepaikan osa (Tikkurila)/Part of a traffic		TkI	Dickursby	Tikkurila station
	ANN .		K	Tohmajärvi	Niirala-raja-Säkäniemi	00448	571+752	Traffic operating point		Toh		Tohmajärvi
Tofiala	K	K	K	Akaa	Toiiala-Turku. Riihimäki-Tampere. Toiiala-Valkeakoski	00150	147+339	Traffic operating point		TI		Toiiala
Toi Traffic operating point 479+162 00412 Pieksämäki–Kontiomäki Siilinjärvi K			K									
Tolsa Tolls Tol Seisake/Halt 35+454 00830 Helsinki-Turku satama Kirkkonummi Kirkkonummi				Kirkkonummi		00830	35+454	Seisake/Halt		Tol	Tolls	
Tommola     Tom     Traffic operating point     117+197     01280     Rilhimäki-Kouvola     Hollola     K       Torkkeli     Trk     Traffic operating point     240+154     01283     Tampere-Jyväskylä     Orivesi     K			K V				240+154					
Torkkeli Trk Traffic operating point 240+154 01283 Tampere–)vváskylä Orivesi K TORNIO Trn Osifin jaettu – – Tornio–Röyttä, Tornio–Röyttä, Tornio–Rojari, Laurila–Tornio-raja K			K .	Urivesi		01283	240+154					
liikennepaikka/Divided traffic operating point			N.		Torino-Roylla, Torino-Roiari, Lauriia-Tornio-raja			liikennepaikka/Divided traffic operating point				
Tornio station Torneå Tor Tornio Liikennepaikan osa 884+656 00351 Tornio K K (Tornio)/Part of a traffic operating point (Tornio)	K	K	K					(Tornio)/Part of a traffic onerating point (Tornio)	Tornio			
Tornio-raja Torneå gränsen Trr Liikennepaikan osa 887+190 00678 Tornio (Tornio) Part of a traffic operating point (Tornio)				Tomio		00678	887+190	Liikennepaikan osa (Tornio)/Part of a traffic		Trr	Torneå gränsen	Tornio-raja

	1	i			i .	i	i .		i	1	i
Fornio-Itäinen	Torneå Östra	Tri		Seisake/Halt	883+307	01318	Laurila-Tornio-raja	Tornio			
[uomarila	Domsbv	Trl		Seisake/Halt	19+022	00579	Helsinki–Turku satama	Espoo			
Tuomioia		Tia		Traffic operating point	698+504	00336	Seinäioki–Oulu, Tuomioia–Raahe Riihimäki–Tampere	Siikatoki Janakkala	K		K
Turenki		Tu		Traffic operating point	93+771	00044			K	K	K
TURKU		Tur		Osiin jaettu liikennepaikka/Divided traffic operating point	_	_	Helsinki–Turku satama, Toijala–Turku, Turku–Uusikaupu	Turku	K		
Kupittaa	Kuppis	Kut		Liikennepaikan osa (Turku)/Part of a traffic operating point (Turku)	196+372	00126		Turku			
Turku station	Åbo	Tku	Turku päärautatiestation	Liikennepaikan osa (Turku)/Part of a traffic operating point (Turku)	199+674	00130		Turku		К	К
Turku cargo		Tkut		Liikennepaikan osa (Turku)/Part of a traffic operating point (Turku)	200+460	01285		Turku		К	К
urku satama	Åbo hamn	Tus		Liikennepaikan osa (Turku)/Part of a traffic operating point (Turku)	202+510	00135		Turku		К	
uupovaara		Tpv		Traffic operating point	668+672	00458	Joensuu-Ilomantsi	Joensuu			К
uuri		Tuu		Seisake/Halt	366+962	00283	Orivesi–Seinäioki	Alavus			
örmä		Tör		Traffic operating point	878+075	01287	Laurila-Kemijärvi	Keminmaa	K		
örölä		Trä		Traffic operating point	264+972	01290	Kouvola–Joensuu	Lappeenranta	K		
limahariu		Uim		Traffic operating point	674+451	00465	Joensuu–Nurmes	Joensuu	K	K	K
rjala		Ur		Traffic operating point	165+588	00148	Toijala-Turku	Urjala	K		K
taiärvi		Uti		Traffic operating point	810+502	00376	Oulu-Kontiomäki	Utaiärvi	K		К
tti		Uti		Linjavaihde/Junction	204+085	00484	Kouvola-Joensuu	Kouvola			К
usikaupunki	Nvstad	Ukp		Traffic operating point	264+795	00121	Uusikaupunki–Hangonsaari, Turku–Uusikaupunki	Uusikaupunki	K	K	
usikvlä		Ukä		Traffic operating point	149+485	00105	Riihimäki–Kouvola	Lahti	K		K
aajakoski		Vko		Traffic operating point	384+866	00245	Jyväskylä–Pieksämäki	Jyväskylä	K		K
aala _		Vaa		Traffic operating point	844+671	00377	Oulu-Kontiomäki	Vaala	K		K
aarala		Vra		Linjavaihde/Junction	981+481	00807	Laurila–Kemijärvi	Rovaniemi			
aasa	Vasa	Vs		Traffic operating point	492+588	00288	Seinäioki–Vaasa	Vaasa	K		K
ahoiärvi		Vir		Traffic operating point	244+926	00214	Tampere–Seinäioki	Parkano	K		
AINIKKALA		Vai		Osiin jaettu liikennepaikka/Divided traffic operating point	_	-	Luumäki–Vainikkala-raja		М		
ainikkala cargo		Vnat		Liikennepaikan osa (Vainikkala)/Part of a traffic operating point (Vainikkala)	281+700	01292		Lappeenranta		K	K
alnikkala station		Vna	Vainikkala	Liikennepaikan osa (Vainikkala)/Part of a traffic operating point (Vainikkala)	282+784	00492		Lappeenranta			κ
ainikkala-raia		1/		Tueffic annualis a solut	284+862	00493					
ainikkaia-raia alimo	Gjuteriet	Vnar Vmo		Traffic operating point Seisake/Halt	7+480	00493	Helsinki–Turku satama	Lappeenranta Helsinki			
alkeakoski	Gjuteriet	Vi		Traffic operating point	164+952	00153	Toijala–Valkeakoski	Valkeakoski	м	V	V
alkeasuo		Vso		Liniavaihde/Junction	583+976	00153	Niirala-raia-Säkäniemi	Tohmajärvi	IYI		
altimo		VIm		Traffic operating point	808+636	00475	Nurmes-Kontiomäki	Valtimo	М		
ammala		Vma		Traffic operating point	245+885	00176	Lielahti–Kokemäki	Sastamala	K		K
anattara		Vtr		Traffic operating point	172+340	01295	Riihimäki–Tampere	Lempäälä	K		K
antaankoski	Vandaforsen	Vks		Seisake/Halt	14+907	00839	Huopalahti-Havukoski	Vantaa	,,		
arkaus	Variationsen	Var		Traffic operating point	424+685	00432	Pieksämäki–Joensuu, Varkaus–Kommila	Varkaus	K	K	K
artius		Vus		Traffic operating point	753+755	00941	Kontiomäki–Vartius-raja	Kuhmo	M		K
artius-raia		Vur		Traffic operating point	755+856	00949	Kontiomäki-Vartius-raia	Kuhmo			
asikkahaka		Vkh		Traffic operating point	31+175	01300	Helsinki–Turku satama	Kirkkonummi	K		
askiluoto	Vasklot	Vsk		Traffic operating point	496+463	00291	Vaasa–Vaskiluoto	Vaasa		K	
ehkala	Veckal	Veh		Seisake/Halt	15+997	01337	Huopalahti-Havukoski	Vantaa			
enetmäki		Vki		Traffic operating point	433+164	00428	Jyväskylä–Pieksämäki	Pieksämäki	K		
esanka		Vn		Traffic operating point	364+469	00239	Haapamäki-Jvväskvlä	Jvväskvlä	K		
ekki		Vk		Linjavaihde/Junction	753+979	00471	Joensuu–Nurmes	Lieksa			K
erumäki		Vrm		Liniavaihde/Junction	153+801	00112	Lahti-Heinola	Heinola			K
hanti		Vti		Traffic operating point	684+573	00334	Seinäioki–Oulu	Raahe	K		
htari		Vih		Traffic operating point	489+889	00438	Pieksämäki–Joensuu	Heinävesi	K		IK.
htavuori		Vri		Traffic operating point	395+230	00248	Jvväskvlä–Äänekoski	Laukaa	K		
iala		Via		Traffic operating point	154+288	00155	Riihimäki–Tampere	Akaa	K K		1000
iniiärvi llähde		Vni		Traffic operating point	656+569 140+442	00440	Siilintärvi–Viinitärvi. Pieksämäki–Joensuu Riihimäki–Kouvola	Liperi	K		
		Vlh		Traffic operating point		00104		Lahti Mänttä-Vilppula	l v	V	V
lppula nnilä		VIp Vin		Traffic operating point Traffic operating point	274+760 131+243	00196 01305	Orivesi-Seinäjoki, Vilppula-Mänttä Riihimäki-Tampere	Mantta-Viippula Hämeenlinna	V	K	N.
nniia rkamies		Vms		Traffic operating point	25+931	01305	Huopalahti–Havukoski	Vantaa	K		
rkamies oltti		VIIIS V/t		Traffic operating point  Traffic operating point	479+402	00302	Seinäioki–Oulu	Kauhava	k		
otti iohiiärvi		Vt		Traffic operating point	221+308	00302	Kouvola–Pieksämäki	Kaunava Kouvola	K		K
ioioki		Vio		Traffic operating point	318+501	01310	Kokemäki–Rauma	Eurajoki	ĸ		
ıokatti		Vkt		Traffic operating point	868+838	00383	Nurmes-Kontiomäki, Vuokatti-Lahnaslampi	Sotkamo	м		К
uonislahti		Vsl		Traffic operating point	705+240	00363	loensuu-Nurmes	Lieksa	lĸ		
uonos		Vns		Traffic operating point	588+116	00863	Svsmäiärvi–Vuonos	Outokumpu		K	
uosaari	Nordsiö	Vsa		Traffic operating point	50+184	01321	Kerava–Vuosaari	Helsinki	к	ĸ	К
KSPIHLAJA	Nordo	Yks		Osiin jaettu liikennepaikka/Divided traffic operating point	_	-	Kokkola-Ykspihlaja				
/kspihlaja cargo		Ykst		Liikennepaikan osa	553+900	00315		Kokkola		к	K
rapiniuja caryo	I	I VOL	1	(Ykspihlaja)/Part of a traffic	333 <b>+3</b> 00	00313		NUNNUIA		K	ľ

Ykspihlaja väliratapiha		Yksv		aikan osa a)/Part of a traffic point (Ykspihlaja)	555+511	01326		Kokkola		К	к
Ylistaro		Yst	Seisake/H	alt 4	139+558	00296	Seinäjoki–Vaasa	Seinäjoki			
Ylitornio	Övertorneå	Ytr	Seisake/H	alt 9	946+041	00789	Tornio-Kolari	Ylitornio			
Ylivalli		Ylv	Traffic on	erating point 3	802+016		Tampere-Seinäioki	Kurikka	K	K	K
Ylivieska		Yv	Traffic op	erating point 6	30+343		Iisalmi–Ylivieska, Seinäjoki–Oulu	Ylivieska	М	K	K
Yläkoski		Ylk	Traffic on	erating point 4	116+849	00867 00913	Suonenioki-Yläkoski	Suonenioki		K	
Ylämylly		Yly	Traffic op	erating point 6	39+019	00913	Pieksämäki–Joensuu	Liperi	K		K
Ylöiärvi		Ylö	Traffic on	erating point 2	200+753	00211 00940	Tampere-Seinäioki	Ylöiärvi	K		K
Ypvkkävaara		Yov	Traffic on		29+780	00940	Kontiomäki–Vartius-raia	Kuhmo	K		K
Äetsä		Äs	Traffic op	erating point 2	258+280	00174	Lielahti-Kokemäki	Sastamala	K		K
Ähtäri	Etseri	Äht	Traffic op	erating point 3	346+067		Orivesi–Seinäioki	Ähtäri	K		
Ämmänsaari		Äm	Traffic op	erating point 7	750+448	00394	Kontiomäki-Ämmänsaari	Suomussalmi	M		
Äänekoski		Äμi	Traffic on	erating point 4	24+515	00252	Ivväskylä–Äänekoski Äänekoski–Haanajäryi	Äänekocki	K	K	K

Name	Min. platform length	Max. platftrorm length	Platform height	Sarake2	Design train length (freight traffic)	Power supply	Side loading platform length	End loading	Loading site	Sarake3	Sarake4	Crane	Fuel Passenger traffic	Freight traffic	Turntable or triangular junction (KR)	Railway yard for dangerous
			[mm]		[m]	[400 V, A]	[m]	olatform				[t]				annds
Ahvenus Ainola	270	270	550	0	747 —	=	= =	=	=			-	= =	=	===	=
Airaksela Aittaluoto				0	819 —	=	=	=	=			=		T	= =	=
Ajos Alapitkā				0	 664	25 A	_ 18	=	Y K			=		T		=
Alavus Alholma	79	203	265	2 0	711	-	_		K Y	664 530	833 040	_	— н	T	=	=
Arola Asola				0	1060	25 A	24 —	=	<u>к</u> —			=	= =			=
Avianolis Draosvik	230 70	230 70	550 550	2	925	=			=				_ H			=
Dynamiittivaihde Eläinnuisto-Zoo	89	89	265 550	0		=		_	=			_	_ н	<u> </u>	=	_
Eno Ervelä	80	80	550	0	664 748	25 A —	=	=	_ K			=	_ H		=	=
Espoo	240 84	322 84	550 265	4	955 326		=	=	=	740	000	=	= н		= =	=
Haapakoski Haapamäki				0 2 (1)	731 725	63 A	- 20	- - - - - - - - - - - - - -	K	2 105	407, 408, 409	=	= = =	÷		=
Haaraioki Hakosiita	188 220	325 220	265 (265) 550	2	240	_	= =	_	<u> </u>	1103	107, 100, 105	=	— н	Ė	Ė	=
Haksi Hamina	20	20	265	1 0	1104	 25 A	-	- K	_ Y			_				
Hammaslahti Hanala				0	686	=	=	=	KY			=	= =	Ť	=	Ë
Hangonsaari Hanhikoski				0	=		 20 27	=	— К			=			= =	=
Hankasalmi HANKO	233	289	265	2	754	25 A	27	К	KY	423	306, 371	-	— н		-	-
Henko station Henko cergo	150	150	550	0	192 729	63 A —	-	К —	=	5 332	003, 004, 011, 012, 113, 115, 116, 117, 118, 119	=	Y H	T	=	=
Hanko-Pohioinen Harjavalta	<i>68</i> 250	<i>68</i> 250	<i>550</i> 550	2	768		=	1111	— К	3 021	303, 304, 305, 306, 307, 308 134, 135	=	- H	T	=	K
Harviala Harviala				0	786 — 833	=		=	— К	1 220	134. 135	=		=	=	=
Haukivuori	(199)	(200)	(265)	0	833 891	=	- 12	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	K			=		T	T =	=
Haustervi cargo	102	102	550	0	656		_	-	K			Y		т	- E	_
Haviseva Heikkilä	202			0	- E		= =	= =	=			=				
Heinola Heinoo		(107)	(265)	(1)	_ 734	=	15	=	K	1 027	004. 005	=			=	=
Heinävaara Heinävesi	100	206	265	0 2	570	=	9	=	K K	366	203	=	H	T	=	=
HELSINKI Helsinki station	167	444	550	19	393	-	_	-	-	1 406	115. 116. 120. 225. 841	-	- н	_	_	_
Heisinki Kiviheka Ilmela station	270	270	550	0 2	=		=	_	=			=	= <del>"</del>	=	=	=
Ilmela raliway yard Kāpyiš				0 3 (2)	=	1500 V. 63 A	29 —	=	=	23 674 325	See information in the table below \$25	=	Y - H	=	=	=
Pastie station	279 (278) 266 250 450	336 266 447 450	550 (265) 550 550 550	2 11	=		=	- - - K K	_	325 38 762 539	564 255, 256, 257, 258, 259	_	- H		22	=
restie certrain-station Pestie cergo				0	727	63 A 63 A	230	K K	KY	539 3 968	105, 106 107, 108, 109, 110, 111, 112	_	- H	T	= =	=
Herrala Hiller	220 110	220 110	550 550	2	998	=	_	1111	=			=	_ H	=	= =	=
Hikiä	120	120	550 550 *) 265	2	700	_	_	_	_			-	- H	=	=	=
Hinthaara Mindowa	170 *) 55	170 *) 65		3	757	=	=	=	=	90	003	=		=	=	=
Humppila Hunnalahti	245 270	427 270	550 550	3 4	753 753	25 A	29	=	KY			=	H		=	=
Huutokoski Hyrkäs		-10		0	659 —	Ē	=	=	=			=		=	= =	=
Hyrvnsalmi Hyvtnkää				0	-	25 A	12	_	К	794	002	-	= =		-	-
Hyvinkää asema Hyvinkää Paavoia	260	315	550	3 0	814	-	-	-	-	88	353	-	- н	<u></u>	20	-
Hyvinkää tavara Hämeenlinna	104 257 352 *) 60	104 450 352 *) 60 (92)	265 550 550 *) 265 (265)	1 3	526 1037	25 A	34	- - - - - - -	<u>—</u> К	421 3 119	009, 037, 252 308, 309, 310, 371	-	- H	T T	_	_
Härmä Höljäkkä	352 *) 60	352 *) 60	550 *) 265	1	808	25 A — — —	=	=	K KY K	730	752, 753	=	— н — н <sub>о</sub>	T T	=	=
Ii Iisalmen teollisuusraiteet	1	(92)	(265)	(1) 0	687	1500 V, 63 A	=	=				=	= =	=	= =	=
Iisalmi Iittala	70 170 27	353 170 27	265 550 265	3 2	734	_	58 —	- K	Y -	504	021, 022, 023	=	Y H		<u> </u>	_ =
Ilola Ilomantsi	27	27	265	0	=	25 A	=	=	- к			=	= = =	T	= =	=
Imatra station	346	346 (218)	550 (265)	1	-	1500 V. 63 A	-	— К	-	100	(m (n) (n) (n) (n)	-	— н Y —	-	-	-
Imatra Laruo Imatrankoski Immola		12101	12031	0	889 1197	1500 V. 63 A	18	К	KY K	1 968 1 173	602, 621, 622, 623, 673, 690 301, 307, 308, 310	=		į	<u> </u>	=
Pelkole Imatrankoski-raja				0	<u>-</u>	=	=	=	=			=	= =	<u> </u>	= =	=
Inha Inkeroinen	120	(99) 120 (482) 150	(265) 550	(1)	_ 792		43 23 14	=	K K	249 1 928 309	432 006, 007, 008, 010, 011	=	H	T	=	=
Inkoo Isokvrö	120 (481) 110	(482) 150	550. 265	(2)	243 509	25 A —	14	1111	- к	399	483	_		T T		=
Jalasiärvi Jepua				0	792 243 509 762 825	=	16	=	K K	361	754	=	= =			=
Abrotion Animals Animals Animals Animals Animals Animals Animals Animals Animals Animals Animals Animals Animals Animals Animals Animals Animals Entrada Entra	265	320	550	3		1500 V. 63 A	46	-	К	Railway yard construction work in progress	Railway yard construction work in progress	-	— н		20. Y	
Joansuu Koopole Joansuu Peltole				0	Railway yard construction work in progress 949 640 998	- - - - -	-	11111	KY			=	= =	T T T	-	К
Onttole	313	321	550	0	998 — 821	=	=	=	=	570	994	=	H	Ť		=
Joroinen Joroas		270	550 550	0 2		=	=	=	K	881	272	=		T	<u> </u>	=
Joutseno Juankoski	270 455	270 455	550	2 0	775 583	  25 A	=	=	K K	686 631	440, 441 403	=	— Н — Н	T T	=	=
Jutila Juupaioki	80	80	550	0	=	=	=	-	=			=		=	=	=
Juurikorpi Jvväskviä	160 387	449 387	550 550	0	789 796	1500 V. 63 A 25 A	— 89	- K -	_ Y	5 695	See information in the table below 006, 007, 008	_ Y	- :: H	т	=	=
Jämsä Jämsänkoski	387	387	550	0	796 769 873 632	25 A — —	=	=	K	1 601	ооь, оо7, 008	=	_ H	Ţ	20	=
JARVENPAA	122 200	122 383	550 550	3	632	-	12 29	- к	К		714	_	— н		=	-
Purole Purole	200 (270) 270	383 (270) 272	550 550	(2)	-	=	29	- -	=	469	/15	=	_ <u> </u>		= =	=
Kaipiainen Kaipiainen	270	212	350	0	770	=	19	=	Y			=		Ţ	T =	=
Kaitjärvi Kaiaani	250	350	265	0	1110 837	1500 V. 63 A		=	_	1 624	681, 696, 697, 698	Ξ		-		=
Kaleton Kalkku				0	=	1500 V. 63 A	122 27	=	K Y			=	= =	<u> </u>	= =	=
Kalliovarasto Kalvitsa				0	864	=	=	-	- K	944	784	=			=	=
Kangas Kannelmäki	226	226	550	0 2	933	=	Ξ	=	=			=	_ H		=	=
Kannonkoski Kannus	452	452	550	0		  25 A	13	=	K —			=	H	T	=	=
Karheiārvi Karhukangas				0	767 —		4 -		K —			=		=	=	=
Kariaa Karkku	182 250	348 250	550 550	1	765 856 745	63 A —	_	=	K —	1 972 377	005. 006. 007. 034. 061. 062. 063 033	_	— н — н	T T	20 —	=
Karviainen Kaskinen				0	745 582	=	=	_	_ Y	2 246	742. 743. 744. 748	_	= =		_ Y	=
Kattilahariu Kauhajoki				0	<u> </u>	=	=	1111	=			_	= =		=	=
Kaunava Kauklahti	450 270	450 270	550 550	3	803 447	=	=	=	- K			=	_ H		=	=
Kauniainen Kaunoilanmäki	194	204	265	3	269	=	=	_	-	459	004, 043	=	_ H		- E	=
Kausala Keitelenohia	120	120	550	2	- E	=	=	=	- <u>-</u>			=	_ H	<u> </u>	1 -	=
Kekomāki KEMI				ő		=	=	=				=		<u> </u>	=	
Kemi station Kemi Sehansaari	450	450	265. 550	2 0	949	63 A	148	=	K —	4 816	539, 540, 903, 904, 905, 906, 907, 908, 931, 932	-	Y H		Y	-
<i>Lautiosaari</i> Kemijärvi	350	350	265	0	471	1500 V, 63 A	<del>-</del>	— K	- KY	1 647	973, 975, 976	=	H		— KR	=
		,								-				1 1		

Kempele	450 216	450 224	550 265	1 759	25 A	9	-	К				н т	-	-
Kera KERAVA	216	224		2 –	-		=	-				н -	_	-
Karava station Kytömaa	270	392	550	4 518 0 922 1 394 1 671 676	25 A —	_	_ =	— К —			= =	H — — — — — — — — — — — — — — — — — — —	KR —	
Kerimäki Kerilahti	108	108	265	1 394		=		K				H T		
Keuruu	111	111	550	676	-	=	Ē	К	706	502	Ē Ē	Й -	-	-
Kilo	108 322 111 49 270	108 322 111 49 270	265 265 550 265 550	1 — 2 — 950		=	=	=				н	=	=
Kilpua Kinahmi				0 -		=		=	402	353				=
Kinni Kirjola				0 776	=	=	=				= =	= = =	= =	=
Kirkkonummi	273	310	550	3 612		-	=	K	1 279 1 145	005. 006. 024. 026 564, 565	=   =	H T		
Kitee	355	355	265	1 660	25 A	18 14 80	_	KY	11.1		=   =	н т	-	-
Kiuruvesi	126	126	265	0 582 1 660 0 768 1 635 0 1098	25 A	14 80	=	K KY	229	286	= =	H T		
Kivesjärvi Kivistö	126 292 56	336 56 (40) 278 270 249 479 675 80	550 265 (265) 550 550 550 265 550(265 550)	0 1098 2 —	=	=	=	=			Ē Ē	н –	=	_
Kohtavaara Koivu	56	56 (40)	265 (265)	1 — 617		32	=	- к	499	473	= =	H -	=	_
Koivuhovi Koivukviä	278 270 249 370 675 80	278 270	550 550	2 -		_	=	=			= =	H -	=	
Kokemāki Kokkola	249	249	550 265	2 765 3 765 1 790 1 0 765 0	25 A 1500 V. 63 A 63 A	29 40		K	592 2 584 966	085 508 509 510 511 512 518 522 540		H T	_	
Kolari	675	675	550/265	1 790	63 A	22	_ K _	K Y KY Y		508, 509, 510, 511, 512, 518, 522, 540 603, 609	=   =	H T	<u> </u>	-
Kolopi	80	80	330	0 765		= =	=	_ KY	538 3 457	903 201, 202, 203, 205, 206			=	=
Komu						=	=				=   =		=	=
Kontiolahti Kontiomäki	351 120	(96) 349 120 (72) 270	(265) 265 550 (265) 550	(1) 577 3 853 2 — (1) 743	25 A 63 A	- 31 - -	— К К — К	K K	470 1 780	153 874, 876, 882, 897, 898		_ T	Y, KR	=
Koria Korkeakoski		120 (72)	550 (265)	2 – 743	=	=		_ K	299	194	=   -	H -	=	=
Korso	270	270	550	2 -		=	=	=				н -	=	
Koskenkorva				ŏ –	-	=	=	-			= =	= =	-	-
Kotka station	193	193	265	1 0 788	63 A 63 A	=	-	-		rm rou rer row re		н -	Y	-
Kotka Mussalo				0 -	63 A —	85 25	=	_ Y	5 080 12 245	503, 504, 505, 506, 507, 508, 509 See information in the table below See information in the table below 672, 673, 674 601, 602, 603, 604, 605, 607, 608, 609, 610, 611	=   =	=	=	К К
Kotke cerso Kotken seteme	110	110	265	0 - 1 541 0 1131	- 63 A	280		— К	12 245 9 519 1 564 10 502	see information in the table below 672, 673, 674		— T		=
Kotolahti Palmanportti	53	53	265		= =	=		=	10 502	601, 602, 603, 604, 605, 607, 608, 609, 610, 611	= =	_ T		<u>K</u>
KOUVOLA Kouvola station	230	480	550	7 600	1500 V 62 A			K	2 965	See information in the table below	- Y	н -	Y	
Kouvois isiittelu Kouvois Olkorei	230	480		0 992	1500 V. 63 A 25 A —	175	К	K K	2 965 25 308 4 088	See information in the table below See information in the table below	=   *		r —	К
Kouvole cerao				0 903	= =	11 -	— к — — —	Y	4 088	226, 227, 228, 229		- T	KK -	K
Kovioki				0 1364 0 757	= =	_ _ 49	=	=			=   =		=	K _
Kruunuovv Kuivasjärvi				0 747 0 782	=	49	=	— К К	314	554	=   =	= -	=	=
KUOPIO Kuopio station	180	387	265	7 600 7 7 600 7 7 7 7 7 7 7 7 7 7 7 7 7	ress 63 A	130	к	Y	Railway yard construction work in pro	gress Railway yard construction work in progress				-
Kuopio Iloheriu Kuopio cergo				0 756 0 804	1500 V. 63 A				1 654	011, 012, 013, 101, 102, 342		H -		=
Kurkimäki Kuurila				0 734	=	100	=	K —				= 1		= =
Kuusankoski				0 811	63 A	Y	_	Y				T	=	_
Kulanlahti	56	56	265	1 - 934	= =	=	=	=			= =	н -	=	_
Kymi Kyminlinna	56 66 120	56 66 120	265 265 550	0	=	=	=		1 352	405, 408, 409	= =	H - T		=
Kvrö Kälviä					=		=	K —	92	434	ĒĒ		=	_
Köykkäri Laaiavuori				0 763				=			= =	= =	_	
Lahdenperä				0 — 777 — 777 4 709 1 439 0 706 0 725	- 25.4	=	-	-			= =		-	-
Lahti	270 201	451 201	550 265	4 709	25 A 63 A	7	- K	Y K	3 873	710. 711. 713. 714. 715. 716. 720. 772. 773	_ <u> </u>	H T	20. KR	=
Lakiala	201	201	203	0 706	= =	=	=	<u> </u>					=	=
Lamminkoski Lamminniemi					=	145 12	=	=	280 582	001	= =		=	=
Laoiniärvi Laoinlahti	300	354	265 265, 550	0 — 2 759 3 671	25 A 25 A		=	K K		002	=   =	H T	=	_
Lappeenranta Lappila	300 387 60 70 441	354 450 60 70 441	265, 550 550		25 A	60	ĸ	Ŷ	2 115	109, 110, 111, 112, 157			22	=
Lappohja Lapua	70 441	70 441	550 550 550	2 — 748 1 761		=	=	_ K	356	194	= = =	H T	=	=
Larvakytő Laukaa				0 -	= =	=	=	_ K			= =	= =	=	= =
Laurila				0 618 0 753	-	-	-	<del>"</del>	637 1 251	623 205, 206, 207			-	-
Leinelä	266	266	550	2 -	= =	=	-	<u>K</u>	1231	103, 100, 103		Н -	=	=
Lempäälä	170 230	250 230	550 550	0 802 2 760	_	=	_	=			=   =	н -	=	_
Leonäkoski				0 -		=	_	=					=	_
Leopävaara Leteensuo	266	292	550	4 =		=			213 1 463	300	= =	H -	=	=
Lieksa Lieksan teollisuuskylä	151	151	265	1 677 -	25 A		K			554. 555. 557. 559	= =	H T	20	_
Lielahti Lievestuore		(259)	(265)	0 780		8 23	_ =	- к	674 585	703, 717 203, 211		_ T		
Liminka Liminnuro				1 677 0	=		Ē	_			ĒĒ			_
Lohiluoma Lohia					 25 A	_ 25	-	_ K	207	467	= =	= 7	_	
Loimaa	252 236	450 236	550 550	0 596 2 783	=	=	-	ĸ	207	107		н -		-
Loukolampi	Z3b	290	330	2 — 886 0 — — 892		_ _ _ 28	= =	=	282	001		<u> </u>		= =
Luikonlahti	124	124	265		25 A —		= =	KY KY	282	p4		_ T	= =	= =
Luumäki	124	129	265	0 1234	_	14	-	Y	1 106	006. 007				=
Länkipohja				0 934	= =	=	=	_ _ K			=   =		=	=
Maanselkä Maaria				1 1 224 0 334 0 799 0 743 0 765 0 705	= =	=			597	002		= -	=	=
Madesiärvi Maiaiärvi				0 765 0 705	25 A	8	=	K —			=   =	= =	=	=
Maksniemi Malmi	318	348	550 (265)	3 (3)	=	=	-	=					=	
Malminkartano Mankala	318 284	348 284	550 (265) 550	2 -		=	=	=			= =	H -		=
Markkala Martiniaakso	292	293	550	0 753	=	=	=	=				_		=
Masala	233 267	233 267	550 550	2 -	=	=		=			=   =	н –	=	=
Mattila				ŏ =	= =	=	_ =	=				= =	= =	=
Melalahti Metsäkansa				0 -		13	_	_ K			= =		_	_
Mikkeli Misi	424 350	452 350	550 265	0 — 3 760 1 718	25 A 63 A	5 52	_ _ K	K KY K	958 2 059	656, 657 873. 874. 893	_ Y	H T	Y	_
Mommila Muhos	424 350 120 212	452 350 120 212	265 550 265	2 - 986	25 A	24	=				- Y	H		= =
Mukkula Murtomäki				0 -	- -	=	=	K	546 483	302 504	- E   E			
Mustio				-	= =	55	=	K	903				- NA	= =
Mustoian satama Muukko				0 1516	= =	=	=	- Y				= =	=	=
Muurame Muurola	316	318	265	0 841 2 724 0 848	25 A	=	_	=				— н —	=	=
Myllykangas Myllykoski				0 848 2 –	= =	=	=	=			=   =	- H	=	=
Mvllvmäki Mvllvoia	120 216	120 216	550 265	1 -	= =	=	Ē	K	792	332		H T	= =	= =
Mynttilä Myntmiki		(134)	(265)	0 -	-	=	-	-			=   =	= -	-	-
Myyrmäki	231 270 220	(124) 231 288 220	(265) 550	(1) 495 2 —	=	=		=			=   =	H -	=	=
Mantsala	220	288 220	550 550	2 998	= =	=	_	I =			= =	H -	=	=
Mäntvhariu	457	457	550	2 989	=	159	_	K K	1 005 87	386	=   =	— T	=	=
Mantyluoto Naantali				0 — 989 0 779 0 — 7 0 770 0 733	= =	20			1 006 87 4 262 904	001, 005 386 901, 902, 903, 904, 905, 906 001. 003		- T		_
		1		0 770	_	-	-	ĸ			-   -	— т	_	_
Naaraiärvi Nakkila				0 733			_	-						_
Kommole  KEANAA  KORONE AND AND AND AND AND AND AND AND AND AND	120	120	550	0 733 2 —	=	- 1	1 =	=				Н -	=	=

Niinimaa				0		- 1	-	-	к	700	932 —	-	-	Т	-	-
Niinisalo		(42)	(265)	0	10//		21	=	ĸ	1 765 5 898	001, 003, 021 — See information in the table below —	=	=	T T	=	=
Niirala-raia				0	922 	25 A -	=	=	_ K	5 898	See information in the table below —	-	=	-	=	- K
Nikkilä	45	45	400	1	695	=	=	-	=			=	=	=	=	=
Niska Nivala	97 250	97 250	265 550	0 1	929 825	25 A	 	=	- к	1 003	004, 005, 014		Н Н		=	=
Nokia Nummela		250		0	865 328		120 — 50	_ K	K K				H H	T	=	=
Nurmes Năroiö	71	205	265	2	850	_	50 —		=	3 343 122 575	001, 011, 013, 014, 851, 853, 855, 856 — 602 —		н —	T T	18 —	=
Ohenmäki Olli				0	=	=	=	=	_ К		002, 003		=		=	=
Orimattila Orivesi	273 80	360 90	550 550	0 3	— 765	25 A	12 —	=	K K	406	001		— Н	T T	13,7	=
Orivesi keskusta Otanmäki	80			1 0	=		=	=	_ K				H	<u> </u>	=	=
Otava Oulainen	450	(152) 492	(265) 550	(1)	636 982 496 990	 25 A	- 80	— - к - -	Ř K	301 1 361	535 304, 305	1		T T	=	=
OULU Outu station	368	498	550, 265	3	496		_	K	_		005, 006, 007, 191	_	н	т	_	_
Outu Nokela Outu Oritkari				0		1500 V, 63 A 63 A 63 A 25 A	200	=	_	1 150 3 075 2 649 3 328 213	005, 006, 007, 191	Y	=	T T	=	K
Outu carao Outu Tutra				0	769 759 945		6	_	_ K	3 328 213	099, 100, 101, 102, 103, 105, 106, 107, 108 — 072, 073		=	T T	Y	K
Outuniahti Paimio				0	945 763	=	=	=	<u> </u>		552,573		=	<u> </u>	=	_
Palopuro	231	231	265	ě	— 664	 25 A	=	_	-				-	-	-	-
Pankakoski Parikkala				0	705		- 20	- K - Y	ΚŶ	1 431	032. 033. 034. 035		<u> </u>	т		
Parkano	294 600 180	379 600 192	265 550 550	3	— 705 887 963 713	25 A 25 A		-	KY	439	-	-	H	Ţ	-	-
Patokangas	454	454	265	0	703 713			-	ΚΥ		101			İ	=	=
Peltosalmi	131	131	203	0	760 — 844	25 A 25 A	- 16	_	K KY KY K	502	002 Y	_		Ť	=	=
Pesiökviä				ő	— 762	_	-	=		-		=	=	т	Ξ	=
PIEKSAMAKI	142	142	265	1		1500 V. 63 A	_	_	К		-		H	т т	_	_
Pieksēmāki ielittelu	332	611	265	0	499 875	-	- s	_	<u>*</u>	220 22 685	See information in the table below —		H -	Ţ	=	K
Pieksēmāki Temu				0	775 947 724 546	63 A 25 A	=	_	KY	1 700 96	See information in the table below —	_ Y	=	Ţ	KR.	=
Pihlajavesi	99	120	265, 550	2	724 546	25 A —	=	=	=	96	104	_ =	н	T -	=	=
Pihtipudas Piikkiö				0	303	=	=	_ =	K K	786	002 -	=	=	T	=	=
Pikkarala Pitkäkallio				0	— 303 759 —	=	=	_	_ _ K			_	_	=	_	=
Pitkämäki Pitäiänmäki	270	306	550	0 2	- 301	=	=	_	K —	557		_	Н Н		_	_
Pohiankuru Pohjois-Haaga	240	240	550	0 2		=	=	_	K —	557	003, 004		H		=	=
Niciolana Niciol				0	698	=	=	_	=		_	_	=	=	=	=
Poiksilta Pori	251 118	251 118	550 265	0	733	= 1	= =		K KY	737 7 517 1 232 1 050	011	_	Н	T		=
Porvoo Puhos				1	648		_ 13	_	- к	1 232 1 050	003, 004, 005, 006, 007, 008, 042, 051 — 004, 005 —		H —		Y	_
Puistola Pukinmäki	274 273	274 279	550 550	2	=	=	Ξ	_	=		=		H	=	=	=
Pulsa	201	201	265	0	1834 436	 25 A		=	— К	482	773			-	-	_
Pyhäkumpu	201	201	200	Ô		-	9	_				_	=	Ť	_	-
Pyhäsalmi Pännäinen	65 450	65 450	265 550	1 2	666 750	25 A	= =	=	K		_		H	T		
Raahe Painne	430		330	0		63 A	53 144	=	K	2 430	004, 007, 008, 009 —		<u> </u>	Ţ		
Raisio	(111)	(168)	(265)	(3)		= -		=	— К	943 608	253, 254, 257 163, 164	_	-	į	-	-
Rajaperkiö				ő		= 1	=	=			100, 101		=	<u>.</u>	=	=
Rasinsuo				0	789 789	=	=	=	K - K		=	=	=	-	=	=
Rauha				0	709	_	=	-	K K	-	-	-	=		=	=
Rauhalahti Rauma				0	916 759	25 A	  15 	- K -	- Y	 5 653	301, 302, 303, 304, 305, 306, 307, 313, 314			T	=	=
Raunio Rautaruukki				0	759 — 784	= 1	=	=	=				=		=	=
Rautjarvi Rautoohia				0		= 1	=	=			-		_ H	=	=	=
Retretti	270 121	270 121	550 265	2 1	=	= =	=	=	=			=	H	Ξ	=	=
RIIHIMAKI Riihimäki Arolampi				0	_	1500 V. 63 A	_ 26	_	=		_	_ Y	-	-	-	-
Riihimäki statton Riihimäki letittelu	80	472	550	0					Y KY	1 981 5 237 5 545	011. 317. 345. 346. 349. 366. 367. 368. 369. 370 030, 031, 032, 033, 034, 035, 036, 056 082, 083, 084, 085, 086, 087, 088, 089		H	Ţ	<u>Y</u>	— K
Riitārvi				0	997 757		Ξ	=		5 545	082, 083, 084, 085, 086, 087, 088, 089	=	=	i i	=	- K
Riiooa Ristiina				0	968 —	=	=	=	K	766	505 -	=	=	Ť	=	=
Ristitärvi Rovaniemi	484	546	550, 265	0 3		1500 V, 63 A	188	- KY	KY	3 506	640, 674, 675, 681, 682, 683, 684	=	_ H		20	=
Ruha Runni	36 454	36 454	265 550	0	=	=	=	_	=			_	— Н	=	=	=
Ruukki Ruusumäki				1 0	738	=	_ _ 7	=	K	602	554 –	=	H -		=	=
Rvttvlä Röyttä	171	173	550	0	=	25 A 25 A	<u> </u>	=	K K	2 832	002, 003, 004, 005	_		Ť	=	=
Saakoski Saari		(201) (69)	(265) (265)	0 (1)	816 692		5		=				=	=	=	=
Saarrjärvi Salminen				(1)	736 401	=	40		K K	1 130	002, 003				=	=
Sammalisto	306	308	550	3 0	401				k - -			1 =	H - H	T	=	=
Saunamāki	70	70	550	0	=	-	=	=	-			_	H H	=	=	=
SAVONLINNA	270	270	550	2	-	-	-		-		_			-	-	-
reeskylehti Sevonlinna station	90 90	90 90	550 550	1 1	663 —	63 A	=	=	=			Y	H H	=	=	=
SEINAJOKI Seinäloki station	396	459	550, 265	4	478 861	1500 V, 63 A 25 A	65 40	=	Y K	5 987 5 656	See information in the table below — 834, 835, 836, 837, 838, 839, 840 —	Y _	н	T	21 Y	_
Seinmoki carao Selanpaa				0	861 772								=		Y =	=
Sieppijärvi Sievi				0	=			=	K	756	502				=	=
SIIkamäki SIILINJÄRVI				0	-	-	-	=	-	_		=		-	-	
Ruokosuo Siliniërvi station	156	360	265	0 2	702	25 A	=	=	_ к	260	606	=	— H	<del>-</del>	<i>KR</i> KR	_
Simo Simpele	156 282	360 (88) 301	265 (265) 265	(1) 2	— <i>702</i> 990 796 —	25 A	46 17 —	=	K K	530	806		— H		=	=
Sipilă Sisăttö				0		=	=	_	=		-	=	_ _ H	=	=	=
Siuntio Siuro	112	176	550	2	513 703	=	=	=	— К			Ē		=	=	=
Skoabv Sköldvík	120	120	550	1 0	945	 25 A	=	=	=	7 328	002, 003, 011, 012, 013, 014, 015, 016, 017		н		=	<u>-</u> к
Soinlahti Sorsasalo				0	_	-	=	_	Y				=	<u> </u>	=	=
Sukeva Suolahti	239 (80)	239 (147) 350	265 (265)	1 (2)	624 666	25 A 25 A	=	=	K K	627	393	=	Н —	T T	=	=
Suonenioki Suoniemi	(80) 350	350	(265) 550	2 0	753 743	25 A 25 A	=	=	К		393		н	<u> </u>	20	=
Svrta Svrtamaki				0	=======================================	= -	5	=	=	229	192 —		=	T —	_	=
Sysmäjärvi Säkäniemi				ŏ	=	= =	= =	=	К	1 186	602, 603	=	=	T	_	=
Sänkimäki Sääksiärvi				ŏ o	=	= 1	=	=	К	603	253	- E	=		=	=
Taavetti Tahkoluoto				ŏ o	723	=	18	=	-	452	404	Ē	=		=	=
Taipale Talviainen				ŏ	829	_ 25 ^		-	÷			-	=	=	-	_
Talvivaara	80	60	550	0	829 732 600	25 A —	=	_	=		=	=	=	T	=	K
TAMPERE	80	80				1500 V, 63 A	_		_	1 022	006, 007, 340	-	H	_	_	_
rampere station Tampere l'érvensivu	500	500	550	0	51/		= =	- к -	=	1 022	006, 007, 340	1 -	H -	=	KR KR	=
ramoere cargo			l	ø	780	1500 V. 63 A	15	1 - 1	ı –	1 407	001, 331, 332, 333, 339, 395, 996 Y	Y		T	22	K

															i.		
Tampara Viinikka Tapanila Tapavainola				0	966	25 A	134	K	Y	4 079	225. 226. 227. 228. 229. 230. 231. 232. 722	-	-	-	T	_	К
Tapanila Tapanalpola	272	272	550	2	789	= =	= =	=				_	=	H	= =	=	
Tavastila	47	47	265	1	-	-	_	-	-				-	н	-	_	-
Tervatoki	171	171	265	1	-	-	_	-	-			-	-	н	-	_	-
Tervola	231	301	265 550	2	709	25 A	11	-	К			_	-	Н	-	-	-
Tavastila Tervaloki Tervola Tesoma Teuva	263	263	550	1	_	25 A	_	-	К			-	-	н		_	-
Tikkala Tikkaperä TIKKURILA				ō	1029		_	_	_			-	-	-	-	_	_
Tikkaperä				0	925	-	-	-	-			-	-	-	-	-	_
TIKKURILA																	
Hevukoski Hiekkahariu Tikkurile station	255	526	550	0	_	= =	= =	_		201	244	_	=	Н	-	_	_
71kkurila station	320	445	550	6	368	=	30	=	К .	381 564	002, 003	=	=	H	ī	=	
Tohmajärvi				0	735	-	_	-	K	917 3 275	272 274	-	-	-	T	-	-
Toitala Toivala	450	450	550	4	677	25 A	-	-	K	3 275	072, 073, 609, 610, 611, 612, 614, 697	Y	-	Н	T	Y	=
Toivala Toisa	220	220	550	0	749	25 A	-	_	К	219	003	-	-	_	Т	_	_
Tommola	220	220	330	0	_	_	=	=	_			=	_	_	=	=	_
Tommola Torkkeli TORNIO				ō	786	-	-	-	-			_	-	-	-	-	-
TORNIO	(101)	(157)	(265)	(2)	***	63 A	24			1 904	012, 013, 016	_		_	т		-
Tornio station Tornio-raja	(101)	(15/)	(205)	(2)	296 —	- 63 A		K	K	1 904	012, 013, 016	_	-			=	_
Tornio-Itainen	297	297	550	1	_	-	_	_	_			_	-	н	-	KR	_
Tornio-Itäinen Tuomarila	297 220	297 222	550	2	-	-	-	-	-			-	-	Н	-	_	-
Tuomioia				0	940	-	_	-	_	678 846	504	_	-	-	T	KR	_
Turenki	170	170	550	2	1195	-	-	-	К	846	204, 205	-	-	н	T	_	-
TURKU Kunittee Turku station	418	418	550	2	Railway vard construction work in progress	-	-	-	-			-	-	н	-		-
Turku station	250 359	347	550	2	Railway yard construction work in progress	1500 V. 63 A	-	K	-	Railway yard construction work in progres	ss Railway yard construction work in progress	_	Y	Н	T	-	K
Turku satama	359	430	550	2	Railway yard construction work in progress	63 A		-				-	-	Н	-	_	
Turku caree Tuupovaara		(200)	(265)	(1)	303	25 A	10 14	_	K Y K	2 646 603	102, 103, 104, 105, 106, 107, 108	_	-	=	T T	=	K
Tuuri	66	66	550	1	_	-	-	-	K				-	н	-	-	-
Törmä				0	857	-	-	-	<u> </u>			-	-	-	-	-	-
Törölä Ulmaharju	00	98	550	0	1239	 25 A		-	_	3.22	356 357 350 350	-	-	-	_	_	-
Umanarju	98	- 58	550	1	805	25 A	-	_	KY	2 263 157	356, 357, 358, 359	=	=	н н	Ţ	=	_
Uriala Utajärvi	165	165	265	2	732 967	=	25	= =	K			_	= =	н	-	=	=
Utti				0	_	-	101	-	-			_	-	-	T	_	-
Uusikaupunki Uusikylä	120	(66) 120	(265) 550	(1)	757 1382	-	<del>-</del>	=	_	513 504	453 609, 614, 616	_ Y	-	-	Ţ	-	-
Vaaiakoski	120	120	550	2	1382 725		14	=	K	304	609, 614, 616	<u> </u>	= -	н_	T	=	=
Vaala Vaarala	182	182	265	2	1019	25 A	25	_	K			_	-	н	-	_	_
Vaarala				0	_	-	-	-	K			-	-	-	-	-	_
Vaasa Vahojärvi	258	258	550	1	428 705	1500 V. 63 A		_		915	832, 833	=	=	H	=	=	
VATNIKKAI A				0	703	_	_	_	_				_	_	_	_	_
Valnikkale station	482	484	550. 265	3	1134 1371	-	-	_	K	264	423	-	-	н	T	-	K
Valnikkala carao Valnikkala-rata				0		25 A	50	K	Y	2 544	309, 310, 311, 312, 313, 322, 421	_	Y	-	T	-	K
Vainikkala-raia	270	270	550	0	-	=	-	=	-			-	-	_ H	-	=	=
Valimo Valkeakoski	2/0	2/0	550	0	=	= =	54		К .			=	=	-	T	=	_
		(44)	(265)	(1)	-	-	=	-	K			_	-	-		-	-
Valtimo Vammala Vanattara				0	_	=		_	K	798	002	-	-	=	T	_	=
Vammala	251	251	550	3	843	=	128	_	Y -			_	=	н		=	
Vantaankoski	230	230	550	2	=	=	=	=	=			=	=	н	=	=	
Varkaus	180	213	265	2	728	63 A	124	K	KY	1 893	105, 106, 108, 109	-	-	Н	T	KR	-
Vartius Vartius-raja				0	1028	25 A		-	К			=	-	=	Т	=	_
Vasikkahaka				0			= =	_				_	_			=	=
Vaskiluoto				0	_	-	Y	-	KY			-	-	-	T	_	_
Vehkala	230	230	550	2		-	_	_	_			_	-	Н	-	_	_
Venetmäki				0	825	-	-	_	_			=	-	-	-	=	_
Vesanka Viekki Vierumäki				0	= =	= =	-	=	K K	1 500	652, 653	_	=	= =	T .	=	
Vierumäki				ō	_	-	92	-	K			_	-	-		-	
Vihanti Vihtari	450	450	550	2	802	<del>-</del> .	_	-	KY	602	404	-	-	н	Ţ	-	=
	58	98	265	2	562 710	25 A	134	_	K —	706	303, 304	_	-	н			
Viiala	170	170	550	2	_	-	-	_	-			-	-	н	-	=	-
Viinijärvi	132	186	265	2	692	25 A	-	-	-			-	-	Н	-	-	-
Viinijärvi Viinijärvi Viilähde Viippula Vinnilä Virkamies	120 112	120 112	550 550	2	 694	25 A		_	_	~~	201, 206, 212	=	-	H	т	=	=
Vinnila	112	112	220	0	694	25 A		=	К	962	201, 200, 212	_	=	н	-	=	
Virkamies				0	_	_	=	=	_			-	-	=	=	_	_
Voitti Vuohiiärvi				0	761	-	_	-	-			-	-	_		_	-
Vuohitärvi				0	710	-	15	К —	-		234. 235	_	=	-	T	_	-
Vuotoki Vuokatti		(141)	(265)	(1)	760 586	25 A		_ =	KY	1 275	001, 003	_	=			=	
Vuonislahti	55	55	265	1	-	-	_	-	-	686	452	_	-	н	Ť	-	-
Vuonislahti Vuonos				0	-	-	16	-	-			-	-	=	-	-	-
Vuosaari YKSPIHLAJA				0	796	-		-	-	6 358	See information in the table below	-	-		т	_	-
Yenthinia carno				0	767	_	_	-	KY	773	004, 030, 060	_	-	_	т	_	K
Yksothiafa cargo Yksothiafa vätiratapiha				0	939	63 A	-	-	KY	1 099	011, 040, 041	-	-	-	Ť	_	ı k
Ylistaro	175 167	175 167	265	1	-	-	-	-	-			_	-	_	-	-	-
Ylitornio	167	167	265	1	968	25 A	-	_	_	F10	7002	-	-	н	-	-	=
Ylivalli Ylivieska	436	450	550	3	988 798	63 A	113	=	KY	519 3 851	See information in the table below	_	=	н	T	20	
Ylivieska Yläkoski	130		220	ő	=	-	-	_	Y			-	-	_	Ť	_	-
Ylämylly				0	_	-	77	-	K			-	-	-	Т	-	-
Ylöiärvi Ypykkävaara				0	699 1050	= =	62	_	K			=	=	= =	Ţ	=	= =
Āetsā				0	924	-		-	K			_	-	-	-	_	
Āetsā Ahtāri	82	224	265	2	614	-	-	-	=	599	533	-	-	Н	T	-	=
Ammānsaari		(96)	(265)	0	 815	25 A	-	-	K	1,000	471, 495, 496, 498	_	-	-		-	-
Aanexoski		(75)	(265)	(1)	815	25 A	14	_	K	1 989	471, 433, 436, 438	- 1	-	-	т т	_	-

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Traffic operating point	Traffic operating point-specific storage sidings
Ilmala railway yard	131, 132, 133, 134, 135, 136, 137, 138, 141, 142, 143, 144, 145, 146, 147, 149, 154, 155, 156, 157, 158, 159, 161, 162, 163, 164, 165, 166, 167, 168, 169, 601, 602, 603,
	604, 605, 606, 709, 710, 711, 712, 731, 732, 734, 735, 736, 737, 738, 743, 773, 774, 775, 776, 777, 778, 782, 783, 784, 785, 786, 787, 788, 792, 793, 794, 795, 796, 797,
	798 799 800 801 802 803 804 812 813 814
Joensuu station	006, 007, 008, 022, 023, 024, 025, 026, 027, 028, 301, 303, 304, 305
Jyväskylä	003, 008, 009, 010, 011, 012, 013, 020, 021, 023, 024, 044, 045, 046, 140, 141, 142, 143, 301
Kotka Mussalo	702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716
Kotka cargo	522, 523, 524, 525, 526, 527, 528, 529, 530, 532, 533, 534, 535, 536, 537, 538, 540
Kouvola station	001, 003, 004, 008, 009, 010, 051, 310
Kouvola lajittelu	102, 116, 117, 120, 125, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 156, 162, 163, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769,
	770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780
Niirala	176, 177, 178, 179, 180, 181, 182, 184, 185, 186, 188
Pieksämäki lajittelu	771, 772, 778, 779, 787, 810, 812, 813, 814, 815, 816, 817, 818, 822, 823, 824, 825, 826, 827, 831, 832, 833, 834, 835, 836, 839, 843, 844, 845, 846, 847
Pieksämäki Temu	153, 159, 160, 161, 162, 164
Pori	032, 033, 034, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 814, 815
Seinäjoki station	305, 307, 308, 310, 380, 381, 845, 852, 853, 854, 855, 856, 857, 858, 859, 860
Vuosaari	901, 902, 903, 904, 905, 906, 907, 908, 909, 911, 912
Ylivieska	006, 007, 008, 009, 010, 011, 016, 017, 023, 024, 025

Name	Second name	Abbreviation	Commercial name	Туре	Km Hki	Line section	Municipality	CTC/manual	Private sidings	Shunting
Haimoo		Hmo			87+700	Hyvinkää–Karjaa	Vihti	K		
Heikkilänkan		Hg			762+500	Oulu-Kontiomäki	Oulu	K		
Honkaranta		Hkr			572+882	Iisalmi–Ylivieska	Kiuruvesi	K		
Iisalmen		Ilk			553+399	Iisalmi–Ylivieska	Iisalmi	K		
kolmioraide										
Jäniskorpi		Jnk			586+419	Seinäjoki–Oulu	Kannus	K		
Karvoskylä		Kvä			662+676	Iisalmi–Ylivieska	Nivala	K		
Kiilinkangas		Kkg			299+490	Kouvola-Joensuu	Lappeenranta	K		
Kuninkaanmä		Knm			38+500	Kerava–Vuosaari	Vantaa	K		
Laihalampi		Lhl			296+900	Tampere-Jyväskylä	Jämsä	K		
Lapinkylä		Lpk			19+900	Vantaankoski-Havukoski	Vantaa	K		
Latukka		Ltk			563+440	Pieksämäki–Kontiomäki	Iisalmi	K		
Nuojua		Nua			835+955	Oulu-Kontiomäki	Vaala	K		
<b>Pappilankang</b>		Pkg			308+633	Kouvola–Joensuu	Lappeenranta	K		
Petas		Pet			17+170	Vantaankoski-Havukoski	Vantaa	K		
Puikkokoski		Pui			665+680	Kontiomäki–Vartius-raja	Paltamo	K		
Puolukkasuo		Puo			23+510	Vantaankoski-Havukoski	Vantaa	K		
Rahkola		Rla			412+650	Orivesi-Seinäjoki	Seinäjoki	K		
Rasimäki		Rmk			602+460	Pieksämäki-Kontiomäki	Kajaani	K		
Raudaskylä		Rkä			691+015	Iisalmi–Ylivieska	Ylivieska	K		
Ruoneva		Rnv				Seinäjoki-Oulu	Siikajoki	K		
Ruskeasanta	Rödsand	Rs			28+760	Vantaankoski-Havukoski	Vantaa	K		
Saarela		Srl			594+018	Seinäjoki–Oulu	Kannus	K		
Salmenmäki		Sal				Seinäjoki–Oulu		K		
Temmesjoki		Tmj				Seinäjoki–Oulu	Liminka	K		
Tuomaanvaar		Tva			682+300	Kontiomäki-Vartius-raja	Ristijärvi	K		
Tupavuori		Tvu			260+100	Kouvola–Joensuu	Lappeenranta	K		
Tupos		Tup			736+500	Seinäjoki–Oulu	Kempele	K		
Viinikkala	Vinikby	Vkl			22+590	Vantaankoski-Havukoski	Vantaa	K		
Yllikkälä	_	YII			268+500	Kouvola-Joensuu	Lappeenranta	K		

Name	Min. platform length	Max. platform length	Laiturikorkeus	Laituriraiteiden lukumäärä	Mitoittava raidepituus (cargoliikenne)	Power supply	Side loading platform length	End loading	Loading site	Crane	Fuel	Passenger traffic	Freight traffic	Kääntöpöytiä	VAK-ratapihat
Name	Min. platform length	Max. platftrorm length	Platform height	Number of tracks with platforms	Design train length (freight traffic)	Power supply	Side loading platform length	End loading	Loading site	Crane	Fuel	Passenger traffic	Freight traffic	Turntables	Railway yard for
	[m]	[m]	[mm]		[m]	[400 V, A]	[m]	nlattorm		Tt1					dangerous goods
Haimoo															
Heikkilänkangas															
Honkaranta															
Iisalmen															
kolmioraide															
Jäniskorpi															
Karvoskylä															
Kiilinkangas															
Kuninkaanmäki															
Lapinkylä															
Latukka															
Pappilankangas															
Petas															
Puikkokoski															
Puolukkasuo															
Rasimäki															
Raudaskylä															
Ruoneva															
Ruskeasanta	23	0 230	5	50 2	2							K			
Saarela															
Salmenmäki															
Temmesjoki															
Tuomaanvaara															
Tupavuori															
Tupos															
Vehkala															
Viinikkala	23	230	5	50 2								K			
Yllikkälä															

#### Railway traffic operating points/Non-Finnish border stations

Name	Second name	Abbreviation	Commercial name	Туре	Km Hki	Line section	Municipality	CTC/manual	Private sidings	Vaihtotyön mahdollisuus
Name	Second name	Abbreviation	Commercial name	Туре	Km Hki	Line section	Municipality	Traffic control	Private sidings	Shunting
Buslovskaj		Bsl			288+000	Vainikkala-raja –		K		
а						Viipuri				
Haparanda	Haparanda	Нра			888+130	Tornio-raja – Boden	Haparanda	K		
Kivijärvi		Kiv			759+800	Vartius-raja –		K		
						Kostamus				
Svetogorsk		Stg			338+200	Imatrankoski-raja –		K		
						Kamennogorsk				
						(Antrea)				
Värtsilä		Vrs			553+300	Niirala-raja –		K		
						Matkaselkä				

Name	Lyhin laituripituus	Pisin laituripituus	Laiturikorkeus	Laituriraiteiden lukumäärä	Mitoittava raidepituus (cargoliikenne)	Sähkövirran saanti	Side loading platform	End loading	Kuormaus-kenttä	Crane	Fuel	Henkilöliikennettä	cargoliikennettä	Kääntöpöytiä	VAK-ratapihat
							length	nlatform							
Name	Min. platform length	Max. platftrorm	Platform height	Number of tracks with	Design train length (freight traffic)	Power supply	Side loading platform	End loading	Loading site	Crane	Fuel	Passenger traffic	Freight traffic	Turntables	Railway yard for
		length		platforms			length	platform							dangerous
		_		[			-								annde
	[m]	[m]	[mm]		[m]	[400 V, A]	[m]			[t]					
Buslovskaja															
Haparanda															
Kivijärvi															
Svetogorsk															
Värteilä															

# Rail loading gauge

Loading gauge (KU) means the space inside which the load on an open wagon must remain, when the wagon is in the centre position on a straight even track.

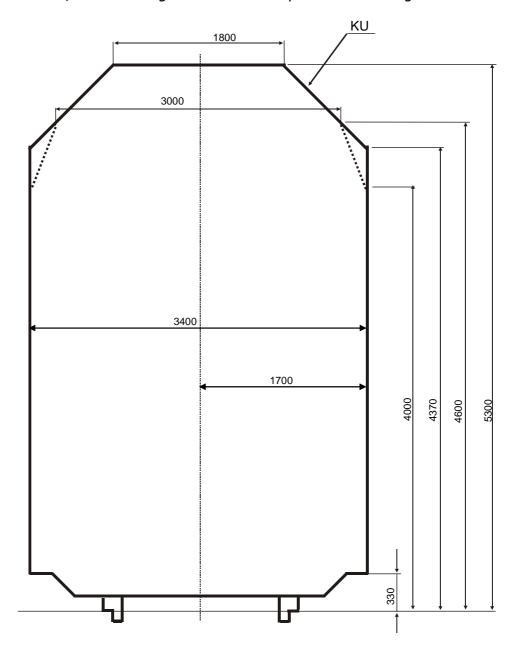


Figure 1. Principal dimensions of the loading gauge

#### Use of the loading gauge

The loading gauge is valid in the whole railway network with the exceptions described below.

The loading gauge may be used for wagons in which the wheelbase or the distance between bogie centres is max. 17.5 m, and the length of the loading area of the wagon outside the wheelbase or the distance between bogie centres is max. 0.2 times the length of the wheelbase or the distance between bogie centres. In other cases, the loading must be examined on a case-by-case basis.

If there is a risk that the load may be displaced laterally outside the loading gauge during transportation, the width of the load must be reduced accordingly. If the displacement of the load may increase the height of the load so that it extends outside the loading gauge, the height of the load must be reduced accordingly.

If the load extends below the floor level of the wagon, the regulations concerning the vehicle gauge (LKU) are applied or the load is considered as an exceptional transport.

#### **Loading gauge restrictions**

A restricted loading gauge is in effect on the bridges on the line section Helsinki–Pasila station – Ilmala railway yard. The loading gauge on these bridges is marked with a dashed line (-----) in the loading gauge drawing (Figure 1).

There are loading gauge restrictions on many industrial and other sidings and they must be taken into account in local railway operations.

# Transport terms and conditions for vehicles and other loading units exceeding the loading gauge

Lorries, lorry trailers and containers exceeding the loading gauge may be transported on the following conditions: loading instructions for lorries, lorry trailers and containers exceeding the loading gauge must be added to the railway undertaking's safety management system.

Other transports exceeding the loading gauge are considered as exceptional transports.

#### Loading

Loading of vehicles and other loading units exceeding the loading gauge is permitted if the maximum width of the vehicle is 2,600 mm and its height does not exceed 4,200 mm, when the wagon's floor height is 1,100 mm.

The load height from the rail upper surface may not exceed 5,300 mm and a maximum  $\pm 100$  mm deviation of the lateral load is allowed.

The instructions on loading vehicles onto goods wagons must be observed when wagons intended for vehicle transports (combined transport wagons) are loaded.

The loading dimensions are also shown in Figure 2.

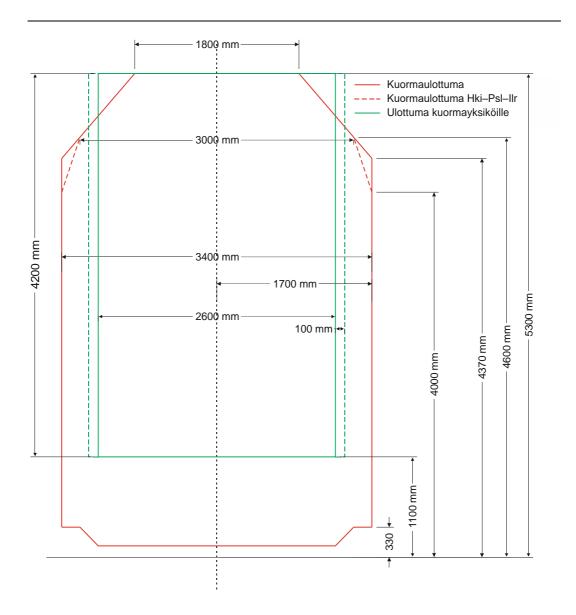


Figure 2. Loading dimensions for vehicles and other loading units exceeding the loading gauge

# Line sections and tracks on which wagons exceeding the loading gauge are allowed

Vehicles and loading units exceeding the loading gauge may be transported on the line sections listed in Tables 1 and 2 in accordance with the rolling stock category shown in Table 3. The line sections are also shown in Figure 3.

At the traffic operating points that are not listed for different line sections in the tables, all through routes meeting the requirements specified in the rules applying to the use of safety installations may be used.

If a track with a number is given under a traffic operating point in the table and the track is divided into sections specified by a letter, the track number without the letter refers to all such sections.

If these transports require shunting operations on tracks that are not mentioned here, the tracks must be specified locally by a railway technology specialist.

Safety regulations must be observed when wagons are loaded, inspected and unloaded on or in the vicinity of electrified tracks.

Table 1. Wagon length ≤ 24.0 m.

Wagon length ≤ 24.0 m	
I	Helsinki–Kemi–Tornio/Rovaniemi
II	Helsinki–Karjaa–Turku
III	Hanko–Hyvinkää
IV	Uusikaupunki–Turku–Toijala
V	(Tampere)-Lielahti-Män-
	tyluoto/Tahkoluoto/Rauma
VI	Seinäjoki–Vaskiluoto
VII	Tampere-Jämsä-Pieksämäki
VIII	Riihimäki–Kouvola–Ämmänsaari
IX	Kouvola–Lieksa
X	Pieksämäki–Varkaus–Joensuu
XI	Kontiomäki–Oulu
XII	Viinijärvi-Siilinjärvi
XIII	Kouvola-Kotka/Kotka Mussalo
XIV	Lahti-Loviisan satama
XV	Kerava-Hakosilta
XVI	Luumäki-Vainikkala-raja
XVII	Rovaniemi–Kemijärvi

Table 2. 24.0 m  $\leq$  wagon length  $\leq$  26.0 m.

24.0 m ≤ wagon length ≤ 26.0 m	
XVIII	Helsinki–Oulu
XIX	Riihimäki–Kouvola–Vainikkala-raja
XX	Kerava–Hakosilta
XXI	Kouvola-Kontiomäki-Oulu-Kemijärvi
XXII	Lielahti-Kokemäki
XXIII	Parkano-Niinisalo
XXIV	Kerava–Vuosaari

#### **Wagon stock of combined transports**

The combined transport stock is divided into two categories on the basis of their principal dimensions. The line sections on which the stock may be used are listed in Tables 1 and 2.

Table 3. Principal dimensions of the stock used for combined transports

Category	Length [s] over buff- ers/max. coupling length	Distance between bogie cen- tres	Maximum wheel- base (distance between in- ner wheel- sets)	Example
Α	s ≤ 24.0 m	18.4 m	16.6 m	Rbnqss
В	24.0 m ≤ s ≤ 26.0 m	20.0 m	18.2 m	Sdggnqss-w

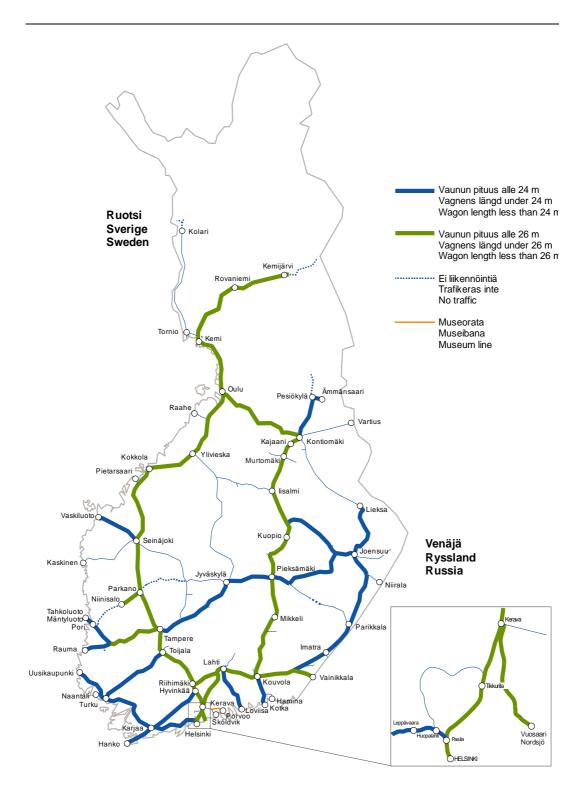


Figure 3. Using vehicles exceeding the loading gauge on different line sections

### Structure gauge

No fixed installations or equipment may be placed within the structure gauge envelope.

The form and dimensions of the structure gauge (ATU) on a straight track, on an open line and in the railway yard are shown in Figure 1. The space required for the mounting of the catenary structure and for the passage of the pantograph on electrified lines is indicated by the broken line D-E-F-G-H-L. The widths of the structure gauge in curves, restrictions on it and more detailed instructions are described in part 2 *Radan geometria* (Track geometry) of the publication *Ratatekniset ohjeet* (RATO).

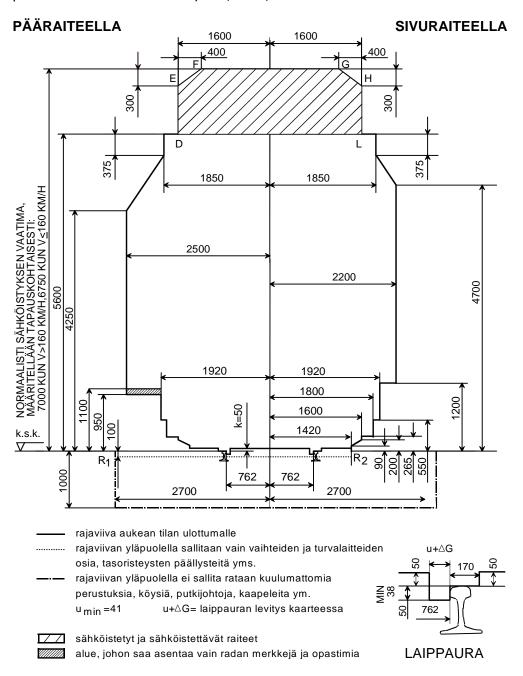


Figure 1. Principal dimensions of the structure gauge.

#### Effective passing clearance

The structure gauge must be observed when new structures and installations are built and mounted in the vicinity of the tracks. The structure gauge or the deviations from it constitute the effective available structure gauge (passing clearance) for exceptional transports. The details of the passing clearance on each line section are collected and continuously updated by the track maintenance providers.

## Use of overweight wagons

A wagon with an axle load exceeding the maximum given for different line sections in the Network Statement's map appendix is overweight for the line section in question. The terms for using wagons built in accordance with OSJD/GOST standards with an axle load exceeding 225 kN are listed in the paragraph below.

The load specified in the wagon load table may not be intentionally exceeded. Any excess load must be unloaded at the first possible traffic operating point, if the load exceeds the permitted load by more than 5% when the maximum axle load is 225 kN or by more than 2% when the maximum axle load is 250 kN.

Overweight wagons must be used in accordance with the regulations on exceptional transports. The wheelsets and the rest of the bogie structure must be inspected before use.

A permission to use overweight wagons can be granted if this is necessary to meet occasional transport needs. The party granting the permission for the overweight transport must notify the track manager of the transport so that the condition of the track superstructure can be monitored.

# Using overweight wagons in domestic traffic and in western transit traffic

When the maximum axle load of a wagon is 225 kN, the speed limits for such wagons (qt most 2 wagons) carrying excess weight are as follows:

Surface structure category	Maximum axle load kN	Speed limit km/h
Α	225	201
B1	235	35
B2	235	50
C1, C2, D	235	80

Using wagons built in accordance with OSJD/GOST standards with an axle load exceeding 225 kN on line sections belonging to superstructure categories C and D, on which the maximum permitted axle load is 225 kN

The maximum axle load is 250 kN.

Wagons built in accordance with OSJD/GOST standards with an axle load between 225 kN and 250 kN may run at speeds imposed on rolling stock with axle loads exceeding 225 kN, however, the speed not exceeding 60 km/h.

Using wagons built in accordance with OSJD/GOST standards with an axle load exceeding 225 kN on line sections belonging to superstructure categories C and D, on which the maximum permitted axle load is 225 kN

#### a) Axle load between 225 kN and 235 kN

The maximum axle load is 235 kN.

Individual wagons built in accordance with OSJD/GOST standards (at most two wagons) with an axle load between 225 kN and 235 kN may run at speeds imposed on rolling stock with axle loads up to 225 kN, however, at speed not exceeding 60 km/h.

#### a) Axle load exceeding 235 kN

If the axle load of a wagon built in accordance with OSJD/GOST standards exceeds 235 kN, the Rail Traffic Management Centre grants transport permits for axle loads of up to 245 kN on the line sections listed below. For other line sections, the permit is granted by Engineering and Environment of the Finnish Transport Infrastructure Agency. The wagons must run as exceptional transports at the speeds specified in the permit.

Pieksämäki-Kontiomäki Kerava-Sköldvik Kokemäki–Hariavalta Pieksämäki-Joensuu Kokkola-Ykspihlaja Siilinjärvi–Viinijärvi Riihimäki-Hakosilta Iisalmi-Ylivieska Luumäki-Joensuu Oulu-Laurila Imatra tavara–Imatrankoski-raja Laurila-Tornio Niirala-raja-Säkäniemi Tornio-Röyttä Joensuu-Uimaharju Oulu-Kontiomäki Kouvola-Pieksämäki Kontiomäki–Vartius-raja

# Using wagons built in accordance with OSJD/GOST standards with axle loads exceeding 225 kN on line sections belonging to superstructure category B

Individual wagons built in accordance with OSJD/GOST standards (at most two wagons) with a maximum axle load of 235 kN may temporarily run as exceptional transports on line sections belonging to superstructure category B1 at a speed of 35 km/h, and on line sections belonging to superstructure category B2 at 50 km/h. The permit is granted by the Rail Traffic Management Centre.

# Using wagons built in accordance with OSJD/GOST standards with axle loads exceeding 225 kN on tracks and in turnouts with K30 and K33 rail profiles

Wagons built in accordance with OSJD/GOST standards with axle loads exceeding 225 kN may not run on tracks and in turnouts with K30 and K33 rail profiles.

# Use of wagons built in accordance with OSJD/GOST standards

# Use of goods wagons built in accordance with OSJD/GOST standards in Finnish domestic traffic

Goods wagons built in accordance with OSJD/GOST standards can be used in Finnish domestic traffic in the state-owned railway network on line sections with minimum rail weight of 54 kg/m and no rail spikes.

As opposed to the above conditions, transport is also permitted on the following track sections:

- Pori–Aittaluoto
- Lahti-Loviisa
- Lahti-Heinola
- Lieksa-Vuokatti

The permitted lines are shown in Figure 1.

However, use is permitted on sidings at traffic operating points or their parts with a minimum rail weight of 43 kg/m. However, when the wagons are used on sidings, the conditions set out on page 3 of this appendix must be observed.

If a goods wagon built in accordance with OSJD/GOST standards has a wheel defect (high impact load, uneven loading, spalling), the conditions specified in the FTIA's guideline 'Junaliikenteen ja vaihtotyön turvallisuussäännöt' (Jt) must be adhered to.

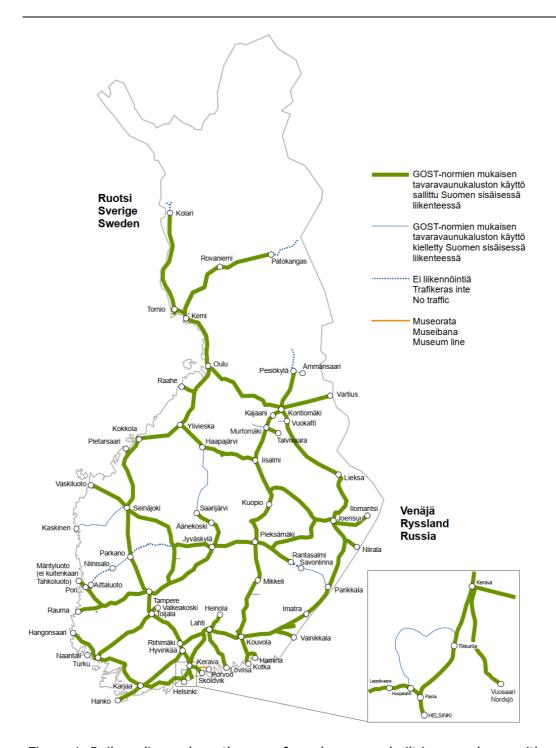


Figure 1. Railway lines where the use of goods wagons built in accordance with OSJD/GOST standards is permitted in Finnish domestic traffic.

# Using goods wagons built in accordance with OSJD/GOST standards on sidings

If the train contains at least one goods wagon built in accordance with OSJD/GOST standards, the maximum speed of the train on the sidings of the following traffic operating points or their parts is 20 km/h:

#### Helsinki-Turku satama

Kauniainen

# Huopalahti-Havukoski Hyvinkää-Karjaa Nummela Karjaa-Hanko Turku-Uusikaupunki Uusikaupunki-Hangonsaari Raisio-Naantali Helsinki-Riihimäki Kerava-Hakosilta Kerava-Sköldvik Kerava-Vuosaari Riihimäki-Tampere Toijala-Turku

Tampere-Seinäjoki

Toijala-Valkeakoski

Ylöjärvi Seinäjoki station Seinäjoki cargo

Lielahti-Kokemäki

\_

Kokemäki-Pori

Pori

Pori-Mäntyluoto

Pori

Mäntyluoto

#### Mäntyluoto-Tahkoluoto

Mäntyluoto

#### Kokemäki-Rauma

#### Niinisalo-Parkano

#### Seinäjoki-Vaasa

Seinäjoki station Seinäjoki cargo

#### Seinäjoki-Kaskinen

Seinäjoki station Kaskinen

#### Seinäjoki-Oulu

Seinäjoki station Seinäjoki cargo Ylivieska Oulu cargo

#### Pännäinen-Pietarsaari

Pietarsaari

#### Tuomioja-Raahe

#### Riihimäki-Kouvola

#### Kouvola-Kuusankoski

\_

#### Lahti-Heinola

Heinola

#### Lahti-Loviisan satama

#### Kouvola-Kotka

#### Kotka Hovinsaari-Kotka Mussalo

#### Juurikorpi-Hamina

#### Kouvola-Joensuu

Joensuu Peltola Joensuu station

#### Luumäki-Vainikkala-raja

\_

#### Imatra tavara-Imatrankoski-raja

#### Niirala-raja-Säkäniemi

#### Joensuu-Ilomantsi

Joensuu Peltola Joensuu station

#### Joensuu-Nurmes

Joensuu Peltola Joensuu station

#### Nurmes-Kontiomäki

#### Kouvola-Pieksämäki

Pieksämäki station Pieksämäki Temu Pieksämäki lajittelu Pieksämäki cargo

#### Mynttilä-Ristiina

Ristiina

#### Pieksämäki-Kontiomäki

Pieksämäki station Pieksämäki Temu Pieksämäki lajittelu Pieksämäki cargo Kuopio station Kuopio cargo Murtomäki

#### Pieksämäki-Joensuu

Pieksämäki station Pieksämäki Temu Pieksämäki lajittelu Pieksämäki cargo Varkaus Heinävesi Joensuu station Joensuu Peltola

#### Murtomäki-Talvivaara

#### Murtomäki

#### Varkaus-Kommila

Varkaus Kommila

#### Huutokoski-Rantasalmi

\_

#### Savonlinna-Parikkala

Kerimäki Punkaharju

#### Siilinjärvi-Viinijärvi

\_

#### Tampere-Jyväskylä

#### Orivesi-Seinäjoki

Vilppula Alavus

#### Vilppula-Mänttä

Vilppula

#### Haapamäki-Jyväskylä

\_

#### Jyväskylä-Pieksämäki

Pieksämäki station Pieksämäki Temu Pieksämäki lajittelu Pieksämäki cargo

#### Jyväskylä-Äänekoski

#### Äänekoski-Haapajärvi

Haapajärvi

#### Iisalmi-Ylivieska

Pyhäsalmi Haapajärvi

#### Pyhäkumpu erkanemisvaihde- Pyhäkumpu

#### Oulu-Laurila

Oulu cargo

#### Laurila-Tornio-raja

#### Tornio-Kolari

#### Laurila-Kemijärvi

Rovaniemi Misi Kemijärvi

#### Kemijärvi-Patokangas

Kemijärvi

#### Oulu-Kontiomäki

Paltamo Oulu cargo

## Kontiomäki-Ämmänsaari

Hyrynsalmi Pesiökylä

#### Kontiomäki-Vartius-raja

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## Maximum speeds of rolling stock categories

This appendix presents the maximum speed for each rolling stock category at different superstructure classes. Speed limits lower than those listed here may be imposed, and the lower speed limit is always mandatory.

The rolling stock for which the Finnish Transport and Communications Agency has issued authorisations for placing in service and for placing on the market valid until further notice is listed in the tables below. A rolling stock category is added to the list after it has received authorisation for placing in service and placing on the market.

Table 1. Maximum permitted speeds of tractive stock and railcars.

Series	Surface structure category						
	A¹	B <sub>1</sub>	B <sub>2</sub>	C <sub>1</sub>	C <sub>2</sub>	D	
Dv12	<b>50</b> <sup>2, 3</sup>	100	110	125	125	125	
Dr14 (with added weight)	-	50	75 <sup>4</sup>	75 <sup>4</sup>	75 <sup>4</sup>	75 <sup>4</sup>	
Dr16	-	70	110	140 <sup>5</sup>	140 <sup>5</sup>	140 <sup>5</sup>	
Dv17 9810 6003070-8	30	40	40	40	40	40	
Dr17 9810 6006010-1	-	50	50	50	50	50	
Dr17 9810 6007001-9	30	65	65	65	65	65	
Dr18	_6	90	90	90	90	90	
Dr19	_6	60	120	120	120	120	
Dv19 9810 8000048-3	20	20	20	20	20	20	
Dr20	_6	80	90	120	120	120	
Dr21	_6	60	60	60	60	60	
Dr25 9810 8029002-7	20	25	25	25	25	25	
Dr25 9810 8021043-9	16	16	16	16	16	16	
Dr25 9810 8129002-6	20	25	25	25	25	25	
Dr25 9810 8129003-4	20	25	25	25	25	25	
Dr25 9810 8129159-4	10	10	10	10	10	10	
Dr25 9810 8129166-9	14	14	14	14	14	14	
Dr27 9810 8121053-7- 9810 8121054-9	8	8	8	8	8	8	
Dr30 9810 1002001-5	60	60	60	60	60	60	
Dr35 9810 8039011-6	20	60	60	60	60	60	
Dr35 9810 8039013-2	35	60	60	60	60	60	
Dr35 9810 8128001-9 <sup>7</sup>	20	20	20	20	20	20	
Dr35 9810 8139005-7	_	30	30	30	30	30	
Dr35 9810 8139006-5	_	30	30	30	30	30	
Dr45 9810 8049001-5	_	60	60	60	60	60	
Sk 9010 9981201-7	7	7	7	7	7	7	

<sup>&</sup>lt;sup>1</sup> For tracks belonging to superstructure category A, see 'Use of tractive stock on tracks belonging to superstructure category A'.

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<sup>&</sup>lt;sup>2</sup> Max. permitted speed in curves with a radius of under 600 m is 40 km/h. Max. permitted speed on the line section Äänekoski–Haapajärvi is 60 km/h.

<sup>&</sup>lt;sup>3</sup> Max. permitted speed in the diverging section of K30 turnouts is 20 km/h.

<sup>&</sup>lt;sup>4</sup> When towing, max. permitted speed is 80 km/h.

<sup>&</sup>lt;sup>5</sup> Max. permitted speed without wagons is 135 km/h (alone or in multi-heading).

<sup>&</sup>lt;sup>6</sup> Use of and speeds on category A line sections is on a case-by-case basis.

<sup>&</sup>lt;sup>7</sup> When towing, max. permitted speed is 60 km/h.

Series	Surface structure category					
	A <sup>1</sup>	B <sub>1</sub>	B <sub>2</sub>	C <sub>1</sub>	C <sub>2</sub>	D
Sk 9010 9981202-5	7	7	7	7	7	7
Sr1	-	80	100	140	140	140
Sr2	1	80	100	180 <sup>8</sup>	200	210
Sr3	1	80	100	180	200	200
Railcars						
Sm1, Sm2	_	90	110	120	120	120
Sm3	_	100	110	180	200	220
Sm4	1	90	110	160	160	160
Sm5	_	90	110	160	160	160
Sm6	_	100	110	180	200	220
Dm12	50	100	110	120	120	120

#### **SMALL-POWER LOCOMOTIVES AND TRACK MOTOR CARS**

(Towing speed is given in brackets if it differs from the maximum permitted speed when the vehicles are moving on their own power.)

Table 2. Maximum permitted speeds of small-power locomotives and track motor cars

Series	Surface structure category					
	$\mathbf{A}^1$	B <sub>1</sub>	B <sub>2</sub>	C <sub>1</sub> , C <sub>2</sub> and D		
Tve1	30 (60)	30 (80)	30 (80)	30 (80)		
Tve2	45 (60)	45 (80)	45 (80)	45 (80)		
Tve4	35	60	80	80		
Tve5	20 (50)	20 (50)	20 (50)	20 (50)		
Tka3-6	60	60 (80)	60 (80)	60 (80)		
Tka7 nos. 168–238 and 243–247	60	80	80	80		
Tka7 (with snowploughs; nos. 168–238)	35 <sup>9</sup>	60 <sup>9</sup> (80)	60 <sup>9</sup> (80)	60 <sup>9</sup> (80)		
Tka7 nos. 239–242	50	80	80	80		
Tka7 (with snowploughs; nos. 239–247)	35 <sup>9</sup>	60 <sup>9</sup> (80)	60 <sup>9</sup> (80)	60 <sup>9</sup> (80)		
Tka7 (with field welding station; nos. 168–238 and 243–247)	35	60	60	80		
Tka8	35	60	80	80		
Tka9 no. 91901	2010	50 <sup>10</sup>	70 <sup>10</sup>	70 <sup>10</sup>		
Otso4 no. 920001	2011	45	45	45		

#### Maximum permitted speeds of machines moving on their own power

<sup>&</sup>lt;sup>8</sup> Max. permitted speed without wagons is 160 km/h. Max. permitted speed in multi-heading is 160 km/h.

<sup>&</sup>lt;sup>9</sup> Max. snowploughing speed is specified in the machine operator's manual.

<sup>&</sup>lt;sup>10</sup> Towing in accordance with the manufacturer's instructions

<sup>&</sup>lt;sup>11</sup> Max. permitted speed on superstructure category A sidings is 20 km/h.

(Towing speed is given in brackets if the machine can be coupled to a train and the towing speed differs from what is stated above.)

Table 3. Maximum permitted speeds of machines when they are moving on their own power

Soules	Surface structure category					
Series	Α	B <sub>1</sub>	B <sub>2</sub>	C <sub>1</sub> , C <sub>2</sub> and D		
Track inspection cars						
Et no. 66	2012	60	60	100		
Ttr1 no. 51	60	80	120	120		
Ttr 99 10 9129 001-5	40	80	120/160	120/160		
Snow sweepers						
Tlh no. 741 <sup>13</sup>	50	60	60	60		
Snowploughs						
Tla 90109691001-2	35	60	60	60		
Rail grinders						
Tkh no. 894 <sup>13</sup>	60	80	80	80		
Track replacement machines						
Trk no. 870	20	20 (50)	20 (80)	20 (100)		
Ballast ploughs						
Tsl nos. 880, 882, 884, 885	70	00	00	90		
and 890 <sup>13</sup>	70	80	80	80		
Tsl no. 883	35	50	60	60		
Tsl no. 888	50	60	60	80		
Tsl no. 889 <sup>13</sup>	20	50	80	80		
Tsl no. 91021	20	70	70	70		
Ballast cleaning machines						
Tsp nos. 891 and 893	20	60	80	80		
Tsp no. 892	50	80	80	80		
Multi-purpose machines						
Ttm1 no. 91101	2014	50	70	70		
Track tamping machines						
Ttk1 <sup>13</sup> nos. 801–803, 821, 823,	60	80	80	80		
831 and 91042	00	00	00	00		
Multi-purpose machines						
Ttk1, nos. 818–820	25 (50)15	25 (50) <sup>15</sup>	25 (50) <sup>15</sup>	25 (50) <sup>15</sup>		
Ttk1 <sup>13</sup> nos. 822, 824-829 <sup>13</sup>	50	50 (80)	50 (80)	50 (80)		
Ttk1 <sup>13</sup> no. 830	60	85 (90)	85 (90)	85 (90)		
Ttk1 <sup>13</sup> nos. 832, 833	50	80	80	80		
Ttk1 no. 834	50 <sup>16</sup>	80	80	80		
Ttk1 <sup>13</sup> no. 91041	60	60	60	60		
Ttk1 no. 91042	60	70	70	70		
Ttk1 no. 9910 9121916-8	_18	80	80	80		

<sup>&</sup>lt;sup>12</sup>Same as the maximum permitted speed on the line section in question, as assessed by a railway technology specialist and a representative of the local maintenance contractor.

<sup>&</sup>lt;sup>13</sup> Max. wheel diameter is 790 mm, which means that caution must be exercised in diamond crossings with slips.

<sup>&</sup>lt;sup>14</sup> Max. axle load with auxiliary wagon is 160 kN (16 t).

<sup>&</sup>lt;sup>15</sup> Max. permitted speed in turnouts is 15 km/h.

<sup>&</sup>lt;sup>16</sup> Max. permitted speed on category A railway yard sidings is 20 km/h.

Contra	Surface structure category					
Series	Α	B <sub>1</sub>	B <sub>2</sub>	C <sub>1</sub> , C <sub>2</sub> and D		
Ttk1 no. 9010 9122002-9	50	80	80	80		
Ttk1 no. 9010 9122003-7	50	80	80	80		
Ttk1 no. 9010 9422001-8	50	80	80	80		
Turnout tamping machines						
Ttk2 nos. 841, 844 and 849 <sup>13</sup>	60	80	80	80		
Ttk2 no. 842 <sup>11</sup>	35	60	60	80		
Ttk2 nos. 850 and 856	20	60	80	90 (100)		
Ttk2 nos. 851–855 <sup>11</sup>	50	50 (80)	50 (80)	50 (80)		
Ttk2 no. 857	20	60	80	80 (100)		
Ttk2 no. 858	<b>-</b> <sup>16</sup>	60	75	90 (100)		
Ttk2 no. 859	20 <sup>16</sup>	60	75	90 (100)		
Ttk2 no. 91051	15	35	50	70 <sup>17</sup>		
Ttk2 no. 9010 9421002-8	_18	80	80	80		
Ttk2 no. 9010 9422845	50	80	80	80		
Ttk2 no. 9010 9424101	50	80	80	80		
Ttk2 no. 9926 0221002-1	80	80	80	80		
UTtk no. 9926 0121006-3	_18	80	80	80		
Ballast compacting machines						
Ttk3 nos. 862 and 863 <sup>11</sup>	60	80	80	80		
Tamping machines						
Ttk4 no. 91501	20	40	40	40		
Ttk5 no. 9010 9121 001-3	_18	80 (100)	80 (100)	80 (100)		
Ttk5 no. 9010 9422001-8	50	80	80	80		
Catenary inspection and						
maintenance vehicles						
Tta nos. 1 and 2	30 <sup>16</sup>	30 <sup>16</sup>	50 <sup>16</sup>	50 <sup>16</sup>		
Tta no. 3	30 <sup>16</sup>	50 <sup>16</sup>	7016	70 <sup>16</sup>		
Tte nos. 21–29	70	100	110	110		
Tte nos. 91201 and 91202	20	60	80	80		
TTe 9910 9131 205-8 and	40	100	100	100		
9910 9131 206-6						
Ttv nos. 6, 9, 12 and 15	50	70	70	90		
Railway cranes						
Tnk4 nos. 982 and 983	15 (20)	15 (50)	15 (60)	15 (60)		
Tnk4 no. 984	15 (50)	15 (60)	15 (60)	15 (60)		
Tnk4, nos. 985–989	15 (60)	15 (60)	15 (60)	15 (60)		
Tnk4 no. 990	15 (20)	15 (50)	15 (60) <sup>19</sup>	15 (60) <sup>19</sup>		
Catenary installation vehicles						
Tnv-sr nos. 911002 and 911003	40 (40)	40 (60)	40 (80)	40 (100)		

#### Maximum permitted speeds of museum rolling stock

<sup>&</sup>lt;sup>17</sup> Max. permitted speed in diamond crossings with slips is 5 km/h, due to the small wheel diameter (440 mm).

18 Use of and speeds on category A line sections is on a case-by-case basis.

19 Towing speed is 80 km/h when the counterweight is carried on the crane trailer.

(Towing speed is given in brackets if it differs from the maximum permitted speed when the vehicles are moving on their own power.)

	Surface structure category					
Series	A <sup>20</sup>	B <sub>1</sub>	B <sub>2</sub>	C <sub>1</sub> , C <sub>2</sub> and D		
Dr12	20 <sup>21</sup>	60 <sup>22</sup>	90	120		
Dr13	20 <sup>21</sup>	100	110	120		
Dv15	60	75 (80)	75 (80)	75 (80)		
Dv16	60	85	85	85		
Hr1	20 <sup>21</sup>	80	100	110 <sup>23</sup>		
Hv1	60	80	80	80		
Hv3	20 <sup>24</sup>	70	70	70		
Pr1	20 <sup>21</sup>	80	80	80		
Tk3	60	60	60	60		
Tr1	20 <sup>21</sup>	80	80	80		
Tv1	60	60	60	60		
Vr1	40 <sup>25</sup>	40	40	40		
Rau2	70	70	70	70		
Dm7	70	95	95	95		
Dm9	50	100	110	120		

#### Use of tractive stock on tracks belonging to superstructure category A

The regulations are listed in the document 'Junaliikenteen ja vaihtotyön turval-lisuussäännöt' (Jt).

<sup>&</sup>lt;sup>20</sup> For secondary lines and railway yard sidings belonging to superstructure category A, see 'Use of tractive stock on tracks belonging to superstructure category A'.

<sup>&</sup>lt;sup>21</sup> May only run on sidings.

<sup>&</sup>lt;sup>22</sup> Max. permitted speed on line sections Orivesi–Haapamäki and Haapamäki–Jyväskylä is 80 km/h.

<sup>&</sup>lt;sup>23</sup> Max. permitted speed without wagons is 100 km/h (alone or in multi-heading).

<sup>&</sup>lt;sup>24</sup> Max. permitted speed in the deflecting section of K30 turnouts is 20 km/h.

<sup>&</sup>lt;sup>25</sup> Max. permitted speed when running alone is 25 km/h.

# Maximum permitted speeds in turnouts and standard diamond crossings

Table 1. Maximum permitted speeds in turnouts and standard diamond crossings.

	Superstructure category					
	Α	B <sub>1</sub>	B <sub>2</sub>	C <sub>1</sub>	C <sub>2</sub>	D
Straight track						
Single turnouts, 60 E 1, short Single turnouts, 60 E 1, long Single turnouts, 54 E 1, long Single turnouts, other Double turnouts Diamond crossings with slips Standard diamond crossings	70  70 70 70 35 35 <sup>2</sup>	100 100 100 100 100 60 <sup>1</sup> 90 <sup>2</sup>	110 110 110 110 110 60 <sup>1</sup> 90 <sup>2</sup>	180 180 140 160 120 60 <sup>1</sup> 90 <sup>2</sup>	200 200 140 160 120 60 <sup>1</sup> 90 <sup>2</sup>	200 220 140 160 120 60 <sup>1</sup> 90
Diverted track						
Short turnouts R = 165 m Short turnouts Short turnouts when axle load exceeds 225 kN Long turnouts R = 500 m R = 530 m R = 900 m, when maximum axle load is 225 kN R = 900 m, when axle load exceeds 225 kN	20¹ 35 — 70 —	20¹ 35 10 — 70 80	20¹ 35 20 — 70 80	20¹ 35 20 60 — 80 60	20¹ 35 20 60 — 80 60	20¹ 35 35 60 — 80 60
R = 2500 m R = 3,000 m	_ _	_ _	_ _	140 —	140 —	140 160
Non-interlocked turnout						
Straight and diverted track	30²	30²	30 <sup>2</sup>	30 <sup>2</sup>	30 <sup>2</sup>	30 <sup>2</sup>

The superstructure categories are listed in the map service of the Network Statement.

<sup>&</sup>lt;sup>1</sup>On a case-by-case basis 90 km/h.

<sup>&</sup>lt;sup>2</sup> Indicated on speed boards

#### Use of the VIRVE network in train traffic

VIRVE is the primary network for voice communications between trains and traffic control. In addition to the VIRVE network, smart phones of commercial networks can also be used for voice communications between shunting foremen and traffic control, and between track work managers and traffic control. The RAPLI application can be used in this process to facilitate the log-in procedure.

### Responsibilities of the Finnish Transport Infrastructure Agency

#### 1.1 VIRVE network subscriptions

The Finnish Transport Infrastructure Agency is responsible for paying the subscription and main user charges of the VIRVE in-cab radio terminals used by train drivers. Train means any unit moving in the state-owned railway network in compliance with the train traffic rules.

In other respects, pricing of the railway voice communication services is in accordance with the <u>terms of use and the price list of the RAILI service (in Finnish)</u>.

#### 1.2 Safety-related voice communication functionalities

The Finnish Transport Infrastructure Agency is responsible for the rail safety-related functionalities of voice communications, such as the application facilitating the log-in procedure.

#### 1.3 Radio network coverage

The Finnish Transport Infrastructure Agency ensures adequate VIRVE reception on trains on open line sections and in railway tunnels, but the agency is not responsible for radio reception in other indoor facilities.

#### 1.4 Recording of phone calls

The Finnish Transport Infrastructure Agency is responsible for recording the phone calls of the traffic control.

Unless otherwise provided in the law, railway operators, private infrastructure managers and companies supplying traffic control services have the right to obtain recordings and identification data of railway voice communications in order to investigate incidents and accidents that have occurred during their operations, prevent future occurrence, as well as develop the safety communications. The right to obtain information on voice recordings only concerns recordings in which the operator or its staff is directly involved.

#### 2. Responsibilities of safety certificate holders

#### 2.1 In-cab radio terminals

The safety certificate holders must acquire the required in-cab radio terminals for their trains and they must ensure that the in-cab radio terminals are purchased, installed and taken into use in accordance with the relevant <a href="Traficom regulation (in Finnish)">Traficom regulation (in Finnish)</a> and the national requirements laid down in the Guidelines of the Finnish Transport Infrastructure Agency 36/2016 - <a href="VIRVE Network Requirements for Hand Portable and Mobile Terminals">VIRVE Network Requirements for Hand Portable and Mobile Terminals</a> <a href="LIVI/5777/06.04.01/2016">LIVI/5777/06.04.01/2016</a>.

Meeting of these requirements ensures that a voice connection between the drivers and the traffic control can be successfully established.

#### 2.2 Other safety-related voice communications in commercial networks

The safety certificate holders must acquire all required radio terminals and subscriptions at their own cost, with the exception of the application facilitating the log-in procedure, which is the responsibility of the Finnish Transport Infrastructure Agency.

The Finnish Transport Infrastructure Agency recommends that train drivers also continue to use spare phones for voice communications and for logging into their duties.

#### 2.3 Disruptions and unexpected disconnection of calls

Radio calls are susceptible to delays and disruptions caused by weather conditions, external radio interference, device and software failures, as well as changes in the network, phones and their accessories. The position of the radiophone in relation to the base station and its user as well as indoor facilities, buildings and structures absorbing radio signals are all factors that may reduce the signal strength. The call may be disconnected during a safety-critical work task, which may seriously impact work and safety because the connection is not automatically restored. It may only be possible to reestablish the connection after the interference has been eliminated. Continuous monitoring of the voice connection and the operations is important to ensure a high level of occupational safety and health.

Other communication devices must be used if the RAILI service is unavailable due to technical disturbance or poor signal strength. The traffic control, or the train drivers, shunting foremen and track work managers must be informed of any disruptions preventing or hindering the use of the network, and of the alternative contact information in accordance with the instructions on voice communications.

# Railway tunnels in the state-owned railway network and restrictions due to bridges, tunnels and vibration

Table 1 lists the following by line section:

- railway tunnels in the state-owned railway network and speed restrictions caused by tunnels
- bridges with access restrictions on rolling stock on the basis of axle load and speed
- speed restrictions due to vibration

Bridges may have access restrictions because the original load-carrying capacity of the bridge is too low, the bridge is in poor condition or it is movable. The maximum speed on the bridges is indicated on speed-restriction boards. The axle loads listed in this appendix may not be exceeded and any excess load must be unloaded at the traffic operating point where it was detected.

The weight limits on bridges do not apply to 6-axle or 8-axle wagons built according to the Russian standard. These wagons may use the bridges with restrictions on the conditions laid down in the transport permit and they must be marked as exceptional transports.

The speed restrictions in tunnels apply to trains containing at least one wagon specified in the table.

Table 1. Railway tunnels and speed limits due to bridges, tunnels and vibration.

Track No.	Line section	Location/Name (tunnel length/EN 15528 category of the bridge and maxi- mum permitted axle load)	Km-lo- cation	Speed limit
001	Helsinki– Karjaa	Espoo (tunnel, 99 m)	21+145- 21+244	All trains 50 km/h Reason: Until the end of tunnel repair work
	Helsinki– Karjaa	Lillgård (tunnel, 187 m)	46+790– 46+977	Single-deck coaches 160 km/h, double-deck coaches 120 km/h, Sm3 180 km/h. Reason: piston effect
	Helsinki– Karjaa	Riddarbacken (tunnel, 273 m)	47+770– 48+043	Single-deck coaches 160 km/h, double-deck coaches 120 km/h, Sm3 180 km/h. Reason: piston effect

Track	Line sec-	Location/Name	Km-lo-	Speed limit
No.	tion	(tunnel length/EN 15528 category of the bridge and maximum permitted axle load)	cation	Speed minit
001	Karjaa– Salo	Bäljens (tunnel, 298 m)	88+924- 89+218	Single-deck coaches 160 km/h, double-deck coaches 140 km/h, Sm3 200 km/h. Reason: piston effect
	Karjaa– Salo	Köpskog (tunnel, 43 m)	90+492- 90+535	Single-deck coaches 160 km/h, double-deck coaches 140 km/h, Sm3 200 km/h. Reason: piston effect
	Karjaa– Salo	Åminne (tunnel, 101 m)	92+391- 92+492	Single-deck coaches 160 km/h, double-deck coaches 140 km/h, Sm3 200 km/h. Reason: piston effect
	Karjaa– Salo	Högbacka (tunnel, 200 m)	94+365– 94+565	Single-deck coaches 160 km/h, double-deck coaches 140 km/h, Sm3 200 km/h. Reason: piston effect
	Karjaa– Salo	Kaivosmäki (tunnel, 99 m)	113+961 - 114+060	Single-deck coaches 160 km/h, double-deck coaches 140 km/h, Sm3 200 km/h. Reason: piston effect
	Karjaa– Salo	Haukkamäki (tunnel, 436 m)	114+304 - 114+740	Single-deck coaches 160 km/h, double-deck coaches 140 km/h, Sm3 200 km/h. Reason: piston effect
	Karjaa– Salo	Harmaamäki (tunnel, 265 m)	115+150 - 115+415	Single-deck coaches 160 km/h, double-deck coaches 140 km/h, Sm3 200 km/h. Reason: piston effect
	Karjaa– Salo	Lemunmäki (tunnel, 775 m)	125+820 - 126+595	Single-deck coaches 160 km/h, double-deck coaches 160 km/h, Sm3 160 km/h. Reason: piston effect
	Karjaa– Salo	Märjänmäki (tunnel, 1,240 m)	126+940 - 128+180	Single-deck coaches 160 km/h, double-deck coaches 160 km/h, Sm3 160 km/h. Reason: piston effect

tunnels and vibration

Track No.	Line sec- tion	Location/Name (tunnel length/EN 15528 category of the bridge and maxi- mum permitted axle load)	Km-lo- cation	Speed limit
	Karjaa– Salo	Lavianmäki (tunnel, 582 m)	137+720 - 138+302	Single-deck coaches 160 km/h, double-deck coaches 160 km/h, Sm3 180 km/h. Reason: piston effect
	Karjaa– Salo	Tottola (tunnel, 531 m)	139+084 - 139+615	Single-deck coaches 160 km/h, double-deck coaches 120 km/h, Sm3 180 km/h. Reason: piston effect
001	Salo– Turku	Halikko (tunnel, 186 m)	150+207 - 150+393	Single-deck coaches 160 km/h, double-deck coaches 140 km/h, Sm3 200 km/h. Reason: piston effect
	Salo– Turku	Pepallonmäki (tunnel, 531 m)	152+420 - 152+951	Single-deck coaches 160 km/h, double-deck coaches 140 km/h, Sm3 200 km/h. Reason: piston effect
002	Kokemäki –Pori	Nakkila: speed restriction due to vibration	305+000 - 306+000	Trains weighing more than 2,500 tonnes containing wagons built in accordance with OSJD/GOST standards: 50 km/h
	Kokemäki –Pori	Ulvila: speed re- striction due to vibration	315+000 - 317+000	Trains weighing more than 2,500 tonnes containing wagons built in accordance with OSJD/GOST standards: 50 km/h
	Kokemäki –Pori	Pori: speed restriction due to vibration	322+000 - 324+000	Trains weighing more than 2,500 tonnes containing wagons built in accordance with OSJD/GOST standards: 50 km/h
	Pori–Män- tyluoto	Pori: speed restriction due to vibration	334+000 - 337+000	Trains weighing more than 2,500 tonnes containing wagons built in accordance with OSJD/GOST standards: 50 km/h
003	Helsinki– Riihimäki	Jokela: speed restriction due to vibration	47+950- 49+950	Trains weighing more than 2,500 tonnes containing wagons built in accordance with OSJD/GOST standards: 40 km/h
004	Jyväskylä – Äänekoski	Kangasvuori (tun- nel, 2,735 m)	380+028 - 382+763	All trains: 50 km/h Reason: condition of the tunnel
				1

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Track	Line sec-	Location/Name	Km-lo-	Speed limit
No.	tion	(tunnel	cation	
		length/EN		
		15528 category		
		of the bridge		
		and maxi- mum		
		permitted axle		
		load)		
005	Kouvola-	Venekallio	204+400	No speed limits due to the tun-
	Pieksämä	(tunnel, 180 m)	_	nel.
	ki	.,	204+580	
	Kouvola-	Vuohijärvi	222+400	No speed limits due to the tun-
	Pieksämä ki	(tunnel, 191 m)	_ 222+591	nel.
	Kouvola-	Kulonpalonvuori	232+075	No speed limits due to the tun-
	Pieksämä	(tunnel, 418 m)	_	nel.
	ki		232+493	
005	Pieksämä	Mustamäki	416+960	No speed limits due to the tun-
	ki–Konti-	(tunnel, 249 m)	-	nel.
	omäki	Mushamari T /hum	417+211	No anald limite due to the turn
	Pieksämä ki–Konti-	Mustavuori I (tun- nel, 283 m)	417+791	No speed limits due to the tun- nel.
	omäki	1161, 203 111)	418+075	nei.
	Pieksämä	Mustavuori II	418+341	No speed limits due to the tun-
	ki–Konti-	(tunnel, 374 m)	_	nel.
	omäki		418+718	
	Pieksämä	Pieni Neulamäki	454+288	No speed limits due to the tun-
	ki–Konti-	(tunnel, 1,003 m)	- 455+291	nel.
	omäki Pieksämä	Tikkalansaari lift	472+817	Passenger trains 50 km/h
	ki–Konti-	bridge	1/2/01/	Freight trains 50 km/h
	omäki	(E5 350 kN)		Reason: movable bridge
	Pieksämä	Honkasalmi rail-	527+080	Passenger trains 120 km/h
	ki–Konti-	way bridge		Freight trains 120 km/h
006	omäki	(D4 225 kN)	110.200	Reason: poor condition
006	Riihimäki– Kouvola	Hollola: speed re- striction due to	116+200	Trains weighing more than 2,500 tonnes containing wag-
	Rouvoia	vibration	118+500	ons built in accordance with
				OSJD/GOST standards: 40
				km/h
	Riihimäki–	Lahti: speed re-	125+000	Trains weighing more than
	Kouvola	striction due to	125 : 400	2,500 tonnes containing wag-
		vibration	125+400	ons built in accordance with OSJD/GOST standards: 40
				km/h
	Riihimäki–	Koria: speed re-	182+900	Trains weighing more than
	Kouvola	striction due to	_	2,500 tonnes containing wag-
		vibration	186+400	ons built in accordance with
				OSJD/GOST standards: 30
006	Parikkala–	Dakeuppiomi (tup	399+111	km/h  No speed limits due to the tun-
000	Säkäniemi	Paksunniemi (tun- nel, 26 m)	_   _   _	nel.
	Janamem	1.57 25 111)	399+137	
	Parikkala-	Syrjäsalmi railway	445+395	Passenger trains 10 km/h
	Säkäniemi	bridge (D4 225		Freight trains 10 km/h
		kN)		Reason: poor condition

Railway tunnels in the state-owned railway network and restrictions due to bridges, tunnels and vibration

Track	Line sec-	Location / Name	Km-lo- Speed limit				
		Location/Name		Speed limit			
No.	tion	(tunnel	cation				
		length/EN					
		15528 category					
		of the bridge					
		and maxi-					
		mum					
		permitted axle					
		load)					
006	Joensuu-	Pielisjoki railway	625+146	Passenger trains 50 km/h			
	Konti-	bridge (E4 250		Freight trains 50 km/h			
	omäki	kN)		Reason: movable bridge			
	Joensuu-	Uimasalmi railway	673+486	Passenger trains 60 km/h			
	Konti-	bridge (E4 250		Freight trains 60 km/h			
	omäki	kN)		Reason: movable bridge			
007	Kerava-	Järvenpää: speed	35+800-	Freight trains weighing more			
	Lahti	restriction due to	36+200	than 2,000 tonnes: 40 km/h			
		vibration		,			
008	Tuomi-	Siikajoki railway	705+684	Passenger trains 100 km/h			
	oja–Oulu	bridge (E4 250		,			
	-3	kN)		Freight trains 100 km/h			
		,		Reason: poor condition			
	Tuomi-	Liminka: speed	726+900	Trains weighing more than			
	oja–Oulu	restriction due to	_	2,500 tonnes containing wag-			
		vibration	729+200	ons built in accordance with			
		Vibration	, 23 . 200	OSJD/GOST standards: 50			
				km/h			
	Tuomi-	Kempele: speed	740+600	Trains weighing more than			
	oja–Oulu	restriction due to	_	2,500 tonnes containing wag-			
	oja Gala	vibration	749+000	ons built in accordance with			
		VIDIGUOTI	7 13 1 000	OSJD/GOST standards: 50			
				km/h			
008	Oulu-	Simojoki railway	832+960	Passenger trains 90 km/h			
000	Kemi	bridge (D4 225	0321300	r dosenger trains 50 km/m			
	Remi	kN)		Freight trains 90 km/h			
		KIV)		Reason: poor condition			
009	Tampere-	Matomäki	303+987	No speed limits due to the tun-			
003	Jyväskylä	(tunnel, 262 m)		nel.			
	Jyvaskyla	(turner, 202 m)	304+249	nei.			
	Tampere-	Lahdenvuori (tun-	308+214	All trains: 120 km/h			
	Jyväskylä	nel, 4293 m)	J00+214	Reason: condition of the tunnel			
	Jyvaskyla	1101, 7233 111)	312+507	Acason. Condition of the turner			
	Tampere-	Sahinmäki	316+064	No speed limits due to the tun-			
	Jyväskylä	(tunnel, 153 m)	210-004	nel.			
	Jyvaskyla	(tallici, 155 iii)	316+217	IICI.			
	Tampere-	Lautakkomäki	321+171	No speed limits due to the tun-			
	Jyväskylä	(tunnel, 399 m)	75141/1	nel.			
	Jyvaskyla	(turnier, 333 III)	_ 321±570	IICI.			
	Tamporo	Paavalinvuori	321+570	No speed limits due to the tur			
	Tampere-		328+364	No speed limits due to the tun-			
	Jyväskylä	(tunnel, 771 m)	220   125	nel.			
	Tampera	Dancivuori /tun	329+135	All trainer 120 km/h			
	Tampere-	Paasivuori (tun-	330+107	All trains: 120 km/h			
	Jyväskylä	nel, 2,475 m)	222   501	Reason: condition of the tunnel			
			332+581				

FTIA publications 55/2023 Appendix 2K/Railway tunnels in the state-owned railway network and restrictions due to bridges, tunnels and vibration

Tampere- Jyväskylä Single-dek coaches 140 km/h, Reason: pokylamyla Reason: pokylamyla Tampere- Jyakylä Tampere- Jyakyla Tampere- Jyakyla Tampere-	Tunale	Line coc	Location / Name	Vm la	Creed limit
Tampere- Jyväskylä  Parikkala- Savonlinn 2 Si ki)  Parikkala- Savonlinn 3 a  Rajperie- Savonlinn 3 a  Viinijärvi  Tirraskoski rail- way bridge  Tirraskoski rail- No speed limits due to the tun- rael.  To beeck coaches 140 km/h Freight trains 50 km/h Reason: poor condition  All trains: 50 km/h Reason: poor condition  Tirraskoski rail- way bridge  Tirraskoski rail- way bridge  Tirraskoski rail- No speed limits due to the tun- rael.  Tirraskoski rail- way bridge  Tirraski All km/h Reason: movable bridge  Tirraski All km/h Reason: movable bridge  Tirraski All km/h Reason: movable bridge  Tirraski All km/h Reason: movable bridge  Tirraski All km/h Reason: movable bridge  Tirraski All km/h Reason: movable bridge  Tirraski All km/h Reason: movable bridge  Tirraski All km/h Reason: movable bridge  Tirraski All km/h Reason: movable bridge  Tirraski All km/h Reason: movable bridge  Tirraski All km/h Reason: movable bridge  Tirraski All km/h Reason: movable bridge  Tirraski All km/h Reason: movable bridge  Tirra	Track	Line sec-	Location/Name	Km-lo-	Speed limit
Tampere- Jyväskylä	110.	CIOII	_	Cation	
Tampere— Jyväskylä  Tampere— Jyväskylä  Tampere— Jyväskylä  Tampere— Jyväskylä  Tampere— Jyväskylä  Tampere— Jyväskylä  Tampere— Jyväskylä  Tampere— Jyväskylä  O14  Parikkala— Savonlinn a  Parikkala— Savonlinn a  Parikkala— Savonlinn a  Parikkala— Savonlinn a  Virraskoski rail- way bridge  O23  Haapamä ki- Jyväskylä  O24  Varkaus— Viinijärvi  Viinijärvi  Viinijärvi  Viinijärvi  Viinijärvi  O24  Varkaus— Viinijärvi  Viinijärvi  Viinijärvi  Viinijärvi  Viinijärvi  Viinijärvi  O24  Varkaus— Viinijärvi  Viinijärvi  Viinijärvi  Viinijärvi  Viinijärvi  Viinijärvi  Viinijärvi  Viinijärvi  Viinijärvi  O24  Varkaus— Viinijärvi  Viinijärvi  Viinijärvi  Viinijärvi  Viinijärvi  Viinijärvi  Viinijärvi  Viinijärvi  Viinijärvi  Viinijärvi  Viinijärvi  Varkaus— Viinijärvi  Viinijärvi  Varkaus— Viinijärvi  Viinijärvi  Varkaus— Viinij					
Tampere- Jyväskylä  Tampere- Jyväskylä  Tampere- Jyväskylä  Tampere- Jyväskylä  Reljonkangas I (tunnel, 1,093 m)  Reljonkangas II (tunnel, 224 m)  Tampere- Jyväskylä  Reljonkangas II (tunnel, 224 m)  Reljonkangas II (tunnel, 224 m)  Tampere- Jyväskylä  Reljonkangas II (tunnel, 224 m)  Reljonkangas II (tunnel, 224 m)  Reljonkangas II  Sayshylä  Reljonkangas II (tunnel, 234 m)  Ressenser trains 20 km/h Freight trains 20 km/h Freight trains 20 km/h Freight trains 20 km/h Freight trains 20 km/h Freight trains 50 km/h Reason: movable bridge  Rason: poor condition  Reason: condition of the tunnel  Reason: condition of the tunnel  Reason: insufficient ballast depth  Passenger trains 80 km/h Reason: condition of the tunnel  Reason: insufficient ballast depth  Passenger trains 80 km/h Reason: insufficient ballast depth  Passenger trains 80 km/h Reason: insufficient ballast depth  Passenger trains 80 km/h Preight trains 80 km/h Preight trains 80 km/h Reason: insufficient ballast depth  Passenger trains 40 km/h* Freight trains 80 km/h Preight trains 80 km/h Reason: movable bridge  * After the bridge and the rail joints have been locked, the maximum speed is 60 km/h Reason: movable bridge  * After the bridge and the rail joints have been locked, the maximum speed is 60 km/h Reason: movable bridge  * After the bridge and the rail joints have been locked, the maximum speed is 60 km/h Reason: movable bridge  * After the bridge and the rail joints have been locked, the maximum speed is 60 km/h Reason: movable bridge  * After the bridge and the rail joints have been locked, the maximum speed is 60 km/h Reason: movable bridge  * After the bridge and the rail joints have been locked, the maximum speed is 60 km/h Reason: movable bridge  * After the bridge and the rail joints have been locked, the maximum speed is 60 km/h Reason: movable bridge  * After the bridge and the rail joints have been locked, the maximum speed is 60 km/h Reason: movable bridge  * After the bridge and the rail joints have been locked, the maximum speed is 6					
Tampere- Jyväskylä  Tampere- Jyväskylä  Tampere- Jyväskylä  Tampere- Jyväskylä  Tampere- Jyväskylä  Tampere- Jyväskylä  Tampere- Jyväskylä  Tampere- Jyväskylä  Tampere- Jyväskylä  Tampere- Jyväskylä  Tampere- Jyväskylä  Tampere- Jyväskylä  Tampere- Jyväskylä  Tampere- Jyväskylä  Tampere- Jyväskylä  Tampere- Jyväskylä  Parikkala- Savonlinn a  Parikkala- Savonlinn a  Parikkala- Savonlinn a  Rampere- Jyväskylä  Parikkala- Savonlinn a  Tampere- Savonlinn a  Rampere- Viinijärvi  Tampere- Jyväskylä  Taspere- Jyväskylä  Tasper- Jyväskylä  Tasper- Jyväskylä  Tasper- Jyväskylä  Tasper- Jy					
Tampere- Jyväskylä  Keljonkangas I (tunnel, 1,093 m)  Tampere- Jyväskylä  Keljonkangas II (tunnel, 224 m)  Tampere- Jyväskylä  Keljonkangas II (tunnel, 224 m)  Single-deck coaches 140 km/h, double-deck coaches 140 km/h, Sm3 140 km/h. Reason: piston effect  Parikkala- Savonlinn a					
Tampere—Jyväskylä (tunnel, 1,093 m)  Tampere—Jyväskylä (tunnel, 224 m)  Tampere—Jyväskylä (tunnel, 224 m)  O14 Parikkala—Savonlinn a Kyrönsalmi rail—way bridge (D4 225 kN)  Parikkala—Savonlinn a (tunnel, 336 m) (tunnel, 336 m) (a 25 kN)  Parikkala—Savonlinn a (tunnel, 336 m) (tunnel, 336 m) (a 25 kN)  Parikkala—Savonlinn a (tunnel, 336 m) (tunnel, 336 m) (a 25 kN)  Parikkala—Savonlinn a (tunnel, 336 m) (tunnel, 336 m) (a 25 kN)  Parikkala—Savonlinn a (tunnel, 336 m) (tunnel, 336 m) (tunnel, 336 m) (a 25 kN)  Parikkala—Savonlinn a (tunnel, 1,429 m) (tunnel, 1,429 m)  O23 Haapamä ki—Jyväskylä—Pönttövuori (tunnel, 1,429 m) (tunnel, 1,429					
Tampere—Jyväskylä (tunnel, 1,093 m)  Tampere—Jyväskylä (tunnel, 224 m)  Tampere—Jyväskylä (tunnel, 224 m)  Tampere—Jyväskylä (tunnel, 224 m)  Parikkala—Savonlinn a parikkala—Sa					
Tampere— Jyväskylä (tunnel, 224 m) (tunnel, 224 m) (tunnel, 224 m) (tunnel, 224 m) (tunnel, 224 m) (tunnel, 224 m) (tunnel, 224 m) (tunnel, 224 m) (tunnel, 335+526 km/h, 5m3 140 km/h, 6m3 140 km/h,				333+973	,
Tampere—Jyväskylä (tunnel, 224 m)  1014 Parikkala—Savonlinn a Kyrönsalmi rail-way bridge (D4 225 kN)  Parikkala—Savonlinn a Wilnijärvi Viinijärvi Viinijärvi Pieksämä ki Uvarkaus—Viinijärvi Viinijärvi Viinijarv		Jyvaskyla	(tunnel, 1,093 m)	225 + 066	nei.
Jyväskylä   (tunnel, 224 m)		Tamporo_	Kolionkangas II		Single-dock coaches 140 km/h
Parikkala-Savonlinn   Asyronsalmi rail-Way bridge (D4 a 225 kN)   Parikkala-Savonlinn   Asyronsalmi rail-Way bridge (D4 a 225 kN)   Parikkala-Savonlinn   Asyronsalmi rail-Way bridge (D4 a 225 kN)   Parikkala-Savonlinn   Asyronsalmi rail-Way bridge   Asyronsalmi rail-Way bridge   Asyronsalmi rail-Way bridge   Asyronsalmi rail-Way bridge   Asyronsalmi rail-Way bridge   Asyronsalmi rail-Way bridge   Asyronsalmi rail-Way bridge   Asyronsalmi rail-Way bridge   Asyronsalmi rail-Way bridge   Asyronsalmi rail-Way bridge   Asyronsalmi rail-Way bridge   Asyronsalmi rail-Way bridge   Asyronsalmi rail-Way bridge   Asyronsalmi rail-Way bridge   Asyronsalmi rail-Way bridge   Asyronsalmi rail-Way bridge   Asyronsalmi rail-Way bridge   Asyronsalmi rail-Way bridge (D4 225 kN)   Asyronsalmi				222+201	
Sm3 140 km/h. Reason: piston effect   Savonlinn a   Way bridge (D4 225 kN)   Parikkala-Savonlinn a   Wyrinamieni (tunnel, 336 m) a   Wirraskoski railway bridge   Way bridge   Way bridge   Wirraskoski railway bridge   Warkaus-Viinijärvi   Way bridge   Warkaus-Viinijärvi   Warkaus-Viin		3 y vasikyla	(turner, 22 rm)	335+526	
Parikkala- Savonlinn   way bridge (D4 as 225 kN)   Parikkala- Savonlinn   way bridge (D4 as 225 kN)   Reason: movable bridge   Parikkala- Savonlinn   (tunnel, 336 m)				333 . 323	1
Savonlinn a					
a 22Ś kN) Reason: movable bridge Parikkala—Savonlinn (tunnel, 336 m) 484+214  017 Siilinjärvi- Viiriskoski rail- Way bridge  028 Haapamä ki— Jyväskylä Pönttövuori (tunnel, 1,429 m) Pieksämä ki  029 Jyväskylä Pieksämä ki  020 Varkaus— Viinijärvi Viinijärvi Pieksämä ki  024 Varkaus— Viinijärvi Viinijärvi Pieksämä ki  025 Haapamä Möykynmäki (tun- ali joints have been locked, the maximum speed is 60 km/h  026 Varkaus— Viinijärvi Pieksämä ki  027 Varkaus— Viinijärvi Pieksämä ki  028 Varkaus— Viinijärvi Pieksämä ki  029 Varkaus— Viinijärvi Pieksämä ki  029 Varkaus— Viinijärvi Pieksämä ki  020 Varkaus— Viinijärvi Pieksämä ki  020 Varkaus— Viinijärvi Pieksämä ki  020 Varkaus— Viinijärvi Pieksämä ki  020 Varkaus— Viinijärvi Pieksämä ki  020 Varkaus— Viinijärvi Pieksämä ki  020 Varkaus— Viinijärvi Pieksämä ki  020 Varkaus— Viinijärvi Pieksämä ki  020 Varkaus— Viinijärvi Pieksämä ki  020 Varkaus— Viinijärvi Pieksämä ki  020 Varkaus— Viinijärvi Pieksämä ki  020 Varkaus— Viinijärvi Pieksämä ki  020 Varkaus— Viinijärvi Pieksämä ki  020 Varkaus— Viinijärvi Pieksämä ki  020 Varkaus— Viinijärvi Pieksämä ki  020 Varkaus— Railway bridge voer the Taipale Canal (D4 225 kN)  021 Varkaus— Viinijärvi Pieksämä ki  022 Varkaus— Railway bridge voer the Taipale Canal (D4 225 kN)  023 Varkaus— Viinijärvi Pieksämä ki  024 Varkaus— Railway bridge voer the Taipale Canal (D4 225 kN)  025 Varkaus— Viinijärvi Viinijärvi Pieksämä kii Viinijärvi Pieksämä kii Viinijärvi Pieksämä kii Viinijärvi Viinijärvi Pieksämä kii Viinijärvi Vi	014		,	483+659	
Parikkala—Savonlinn a (tunnel, 336 m) 483+892		Savonlinn			
Savonlinn a					
a 484+214  017 Siilinjärvi Virraskoski rail- Viinijärvi Way bridge 533+833 Passenger trains 50 km/h Reason: poor condition  023 Haapamä ki-     Jyväskylä			,	483+892	-
O17   Siilinjärvi Virraskoski railway bridge   S33+833   Passenger trains 50 km/h Freight trains 50 km/h Reason: poor condition			(tunnel, 336 m)	- 494 : 214	nel.
Viinijärvi way bridge  Preight trains 50 km/h Reason: poor condition  All trains: 50 km/h Reason: poor condition  All trains: 50 km/h Reason: condition of the tunnel  Jyväskylä  Dyväskylä  Pönttövuori (tunnel, 1,429 m) Pieksämä ki  Jyväskylä  Pieksämä ki  O24  Varkaus- Viinijärvi	017		Virraskoski rail-		Passenger trains 50 km/h
Reason: poor condition   Reason: poor condition   All trains: 50 km/h   Reason: condition of the tunnel   Jyväskylä   Jyväskylä   Pönttövuori (tunnel, 1,429 m)   - 395+905   Reason: condition of the tunnel   No speed limits due to the tunnel   Passenger trains 80 km/h   Reason: insufficient ballast depth   Reason: insufficient ballast depth   Passenger trains 40 km/h   Reason: insufficient ballast depth   Passenger trains 40 km/h   Reason: insufficient ballast depth   Passenger trains 40 km/h   Reason: movable bridge   * = After the bridge and the rail joints have been locked, the maximum speed is 60 km/h   Passenger trains 30 km/h   Reason: movable bridge   * = After the bridge and the rail joints have been locked, the maximum speed is 60 km/h   Reason: movable bridge   * = After the bridge and the rail joints have been locked, the maximum speed is 60 km/h   Reason: movable bridge   * = After the bridge and the rail joints have been locked, the maximum speed is 60 km/h   Reason: movable bridge   * = After the bridge and the rail joints have been locked, the maximum speed is 60 km/h   Reason: movable bridge   * = After the bridge and the rail joints have been locked, the maximum speed is 60 km/h   Reason: movable bridge   * = After the bridge and the rail joints have been locked, the maximum speed is 60 km/h   Reason: movable bridge   * = After the bridge and the rail joints have been locked, the maximum speed is 60 km/h   Reason: movable bridge   * = After the bridge and the rail joints have been locked, the maximum speed is 60 km/h   Reason: movable bridge   * = After the bridge and the rail joints have been locked, the maximum speed is 60 km/h   Reason: movable bridge   * = After the bridge and the rail joints have been locked, the maximum speed is 60 km/h   Reason: movable bridge   * = After the bridge and the rail joints have been locked, the maximum speed is 60 km/h   Reason: movable bridge   * = After the bridge and the rail joints have been locked, the maximum speed is 60 km/h   Reason: movable bridge	017	-		333+633	
Description of the tune   Section		Viii ijai vi	way bridge		-
ki— Jyväskylä nel, 350 m) 366+319  023 Jyväskylä Pönttövuori (tunnel, 1,429 m) 91eksämä ki  024 Varkaus— Viinijärvi Viini	023	Haapamä	Mövkvnmäki (tun-	365+969	
Jyväskylä				_	
Pieksämä ki   Jyväskylä   Heinlampi under- pass (E4 250 kN)   Pieksämä ki   Jyväskylä   Passenger trains 80 km/h   Preight trains 80 km/h   Preight trains 80 km/h   Preight trains 80 km/h   Preight trains 80 km/h   Preight trains 80 km/h   Preight trains 80 km/h   Preight trains 80 km/h   Preight trains 40 km/h*   Preight trains 40 km/h*   Preight trains 40 km/h*   Preight trains 40 km/h*   Preight trains 40 km/h*   Preight trains 40 km/h*   Preight trains 40 km/h*   Preight trains 40 km/h*   Preight trains 40 km/h*   Preight trains 40 km/h*   Preight trains 40 km/h*   Preight trains 40 km/h*   Preight trains 40 km/h*   Preight trains 30 km/h*   Preight trains 30 km/h*   Preight trains 30 km/h*   Preight trains 30 km/h*   Preight trains 30 km/h*   Preight trains 30 km/h*   Preight trains 30 km/h*   Preight trains 30 km/h*   Preight trains 30 km/h*   Preight trains 30 km/h*   Preight trains 30 km/h*   Preight trains 30 km/h*   Preight trains 30 km/h*   Preight trains 40 km/h*   Preight trai		Jyväskylä	,	366+319	
Pieksämä ki  Jyväskylä	023	Jyväskylä		394+476	-
ki  Jyväskylä  Pieksämä ki  O24  Varkaus- Viinijärvi  Aairoport (tunnel, 230 m)  Auspeed limits due to the tunnel.  No speed limits due to the tunnel.  No speed limits due to the tunnel.  No speed limits due to the tunnel.  No speed limits due to the tunnel.  No speed limits due to the tunnel.  No speed limits due to the tunnel.  No speed limits due to the tunnel.  No speed limits due to the tunnel.  No speed limits due to the tunnel.  No speed limits due to the tunnel.  No speed limits due to the tunnel.  No speed limits due to the tunnel.			(tunnel, 1,429 m)	_	nel.
Jyväskylä - pass (E4 250 kN) Pieksämä ki  024 Varkaus- Viinijärvi  Aliminkartano opalahti- Havukoski  Hu- opalahti- Havukoski  Hu- opalahti- Havukoski  Hu- opalahti- Havukoski  Hu- opalahti- Havukoski  Hu- opalahti- Havukoski  Hu- opalahti- Havukoski  Airport (tunnel, 21+388- Do speed limits due to the tunnel.  No speed limits due to the tunnel.  No speed limits due to the tunnel.  No speed limits due to the tunnel.  No speed limits due to the tunnel.				395+905	
- Pieksämä ki  024 Varkaus- Viinijärvi bridge (D4 225 kN)  Varkaus- Viinijärvi bridge (D4 225 kN)  Varkaus- Viinijärvi bridge (D4 225 kN)  Varkaus- Viinijärvi bridge (D4 225 kN)  Varkaus- Viinijärvi bridge over the Taipale Canal (D4 225 kN)  Varkaus- Viinijärvi bridge over the Taipale Canal (D4 225 kN)  Varkaus- Viinijärvi bridge over the Taipale Canal (D4 225 kN)  Varkaus- Viinijärvi bridge over the Taipale Canal (D4 225 kN)  Varkaus- Viinijärvi bridge over the Taipale Canal (D4 225 kN)  Varkaus- Viinijärvi bridge over the Taipale Canal (D4 225 kN)  Varkaus- Viinijärvi bridge over the Taipale Canal (D4 225 kN)  Varkaus- Viinijärvi bridge over the Taipale Canal (D4 225 kN)  Varkaus- Viinijärvi bridge over the Taipale Canal (D4 225 kN)  Varkaus- Viinijärvi bridge over the Taipale Canal (D4 225 kN)  Varkaus- Viinijärvi bridge over the Taipale Canal (D4 225 kN)  Varkaus- Viinijärvi bridge over the Taipale Canal (D4 225 kN)  Varkaus- Viinijärvi bridge over the Taipale Canal (D4 225 kN)  Varkaus- Viinijärvi bridge over the bridge and the rail joints have been locked, the maximum speed is 60 km/h  No speed limits due to the tunnel.  Varkaus- Viinijärvi bridge over the Taipale Canal (D4 225 kN)  Varkaus- Viinijärvi bridge over the Taipale Canal (D4 225 kN)  Railway bridge over the Taipale Passenger trains 40 km/h*  Reason: movable bridge * = After the bridge and the rail joints have been locked, the maximum speed is 60 km/h  Reason: movable bridge * = After the bridge and the rail joints have been locked, the maximum speed is 60 km/h  Reason: movable bridge * = After the bridge and the rail joints have been locked, the maximum speed is 60 km/h  Reason: movable bridge * = After the bridge and the rail joints have been locked, the maximum speed is 60 km/h  Reason: movable bridge * = After the bridge and the rail joints have been locked, the maximum speed is 60 km/h  Reason: movable bridge * = After the bridge and the rail joints have been locked, the maximum speed is 60 km/h			Heinlamni under-	448+690	Passenger trains 80 km/h
Pieksämä ki  O24 Varkaus- Viinijärvi bridge (D4 225 kN)  Varkaus- Viinijärvi Preight trains 40 km/h* Reason: movable bridge * = After the bridge and the rail joints have been locked, the maximum speed is 60 km/h  Varkaus- Viinijärvi Over the Taipale Canal (D4 225 kN)  Passenger trains 40 km/h* Reason: movable bridge * = After the bridge and the rail joints have been locked, the maximum speed is 60 km/h  Preight trains 30 km/h* Freight trains 30 km/h* Reason: movable bridge * = After the bridge and the rail joints have been locked, the maximum speed is 60 km/h  123 Hu- Opalahti- Havukoski  Hu- Opalahti- Havukoski  Hu- Opalahti- Havukoski  Hu- Opalahti- Havukoski  Hu- Opalahti- Havukoski  Hu- Opalahti- Havukoski  Hu- Opalahti- Havukoski  Hu- Opalahti- Havukoski  Hu- Opalahti- Havukoski  Hu- Opalahti- Havukoski  Hu- Opalahti- Havukoski  Hu- Opalahti- Havukoski  Hu- Opalahti- Havukoski  Hu- Opalahti- Havukoski  Hu- Opalahti- Havukoski  Hu- Opalahti- Havukoski  No speed limits due to the tunnel.  No speed limits due to the tunnel.		–	-	1101030	
ki  O24 Varkaus- Viinijärvi bridge (D4 225 kN)  Varkaus- Viinijärvi bridge (D4 225 kN)  Varkaus- Viinijärvi Viinijärvi  Varkaus- Viinijärvi Viinijärvi  Varkaus- Viinijärvi Over the Taipale Canal (D4 225 kN)  Varkaus- Viinijärvi Over the Taipale Canal (D4 225 kN)  Varkaus- Viinijärvi Over the Taipale Canal (D4 225 kN)  Varkaus- Viinijärvi Over the Taipale Canal (D4 225 kN)  Varkaus- Viinijärvi Over the Taipale Canal (D4 225 kN)  Varkaus- Viinijärvi Over the Taipale Canal (D4 225 kN)  Varkaus- Viinijärvi Over the Taipale Canal (D4 225 kN)  Varkaus- Viinijärvi Over the Taipale Canal (D4 225 kN)  Varkaus- Viinijärvi Over the Taipale Canal (D4 225 kN)  Varkaus- Viinijärvi Over the Taipale Canal (D4 225 kN)  Varkaus- Viinijärvi Over the Taipale Canal (D4 225 kN)  Varkaus- Viinijärvi Over the Taipale Canal (D4 225 kN)  Varkaus- Viinijärvi Over the Taipale Canal (D4 225 kN)  Varkaus- Viinijärvi Over the Taipale Canal (D4 225 kN)  Varkaus- Viinijärvi Over the Taipale Canal (D4 225 kN)  Varkaus- Viinijärvi Over the Taipale Canal (D4 225 kN)  No speed limits due to the tunnel.  Varkaus- Viinijärvi Over the Taipale Canal (D4 225 kN)  Varkaus- Viinijärvi Over the Taipale Canal (D4 225 kN)  Varkaus- Viinijärvi Over the Taipale Canal (D4 225 kN)  No speed limits due to the tunnel.  Varkaus- Viinijärvi Over the Taipale Canal (D4 225 kN)  Varkaus- Viinijärvi Over the Taipale Canal (D4 225 kN)  Varkaus- Viinijärvi Over the Taipale Canal (D4 225 kN)  Varkaus- Varkaus- Viinijärvi Over the Taipale Canal (D4 225 kN)  Varkaus- Viinijärvi Over the Taipale Canal (D4 225 kN)  Varkaus- Viinijärvi Over the Taipale Canal (D4 26+855 Passenger trains 40 km/h* Reason: movable bridge * = After the bridge and the rail joints have been locked, the maximum speed is 60 km/h No speed limits due to the tun- nel.  Varkaus- Varkaus- Viinijärvi Over the Taipale Canal (D4 26+855 No speed limits due to the tun- nel.		Pieksämä	pass (2 1 250 KH)		
Viinijärvi bridge (D4 225 kN)  Varkaus- Viinijärvi over the Taipale Canal (D4 225 kN)  Hu- opalahti- Havukoski					
KN)   Reason: movable bridge   * = After the bridge and the rail joints have been locked, the maximum speed is 60 km/h	024	Varkaus-	Pirtinvirta railway	425+570	Passenger trains 40 km/h*
* = After the bridge and the rail joints have been locked, the maximum speed is 60 km/h  Varkaus— Viinijärvi over the Taipale Canal (D4 225 kN)  123 Hu- Malminkartano (tunnel, 230 m) Hu- Opalahti— Havukoski Hu- Opalahti— Havukoski Hu- Opalahti— Havukoski Hu- Opalahti— Havukoski Hu- Opalahti— Havukoski Hu- Opalahti— Havukoski Hu- Opalahti— Havukoski Hu- Opalahti— Havukoski Hu- Opalahti— Havukoski Hu- Opalahti— Havukoski Hu- Opalahti— Havukoski Hu- Opalahti— Havukoski Hu- Opalahti— Airport (tunnel, 8,260 m)  ** = After the bridge and the rail joints 30 km/h*  ** Freight trains 30 km/h* ** Reason: movable bridge ** = After the bridge and the rail joints 40 km/h*  ** Reason: movable bridge ** = After the bridge and the rail joints 30 km/h*  ** Reason: movable bridge ** = After the bridge and the rail joints 30 km/h*  ** Reason: movable bridge ** = After the bridge and the rail joints 40 km/h* ** Reason: movable bridge ** = After the bridge and the rail joints 40 km/h* ** Reason: movable bridge ** = After the bridge and the rail joints 40 km/h* ** Reason: movable bridge ** = After the bridge and the rail joints have been locked, the maximum speed is 60 km/h ** Reason: movable bridge ** = After the bridge and the rail joints have been locked, the maximum speed is 60 km/h ** Reason: movable bridge ** = After the bridge and the rail joints have been locked, the maximum speed is 60 km/h ** Reason: movable bridge ** = After the bridge and the rail joints have been locked, the maximum speed is 60 km/h ** Reason: movable bridge ** = After the bridge and the rail joints have been locked, the maximum speed is 60 km/h ** Reason: movable bridge ** = After the bridge and the rail joints have been locked, the maximum speed is 60 km/h **		Viinijärvi			
rail joints have been locked, the maximum speed is 60 km/h  Varkaus- Viinijärvi over the Taipale Canal (D4 225 kN)  123 Hu- opalahti- Havukoski  Hu- opalahti- Havukoski  Hu- opalahti- Havukoski  Hu- opalahti- Havukoski  Hu- opalahti- Havukoski  Hu- opalahti- Havukoski  Hu- opalahti- Havukoski  Hu- opalahti- Havukoski  Hu- opalahti- Havukoski  Hu- opalahti- S,260 m)  Airport (tunnel, 29+636  Fassenger trains 30 km/h* Freight trains 30 km/h* Reason: movable bridge  * = After the bridge and the rail joints have been locked, the maximum speed is 60 km/h  10+636- No speed limits due to the tun- nel.  No speed limits due to the tun- nel.			kN)		_
the maximum speed is 60 km/h  Varkaus— Viinijärvi  Vii					
Varkaus- Viinijärvi  Viinijärvi  Viinijärvi  Over the Taipale  Canal (D4 225  kN)  Hu-  Opalahti- Havukoski  Hu-  Opalahti- Havukoski  Hu-  Opalahti- Havukoski  Hu-  Opalahti- Havukoski  Hu-  Opalahti- Havukoski  Hu-  Opalahti- Havukoski  Hu-  Opalahti- Havukoski  Hu-  Opalahti- Havukoski  Hu-  Opalahti- Havukoski  Hu-  Opalahti- Havukoski  Hu-  Opalahti- Havukoski  Hu-  Opalahti- Havukoski  No speed limits due to the tun-  nel.  No speed limits due to the tun-  nel.  No speed limits due to the tun-  nel.					
Viinijärvi over the Taipale Canal (D4 225 kN)  Hu- opalahti- Havukoski  Hu- opalahti- Havukoski  Hu- opalahti- Havukoski  Hu- opalahti- Havukoski  Hu- opalahti- Havukoski  Hu- opalahti- Havukoski  Hu- opalahti- Havukoski  Hu- opalahti- Havukoski  Hu- opalahti- Havukoski  Hu- opalahti- Havukoski  Hu- opalahti- Havukoski  Hu- opalahti- Havukoski  Hu- opalahti- No speed limits due to the tun- nel.  No speed limits due to the tun- nel.		Varkaus_	Railway bridge	426±855	
Canal (D4 225 kN)  Reason: movable bridge  * = After the bridge and the rail joints have been locked, the maximum speed is 60 km/h  123 Hu- Opalahti- Havukoski  Hu- Opalahti- Havukoski  Hu- Opalahti- Havukoski  Hu- Opalahti- Havukoski  Hu- Opalahti- Havukoski  Hu- Opalahti- Signature  Airport (tunnel, 21+388- Opalahti- Opalahti- Signature  10+636- No speed limits due to the tunnel.  18+122- No speed limits due to the tunnel.  18+554 No speed limits due to the tunnel.			, -	7207033	-
KN   * = After the bridge and the rail joints have been locked, the maximum speed is 60 km/h		V III IIJUI VI	•		
rail joints have been locked, the maximum speed is 60 km/h  Hu- opalahti- Havukoski  Hu- opalahti- Havukoski  Hu- opalahti- Havukoski  Hu- opalahti- Havukoski  Hu- opalahti- Opalahti- Havukoski  Hu- opalahti- Opalahti- S,260 m)  Rivistö (tunnel, 230 m) 10+866 10+866  10					
the maximum speed is 60 km/h  Hu- opalahti- opalahti- opalahti- Havukoski  Hu- opalahti- Havukoski  Hu- opalahti- Havukoski  Hu- opalahti- Havukoski  Hu- opalahti- Opalahti- Opalahti- Havukoski  Hu- opalahti- Opalahti- S,260 m)  the maximum speed is 60 km/h  No speed limits due to the tun- nel.  No speed limits due to the tun- nel.			,		_
opalahti– (tunnel, 230 m) 10+866 nel.  Hu- Kivistö (tunnel, opalahti– 432 m) 18+554 nel.  Hu- Airport (tunnel, opalahti– 8,260 m) 10+866 nel.					the maximum speed is 60 km/h
Havukoski  Hu-  opalahti- Havukoski  Hu-  opalahti- Havukoski  Hu-  opalahti- Opalahti-  s,260 m)  Havukoski  Kivistö (tunnel, 18+122- 18+554  nel.  No speed limits due to the tun- nel.  No speed limits due to the tun- nel.	123				-
Hu- opalahti- Havukoski  Hu- opalahti- Opalahti- Havukoski  Hu- opalahti- Opalahti- Opalahti- S,260 m)  Hu- No speed limits due to the tun- nel.  No speed limits due to the tun- nel.			(tunnel, 230 m)	10+866	nel.
opalahti- 432 m) 18+554 nel.  Havukoski Hu- Airport (tunnel, opalahti- 8,260 m) 21+388- No speed limits due to the tunnel.			Vivieto (tuppel	10 : 122	No speed limits due to the time
Havukoski Hu- Airport (tunnel, 21+388– <i>No speed limits due to the tun-</i> opalahti– 8,260 m) 29+636 <i>nel.</i>					-
Hu- Airport (tunnel, 21+388- <i>No speed limits due to the tun-</i> opalahti- 8,260 m) 29+636 <i>nel.</i>			734 III <i>)</i>	10-1034	IICI.
opalahti– 8,260 m) 29+636 <i>nel.</i>			Airport (tunnel	21+388-	No speed limits due to the tun-
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_	Las		l	
Track	Line sec-	Location/Name	Km-lo-	Speed limit
No.	tion	(tunnel length/EN 15528 category of the bridge and maxi-	cation	
		mum permitted axle load)		
125	Kerava-	Savio (tunnel,	32+659-	No speed limits due to the tun-
	Vuosaari	13,575 m)	46+234	nel.
	Kerava-	Labbacka (tunnel,	48+728-	No speed limits due to the tun-
	Vuosaari	651 m)	49+379	nel.
131	Kerava– Sköldvik	Kerava: speed restriction due to vibration	30+700- 31+650	All trains 40 km/h
	Kerava– Sköldvik	Nikkilä: speed re- striction due to vibration	38+850- 40+160	All trains 40 km/h
141	Hyvinkää– Karjaa	Ojakkala: speed restriction due to vibration	102+000- 103+500	Trains weighing more than 2,500 tonnes containing wagons built in accordance with OSJD/GOST standards: 50 km/h
	Hyvinkää– Karjaa	Nummela: speed restriction due to vibration	108+500 - 109+500	Trains weighing more than 2,500 tonnes containing wagons built in accordance with OSJD/GOST standards: 50 km/h
	Hyvinkää– Karjaa	Lohja: speed restriction due to vibration	120+600- 128+500	Trains weighing more than 2,500 tonnes containing wagons built in accordance with OSJD/GOST standards: 50 km/h
	Hyvinkää– Karjaa	Lohja: speed restriction due to vibration	130+500- 132+000	Trains weighing more than 2,500 tonnes containing wagons built in accordance with OSJD/GOST standards: 50 km/h
142	Karjaa– Hanko	Pohja railway bridge, Läntinen salmi (E4 250 kN)	175+051	Passenger trains 50 km/h Freight trains 50 km/h Reason: swing bridge
221	Kouvola– Kotka	Kehä II (tunnel, 388 m)	194+646 -	No speed limits due to the tun- nel.
	Kouvola– Kotka	Myllykoski: speed restriction due to vibration	195+029 200+700 - 202+500	Trains weighing more than 2,500 tonnes containing wagons built in accordance with OSJD/GOST standards: 40 km/h
	Kouvola– Kotka	Keltakangas: speed restriction due to vibration	207+300 - 207+700	All trains 40 km/h
222	Juuri-	Suurivuori	236+028	No speed limits due to the tun-
	korpi–	(tunnel, 765 m)	_	nel.
	Hamina	(3331, 7.55 111)	236+793	1.5.7
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		1	17	0 11 1
Track No.	Line sec- tion	Location/Name (tunnel length/EN 15528 category of the bridge and maxi- mum permitted axle load)	Km-lo- cation	Speed limit
246	Lan	Voisalmensaari	290+167	No speed limits due to the tun-
	Lap- peenranta -Metsä- Saimaa	(tunnel, 198 m)	_ 290+365	nel.
251	Lahti– Heinola	Jyränkö railway bridge (D4 225 kN)	166+604	Passenger trains 30 km/h Freight trains 30 km/h Reason: poor condition
321	Toijala– Turku	Toijala: speed restriction due to vibration	150+400 - 150+900	All trains 40 km/h
	Toijala– Turku	Loimaa: speed restriction due to vibration	208+000 - 210+600	Trains weighing more than 2,500 tonnes containing wagons built in accordance with OSJD/GOST standards: 40 km/h
	Toijala– Turku	Turku: speed restriction due to vibration	271+900 - 273+700	Trains weighing more than 2,500 tonnes containing wagons built in accordance with OSJD/GOST standards: 40 km/h
349	Pori–Män- tyluoto	Tahkoluoto rail- way bridge (E4 250 kN)	343+792	Passenger trains 50 km/h Freight trains 50 km/h Reason: movable bridge
441	Seinäjoki– Kaskinen	Seinäjoki railway bridge (C4 200 kN)	419+367	Passenger trains 50 km/h Freight trains 50 km/h Cause: safeguarding the bridge's life cycle
	Seinäjoki– Kaskinen	Kyrönjoki railway bridge (C4 200 kN)	442+875	Passenger trains 50 km/h Freight trains 50 km/h Cause: safeguarding the bridge's life cycle
	Seinäjoki– Kaskinen	Nenät- tömänluoma rail- way bridge (C4 200 kN)	446+650	Passenger trains 60 km/h Freight trains 60 km/h Cause: safeguarding the bridge's life cycle
	Seinäjoki– Kaskinen	Kurikka: speed restriction due to vibration	450+500 - 452+000	All trains 40 km/h
	Seinäjoki– Kaskinen	Kainastonjoki rail- way bridge (C4 200 kN)	482+348	Passenger trains 60 km/h Freight trains 60 km/h Cause: safeguarding the bridge's life cycle

Track No.	Line section	Location/Name (tunnel length/EN 15528 category of the bridge and maximum permitted axle load)	Km-lo- cation	Speed limit
	Seinäjoki– Kaskinen	Teuvanjoki rail- way bridge (C4 200 kN)	502+165	Passenger trains 60 km/h Freight trains 60 km/h Cause: safeguarding the bridge's life cycle
	Seinäjoki– Kaskinen	Närpiönjoki rail- way bridge (C4 200 kN)	518+951	Passenger trains 60 km/h Freight trains 60 km/h Cause: safeguarding the bridge's life cycle
	Seinäjoki– Kaskinen	Kaskistensalmi railway bridge (C4 200 kN)	528+922	Passenger trains 60 km/h Freight trains 60 km/h Cause: safeguarding the bridge's life cycle
531	Oulu– Konti- omäki	Oulu: speed restriction due to vibration	762+800 - 763+800	Trains weighing more than 2,500 tonnes containing wagons built in accordance with OSJD/GOST standards: 45 km/h
	Oulu– Konti- omäki	Muhos: speed restriction due to vibration	786+000 - 790+300	Trains weighing more than 2,500 tonnes containing wagons built in accordance with OSJD/GOST standards: 50 km/h
	Oulu– Konti- omäki	Vaalansalmi rail- way bridge (D4 225 kN)	843+637	Passenger trains 80 km/h Freight trains 80 km/h Reason: poor condition
	Oulu– Konti- omäki	Kiehimänjoki rail- way bridge (D4 225 kN)	902+658	Passenger trains 50 km/h Freight trains 50 km/h Reason: poor condition
731	Joensuu– Viinijärvi	Joensuu: speed restriction due to vibration	631+100 - 631+700	Trains weighing more than 2,500 tonnes containing wagons built in accordance with OSJD/GOST standards: 40 km/h

# Estimation of speed limits due to track condition during the 2025 timetable period

The table below gives the best estimation of speed limits due to track condition in 2025 at the time of publication and is based on the previous condition of the track and known speed limits. The situation may change between the time of estimation and the year 2025.

Line sec- tion num- ber	Traffic oper- ating point	Km start	Km end	Leng th (m)	Re- strictio n	(Stand- ard Speed)	Name	Description	Date lifted	Cate- gory
001	Pik	0182+62 3	0183+249	626	130	(160)	Piikkiö	permanent 130	Unknown	track condi- tion
001	Kni	15+910	15+930	20	80	(120)	Track cross- ing in Kauniainen	Will be closed when the Espoo City Line (ESKA) is built	31 December 2027	level cross- ing
001	Kut	198+601	200+258	1657	40	(60)	KUTU con- struction site Turku I	Temporary speed limit. Speed limit plan 91B.	31 December 2025	project
001	Kut	200+7	201+540	1533	40	(60)	KUTU con- struction site Turku II	Temporary speed limit. Speed limit plan 91B.	31 December 2025	project
003	Mat	160+375	163+700	3325	170	(200)	Mattila– Lempäälä geometry	Two curves with permit value bevel angle. Safety equipment operating instructions	Unknown	track geome- try
005	Skv	590+800	591+0	200	50	(80)	Geometry of the Sukeva bridge ap- proach em- bankment	50 km/h for now, due to the geome- try of the Rauda- joki bridge.	Unknown	bridge
006	Kra	182+000	182+050	50	140	(170)	Koria over- pass		Unknown	bridge
006	Pus	445+300	445+500	200	10	(80)	Syrjäsalmi bridge instal- lation site	Installation of speed limit 4958 Syrjäsalmi bridge 10km/h. (Kesälahti) - (Puhos) 445+300 - 445+500	Unknown	bridge
008	Vti	0684+96 8	0685+017	49	160	(200)	Vihanti over- pass	Size of the bridge span leads to a speed limit.	Unknown	bridge
008	Rki	0705+40 3	0705+447	43	140	(190)	Ruukki over- pass	Speed limit for tilt- ing trains	Unknown	bridge
008	Kvu	923+740	924+113	373	80	(130)	Speed limit in Koivu	Safety equipment operating instructions	Unknown	track geome- try
008	Ii	789+350	789+600	249	50	(140)	Iijoki railway bridge	Track condition.	31 December 1930	bridge
008	Lpa	440+691	441+057	366	140	(160)	Speed limit in Lapua		Unknown	track geome- try
008	Hm	472+705	475+163	2458	160	(190)	Speed limit in Härmä		Unknown	track geome- try
008	Vti	480+045	482+815	2770	160	(200)	Voltti– Köykkäri speed limit		Unknown	other

Line sec- tion num- ber	Traffic oper- ating point	Km start	Km end	Leng th (m)	Re- strictio n	(Stand- ard Speed)	Name	Description	Date lifted	Cate- gory
008	Јра	496+125	497+427	1302	160	(200)	Speed limit in Jepua		Unknown	track geome- try
008	Hd	774+800	775+000	200	100	(140)	Speed limit in Haukipudas		Unknown	bridge
008	Ii	804+230	806+540	2310	80	(140)	Ii–Myllykan- gas		Unknown	other
008	Mkk	425+0	425+200	212	80	(120)	Munakka rail- way bridge	Condition of the railway bridge	31 December 2025	bridge
008	Lla	870+900	871+100	201	50	(105)	Kortelainen level crossing	Temporary speed limit, poor crossing view	31 Decem- ber 2025	level cross- ing
066	Mko	297+310	297+950	639	80	(100)	Louheikko level crossing	Speed limit at Louheikko level crossing 80km/h is permanent.	Unknown	level cross- ing
066	Klo	294+400	294+600	199	80	(100)	Vastapenger Kolho	Speed limit 80 km / h after the Emma drive. Soft soil area, requires subgrade rein- forcement. Is to remain per- manent.	Unknown	track condi- tion
314	Msä	156+30	156+167	137	20	(50)	Metsäkansa level crossing light facility	Due to the sufficient alarm of the level crossing light facility at the Metsäkansa level crossing, a speed limit of 20km/h is required for from the Metsäkansa turnout to the Metsäkansa level crossing. The speed limit only applies to trains travelling towards Valkeakoski	Unknown	level cross- ing
321	Mri	273+192	274+1100	1908	40	(60)	KUTU con- struction site Turku III	Temporary speed limit. Speed limit plan 91B.	31 December 2025	other
431	Iky	457+836	458+036	200	80	(120)	Seinäjoki- Isokyrö		Unknown	bridge
441	Ksk	528+995	529+970	975	30	(60)	Kaskinen level crossing	To improve safety at the level crossing In effect until further notice.	Unknown	level cross- ing
513	Tor	885+270	885+637	367	70	(100)	Tornio level crossing	Speed limit di- rectly due to the level-crossing fa- cility.	Unknown	level cross- ing
513	Tor	884+304	886+112	674	70	(100)	Kiviranta level crossing	Speed limit di- rectly due to the level-crossing fa- cility.	Unknown	level cross- ing
552	Psk	732+381	733+213	832	20	(50)	Speed limit in Pesiökylä	20 km/h speed limit on track R002 kmv 732+380 - 733+250. Existing speed limit, now signs	Unknown	drum

Line sec- tion num- ber	Traffic oper- ating point	Km start	Km end	Leng th (m)	Re- strictio n	(Stand- ard Speed)	Name	Description	Date lifted	Cate- gory
								added. Estimated to be discontinued in connection with the upcoming rail- way projects in Pesiökylä.		

## Priority order in congested infrastructure

## 1 Structure of the priority order

The priority order defines the priorities between trains when a train route is congested. The new priority order is based on the following framework:

- Trains are divided into nine categories, which are based on their key features as part of the transport service.
- Each part of the railway network is divided into five different route profiles. Prioritisation of train categories varies depending on the route profile and
- a priority order between train categories is determined for each route profile.
- Trains in each category are prioritised using the key features of the trains as a basis. If it proves impossible to categorise trains on the basis of these features, the remaining categories are applied so that all operators are provided with a level playing field.
- On some line sections, a capacity quota may be introduced for trains belonging to a low-priority category so that at least a certain number of trains of this category may use the line section.
- In certain exceptional cases, the infrastructure manager has a statutory right to derogate from the priority rules if applying them would lead to an unreasonable situation.

## 2 Route profiles

The railway network is divided into five entities (described in the table below) on the basis of the characteristic features of the route profile, the railway network and the transport service in question.

Table 1. Route profiles.

Route profile	Criteria	Train routes
Train routes for specialised infrastructure capacity.	A train route for specialised infrastructure capacity or comparable train route (defined in the Network Statement).	Kerava-Vuosari and Helsinki region city tracks: Helsinki – Kerava, Helsinki – Leppävaara, Huopalahti – Hiekkaharju.
Helsinki region train routes	Different types of passenger traffic, no regular freight traffic, high total number of trains, high passenger flows, high capacity utilisation.	Helsinki-Kytömaa (Kerava), Helsinki-Kirkko- nummi
Main train routes in Southern Fin- land	Frequent passenger traffic (regular interval of at most one hour on weekdays), large passenger flows, potentially significant transport needs for freight traffic.	Kytömaa-Tampere, Kytömaa-Lahti-Kouvola, Kirkkonummi- Port of Turku
Passenger and freight train routes	With regard to passenger transport, connection to Southern Finland's main train routes and regular service intervals of more than an hour, possibly significant transport needs for freight transport.	Hanko-Karjaa, Riihimäki-Hakosilta, Turku- Toijala, Tampere-Pori, Tampere-Pieksämäki, Orivesi-Haapamäki, Seinäjoki-Vaasa, Seinäjoki-Jyväskylä, Seinäjoki-Kemijärvi/Ko- lari, Kouvola-Kontiomäki, Kouvola- Joensuu/Vainikkala, Parikkala-Savonlinna
Freight-domi- nated routes	Traffic on the line section consists solely of freight traffic, or freight traffic far outweighs passenger traffic (number of train, comparison of passenger and freight flows).	Train routes used only by freight traffic and Kouvola - Port of Kotka, Pieksämäki-Joensuu, Joensuu-Nurmes, Iisalmi-Ylivieska, Konti- omäki-Oulu

## 3 Train categories

To determine the priority order, trains are divided into nine categories as shown in Table 2. As a rule, each train belongs to only one train category for the whole duration of its journey. If the category of the train changes between route profiles, the highest-priority category of the train in any of the route profiles is set as the overall category of the train. Where necessary, an applicant for infrastructure capacity will notify the infrastructure manager of a separate request in connection with their annual capacity request on which category each train in the request is in. The infrastructure manager may ask the applicant to provide information on the grounds for placing a train in a specific category.

Criteria Current volume of category journey category Integrated long-Too long Fast, regular and repetitive timetable struc-Majority of current long-distance distance trains ture, significant transit connections and intetrains grated rolling stock rotation Fast rolling stock, but not all criteria for inte-About 10% of current long-distance Fast long-distance trains grated long-distance trains are met trains Predomi-Commuter trains Regular timetable structure, frequent running Most commuter and regional trains nantly times and tied rolling stock rotation short Urban train traffic Primary traffic on train routes for specialised All trains on urban tracks infrastructure capacity, Helsinki city trains Other Trains not included in other categories of pas-Less than 10% of current long-dis-Long or passenger tance trains, night trains, commuter short trains senger transport. and regional trains with less frequent traffic Integrated freight Transport time criticality and tied rolling stock Some freight trains Long or short trains rotation Other freight Freight trains that do not meet the conditions Some freight trains of an integrated freight train trains Other traffic Long or For example, locomotive transfers, shunting All other traffic

Table 2. Concise definitions of the train categories.

A train belongs to a train category if it meets the following criteria for each category:

traffic, machinery, exceptional traffic, test

#### **Integrated long-distance trains**

short

- 1. The train makes commercial stops in the territory of at least two regional centres and it travels a distance of at least 100 km.
- 2. The train runs on a frequent and regular basis.

runs

- Trains operated on a seasonal basis (during a period that is shorter than the period between two timetable period adjustment dates) do not meet the criterion.
- 3. The train is operated through its journey with rolling stock capable of travelling at the maximum speed permitted on the line section or at least 200 km/h if the maximum speed is higher than this.
- 4. The train is part of integrated rolling stock rotation.
  - The rolling stock is subject to specific turnaround requirements and the same rolling stock is rotated efficiently throughout the operating period, considering the demand for the service and adequate maintenance and cleaning capacity during daytime. Failure to run the train or significant changes in the timetable will disrupt the integrated rotation of the rolling stock.

- 5. The train provides interchange with other long-distance trains in at least one network node in the area covered by train routes in the Helsinki region or the main train routes in Southern Finland.
  - Maximum interchange time is 20 minutes.
  - Minor deviations are allowed (for example, off-peak hours, such as early morning and late evening, or differing running times resulting from train meets on a single-track line section.
- 6. The train belongs to a group of integrated trains in which trains travelling in the same direction stop at the same stations and have standard running times at least on one line section between two regional centres.
  - Minor differences between stops or changes in running times are allowed (for example, as a result of customer needs or train meets on single-track line sections.
  - Both parts of the trains separated/combined during the journey are considered as a single train.
  - Single trains may include trains from more than one operator.

#### **Fast long-distance trains**

- 1. The train makes commercial stops in the territory of at least two regional centres and it travels a distance of at least 100 km.
- 2. The train runs on a frequent and regular basis.
  - Trains operated on a seasonal basis (during a period that is shorter than the period between two timetable period adjustment dates) do not meet the criterion.
- 3. The train is operated through its journey with rolling stock capable of travelling at the maximum speed permitted on the line section or at least 200 km/h if the maximum speed is higher than this.
  - The requirement may not necessarily be met on a short line section if this does not have any major impact on the rest of the timetable structure.

#### **Commuter trains**

- 1. The train is part of a service concept in which trains operate at regular intervals (maximum interval 60 minutes). The service concept may also refer to the concept comprising commuter and long-distance trains if there are no other frequent commuter services on the route.
  - Minor variations in running times (such as those resulting from train meets on single-track line sections or running the train on different line sections) and non-standard traffic arrangements during off-peak hours are allowed.
  - If the train is operated in a large area and it runs more irregularly in one part of its route, the service can nevertheless be considered as a commuter train service.
- 2. The train runs on a frequent and regular basis.
  - Trains operated on a seasonal basis (during a period that is shorter than the period between two timetable period adjustment dates) do not meet the criterion.
- 3. The train is part of a service concept in which at least two trains run in both directions on weekday mornings and afternoons and there are also trains in both directions outside peak hours on weekday mornings and afternoons.
- 4. Rolling stock rotation comprises a system in which the trains in both directions have the same composition (separating, combining or transfer of units to other commuter train routes is allowed).

#### **Urban train traffic**

1. The urban train traffic operated by the HSL joint municipal authority, which only uses the specialised-capacity urban tracks (Helsinki–Leppävaara, Huopalahti–Myyrmäki–Havukoski and Helsinki–Kerava).

#### Other passenger trains

1. The train does not meet any other passenger traffic criteria.

Note! International passenger trains are divided into the above categories of passenger trains on the basis of their characteristics, and their priority is determined by the category in question in the same way as the priorities of national trains.

#### **Integrated freight trains**

The train is subject to specific timetable requirements (such as unloading/loading times in a plant, in a warehouse or at a port) and it is linked with industrial processes or logistic transport chains OR the train is part of an explicit rolling stock rotation scheme in which wagons tied to a specific transport task are used in both directions. Failure to run the train or significant changes in the timetable will disrupt the integrated rotation of rolling stock.

#### Other freight trains

1. A freight train that does not meet the criteria for integrated freight train traffic.

#### Other traffic

- Other traffic, such as trains consisting of empty passenger carriages, locomotive transfers, shunting, machinery, unscheduled traffic, trial runs and museum train traffic.
  - Locomotive transfers normally included in other traffic may be given the priority of an integrated freight train if they are an essential part of running such a train.

## 4 Timetable changes and cancelled trains

In addition to decisions on which trains should be cancelled, the priority order may also have to be used to resolve more complex conflict situations. In such situations, it may also have to be decided which trains should be rescheduled or whether a train should be rescheduled or cancelled altogether. The aim is to find a solution that will cause minimum harm to the railway operations as a whole.

In order to ensure that prioritisation can lead to the achievement of the legal objective of meeting as many capacity needs as possible, the priority set for a train cannot always mean that the train in question is automatically entitled to the capacity requested for it. The timetable of a train with a priority status must also be flexible within the limits specified below, if the alternative is the cancellation of a

lower-priority train or rescheduling it to the extent that its customer service role is lost and the transport service in question is discontinued.

In this context, the loss of the customer service role means a situation in which there are good grounds for concluding that, after the rescheduling, there are no longer any commercial or production-related reasons to continue the train service. Such a situation may arise if the service provided by the train no longer meets customer needs, the cost of running the train will increase significantly (as a result of such factors as disrupted rolling stock rotation) in a manner that cannot be compensated or the transport service in question is discontinued for other similar reasons.

In freight traffic, the effects on the customer service role would not be crucial if the service can be rescheduled (as a new train or as part of another train) and there are no serious business impacts. If necessary, the infrastructure capacity applicant or the charterer is asked to assess the significance of the impact.

In complex conflict situations, lowest-category trains are cancelled first and every effort is made to ensure that the lowest-category trains on each route profile are least affected.

In addition, the following rules apply to the modification of freight train timetables:

- The timetable for a regular freight train running several days a week may be changed as part of the running days in the coordination of annual capacity and in the application of the priority order, provided that this can be used to reduce problems caused by the change to the customer and operator of the freight train for which the change was made.
- The same priority criteria are used for the transport of dangerous goods as for other freight trains. If a train transporting dangerous goods is operated on the basis of priority order, it's possible timetable changes must be made in a manner that allows the train to run according to the safety regulations for trains transporting dangerous goods.

# 5 Priority order between train categories on individual route profiles

Route pro- file/train cate- gory	Helsinki region train routes	Main train routes in Southern	Passenger and freight train routes	Freight train routes	Train route cialised inf capacity	es for spe- rastructure
	Finland		. cates		Urban tracks	Kerava– Vuosaari
Integrated long-distance trains	1	1	1	3 *	-	-
Fast long-dis- tance trains	3	3	3	4 *	-	-
Commuter trains	2	2	4	5*	-	-
Other passen- ger transport	4	4	5	6*	-	-
Integrated freight trains	5	5 *	2	1	-	1
Other freight trains	6	6 *	6	2	-	2
Urban train traffic	-	-	-	-	1	-
Other traffic	7	7	7	7	-	-

Figure 1. Priority order between train categories on individual route profiles.

On the train routes with specialised infrastructure capacity, the capacity is reserved for urban train traffic and on the line section Kerava–Vuosaari for freight trains. This means that on these train routes, priority is given to specialised train traffic and there is no need for coordination with other traffic. Other trains can use the remaining capacity even though the tunnel-specific safety regulations significantly limit the applicability of this option.

As the railway infrastructure develops, route profiles and their priority orders can be updated to reflect the new situation. In order to achieve the objectives set for the development of infrastructure, it should be noted that the priority of trains on the new line does not conflict with these objectives. In addition, if the capacity of a line section deteriorates over a long period of time, for example as a result of track work, the line section priorities can be reviewed.

## 6 Capacity quotas

In the cases shown in Figure 1, capacity quotas can be set to ensure that lower-category trains which would otherwise be in a detrimental position can also run. Capacity quotas mean the minimum share of the capacity on a specific line section allocated to a train category. Capacity quotas can be used to ensure that freight

trains can run on the main train routes in Southern Finland and to ensure adequate passenger services on train routes mostly used by freight traffic.

The trains included in the capacity quota may have slightly more unscheduled stops and they may have to give way to other trains slightly more frequently compared with higher-priority trains. However, a commercially meaningful route is guaranteed for the train throughout the line section.

The content of the capacity quotas for the next timetable period is determined by the Finnish Transport Infrastructure Agency. Depending on the situation, the capacity quota can be determined as a number of trains during one day, one hour or certain time of the day.

The Finnish Transport Infrastructure Agency may also set capacity quotas for the duration of track work or other temporary capacity restrictions as part of the time-table period.

Capacity quotas will be published on the <u>Finnish Transport Infrastructure Agency</u> website.

## 7 Priority orders within train categories

The priority order within train categories varies by train category. At this stage, the specific characteristics of the trains and potential solutions are examined one by one. A decision is made if there is sufficient difference in a priority criterion. If no difference can be established, each of the criteria is examined one by one until a difference is determined.

The Finnish Transport Infrastructure Agency carries out an expert assessment for the last passenger traffic criterion. If no difference can be established in freight traffic on the basis of the priority criteria, every effort is made to resolve the conflict in a fair manner, considering the scope of the applicants' operations. In both cases, a failure to find a solution probably means that the applicants have requested capacity for a similar service. This means that no explicit factor or calculation method can produce a difference between the applicants.

Table 3. Prioritisation among trains in the same train category

Priority	Long-distance trains *	Commuter and urban train traffic	Goods transport
1.	Running in the congested direction (only on single-track line sections)	Number of operating days	Impacts on the applicants' business
2.	Number of operating days	Impact of timetable change on service intervals	Number of changes impacting other trains
3.	Timetable re- strictions	Distance travelled by the train	Impacts on the applicants' operations
4.	Distance travelled by the train	Number of interchange stations (incl. other transport forms)	-

Priority	Long-distance trains *	Commuter and urban train traffic	Goods transport
5.	Train maximum speed	Impacts on the applicants' business operations	_
6.	Impacts on the applicants' business operations	_	_

<sup>\*</sup> Long-distance traffic means the following train categories: integrated long-distance trains, fast long-distance trains and other passenger trains.

#### Long-distance traffic

The same prioritisation criteria apply to all long-distance train categories. The long-distance prioritisation criteria also apply to the train category 'Other passenger trains'. The prioritisation criteria are as follows:

Running in the congested direction is only used as a criterion on single-track line sections. As a rule, all trains arriving in Helsinki on weekdays between 06:00 and 09:00 or leaving Helsinki on weekdays between 14:00 and 18:00 or that offer interchange with these trains are running in the congested direction. Night trains are not considered as trains running in the congested direction. Commuting train services to large cities can also be considered as trains running in the congested direction.

<u>Number of operating days</u>: Priority is given to trains with more operating days. However, there must be a difference in the number of weekly operating days. If the trains included in the comparison only run once a week or less frequently, there must be a regular difference between the number of operating days on a monthly basis. Occasional differences (on such days as public holidays) cannot be used as a basis for prioritisation.

<u>Timetable restrictions:</u> Trains subject to strict timetable restrictions due to arrival times, interchange connections or high infrastructure utilisation rate are given a higher priority and the option favouring them is prioritised.

<u>Distance travelled by the train:</u> Priority is given to trains travelling longer distances.

<u>Maximum train speed</u>: If there are no other major differences between the trains, there are grounds for prioritising a train with a higher maximum speed. Maximum train speeds exceeding the maximum permitted speed on the line section in question are not considered.

If the decision cannot be made on the basis of other comparison factors, the Finnish Transport Infrastructure Agency will ask the capacity applicants to provide the necessary information on the impacts of the train in question on their business operations and to name the train with the most significant relative impact on the applicant's business operations. The number of passengers using the trains can also be considered in the assessment. Trains with a major impact on the applicant's business operations are given a higher priority and the option favouring them is prioritised. If the capacity applicants state that they are requesting exactly the same capacity as part of the tendering process, the capacity can be allocated on a conditional basis so that ultimately it will be given to the winning party.

#### **Local traffic**

Number of operating days: See 'Long-distance trains'

If the comparison is between options in which it is only necessary to change train timetables, the percentage impact of the change on the regularity of <u>service intervals</u> is compared. Priority is given to the option with the smallest change in service intervals.

<u>Distance travelled by the train:</u> As in long-distance traffic, there are good grounds for prioritising trains travelling longer distances.

<u>Number of interchange stations:</u> In commuter services, consideration must also be given to interchange connections with other modes of transport. Trains with more stops at interchange stations are given a higher priority and the option favouring them is prioritised.

If a solution cannot be found on the basis of other comparison factors, the procedure used for long-distance traffic is followed.

#### **Goods transport**

The prioritisation of freight trains within the categories of goods trains shall be determined using the following prioritisation criteria.

1. Impacts on the applicants' business

The impact of the prioritisation decision on the business of the applicant's production facility are assessed using the following assessment criteria:

- 1. Termination of customer's business activities
- 2. A decline in a customer's business or cancellation of business expansion planned by the customer.
- 3. Interrupted transport of the customer's raw material or product for example in ports.
- 4. Significant increase in customer stocks
- 5. Number of rail transports lost by customer
- 6. The customer's possibilities for replacing missing rail transport with other modes of transport.

The possible impacts of prioritisation solutions are evaluated in the order of the list. The effects higher on the list, if any, as a result of the solution are assessed to be more significant, but the criteria are primarily aimed at making a prioritisation decision with the least economic adverse effects as a whole. Point 4 refers to the need to increase the size and amount of storage facilities, increase the movement of goods to be stored or other similar harmful change. Point 5 is not an independent assessment criterion, but can be used as an indicator of the magnitude of the impacts if it can be demonstrated that the cancellation of trains will cause effects 1–4. With regard to point 6, it is assessed whether the use of other modes of transport for a customer can mitigate effects 1–4.

As annual capacity allocation decisions are made at least several months before a production date, reliable or accurate information on the impact of the decisions on the above criteria may not be available at this stage. The impacts on the customer's

business will only be taken into account in the prioritisation of trains in points 1–4 if the information on the adverse effects described above is available and if the impacts are quantitatively significant, at least measured in person-years. If the effects for two or more applicants are similar but different in size, smaller impacts will be prioritised, but only if the differences are so significant that the differences can be reliably assessed in advance. The applicant for infrastructure capacity shall, where necessary, transmit the relevant information on the impact to the infrastructure manager.

#### 2. Effects on other trains

If no significant difference has been found in the impact on the business of the applicant's customer, the impact of the solutions on other trains will be examined. The number of changes caused to other trains reflects the impact on the efficient use of the rail network and, more broadly, on the functioning of the rail system. For this reason, there are grounds for prioritising the option that has fewer impacts on other trains, if, as a whole, a solution option generates fewer interoperability solutions that are harmful to traffic. The changes are examined on the basis of units.

#### 3. Impacts on the applicants' operations

If there is no significant difference in the impact on other trains, the impact of the solutions on the applicants' business will be examined. The following impacts on the applicants' operations will be assessed:

- 1. Break in wagon cycle
- 2. Break in locomotive cycle
- 3. Disruption of staff cycles
- 4. Total number of trains owned by applicants

If only one of the applicants is able to demonstrate that the change has significant impacts on its operations, the train in question will be prioritised. If more than one applicant is able to demonstrate that the change has major impacts on their operations, the changes in rolling stock and locomotive rotation are prioritised over changes in personnel rotation.

If a solution cannot be found on the basis of points 1–3, the conflicts affecting the remaining trains are resolved in relation to the applicants' total number of trains in the train category in question. The principle is that the applicants lose conflicts in relation to the total number of trains when measured by the number of operating days of the trains requested for the annual capacity. However, a distinction is made between conflicts in which trains must be cancelled and in which only timetable changes are necessary.

In this case, if only one conflict needs to be solved, it is solved for the benefit of the operator that has requested the lowest number of operating trains for its freight trains. If there is more than one conflict between the same operators they are resolved by selecting the option in which the ratio of the number of operating days containing changes or lost by each applicant as cancelled trains is as close as possible to the ratio of the number of operating days requested by the applicants. The comparison is made separately between the options in which a train of one of two operators must be cancelled and for those situations in which the rescheduling of a train of one of the operators is detrimental to the operator.

## 8 Exceptions

Under section 120 of the Rail Transport Act, the infrastructure manager may derogate from the end result produced by the priority order on the following grounds:

1) maintenance or improvement of the functioning of the rail transport system or public transport; or 2) unreasonable inconvenience to applicants or their customers. The priority order may also be derogated from for the benefit of an applicant that operates international rail services.

The decision on the derogation must always be made on a case-by-case basis and a derogation decision should not be seen as a precedent for other similar situations. This is because many of the external factors and factors directly impacting railway traffic may change and influence the decision. Derogating from the priority order can be considered justified in the following situations:

- Congestion affecting lower-category passenger trains
- Significant detrimental impact on the functioning of railway traffic or public transport
- Introducing more regular intervals for passenger services if this can be carried out without the detrimental changes affecting higher-category trains specified in chapter 4
- Unreasonable detrimental impact on railway operators
- Locomotive transfers normally included in other traffic may be given the priority of an integrated freight train if they are an essential part of running such a train.
- Regular failure to use the corresponding capacity in the previous timetable period, taking into account the capacity utilisation limits described in chapter 4.8.3 of the Network Statement, may reduce a train's priority;
- Essential infrastructure management needs
- The reasonableness of solutions for trains in different categories must be considered in connection with Infrastructure constraints, especially with regard to long-term constraints.

For example, in the case of a small operator, an unreasonable detrimental impact on a party allocated a lower priority may lead to a situation in which the applicant would have to close down a significant part of its business as a result of the decision.

A night train may be given priority over higher-category trains if the commercial advantage of the night train would otherwise disappear and the required loadings and unloadings cannot otherwise be carried out. However, as a rule, night trains are not subject to the same strict travel time requirements as other long-distance trains.

If a train with a higher priority involved in a conflict had been allocated similar capacity in the preceding timetable period and this capacity has not been used as described in the Network Statement, a lower-category train may be given priority.

### 9 Further information

This priority order is not applied in operational situations. The management of operational situations is described in chapter 6 of the Network Statement and in

the FTIA document 'Rautatieliikenteen hallinta operatiivisissa tilanteissa' (see the Railway Instructions).

The Finnish Transport Infrastructure Agency has published a report <u>Priority order of infrastructure capacity on a congested railway route</u> (FTIA's publications 63/2020) in which priority order model discussed in this appendix and the grounds for it are described in more detail.

Major changes in traffic flows and the railway network will be taken into account in the development of the priority order.

## Determining the basic infrastructure charge

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## Summary

The Finnish Transport Infrastructure Agency determined an infrastructure charge for 2025 based on the Finnish Rail Transport Act 1302/2018, the European Commission Implementing Regulation 2015/909 and the Single European Railway Area Directive 2012/34/EU. The infrastructure charge was determined for the railway operators using the state-owned railway network. The infrastructure charge for 2025 consists of the basic component of the basic infrastructure charge and the additional charge for the use of electric supply equipment. The infrastructure charge for 2025 was determined by expanding the calculation with data for 2022.

The infrastructure management costs were retrieved from the Finnish Transport Infrastructure Agency's cost management system after which the contents of the cost data were revised on the basis of separate reports. The basic component of the basic infrastructure charge (the direct cost generated by all railway traffic) was determined using a calculation based on econometric modelling, in which the cost function was determined using a regression analysis. Maintenance costs and replacement investments by line section were used as explanatory variables and the gross tonnes and rail kilometres by line section as independent variables in the cost function. The additional charge for the use of electric supply equipment was determined using a subtraction method in which the direct traffic-related costs were separated by experts from the costs incurred as a result of using the electric supply equipment of the electrified railway network and these costs were divided by the kilometres operated in rail traffic using electric supply equipment.

Based on econometric modelling, the basic component of the basic infrastructure charge is 0.1927 cents/gross tonne-kilometre. Based on the calculation used, the additional charge for the use of electric supply equipment is 0.0145 cents/gross tonne-kilometre.

The calculations used to produce the basic component of the basic infrastructure charge met the assumptions of linear regression in econometric modelling and the tests carried out on it. The definition of the additional charge for using electric supply equipment is in accordance with the requirements set out in the subtraction method defined in the Commission Implementing Regulation. The infrastructure charge calculations were produced and documented in a thorough and transparent manner and best international practices were used in the process.

#### 1 Introduction

References to the following material are made in this appendix: the basic infrastructure charge calculation required under the Railway Market Directive 2012/34/EU, the legislative framework for determining the calculation, the method used by the Finnish Transport Infrastructure Agency in the Network Statement 2025 to calculate the basic infrastructure charge, the dataset compiled to calculate the charges and the results and evaluation of the calculations based on the dataset.

The infrastructure charge calculations have been produced by combining two methods permitted under the law. The econometric cost modelling based on marginal cost pricing has been used as the principal method and the principles of this modelling have been used to determine the Finnish infrastructure charge since 2003. The method produces the low infrastructure charges meeting transport policy objectives. The second method applied, the subtraction method, is used for determining the additional charge levied on the use of electric supply equipment.

Best international practices have been used in the infrastructure charge calculations even though so far the network statements of different countries and the appendices to them have contained only a limited amount of detailed information on the calculations. Efforts have been made to create sustainable practices that exceed international standards in terms of the accuracy and documentation of the calculations. In 2019, the authority supervising the lawfulness of the pricing stated that the Finnish Transport Infrastructure Agency should incorporate changes in its method and all these changes have been taken into account in the calculations. Background reports and studies have been prepared to support the calculations.

The Finnish Transport Infrastructure Agency only levies the basic infrastructure charge in the timetable period 2025. As required under the law, the charges paid by traffic using electric supply equipment and the traffic not using it are itemised in the basic infrastructure charges.

The process of determining the basic infrastructure charge (Figure 1) consists of two parts: processing of the overall infrastructure management costs and the calculation of direct unit costs. Maintenance costs and replacement investments have been separated from the total infrastructure management costs to calculate the basic component of the basic infrastructure charge and the additional charge for the use of electric supply equipment. After this, non-eligible costs have been separated from total infrastructure management costs. The basic component of the basic infrastructure charge levied on all traffic is a result of econometric modelling, while the additional charge for using electric supply equipment has been calculated with a subtraction method. Processing and modelling of the cost data is discussed in more detail in chapter 4.

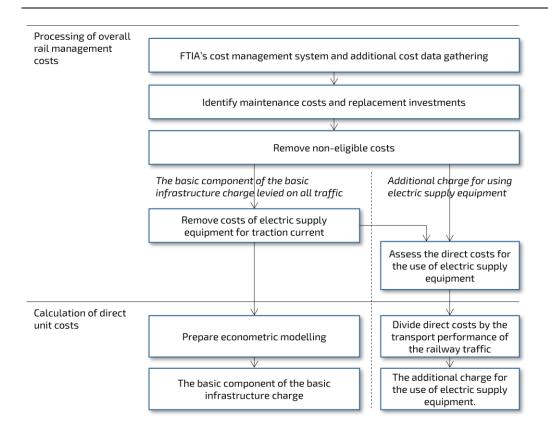


Figure 1. Determining the basic infrastructure charge

## 2 Legislative considerations

The basic infrastructure charge is used to determine the price for the minimum access package. The pricing provisions are laid down in the Railway Market Directive 2012/34/EU of the European Union, the Finnish Rail Transport Act (1302/2018) and the Commission Implementing Regulation (EU) 2015/909. The focus in the legislation is on determining which costs should be used as a basis for the pricing of the minimum access package and the basic infrastructure charge levied by the Finnish Transport Infrastructure Agency.

#### 2.1 Railway Market Directive and the Rail Transport Act

In accordance with the Railway Market Directive, the following is stated on the scope of the infrastructure charge in section 132 of the Rail Transport Act (1302/2018):

In return for the infrastructure charge referred to in section 139, the infrastructure manager must provide all railway operators, in a fair and non-discriminatory manner, with the services included in the minimum access package referred to in point 1 of Annex II to the Railway Market Directive. In return for the infrastructure charge, the infrastructure manager must also guarantee access to the service facilities referred to in section 133.

In accordance with the Railway Market Directive (2012/34/EU), the basic rule for determining the basic infrastructure charge is laid down in section 139 of the Rail Transport Act as follows:

The basic infrastructure charge levied on the services included in the minimum access package and referred to in section 132(1) above must be directly based on the costs resulting from railway operations.

The costs directly resulting from railway operations are determined on the basis of the costs that are related to the provision of the minimum access package. Under point 1 of Annex II to the Railway Market Directive, the minimum access package must comprise the following:

- a) handling of requests for railway infrastructure capacity
- b) the right to utilise capacity which is granted
- c) use of the railway infrastructure, including track points and junctions
- d) train control including signalling, regulation, dispatching and the communication and provision of information on train movements
- e) use of electric supply equipment for traction current, where available
- f) all other information required to implement or operate the service for which capacity has been granted.

The inclusion of the minimum access package in the basic infrastructure charge determined by the Finnish Transport Infrastructure Agency has been assessed as follows:

- Paragraph a) concerns official administrative work that is relatively minor in scope and has not been included in the basic infrastructure charge.
- The content of paragraph b) has not been determined as an infrastructure management measure.
- The services referred to in paragraph c) and e) are examined in the section discussing the way in which the basic infrastructure charge is determined.
- The services referred to in paragraph d) are currently outside the scope of the basic infrastructure charge but they are functions that could be priced as minimum access package services.
- The information referred to in paragraph f) is not an infrastructure management measure in the Finnish railway network.

#### 2.2 Commission Implementing Regulation

The EU provisions supplementing the Railway Market Directive must be considered in the process of determining the basic infrastructure charge. The Commission Implementing Regulation (EU) 2015/909 on the modalities for the calculation of the cost that is directly incurred as a result of operating the train service lays down the costs that should be considered as direct costs incurred as a result of operating train traffic (Article 3) and the costs that may not be included in the direct costs (Article 4). It is specifically noted in the regulation that the charges levied on train traffic not using electric supply equipment may not include the costs specifically generated by electric traction (Article 4(1)(k)). The rules have been taken into account in the itemisation of infrastructure management costs for the purpose of calculating the basic infrastructure charge and in order to determine a separate price for the basic infrastructure charge levied on all traffic and for the additional charge for using electric supply equipment.

The main points of Article 3 are:

#### Direct costs on a network-wide basis

Direct costs on a network-wide basis shall be calculated as the difference between, on the one hand, the costs for providing the services of the minimum access package and for the access to the infrastructure connecting service facilities and, on the other hand, the non-eligible costs referred to in Article 4.

Without prejudice to Article 4 and if the infrastructure manager can transparently, robustly, and objectively measure and demonstrate on the basis of, inter alia, best international practice that costs are directly incurred by the operation of the train service, the infrastructure manager may include in the calculation of its direct costs on a network-wide basis in particular the following costs:

- costs of staff needed for keeping open a particular stretch of line if an applicant requests to run a specific train service scheduled outside the regular opening hours of this line;
- the part of the costs of points infrastructure, including switches and crossings, that is exposed to wear and tear by the train service;
- the part of the costs of renewing and maintaining the overhead wire or the electrified third rail or both and the supporting overhead line equipment directly incurred as a result of operating the train service; the costs of staff needed for preparing the allocation of train paths and the timetable to the extent that they are directly incurred as a result of operating the train service.

The Finnish Transport Infrastructure Agency includes the costs presented in section 1 in the costs incurred from the measures that are carried out to maintain the daily operability of the railway network (maintenance) as well as to repair and renew the infrastructure due to the wear and tear (replacement investments) resulting from railway operations. The specifications on the non-eligible costs presented in Article 4 are considered in determining these costs.

Article 4 presents special rail infrastructure management costs, which have been excluded from the modelling exercise, as follows:

#### Non-eligible costs

- The infrastructure manager shall not include in the calculation of direct costs on a network-wide basis in particular the following costs:
  - a. fixed costs relating to the provision of a stretch of line which the infrastructure manager must bear even in the absence of train movements;
  - costs that do not relate to payments made by the infrastructure manager. Costs or cost centres that are not directly linked to the provision of the minimum access package or to access to infrastructure connecting service facilities;
  - c. costs of acquisition, selling, dismantling, decontamination, recultivation or renting of land or other fixed assets;
  - d. network-wide overhead costs, including overhead salaries and pensions;
  - e. financing costs;
  - f. costs related to technological progress or obsolescence;
  - g. costs of intangible assets;
  - costs of track-side sensors, track-side communication equipment and signalling equipment if not directly incurred by operation of the train service;
  - i. costs of information, non-track side located communication equipment or telecommunication equipment;

- j. costs related to individual incidences of force majeure, accidents and service disruptions without prejudice to Article 35 of Directive 2012/34/EU;
- costs of electric supply equipment for traction current if not directly incurred by operation of the train service. Direct costs of operation of the train services that do not use electric supply equipment shall not include costs of using electric supply equipment;
- l. costs related to the provision of information mentioned under item 1(f) of Annex II to Directive 2012/34/EU, unless incurred by operation of the train service;
- administrative costs incurred by schemes of differentiated charges referred to in Articles 31(5) and 32(4) of Directive 2012/34/EU;
- n. depreciation which is not determined on the basis of real wear and tear of infrastructure due to the train service operation;
- the part of the costs of maintenance and renewal of civil infrastructure that is not directly incurred by operation of the train service.
- 2. If the infrastructure manager received funding to finance specific infrastructure investments, which it is not obliged to repay and where such investments are taken into account in the calculation of direct costs, the costs of such investments shall not increase the level of charges without prejudice to Article 32 of Directive 2012/34/EU.
- 3. Costs excluded from calculation by virtue of this Article shall be measured or forecast on the basis of the time period referred to in Article 3(5).

In the non-eligible costs, the Finnish Transport Infrastructure Agency follows the procedure described in subsection 4.1 so that it can be ensured that non-eligible cost items are not included in the infrastructure charge.

# 3 Method of determining the basic infrastructure charge and the source data

#### 3.1 General description

A dataset has been prepared to calculate the basic infrastructure charge and it describes the railway network of the Finnish Transport Infrastructure Agency as well as the railway operations and infrastructure management on the network. The dataset contains the following data:

- features of the railway network by line section,
- annual transport performance by line section, and
- annual cost of rail infrastructure management (maintenance and replacement investments) allocated to line sections considering the legal framework related to the cost assessment.

The determination of the basic infrastructure charge is primarily based on the econometric cost modelling described in Article 6 of the Commission Implementing Regulation (2015/909) (section 4.2.1 of this appendix)), while the additional charge for using electric supply equipment is determined on the basis of the subtraction method described in Article 3 of the Commission Implementing Regulation. Econometric modelling of the dataset has been used to examine the ratio of costs by line section to the amount of infrastructure and the transport performance on the line sections. Costs that do not include the infrastructure management costs incurred from the use of electric supply equipment have been determined on the basis of econometric modelling. This gives the costs generated by the transport performance of train traffic (basic component of the basic infrastructure charge; cents/gross tonne-kilometre).

An additional charge is levied on the use of electric supply equipment and this charge is added to the basic component of the basic infrastructure charge. The additional charge for the use of electric supply equipment is charged to all electrically driven rolling stock (cents per gross tonne-kilometre). The additional charge has been determined using the calculation method laid down in Article 3 of the Commission Implementing Regulation (section 4.2.2 of this appendix). In this method, expert evaluation has been used to separate the network-wide costs of infrastructure management of the electrified rail network from the infrastructure costs directly incurred from rail traffic operations and these costs have been divided by the kilometres operated in rail traffic using electric supply equipment.

## 3.2 Feature data of the railway network and scope of the study

The dataset used for the calculations includes the following feature data of the railway network:

- division of the railway network into line sections,
- line length of the line section,
- track length of the line section,

- multi-rail line sections, and
- electrification.

The feature data was compiled for 70 line sections from the Network Statement and the Railway Information Extranet. The calculation data covers the entire length of the railway network managed by the Finnish Transport Infrastructure Agency (excluding railway yards and a small number of short sidings). In 2022, a total of 5,645 km of the Finnish railway network was in transport use and 5,559 km of this was covered by the calculation data.

#### 3.3 Transport performance data

The dataset includes the annual statistical data on the kilometres operated by line section in gross tonnes (total weight of rolling stock and cargo). The figures for the period 2013–2014 are from the traffic information system of VR and for the period 2015–2022 from the infrastructure manager's traffic information system.

#### 3.4 Cost information

The data on total infrastructure management costs as regards the basic component and the additional charge for using electric supply equipment are from the Finnish Transport Infrastructure Agency's cost calculation system and it covers the period 2013–2022. The total infrastructure management costs have been grouped by cost category (see section 4.1.1). The costs incurred from the use of the minimum access package have been identified and the non-eligible costs listed in Article 4 have been excluded (see section 4.1.2). To determine the basic component of the basic infrastructure charge, the following items have been identified from the remaining data: cost of maintaining line sections and replacement investments, which serve as the source data for the econometric modelling. The modelling produces the direct unit costs generated by train traffic.

The datasets of the basic component of the basic infrastructure charge contain the following maintenance costs allocated to line sections each year:

- superstructure maintenance;
- maintenance of turnouts and turnout heating;
- maintenance of trackside equipment and devices;
- bridge maintenance;
- maintenance of substructure, foundation structure and railway areas;
- maintenance of train control systems and safety installations; and
- maintenance material, such as rails, sleepers and ballast as well as materials related to equipment and instruments.

The dataset of the basic component of the basic infrastructure charge contains the following replacement investment costs allocated to line sections each year:

- renewal and cleaning of superstructure, such as the ballast bed;
- renewal of rails, sleepers, overhead wires and supporting lines;
- renewal and repair of turnouts;
- grinding of rails and turnouts; and

- such material as rails, sleepers and ballast and other structural material.

To determine the additional charge of the basic infrastructure charge based on the use of electric supply equipment, the cost of infrastructure management of the electrified railway network and the infrastructure costs directly incurred from traffic identified by experts have been retrieved from the dataset. The costs have been divided by the transport performance generated using electric supply equipment, which has resulted in the additional charge for the train traffic using electric supply equipment.

The costs related to electric supply equipment have been grouped in the following categories and subcategories:

- electrotechnical bridge maintenance;
- maintenance, renewal and inspections of electric railway systems and substations;
- maintenance of high-tension track equipment, 110 kV systems, lighting, heating stations and transformers;
- maintenance of other special track systems;
- separately contracted maintenance work for the electrified railway network; changes of overhead wires and supporting lines, changes of hangers, changes of phase breaks, changes of section insulators, changes of disconnectors and their anchor arms, changes of circuit breakers and disconnectors at feeder stations, basic overhead line maintenance; and
- materials: overhead wires and supporting lines, hanger materials, phase breaks, section insulators, circuit breakers, disconnectors and anchor arms.

To determine the costs of using electric supply equipment, experts have estimated the dependence between costs and traffic for each of these categories. The estimates are given as dependence between 0% and 100%. An independent report based on interviews with experts has been prepared on the dependencies and published in the FTIA publication series.

## 4 Calculations and basic infrastructure charges

#### 4.1 Infrastructure management costs incurred by the Finnish Transport Infrastructure Agency

To verify the costs eligible for the infrastructure charge calculations and directly incurred from traffic, a compilation and breakdown of the total costs of infrastructure management have been produced. This sub-chapter describes how the costs used in the minimum access package and further in the econometric cost modelling have been calculated on the basis of the total infrastructure management costs by subtracting the non-eligible costs (section 4.1.2) from the minimum access package costs (section 4.1.1).

The infrastructure management costs incurred by the Finnish Transport Infrastructure Agency have been entered in the agency's Sampo cost management system, which is based on the Kieku ERP system of central government. The infrastructure management costs have been retrieved from the Sampo cost management system and entered on the following on-budget accounts:

- 3110202 Railway infrastructure management
- 3110205 Traffic control service charge
- 3110772xxx Railway network development investments
- 3110774xxx Other major development investments (including railway network development investments)
- 3110775xxx Planning of development investments (including railway network development investments)

The total infrastructure management costs incurred by the Finnish Transport Infrastructure Agency for each year (2013–2022) and by cost category (18 categories) are presented in Table 1 and in graphics in Appendix 1. The categorisation of costs is based on a review carried out on the most detailed cost management system level (payment item).

Table 1. Infrastructure management costs incurred by the Finnish Transport Infrastructure Agency in the period 2013–2022 (EUR million) Sampo cost management system). The abbreviation MAP means the costs incurred from the minimum access package.

Total	679.17	659.28	559.40	621.91	606.62	617.57	585.58	645.75	704.37	827.61
Administrative costs	1.97	1.23	1.83	2.36	2.57	2.66	2.21	2.95	2.19	2.95
Reports and R&D	1.49	2.63	2.36	2.38	3.59	3.34	4.12	5.79	5.50	8.90
Clearing of accident sites and rescue services	0.51	1.31	2.45	4.56	7.00	6.96	3.78	4.29	10.11	7.82
Contaminated land areas and environmental management	1.02	0.58	0.62	0.50	0.49	0.46	0.51	0.49	0.39	0.29
Rail Training Centre	0.00	0.00	0.40	3.72	9.24	1.87	1.01	1.76	1.76	1.52
Property management	4.71	5.41	5.63	4.75	4.48	4.33	4.12	3.48	3.45	5.14
Supervision	4.55	4.96	4.99	4.66	4.49	4.86	5.05	5.74	5.42	5.25
Data communications	13.86	14.62	14.40	15.35	19.94	19.66	15.25	10.41	9.88	9.80
Data systems	4.23	5.62	5.77	7.02	10.13	11.69	9.13	10.38	9.55	8.70
Train traffic control costs (MAP/no MAP)	48.69	51.82	56.33	54.98	51.43	53.76	82.17	75.03	76.59	75.55
Development investments	296.55	277.59	204.16	216.51	162.03	113.19	123.33	134.16	183.92	260.60
Electricity transmission service	10.47	10.19	9.64	10.19	10.60	11.37	9.97	12.27	13.96	17.79
Electric supply equipment costs (not MAP)	9.11	9.40	8.62	8.23	3.89	5.36	4.94	3.89	8.11	6.80
Electric supply equipment costs (MAP)	10.30	14.20	13.76	15.33	20.55	15.78	16.29	19.07	17.26	15.25
Maintenance costs (not MAP)	19.81	7.73	5.85	6.68	7.34	7.64	8.27	9.50	15.33	17.38
Maintenance costs (MAP)	122.69	126.89	128.25	133.28	148.66	135.79	152.42	176.90	159.29	179.33
Replacement investments (not MAP)	16.35	24.52	26.73	50.00	48.24	54.05	44.23	45.85	43.11	74.54
Replacement investments (MAP)	112.86	100.56	67.61	81.41	91.96	164.82	98.80	123.80	138.54	130.02
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022

#### 4.1.1 Costs incurred from minimum access package

The infrastructure management costs and the minimum access package (MAP) costs incurred by the Finnish Transport Infrastructure Agency have been itemised to calculate the basic infrastructure charge. Only the costs incurred from the minimum access package (MAP) have been considered in the calculation of the basic infrastructure charge.

Cost incurred from the minimum access package:

- Replacement investments (MAP) comprise the costs incurred from the renovation of line sections, safety installations and platforms. Replacement investments (no MAP) include other replacement investments.
- Maintenance costs (MAP) comprise the costs incurred from the maintenance of line sections, safety installations and platforms and from separately contracted line section maintenance (YPI and RHET). Maintenance costs (no MAP) include other maintenance costs.
- Electric supply equipment costs (MAP) comprise the costs incurred from the replacement of electric supply equipment, and the maintenance of the electric supply equipment, overhead wires and supporting lines,

- and the maintenance of turnouts and control equipment on the line sections with electric supply equipment and the costs for using filtering equipment of electrical disturbances. The costs of electrical supply equipment (no MAP) include other costs of electrical supply equipment.
- Train traffic control costs (MAP & no MAP) comprise the costs incurred from traffic control, traffic control centres and control rooms, capacity management and system maintenance. In addition to the minimum access package costs, train traffic control costs also include other costs, such as systems development and training. The costs incurred from train traffic control are not included in the infrastructure charge.

Table 2. Costs incurred from the Minimum Access Package in the period 2013–2022 (EUR million) (source: Sampo cost management system). Train traffic control costs also include non-MAP costs and thus they are not included in the total amounts.

MAP costs	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Replacement investments (MAP)	112.86	100.56	67.61	81.41	91.96	164.82	98.80	123.80	138.54	130.02
Maintenance costs (MAP)	122.69	126.89	128.25	133.28	148.66	135.79	152.42	176.90	159.29	179.33
Electric supply equipment costs (MAP)	10.30	14.20	13.76	15.33	20.55	15.78	16.29	19.07	17.26	15.25
Train traffic control costs (MAP/no MAP)	48.69	51.82	56.33	54.98	51.43	53.76	82.17	75.03	76.59	75.55
Total (excl. train traffic control)	245.85	241.65	209.61	230.01	261.17	316.38	267.51	319.77	315.10	324.60

The average MAP costs for the period 2013-2022 are EUR 273 million per year and EUR 257 million per year when excluding costs of electrical supply equipment. An average of EUR 223 million of these can be allocated to track sections.

#### 4.1.2 Non-eligible costs

This section describes how non-eligible costs have been separated from total infrastructure management costs (Article 4 of the Commission Implementing Regulation).

The following costs specified in Article 4 are not included in the infrastructure management cost data:

Table 3. Costs specified in Article 4(1) that are not included in the infrastructure management costs of the Finnish Transport Infrastructure Agency.

Costs specified in Article 4	Explanation
d) network-wide overhead costs, including overhead salaries and pensions.	The network-wide overhead costs are paid from the operating expenditure of the Finnish Transport Infrastructure Agency and they are not included in the total infrastructure management costs examined in this appendix.
e) financing costs.	Financing costs of the on-budget appropriations are not considered in the accounts of the Finnish Transport Infrastructure Agency. The Finnish Transport Infrastructure Agency only collects financing for infrastructure management through infrastructure charges, which do not involve financing costs.
f) Costs related to technological progress or obsolescence.	The cost data does not include costs related to technological progress or obsolescence. These costs refer to write-downs that may have to be made when assets that have not yet reached the end of their useful life in terms of accounting are replaced.
I) Costs related to the provision of information mentioned under item 1(f) of Annex II to Directive 2012/34/EU, unless incurred by operation of the train service.	Costs related to the provision of information are paid from the operating expenditure of the Finnish Transport Infrastructure Agency and they are not included in the total infrastructure management cost data examined in this appendix.
m) Administrative costs incurred by schemes of differentiated charges referred to in Articles 31(5) and 32(4) of Directive 2012/34/EU.	The system of infrastructure charges does not include cost impact mechanisms referred to in the regulation, which means that the total infrastructure management cost data examined in this appendix does not include administrative costs of this type.
n) Depreciation which is not determined on the basis of real wear and tear of infrastruc- ture due to the train service operation.	The Finnish Transport Infrastructure Agency receives its funding from the State Budget and thus it does not make any depreciation in its accounts. The agency publishes annual financial statements, in which the depreciation is estimated on the basis of commercial accounting methods.

The infrastructure management data contains the following non-eligible costs referred to in Article 4 of the Commission Implementing Regulation (references to categories in Table 1 (p. 13) are shown in bold and in italics):

Table 4. Costs specified in Article 4(1) that are included in the infrastructure management costs of the Finnish Transport Infrastructure Agency in full or in part.

Costs specified in Article 4	Explanation
(a) Fixed costs relating to the provision of a stretch of line which the infrastructure manager must bear even in the absence of train movements.	Maintenance costs (MAP) and Replacement investments (MAP) include the costs incurred from the minimum access package, which include both fixed and variable costs. The fixed costs related to a line section do not depend on the volume of train traffic and they are not included in the infrastructure charge in econometric modelling.
(b) Costs that do not relate to payments made by the infrastructure manager. Costs or cost centres that are not related to the provision of the minimum access package or the right to access the infrastructure connecting service facilities.	The cost data only includes charges paid by the Finnish Transport Infrastructure Agency. Replacement investments (no MAP), Maintenance costs (no MAP) and Electric supply equipment costs (no MAP) include railway yard costs and they are not considered in the infrastructure charge calculations.
c) Costs of acquisition, selling, dismantling, decontamination, recultivation or renting of land or other fixed assets.	As a rule, these cost items are not included in the infrastructure management costs. Costs items included in the infrastructure managements costs have been excluded from the cost data.
g) Costs of intangible assets.	Information systems containing software licences are not considered as costs in the infrastructure charge calculations. The Finnish Transport Infrastructure Agency does not have any other intangible assets related to infrastructure management.
h) Costs of track-side sensors, track-side communication equipment and signalling equipment if not directly incurred by operation of the train service.	These costs are included in the following categories: <b>Replacement investments (MAP)</b> and <b>Maintenance investments (MAP)</b> . Costs that do not directly arise from railway operations are not considered in the econometric modelling.
I) Costs of information, non-track side lo- cated communication equipment or tele- communication equipment.	These costs are included in the following categories: <b>Replacement investments (MAP)</b> and <b>Maintenance investments (MAP)</b> . Costs that do not directly arise from railway operations are not considered in the econometric modelling.
j) Costs related to individual incidences of force majeure, accidents and service disruptions without prejudice to Article 35 of Directive 2012/34/EU.	Clearing of accident sites and rescue services and Contaminated land areas and environmental management, which include damage-related costs are not considered in the infrastructure charge calculations.
k) Costs of electric supply equipment for traction current if not directly incurred by operation of the train service. Direct costs of operation of the train services that do not use electric supply equipment shall not include costs of using electric supply equipment.	The electric supply equipment costs are divided into two categories: Electric supply equipment costs (MAP) and Electric supply equipment costs (no MAP), which have both been excluded from the calculations producing the basic component of the basic infrastructure charge. The cost of infrastructure management of the electrified railway network directly incurred from railway operations are estimated by experts on the basis of a detailed cost itemisation and allocated to train traffic using electric supply equipment.
o) The part of the costs of maintenance and renewal of civil infrastructure that is not directly incurred by operation of the train service.	<b>Maintenance costs (no MAP)</b> are not considered in the infrastructure charge calculations.

The interpretation is that Article 4(2) of the Commission Implementing Regulation applies to such projects of the Finnish Transport Infrastructure Agency that

are funded from the TENT-T scheme. These are **development investments**, which are not considered in the basic infrastructure charge calculations.

In addition to the non-eligible costs specified in Article 4, the following cost categories are also excluded from the infrastructure charge calculations for 2023: **Data communications, Supervision, Property management, Rail Training Centre, Reports and R&D** and **Administrative costs**. In addition, the **electricity transmission service** is a cost that is not included in the infrastructure charge calculation.

#### 4.2 Determining the basic infrastructure charge

The following costs incurred from the minimum access package and referred to in section 4.1.1 from which the non-eligible costs referred to in section 4.1.2 have been subtracted are considered in the calculation of the basic infrastructure charge for 2025:

- Replacement investments (MAP) that comprise the costs allocated to line sections and that have been capitalised in the line section balance sheet of the on-budget account 3110202 (Railway infrastructure management).
- The part of the maintenance costs (MAP) that can be allocated to line sections directly or on the basis of a questionnaire survey carried out among railway network maintenance managers.
- Electric supply equipment costs (MAP) that can be allocated to the cost categories listed in section 3.4.

Replacement investments and maintenance costs are processed using econometric modelling (Article 6 of the Commission Implementing Regulation) and the costs for the use of electric supply equipment using the subtraction method (Article 3 of the Implementing Regulation).

**Train traffic control costs (MAP)** will not be considered in the infrastructure charge calculations for 2025 because their dependence from train traffic has not yet been determined. Certain MAP costs that cannot be allocated to line sections will be similarly treated.

Econometric modelling takes into account the dependence between the examined costs and traffic volumes so that the non-traffic costs or fixed costs do not impact the level of basic infrastructure charges. Paragraphs a, h and i of Article 4 (Non-eligible costs) are considered on this basis.

Econometric modelling requires that replacement investments and maintenance costs are allocated to specific line sections. The allocation is based on the payment item-level entries in the cost management system specifying a line section. Example:

On-budget account: 3110202 Railway infrastructure management, TA1
Project: RTHH-49 RO 1105 Huopalahti–Vantaankoski renovation, H

Project: RTPP-49 RO 1105 HUOPALAHTI-VANTAANKOSKI, P

Events: PR00011594 RO 1105 Hpl-Vks superstructure and bridge repairs, TP, v

Payment item: L00000K0L IR132183A13 R0 1105 Renovation of ground supports and vaults on the

Louhela station bridge, M, v

Line section: LS 1105

Year: 2013 Category: Replacement investments (MAP) Specific category: Replacement investments line sections

When determining the basic component of the basic infrastructure charge for 2025 the same method was used as in 2024, wherein it is calculated on the basis of account line sections and in these calculations the divisions into line sections used as the basis for cost data and transport performance data are identical. This change has eliminated the need to allocate cost data to line sections used as a basis for transport performance data. The costs for which the transport performance line section is not known are not considered in the calculations. The allocation of cost data to line sections has been specified, especially with regard to replacement investments, for example by utilising detailed location entries in fixed assets accounting.

The costs arising from turnout heating comprise the costs of the energy needed for heating turnouts. These costs are allocated to line sections in accordance with the number of heated turnouts.

#### 4.2.1 Basic component of the basic infrastructure charge

Using the datasets described above, the Finnish Transport Infrastructure Agency has prepared a modelling to determine the basic component of the basic infrastructure charge. The datasets cover the period 2013–2022. In the modelling, a cost function has been determined on the basis of a linear regression analysis, in which the costs (maintenance and replacement investments by line section) are used as the explanatory variable, and transport performance (gross tonnes by line section) and track kilometres (by line section) are used as independent variables.

The dataset has been compiled by adding up the costs (in the manner demonstrated in Table 2 and Appendix 2) and transport performance during a period of ten years (2013–2022). By combining datasets of several years, the impacts of replacement investments can be divided equally over the period in review. The calculation method was selected on the basis of a thesis on the topic produced for the Finnish Transport Infrastructure Agency.

The following function is used as the cost function:

$$\ln C_i = \alpha + \beta_{rd\_km} \ln rd\_km_i + \beta_{brt} \ln brt_i + \epsilon_i$$
, in which

 $\mathcal{C}_i$  means infrastructure management costs on line section i

 $\alpha$ ,  $\beta_{rd\_km}$  ja  $\beta_{brt}$  are the estimated coefficients of the model

 $rd\_km_i$  means total track length on line section i (length of the line section  $\times$  number of tracks on the line section)

 $brt_i$  transport performance on line section i in gross tonnes

 $\epsilon_i$  error term of the costs of line section i, which is the difference between econometric modelling and actual cost.

In the calculation, track length is the length of the line sections multiplied by the number of tracks on each line section. Transport performance on a line section means the transported gross tonne volume during the period in review, which includes the total weight of the train (including cargo).

The marginal cost of traffic has been estimated from the dataset by constructing a cost function, which examines the ratio of transport performance on each line section (gross tonnes) and track length to costs on all line sections. In addition to turnout heating, no other electric supply equipment costs have been included in the examination.

Model estimation was carried out on the basis of the R computing software. The coefficients of the estimated model (cost function) and the explanation rate are shown in Table 5.

N	Explanation rate	Model c	Standard error		
	R <sup>2</sup>	stand- ard α	$\begin{array}{cc} \text{Transport} & \text{per-} \\ \text{formance} \\ & \beta_{\text{brt}} \end{array}$	Track length β <sub>rd_km</sub>	
70	0.6307	10.236	0.2464	0.5952	0.6434

Table 5. Coefficients and key figures of the estimated cost function.

The results of the cost function estimation (incl. key figures) as well as the statistical tests carried out on the modellings are presented in Appendix 3.

The marginal cost (the cost directly resulting from an individual train service performance) has been calculated using partial derivation of the cost function with respect to the service performance. The resulting marginal cost function indicates how much the infrastructure management costs examined change as a result of one additional train service performance (gross tonne-kilometre).

The marginal cost (MC) is presented as follows:

$$MC_i=eta_{brt}rac{e^{lpha+eta_{rd\_km}\ln rd\_km_i+eta_{brt}\ln brt_i+rac{\sigma^2}{2}}}{brt_i\,rt\_km_i},$$
 in which

 $rt_{-}km_{i}$  is the length of line section i and  $\sigma^{2}$  is the estimate of the model error term variance.

The marginal cost has been estimated separately for each line section contained in the dataset. Due to substantial differences in track length, transport performance and costs between line sections, there is also substantial variation in marginal costs between line sections.

The marginal cost (MC) determined for the pricing of the basic infrastructure charge has been calculated by weighting the marginal costs for each line section by the volume of the service performance on the line sections as follows:

$$MC = \frac{\sum brtkm_i \ MC_i}{\sum brtkm_i}$$

The marginal cost determined using econometric modelling (The basic component charged for all traffic performance is 0.1927 cents/gross tonne-kilometre, as adjusted on the basis of the 2022 cost index.

Based on the modelling, the dependency between transport performance and the costs that must be considered in the calculation of the infrastructure charge amounts to 24.6 %. In other words, when transport volumes grow by one per cent, infrastructure management costs increase by 0.246%.

The infrastructure charge has been calculated using the R programming language and the calculation code is described in Appendix 4.

#### 4.2.2 Additional charge for the use of electric supply equipment

The additional charge levied on the use of electric supply equipment has been determined using the method laid down in Article 3 of the Commission Implementing Regulation. In this method, expert evaluation has been used to separate the network-wide separate costs of infrastructure management of the electrified rail network from the infrastructure costs directly incurred from rail traffic operations and these costs have been divided by the kilometres operated in rail traffic using electric supply equipment. The proportion of direct costs is based on the view of ten independent experts on the dependencies between component wear and tear and railway traffic. The report on the topic has been published in the FTIA publication series.

The average annual costs of infrastructure management of the electrified rail network in the period 2014–2022 are presented below. The information is based on the classification used by the Finnish Transport Infrastructure Agency in its cost monitoring and estimates of the proportion of the costs directly resulting from rail traffic are also given. The cost dataset of infrastructure management of the electrified rail network in 2013 is not fully comparable with the figures for subsequent years and for this reason it is not included in the data used in the calculations. The figures presented below are index-adjusted to 2022 price level.

<u>Electrotechnical maintenance of bridges</u> consists of periodical earthing inspections carried out independently of railway traffic. These costs averaged EUR 0.261 million/year in the period 2014–2022 and 0% of them (EUR 0 million/year) were costs directly resulting from rail traffic.

Maintenance of the electrified railway system consists of the work carried out as part of annual maintenance contracts and separately contracted work. Work carried out as part of the maintenance contracts consists of inspections to ensure network safety and accessibility and the work is not related to transport performance (70%). Costs directly resulting from traffic include maintenance costs for section insulators, phase breaks and overhead lines of scissor crossings (30%), 10% of which are estimated to be due to replacement investments made before the end of the life cycle. Annual costs averaged EUR 4.271 million in the period 2014–2022 and 27% of these costs (EUR 1.153 million/year) were costs directly resulting from rail traffic. The separately contracted work consists of inspections and other work carried out to ensure the safety and accessibility of the rail network and the work does not include costs that are directly related to traffic. Separately contracted work averaged EUR 0.274 million/year in the period 2014–2022 and 0% (EUR 0/year) of this was work directly resulting from traffic.

Maintenance of high-tension equipment consists of work carried out as part of annual maintenance contracts and separately contracted work. Annual costs averaged EUR 2.798 million in the period 2014–2022 and none of these costs are allocated to the additional charge of the basic infrastructure charge payable by traffic using electric supply equipment. Separately contracted work comprises maintenance of 110 kV systems, lighting and heating stations. According to the report, these costs are not traffic-related. Separately contracted work averaged EUR 1.529 million/year in the period 2014–2022.

Maintenance of transformers and turnout heating equipment, which include periodic inspections and replacements of components, is also included as part of the maintenance of high-current track equipment. The average costs for the transformers in 2014-22 were EUR 0.0667 million/year, of which 50% (EUR 0.034/year) were directly caused by traffic and EUR 0.147 million/year for turnout heating equipment, of which 35% (EUR 0.052/year) were directly caused by traffic.

Separately contracted electrified railway maintenance work comprises the work carried out as part of annual maintenance contracts and separate work. Separately contracted electrified railway maintenance work consists of changes of overhead wires and supporting lines, changes of hangers, changes of phase breaks, changes of section insulators, changes of disconnectors and their anchor arms, changes of circuit breakers and disconnectors at feeder stations, basic overhead line maintenance and hangers. An expert assessment of to what extent these maintenance costs are traffic-related is given in Table 6 below.

Table 6. Traffic-related nature of separately contracted electrical maintenance work.

Type of cost	To what ex- tent is the work traf- fic-related	Cause
Overhead wires	90%	Direct physical contact, contact force, vibration
Hangers	90%	Vibration of the overhead line caused by traffic, 10% acceleration and vibration caused by wind
Phase breaks	85%	Direct physical contact, contact force, vibration
Grouping insulators	95%	Direct physical contact, contact force, vibration
Disconnectors and their anchor arms	10%	The operating current of the rolling stock causes the disconnectors and their anchor arms to wear
Circuit breakers and disconnectors at feeder stations.	20%	The operating current of the rolling stock causes circuit breakers and disconnectors to wear
Basic overhead line maintenance	0%	Is not traffic-related
Hangers	5%	Vibration of the overhead line system caused by traffic
Transformers	50%	Operating current of the rolling stock causes transformers to wear.

Annual costs of maintenance contract work averaged EUR 2.818 million in the period 2014–2022 and EUR 0.991 million/year of these costs were costs resulting from rail traffic. Annual costs of separately contracted work averaged EUR 2.656 million in the period 2014–2022 and EUR 0.934 million of these costs were costs resulting from rail traffic.

Replacement of overhead wires and supporting lines is separated from other electrical maintenance in the cost accounting of the Finnish Transport Infrastructure Agency. Annual costs of replacing overhead wires averaged EUR 0.635 million in the period 2014–2022 and 90% of these costs (EUR 0.571 million/year) were costs directly resulting from rail traffic. Annual costs of replacing supporting lines averaged EUR 1.067 million and 5% of these costs (EUR 0.053 million/year) were costs directly resulting from rail traffic.

<u>Material costs</u> are divided into material costs related to annual maintenance contracts and material costs related to separate work. The material costs of maintenance contracts consist of the same components as separately contracted electrical maintenance work. These costs averaged EUR 0.252 million/year in the period 2014–2022 and 35% of them (EUR 0.089 million/year) were costs directly resulting from rail traffic. Material costs related to separate work comprise materials of heating stations and they do not directly result from traffic. The material costs of separate work are divided into the material costs of heating stations and other material costs. The average material costs of heating stations between 2014 and 2022 were EUR 0.129 million/year, of which 40% (EUR 0.051 million/year) directly caused by traffic and other material costs were EUR 0.181 million/year, which are not dependent on traffic.

Maintenance of other special trackside systems and other work comprises inspection costs that do not directly result from train traffic. These costs averaged EUR 0.592 million/year in the period 2014–2022 and 0% of them (EUR 0 million/year) were costs directly resulting from rail traffic.

All in all, the electrified railway infrastructure management costs included in the calculation totalled EUR 17.678 million/year and EUR 3.927 million/year of them were costs directly resulting from rail traffic.

The transport performance of traffic using electric supply equipment averaged 27,129 million gross tonne-kilometres in the period 2014–2022.

When the sum of the electrified railway infrastructure management costs directly resulting from traffic (EUR 3.927 million/year) is divided by transport performance (27,129 million gross-tonne km), the additional charge for the use of electric supply equipment is 0.0145 cents/gross tonne-kilometre (2022 price level). This figure is the additional charge for the traffic using electric supply equipment/transport performance.

#### 4.3 Unit values of basic infrastructure charge

The Finnish Transport Infrastructure Agency uses an index method taking into account changes in the cost of infrastructure maintenance when determining the basic infrastructure charge. The charges are linked to the point figure 124.64 (annual average for 2022) of the sub-index 'Railway maintenance' of Statistics Finland's cost index of civil engineering works (2010 = 100). The Finnish Transport Infrastructure Agency uses the annual rates of changes for the index-based determination of the charges.

The Finnish Transport Infrastructure Agency will include the direct costs specified in cost modelling in accordance with the legal requirements in the basic component of the basic infrastructure charge for 2025.

Considering the research results described in this appendix and the above-mentioned preconditions for determining the charges, the basic infrastructure charge will be levied in the period 1 January – 31 December 2025 as follows:

- Based on the econometric modelling described in chapter 4.2.1, the basic component of the basic infrastructure charge to be levied on all railway transport performance is <u>0.1927 cents/gross tonne-kilometre</u>.
- Based on the calculation described in chapter 4.2.2, the additional charge for the use of electric supply equipment on all electrically hauled railway transport performance is <u>0.0145 cents/gross tonne-kilometre.</u>

### 5 Evaluation of the results

#### 5.1 Evaluating the basic component of the basic infrastructure charge

The results of econometric modelling can only be interpreted if the assumptions given in the modelling are met. The linear regression model used in modelling must meet five Gauss-Markov theorem standard assumptions, so that the model is the most effective and accurate linear estimator (BLUE, best linear unbiased estimator) for the phenomenon being examined. In addition, if the model's error terms are normal, BLUE can be found using the smallest sum of squares method. The assumptions are:

- 1. explanatory values are independent and fixed, i.e. non-random constants
- 2. explainers have no linear dependencies
- 3. all error terms have the same expected value
- 4. all error terms have the same variance
- 5. error terms do not correlate with each other
- 6. error terms are normally distributed

Condition 5 only applies to series data, e.g. time series. Line section cross-section materials cannot be arranged as a series, so condition 5 cannot be applied.

Conditions 1 to 4 and 6 are met with the drawn up model. The tests related to the modelling are described in Appendix 3.

The explanation rate of the econometric model determining the basic component of the basic infrastructure charge is 0.6307. The explanation rate states to what extent the infrastructure management costs can be attributed to performance (gross tonne-kilometres and track lengths of line sections). The model is estimated to have a high explanation rate.

## 5.2 Evaluation of the additional charge for the use of electric supply equipment

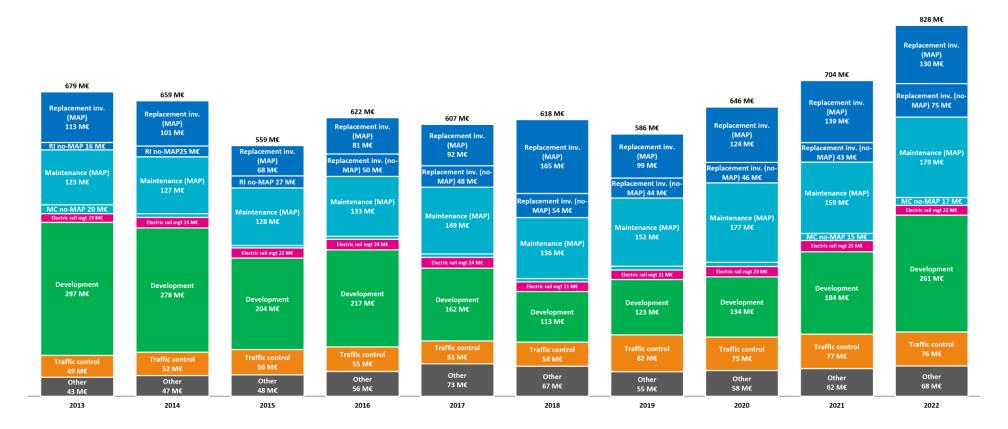
Determining the electric supply equipment costs directly resulting from traffic is based on a detailed classification of the cost of electrified railway infrastructure management and detailed and documented interviews with ten experts. The views of these experts reinforce the earlier view that most of the direct costs resulting from the use of electric supply equipment are related to the equipment and components that are in directly contact with the rolling stock. The main differences in the views among the experts were related to factors affected by regional weather conditions.

The international comparison of network statements has not yet provided methodological support or comparative information to determine the additional charge for the use of electric supply equipment. The calculation method used in Finland is similar to the method used in France, which, like the Finnish system, is based on the classification of costs and the percentage-based assessment of

the manner in which the cost depend on train traffic. In international comparisons, the difference between the charges paid by traffic using electric supply equipment and other traffic is small in Finland.

## Railway maintenance costs 2013–2022

The total infrastructure management costs of the Finnish Transport Infrastructure Agency are presented by category and year (2013–2022) in the figure below. The abbreviation MAP refers to the costs of minimum access possibilities, KI refers to replacement investments and KP to maintenance costs.

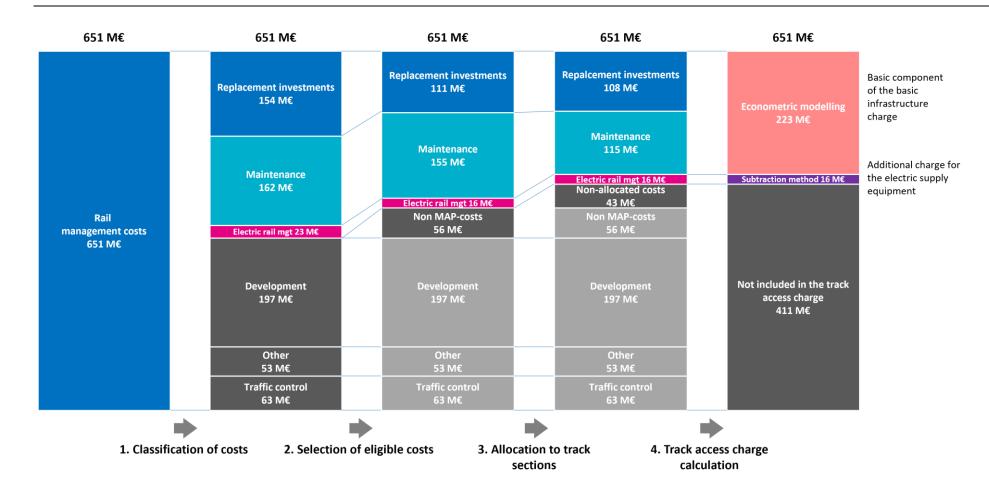


## Establishment of infrastructure management costs for calculating unit values

The unit value calculation data is generated with steps shown in the figure below:

- 1. Rail maintenance costs are classified into replacement investments to be taken into account in the infrastructure charge, maintenance costs and electrical track maintenance costs as well as development investments traffic control costs and other costs excluded from the calculation.
- 2. Choice of costs between minimum access possibilities (MAP) and those not included in these (no MAP) costs.
- 3. Allocation of costs to track sections based on cost management system data.
- 4. Replacement investments and maintenance costs will be included in the econometric calculation of the basic component of the basic infrastructure charge, and the costs of electrical track maintenance will be included in the calculation according to the method for calculating the additional price of the use of electricity supply equipment.

The figure shows the average annual costs of track maintenance for the period 2013–2022.



## Results of cost function estimation

#### Modelling result:

```
Residuals:
Min 1Q Median 3Q Max
-1.99801 -0.41323 -0.02383 0.44921 1.57556
Coefficients:
           (Intercept) 10.23626
1n_brt 0.24643
ln_brt
                               6.005 8.69e-08 ***
            0.59521
                       0.09912
ln_rd_km
Signif. codes: 0 '*** 0.001 '** 0.01 '* 0.05 '.' 0.1 ' '
Residual standard error: 0.6434 on 67 degrees of freedom
Multiple R-squared: 0.6307,
                                   Adjusted
0.6197
F-statistic: 57.22 on 2 and 67 DF, p-value: 3.205e-15
```

The model parameters differ significantly from zero. Explanation rate of the model is 0.6307.

#### Checking heteroscedasticity:

```
studentized Breusch-Pagan test
BP = 0.15961, df = 2, p-value = 0.9233
```

As the test statistics (BP) are less than 5.99, there is no heteroscedasticity in the dataset.

#### Variance analysis (ANOVA):

```
Analysis of Variance Table
```

Both independent variables of the model explain a large proportion of the modelled variation.

#### Normal distribution of residual (error) term:

```
Jarque-Bera-test
X-squared 1.039997
```

As the X-squared is less than 5.99, the residual terms of the dataset are distributed in a normal manner.

#### Multi-collinearity of explanatory variables

Variable Inflation Factors (VIF) ln\_brt ln\_rd\_km 1.248726 1.248726

There is no limit value defined for the VIF estimate for explanatory variables. The VIF value is defined by variable pair VIF =  $1/(1 - R^2)$ . If the VIF value is greater than five, the explanatory variables are considered too multiple-collinear. Based on the test, the variables explaining the model do not have multi-collinearity.

### Calculation code

```
library(tidyverse)
library(lmtest)
library(readr)
library(tseries)
library(caret)
rm(list = ls(all.names = TRUE))
data <- read_delim("lähtödata.csv", ";", escape_double = FALSE, lo-
cale = locale(decimal_mark = ",", grouping_mark = " "), trim_ws =
TRUE)
mallidata <- data %>% select(rd_km, rt_km, brt_yht, eur_yht, vuosi)
%>%
mutate(ln_brt = (log(brt_yht)), ln_eur = log(eur_yht), ln_rd_km =
log(rd_km))
mallidata <- mallidata[mallidata$ln_brt > -Inf, ]
mallidata <- mallidata[mallidata$ln_eur > -Inf, ]
mallinnus <- lm('ln_eur ~ ln_brt + ln_rd_km', data=mallidata)
varianssi <- var(resid(mallinnus))</pre>
coeffs <- coef(mallinnus)
mallidata <- mallidata %>%
mutate(MC = 100 * coeffs[2] * exp(coeffs[1] + coeffs[2] * ln_brt +
coeffs[3] * ln_rd_km + 0.5* varianssi) / (brt_yht * rt_km)) %>%
mutate(wMC = MC*(brt_yht*rt_km))
rajakust = sum(mallidata$wMC)/sum(mallidata$brt_yht*malli-
data$rt_km)
summary(mallinnus)
bptest(mallinnus)
anova(mallinnus)
Jarque.bera.test(resid(mallinnus))$statistic
car::vif(mallinnus)
```

# Service facility description: Electricity transmission service

### 1 General information

### 1.1 Introduction

This service facility description specifies the electricity transmission service provided in the state-owned rail network. The service is an additional service referred to in point 3 of Annex II to Directive 2012/34/EU.

## 1.2 Service manager

Service manager:

Finnish Transport Infrastructure Agency, Track and Rolling Stock Technology Opastinsilta 12 A FI-00520 Helsinki kirjaamo@vayla.fi

## 1.3 Validity period and updating process

This document is updated annually in connection with the publication of the Network Statement. If required, changes may also be made on the statement's revision dates during the timetable period.

## 2 Services

## 2.1 Electricity transmission service

The infrastructure manager provides the transfer of electricity required for traction current to the railway network and provides the balance management of the contact-line network, which gives the railway operator the basis to acquire its own electric power. Under section 4 of the Government decree (1489/2015), traction current and preheating of passenger carriages are additional services.

# 3 Service facility description

## 3.1 List of service parts

Finland's electrified railway network is described in Appendix 3A to the Network Statement and in the map service.

## 3.2 Naming the service

#### 3.2.1 Location

The electricity transmission service is provided on the electrified railway network. The electrified tracks at traffic operating points are specified in the track diagram.

#### 3.2.2 Opening hours

The electrified railway network, heating and socket points are accessible on a 24/7 basis. Any temporary voltage cut-offs are indicated in capacity management information systems (LIIKE, JETI).

#### 3.2.3 Technical characteristics

The technical characteristics of the power supply systems are described in the <u>instructions issued by the Finnish Transport Infrastructure Agency</u> (The documents are in Finnish).

#### 3.2.4 Planned changes in technical characteristics

The service will be continuously developed in cooperation with rail operators.

## 4 Charges

## 4.1 Information on charges

The transfer costs comprise the transfer fees paid to the grid companies outside the electrified railway network and dissipation in the contact-line network, as well as the measurements, assessment services and balance management related to transmission of electricity in the network.

In September 2023, the Finnish Transport Infrastructure Agency prepared an estimate of the prices of transport services based on the Network Statement for the 2025 timetable period, based on the actual transfer fees for the previous 12 months and the government's energy procurement unit Hansel Ltd's electricity price forecasts. The Finnish Transport Infrastructure Agency charges monthly for the use of the service based on these prices. As the service is invoiced in a cost-proportional manner, the estimated invoicing will be checked in spring 2026 with a compensatory invoice to correspond to the invoicing of network companies, the costs of dissipated energy and EREX costs. The invoiced amount is monitored at access agreement monitoring meetings held during the timetable period.

Table 1. Electricity transmission price list 1 January 2025–31 December 2025.

	Basic charge	Transfer fee for high-voltage networks		Fee for contact-line dissipa-
		Winter months*)	Other months	tion
Unitprice	EUR 45/month/trac- tion unit	EUR 9.00/MWh	EUR 5.90/MWh	EUR 62/MWh

<sup>\*)</sup> The winter months are December, January and February.

The transfer fee comprises the basic fee specified for the traction unit, the average transfer fee for high-voltage networks in winter months/other months, and the contact-line dissipation costs.

- The basic fee specified for the traction unit is based on the measurement and reporting services required for the purchase of electric power. The basic fee is invoiced based on the estimated total number of the railway operator's electric traction units. The unit price of the basic fee may change if the number of traction units belonging to the Erex system changes.
- The transfer fee for high-voltage networks is based on the transfer fees for the main grid and high-voltage distribution networks. An average transfer fee is used in the whole rail network. A different price is set for the winter months because network services also charge a higher transfer fee in winter.
- The net consumption of the individual consumption targets subtracted from the net consumption of feeder stations equals the contact-line dissipation. The dissipation cost is based on the actual price of electric power purchased by the infrastructure manager in 2025. The price given in the transfer invoicing price list is an estimate of the average price for 2025.

## 4.2 Information on discounts

No discounts are granted.

## 5 Terms of use

## 5.1 Legal requirements

The use and terms of use of electricity transmission service are set out in the network access agreement.

The prerequisite for using the electricity transmission service is a valid contract with an electricity supplier. The use of infrastructure capacity includes the railway operator's right to use the infrastructure manager's electric power supply network for electric stock on the electrified line sections for the purpose of traction current for rolling stock and heating of wagons and for the use of electrical supply equipment. The infrastructure manager does not, however, provide electricity, and the railway operator should enter into an agreement on the supply of power with a service provider.

The currently effective value-added tax is added to the transfer fee for high-voltage networks and fee for contact-line dissipation.

## 5.2 Technical conditions

All new or significantly modernised electric traction units must be equipped with an energy measurement system compliant with the requirements for billing according to standard 50463-1...-5 (2017). Data transmission to the Finnish Transport Infrastructure Agency's measurement and balance management system must comply with part 4 in Standard EN 50463. Data can also be transmitted in a UTILTS message.

For more information on the subject, see section 2.3.9 of the Network Statement and the instructions regarding electricity transmission systems (in Finnish).

## **6 Capacity allocation**

The electricity transmission service is included in the access rights to railway capacity and it is agreed upon in the network access agreement. An estimate of the number of traction units during the timetable period is needed for the access agreement.

# Service facility description: Traffic control service for shunting operations

### 1 General information

### 1.1 Introduction

The service facility description describes the traffic control services supplied by the Finnish Transport Infrastructure Agency to railway operators that are not covered by the basic infrastructure charge but fall within the scope of a separate service charge.

This appendix to the Network Statement and the guidelines issued by the infrastructure manager specify the procedures for traffic control service for shunting operations in Finnish railway yards. The operations and specific features of each traffic operating point must, if necessary, also be described and agreed on in the network access agreement and in the separate railway yard agreements enclosed in the access agreement (chapter 3.3 of the Network Statement). The access agreement's enclosure concerning the traffic control service for shunting operations and railway yard agreements regarding specific traffic operating points may be updated during the agreement period.

The Finnish Transport Infrastructure Agency has prepared this service facility document in compliance with the requirements set in the Commission Implementing Regulation (EU) 2017/2177. The service is a basic service referred to in point 2 of Annex II to Directive 2012/34/EU.

## 1.2 Service manager

Finnish Transport Infrastructure Agency, Railway Network Access Unit, Opastinsilta 12 A, FI-00520 Helsinki.

In addition, the contact details of railway yard contact persons are available at the FTIA's Track Data Service under the heading Liikenteenohjauksen yhteystiedot at https://vayla.fi/palveluntuottajat/aineistot/ratatieto-palvelu

## 1.3 Validity period and updating process

This document is updated annually in connection with the publication of the Network Statement. If required, minor changes may also be made on the statement's revision dates during the timetable period.

### 2 Services

# 2.1 Traffic control service for shunting operations offered for a charge

Traffic control in railway yards in shunting (Traffic control service for shunting operations) means the shunting work in railway yards other than the traffic control for shunting required for moving on railway line according to the granted track capacity. It includes the formation of rolling stock, coupling and uncoupling of wagons and the need for traffic control arising from shunting locomotives.

The following operations are also covered by the charge: arrangements necessitated by defective rolling stock (excluding removal of suddenly damaged rolling stock from a train), transferring parts of incoming sets of wagons to other departure tracks or maintenance as well as sorting sets of wagons for service or storage.

## 3 Description of the service

## 3.1 Availability of the service

The traffic control service for shunting operations is provided in the train formation yards of the state-owned railway network. The train formation yards owned by the Finnish Transport Infrastructure Agency are marked with 'Shunting' in Appendix 2B to the Network Statement. The largest train formation yards are located in Tampere and Kouvola and they also provide incline services for train formation. For the service facility description of the train formation yards, see Appendix 7F and the service facility description of the incline services, see Appendix 7G.

## 3.2 Name of installation

Railway yard tracks are named so that the abbreviation of the traffic operating point comes first, followed by the track number (= track identifier). The track identifiers are shown in the infrastructure capacity management systems and in track diagrams (see also section 5.2).

#### 3.2.1 Location

The locations of traffic operating points in the state-owned railway network are specified in Appendix 2B to the Network Statement and in the map service. The track locations in traffic operating points are specified in track diagrams.

#### 3.2.2 Opening hours

Railway yard tracks are available on a 24/7 basis and can be used as agreed. If there are service times that differ from this rule, they can be found in the infrastructure capacity management system and in the Track Data Service. The information can also be requested as a list from palveluaika@fintraffic.fi.

#### 3.2.3 Technical characteristics

Traffic control service for shunting in railway yards is primarily the responsibility of traffic controllers of Fintraffic Railway Ltd. However, limited area traffic control (RLO) is in use in a number or railway yards. The Finnish Transport Infrastructure Agency maintains a list of limited area traffic operating points and/or their parts on its website (https://vayla.fi/palveluntuottajat/ammattiliikenne-raiteilla/rataver-kon-kaytto/rajoitetunalueenliikenteenohjaus) (in Finnish). Limited area traffic control supports the actual traffic control work. Limited area traffic control participates in protecting routes and securing track works in its area on the basis of traffic control's orders. Within its area, limited area traffic control may issue permits related to shunting operations. It takes care of turnout operation and the use of safety devices.

#### 3.2.4 Planned changes in technical characteristics

No changes have been planned to technical characteristics.

## 4 Charges

## 4.1 Information on charges

The pricing of the traffic control service for shunting that is not included in the infrastructure charge is based on the number of the shunting routes required by railway operators. The traffic control performance is defined as a shunting route in one direction. The time spent by traffic control for safeguarding the routes is specified for each traffic operating point. The price is determined on the basis of the number of performances and the time required for each performance.

Pricing of the traffic control service for shunting operations

- The railway operator must inform the Finnish Transport Infrastructure Agency of its traffic control needs in a mutually agreed manner. The quantity describing the control need is
  - determined on a case-by-case basis (for example, shunting route quantity, time, xx).
- The time used for the traffic control performance and the performance quantity are specified/confirmed at least twice a year on the basis of the weekly follow-up carried out by Fintraffic Raide Ltd. The time spent on the autumn follow-up is taken into account in the charges of the following year's first six months (January–June) and the spring follow-up in the charges of the last six months (July–December). The practices of any other follow-up times are set out in the network access agreement.
- A 12% margin is added to the results of the weekly follow-ups in order to ensure availability of the service and flexibility in situations that change daily without having to reserve resources in advance.

The information submitted by the railway operator can be checked/verified on the basis of the weekly follow-ups carried out by Fintraffic Raide Ltd. If there are any changes in traffic control in the railway yard, the performance and invoicing procedure is examined on the basis of the changed situation.

Traffic control during shunting operations in railway yards is a fixed-price service under public law and it is laid down in the Decree of the Ministry of Transport and Communications on the chargeable services of the Finnish Transport Infrastructure Agency. The charge for 2025 has not yet been set but it will probably be at the same level as in the period 2019–2023. The charge will amount to EUR 70/hour until the end of 2023. The Finnish Transport Infrastructure Agency invoices the services on a monthly basis during the agreement period, unless otherwise agreed in the network access agreement.

#### 4.2 Information on discounts

No discounts are granted.

### 5 Terms of use

## 5.1 Legal requirements

The use of the traffic control service for shunting operations must be agreed separately for each timetable period with the Finnish Transport Infrastructure Agency in the network access agreement.

If required, a railway yard agreement is prepared for railway yards used by several railway operators. For more information, see chapter 2.3 of the Network Statement.

## 5.2 Technical conditions

The maximum length and axle load of rolling stock arriving to a service facility as well as the need for diesel traction are stated track-specifically in track diagrams available (in Finnish) at the Track Data Service: track system diagrams.

## 5.3 Self-supply of rail-related services

The Finnish Transport Infrastructure Agency does not provide train formation services except for the protection of routes. Railway operators can carry out train formation operations themselves.

## 5.4 IT systems

Railway yard tracks can be viewed in Fintraffic Raide data systems, such as the capacity management system LIIKE and its modules. <u>More information about the information systems (in Finnish)</u>.

# **6 Capacity allocation**

## 6.1 Requests for access or services

Traffic control services not covered by the infrastructure charge must be separately agreed on with the Finnish Transport Infrastructure Agency.

The need to use railway yard tracks and the right to use train formation yards are discussed and agreed in the access agreement. The railway operator or another capacity applicant must deliver to the infrastructure manager a free-form estimate of their train formation yard needs at each traffic operating point before the start of access agreement negotiations. The application must also state the applicant's need for traffic control services for shunting operations. Based on the track access requirements reported by the railway operators, the infrastructure manager estimates whether it is necessary to prepare separate railway yard agreements for specific traffic operating points or if other capacity management procedures are required.

If the operation of a railway operator is, during the timetable period, subject to such changes to track requirements that affect the matters agreed upon in the access agreement or its enclosures, the railway operator must contact the infrastructure manager regarding the matter as soon as possible.

Any railway yard-specific operating methods are described in the access agreement's enclosures specific to each traffic operating point (railway yard agreement) with respect to the common management of situational information on tracks.

## 6.2 Response to requests

Applications concerning train formation yard needs are answered within 30 days from receiving sufficient information for processing the application. Any urgent needs are responded to as soon as possible, but no later than within five working days from receiving all necessary information for processing the application. With respect to processing applications, the contact person for access agreements and railway yard agreements is the person responsible for agreements at the Railway Network Access Unit (see section 1.2).

The priority criteria for operation, granting of permits and track use in railway yards are specified in section 6.2.2 (Congested infrastructure and priority criteria) of the Network Statement. Where necessary, other applicable priority orders may have been agreed upon with respect to specific railway yards in railway yard agreements. In addition to the priority order, the granted route access rights related to the applied services, the capability to use the applied capacity and the valid railway yard agreements are taken into account (Article 11 of Regulation 2017/2177).

The infrastructure manager and the traffic control company as its service provider are responsible for the traffic control at traffic operating points. Limited area traffic control in railway yards is performed by service providers. Detailed information (contact information, procedures and roles regarding the granting of permits) can be found in Ratatieto palvelu (Track Data Service, in Finnish) under the heading Liikenteenohjauksen yhteystiedot (Traffic control contact information).

Service facility description: Traffic control service for shunting operations

In case of conflicting needs for track use, the aim is to find solutions through negotiations and coordination and, if required, in collaboration with other service facility operators and infrastructure managers. Other viable alternatives, such as an alternative location or time for the formation of rolling stock, may be proposed to the applicant (Article 10 of Regulation 2017/2177).

# 6.3 Information on available capacity and temporary capacity restrictions

Information on available capacity and temporary capacity restrictions is visible to all operators in the infrastructure capacity management system (LIIKE/SAAGA). In addition, information may be requested from Fintraffic Raide traffic planning or traffic control.

# Service description: Use of buildings and land areas

## 1 General information

### 1.1 Introduction

This service description specifies access to and terms of use of buildings and land areas owned by the infrastructure manager of the state-owned railway network. As a rule, the Finnish Transport Infrastructure Agency manages and maintains the ground areas under passenger platforms and the state-owned railway network. The service is not a service referred to in Annex II to the Railway Market Directive and thus it is outside the scope of the Commission Implementing Regulation 2017/2177. The Finnish Transport Infrastructure Agency describes the content of the service in accordance with the Implementing Regulation.

At passenger stations and areas surrounding them, the land ownership varies. In station areas, in addition to the Finnish Transport Infrastructure Agency, the land may be owned by VR Group Ltd, Senate Properties, Senate Station Properties Ltd, municipalities and private owners.

Separate service descriptions have been prepared for the rental of Finnish Transport Infrastructure Agency's passenger station facilities and the use of timber loading facilities.

In general, the maintenance of buildings and land areas belongs to the landowner. However, the exact maintenance area limits vary by area/case.

The Finnish Transport Infrastructure Agency leases or grants access rights to land areas managed by it in so far as it does not endanger traffic or infrastructure management (section 36 of the Railway Act).

# 1.2 Service manager

Service manager:
Finnish Transport Infrastructure Agency
Property Unit and Railway Maintenance Service Unit
Opastinsilta 12 A
FI-00520 Helsinki
kirjaamo@vayla.fi

## 1.3 Validity period and updating process

This document is updated annually in connection with the publication of the Network Statement. If required, changes may also be made on the statement's revision dates during the timetable period.

### 2 Services

## 2.1 Use of buildings and land areas

The Finnish Transport Infrastructure Agency leases or grants access rights to land areas managed by it in so far as it does not endanger traffic or infrastructure management (section 36 of the Railway Act). In general, the Finnish Transport Infrastructure Agency manages and maintains the land areas under railway platforms and the railways.

## 3 Description

## 3.1 List of service parts

No list is published on the buildings and land areas owned by the infrastructure manager of the state-owned railway network. The property boundaries of railway areas can be checked through the open interfaces of the National Land Survey of Finland, such as <a href="https://kartta.paikkatietoikkuna.fi">https://kartta.paikkatietoikkuna.fi</a>/ However, the boundaries between state-owned properties in railway areas and rental and right of use areas are not yet publicly accessible. When planning operations for a railway area or in its immediate vicinity, the operator must ask the FTIA for the boundary of the area managed by the FTIA.

The land areas of the state-owned rail network are divided into railway areas and loading and maintenance areas for technical equipment rooms and infrastructure management serving their needs. Passenger platforms, park-and-ride areas, access roads to stations and service road connections are also regarded as railway areas. These areas are leased or the right to use them is granted to external operators for very compelling reasons only. However, wires, structures and equipment other than those related to infrastructure management may be placed in these areas upon agreement on access rights and the execution of measures with the infrastructure manager; additional information (in Finnish).

The state-owned railway network also includes areas other than those directly intended for railway operations. These areas are leased to external operators as deemed appropriate.

The Finnish Transport Infrastructure Agency manages only a small proportion of passenger station buildings in Finland, and, in some of them, rents out vacant premises as office and business space. In addition, the Finnish Transport Infrastructure Agency also owns station buildings at stations where the train does not stop. These buildings are used by railway infrastructure management, and these premises are not rented out to external operators.

## 3.2 Name of service part

The buildings and land areas are named by location, property identifier and address, with a qualifier added to the name, if necessary.

#### 3.2.1 Location

This service description applies to the entire state-owned railway network as well as the buildings and land areas managed by the Finnish Transport Infrastructure Agency in station areas. The locations of the buildings are described in Appendix 3Q of the Network Statement and in the map service.

#### 3.2.2 Opening hours

#### 3.2.3 Technical characteristics

#### 3.2.4 Planned changes in technical characteristics

In general, no changes have been planned to the technical characteristics of buildings and land areas. Information on the changes being planned or implemented in the railway infrastructure or platform areas can be found at <a href="https://www.vayla.fi/hankkeet.">www.vayla.fi/hankkeet.</a>

## 4 Charges

## 4.1 Information on charges

The Finnish Transport Infrastructure Agency leases land areas and parts of buildings at market prices.

The fair rental rate of the facilities is determined before each lease. The rental level is based on the actual price level in the area.

As regards the wires and cables placed in railway areas, the Finnish Transport Infrastructure Agency's fixed price list valid at any given time will apply. For more information, click here (in Finnish).

## 4.2 Information on discounts

No discounts are granted.

## 5 Terms of use

## 5.1 Legal requirements

A lease agreement is prepared for the use of buildings and land areas. An access agreement is prepared for the placement of wires and cables.

The lease agreements and access agreements are concluded for a fixed term or for an indefinite period.

## 5.2 Technical conditions

The technical terms and conditions of the agreements are described in the lease and access agreements.

## 5.3 Self-supply of rail-related services

The infrastructure manager of the state-owned railway network does not impose any general restrictions on the use of buildings and land areas. The use of the facilities is set out in connection with the conclusion of the lease agreement.

## 6 Capacity allocation

## 6.1 Requests for access or services

In general, the rental of buildings or the use of land areas does not affect the allocation of capacity. The use of land areas only impacts train traffic in exceptional cases, for example, in connection with site construction.

The lessee of buildings or land areas must submit to the infrastructure manager a free-form enquiry on the leasing of buildings or land areas. The enquiry must include the relevant information for the processing of applications for the leasing of buildings or land areas, such as the applicant's contact details, the name and address of the building or the area to be leased, the surface area to be leased, the purpose of use, the lease period.

Click <u>here</u> to view the instructions for the right to use wires and cables and for application instructions (The website is in Finnish).

Any lease enquiries should be sent to the Finnish Transport Infrastructure Agency's Property Unit by email: <a href="kirjaamo@ftia.fi">kirjaamo@ftia.fi</a>.

## 6.2 Response to requests

Enquiries related to the use and leasing of land areas are answered no later than 30 days from receiving sufficient information for processing the application. Any urgent needs are responded to as soon as possible, but no later than within five working days from receiving all necessary information for processing the application.

The lease matters and access agreements of the buildings and land areas in the state-owned railway network are prepared by the Property Unit of the Finnish Transport Infrastructure Agency.

No principles of primacy have been set for leasing of land areas and building facilities.

If there are conflicting requests for leased facilities, every effort will be made to reconcile them through discussion and coordination, if necessary, with other service providers operating in the same area. Other viable alternatives, such as alternative locations or dates, may also be proposed to the applicant (2017/2177, article 10).

# 6.3 Information on available capacity and temporary capacity restrictions

Information on facilities available for rent can be obtained from the infrastructure manager of the state-owned railway network.

FTIA publications 55/2023 Service description: Rail Training Centre (RTC)

# Service description: Rail Training Centre (RTC)

### 1 General information

#### 1.1 Introduction

This service description specifies the services of the Rail Training Centre, which is located in Kouvola.

The Rail Training Centre (RTC) provides the certification and continuing training required by rail operators in cooperation with service providers. The RTC offers service providers a modern learning and development environment.

The service is not a service referred to in Annex II to the Railway Market Directive and thus it is outside the scope of the Commission Implementing Regulation 2017/2177. The Finnish Transport Infrastructure Agency describes the content of the service in accordance with the Implementing Regulation.

## 1.2 Operator of the service facility

Operator of the service facility: Rail Training Centre RTC
Hallituskatu 19
Kouvola

## 1.3 Validity period and updating process

This document is updated annually in connection with the publication of the Network Statement. If required, changes may also be made on the statement's revision dates during the timetable period.

## 2 Services

#### 2.1 RTC

The Rail Training Centre (RTC) provides the certification and continuing training required by rail operators in cooperation with service providers. The RTC offers service providers a modern learning and development environment. More information about the Rail Training Centre.

## 3 Description

The <u>facilities of the Rail Training Centre</u> are described on the RTC website (in Finnish).

### 3.1 Name of service

The traffic operating points of the Rail Training Centre have been named according to the locality in question.

#### 3.2 Location

Kouvola, Hallituskatu 19. Inquiries.

## 3.3 Opening hours

The Rail Training Centre is open during training, rental use and events.

#### 3.4 Technical characteristics

The RTC area is isolated from the state-owned railway network with iron gates and thus it does not require a permit issued by the Finnish Transport and Communications Agency Traficom. The tracks in the RTC area are state-owned, even though they are operated in the same manner as private tracks. The tracks are described in the railway diagram of the Kouvola railway yard, which is published in <a href="the Track Data Service">the Track Data Service</a>.

## 3.5 Planned changes in technical characteristics

The Finnish Transport Infrastructure Agency determines the annual maintenance needs and replacement intervals of line sections at the RTC No changes are planned to the technical characteristics of the RTC.

## 4 Charges

## 4.1 Information on charges

For the rent rates, see the RTC website. The price list is based on the Act on Criteria for Charges Payable to the State and the appraisal document commissioned on the property.

## 4.2 Information on discounts

No discounts are granted.

### 5 Terms of use

## 5.1 Legal requirements

The RTC users must have a valid liability insurance. An external training institute using the RTC facilities must have received induction to the use of the facility's technology (induction is provided by the infrastructure manager).

The use of intoxicants is prohibited in the RTC facilities.

### 5.2 Technical conditions

Any technical conditions are described in the track diagram.

## 5.3 Self-supply of rail-related services

The Rail Training Centre provides the certification and continuing training required by rail operators in cooperation with service providers.

## 5.4 IT systems

The e-learning environment Eerokki is used in the training provided by the Rail Training Centre. After enrolment on a course, the trainees will receive user IDs to Eerokki.

# **6 Capacity allocation**

## 6.1 Requests for access or services

The courses provided by the Rail Training Centre are described on the RTC website. Trainees can enrol on the courses through the website.

## 6.2 Response to requests

For more information, visit https://rok.vayla.fi.

# 6.3 Information on available capacity and temporary capacity restrictions

For more information, visit https://rok.vayla.fi.

# Service description: Traffic Quality Control Centre and rolling stock monitoring devices

### 1 General information

### 1.1 Introduction

This service facility description specifies the Traffic Quality Control Centre service commissioned by the infrastructure manager (Finnish Transport Infrastructure Agency) and the rolling stock monitoring equipment used as part of the service. The Finnish Transport Infrastructure Agency orders supervision services for railway network rolling stock, tunnels and properties from Fintraffic Railway Ltd. as a service.

The purpose of the Traffic Quality Control Centre and the monitoring devices is to improve the safety and punctuality in the state-owned railway network and to contribute to the management of disruptions and accidents.

The Finnish Transport Infrastructure Agency has prepared this service facility document in compliance with the requirements set in the Commission Implementing Regulation (EU) 2017/2177. The service facility is an ancillary service referred to in point 4 c) of Annex II to Directive 2012/34/EU.

## 1.2 Operator of the service facility

Operator of the service facility: Fintraffic Railway 029 450 7000 info@fintraffic.fi

## 1.3 Validity period and updating process

This document is updated annually in connection with the publication of the Network Statement. If required, minor changes may also be made on the statement's revision dates during the timetable period.

## 2 Services

## 2.1 Traffic Quality Control Centre

The Traffic Quality Control Centre is responsible for supervising the rolling stock monitoring systems on Finland's railways as well as the tunnel and facilities management systems on the Ring Rail Line and the Vuosaari railway line.

The Traffic Quality Control Centre has two main duties: The rolling stock monitoring systems involve the monitoring of the data control process and its quality, data

Service description: Traffic Quality Control Centre and rolling stock monitoring devices

analysis, and the measures resulting from the analysis. The purpose is to monitor properties of the rolling stock that have a direct or indirect interface with the rail infrastructure. Rolling stock monitoring devices are located in all parts of the state-owned railway network.

The second task is to monitor tunnel and facilities management systems and to take the required measures in both normal and exceptional situations. The alarms received from the systems are relayed to the partners of the Technical Control Centre on a case-by-case basis. These partners include the fire and rescue authorities, the police, system maintenance providers, traffic controllers as well as the Security Control Centre and the operating centre.

The Traffic Quality Control Centre uses rolling stock monitoring systems to monitor the alarms given by malfunctioning stock and forwards access restrictions to the rolling stock as indicated by the alarms. The aim is to reduce accidents and the wear and tear caused to the rail infrastructure by malfunctioning stock and to avoid disruptions. The monitoring equipment located in the railway network is owned by the Finnish Transport Infrastructure Agency. The information system compiling the alarms (VALTSU) is the property of Fintraffic Railway Ltd. Unnecessary alarms and the frequency and causes of failures can be analysed with the help of the alarms given by monitoring system. The objective is to use data analytics to reduce susceptibility to disruptions and delays in train traffic.

The monitoring system is also used to examine and monitor wheel loads, the temperature of bearings and the condition of pantographs. Furthermore, at border crossing points, analytics can be used to monitor the condition of foreign rolling stock and on this basis, more detailed border checks can be carried out on rolling stock units.

## 2.2 Rolling stock monitoring equipment

Hot box detectors have been placed on the network at intervals of approximately 50 kilometres. Intervals may be longer on line sections where the maximum permitted speed is 160 km/h. The devices have been installed on the track and to ensure that they function as intended, rolling stock and the infrastructure must be interoperable as laid down in the acceptance requirements. The alarms given by the system are transmitted to the traffic control supervising the line section in question and to the Technical Control Centre.

Wheel load checkpoints are positioned as comprehensively as possible so that the rolling stock crosses at least one measuring instrument on its normal routes. The instruments measure the static and dynamic load from the wheelset to the rail. Based on these measurement results, defects in the wheel tread (such as wheel flats) and incorrect loading can be detected. Critical alarms from these trackmounted instruments are transmitted via the Traffic Quality Control Centre to the Rail Traffic Management Centre.

Traffic control will notify the train driver of hot box and wheel load alarms and provide them with the necessary instructions. The measures are described in the instruction 'Junaturvallisuuden ja vaihtotyön turvallisuussäännöt' (Jt) issued by the Finnish Transport Infrastructure Agency.

Service description: Traffic Quality Control Centre and rolling stock monitoring devices

The condition of the pantograph contact carbon is monitored using cameras installed on a number of bridges. Active pantographs approaching the measuring station are scanned, the images are analysed and faulty pantographs are reported to the undertaking operating the vehicle. Traffic control will notify the train driver if the condition of the pantograph requires immediate measures and provide further instructions in order to avoid damage to the electrified track or rolling stock.

A bogie detector and a wheel profile detector have been installed in the railway network for trial purposes.

Equipping rolling stock with the system used by the infrastructure manager with interoperable radio frequency identification (RFID) will enable the rapid transmission of the control data to the correct vehicle and the party responsible for its maintenance. The RFID system is described in part 21 of the RATO instructions.

Appendix 5G contains a map showing the location of the rolling stock monitoring equipment and more detailed information is available on the Railway Information Extranet, which requires registration.

The Traffic Quality Control Centre monitors and maintains the functioning of the monitoring system. The VALTSU system used by the Technical Control Centre collects the measurement data produced by the monitoring system, combines it with the available RFID reading and further distributes this data to actors who need it. Operators can obtain information on their trains supplied by the monitoring devices from the VALTSU system.

## 3 Description of the service

# 3.1 The Traffic Quality Control Centre's operational area

The operating area of the Traffic Quality Control Centre covers the entire stateowned railway network.

# 3.2 Supervision by the Traffic Quality Control Centre

The Traffic Quality Control Centre monitors:

- rolling stock pantographs, overheating of bearings and wheels and alarms on wheel loads and excess loads;
- the condition of the wheel profiles and bogies;
- technical alarms from railway tunnels and agreed properties.

#### 3.2.1 Opening hours

The Traffic Quality Control Centre provides services on a 24/7 basis, 365 days a year.

# 3.2.2 Joining the service

Fintraffic Railway Ltd provides the Finnish Transport Infrastructure Agency with the Traffic Quality Control Centre services . The services are provided and notifications on alarms are forwarded to all other users of the state-owned railway network with the help of a specific notification procedure.

## 4 Charges

## 4.1 Information on charges

For the time being, the services of the Traffic Quality Control Centre and the operator-specific data produced in the monitoring systems in rolling stock and stored in the VALTSU system are provided free of charge.

### 4.2 Information on discounts

Discounts are not applied to the service.

### 5 Terms of use

## 5.1 Legal requirements

Every message submitted to the operator about an alarm due to a defect in the rolling stock must result in inspecting the condition of the rolling stock concerned.

The alarms given by rolling stock may lead to imposing restrictions on the rolling stock, such as speed limits or to issuing an order to drive the stock to an assigned location for inspection.

## 5.2 Technical conditions

## 5.3 Self-supply of rail-related services

The data produced by the Finnish Transport Infrastructure Agency's monitoring system is collected in the VALTSU system of Fintraffic Railway Ltd. Fintraffic Railway Ltd can share the data with operators as agreed, via system interfaces. Each operator only receives data concerning their own equipment, taking account of data protection and business secrets.

A separate agreement on the sharing of information is made with each operator.

# **6 Capacity allocation**

# 6.1 Requests for access or services

The operators do not need to request for the service separately; the service is included in the access to infrastructure capacity.

## 6.2 Response to requests

# Monitoring of rolling stock

### Rolling stock monitoring equipment

The location of the rolling stock monitoring devices in the railway network is illustrated in Figure 1.

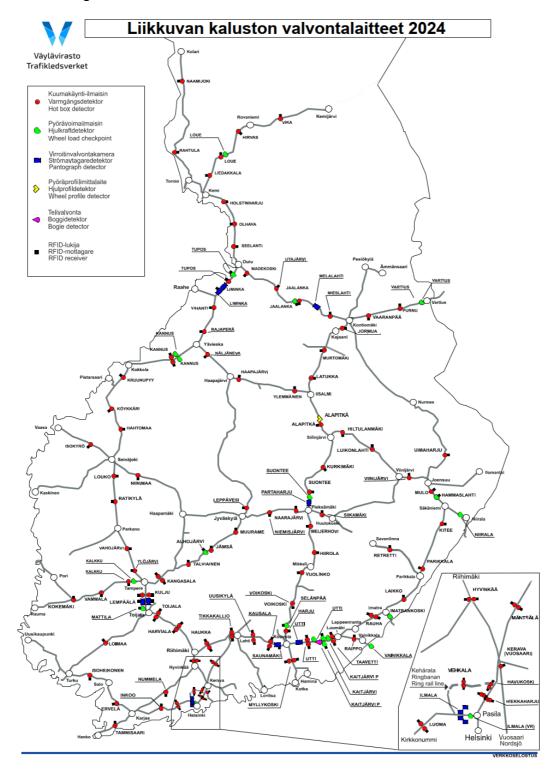


Figure 1. Rolling stock monitoring devices

## Service description: Security Monitoring Service

### 1 General information

#### 1.1 Introduction

This appendix specifies the Security Monitoring Services commissioned by the infrastructure manager of the state-owned railway network. The Finnish Transport Infrastructure Agency procures a security monitoring service from Fintraffic Railway Ltd.

The aim of the Security Monitoring Services is to improve the attractiveness, safety, comfort and customer experience of public transport by means of security services, security guards and technical supervision. The centralised Security Control Centre service has been implemented in cooperation with various parties to prevent threats against passenger safety and the vandalization of property, and to prevent disruptions in the ground areas, platforms and station areas of the state-owned railway network.

The service is not a service referred to in Annex II to the Railway Market Directive and thus it is outside the scope of the Commission Implementing Regulation 2017/2177. The Finnish Transport Infrastructure Agency describes the content of the service in accordance with the Implementing Regulation.

## 1.2 Operator of the service facility

Operator of the service facility:
Fintraffic Ltd
029 450 7000
viestinta@fintraffic.fi
Contact person in the Finnish Transport Infrastructure Agency: Arto Muukkonen
etunimi.sukunimi@ftia.fi

## 1.3 Validity period and updating process

This document is updated annually in connection with the publication of the Network Statement. If required, minor changes may also be made on the statement's revision dates during the timetable period.

## 2 Services

## 2.1 Security Control Centre

The Security Control Centre is mainly responsible for improving railway passenger safety at stations and on platform areas and protecting railway infrastructure from vandalism. The Security Control Centre is responsible for monitoring the situation, receiving messages and creating a situational picture as well as for guiding security

FTIA publications 55eng/2023 Service description: Security Monitoring Service

officers, security guards or, if necessary, authorities to the location where help is needed. Operational activities in the field are managed from the Security Control Centre.

The main duties of the Security Control Centre are:

- Maintaining situation awareness on security
- Camera surveillance and handing over of recordings to authorities
- Assisting the authorities in security and rescue duties
- Granting photography and event permits in the state-owned railway network
- Preparation of reports of offences, including those concerning the property of the Finnish Transport Infrastructure Agency
- Maintaining order and security in the platform areas, station areas and other separately agreed areas

## 3 Description of the service

## 3.1 Operating area of the Security Control Centre

The operating area of the Security Control Centre covers the entire state-owned railway network. The main focus of operations is on the railway stations in the Helsinki region. The Security Control Centre serves as the operational and control centre for security guard services and camera surveillance.

# 3.2 Parties to the Security Control Centre agreement

The operations of the Security Control Centre are based on a framework agreement on the Security steward and guard services in the transport system. The parties to the agreement are the Finnish Transport Infrastructure Agency, Helsinki Region Transport (HSL), Espoo, and Vantaa.

When it comes to maintenance of order and security guard services, each party commissions the services independently.

## 3.3 Opening hours

The Security Control Centre provides services on a 24/7 basis, 365 days a year.

## 3.4 Joining the service

Negotiations about joining the agreement can be initiated by contacting the service provider or the Finnish Transport Infrastructure Agency. Each operator places an individual order with the service provider.

## 4 Charges

# 4.1 Information on charges

Each party is an independent customer and pays the costs according to the scope of services they have ordered. For common areas, such as the station areas, a certain percentage of the costs is jointly allocated to each party to the agreement.

#### 4.2 Information on discounts

No discounts are granted in the agreement.

#### 5 Terms of use

## 5.1 Legal requirements

Each party to the agreement prepares their own procurement order for the service provider.

All parties to the agreement are bound by the same confidentiality obligations.

## 5.2 Technical conditions

## 5.3 Self-supply of rail-related services

The infrastructure manager of the state-owned railway network (Finnish Transport Infrastructure Agency) determines the boundaries of the provision of security services in its areas.

## 6 Capacity allocation

## 6.1 Requests for access or services

The Finnish Transport Infrastructure Agency will be notified of the willingness to join the service agreement. The parties agree jointly upon the accession of a new operator to the agreement, the scope of service to be provided to the operator concerned and the division of costs.

## 6.2 Response to requests

The Finnish Transport Infrastructure Agency will respond to the notifications within a reasonable time.

## Performance scheme

This appendix specifies the compensations and compensation criteria of the performance scheme applied by the infrastructure manager and the railway undertakings as of 1 January 2025. The system described in the Network Statement 2024 will remain in effect until 31 December 2024.

In addition to the issues contained in the performance scheme, the parties may agree, in connection with the monitoring of the performance scheme, to separately monitor other issues arising from railway traffic disruption records, such as freight traffic running ahead of schedule.

# 1 Deviations within the infrastructure manager's responsibilities

Based on the performance scheme, the infrastructure manager pays the railway undertaking a compensation for a deviation caused by a reason attributable to the infrastructure manager or traffic control following a case-by-case examination in the following cases:

- H302 Reason related to the personnel of another operator
  - If, according to the specification, the delay is clearly caused by a reason attributable to the infrastructure manager or traffic control company.
- L6 Delay related to waiting for the departure of a train, excluding the following level 2 reason codes:
  - L606 Escort delay caused by an infrastructure fault.
  - L608 Other delay related to departure in case the reason falls within the infrastructure manager's responsibilities.
- L7 Traffic management error.
- P1 Rail infrastructure equipment faults, excluding the following level 2 reason code:
  - P116 Equipment faults other than those for which the infrastructure manager is responsible.
- P2 Information system faults, excluding the following level 2 reason codes:
  - P201 Missing departure data in case the fault occurred in the railway undertaking's system.
  - P202 Technical fault in making a departure readiness notification.
  - P203 Other information system faults within the operator's responsibilities.
  - P204 Information system or telecommunications faults within the responsibilities of an external party.
- P3 Monitoring equipment fault.
- P4 Communication/telecommunication faults.
  - P401 RAILI service only with respect to the RAILI network.
  - P403 Other communications device/connection faults in case the fault occurred in a communications device/connection within the responsibilities of traffic control or the infrastructure manager.
- S1 Interruption in electricity supply, excluding the following level 2 reason codes:

- S102 Power restriction.
- S103 Main grid fault/restriction.
- S2 Electrified railway fault.
- T3 Damaged/blocked track.
- R2 Exceeding the agreed period for track works.
- R3 Traffic restriction following railway works.
- R4 The performance of track works deviates from the plan.
- I4 Other reason.
  - If, according to the specification, the delay is clearly caused by a reason attributable to the infrastructure manager or traffic control company.

# 2 Deviations within the responsibilities of the railway undertaking

Based on the performance scheme, the railway undertaking pays the infrastructure manager a compensation for a deviation caused by a reason attributable to the railway undertaking following a case-by-case examination in the following cases:

- H1 Absence of operator's personnel, excluding the following level 2 reason codes:
  - H104 Train driver from a delayed train.
  - H105 Conductor from a delayed train.
  - H106 Other personnel of the operator from a delayed train.
- H2 Departure readiness notification or departure deviation notification has not been made.
- H301 Other reason related to the operator's personnel.
- J1 Train formation delay.
- K1 Lack of rolling stock.
- K2 Equipment faults, excluding the following level 2 reason code:
  - K207 Wheel flat.
- K4 Coupling.
- K5 Decoupling.
- K6 Uninspected rolling stock.
- V1 Lack of locomotive.
- V2 Locomotive faults, excluding the following level 2 reason code:
  - V207 Wheel flat.
- V3 Reduction of speed due to traction power or lack of power.
- V4 Uninspected traction stock.
- A2 Timetable planning error, excluding the following level 2 reason code:
  - A201 Travel and/or stopping times are cumulatively longer than planned.
- L6 Delay related to waiting for the departure of a train, excluding the following level 2 reason codes:
  - L604 Escort delay caused by a rolling stock or locomotive fault.
  - L605 Escort delay caused by train formation.
  - L608 Other delay related to departure in case the reason falls within the railway undertaking's responsibilities.
- P116 Equipment faults other than those for which the infrastructure manager is responsible if the reason falls within the railway undertaking's responsibilities.

- P2 Information system faults, excluding the following level 2 reason codes:
  - P201 Missing departure data in case the fault occurred in the railway undertaking's system.
  - P202 Technical fault in making a departure readiness notification.
  - P203 Other information system faults within the operator's responsibilities.
- P4 Communication/telecommunication faults, excluding the following level 2 reason codes:
  - P401 RAILI service in case the fault is caused by the railway undertaking's RAILI phone.
  - P403 Other communications device/connection faults in case the fault occurred in a communications device/connection within the railway undertaking's responsibilities.
- I4 Other reason.
  - If, according to the specification, the delay is clearly caused by a reason attributable to the railway undertaking.

## 3 Determining the compensation

Monitoring stations for trains have been specified with the purpose of checking that they run on schedule (Appendix 5K). In addition, the train's departure and destination station is always automatically a monitoring station. Trains may be affected by additional delays between two monitoring stations or at a single monitoring station A single reason code is assigned to such single instance of additional delay to indicate the reason for the delay.

In the performance scheme, trains are divided into three categories:

- Commuter train lines in urban areas with frequent traffic (currently trains commissioned by HSL)
- Other passenger trains
- Freight trains

A penalty is paid when the additional delay caused by reasons specified in sections 1 or 2 of this appendix between two monitoring stations or at a monitoring station is equal or greater than

- 3 minutes on a commuter train in urban areas with frequent traffic.
- 15 minutes for other passenger trains.
- 30 minutes for freight trains.
- or when frequent commuter traffic train in urban areas or another passenger train is cancelled at a short notice for other similar reasons.

The amount of penalty is determined as follows:

- a delayed frequent traffic commuter train in urban areas EUR 23/minute of delay, at maximum for 60 minutes per single instance of delay.
- other delayed passenger train EUR 40/minute of delay, at maximum for 180 minutes per single instance of delay.
- a delayed freight train EUR 3.5/minute of delay, at maximum for 360 minutes per single instance of delay.

- a cancelled frequent commuter traffic train in urban areas EUR 1,000 / train
- other cancelled passenger train EUR 1,500/train

The penalty will be based on all minutes of the additional delay and not only the minutes exceeding the threshold value.

In timetable period 2025, the penalties for J1 reason code (Train formation delay) are 50% of the normal sanction for delays assigned level 2 and full (100%) for delays assigned level 1. A full penalty fee will be charged for cancellations recorded assigned the J1 code. The sanction for code L605 Escort delay due to train formation as the reason is 50% of normal if the reason for the escort delay related to train formation has been specified at level 2.

The specific description for J1 reason codes must be given no later than 21 days after the event to which the reason code applies, after which the sanction level is not changed. Two-level sanctions encourage railway undertakings to be more specific in assigning J1 reason codes and to develop operating processes related to train formation and monitoring.

# 4 Consideration of the average delay in the performance scheme

Average delay means the average delay of the train during its journey, excluding the sections where it is running ahead of schedule. The procedure may, where appropriate, be used to address repeated delays by railway undertakings that exceed the calculated threshold. However, the Finnish Transport Infrastructure Agency will not take action if exceeding the threshold value was due to reasons beyond the control of the railway undertaking. These may include reasons that are caused by the infrastructure manager, traffic control and external factors, as well as secondary reasons.

#### Calculation method

The average delay by the railway undertaking and train type is calculated from the average delays of individual trains. Accuracy of the timetable means that the train is not early or late.

The following rules are taken into account when calculating the average delay of an individual train:

- The average delay of an individual train is calculated from the delays on the route's observed intervals.
  - An observed interval refers to the intervals between traffic operating points and the traffic operating points according to the train's timetable.
- The calculation is made by comparing the actual figures with the timetable at all points where the train running data is obtained.
- Any delays will be taken into account.
- The delay on the observed interval is calculated as the average of the delays in the start and end points of the observed interval. If the train arrives

early at one end of the traffic operating point interval and the train is late at the other end, the average delay is calculated by subtracting the amount the was train running early from the observation interval.

Running ahead of schedule is a negative deviation from the planned schedule. However, running ahead of schedule is permitted when it does not interfere with other traffic, and so this is not taken into account in the calculation.

The averages per train type and per operator are calculated for all trains and compared to the threshold values.

#### Threshold values for timetable period 2025

The average delay is compared by train type and an individual pre-set threshold for delay that is clearly abnormal. The thresholds for average delays in 2025 are:

- frequent commuter traffic in urban areas 5 min
- other passenger train traffic 10 min
- freight transport 30 min

#### Measures applied following exceeding the threshold

The Finnish Transport Infrastructure Agency monitors the fulfilment of the threshold values monthly. As a rule, the Finnish Transport Infrastructure Agency intervenes in the performance of a railway undertaking that exceeds the average delay threshold by issuing a notice and undertaking a consultation procedure if the threshold has been exceeded in two consecutive months. If the performance continues to be poor, the Finnish Transport Infrastructure Agency may impose sanctions on the railway undertaking.

The sanction shall total 10 % of the sanctions paid by the railway undertaking for the train type concerned under the performance scheme during the month in question, but shall not be less than EUR 500.

# 5 Specifications to the application of the performance scheme

In certain cases, a track availability deviation or a disruption in a railway undertaking's operation may be caused by a factor not attributable to the infrastructure manager or the railway undertaking but to a third party or a force majeure event, for example.

A compensation based on the performance scheme shall not be paid for reasons attributable to third parties. Cases falling outside the sphere of the performance scheme as the disturbance is caused by an external factor include, for example:

- Vandalism (e.g. vandalization of safety devices or rolling stock).
- Road, air or water transport accident.
- Private landowner.
- Works performed close to the railway by a party other than the FTIA.
- Safety device fault caused by a public network power outage of more than 6 hours or several successive outages. The performance scheme

does not concern the part of the fault's overall duration which exceeds six hours.

In addition, disturbances in performance attributable to force majeure events do not fall within the sphere of the performance scheme. When discussing the compensations of the performance scheme, the parties shall agree on which availability deviations and disturbances in the railway undertaking's operation are considered to be caused by a force majeure event. Force majeure events include, for example, exceptional natural conditions and accidents.

#### Other clarifications:

- Exceeding the agreed period of track works does not fall within the sphere of the performance scheme if the start of the track possession has been delayed due to delayed train operation in case the delay has been caused by a reason that does not fall within the sphere of the infrastructure manager's performance scheme. In that case, the period falling outside the sphere of the performance scheme is at maximum equal to the time by which the start of the track possession was delayed.
- If a cancellation is made in order to shorten a delay, and the passengers are transported by replacement transport, the cancellation does not fall within the sphere of the performance scheme.
- As a rule, secondary cancellations do not fall within the sphere of the performance scheme (e.g. rolling stock could not reach its point of departure because it had not finished its previous journey due to damage sustained or a safety device fault). Cases related to escort delays or cancellations caused by train formation, equipment or infrastructure faults are covered by the performance scheme.
- Cancelling a train departure and replacing it with a bus transport that complies with the train's timetable does not fall within the sphere of the performance scheme.
- When two separate passenger trains are run due to failed coupling, both
  of the trains fall within the sphere of the performance scheme.
- A delay caused by a temporary voltage cut-off of an electrified railway network (due to a disconnection) or opening the main switch of the train unit does not fall within the sphere of the performance scheme, unless the situation emerges as a result of a fault in the electrified railway network or the rolling stock.

In the case of extensive weather-related disturbances, delays are marked with the reason code I1 (exceptional weather conditions). A separate decision on the use of this reason code is made jointly with the Rail Traffic Management Centre, the operators, traffic control and, if required, the HSL. As the situation develops, the Rail Traffic Management Centre provides traffic control with information on where and over what time period the I1 reason code may be marked as the reason of the delay. In connection with discussing performance scheme compensations, the parties shall agree, on a case-by-case basis, when the weather-related disturbance marked with reason code I1 is considered to constitute a force majeure event.

 When a passenger traffic reduction plan has been decided upon on the previous day due to a weather phenomenon, trains cancelled in accordance with the plan do not fall within the sphere of the performance scheme. The decision on the traffic reduction plan is made jointly by the Rail Traffic Management Centre, the operators, traffic control and, if required, the HSL.

Performance scheme monitoring stations (S)

Performance scheme i							
Traffic operating point			Local traffic	Goods transport	Machinery		Trial run
	n	traffic				unit	
Espoo	EPO		S				
Haapajärvi	НРЈ	S					_
Haapamäki	HPK	S		S	S	S	S
Hamina	HMA			S	S	S	S
Hanko station	HNK	S					
Hanko cargo	HNKT			S	S	S	S
Heinävaara	HÄV			S	S	S	S
Helsinki station	HKI	S	S				
Huopalahti	HPL		S				
Hyrynsalmi	HYS			S	S	S	S
Hämeenlinna	HL	S	S	S	S	S	S
Iisalmi	ILM	S		S	S	S	S
Ilomantsi	ILO			S	S	S	S
Imatra station	IMR	S					
Imatra cargo	IMT			S	S	S	S
Inkeroinen	IKR	S		S	S	S	S
Joensuu station	JNS	S		S	S	S	S
Joensuu Peltola	PLT			S	S	S	S
Joensuu Sulkulahti	SUL			S	S	S	S
Juurikorpi	JRI	S		S	S	S	S
Jyväskylä	JY	S		S	S	S	S
Jämsä	JÄS	S		S	S	S	S
Kajaani	KAJ	S		S	S	S	S
Kannonkoski	KSI	3		S	S	S	S
				S S			S
Karjaa	KR	S	S	5	S	S	5
Kauppilanmäki	KPL				S	S	-
Keitelepohja	KTP			S	S	S	S
Kemi	KEM	S		S	S	S	S
Kemijärvi	KJÄ	S	_	S	S	S	S
Kerava station	KE	_	S				
Keuruu	KEU	S	-				
Kirkkonummi	KKN	S	S				
Kirkniemi	KRN			S	S	S	S
Kitee	KIT	S		S	S	S	S
Kokemäki	KKI	S		S	S	S	S
Kokkola	KOK	S		S	S	S	S
Kolari	KLI	S		S	D		S
Kommila	KMM			S	S	S	S
Kontiomäki	KON	S		S	S	S	S
Kotka Hovinsaari	HOS			S	S	S	S
Kotka Mussalo	MSS			S	S	S	S
Kotkan satama	KTS	S		S	S	S	S
Kouvola station	KV	S	S	S	S	S	S
Kouvola lajittelu	KVLA			S	S	S	S
Kouvola Oikoraide	OIK			S	S	S	S
Kouvola cargo	KVT			S	S	S	S
Kuopio station	KUO	S		S	S	S	S
Kuopio cargo	KUOT			S	S	S	S
Kuusankoski	KUK			S	S	S	S
Kymi	KY			S	S	S	S
Lahnaslampi	LHN			S	S	S	S
Lahti	LH	S	S	S	S	S	S
Lapinjärvi	LPJ	5	5	S	S	S	S
	LR	S		5	3	3	3
Lappeenranta		5					
Lappohja	LPO			S	S	S	S
Airport	LEN		S				
Leppävaara	LPV	S	S				
Lieksa	LIS	S					
Loimaa	LM	S					
Luumäki	LÄ	S		S	S	S	S
Maanselkä	MLK			S	S	S	S
Mikkeli	MI	S		S	S	S	S

Moskova	MVA	S					
Myllyoja	MYL	3		S	S	S	S
	MYT			S	S	S	S
Mynttilä				5	5	5	5
Mäntsälä	MLÄ MÄN		S				<u> </u>
Mänttä				S	S	S	S
Mäntyharju	MR	S S		<u> </u>	-		
Niirala	NRL			S	S	S	S
Nurmes	NRM	S		S	S	S	S
Orivesi	OV	S		S	S	S	S
Oulainen	OU				S	S	
Oulu station	OL	S		S	S	S	S
Oulu Nokela	NOK			S	S	S	S
Oulu cargo	OLT			S	S	S	S
Oulunkylä	OLK		S				_
Parikkala	PAR	S		S	S	S	S
Parkano	PKO	S					
Pello	PEL	S					
Pesiökylä	PSK			S	S	S	S
Pieksämäki station	PM	S		S	S	S	S
Pieksämäki lajittelu	PMLA			S	S	S	S
Pieksämäki cargo	PMT			S	S	S	S
Pieksämäki Temu	TMU			S	S	S	S
St. Petersburg	PTR	S					
Pietarsaari	PTS			S	S	S	S
Pihtipudas	PP			S	S	S	S
Pitkämäki	PTK			S	S	S	S
Pori	PRI	S		S	S	S	S
Pyhäsalmi	PHÄ			S	S	S	S
Pännäinen	PNÄ	S					
Raahe	RHE			S	S	S	S
Rauma	RMA			S	S	S	S
Riihimäki station	RI	S	S	S	S	S	S
Riihimäki lajittelu	RILA			S	S	S	S
Riihimäki cargo	RIT			S	S	S	S
Ristijärvi	RJV			S	S	S	S
Rovaniemi	ROI	S		S			S
Saarijärvi	SRJ			S	S	S	S
Salo	SLO	S					
Savonlinna station	SL	S					
Seinäjoki station	SK	S		S	S	S	S
Siilinjärvi station	SIJ	S		S	S	S	S
Sköldvik	SLD			S	S	S	S
Suonenjoki	SNJ	S					
Tampere station	TPE	S	S	S	S	S	S
Tampere cargo	TPET			S	S	S	S
Tampere Viinikka	VKA			S	S	S	S
Tikkurila station	TKL	S	S				
Toijala	TL	S	S				
Tornio-Itäinen	TRI	S					
Turku station	TKU	S		S	S	S	S
Turku satama	TUS	S					
Turku cargo	TKUT			S	S	S	S
Tuupovaara	TPV			S	S	S	S
Uimaharju	UIM			S	S	S	S
Vaala	VAA	S		<u> </u>		, ,	3
Vaasa	VS	S		S	S	S	S
Vainikkala station	VNA	S		S	S	S	S
Valtimo	VLM	3		S	S	S	S
Vammala	VMA	S		J	J	J	J
Vantaankoski	VKS	3	S				
Varkaus	VAR	S	3				
		3		C	C	C	c
Vartius	VUS			S	S	S	S
Vihanti	VTI	S					_
Violenti	VLP	S		S	S	S	S
Vuokatti	VKT				S	S	S
Ylivieska	YV	S		S	S	S	S

Ämmänsaari	ÄM		S	S	S	S
Äänekoski	ÄKI		S	S	S	S

# Service description: Heating of rolling stock and electrical outlet points (1500 V and 400 V)

#### 1 General information

#### 1.1 Introduction

This service description describes the heating and electricity supply service for rolling stock on state-owned railway infrastructure. The service is an additional service referred to in point 3 of Annex II to Directive 2012/34/EU.

#### 1.2 Service manager

Service manager:

Finnish Transport Infrastructure Agency, Track and Rolling Stock Technology Opastinsilta 12 A, 00520 Helsinki <a href="mailto:kirjaamo@vayla.fi">kirjaamo@vayla.fi</a>

#### 1.3 Validity period and updating process

This document is updated annually in connection with the publication of the Network Statement. If required, changes may also be made on the statement's revision dates during the timetable period.

## 2 Services

#### 2.1 Wagon heating points (1500 V)

The infrastructure manager provides 1500 V heating points at the Ilmala rail yard for railway operators. Under section 4 of the Government decree (1489/2015), the preheating of passenger carriages is an additional service.

#### 2.2 Socket points (400 V)

The infrastructure manager provides 400 V socket points for railway operators. Some of the electrical outlet points on the state-owned railway network are owned by VR Group. Under section 4 of the Government decree (1489/2015), electrical outlet points are an additional service.

# 3 Service description

#### 3.1 List of service parts

The list of heating and socket points is provided in Appendix 2B to the Network Statement.

#### 3.2 Naming the service

The heating and socket points are named after their track location, and a specifier is added to the name, if necessary.

#### 3.2.1 Location

The 400 V and 1,500 V power supply facilities for rolling stock are indicated in Appendix 2B to the Network Statement, in the track diagrams and in the map service.

#### 3.2.2 Opening hours

The electrified railway network, heating and electrical outlet points are accessible on a 24/7 basis.

#### 3.2.3 Technical characteristics

The technical characteristics of the power supply systems are described in the <u>instructions issued by the Finnish Transport Infrastructure Agency</u> (The documents are in Finnish).

#### 3.2.4 Planned changes in technical characteristics

There are no planned changes to the service.

## 4 Charges

The fees for accessing heating of rolling stock and electrical outlet points are agreed on a case-by-case basis.

## 5 Access conditions

The use and terms of use for heating of rolling stock and electrical outlet points are agreed on a case-by-case basis.

## 6 Capacity allocation

#### 6.1 Requests for access or services

Reservations for using heating and socket points are made by reserving the track on which the service is located.

#### 6.2 Response to requests

Track reservation requests for heating and socket points are answered as specified in chapter 4.2.1 of the Network Statement.

#### 6.3 Information on available capacity and temporary capacity restrictions

No known capacity constraints.

# Operational responsibilities

The general requirements for railway operations are described in chapter 3.2.1 of the Network Statement. In a multi-operator environment, the roles and responsibilities of operative work of the various parties also depend on the agreements between the various actors. The infrastructure manager must treat all parties equally and assume operational responsibility for traffic control. In operational work (24/7):

#### The operator's responsibilities include

- Production planning, which may include, depending on the purchase agreement, for example, the planning of schedules, stock rotation, depot services and depot personnel rotation, marketing and sales, traffic operation, preparedness for disruptions as well as the organisation of substitutive transport services.
- Submitting the information on schedules, stock rotations, train configurations and related operational changes in order to manage the data regarding the access to tracks in accordance with the instructions of the infrastructure manager.
- Close collaboration with traffic control in order to move stock off the track or out of an area in the railway yard when necessary, for instance, in case of infrastructure or equipment failure.
- Receiving notifications from traffic control on temporary, changed circumstances, such as sudden restrictions on available capacity, and adapting the operations accordingly (depending on the purchase agreement, for example, by applying for ad hoc capacity, cancelling allocated capacity, informing passengers before arriving at the station and on the trains).
- Operating the trains in accordance with the plans drawn up in advance and reporting on any deviations and their reasons in accordance with the reason code classification as well as aiming to operate as scheduled.
- Complying with the instructions given in the network statement and in the instructions of infrastructure maintenance of the infrastructure manager and informing on any safety deviations in accordance with the instructions given by the infrastructure manager.
- Participating in the work of the operational group (see chapter 6.2.3).

#### The responsibilities of traffic control include

- Maintaining situation awareness and anticipating disruptions.
- Deciding on convening the operational group that includes the operational actors.
- Managing traffic situations and the infrastructure fault repair situations and communicating them to other operational actors.
- Controlling traffic and managing track and line capacity, putting limitations on capacity if necessary.
- Informing passengers at the stations and platforms on train departures and arrivals as well as on the tracks used by the trains.
- Providing real-time data for the use of the operators via interfaces.

# Safety issues

#### Reporting safety incidents and providing safety information

The infrastructure manager is responsible for the safety of its railway network. A railway operator must report any accident, safety-related anomaly or incident that it has detected to railway traffic control, which must relay the information to the Rail Traffic Management Centre. The report must be submitted without delay (recommended within 24 hours), but no later than 48 hours after the anomaly or incident. Serious safety-related anomalies must be reported immediately.

The incident must be reported regardless of whether the anomaly is related to the operator's operations or if it is a party to causing the anomaly. The report must include information on whether the safety anomaly has occurred on the state-owned railway network or on another railway network.

All railway operators must submit reports on accidents and incidents related to train and shunting traffic (safety anomaly data) to the infrastructure manager's TUTKA system in accordance with the up-to-date classification instructions issued by the Finnish Transport Infrastructure Agency.

The provision of information may take the form of data transfer between systems, or the railway operator may record safety-related anomalies directly in the TUTKA system. Similarly, safety-related anomalies from the TUTKA system that apply to the railway operator may be submitted to the railway operator in a separately agreed on manner.

If the railway operator is responsible for the performance of traffic control for shunting operations using the infrastructure manager's traffic control system, the railway operator must also send the infrastructure manager the written reports and analyses on any safety anomalies that have occurred during its performance of traffic control.

#### Reporting damage

Railway operators must without delay inform the infrastructure manager's traffic control of any damage to the railway network or malfunctioning of the infrastructure. In order to investigate the events, the railway operator must contact the infrastructure manager's authorised track manager. The infrastructure manager must notify railway operators of any observations it makes of damage to the rolling stock or malfunctioning of rolling stock operated railway operators.

#### Occupational safety in railway yards

The infrastructure manager is responsible for ensuring that the infrastructure of Finland's railway yards is in operable condition and in accordance with the relevant legislation, regulations and instructions including the Railway Engineering Guidelines (RATO) as well as with occupation safety conditions.

Railway operators are responsible for the condition of the rolling stock that they use in railway yards and for the safety of its movement.

In its role as an employer, the railway operator is responsible for the occupational safety of its employees in railway yards. They are also responsible for the management of equipment and rolling stock in their ownership from the perspective of safety.

#### Storage of stop blocks

When storing rolling stock, railway operators must ensure that the trains that they operate remain stationary and that stop blocks are used and stored appropriately.

#### **Preparedness of railway operators**

A railway operator must prepare for accidents and exceptional situations as provided in legislation. The infrastructure manager cooperates with railway operators in preparedness matters. The infrastructure manager publishes the OVRO instructions for railway operators on how to prepare for railway accidents. The railway operator must integrate the actions outlined in the OVRO instructions into its own operations. Railway operators must also comply with the other instructions related to preparedness and exceptional situations issued by the infrastructure manager.

## Service facility description: Passenger stations

#### 1 General information

#### 1.1 Introduction

This service facility description specifies access to and terms of use of passenger stations in the state-owned railway network and their buildings and other facilities.

The Finnish Transport Infrastructure Agency has prepared this service facility document in compliance with the requirements set in the Commission Implementing Regulation (EU) 2017/2177. The service is a basic service referred to in point 2 of Annex II to Directive 2012/34/EU.

#### 1.2 Operator of the service facility

Operator of the service facility:

Finnish Transport Infrastructure Agency
Property Unit and Railway Maintenance Services Unit
Opastinsilta 12 A
FI-00520 Helsinki
kirjaamo@ftia.fi

#### 1.3 Validity period and updating process

This document is updated annually in connection with the publication of the Network Statement. If required, minor changes may also be made on the statement's revision dates during the timetable period.

## 2 Services

#### 2.1 Passenger stations

In its capacity as the infrastructure manager of the state-owned railway network, the Finnish Transport Infrastructure Agency owns and provides access to the tracks and passenger platforms at all passenger stations. Traffic operating points used for passenger traffic and the lengths of their platforms are listed in Appendix 2B. The platforms that are not maintained by the infrastructure manager are also listed in Appendix 2B (in brackets). The safety of and public access to these platforms is the responsibility of the railway operator using the platform. All passenger stations are listed in the map service.

Details of the station buildings and other facilities at passenger stations owned by the Finnish Transport Infrastructure Agency that are available for rent (such as ticket-selling facilities and the placing of ticket-vending machines) are presented in Appendix 7B. The facilities owned by other parties and their contact details are presented in Appendix 7C.

Open data bank on the development of railway station areas.

#### 2.2 Passenger information and public address system

The Finnish Transport Infrastructure Agency is responsible for the information systems at stations and in platform areas, which include signs directing to locations, signs for station name and track numbers as well as timetable display cabinets. The information provided in timetable display cabinets is the responsibility of the railway operator or HSL. The railway operator is responsible for information related to the availability of transport as well as information provided on trains. Fintraffic is responsible for the information systems at stations and in platform areas, which include timetable displays and public address systems. The passenger information system is maintained by Fintraffic Ltd.

In order to provide a passenger information service, the railway operator must produce the following information for the passenger information centre or system:

- Basic information: Train type, train number, line ID, route, commercial stops, planned time of arrival and departure, track and sectoral information and train composition
- From bypass stations: Planned arrival and departure time, track, train composition
- Change information: Replacement transport and type (bus/taxi), number of transport units, route, schedule, station specific departure, ticket eligibility
- Train connection: Replacement train connection (train number, line ID) and ticket eligibility
- Traffic information: Exceptional traffic, reduction in frequency/discontinued traffic, additional/chartered traffic, changes to the basic structure of traffic, such as changes in the timetable period
- Specific information concerning communication: Dual capacity train connections, international traffic, other issues requiring specific communication.

# 3 Service facility description

#### 3.1 List of all installations

Traffic operating points owned by the Finnish Transport Infrastructure Agency and used for passenger traffic are listed in Appendix 2B.

The passenger stations owned by the Finnish Transport Infrastructure Agency and their facilities that are available for rent are listed in Appendix 7B to the Network Statement. The facilities that can be rented out are divided into waiting areas, office spaces, social facilities and business premises.

#### 3.2 Name of installation

The passenger stations are named after their locality, and a specifier is added to the name, if necessary.

#### 3.3 Location

Traffic operating points owned by the Finnish Transport Infrastructure Agency and used for passenger traffic are listed in Appendix 2B.

The addresses of the passenger stations owned by the manager of the state-owned railway network are presented in Appendix 7B to the Network Statement and in the map service.

#### 3.4 Opening hours

The traffic operating points owned by the Finnish Transport Infrastructure Agency and used for passenger traffic are open on a 24/7 basis. The opening hours for facilities at passenger stations maintained by the Finnish Transport Infrastructure Agency are decided on site-specifically.

In general, the tenant decides on the opening hours of the rental facilities of passenger stations. If necessary, the opening hours are agreed upon in the lease agreement.

#### 3.5 Technical characteristics

Details of the facilities at passenger stations available for rent and their technical characteristics are given in Appendix 7B to the Network Statement.

#### 3.6 Planned changes in technical characteristics

No changes have been planned to the technical characteristics of passenger stations.

## 4 Charges

#### 4.1 Information on charges

The approximate rental rates of the passenger stations owned by the infrastructure manager are presented in Appendix 7B.

The fair rental rate of the facilities is determined before each lease. The rental level is based on the actual price level in the area.

#### 4.2 Information on discounts

Discounts are not granted on the rents of passenger stations. In return for renovations done in the buildings, discounts may be considered on a case-by-case basis.

#### 5 Access conditions

#### 5.1 Legal requirements

A rental agreement is drawn up on the use of passenger stations.

#### 5.2 Technical conditions

Technical conditions and information regarding individual service facilities at each specific station are presented in Appendix 7B to the Network Statement.

#### 5.3 Self-supply of rail-related services

The infrastructure manager of the state-owned railway network does not impose any general restrictions on the use of passenger stations. The use of the facilities and the terms of use are set out when the rental agreement is made.

## 6 Capacity allocation

#### 6.1 Requests for access or services

An applicant wishing to rent passenger station facilities must submit to the infrastructure manager a free-form enquiry regarding the renting of passenger station facilities. The enquiry must include the relevant information for the processing of applications for the renting of passenger station facilities, such as the applicant's contact details, the name and address of the building, the surface area to be rented, the purpose of use, the rental period.

Lease enquiries shall be sent to the Finnish Transport Infrastructure Agency's Property Unit by e-mail: kirjaamo@ftia.fi.

#### 6.2 Response to requests

Applications for renting facilities at passenger stations are answered within the deadlines set by the Rail Regulatory Body (reg. no. TRAFI-COM/270984/03.06.04/2019) no later than within 30 days from receiving sufficient information for processing the application.

Any urgent needs are responded to as soon as possible, but no later than within five working days from receiving all necessary information for processing the application. Renting out passenger station facilities often includes viewings, condition surveys and suitability assessments of the premises. These are agreed on separately in connection with each rental.

Matters related to the rental of passenger stations in the state-owned railway network are prepared by the Property Unit of the Finnish Transport Infrastructure Agency.

No principles of priority have been set for the rental of passenger stations.

If there are conflicting requests for leased facilities, every effort will be made to reconcile them through discussion and coordination, if necessary, with other service providers operating in the same area. Other viable alternatives, such as alternative locations or dates for renting passenger stations, may also be proposed to the applicant (Article 10 of Regulation 2017/2177).

# 6.3 Information on available capacity and temporary capacity restrictions

Information on facilities available for rent on passenger stations can be obtained from the infrastructure manager of the state-owned railway network. The information is maintained in Appendix 7B in connection with the publication and updating of the Network Statement.

#### Station buildings owned by the Finnish Transport Infrastructure Agency at passenger stations - situation in September 2020

Leases of the facilities owned by the Finnish Transport Infrastructure Agency are prepared by Railway Maintenance Services. For rental matters, contact: kiriaamo@ftia.fi

The fair rental rate of the facilities is determined before each lease. The rental level is based on the actual price level in the area.

"(accuracy +/- 50%, depending on the condition of the premises)

*faccuracy +/- 50%, depending on the condi-	non or one oreniae	.,																					
Station building	Station building				Waiting area Office space								Commercial space										
Building	Postal code	Location	Street address	Valid contract (no.)	Total area to be leased (m2)	Vacant premises yes/no	Additional information	Vacant premises yes/no	M2	rent* EUR/m2/month	Additional information	Vacant premises yes/no	M2	rent* EUR/m2/m onth	Additional information	Vacant premises yes/no	M2	rent* EUR/m2/m onth	Additional information	Vacant premises yes/no	M2	rent* EUR/m2/month	Additional information
HELSINKI HUOPALAHTI	00320	HELSINKI	KYLÄTIE 25		Less than 100	WS	Empty premises for rent in the station hall. The premises are in poor condition and require extensive repairs. Vacant sales premises and empty				Unheated station hall, adjacent outdoor area. Not leased									WS	ess than 100 ml	15	
HELSINKI MALMIN VANHA ASEMA	00700	HELSINKI	LATOKARTANONTIE 1		229.00	ves	office, storage and work space. Fairly far off from the station, next to the Jokeri line. Must be renovated before use.					WS	Not known	15						VES	Not known	15	
HELSINKI PUKINMÄKI	007200	HELSINKI	PUKINMÄENAUKIO 1	61344	125.00	no	currently used as a przeria; could be suitable for passenger services, at tunnel level and thus not adjacent to the station.  Currently used as a pizzeria.					•								no	125.00	15	Currently leased
HELSINKI PUISTOLA	00750	HELSINKI	TAPULIKAUPUNGINTIE 1	90183	31,00	no	Commercial premises (station upper level); four customer places. Leases are managed by YTT through a													no	31,00	15-20	Currently leased
YANTAA TIKKURILA (NEW STATION BRI YANTAA KOIYUKYLÄ	01360		RATATIE 11  KOIVUKYLÄN PUISTOTIE	61426	262.00	no no	Iong-term contract.  A former klosk has been leased for other use. Not adjacent to the station; ground floor would be suitable for passenger use but extensive repairs are required.  No facilities up for rent. The airport's	no	See 'Break room/staff facilities'	8	Currently leased					no	220.00	8	The floor space includes the hall and break room/staff facilities Currently leased.	no.	42.00	10	Currently leased
HELSINKI-VANTAA AIRPORT	01530	VANTAA	TELETIE 6			no	underground facilities owned by the Finnish Transport Infrastructure Agency.	no.				no				no				no no			
JÄMSÄ	42100	JÄMSÄ	ASEMAKATU S	5495	70.00	yes	Empty, closed to the public	VES	40.00	8	Waiting area and toilet	WS	30.00	8									
LAPUA	62100	LAPUA	ASEMAKATU 7	90077	121.00	yes	Empty, closed to the public	WS	43.00	8	Waiting area and two toilets Waiting area and two	yes	78,00	8		yes	Not known	7					
KAUHAVA PÄNNÄINEN	62200 68910	KAUHAVA PÄNNÄINEN	ASEMAKUJA 3 ASEMATIE 13	90076	89.00 Not known	yes ves	Empty, closed to the public The station was renovated in the 2010s. Vacant premises in addition to the waiting room.	ves	64.00 48.70	8 8	Waiting room and two toilets. Currently leased.	yes yes	25,00 Not known	8		yes ves	Not known	7		ves	Not known	8	
HĀRMĀ	62300	HÄRMÄ	PIIRTOLANTIE 6		Not known	yes	The station building would have to be renovated. There may be vacant premises in the building (in addition to the waiting room).	yes	Not known	, and the second	THE PARTY OF THE P	,44	The Month	Ü		,63		,		yes	Not known	8	

Traffic operating point	Building	Operator of the service facility	Timetable display	More information on railway premises available for lease
Akaa, Toijala	Station building	VR-Group plc	Yes	VR Network Statement, passenger stations (vacant premises and prices) <sup>1</sup>
Espoo	Station bridge	City of Espoo, Premises Department	Yes	No vacant premises Inquiries: City of Espoo, Premises Department
Espoo, Kauklahti	Station building	Senate Station Properties Ltd	Yes	https://www.senaatti.fi/asema-alueet/en/
Hamina	Traffic operating point building	VR-Group plc	No	VR Network Statement, passenger stations (vacant premises and prices) <sup>1</sup>
Hanko	Station building	Privately owned	No	Not in passenger use
Helsinki, Kannelmäki	Railway station	Helsinki City Transport HKL	Yes	HKL, property management
Helsinki, Malmi	Station building	Senate Station Properties Ltd	Yes	https://www.senaatti.fi/asema-alueet/en/
Helsinki, Malminkartano	Tunnel station	Helsinki City Transport HKL	Yes	HKL, property management Service description (in Finnish): https://vayla.fi/ammattiliikenne-raiteilla/rautateiden-verkkoselostus/rataverkon-
Helsinki, Pasila	New station building	Kiinteistö Oy Uusi Pasilan Asema	Yes	palvelun-tarionta
Helsinki, Pohjois-Haaga		Helsinki City Transport HKL	Yes	HKL, property management
Helsinki	Station building	VR-Group plc	Yes	VR Network Statement, passenger stations (vacant premises and prices) <sup>1</sup>
Hyvinkää	Station building	VR-Group plc	Yes	VR Network Statement, passenger stations (vacant premises and prices) <sup>1</sup>
Hämeenlinna	Station building	VR-Group plc	Yes	VR Network Statement, passenger stations (vacant premises and prices) <sup>1</sup>
Iisalmi	Station building	Senate Station Properties Ltd	Yes	https://www.senaatti.fi/asema-alueet/en/
Imatra	Imatra	VR-Group plc	No	VR Network Statement, passenger stations (vacant premises and prices) <sup>1</sup>
Imatra	Imatra	Kiinteistö Oy Imatran keskusasema	Yes	REIM Imatra Oy
Joensuu	Station building	VR-Group plc	Yes	VR Network Statement, passenger stations (vacant premises and prices) <sup>1</sup>
Jyväskylä	Jyväskylä	Jyväs-Parkki Oy	Yes	Jyväs-Parkki Oy, property matters (vacant premises and prices)
Järvenpää	Station building	VR-Group plc	Yes	VR Network Statement, passenger stations (vacant premises and prices) <sup>1</sup>
Kajaani	Station building	VR-Group plc	Yes	VR Network Statement, passenger stations (vacant premises and prices) <sup>1</sup>
Kannus	Station building	Senate Properties	?	https://www.senaatti.fi/en/
Kauniainen	Station building	Senate Station Properties Ltd	No	https://www.senaatti.fi/asema-alueet/en/
Kemi	Station building	Senate Station Properties Ltd	Yes	https://www.senaatti.fi/asema-alueet/en/
Kemijärvi	Station building	VR-Group plc	Yes	VR Network Statement, passenger stations (vacant premises and prices) <sup>1</sup>
Kerava	Station building	VR-Group plc	Yes	VR Network Statement, passenger stations (vacant premises and prices) <sup>1</sup>
Kirkkonummi	Station building	Senate Station Properties Ltd	No?	https://www.senaatti.fi/asema-alueet/en/
Kokkola	Station building	City of Kokkola	Yes	City of Kokkola
Kolari	Station building	VR-Group plc	Yes	VR Network Statement, passenger stations (vacant premises and prices) <sup>1</sup>
Kotka	Station building	VR-Group plc	No	VR Network Statement, passenger stations (vacant premises and prices) <sup>1</sup>
Kouvola	Station building	VR-Group plc	Yes	VR Network Statement, passenger stations (vacant premises and prices) <sup>1</sup>
Kuhmo, Vartius	Station building	VR-Group plc	No	VR Network Statement, passenger stations (vacant premises and prices) <sup>1</sup>
Kuopio	Station building	VR-Group plc	Yes	VR Network Statement, passenger stations (vacant premises and prices) <sup>1</sup>
Lahti	Station building	VR-Group plc	Yes	VR Network Statement, passenger stations (vacant premises and prices) <sup>1</sup>
Lapinlahti	Station building	Nelson House Oy	Yes	Nelson House Oy, Lapinlahti. No vacant premises
Lappeenranta	Station and customs office building	Senate Station Properties Ltd	Yes	https://www.senaatti.fi/asema-alueet/en/
Mikkeli	Station building	VR-Group plc	Yes	VR Network Statement, passenger stations (vacant premises and prices) <sup>1</sup>
Oulainen	Station building	VR-Group plc	Yes	VR Network Statement, passenger stations (vacant premises and prices) <sup>1</sup>
Oulu	Station building	Senate Station Properties Ltd	Yes	https://www.senaatti.fi/asema-alueet/en/
Parikkala	Station building	Municipality of Parikkala	Yes	Municipality of Parikkala, construction manager
Parkano	Station building	VR-Group plc	Yes	VR Network Statement, passenger stations (vacant premises and prices) <sup>1</sup>
Pieksämäki	Station building	VR-Group plc	Yes	VR Network Statement, passenger stations (vacant premises and prices) <sup>1</sup>
Pori	Station building	Senate Station Properties Ltd	Yes	https://www.senaatti.fi/asema-alueet/en/
Raasepori	Station building	A&N Invest Oy Ab	Yes	A&N Invest Oy Ab
Riihimäki	Station building	VR-Group plc	Yes	VR Network Statement, passenger stations (vacant premises and prices) <sup>1</sup>
Rovaniemi	Station building	Senate Station Properties Ltd	Yes	https://www.senaatti.fi/asema-alueet/en/
Seinäjoki	Station building	Senate Station Properties Ltd	Yes	https://www.senaatti.fi/asema-alueet/en/
Siilinjärvi	Station building	VR-Group plc	No	VR Network Statement, passenger stations (vacant premises and prices) <sup>1</sup>
Tampere	Station building	VR-Group plc	Yes	VR Network Statement, passenger stations (vacant premises and prices) <sup>1</sup>
Tohmajärvi, Niirala	Station building	VR-Group plc	No	VR Network Statement, passenger stations (vacant premises and prices) <sup>1</sup>
Turku	Station building	VR-Group plc	Yes	VR Network Statement, passenger stations (vacant premises and prices) <sup>1</sup>
Turku, Kupittaa	Station building	VR-Group plc	Yes	VR Network Statement, passenger stations (vacant premises and prices) <sup>1</sup>
Tuusula, Jokela	Station building	VR-Group plc	No	VR Network Statement, passenger stations (vacant premises and prices) <sup>1</sup>
Vaasa	Station building, new waiting room	City of Vantas	Yes	Airaksinen Capital Oy, Vaasa. Vacant premises
Vantaa Vivistö	Station bridge, halt	City of Vantaa	Yes	City of Vantaa, housing and premises rental
Vantaa, Kivistö Vantaa, Leinelä	Station building Station bridge, halt	City of Vantaa City of Vantaa	Yes	City of Vantaa, housing and premises rental
Vantaa, Leineia Vantaa, Louhela	Station bridge, nait Station building	City of Vantaa	Yes	City of Vantaa, housing and premises rental City of Vantaa, housing and premises rental
Vantaa, Louriela Vantaa, Martinlaakso	Station building	City of Vantaa	Yes Yes	City of Vantaa, housing and premises rental
Vantaa, Myyrmäki	Station building	City of Vantaa	Yes	City of Vantaa, housing and premises rental
Vantaa, Vantaankoski	Station bridge, halt	City of Vantaa	Yes	City of Vantaa, housing and premises rental
Varkaus	Station building	Varkauden keskusliikenneasema Oy	Yes	Realia isannointi Oy, Varkaus.
Ylivieska	Station building	Senate Station Properties Ltd	Yes	https://www.senaatti.fi/asema-alueet/en/
				piminta/matkustaja-asemat-ja-muut-asema-alueen-tilat/

# Service facility description: Timber loading facilities

## 1 General information

#### 1.1 Introduction

This service facility description specifies access to and terms of use of timber loading facilities owned by the Finnish Transport Infrastructure Agency in the state-owned railway network.

The Finnish Transport Infrastructure Agency has prepared this service facility document in compliance with the requirements set in the Commission Implementing Regulation (EU) 2017/2177. The service is a basic service referred to in point 2 of Annex II to Directive 2012/34/EU.

## 1.2 Operator of the service facility

Operator of the service facility:

Finnish Transport Infrastructure Agency Railway Network Access Unit Opastinsilta 12 A FI-00520 Helsinki kirjaamo@vayla.fi

The FTIA's Maintenance Department is the party to contact in matters concerning the use and rental of state-owned railway network loading facilities as well as the condition of loading facilities and sidings. The contact information is listed on the infrastructure manager's website.

The contact point in matters concerning track access to loading areas in the stateowned railway network and their use is Railway Access Unit at the Finnish Transport Infrastructure Agency.

# 1.3 Validity period and updating process

This document is updated annually in connection with the publication of the Network Statement. If required, changes may also be made on the statement's revision dates during the timetable period.

### 2 Services

# 2.1 Timber loading facilities

The timber loading facilities of the Finnish Transport Infrastructure Agency are used for storing and/or loading timber. As a rule, the Finnish Transport Infrastructure Agency owns the land areas and sidings in these facilities. There may also be loading facilities owned by private operators in the private sidings connected to the state-owned railway network.

The timber loading facilities of the Finnish Transport Infrastructure Agency are described in Appendices 2B and 7E to the Network Statement, and in the map service.

# 3 Service facility description

#### 3.1 List of all installations

Most of the freight terminals in the state-owned railway network, marked with 'K' in the table in Appendix 2B, are used for loading timber. The marking 'Y' means a private loading area leased by the facility owner.

Appendix 7E contains a list and more detailed information on the Finnish Transport Infrastructure Agency's loading facilities.

## 3.2 Name of installation

The timber loading facilities are named after the locality of the railway traffic operating point, and a specifier is added to the name, if necessary.

## 3.3 Location

The locations of the timber loading facilities of the state-owned railway network are described in Appendices 2B and 7E to the Network Statement and in the map service. A connection to a private siding provided at a traffic operating point in the state-owned railway network is indicated in the tables of Appendices 2B and 7E.

## 3.4 Opening hours

As a rule, the timber loading facilities in the state-owned railway network are accessible on a 24/7 basis all year round. There may be restrictions on traffic and loading/unloading operations in certain timber loading facilities. Further information available from the FTIA's Maintenance Department (see section 1.2).

#### 3.5 Technical characteristics

The loading facilities are available to railway operators and charterers for the purpose of loading timber wagons. The number and length of loading tracks and the possibility of using electric traction is presented for each specific trackin the track diagrams

The availability of loading facilities for unloading cargo is examined on a case-bycase basis, as needed.

# 3.6 Planned changes in technical characteristics

No major changes are planned to the technical characteristics of the current loading sites. Planning of improvement work to the loading sites in Sänkimäki and Haapamäki was launched in 2023, and the feasibility and schedule of the measures will be specified as the planning progresses. Information on the construction of new loading facilities and changes in the current loading facilities is given in Appendix 7E to the Network Statement. Note: New loading facilities will be completed in 2024 in Seinäjoki and Vaala (Nuojua), and their commissioning schedule will be specified separately.

The target status and development of the timber loading point network is discussed in the publication 'The situation and future view of the loading site network for timber on the railway network.' (Publications of the Finnish Transport Infrastructure Agency 29/2022; the information is in Finnish) and 'Update of the situation and future view of the loading site network for timber on the railway network' Publications of the Finnish Transport Infrastructure Agency 48/2023; the information is in Finnish).

## 4 Charges

# 4.1 Information on charges

Access to the timber loading facilities in the railway network is covered by the basic infrastructure charge. A rent is payable for the storage areas provided as part of the loading facilities. The rent for storage is EUR 0.38/m²/year. The exception is the Patokangas loading facility in Kemijärvi where rent for storage is EUR 0.60/m²/year. The rent for the storage area does not include maintenance costs that are charged from the leaseholder as agreed in the lease agreement. No significant changes are expected in the rents set out in the lease agreements. The pricing will remain in effect until 31 December 2026.

## 4.2 Information on discounts

No discounts are granted.

#### 5 Terms of use

## 5.1 Legal requirements

Track access to and the terms of use of timber loading facilities are agreed upon in the network access agreements. If several railway operators use the same loading facility, a railway yard agreement will be prepared for the facility under the supervision of the Finnish Transport Infrastructure Agency. For more information, see chapter 2.3 of the Network Statement.

An agreement on the rent charged for the timber loading facilities and on the right to use the facilities is concluded between the user and the FTIA. The FTIA's Maintenance Department acts as the contact (see section 1.2).

#### 5.2 Technical conditions

Information on the maximum length and axle load of rolling stock arriving to a service facility, the length of loading tracks and the possibility to use electric traction for each specific track are in the track diagrams available on the Track Data Service:

The loading contractors operating in the loading facilities must purchase their own power connection for their own use. As a rule, the connection must be located outside the area owned by the infrastructure manager. If, however, it must be placed in the land area administered by the infrastructure manager, a location permit for the connection must be prepared. The loading contractors operating in the loading facilities must also purchase their own data connection for their own use.

The placement of possible other services must be agreed upon with the FTIA's Maintenance Department.

# 5.3 Self-supply of rail-related services

The Finnish Transport Infrastructure Agency does not provide services in these service facilities. The supply of services is based on the operations of each service facility user. The placement of possible services must be agreed upon with the FTIA's Maintenance Department.

There may be loading facilities owned by various private operators in the private sidings connected to the state-owned railway network. Connecting a private siding to the state-owned railway network requires the preparation of a private siding agreement in accordance with the agreement template used by the Finnish Transport Infrastructure Agency. More information on private siding agreements (in Finnish).

# 5.4 IT systems

The arrival/departure tracks of loading facilities can be viewed in Fintraffic's data systems, such as the capacity management system LIIKE and its modules. Data systems for rail capacity management are being developed, and the railway yard capacity management will gradually be transferred to a new information system (SAAGA).

# 6 Capacity allocation

# 6.1 Requests for access or services

Track access to timber loading facilities is agreed on in the of the network access agreements.

For the purpose of access agreement negotiations, the railway operator or another capacity applicant must deliver to the infrastructure manager a free-form estimate of their loading facility needs at each traffic operating point annually by the end of September. Based on the track access requirements reported by the railway operators, the infrastructure manager estimates whether it is necessary to prepare separate railway yard agreements for specific traffic operating points or if other capacity management procedures are required.

If there are any changes in the railway operators' operations that affect both the needs for access to loading facilities during the timetable period and the issues described in this appendix or in the access agreement, they should contact the infrastructure manager in good time (at least two months before the capacity is needed), so that the negotiations about access to the capacity of the loading facilities and the related practical arrangements can be commenced. The infrastructure manager must also be notified if the need for capacity ends or is reduced during the timetable period.

Any railway yard-specific operating methods are described in the access agreement's enclosures specific to each traffic operating point (railway yard agreement) with respect to the common management of situational information on tracks. In addition, railway operators may participate in regional meetings for planning snow clearing operations or other cooperation procedures which are organised each autumn.

The railway operator must consider the longitudinal gradient of the loading track presented in the track diagram and ensure that the rolling stock stays in place.

Applications concerning the leasing of storage sites are sent to the FTIA's Maintenance Department (see chapter 1.2).

## 6.2 Response to requests

Applications for track access at loading facilities are answered within the deadlines set by the Rail Regulatory Body (reg. no. TRAFICOM/270984/03.06.04/2019) no

later than within 30 days from receiving sufficient information for processing the application.

Any urgent needs are responded to as soon as possible, but no later than within five working days from receiving all necessary information for processing the application. With respect to processing applications, the contact person for agreement matters is the person responsible for agreements at Railway Network Access Unit. Fintraffic's traffic planning should be contacted in matters regarding ad hoc capacity needs (see chapters 1.2 and 6.1).

The FTIA's Maintenance Department will respond to applications concerning the leasing of storage sites are sent to (see chapter 1.2).

In case of conflicting needs of access to loading facilities, the aim is to find solutions through negotiation and coordination, if necessary, in collaboration with the operators and infrastructure managers of other service facilities.

# 6.3 Information on available capacity and temporary capacity restrictions

Information on available rail capacity and temporary capacity restrictions is visible to all operators in the data system for rail capacity management (LIIKE/SAAGA). Information on traffic planning or traffic control can also be requested from Fintraffic. Further information on the availability of storage areas will be provided by the FTIA's Maintenance Department (see section 1.2).

Timber loading facilities in the railway network	Line section	Track kilometre	Loading tracks	Rail weight	Length of the	Provision for electric traction	Private siding
Alapitkä	Pieksämäki-Kontiomäki	505+840	r004	K30	237	no	
Alavus Arola	Orivesi–Seinäjoki Kontiomäki–Vartius-raja	373+445 707+668	r834 r464	K30 54E1	664 705	no no	
Eno	Joensuu-Nurmes	660+170	r253	K43	625	no	
Haapajärvi	Äänekoski-Haapajärvi		<u>r571</u> r572	54E1 54E1	650 650	yes	
<u>Haapajärvi</u> Haapamäki	Äänekoski–Haapajärvi Orivesi–Seinäjoki	300+235	r410	54E1	721	yes no	
Hammaslahti	Kouvola-Joensuu	602+199	r004	54E1	657	yes	
Hankasalmi Heinola	Jvväskvlä–Pieksämäki Lahti–Heinola	418+089 167+607	r304 r008	54E1 K43	483 469	ves no	ves
Heinävaara	Joensuu-Ilomantsi	648+408	r002	54E1	684	no	
Heinävaara	Joensuu–Ilomantsi	648+408	r003	54E1 54E1	234	no	
Humppila Hyrynsalmi	Toiiala-Turku Kontiomäki-Ämmänsaari	188+778 704+601	r634 r203	60E1	413 796	no no	
Hyrynsalmi	Kontiomäki-Ämmänsaari	704+601	r204	60E1	857	no	
Hämeenlinna Hämeenlinna	Riihimäki–Tampere Riihimäki–Tampere	107+559 107+559	r007 r008	54E1 54E1	599 293	yes ves	
Härmä	Seinäjoki–Oulu	472+940	r574	54E1	635	no	
Ilomantsi	Joensuu–Ilomantsi	695+203	r002	54E1	753	no	
<u>Ilomantsi</u> Ilomantsi	Joensuu–Ilomantsi Joensuu–Ilomantsi	695+203 695+203	r003 r004	54E1 54E1	633 496	no no	
Immola/Imatra	Kouvola-Joensuu	332+699	r682	54E1	581	no	
Immola/Imatra	Kouvola–Joensuu	332+699	r683	54E1 54E1	<u>518</u>	no	
<u>Immola/Imatra</u> Isokvrö	Kouvola–Joensuu Seinäioki–Vaasa	332+699 447+488	r684 r603	K30	540 189	no no	
Joroinen	Huutokoski-Savonlinna	414+617	r272	54E1	881	no	
Jämsä Kalvitsa	Tampere–Jyväskylä Kouvola–Pieksämäki	284+084 330+634	r009 r784	54E1 54E1	302 944	NO NOC	
Kaivitsa Kannonkoski	Äänekoski–Haapaiärvi	330+634 488+694	r002	K30	<del>944</del> 736	yes no	
Kannonkoski	Äänekoski–Haapajärvi	488+694	r011	K30	243	no	
<u>Karjaa</u> Karjaa	Hyvinkää–Karjaa Hyvinkää–Karjaa	87+056/157+817 87+056/157+817	<u>r35</u> r36	54E1 54E1	352 428	yes yes	
Kariaa	Hvvinkää–Kariaa	87+056/157+817	r38	54E1	448	no ves	
Kauppilanmäki	Pieksämäki-Kontiomäki	568+751	r393	54E1	489	no	
Keitelepohja Keitelepohja	Äänekoski–Haapajärvi Äänekoski–Haapajärvi	519+256 519+256	r002 r003	K30 K30	670 674	no no	
Kerimäki	Savonlinna-Parikkala	495+531	r673	K43	454	no	
Kitee	Kouvola-Joensuu	460+016	r004	54E1	603	yes	
<u>Kitee</u> Kiuruvesi	Kouvola–Joensuu Iisalmi–Ylivieska	460+016 583+985	r031 r284	54E1 54E1	578 443	yes no	
Kiuruvesi	Iisalmi–Ylivieska	583+985	r285	54E1	678	no	
Kokemäki	Lielahti-Kokemäki	284+442	r086	54E1	592	no	
<u>Kolari</u> Kolari	Tornio–Kolari Tornio–Kolari	1067+206 1067+206	<u>r605</u> r604	54E1 54E1	1204 1029	no no	
Kontiomäki	Pieksämäki–Kontiomäki	658+786	r884	54E1	664	yes	
Kontiomäki	Pieksämäki–Kontiomäki	658+786	r883	K43	645	ves	
Kontiomäki Korkeakoski	Pieksämäki–Kontiomäki Orivesi–Seinäjoki	658+786 247+910	r881 r104	K43 K43	636 299	yes no	yes
Kouvola lajittelu	Riihimäki–Kouvola	192+570	r162	54E1	282	no	yes
Kouvola laiittelu Kurkimäki	Riihimäki–Kouvola Pieksämäki–Kontiomäki	192+570 444+074	r163 r005	54E1 54E1	282 535	no	ves
Kurkimäki	Pieksämäki–Kontiomäki	444+074	r006	54E1	534	no no	
Kyrö	Toijala-Turku	232+875	r433	K43	596	no	
Lapinlahti Lapinlahti	Pieksämäki–Kontiomäki Pieksämäki–Kontiomäki	525+604 525+604	r004 r011	K30 K30	556 379	no no	
Lapua	Seinäjoki–Oulu	441+094	r454	54E1	317	no	
Lieksa	Joensuu–Nurmes	728+121	r555	K43	576	no	yes
Lohia Lohia	Hvvinkää–Kariaa Hyvinkää–Karjaa	122+965 122+965	r469 r468	54E1 54E1	338 377	no no	
Lohja	Hyvinkää–Karjaa	122+965	r470	54E1	287	no	
Luikonlahti	Siilinjärvi–Viinijärvi	557+061	r503	K30	353	no	
Luikonlahti Naarajärvi	Siiliniärvi–Viiniiärvi Jyväskylä–Pieksämäki	557+061 449+862	r504 r503	K30 54E1	214 657	no no	
Niirala	Niirala-raja-Säkäniemi	555+846	r013	K60	634	no	
Nivala Nummola	Iisalmi–Ylivieska	676+878 109+368	r684 r363	K43 K43	507 510	no	
Nummela Nuojua*	Hvvinkää–Kariaa Oulu–Kontiomäki	109+308	1303	K43 54E1	210	no yes	
Nuojua*	Oulu–Kontiomäki	220. 274		54E1	FC.	yes	
Orivesi Oulainen	Tampere–Jyväskylä Seinäioki–Oulu	228+276	r537 r361	K43 54E1	586	no ves	
Oulainen	Seinäjoki-Oulu		r362	54E1		yes	
Parkano	Tampere–Seinäjoki	262+483	r006	54E1	716	yes	
Parkano Patokangas	Tampere–Seinäjoki Kemijärvi–Patokangas	262+483 1064+591	r007 r904	54E1 54E1	790 581	yes yes	yes
Patokangas	Kemijärvi–Patokangas	1064+591	r905	54E1	581	yes	yes
Patokangas Pello	Kemijärvi–Patokangas Tornio–Kolari	1064+591 1002+632	r906 r403	54E1 54E1	627 630	yes	yes
Pesiökvlä	Kontiomäki–Pesiökylä	732+752	r361	54E1 54E1	030	no no	yes
Pesiökylä	Kontiomäki-Pesiökylä	732+752	r362	54E1		no	
Petäjävesi Pihtipudas	Haapamäki–Jyväskylä Äänekoski–Haapajärvi	343+357 540+605	r673 r002	K43 K30	483 784	no no	
Pihtipudas Pihtipudas	Äänekoski-Haapajärvi	540+605	r003	K30	76 <del>4</del> 797	no	
Piikkiö	Helsinki-Turku satama	182+785	r003	54E1	310	no	
Pitkämäki Poiksilta	Nurmes–Kontiomäki Kouvola–Joensuu	789+619 416+728	r902 r011	60E1 54E1	610 737	no no	yes
Pori	Kokemäki–Pori	322+278	r822	54E1	803	no	
Pvhäsalmi	Iisalmi–Ylivieska	615+934	r484	K30	552	no	
<u>Pyhäsalmi</u> Pyhäsalmi	Iisalmi–Ylivieska Iisalmi–Ylivieska	615+934 615+934	r488 r489	54E1 54E1	319 169	no no	
Rahkola (Seinäjoki)*	Z.GAITH THYICGING	0137331	r671	54E1	100	yes	
Rahkola (Seinäioki)*	Uhuuhakachi Cau II	445 . 165	r672	54E1	050	ves	
Rantasalmi Ristiina	Huutokoski–Savonlinna Mynttilä–Ristiina	445+165 291+162	r473 r002	54E1 K30	850 888	no no	
Rovaniemi	Laurila-Kemijärvi	971+775	r664	K43	846	yes	
Rovaniemi	Laurila–Kemijärvi Laurila–Kemijärvi	971+775 971+775	r666 r669	K43 K43	766 762	ves yes	
Rovaniemi							

Timber loading facilities in	Line section	Track kilometre	Loading	Rail weight	Length of the	Provision for electric	Private siding
the railway network			tracks	, in the second	loading track	traction	Private Siulity
Ruukki	Seinäjoki–Oulu	705+228	r556	K30	459	no	
Saarijärvi	Äänekoski–Haapajärvi	452+723	r004	K30	576	no	
Salo	Helsinki-Turku satama	143+981	r101	54E1	404	no	
Salo	Helsinki-Turku satama	143+981	r102	54E1	401	no	
Sukeva	Pieksämäki-Kontiomäki	589+222	r494	54E1	536	no	
Suolahti	Jyväskylä–Äänekoski	417+796	r394	54E1	625	no	
Sysmäjärvi	Siilinjärvi–Viinijärvi	669+601	r604	54E1	640	no	
Teuva*	Seinäjoki–Kaskinen	497+474	r542	54E1	560	no	
Sänkimäki	Siiliniärvi–Viiniiärvi	504+505	r252	K30	693	no	
Tohmajärvi	Niirala-raja-Säkäniemi	571+752	r273	K43	462	no	
Tohmajärvi	Niirala-raja-Säkäniemi	571+752	r274	K43	455	no	
Toijala (Akaa)	Toijala-Valkeakoski	149+400	r061	60E1	650	yes	
Toiiala (Akaa)	Toiiala-Valkeakoski	149+400	r062	60E1	650	ves	
Turku tavara*	Helsinki-Turku satama	200+460	r354	K43	345	no	ves
Tuupovaara	Joensuu-Ilomantsi	668+672	r002	54E1	603	no	
Tuupovaara	Joensuu-Ilomantsi	668+672	r003	54E1	605	no	
Uimahariu	Joensuu–Nurmes	674+451	r359	54E1	527	no	ves
Vaaiakoski	Jvväskylä-Pieksämäki	384+866	r103	54E1	336	no	
Vaaiakoski	Jvväskylä–Pieksämäki	384+866	r107	K43	312	no	
Varkaus	Pieksämäki–Joensuu	424+685	r109	K43	347	no	yes
Varkaus	Pieksämäki-Joensuu	424+685	r111	K43	307	no	ves
Varkaus	Pieksämäki–Joensuu	424+685	r112	K30	404	no	yes
Vartius	Kontiomäki-Vartius-raia	753+755	r665	54E1	381	ves	
Vuokatti	Nurmes-Kontiomäki	868+838	r004	54E1	577	no	
Vuokatti	Nurmes-Kontiomäki	868+838	r005	54E1	363	no	
Vuokatti	Nurmes-Kontiomäki	868+838	r008	54E1	345	no	
Vuokatti	Nurmes-Kontiomäki	868+838	r011	54E1	312	no	
Ykspihlaia väliratapiha	Kokkola–Ykspihlaia	555+511	r011	54E1	902	no	ves
Ylivieska	Seinäioki–Oulu	630+343	r603	K43	402	no	
Ylivieska	Seinäioki–Oulu	630+343	r604	K43	389	no	
Ylämvllv	Pieksämäki–Joensuu	638+981	r803	K43	579	no	
Ylöjärvi	Tampere–Seinäioki	200+753	r004	54E1	230	no	
Ynykkävaara	Kontiomäki–Vartius-raia	729+780	r563	54F1	775	no	
* Nuojua is a new loading site, v	which will be completed at th	ne end of 2024 and who	se commissioni	ng schedule will		ly.	
* Rahkola is a new loading site :	and it will be completed in 20	024. Its commissioning	schedule will be	specified separ	atelv.		
* Usability of the Teuva loading	Site will depend on the oper	will be terminated in one	i selliajoki–Kas	KIIIEII.			
It is estimated that the use of the	ie i urku tavara ioauirig site i	wiii be terminateu in Spi	111y 2024.	1 1		1	

## Service facility description: Train formation yards

### 1 General information

#### 1.1 Introduction

This service description describes the different uses of train formation yards in the state-owned railway network and the terms and conditions for accessing them.

Separate service descriptions have been prepared on the traffic control service for shunting operations and the use of maintenance equipment, inclines and storage sidings.

The Finnish Transport Infrastructure Agency has prepared this service facility document in compliance with the requirements set in the Commission Implementing Regulation (EU) 2017/2177. The service is a basic service referred to in point 2 of Annex II to Directive 2012/34/EU.

# 1.2 Operator of the service facility

Operator of the service facility:
Finnish Transport Infrastructure Agency
Railway Network Access Unit
Opastinsilta 12 A
FI-00520 Helsinki
kirjaamo@vayla.fi

The contact details for railway yards can be viewed in the Finnish Transport Infrastructure Agency's Alfresco workspace.

## 1.3 Validity period and updating process

This document is updated annually in connection with the publication of the Network Statement. If required, changes may also be made on the statement's revision dates during the timetable period.

## 2 Services

## 2.1 Use of marshalling yards

Train formation yards owned by the infrastructure manager may be used for recomposing of train wagons, train formation and temporary storage of rolling stock.

The infrastructure manager and the traffic management company Fintraffic Ltd as its service provider are responsible for the traffic control at traffic operating points. Detailed information (contact information, procedures and roles regarding the

granting of permits) can be found in the Track Data Service (in Finnish) under the headingLiikenteenohjauksen yhteystiedot..

# 3 Service facility description

#### 3.1 List of all installations

The train formation yards owned by the infrastructure manager are marked with 'Shunting' in Appendix 2B to the Network Statement.

#### 3.2 Name of installation

The official names and abbreviations of the names of the train formation yards owned by the infrastructure manager are listed in Appendix 2B and in the map service.

#### 3.3 Location

The location of the train formation yards in the state-owned railway network is given in Appendix 2B (marked with 'Shunting') and in the map service.

# 3.4 Opening hours

All train formation yards are open on a 24/7 basis. Traffic control service hours are given in the infrastructure capacity management system and in the Track Data Service. The information can also be requested as a list from <a href="mailto:palveluaika@fintraf-fic.fi">palveluaika@fintraf-fic.fi</a>

# 3.5 Technical characteristics

The technical characteristics of the train formation yards are specified in the track diagrams available in the Track Data Service (in Finnish).

Not all train formation yards are electrified. Information on electrified tracks can be viewed on the Finnish Transport Infrastructure Agency's Track Data Service.

# 3.6 Planned changes in technical characteristics

More information on the plans to develop train formation yards and projects under way .

## 4 Charges

## 4.1 Information on charges

No charges are collected for the use of train formation yards. Pricing of the traffic control service for shunting operations is described in the relevant service description.

#### 4.2 Information on discounts

No discounts are granted.

#### 5 Terms of use

## 5.1 Legal requirements

Access to and the terms of use of train formation yards are laid out in the network access agreements.

If several railway operators use the same train formation yard, a railway yard agreement will be prepared for the yard under the supervision of the Finnish Transport Infrastructure Agency. For more information, see chapter 2.3 of the Network Statement.

## 5.2 Technical conditions

The track-specific maximum length and axle load of the rolling stock arriving at the service facility as well as the need for diesel traction for each track are given in the track diagrams published in the track diagrams available in the Track Data Service: (in Finnish).

The railway operator must consider the longitudinal gradient presented in the track diagram and ensure that the rolling stock stays in place.

The national procedures for track access in Finnish train formation yards are described in the Network Statement and in the guidelines issued by the infrastructure manager (such as 'Junaliikenteen ja vaihtotyön turvallisuussäännöt' (Jt)). If necessary, the operations and specific features of each traffic operating point are also described and agreed on in the network access agreement and in the separate railway yard agreements enclosed in the network access agreement.

Carriage of dangerous goods is discussed in chapter 2.4.3 of the Network Statement.

Operating permits and access to shunting frames are granted by the traffic controller/the person issuing permits in the respective area. The traffic controller issues operating permits within the limits of the allocated rail capacity. The area limits where these permits are applicable are described in the track diagram of

each traffic operating point. The communication regarding the operating permits must comply with the infrastructure manager's guidelines and the Network Statement.

Staff working in train formation yards must report any malfunctions that they have observed to the traffic controller of the traffic operating point. The traffic controller must decide on the necessary restrictions affecting operations on the basis of the malfunction reports before any corrective action is taken. The traffic controller must notify all parties of malfunctions affecting operations.

In general, train formation yards are not used for the maintenance or cleaning of rolling stock. If such a need arises, the use of the facility for such purposes must be separately agreed with the infrastructure manager. The infrastructure manager examines the impacts of maintenance and cleaning activities on a case-by-case basis and may also refuse from concluding an agreement.

## 5.3 Self-supply of rail-related services

The Finnish Transport Infrastructure Agency does not provide train formation services except for the protection of routes by the traffic controller. The supply of services is based on the operations of each service facility user.

# 5.4 IT systems

Railway yard tracks can be viewed in Fintraffic data systems, such as the capacity management system LIIKE and its modules. Data systems for rail capacity management are being developed, and the railway yard capacity management will gradually be transferred to a new information system (SAAGA).

# 6 Capacity allocation

## 6.1 Requests for access or services

The access to train formation yards is laid out in the network access agreements.

For the purpose of access agreement negotiations, the railway operator or another capacity applicant must deliver to the infrastructure manager a free-form estimate of their train formation yard needs at each traffic operating point annually by the end of September. Based on the track access requirements reported by the railway operators, the infrastructure manager estimates whether it is necessary to prepare separate railway yard agreements for specific traffic operating points or if other capacity management procedures are required.

If there are any changes in the railway operators' operations that affect both the needs for track access in train formation yards during the timetable period and the issues described in this appendix or set out in the access agreement, they must contact the infrastructure manager in good time (at least two months before the capacity is needed), so that the negotiations about access to railway yard capacity and the related practical arrangements can be commenced. The infrastructure

manager must also be notified if the need for capacity ends or is reduced during the timetable period.

Any railway yard-specific operating methods are described in the access agreement's enclosures specific to each traffic operating point (railway yard agreement) with respect to the common management of situational information on tracks. In addition, railway operators may participate in regional meetings for planning snow clearing operations or other cooperation procedures which are organised each autumn.

## 6.2 Response to requests

Applications for access to train formation yards are answered within the deadlines set by the Rail Regulatory Body (reg. no. TRAFICOM/270984/03.06.04/2019) no later than within 30 days from receiving sufficient information for processing the application.

Any urgent needs are responded to as soon as possible, but no later than within five working days from receiving all necessary information for processing the application.

With respect to processing applications, the contact person for agreement matters is the person responsible for agreements at Railway Network Access Unit. Fintraffic's traffic planning should be contacted in matters regarding ad hoc capacity needs (see sections 1.2 and 6.1).

In case of conflicting needs of access to train formation yards, the aim is to find solutions through negotiation and coordination, if necessary, in collaboration with other service facility operators and infrastructure managers.

The priority criteria for operations, issuing of permits and track access applied in the train formation yards are described (in Finnish) in 'Junaliikenteen ja vaihtotyön turvallisuussäännöt' (Jt). In addition to the priority order, the granted route access rights related to the applied services, the capability to use the applied capacity and the valid railway yard agreements are taken into account (Article 11 of Regulation 2017/2177).

# 6.3 Information on available capacity and temporary capacity restrictions

Information on temporary capacity constraints is visible to all operators via the JETI system. Information on the available track capacity can be found in the SAAGA system as the capacity control function expands nationally. Information on traffic planning or traffic control can also be requested from Fintraffic.

# Service facility description: Inclines

### 1 General information

#### 1.1 Introduction

This service facility description specifies access to and terms of use of inclines in the state-owned railway network.

The Finnish Transport Infrastructure Agency has prepared this service facility document in compliance with the requirements set in the Commission Implementing Regulation (EU) 2017/2177. This service facility is a basic service referred to in point 2 of Annex II to Directive 2012/34/EU.

## 1.2 Operator of the service facility

Operator of the service facility:

Finnish Transport Infrastructure Agency Railway Network Access Unit Opastinsilta 12 A FI-00520 Helsinki kirjaamo@vayla.fi

# 1.3 Validity period and updating process

This document is updated annually in connection with the publication of the Network Statement. If required, minor changes may also be made on the statement's revision dates during the timetable period.

## 2 Services

## 2.1 Incline

At the traffic operating points in Kouvola and Tampere, the railway operators have access to inclines for the recomposing of train wagons.

The infrastructure manager and the traffic management company Fintraffic Ltd as its service provider are responsible for the traffic control at traffic operating points. Detailed information (contact information, procedures and roles regarding the granting of permits) can be found in the Track Data Service (in Finnish) under the headingLiikenteenohjauksen yhteystiedot.

# 3 Service facility description

#### 3.1 List of all installations

The tracks of the inclines are described in the track diagrams in the Ratatieto palvelu (Track Data Service).

For additional information on the installations and technical characteristics of inclines see <u>instructions for inclines</u>.

# 3.2 Name of part of service facility

The inclines are named after their locality, and a specifier is added to the name, if necessary.

#### 3.3 Location

Kouvola lajittelu

Tampere Viinikka

# 3.4 Opening hours

As a rule, the inclines are open on a 24/7 basis. The railway undertaking decides when the incline is accessible for train formation. When defining times of access, it should be ensured that maintenance operators have time to complete their maintenance measures.

## 3.5 Technical characteristics

The number and length of marshalling tracks are shown in the track diagrams. The operating instructions for inclines will provide more detailed descriptions of their technical characteristics.

## 3.6 Planned changes in technical characteristics

No planned changes.

# 4 Charges

## 4.1 Information on charges

No charges are collected for using the inclines. The charges for the traffic control service for shunting operations are specified in the relevant service description.

#### 4.2 Information on discounts

No discounts are granted.

#### 5 Terms of use

## 5.1 Legal requirements

Access to and the terms of use of inclines are agreed upon in the access agreements, and operating instructions specific to each incline are to be followed.

The railway operator is responsible for ensuring that the operating personnel use the incline, tracks and the relevant systems and equipment in accordance with the operating instructions.

The infrastructure manager is responsible for the technical functionality, maintenance and development of the tracks and the relevant systems and equipment.

#### 5.2 Technical conditions

The track-specific maximum length and axle load of the rolling stock arriving at the service facility as well as the need for diesel traction for each track are given in the track diagrams available in the Track Data Service: (in Finnish).

# 5.3 Self-supply of rail-related services

The Finnish Transport Infrastructure Agency does not provide services in these service facilities. The supply of services is based on the operations of each service facility user.

# 5.4 IT systems

The systems used for controlling inclines are described in the operating instructions for inclines.

# **6 Capacity allocation**

# 6.1 Requests for access or services

The access to inclines is agreed upon in the network access agreements.

The railway operator or another capacity applicant must deliver to the infrastructure manager a free-form estimate of their incline needs at each traffic operating point before the start of access agreement negotiations. Based on the track access requirements reported by the railway operators, the infrastructure manager estimates whether it is necessary to prepare separate railway yard agreements for

specific traffic operating points or if other capacity management procedures are required.

If any changes happen in the railway operators' operations that affect both the needs for track access to inclines during the timetable period and the issues described in this appendix or agreed upon in the access agreement, they must contact the infrastructure manager in good time (at least two months before the capacity is needed), so that the negotiations about access to incline capacity of the railway yards and the related practical arrangements can be commenced.

Any railway yard-specific operating methods are described in the access agreement's enclosures specific to each traffic operating point (railway yard agreement) with respect to the common management of situational information on tracks. In addition, railway operators may participate in regional meetings for planning snow clearing operations or other cooperation procedures which are organised each autumn.

For more information on the handling of dangerous goods, see chapter 2.4.3 of the Network Statement and the operating instructions for inclines.

Ad hoc capacity requests:

Decisions on meeting urgent need of access to inclines are made by Fintraffic's traffic planning, the traffic controller or, if necessary, by the Rail Traffic Management Centre, based on situational awareness (this includes reviewing of the situation with the various actors in the railway yard, if needed).

## 6.2 Response to requests

Applications for access to inclines are answered within the deadlines set by the Rail Regulatory Body (reg. no. TRAFICOM/270984/03.06.04/2019) no later than within 30 days from receiving sufficient information for processing the application.

Any urgent needs are responded to as soon as possible, but no later than within five working days from receiving all necessary information for processing the application. With respect to processing applications, the contact person for operating agreements is the person responsible for agreements at Railway Network Access Unit. Fintraffic's traffic planning should be contacted in matters regarding ad hoc capacity needs (see chapters 1.2 and 6.1).

In case of conflicting needs of access to inclines, the aim is to find solutions through negotiation and coordination, if necessary, in collaboration with the operators and infrastructure managers of other service facilities.

# 6.3 Information on available capacity and temporary capacity restrictions

Information on available capacity and temporary capacity restrictions for Tampere is visible to all operators in the infrastructure capacity management system (LIIKE) and for Kouvola in the SAAGA system. Information on traffic planning or traffic control can also be requested from Fintraffic.

# Service facility description: Storage sidings

### 1 General information

#### 1.1 Introduction

This appendix describes the operations and collaboration regarding traffic operating points in the state-owned railway network as well as track access in railway yards. This appendix to the Railway Network Statement and the infrastructure manager's guidelines specify the procedures for track access in Finnish railway yards. The operations and specific features of each traffic operating point are, if necessary, also described and agreed upon in the network access agreement and in the separate railway yard agreements enclosed in the access agreement as well as in agreements concluded with museum train traffic operators on the storage of rolling stock (section 2.3 of the Network Statement). Enclosures regarding specific traffic operating points may be added to the access agreement during the agreement period.

The Finnish Transport Infrastructure Agency has prepared this service facility document in compliance with the requirements set in the Commission Implementing Regulation (EU) 2017/2177. The service is a basic service referred to in point 2 of Annex II to Directive 2012/34/EU.

## 1.2 Operator of the service facility

Operator of the service facility:

Finnish Transport Infrastructure Agency Railway Network Access Unit Opastinsilta 12 A FI-00520 Helsinki kirjaamo@vayla.fi

The contact details for railway yards can be viewed in the Finnish Transport Infrastructure Agency's Alfresco workspace.

# 1.3 Validity period and updating process

This document is updated annually in connection with the publication of the Network Statement. If required, changes may also be made on the statement's revision dates during the timetable period.

#### 2 Services

# 2.1 Storage of rolling stock

Storage sidings are primarily intended for the parking of wagons and coaches waiting to be used in transport services. In general, storage siding requirements can be divided into long-term and temporary storage needs.

Storage sidings may also be used for other purposes required by train traffic. Storage sidings are not intended for the maintenance or cleaning of rolling stock. If such a need arises, the use of the storage sidings for such purposes must be separately agreed with the Finnish Transport Infrastructure Agency. Only railway operators may park wagons on storage sidings. The Finnish Transport Infrastructure Agency determines which tracks can be used as storage sidings.

# 3 Service facility description

#### 3.1 List of all installations

Storage sidings at each traffic operating point are listed in Appendix 2B to the Network Statement.

## 3.2 Name of installation

Storage sidings are named so that the abbreviation of the traffic operating point comes first, followed by the track number (= track identifier). The track identifiers are shown in the infrastructure capacity management systems and in track diagrams (see also section 5.2).

## 3.3 Location

The locations of traffic operating points in the state-owned railway network are specified in Appendix 2B to the Network Statement and in the map service. The locations of storage sidings in traffic operating points are specified in track diagrams.

## 3.4 Opening hours

Storage sidings are available on a 24/7 basis and they can be used as agreed. The service times (traffic control, railway yard traffic control or signal box operator service) differing from this rule can be found in the LIIKE system. The details can also be requested as a list from palveluaika@fintraffic.fi.

#### 3.5 Technical characteristics

Sidings: number and length (in metres) of storage sidings are stated in Appendix 2B to the Network Statement (see also section 5.2).

# 3.6 Planned changes in technical characteristics

No changes are planned to the technical characteristics of storage sidings.

# 4 Charges

# 4.1 Information on charges

No charges are collected for using storage sidings. The access charge for the Ilmala railway yard is given in Appendix 7K (Maintenance facilities and equipment).

If the use of storage sidings involves the lease of land areas, a lease is charged in accordance with the service description in Appendix 5D.

#### 4.2 Information on discounts

No discounts are granted on the use of storage sidings.

#### 5 Terms of use

# 5.1 Legal requirements

If required, a railway yard agreement is prepared for railway yards used by several railway operators. The railway yard agreements are timetable period-specific, and they must be renegotiated prior to the start of each timetable period. A railway yard agreement may also be renegotiated during the timetable period.

If required, information on railway yards subject to a valid railway yard agreement and the models of valid agreements may be requested from Railway Network Access Unit. However, it should be noted that the agreement model may change for the timetable period of the Network Statement in question.

A new capacity management function and the SAAGA system will be introduced for the management of railway yards in stages starting from the timetable period 2022. SAAGA is an information system entity used to request, process and grant capacity in railway yards and on the line. The SAAGA track view shows tracks visually, trains arriving and departing, track reservations and advance notifications.

The aim is to ensure an equal situational picture for all railway yard operators. The operating models will change as implementation progresses nationally, and contacts related to track use planning will be transferred from traffic planning and traffic control to capacity management.

#### 5.2 Technical conditions

The track-specific maximum length and axle load of the rolling stock arriving at the service facility as well as the need for diesel traction for each track are given in the track diagrams available in the Track Data Service: (in Finnish). The number and total length of the storage sidings are also given in Appendix 2B.

## 5.3 Self-supply of rail-related services

Rolling stock may also be stored on private sidings connected to the state-owned railway network. Connecting a private siding to the state-owned railway network requires the preparation of a private siding agreement in accordance with the agreement template used by the Finnish Transport Infrastructure Agency.

# 5.4 IT systems

Railway yard tracks can be viewed in Fintraffic data systems, such as the capacity management system LIIKE and its modules. The Advance Information System JETI is used for temporary and fixed-term reservation of storage sidings. Later, the SAAGA System will be used. More information about the information systems (in Finnish).

As the infrastructure manager, the Finnish Transport Infrastructure Agency provides further information on railway yard storage sidings. If the need to use storage sidings is continuous, a railway yard agreement must be concluded among the operators under the supervision of the Finnish Transport Infrastructure Agency, if required (see chapter 6).

# **6 Capacity allocation**

## 6.1 Requests for access or services

#### **Agreement level**

The need and the right to access railway yard tracks are discussed and agreed in the access agreement. The railway operator or another capacity applicant must deliver to the infrastructure manager a free-form estimate of their rolling stock storage needs (track reservations) at each traffic operating point before the start of access agreement negotiations. Based on the track access requirements reported by the railway operators, the infrastructure manager estimates whether it is necessary to prepare separate railway yard agreements for specific traffic operating points or if other capacity management procedures are required.

If the operation of a railway operator is, during the timetable period, subject to such changes to track requirements that affect the matters described in this appendix or agreed upon in the access agreement or its enclosures, the railway operator must contact the infrastructure manager regarding the matter as soon as possible.

If a museum train traffic operator needs to store its rolling stock in the state-owned railway network, an agreement on the storage of the rolling stock must be concluded with the infrastructure manager. The agreement concerns a single timetable period and each agreement must be considered on a case-by-case basis. The infrastructure manager may, for justifiable reasons, refuse to enter into such an agreement.

Any railway yard-specific operating methods are described in the access agreement's enclosures specific to each traffic operating point (railway yard agreement) with respect to the common management of situational information on tracks. In addition, railway operators may participate in regional meetings for planning snow clearing operations or other cooperation procedures which are organised each autumn.

Storage of dangerous goods is discussed in more detail in chapter 2.4.3 of the Network Statement.

#### Ad hoc capacity requests

During the timetable period, railway operators may report their temporary and fixed-term needs for storage sidings with an advance plan in the JETI system or a rail reservation in the SAAGA information system in which case Fintraffic's traffic planning will check the suitability of the storage siding. Decisions on meeting urgent storage needs are made by Fintraffic's traffic planning, the traffic controller or, where necessary, the Rail Traffic Management Centre, based on current situation (incl. examining the railway yard's situation in the required extent with the various operators using the railway yard).

The information required for processing storage siding applications include the duration and date of the storage need as well as the location and required quantity (required train length). The railway operator must consider the longitudinal gradient presented in the track diagram and ensure that the rolling stock stays in place.

The storage needs are also listed in the LIIKE or SAAGA System as advance notifications, which means that the railway operators must enter the information in the JETI System and ensure that the notifications are removed from JETI as soon as the storage need ends. If the storage need continues after the end date, the railway operator must submit a new JETI notification or it must immediately notify the traffic control or the Rail Traffic Management Centre of the matter. The traffic planning or the Rail Traffic Management Centre may, however, refuse to grant the storage permit, if the situation so requires. In that case, the railway operator must, within a reasonable time, move the rolling stock to another storage location designated for the purpose

## 6.2 Response to requests

Applications concerning storage siding needs are answered within 30 days from receiving sufficient information for processing the application. Any urgent rolling stock storage needs are responded to as soon as possible, but no later than within five working days after all necessary information for processing the application has been received. With respect to processing of requests, the contact person for railway yard agreements and agreements on the storage of museum train traffic op-

erators' rolling stock is the person responsible for agreements in the Railway Network Access Unit. Please contact Fintraffic's traffic planning in matters regarding temporary storage needs (see chapters 1.2 and 6.1).

The priority criteria for operation, granting of permits and track use in railway yards are specified in section 6.2.2 (Congested infrastructure and priority criteria) of the Network Statement. In addition to the priority order, the granted route access rights related to the applied services, the capability to use the applied capacity and the valid railway yard agreements are taken into account (Article 11 of Regulation 2017/2177).

The infrastructure manager and the traffic management company Fintraffic Ltd as its service provider are responsible for the traffic control at traffic operating points. Detailed information (contact information, procedures and roles regarding the granting of permits) can be found in the Track Data Service (in Finnish) under the headingLiikenteenohjauksen yhteystiedot.

In case of conflicting needs for track use, the aim is to find solutions through negotiations and coordination and, if required, in collaboration with other service facility operators and infrastructure managers. Other viable alternatives, such as an alternative location or time for the storage of rolling stock, may be proposed to the applicant (Article 10 of Regulation 2017/2177).

# 6.3 Information on available capacity and temporary capacity restrictions

Information on temporary capacity constraints is visible to all operators via the JETI system. Information on the available track capacity can be found in the SAAGA system as the capacity control function expands nationally. Information on traffic planning or traffic control can also be requested from Fintraffic.

Service facility description: Use of railway yards for dangerous goods and temporary storage facilities on the state-owned railway network

#### 1 General information

#### 1.1 Introduction

Railway yards used for the temporary storage of dangerous goods are defined in the Ministry of the Interior Decree on External Rescue Plans (1286/2019, <u>amending Decree 916/2023</u>). In addition, there are temporary storage facilities for dangerous goods in Harjavalta, Pieksämäki and Talvivaara. The Finnish Transport Infrastructure Agency is the holder of temporary storage facilities for dangerous goods located on the state-owned railway network. The Finnish Transport and Communications Agency Traficom supervises the carriage of dangerous goods by rail and the related temporary storage.

The Act on the Transport of Dangerous Goods 541/2023 includes provisions requiring that an internal rescue plan be drawn up for the temporary storage of dangerous goods. In addition, a person must be appointed responsible for temporary storage at the place of temporary storage, and they must be familiar with the operations and the requirements applicable to these as well as the prerequisites for safe operation. The content requirements of the internal rescue plan are laid down in the Act on Transport of Dangerous Goods and the Decree supplementing it. The internal rescue plan is available from the Finnish Transport Infrastructure Agency's Track Data Service.

The Finnish Transport Infrastructure Agency has prepared this service facility document in compliance with the requirements set in the Commission Implementing Regulation (EU) 2017/2177. The service is a basic service referred to in point 2 of Annex II to Directive 2012/34/EU.

## 1.2 Operator of the service facility

Finnish Transport Infrastructure Agency Railway Network Access Unit Opastinsilta 12 A FI-00520 Helsinki

For the contact details of Fintraffic's traffic planning, visit the websites of the Finnish Transport Infrastructure Agency and Fintraffic (in Finnish).

# 1.3 Validity period and updating process

This document is updated annually in connection with the publication of the Network Statement. If required, minor changes may also be made on the statement's revision dates during the timetable period.

#### 2 Services

# 2.1 Handling and parking of wagons loaded with dangerous goods

The storage sidings for wagons loaded with dangerous goods are tracks that are, as a rule, intended for the temporary storage of wagons loaded with dangerous goods. The railway operator is responsible for the handling and temporary storage of dangerous goods in railway yards designated for dangerous goods and other temporary storage sites (Appendix 2B). The use of temporary storage locations other than those located in railway yards designated for dangerous goods must be agreed on between the railway operator and the Finnish Transport Infrastructure Agency.

The Finnish Transport Infrastructure Agency does not provide services for the long-term storage of dangerous goods. All temporary storage at the Finnish Transport Infrastructure Agency's storage locations must be connected to the transport operation.

The document 'Junaliikenteen ja vaihtotyön turvallisuussäännöt' (Jt) by the Finnish Transport Infrastructure Agency must be observed when wagons loaded with dangerous goods are moved and stored temporarily. The railway operator's personnel must be familiar with the internal rescue plans prepared for railway yards handling dangerous goods and the requirements relevant to their own work laid out in the documents. Rescue plans can be found in the Finnish Transport Infrastructure Agency's Track Data Service.

The railway operator is responsible for familiarising its personnel working in the area with the requirements.

The composition of the trains carrying dangerous goods must be known to the traffic control at all times so that it can take the necessary action during accidents and rescue operations. The composition data comprises the numbers of the trains and of the wagons parked in the railway yard as well as the total length and weight of the trains. The details of the dangerous goods carried in each wagon and their amounts (including the UN numbers) must also be available.

In case of temporary congestion of wagons loaded with dangerous goods, the railway operators must move other wagons to temporary storage sidings designated by the Finnish Transport Infrastructure Agency or Fintraffic's traffic planner. The Finnish Transport Infrastructure Agency or Fintraffic's traffic planner will notify the operators of the need to move the wagons.

# 3 Service facility description

# 3.1 Service facility description

The temporary storage locations of dangerous goods by traffic operating point are listed in Appendix 2B of the Network Statement.

Service facility description: Use of railway yards for dangerous goods and temporary storage facilities on the state-owned railway network

The Finnish Transport Infrastructure Agency or (in operational situations) Fintraffic's traffic planning or traffic controller may also restrict the movements of other units in the areas described above, considering the safety of dangerous goods. The restrictions do not apply to rerouting of units in connection with pre-planned track work or in unanticipated operational situations.

#### 3.2 Name of installation

Storage sidings for wagons loaded with dangerous goods are named so that the abbreviation of the traffic operating point comes first, followed by the track number (= track identifier). The track identifiers are shown in the infrastructure capacity management systems and in track diagrams (see also section 5.2).

#### 3.3 Location

The locations of the dangerous goods storage sidings are described in Appendix 2B of the Network Statement and in the internal rescue plans (Track Data Service).

# 3.4 Opening hours

Storage sidings for wagons loaded with dangerous goods are available on a 24/7 basis and can be used as agreed. The service times (traffic control, railway yard traffic control or signal box operator service) differing from this rule can be found in the LIIKE system. The details can also be requested as a list from palveluaika@fintraffic.fi.

#### 3.5 Technical characteristics

The number of storage sidings for wagons loaded with dangerous goods and their length (in metres) are given in Appendix 2B to the Network Statement.

# 3.6 Planned changes in technical characteristics

No changes are planned to the technical characteristics of storage sidings.

## 4 Charges

## 4.1 Information on charges

The use of storage sidings for wagons loaded with dangerous goods is currently free of charge.

## 4.2 Information on discounts

No discounts are granted on the use of storage sidings.

#### 5 Terms of use

# 5.1 Legal requirements

If several railway operators use the same railway yard for wagons loaded with dangerous goods, a railway yard agreement will be prepared for the facility under the supervision of the Finnish Transport Infrastructure Agency if necessary. The railway yard agreements are timetable period-specific, and they must be renegotiated prior to the start of each timetable period. A railway yard agreement may also be renegotiated during the timetable period.

If required, information on railway yards subject to a valid railway yard agreement and the models of valid agreements may be requested from Railway Network Access Unit. However, it should be noted that the agreement model may change for the timetable period of the Network Statement in question.

A new capacity management function and the SAAGA system will be introduced for the management of railway yards in stages starting from the timetable period 2022.

#### 5.2 Technical conditions

The track-specific maximum length and axle load of the rolling stock arriving at the service facility as well as the need for diesel traction for each track are given in the track diagrams published in the Track Data Service (in Finnish). The lengths of the storage sidings for wagons loaded with dangerous goods are also given in Appendix 2B.

## 5.3 IT systems

Railway yard tracks can be viewed in Fintraffic's data systems, such as the capacity management system (LIIKE/SAAGA) and its modules. Temporary and fixed-term reservations of storage sidings for wagons loaded with dangerous goods are made using the JETI system for advance information on train traffic or the SAAGA system. For more information on information systems please see the <u>Fintraffic website</u>.

As the infrastructure manager, the Finnish Transport Infrastructure Agency provides further information on railway yard storage sidings. If the need to use storage sidings is continuous, a railway yard agreement must be concluded among the operators under the supervision of the Finnish Transport Infrastructure Agency, if required (see chapter 6).

# 6 Capacity allocation

# 6.1 Requests for access or services

#### **Agreement level**

The need and the right to access tracks in railway yards handling dangerous goods are specified in the network access agreement The needs are considered in conjunction with the other needs to access tracks in the railway yard. The railway operator or another capacity applicant must deliver to the infrastructure manager a free-form estimate of their temporary rolling stock storage needs (track reservations) at each traffic operating point before the start of access agreement negotiations. Based on the track access requirements reported by the railway operators, the infrastructure manager estimates whether it is necessary to prepare separate railway yard agreements for specific traffic operating points or if other capacity management procedures are required.

If the operation of a railway operator is, during the timetable period, subject to such changes to track requirements that affect the matters described in this appendix or agreed upon in the access agreement or its enclosures, the railway operator must contact the infrastructure manager regarding the matter as soon as possible.

Any railway yard-specific operating methods are described in the access agreement's enclosures specific to each traffic operating point (railway yard agreement) with respect to the common management of situational information on tracks. In addition, railway operators may participate in regional meetings for planning snow clearing operations or other cooperation procedures which are organised each autumn.

#### Ad hoc capacity requests

During the timetable period, railway operators may report their temporary and fixed-term needs for storage sidings with an advance plan in the JETI system or the SAAGA information system whereby Fintraffic's traffic planning checks the suitability of the storage siding. Decisions on meeting urgent storage needs are made by Fintraffic's traffic planning, the traffic controller or, if necessary, by the Rail Traffic Management Centre, based on current situation (incl. examining the railway yard's situation in the required extent with the operators using the railway yard).

The information required for processing storage siding applications include the duration and date of the storage need as well as the location and required quantity (required train length). The railway operator must consider the longitudinal gradient presented in the track diagram and ensure that the rolling stock stays in place. Temporary storage of dangerous goods is possible in designated railway yards handling dangerous goods and in other temporary storage locations (Appendix 2B).

### 6.2 Response to requests

Applications concerning storage siding needs are answered within 30 days from receiving sufficient information for processing the application. Any urgent rolling stock storage needs are responded to as soon as possible, but no later than within five working days after all necessary information for processing the application has been received. With respect to processing applications, the contact person for railway yard agreement matters is the person responsible for agreements at the Railway Network Access Unit, and Fintraffic's traffic planning should be contacted in matters regarding ad hoc capacity needs (see chapters 1.2 and 6.1).

The priority criteria for operation, granting of permits and track use in railway yards are specified in section 6.2.2 (Congested infrastructure and priority criteria) of the Network Statement. In addition to the priority order, the granted route access rights related to the applied services, the capability to use the applied capacity and the valid railway yard agreements are taken into account (Article 11 of Regulation 2017/2177).

The infrastructure manager and the traffic management company Fintraffic Ltd as its service provider are responsible for the traffic control at traffic operating points. Detailed information (contact information, procedures and roles regarding the granting of permits) can be found in Ratatieto palvelu (Track Data Service, in Finnish) under the heading <u>Liikenteenohjauksen yhteystiedot</u>.

In case of conflicting needs for track use, the aim is to find solutions through negotiations and coordination and, if required, in collaboration with other service facility operators and infrastructure managers. Other viable alternatives, such as an alternative location or time for the storage of rolling stock, may be proposed to the applicant (Article 10 of Regulation 2017/2177).

# 6.3 Information on available capacity and temporary capacity restrictions

Information on available capacity and temporary capacity restrictions is visible to all operators in the data system for rail capacity management (LIIKE/SAAGA). Information on traffic planning or traffic control can also be requested from Fintraffic.

# Service facility description: Maintenance facilities and equipment

#### 1 General information

#### 1.1 Introduction

This service facility description specifies access to and terms of use of rolling stock maintenance facilities and equipment owned by the Finnish Transport Infrastructure Agency in the state-owned railway network.

The Finnish Transport Infrastructure Agency has prepared this service facility document in compliance with the requirements set in the Commission Implementing Regulation (EU) 2017/2177. The service is a basic service referred to in point 2 of Annex II to Directive 2012/34/EU.

# 1.2 Operator of the service facility

Operator of the service facility:

Finnish Transport Infrastructure Agency Railway Maintenance Services Opastinsilta 12 A FI-00520 Helsinki kirjaamo@vayla.fi

## 1.3 Validity period and updating process

This document is updated annually in connection with the publication of the Network Statement. If required, minor changes may also be made on the statement's revision dates during the timetable period.

#### 2 Services

## 2.1 Maintenance facilities and equipment

The Ilmala railway yard, owned by the Finnish Transport Infrastructure Agency, places rolling stock maintenance facilities and equipment at the disposal of railway operators. Access to the maintenance equipment in the Ilmala railway yard is included in the basic services.

The maintenance platforms at the Ilmala depot are services provided by the Finnish Transport Infrastructure Agency. Services available on the maintenance tracks include filling of thin oil and water tanks, feeding of heavy current, electrical rooms, compressed air outlets, heating points, brake trials using compressed air and vacuum emptying of septic tanks. In addition, there are separate tracks for washing

rolling stock and applying traction sand to locomotive wheels. The oil-changing points are equipped with oil-absorbing mats to protect the environment.

The Finnish Transport Infrastructure Agency does not provide maintenance services for the technical maintenance of rolling stock. VR Group's Helsinki depot, which accommodates garages, maintenance and washing facilities, locomotive depots and lathes, is also situated in the Ilmala railway yard area. The services provided by VR Group Ltd and their prices can be found in the company's Network Statement.

# 3 Service facility description

#### 3.1 List of all installations

The maintenance equipment owned by the Finnish Transport Infrastructure Agency and located in the Ilmala railway yard are shown in the track diagram and in the map service of the Network Statement.

The tracks in the Ilmala railway yard are described in the track diagrams in the Ratatieto palvelu (Track Data Service).

#### 3.2 Name of installation

Helsinki depot, Ilmala railway yard

#### 3.3 Location

Location of and access to the services and facilities of the Ilmala railway yard are shown in the track diagram.

## 3.4 Opening hours

The Ilmala railway yard is accessible on a 24/7 basis all year round.

### 3.5 Technical characteristics

Railway operators have access to the maintenance facilities and equipment owned by the Finnish Transport Infrastructure Agency for the purpose of rolling stock maintenance. The number and length of maintenance tracks and the services available are described in track diagrams. More information on the technical characteristics is provided by the service facility operator (see chapter 1.2).

## 3.6 Planned changes in technical characteristics

No significant changes are planned

## 4 Charges

# 4.1 Information on charges

The access to the Ilmala railway yard is invoiced based on the capacity allocated to the transfer, excluding cancelled capacity. The access charge is EUR 17.60/transfer. The sum of the access charge is determined on the basis of the actual investment and maintenance costs.

The above-mentioned transfers do not correspond to the transfers referred to in the Rail Transport Act as the transfers detailed in this section mean the transfer of rolling stock as a train or as shunting by the railway undertaking to the Ilmala railway yard from such locations as the Helsinki Central Railway Station.

The number of incoming transfers is calculated for each railway undertaking separately on the basis of the infrastructure manager's reporting system, by halving the number of transfers so that double invoicing can be avoided (incoming and outgoing transfers). The invoicing is carried out on a monthly basis when the figures for the previous month have become available, unless otherwise agreed in the access agreement.

In return for paying the network access charge, railway undertakings may use the tracks in the Helsinki depot at Ilmala, their brake-testing systems, as well as the maintenance platforms and their equipment (including 1500 V feeder points and 400 V socket points), and move to the railway yard services.

The access charge does not cover the supply of water, electricity, oil, sand or other similar items or the processing or transport of the waste resulting from the use of the services. Other operators in the Ilmala railway yard may also charge fees for the use of their services (such as the maintenance facilities and lathes) and their pricing is not described in this document (for more information, see the network statement of VR Group Ltd and other operators).

The same index procedure is applied to the access charge as to the basic infrastructure charge. In addition to the annual index adjustments, other adjustments can also be made to the access charge for special reasons, and advance notification of these is given in the same manner as for the basic infrastructure charge.

#### 4.2 Information on discounts

No discounts are granted.

#### 5 Terms of use

# 5.1 Legal requirements

The tracks and services of the Finnish Transport Infrastructure Agency are available to all operators. Access to the tracks and services is laid out in the network access agreements.

The maintenance, cleaning and repair of rolling stock must be carried out at appropriate places to be agreed upon with the infrastructure manager before operations begin on tracks in the state-owned railway network.

If necessary, the infrastructure manager will provide railway undertakings with guidance and instructions for the use of the equipment and structures referred to in this section. After having been notified by the railway undertaking of damage or malfunctioning of equipment or structures, the infrastructure manager will ensure that the equipment and structures will be restored, without undue delay, to a good working condition.

Railway undertakings must plan and implement the use of the equipment and structures so that all regulations concerning occupational and train safety are observed. Railway undertakings must provide all persons using the equipment or structures on behalf of the undertakings with adequate training in their use. Railway undertakings must ensure that their own personnel or the personnel working on behalf of the undertakings use the equipment and structures with care and in accordance with any guidance provided for their use and that the equipment and structures do not malfunction or become damaged for reasons arising from their use.

The use of services provided by VR Group Ltd or other service providers must be agreed upon with the service provider.

#### 5.2 Technical conditions

The track-specific maximum length and axle load of the rolling stock arriving at the service facility as well as the need for diesel traction for each track are given in the track diagrams published in <a href="the-track-bata-service">the Track Data Service</a> (in Finnish).

# 5.3 Self-supply of rail-related services

Agreements on access to maintenance services must be made with the maintenance providers. The infrastructure manager does not provide maintenance services. More information can be found on the VR website.

## 5.4 IT systems

For more information on the use of capacity management systems, visit the Finrail Ltd website (in Finnish):

# **6 Capacity allocation**

## 6.1 Requests for access or services

The railway undertaking must deliver to the infrastructure manager an estimate of the annual service needs, or the monthly number of transfers, by the time of access agreement negotiations.

### 6.2 Response to requests

The applications for the supply of services provided by the Finnish Transport Infrastructure Agency are answered within the deadlines set by the Rail Regulatory Body (reg. no. TRAFICOM/270984/03.06.04/2019) no later than within 30 days from receiving sufficient information for processing the application.

Any urgent needs are responded to as soon as possible, but no later than within five working days from receiving all necessary information for processing the application. With respect to processing applications, the contact person for agreement matters is the person responsible for agreements at the Railway Network Access Unit. Fintraffic's traffic planning should be contacted in matters regarding ad hoc capacity needs (see chapters 1.2 and 6.1).

In case of conflicting needs for supply of services, the aim is to find solutions through negotiation and coordination, if necessary, in collaboration with the operators and infrastructure managers of other service facilities.

# 6.3 Information on available capacity and temporary capacity restrictions

Information on available capacity and temporary capacity restrictions is visible to all operators in the data system for rail capacity management. Information on traffic planning or traffic control can also be requested from Fintraffic.



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