Updated on 18 June 2020



Publications of the FTIA 46eng/2019

# RAILWAY NETWORK STATEMENT 2021



Updated on 18 June 2020

# **Railway Network Statement 2021**

FTIA's publications 46eng/2019

Finnish Transport Infrastructure Agency Helsinki 2019

## Updated on 18 June 2020

Photo on the cover: FTIA's photo archive

Online publication pdf (www.vayla.fi)

ISSN 2490-0745 ISBN 978-952-317-744-4

Väylävirasto PL 33 00521 HELSINKI Puhelin 0295 34 3000

## Foreword

In compliance with the Rail Transport Act (1302/2018)<sup>1</sup>, the Finnish Transport Infrastructure Agency (FTIA), as the manager of the state-owned railway network, publishes the Finnish Railway Network Statement (hereinafter the Network Statement) for the timetable period 2020. The Network Statement describes the access conditions, the state-owned railway network, the rail 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 applicants requesting capacity for each timetable period. This Network Statement is intended for the timetable period 13 December 2020–11 December 2021.

The Network Statement 2021 has been prepared based on the previous Network Statement taking into account the feedback received from users and the Network Statements of other European Infrastructure Managers. The Network Statement 2021 is published as a PDF publication. The Finnish Transport Infrastructure Agency will update the Network Statement and will provide information about it to rail capacity allocatees and the known applicants for rail capacity in the Finnish railway network. RINF data and the Finnish Transport Infrastructure Agency's register information have been used to create a map service including information about the characteristic features of the Finnish railway network.

The structure of the Network Statement 2021 follows the common European structure, with some exceptions to the structure of previous Network Statements, and comprises the following chapters:

- 1. General
- 2. Access conditions
- 3. Railway network
- 4. Capacity allocation
- 5. Services
- 6. Charges

The Finnish Transport Infrastructure Agency is in charge of the Network Statement. Several specialists both within and outside of the Finnish Transport Infrastructure Agency have been involved in the drafting process.

The road and rail traffic management functions and vessel traffic services were corporatised as a state-owned limited company on 1.1.2019. In future, the Finnish Transport Infrastructure Agency will procure all traffic control services from the traffic control company Traffic Management Finland Ltd.

Helsinki, 13 December 2019

Finnish Transport Infrastructure Agency Infrastructure Access and Information Services

<sup>&</sup>lt;sup>1</sup> https://www.finlex.fi/fi/laki/alkup/2018/20181302

GLOS	GLOSSARY				
1	GENERAL INFORMATION	. 12			
1.1	Introduction	. 12			
1.2	Objective	. 12			
1.3	Legal Framework	. 12			
1.4	Legal Status	. 13			
	1.4.1 General Remarks	. 13			
	1.4.2 Liability	. 13			
	1.4.3 Appeals Procedure	. 13			
1.5	Structure of the Network Statement	14			
1.6	Validity and Updating Process	14			
	1.6.1 Validity Period	.14			
	1.6.2 Updating Process	.14			
1.7	Publishing	. 15			
1.8	Railway Sector Operators and Contact Information	. 15			
1.9	Rail Freight Corridors in Finland	.18			
1.10	International cooperation between Infrastructure Managers	.18			
	1.10.1 One Stop Shop (OSS)	. 19			
	1.10.2 RNE IT Tools	. 19			
7		20			
Z	ALLESS CUNDITIONS	20			
Z.I	Introduction	. 20			
Z.Z	Leneral Access Requirements	.20			
	2.2.1 Conditions for Applying for Capacity	20			
	2.2.2 Conditions for Access to the Railway Infrastructure				
	2.2.3 Licences	. 22			
	2.2.4 Safety Certificate	. 22			
~ ~	2.2.5 Lover of Liabilities	22			
2.3	Network Access Agreements	23			
- /	2.3.1 Framework Agreement	.25			
2.4	Operational Rules	25			
2.5	Exceptional Transports				
2.6	Dangerous Goods	. 26			
2.7	Railway Rolling Stock	26			
Z.8	Tasks with a Significant Impact on Railway Safety	27			
3	INFRASTRUCTURE	29			
3.1	Introduction	29			
3.2	Extent of Network	29			
	3.2.1 Limits	29			
	3.2.2 Connected Railway Networks	29			
3.3	Network Description	30			
	3.3.1 Geographic Identification	30			
	3.3.2 Capabilities	. 31			
	3.3.3 Traffic Control and Communication Systems	.33			
34	Traffic Restrictions				
2	3.4.1 Specialised Infrastructure	.37			
	3.4.2 Environmental Restrictions				
	3.4.3 Dangerous Goods	.37			
	3.4.4 Tunnel Restrictions	39			
	3.4.5 Bridge Restrictions	40			
	3.4.6 Other	40			
		-			

3.5	Availability of the Infrastructure	40
3.6	Service Facilities	.41
	3.6.1 Passenger Stations	.41
	3.6.2 Freight Terminals	.41
	3.6.3 Train Formation Yards	. 41
	3.6.4 Storage Sidings	42
	3.6.5 Maintenance and Facilities	42
	3.6.6 Other Technical Services	42
	3.6.7 Port Facilities	43
	3.6.8 Relief Facilities	43
	3.6.9 Refuelling Facilities	43
	3.6.10 Technical Equipment	43
3.7	Service Facilities not Managed by the infrastructure manager	44
3.8	Infrastructure Development	44
/		/16
4 // 1	Latraduction	40
4.1	Introduction	40
4.Z	4.2.1. Description of Process	40
	4.2.1 Requesting Rail Capacity	40
	4.2.2 Requesting Rail Capacity for Shunting Operations	47
	4.2.3 Requesting railway yard capacity	4/
	4.2.4 Requesting service facility capacity	48
	4.2.5 Developing the Process of Rail Capacity Management	48
4.3	Schedule for Path Requests and Allocation Process	49
	4.3.1 Schedule for Working timetable	49
	4.3.2 Schedule for Ad-Hoc Requests	50
	4.3.3 Applying for Railway yard Capacity	50
	4.3.4 Service facility capacity	50
4.4	Allocation Process	. 51
	4.4.1 Coordination Process	. 51
	4.4.2 Dispute Resolution Process	.52
	4.4.3 Congested Infrastructure and Priority Criteria	.52
	4.4.4 Impact of Framework Agreements	.55
4.5	Allocation of Capacity for Maintenance, Renewal and Enhancements	.56
	4.5.1 Machinery Operations and Storage	.56
	4.5.2 Coordination of Track works and Train services	.56
4.6	Non-usage	.59
4.7	Exceptional Transports	.59
4.8	Special Measures to be taken in the Event of Disturbance	60
	4.8.1 Principles	60
	4.8.2 Operational Regulation	62
	4.8.3 Foreseen Problems	62
	4.8.4 Unforeseen Problems	62
4.9	Allocation of Capacity for Service Facilities	63
5		6/1
J 5 1	Introduction	04 6/i
57	Minimum Accoss Dackago	6/i
J.Z E D	Access to Sonvice Eacilities	66
כיכ	5.21 Accors to sorvice facilities	66
	5.3.1 ALLESS 10 SELVICE IDCILLIES	
E /ı	Additional Convices	74 7/1
5.4	Auditional Services	74 7/-
	5.4.1 HIdelion current	/4 75
	5.4.2 Services for executional transports and demonstrates and	. / כ קר
	ס.א.ס ספרעוכפג וטר פאכפטנוטחמג transports and dangerous goods	. / ว

	5.4.4 Oth	er Additional Services	75
5.5	Ancillarv	Services	76
5.5	5.5.1 Acc	ess to telecommunication network	
	5.5.2 Pro	vision of supplementary information	
	553 (or	ntrol Centres	76
	554 Tic	keting Services in Passenger Stations	,0
	555 Sne	cetting set vices in russenger stations imminimum minimum perialised Heavy Maintenance Services	<i>, ,</i> 77
	556 O+k	por Aprillary Sorvicos	,, רר
	5.5.0 00		/ /
6	CHARGES		78
6.1	Charging	Principles	78
6.2	Charging	System	78
6.3	Tariffs		79
	6.3.1 Infr	astructure Charge	79
	6.3.2 Oth	er Charges Levied by the infrastructure manager	79
6.4	Financial	Penalties and Incentives	81
6.5	Performa	ance Scheme	81
6.6	Changes	to Charges	83
6.7	Billing Ar	rangements	83
AFFL		Pacie information on line soctions	
Appe	ndiv 3R	Basic mornation on the sections	
Appe			
Vppe		Structure gauge	
Vube		Superstructure sategories and EN sateogries derived from the	20
Ahhe		superstructure categories and chicateogries derived from th	le
Anno	ndiv 3H	Bailway tuppols in the state-owned railway notwork and	
vhhe		restrictions due to bridges, tunnels or vibration	
Anno	ndiv 31	Estimation on spood limits due to track condition	
Appe		Track works	
Vube		Spood depending on rolling stock	
Anno		Transport of overweight wagens	
Appe		Transport of wagons complying with the Pussian standard	
Appe		Monitoring of colling stock	
Appe		Monitoring of Folding Stock	
Appe		Deconger stations owned by the Einnich Transport	
Ahhe	nuix sų		
٨٠٠٠٠		Initiastituciule Agency	
Abbe		Services supplied by others: Passenger stations	
whhe	nuix 55	Maintenance Services at itinate depot	
vhhe		Safety issues	
whhe	nuix 4A	Jarely ISSUES	
Anne		Service racially description: Storage Slaings	
Арре	ndix 4C	USE OT THE TRACKS AT ILMALA RAILWAY YARD	

Appendix 4D Use of the tracks at Helsinki railway yard and transfers of rolling stock between Helsinki and Ilmala

- Appendix 5A Description and pricing of the traffic control service for shunting operations
- Appendix 5B Pricing of electricity transfers
- Appendix 5C Responsibilities of operative work
- Appendix 5D Service facility description: traffic control service for shunting operations
- Appendix 5E Service facility description: maintenance facilities and equipment

Appendix 5F	Service facility description: Train formation yards
Appendix 5G	Service facility description: Inclines
Appendix 5H	Service facility description: Trial runs of rolling stock
Appendix 5J	Service facility description: Passenger stations
Appendix 5K	Service facility description: Timber loading facilities
Appendix 5L	Service facility description: Use of buildings and land areas
Appendix 5M	Service facility description: Rail Training Centre (RTC)
Appendix 5N	Service facility description: Electricity transfer service
Appendix 50	Service facility description: Technical Control Centre
Appendix 5P	Service facility description: Security Control Centre
Appendix 6A	Performance scheme

## Glossary

Ad hoc capacity refers to rail 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.

**Applicant** refers to a railway operator, a competent authority referred to in Part IV, chapter 1, section 4 of the Act on Transport Services (320/2017<sup>2</sup>) and shippers, forwarders, integrated transport operators and a railway sector training institute that request rail capacity for reasons related to the provision of a public service or for commercial reasons.

**Capacity for operating regular train services** refers to rail capacity requested for regular, long-term and identical train services. Example: services required year round from Monday to Saturday or on every Tuesday and Thursday for three months.

**ENNE** is a railway traffic prediction and optimisation system.

**Finrail Ltd<sup>3</sup>** is a subsidiary of the traffic control company Traffic Management Finland Ltd. It provides railway transport control and management services. Finrail's services include, for example, railway traffic control, traffic planning, capacity management, catenary system operating centre activities and passenger information services related to rail transport.

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

**Infrastructure Manager** refers to the Finnish Transport Infrastructure Agency or a railway infrastructure manager of a private siding, on which the Rail Transport Act (1302/2018) is applied.

**JETI** is a system for advance information on train traffic, where the advance reports of and information on changes affecting traffic are drafted, shared and maintained. Advance plans and trackworks to be performed in the railway network are drafted and approved in this system. JETI is also used to reserve capacity on railway yards and main lines for storage of rolling stock, trials or other special needs.

**JKV** is a class B system "ATP-VR/RHK - Junankulunvalvonta (JKV)" according to 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.

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

<sup>&</sup>lt;sup>2</sup> https://www.finlex.fi/fi/laki/kaannokset/2017/en20170320\_20180731.pdf

<sup>&</sup>lt;sup>3</sup> https://tmfg.fi/fi/finrail

**LIIKE** is the data system for rail capacity management used in Finland. SAAGA data system will replace LIIKE gradually during 2020-2022.

**Line 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.

**Museum train traffic** refers to traffic operated on a small scale of the railway network by a non-profit association of museum trains. Museum train refers to rolling stock registered as a museum train on the Finnish Transport and Communications Agency Traffcom's stock register.

**Museum track r**efers to a track designated as a museum track by the infrastructure manager of the Finnish railway network. Before designating a museum track, the infrastructure manager shall consult the Finnish Transport and Communications Agency Traficom and the railway operators using the track in question. Only museum traffic may be operated on a museum track; no other passenger or freight traffic.

**Operating rail services** refers to the services operated by a railway undertaking, operations related to railway maintenance, traffic conducted by a museum train operator, a company or other association under private law whose main activity is some other than operating railway traffic, or the railway Infrastructure manager in the railway network.

**OSS** (One Stop Shop), through OSS customers can manage all matters concerning international railway traffic, such as access to the railway network, requesting international rail 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 operations. The email address of the point of contact is oss@vayla.fi.

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

**Rail capacity** refers to, in accordance with the Rail Transport Act (1302/2018), the potential to schedule train paths requested for an element of infrastructure for a certain period depending on the characteristic features of the railway network.

**RAILI** is an integrated railway communication service, which can be accessed with VIRVE phones and smart phones. In order to use the RAILI service on a mobile phone, the RAPLI application must be downloaded.

**Rail Traffic Management Centre**<sup>4</sup> is a national rail traffic control and management service which operates as part of the traffic control company. The service is provided by Finrail Ltd.

<sup>&</sup>lt;sup>4</sup> https://tmfg.fi/en/finrail/traffic-control-and-management

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

**Railway operator** refers to railway undertakings, railway maintenance providers, infrastructure managers operating in the railway network, and museum train operators. Other companies or associations operating in the railway network, and whose operations in the railway network are not part of their core activities, are also referred to as railway operators.

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

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

**RATO** refers to the technical instructions for railway tracks, which include basic information on development, inspection and maintenance of a track and its equipment. RATO is based on the provisions issued by the Finnish Transport and Communications Agency Traficom. RATO is published by the Finnish Transport Infrastructure Agency<sup>5</sup>.

**RINF** is the Register of Infrastructure (RINF), which refers to the European Register of Infrastructure of the features of the European railway infrastructure. In practice, RINF is made up of national registers (NRE's). The Finnish Railway Register, NREFI RINF is made up of collected data, which, when simplified, can be divided into data on the following topics: a) railway network; b) detailed railway network, c) railway line, d) section of line, e) operational point, f) running track, g) siding

**RNE** (RailNetEurope)<sup>6</sup> is a non-profit organisation of European railway infrastructure managers and bodies allocating rail capacity. Its purpose is to promote international traffic in the European railway infrastructure. The Finnish Transport Infrastructure Agency resigned from RNE in 2014.

**RUMA** or the mobile platform for track work contractors, is an application providing and ensuring track work location data. The RUMA application is also used for messages concerning applications of permit to work and for confirming completed track work operations.

**Track work** is work carried out in the railway network that requires interruption of railway operations (in class 1 traffic control areas) or prevents a safety installation from operating at interlocking level or at the level of centralised traffic control. In class 1 traffic control areas, a permit granted by the traffic control is required for track work. The work carried out in class 2 traffic control areas is track work when the track work manager protects the track work site.

<sup>&</sup>lt;sup>5</sup> https://julkaisut.vayla.fi/pdf7/rautatieohjeet\_web.pdf

<sup>&</sup>lt;sup>6</sup> http://www.rne.eu/

In class 2 traffic control areas, the track work manager is responsible the track work and for protecting it.

**Traffic control** protects and secures operations and track works. Traffic control grants permits for track works and operations and gives notifications concerning these. Traffic control services are provided by Finrail Ltd.

**Traffic control company** refers to the Traffic Management Finland Group, which began operations on 1 January 2019. The tasks of the traffic control company mentioned in this Network Statement primarily comprise the tasks of the Group subsidiary Finrail Ltd.

**Traffic planning**<sup>7</sup> is tasked with coordinating track works and rail traffic in the state-owned railway network. The service is provided by Finrail Ltd.

**TURI** is a data system for safety-related anomalies and risk management. Railway operators and the Finnish Transport Infrastructure Agency's service providers are expected to use this system for reporting safety-related anomalies to the Finnish Transport Infrastructure Agency.

**TURO** refers to safety instructions in track maintenance. The Finnish Transport Infrastructure Agency publishes the instructions on its website <sup>8</sup>.

**VIRVE** is a network based on TETRA technology. The VIRVE network is used to produce radio communication services, which function at a level of raised security safety and preparedness, for joint use by the authorities and operators working with critical infrastructure who have been granted permission to use the network.

<sup>&</sup>lt;sup>7</sup> https://tmfg.fi/en/finrail/capacity-management-and-traffic-planning

<sup>&</sup>lt;sup>8</sup> https://julkaisut.vayla.fi/pdf7/rautatieohjeet\_web.pdf

# 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 is the Finnish railway infrastructure management authority and the infrastructure manager of the railway network under its management.

The Network Statement is published in accordance with the Rail Transport Act (1302/2018) and Directive 2012/34/EU<sup>9</sup> of the European Parliament and of the Council establishing a single European railway area. The Network Statement is published each timetable period.

# 1.2 Objective

The Network Statement is published for applicants requesting rail 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 rail capacity for domestic freight transport, international transport within the European Economic Area, as well as for transit traffic between Finland and Russia. VR Group Ltd may operate domestic rail passenger services on the line sections specified in the monopoly agreement between the Ministry of Transport and Communications and VR Group Ltd. Any railway operator can operate passenger transport on the line sections which are not included in the agreement.

# 1.3 Legal Framework

## **Current legislation**

In accordance with Section 131 of the Rail Transport Act (in Finnish), the infrastructure manager publishes information on the provisions of the Rail Transport Act, as well as on the provisions and regulations issued under the Act and other provisions, concerning:

1. the right of access to the railway network;

- 2. the principles of determining the infrastructure charge;
- 3. applying for rail capacity and the related deadlines;
- 4. the requirements for and approval of railway rolling stock; as well as

<sup>&</sup>lt;sup>9</sup> http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=0J:L:2012:343:0032:0077:FI:PDF

5. other conditions concerning operating and starting the operation of railway traffic.

The infrastructure manager publishes information on the characteristic features and extent of the railway network in the Network Statement for each timetable period. This information is contained in Chapter 3. Also published in the Network Statement are the following provisions issued by the infrastructure manager under the Rail Transport Act:

- 1. specialised infrastructure capacity (Section 3.4.1)
- 2. the priority order to be applied to congested infrastructure (Section 4.4.3)
- 3. the threshold quota for the minimum use of railway infrastructure on each train path (Section 4.6).

## 1.4 Legal Status

## 1.4.1 General Remarks

The Network Statement is a legally binding document in so far as it is subject to the provisions laid down in the Rail Transport Act (Section 131). Railway operators also pledge to comply with the Network Statement when signing access agreements.

## 1.4.2 Liability

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

### 1.4.3 Appeals Procedure

The appeals procedure concerning the infrastructure manager's decisions, in its capacity as infrastructure management, has been described on the Regulatory Body's website<sup>10</sup>. A claim for rectification may be filed with the Reguatory Body within 30 days of receipt of the infrastructure manager's decision notice. Send the claim for rectification to the registry office of the Finnish Transport and Communications Agency Traficom: Rail Regulatory Body, PO Box 467, 00101 Helsinki or by email: kirjaamo@traficom.fi.

<sup>&</sup>lt;sup>10</sup> https://www.saantelyelin.fi/asiointi/oikaisuvaatimukset

- 1) congested railway routes or parts of routes, or priority criteria as referred to insection 120;
- 2) capacity allocation as referred to in section 122;
- 3) allocation of ad hoc capacity as referred to in section 123;
- 4) cancelled or withdrawn capacity as referred to in section 125;
- 5) infrastructure charges as referred to in section 139;
- 6) reductions and hikes of the basic infrastructure charges as referred to in section 140; or
- 7) additional charges as referred to in section 141 of the Rail Transport Act.

# 1.5 Structure of the Network Statement

This Network Statement follows the common structure set for Network Statements by RailNetEurope (RNE). This means that applicants requesting rail capacity may get access to the same information at the same place in the Network Statements published by infrastructure managers in other countries.

The Network Statement consists of five more chapters in addition to this one as well as appendices. The second chapter deals with the access conditions, the third handles the infrastructure, the fourth covers issues related to capacity allocation, the fifth chapter is about services supplied to railway undertakings, and the sixth chapter deals with charges and charging principles. The Network Statement includes appendices that provide a more detailed description of the railway network features and other issues related to railway traffic operations, as well as a separate map service describing the characteristic features of the railway network<sup>11</sup>.

# 1.6 Validity and Updating Process

## 1.6.1 Validity Period

The Network Statement is valid for one timetable period. It is published no later than four months ahead of the expiry of the deadline for submission of capacity requests, i.e. 12 months before the change of the timetable period. This Network Statement is intended for the timetable period 2021, that is from 13.12.2020 to 11 December 2021. The Network Statement 2022 will be published no later than 12 December 2020.

## 1.6.2 Updating Process

If information contained in Section 1.3 changes, the Finnish Transport Infrastructure Agency will publish the changes on its website<sup>12</sup>. The infrastructure manager aims at keeping the Network Statement up-to-date. The aim is to concentrate the most significant changes to be made during the year to two preliminary adjustment dates, at the beginning of January and June. The Finnish

<sup>&</sup>lt;sup>11</sup> http://www.vayla.fi/ammattiliikenne-raiteilla/rautateiden-verkkoselostus

<sup>&</sup>lt;sup>12</sup> http://www.vayla.fi/ammattiliikenne-raiteilla/rautateiden-verkkoselostus

Transport Infrastructure Agency applies a consultation procedure for the updates at the aforementioned adjustment dates. The updates are published on the Finnish Transport Infrastructure Agency's website.

This Network Statement includes references to infrastructure manager's instructions, which, if necessary, will be updated during the timetable period. If any discrepancies are found between the instructions and the Network Statement, the valid instructions shall prevail.

# 1.7 Publishing

The Network Statement is published in two languages: Finnish and English. If any discrepancies are found between the different language versions, the Finnish language version will prevail. The language versions in electronic format are available free of charge on the Finnish Transport Infrastructure Agency's website

# 1.8 Railway Sector Operators and Contact Information

An overview of the railway operating environment, actors, facilities, services and ownership/steering relationships are described at www.traficom.fi/en/transport/rail/railway-sector-operators.

### Finnish Transport Infrastructure Agency

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

PO Box 33 (Street address: Opastinsilta 12 A) 00521 HELSINKI, FINLAND Email: kirjaamo(at)vayla.fi Internet: www.vayla.fi

In all matters concerning this Network Statement, market entry and railway traffic, you can contact the OSS in the Finnish Transport Infrastructure Agency at oss(at)vayla.fi.

Other contact information can be found on the Finnish Transport Infrastructure Agency's website www.vayla.fi<sup>13</sup>

<sup>&</sup>lt;sup>13</sup> http://www.vayla.fi/yhteystiedot

FTIA's publication 46eng/2019 Railway Network Statement 2021

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

The Ministry of Transport and Communications prepares the legislation and budget of its administrative branch in collaboration with the agencies and institutions that fall within the branch. These are the Finnish Transport Infrastructure Agency, the Finnish Transport and Communications Agency Traficom and the Finnish Meteorological Institute. In addition, the Ministry of Transport and Communications governs the traffic control company Traffic Management Finland Group.

PO Box 31 (street address: Eteläesplanadi 16-18) FI-00023 VALTIONEUVOSTO, FINLAND Email: kirjaamo(at)lvm.fi Internet: **www.lvm.fi** 

#### Finnish Transport and Communications Agency Traficom

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

P.O. Box 320 (Street Address: Kumpulantie 9) FI-00101 HELSINKI, FINLAND Email: kirjaamo(at)traficom.fi Internet: www.traficom.fi

#### **Rail Regulatory Body**

The rail regulatory body monitors the competitive situation of the rail market. The rail regulatory body ensures the fair and non-discriminatory treatment of all operators in the railway sector.

P.O. Box 467 (Street Address: Kumpulantie 9) FI-00101 HELSINKI, FINLAND Email: kirjaamo(at)traficom.fi and railregulator(at)traficom.fi Internet: Internet: www.saantelyelin.fi

#### Transport purchasers

At the time of the Network Statement's publication, transport purchasers include the Ministry of Transport and Communications and Helsinki Regional Transport (HSL). The HSL joint local authority acts as a competent authority as referred to in Regulation (EC) No 1370/2007 of the European Parliament and of the Council as well as in the Act on Transport Services. The joint local authority is responsible for planning and providing public transport in its area and for drawing up the transport system plan in the Helsinki region.

P.O. 100 (Street address: Opastinsilta 6 A) FI-00077 HELSINKI, FINLAND Email: hsl@hsl.fi (registry) Internet: www.hsl.fi

#### Finnish Competition and Consumer Authority

The responsibilities of the Finnish Competition and Consumer Authority relate to implementing competition and consumer policy, ensuring good market performance, implementing competition legislation and EU competition rules, and securing the financial and legal position of the consumer. The agency also handles the supervision responsibilities of the Consumer Ombudsman.

P.O. Box 5 (Street address: Siltasaarenkatu 12 A) FI-00531 HELSINKI, FINLAND Email: kirjaamo(at)kkv.fi Internet: http://www.kkv.fi/en/

#### **Traffic Management Finland Group**

A group whose subsidiary, Finrail Ltd, is responsible for the management and traffic control of railway transport in compliance with the service agreement between the group and the Finnish Transport Infrastructure Agency. With respect to railway transport, the agreement contains, for example, the control service, passenger information service, rail capacity management service, catenary system use service, monitoring service for the railway network's safety systems and railway network development and life cycle management, information services and professional services.

Palkkatilanportti 1, 00240 HELSINKI, FINLAND Email: viestinta(at)finrail.fi Internet: www.tmfg.fi

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

In accordance with 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 these shall give mobility service providers and providers of integrated mobility services access to the sales interface of their ticket and payment systems, through which it is possible to: 1) purchase a ticket product at a basic price that, at minimum, entitles the passenger to a single trip; the travel right based on this ticket shall 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 companies**

At the time of the Network Statement's publication, railway companies operating in Finland comprise VR, Fenniarail and Aurora Rail. The railway companies are responsible for the planning, marketing and sales, operation and real-time traffic control of the services they provide. In matters related to operating licences and registering rolling stock in Finland, a new railway company can contact the Finnish Transport and Communications Agency Traficom. In matters related to the use of the railway network, companies can contact the Finnish Transport Infrastructure Agency.

#### Stock companies

Metropolitan Area Rolling Stock Ltd is the owner of the rolling stock required in the transport of the Helsinki region, or the HSL region.

#### Infrastructure managers of private sidings

On the Finnish Transport Infrastructure Agency's website<sup>14</sup>, there are links to Network Statements published by infrastructure managers of private sidings. Private sidings connect to the state-owned railway network in, for example, harbours and in the vicinity of industrial establishments.

#### Station area development company Senaatin Asema-alueet Oy<sup>15</sup>

The company that began its operations at the start of 2019 plans collaboratively with cities and municipalities how each station area within the company's responsibility can best serve sustainable urban development in the area's operational environment. The company develops the station areas' purposes of use by means of zoning and facilitates the areas' versatile utilisation for residential building construction, business operations and as transport hubs. Information on the development of station areas is compiled at www.asemanseutu.fi.

## 1.9 Rail Freight Corridors in Finland

The Finnish railway network is not connected to the European Rail Freight Corridors network<sup>16</sup>.

# 1.10 International cooperation between Infrastructure Managers

RailNetEurope (RNE)<sup>17</sup> is a non-profit organisation of European railway infrastructure managers and bodies allocating rail capacity. Its purpose is to promote international traffic in the European railway infrastructure.

The railway network statements of infrastructure managers in other countries are available at RailNetEurope's (RNE) website<sup>18</sup>.

European Rail Infrastructure Managers (EIM)<sup>19</sup> is a Brussels-based, international, non-profit association, which represents the common interests of European Rail Infrastructure Managers. The members of EIM also include multi-modal organisations, such as the Finnish Transport Infrastructure

<sup>&</sup>lt;sup>14</sup> https://vayla.fi/ammattiliikenne-raiteilla/rautateiden-verkkoselostus/yksityisraiteiden-haltijoiden-verkkoselostukset

<sup>&</sup>lt;sup>15</sup> https://www.senaatti.fi/asema-alueet/

<sup>&</sup>lt;sup>16</sup> http://www.rne.eu/rail-freight-corridors

<sup>&</sup>lt;sup>17</sup> http://www.rne.eu/

<sup>&</sup>lt;sup>18</sup> http://www.rne.eu/organisation/network-statements/

<sup>&</sup>lt;sup>19</sup> http://www.eimrail.org

Agency. Its members manage 53% of the European Union's railway lines. Accordingly, EIM is the EU institutions' first port of call for questions concerning infrastructure management. Through EIM, the Finnish Transport Infrastructure Agency can exercise direct influence on the European railway legislation, both at the political and the technical level. The Finnish Transport Infrastructure Agency can influence the contents of, for example, the Fourth Railway Package, the technical specifications for interoperability and the common safety methods through both EIM and the national channels.

The Finnish Transport Infrastructure Agency participates in PRIME meetings (Platform for Rail Infrastructure Managers in Europe) through EIM. PRIME is an open forum of European rail infrastructure managers and of the European Commission for preliminary discussions on the Commission's emerging legislative proposals. At the meetings, the members also discuss the practical implications of the current legislation.

EIM is part of the working group implementing the technical pillar of the Fourth Railway Package. The working group includes the Finnish Transport Infrastructure Agency's mandated representative and the President of EIM.

### 1.10.1 One Stop Shop (OSS)

Each member state has an RNE OSS contact point or contact person that constitute a single point of contact for the entire international route of a rail service, from the initial questions related to network access to international path requests and performance reviews after a train run.

In Finland, the OSS also functions as a point of contact in matters concerning domestic operations. The email address of the point of contact is oss@vayla.fi.

The contact information to the infrastructure managers' OSS contact persons can be found on RailNetEurope's website www.rne.eu<sup>20</sup>. The Finnish Transport Infrastructure Agency resigned from RNE in 2014.

#### 1.10.2 RNE IT Tools

RNE IT Tools are not used in Finland.

<sup>&</sup>lt;sup>20</sup> http://www.rne.eu/organisation/oss-c-oss/

# 2 Access conditions

# 2.1 Introduction

Chapter 2 describes the conditions for access to the railway network and for operating rail services. The conditions for operating rail services are an operating licence, the railway operator's safety certificate, allocated capacity and an access agreement. For example, the rolling stock acceptance process and staff acceptance process are described in this chapter.

The phases of the market access are described at www.traficom.fi/en/transport/rail/railway-sector-operators.

Finnish is the only language of communications used in Finland's state-owned railway network.

# 2.2 General Access Requirements

The legal framework of access to infrastructure is described in the Rail Transport Act. The regulations and instructions issued by the Finnish Transport and Communications Agency Traficom and the infrastructure manager shall be observed in the state-owned railway network. Information on the regulations issued by the Finnish Transport and Communications Agency Traficom currently in force is available at the Finlex website<sup>21</sup> and at the Finnish Transport and Communications of the infrastructure manager are available on the Finnish Transport Infrastructure Agency's website<sup>23</sup>.

The Government Decree on the interoperability of the rail system (284/2019)<sup>24</sup> lays down, for example, the essential requirements on the rail system.

Locomotives operating in the state-owned railway network shall be fitted with a functioning ATP onboard-unit. This does not apply to units for which the Finnish Transport and Communications Agency Traficom has granted an exemption to operate without the equipment in question, or units to which the ATP system requirement of installing ATP equipment in rolling stock does not apply.

## 2.2.1 Conditions for Applying for Capacity

The conditions for operating rail services in the state-owned railway network are that the railway undertaking or international grouping of railway undertakings meet the following conditions:

1. A railway undertaking or an international grouping of railway undertakings must have an operating licence meeting the requirements laid down in the Rail Transport Act and granted by the Finnish Transport and

<sup>&</sup>lt;sup>21</sup> http://www.finlex.fi/fi/viranomaiset/normi/499001/

<sup>&</sup>lt;sup>22</sup> https://www.traficom.fi/fi/saadokset

<sup>&</sup>lt;sup>23</sup> https://julkaisut.vayla.fi/pdf7/rautatieohjeet\_web.pdf

<sup>&</sup>lt;sup>24</sup> https://www.finlex.fi/fi/laki/alkup/2019/20190284

Communications Agency Traficom or a corresponding operating licence issued in the European Economic Area.

- 2. The railway operator shall have a safety certificate in accordance with the Rail Transport Act, issued or approved by the Finnish Transport and Communications Agency Traficom, which covers all the train paths on which traffic will be operated.
- 3. Rail capacity has been allocated to the railway operator for its planned traffic.
- 4. The railway undertaking has concluded an access agreement with the FTIA.
- 5. Other conditions for operating rail traffic, laid down in or under the Rail Transport Act are in all respects fulfilled.

#### Museum train traffic

The same requirements described in this Network Statement are applied to museum train traffic as to other rail traffic, except with regard to the operating licence. The law provides that a museum train traffic operator shall have a safety certificate granted by the Finnish Transport and Communications Agency Traficom. The safety certificate will be granted upon application for a maximum of five years at a time. The infrastructure manager also requires that museum train traffic operators enter into access agreements for each time-table period. Museum train traffic operators may only request ad hoc rail capacity.

### 2.2.2 Conditions for Access to the Railway Infrastructure

The following railway undertakings or international groupings of railway undertakings may access the state-owned railway network to operate rail services.

- 1. Railway undertakings and international groupings of railway undertakings as referred to in the Rail Transport Act providing domestic freight services and international railway traffic services between states belonging to the European Economic Area.
- 2. In the Finnish railway network, VR Group Ltd may operate domestic passenger rail services on the line sections referred to in the agreement on exclusive rights between VR Group Ltd and the Ministry of Transport and Communications. Any railway undertaking can operate passenger transport on the line sections that are not included in the agreement.

These railway undertakings and international groupings of 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 operated services according to the access agreement. Other railway operators may also use the state-owned railway network, provided that the infrastructure manager has given its consent.

22

## 2.2.3 Licences

A railway undertaking may only operate rail services if it has an operating licence issued by the competent authority<sup>25</sup>. The Finnish Transport and Communications Agency Traficom<sup>26</sup> issues operating licences to railway undertakings established in Finland for operating railway traffic. Operating licences issued for operating rail services in another EEA member stated are also accepted and these licences shall be submitted to the Finnish Transport and Communications Agency Traficom.

## 2.2.4 Safety Certificate

In Finland, the safety certificate is issued by the Finnish Transport and Communications Agency Traficom.

If a railway undertaking has been issued part A of the safety certificate in another country belonging to the European Economic Area, it shall apply for part B of the safety certificate from the Finnish Transport and Communications Agency Traficom before it can commence train operations or infrastructure management in Finland.

The safety certificate will be issued or approved for a maximum of five years at a time. The railway undertaking shall apply for a new safety certificate as soon as its old certificate has expired.

The safety certificate comprises two parts. Part A approves the safety management system, while part B accepts the documents and arrangements that the holder of the safety certificate has issued and put in place that indicates that the set requirements are fulfilled. The purpose of the safety certificate is to ensure that the applicant fulfils the safety requirements for its operations and that the undertaking has the necessary qualifications to operate safely in the railway network. These requirements are presented in the Rail Transport Act. It is also possible to include other requirements in the safety certificate regarding railway safety. The purpose of these requirements is to ensure railway safety while taking into consideration the nature and scope of the railway traffic of the applicant. The aforementioned requirements are presented in more detail and explained in the Finnish Transport and Communications Agency Traficom's instructions on how to apply for a safety certificate.<sup>27</sup>

## 2.2.5 Cover of Liabilities

The railway operator shall have a sufficient liability insurance or another corresponding arrangement in case of damage to another a party caused when using a railway vehicle and for which the railway operator is responsible by law or agreement. The nature and scope of operations and risks related to the operations shall be taken into account in evaluating the sufficiency of the insurance or similar arrangement. The insurance or other corresponding

<sup>&</sup>lt;sup>25</sup> https://www.finlex.fi/fi/laki/ajantasa/2017/20170320#L5P1

<sup>&</sup>lt;sup>26</sup> https://www.traficom.fi/fi/asioi-kanssamme/rautatieyrityksen-toimilupa

<sup>&</sup>lt;sup>27</sup> https://www.traficom.fi/fi/asioi-kanssamme/rautatieliikenteen-harjoittajan-turvallisuustodistus

arrangement shall be in force for the duration of the entire period during which rail services are operated. More information can be found in the Finnish Transport and Communications Agency Traficom's guideline on liability.<sup>28</sup>

# 2.3 Network Access Agreements

#### Network Access Agreement

Railway undertakings and museum train traffic operators shall enter into an access agreement with the infrastructure manager on the access to the services required for railway traffic operations. These services include, for example, access to tracks at traffic operating points and access to traffic control services. It is also possible to agree on other practical arrangements related to railway operations.

The railway operator shall contact the infrastructure manager to prepare the access agreement and contractual negotiations as early as possible, preferably before applying for capacity. Each timetable period has a separate access agreement, which can be changed due to decisions made during the timetable period, e.g. concerning capacity allocation or the condition of the railway network. The access agreement can only be concluded after all conditions stipulated in the Rail Transport Act for operating railway traffic have been fulfilled. Traffic may commence once the agreement has been concluded and rail capacity granted.

#### Agreement on Access to Individual Traffic Operating Points

Railway operators, whose operations in the railway network are not part of their core activities, only have access to the state-owned railway network or individual traffic operating points in the network, if they have concluded an access agreement with the infrastructure manager before commencing operation. The agreement concerns a single timetable period. In order to enter into an agreement, the railway operator shall, well in advance prior to starting the operation, send an application in free form to the infrastructure manager at the address: kirjaamo(at)vayla.fi.

#### **Railway Yard Agreement**

At traffic operating points where many railway operators operate rail services, the parties negotiate a railway yard agreement, if necessary. The agreement relates to the common rules, the access to and operation of tracks in the railway yard in question, or parts of it. The railway yard agreement is an appendix to the railway network access agreement. The railway yard agreement concerns a single timetable period. The infrastructure manager summons the parties to negotiate the railway yard agreement. As more advanced data systems are developed, the aim will be to change over from railway yard agreements to railway yard capacity management.

<sup>&</sup>lt;sup>28</sup> https://www.traficom.fi/sites/default/files/media/file/9079-

 $OHJE\_RAUTATIELIIKENTEEN\_HARJOITTAJAN\_vastuuvakuutuksesta.pdf$ 

#### Maintenance contractors' network access agreement

Maintenance contractors, who 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, since access to the railway network is already included in the maintenance agreement. Contractors who do not have an agreement with the infrastructure manager or a link through a subcontractor must contact the infrastructure manager for an assessment of the need for a network access agreement.

# Agreement on Track Access to the State-owned Railway Network for Storage of Rolling Stock

The need and right to access tracks in railway yards are discussed and agreed upon in the network access agreement. In a multi-operator environment, railway yard agreements may, if necessary, be concluded with all operators at the traffic operating point or in the railway yard in question. Moreover, the JETI system may be used to apply for track reservations from Finrail's traffic control, for temporary storage of rolling stock. Longer-term storages are examined separately and are granted based on the need. Storage is temporary, and it must not disturb 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 timeframe.

If museum train operators need to store rolling stock in the state-owned railway network, they shall enter into an agreement about this with the infrastructure manager. The entry of such an agreement is always decided on a case-by-case basis and the infrastructure manager may reject the agreement on reasonable grounds. Applications to draw up an agreement shall be addressed to kirjaamo(at) vayla.fi.

#### Agreement between Infrastructure Managers

The agreement includes e.g. operating services between railway networks, traffic control, the dividing line between railway networks, its ownership and maintenance, as well as the cooperation between infrastructure managers. In order to enter into an agreement, the private infrastructure manager shall submit a request in free form to the Finnish Transport Infrastructure Agency at the address kirjaamo(at)vayla.fi.

#### Agreement on the Operation of Track Cars

Track cars shall not be operated on line sections with commercial traffic in the stateowned railway network. However, an agreement can be reached on operation of track cars on certain line sections which are closed to traffic, provided that the track conditions are satisfactory, and the safety requirements met. The entry of such an agreement is always decided on a case-by-case basis and the infrastructure manager may reject an agreement. Requests concerning this matter shall be submitted well in advance to kirjaamo(at)vayla.fi.

## 2.3.1 Framework Agreement

The infrastructure manager may enter into a framework agreement with the applicant on access to rail capacity. The purpose of such an agreement is to specify the characteristics of the capacity requested by the applicant. The framework agreement does not, however, entitle the applicant to obtain such capacity as is specified in the agreement.

Railway undertakings shall request the capacity specified in the framework agreement for each timetable period separately. If requested, the infrastructure manager allocates the capacity specified in the framework agreement following the procedure laid down in the Rail Transport Act. Correspondingly, the access agreement shall be concluded for each timetable period separately regardless of the framework agreement. The framework agreement does not, however, impede the application of the provisions of the Rail Transport Act to other applicants.

The framework agreement shall remain in effect for a maximum of five years. For special reasons, the infrastructure manager may, however, also conclude framework agreements for a longer period. Conclusion of an agreement for more than five years can, however, be justified only by agreements, special investments or special business risks connected with the transport business of the party with which the agreement is concluded, as well as by the large-scale and long-term investments of the party with which the agreement is concluded or the contractual obligations connected with such activities.

At present, the Finnish Transport Infrastructure Agency does not enter into framework agreements.

## 2.4 Operational Rules

The operational rules can be viewed in the Finlex service<sup>29</sup> and on the Finnish Transport and Communications Agency Traficom's website<sup>30</sup>. Operational istructions can be found on the Finnish Transport and Communications Agency Traficom's and the Finnish Transport and Communications Agency Traficom's websites<sup>31</sup>. The infrastructure manager aims at providing the operators with the final version of the instructions at least two months before they enter into effect.

# 2.5 Exceptional Transports

Traffic restrictions on exceptional transport are dealt with in sections 3.4 and 4.7. Regulations concerning railway traffic and rolling stock can be viewed in the Finlex service<sup>32</sup> and on the Finnish Transport and Communications Agency

<sup>&</sup>lt;sup>29</sup> http://www.finlex.fi/fi/viranomaiset/normi/499001/

<sup>&</sup>lt;sup>30</sup> https://www.traficom.fi/fi/liikenne/raideliikenne

<sup>&</sup>lt;sup>31</sup> https://julkaisut.vayla.fi/pdf7/rautatieohjeet\_web.pdf

<sup>&</sup>lt;sup>32</sup> http://www.finlex.fi/fi/viranomaiset/normi/499001/

Traficom's website <sup>33</sup>. Other instructions can be viewed on the Finnish Transport Infrastructure Agency's website <sup>34</sup>.

Permits for exceptional transports are issued by the Finnish Transport Infrastructure Agency's Railway Technology Unit.

# 2.6 Dangerous Goods

Carriage of dangerous goods is dealt with in Section 3.4.3. Regulations concerning railway traffic and rolling stock can be viewed in the Finlex service<sup>35</sup> and on the Finnish Transport and Communications Agency Traficom's website <sup>36</sup>.

# 2.7 Railway Rolling Stock

An authorisation issued by the Finnish Transport and Communications Agency Traficom<sup>37</sup> is required for placing rolling stock in service. This authorisation can be issued for rolling stock that meets the requirements valid in Finland, which is laid down in legislation.

The requirements are based on the interoperability requirements for the rail system in accordance with Community law and the Finnish Transport and Communications Agency Traficom has issued complementary and more detailed regulations. Conformity can be proved by the EC Declaration of Conformity or a corresponding declaration issued within the European Economic Area. Before issuing the authorisation, the Finnish Transport and Communications Agency Traficom will ask for the infrastructure manager's statement on the compatibility of the rolling stock type or unit with the railway network, in order to impose possible restrictions.

The Finnish Transport and Communications Agency Traficom maintains a register monitoring the validity and traffic safety of rolling stock. The purpose is to promote rail system safety and identify rolling stock. The rolling stock is recorded in a register maintained by the Finnish Transport and Communications Agency Traficom, if the rolling stock permit has been issued in Finland. Rolling stock that will be used in the state-owned railway network and the permit for which has been issued elsewhere within the European Economic Area or in a country outside the EEA shall also be recorded in the register.

The Finnish Transport and Communications Agency Traficom may also register rolling stock for a limited time upon request. A fixed-period registration is also possible for any rolling stock, the permit for which has been issued in another country, if a permit has been issued in Finland and the rolling stock is only used for a limited time in the state-owned railway network.

<sup>&</sup>lt;sup>33</sup> https://www.traficom.fi/fi/liikenne/raideliikenne

<sup>&</sup>lt;sup>34</sup> https://julkaisut.vayla.fi/pdf7/rautatieohjeet\_web.pdf

<sup>&</sup>lt;sup>35</sup> http://www.finlex.fi/fi/viranomaiset/normi/499001/

<sup>&</sup>lt;sup>36</sup> https://www.traficom.fi/fi/liikenne/raideliikenne

<sup>&</sup>lt;sup>37</sup> https://www.traficom.fi/fi/liikenne/raideliikenne

The rolling stock register shall include information on the owner, holder and renter of the rolling stock. The more detailed regulations on related information about other rolling stock to be recorded in the register will be set forth in a Government decree.

With regard to any rolling stock used for railway traffic between Finland and Russia, the register shall include information on the vehicle owner or renter, any possible limitations on the vehicle use and information on the vehicle's maintenance plan in so far as is essential to vehicle safety.

The infrastructure manager shall approve any rolling stock that is used solely for track work, not rolling stock used for other operations. If the rolling stock at any point is operated as a train or used for shunting, it must be approved by the Finnish Transport and Communications Agency Traficom.

The line sections Toijala–Valkeakoski, Olli-Porvoo and Lahti–Heinola, have been equipped with level crossing warning devices. The traction units of rolling stock and track construction/maintenance machines on these line sections shall use a portable appliance in order to activate the warning devices. These appliances are available at a railway yard on the line section. Instructions for this can be found on the Finnish Transport Infrastructure Agency's website<sup>38</sup>.

RFID tags used to identify the unit shall be attached to all registered rolling stock. The interoperability conditions have been specified in the Finnish Transport Infrastructure Agency's publication RATO 21 Rolling stock (in Finnish)<sup>39</sup>.

## 2.8 Tasks with a Significant Impact on Railway Safety

Under the EU railway safety directive (EU 2016/798), railway undertakings and infrastructure managers are responsible for the level of training and qualifications of their staff performing safety-critical work. In its capacity as the infrastructure 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 required under 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

<sup>&</sup>lt;sup>38</sup> https://julkaisut.vayla.fi/pdf7/rautatieohjeet\_web.pdf

<sup>&</sup>lt;sup>39</sup> https://julkaisut.vayla.fi/pdf7/rautatieohjeet\_web.pdf

the licence with them when performing their task in the state-owned railway network.

#### Qualification requirements set by the infrastructure manager of the stateowned railway network

In its instructions "Valtion rataverkon haltijan osaamis- ja pätevyysvaatimukset"<sup>40</sup> 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 undertaking must describe the management and training programmes of the qualifications 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 of the infrastructure manager of the stateowned railway network.

In addition, the qualifications instructions of the infrastructure manager of the state-owned railway network specifies the essential tasks concerning the safety of track works and the related training programmes<sup>41</sup>.

#### Small-scale train driver operations

Small-scale train driver operations, the application thereof and operators' responsibilities are specified in Traficom's instructions "Pienimuotoinen kuljettajatoiminta"<sup>42</sup>. Provisions on small-scale train driver operations are laid out in the network access agreements between the infrastructure manager and the railway operators. Small-scale train driver operations are in small scale and limited in terms of their geographic area. Areas for small-scale drivers operations within railway traffic operating points are presented in Ratatiedon extranet<sup>43</sup> (the Railway Information Extranet) in Finnish.

<sup>&</sup>lt;sup>40</sup> https://julkaisut.vayla.fi/pdf7/rautatieohjeet\_web.pdf

<sup>&</sup>lt;sup>41</sup> https://julkaisut.vayla.fi/pdf7/rautatieohjeet\_web.pdf

<sup>&</sup>lt;sup>42</sup> https://www.traficom.fi/fi/liikenne/raideliikenne/raideliikenteen-saadokset

<sup>&</sup>lt;sup>43</sup> https://www.vayla.fi/palveluntuottajat/aineistot/ratatiedon-extranet

## 3 Infrastructure

# 3.1 Introduction

The infrastructure refers to the state-owned railway network managed by the Finnish Transport Infrastructure Agency. The Finnish Transport Infrastructure Agency's infrastructure management comprises the construction and maintenance of tracks, structures and equipment connected with them, as well as of the immoveable property needed for infrastructure management and planning.

# 3.2 Extent of Network

## 3.2.1 Limits

The Network Statement describes the state-owned railway network in Finland. The railway network is presented in the map service and in Appendix 3A.

## 3.2.2 Connected Railway Networks

There is a rail connection from Finland to Sweden via Tornio. The main outlines of traffic operating on the Tornio–Haaparanta line section are presented in the FTIA's JT rules. The Swedish Infrastructure Manager is Trafikverket.

There is a rail connection from Finland to Russia via Vainikkala, Imatrankoski, Niirala and Vartius. Provisions on the direct international railway traffic between Finland and Russia are laid out in the Rail Traffic Agreement between Finland and Russia. Railway traffic between Finland and Russia is not international transport within the European Economic Area.

According to the Commission Decision of 20.2.2015, the Finnish local railway infrastructures of strategic importance, as referred to in Directive 2012/34/EU  $2(4)^{44}$  are private sidings in the areas owned by all ports with international seaborne trade and private sidings owned by VR<sup>45</sup>.

<sup>&</sup>lt;sup>44</sup> https://eur-lex.europa.eu/legal-content/FI/TXT/?uri=uriserv:0J.L\_.2012.343.01.0032.01.FIN

<sup>&</sup>lt;sup>45</sup>https://ec.europa.eu/transport/sites/transport/files/modes/rail/packages/doc/c\_2015\_857\_act\_fi.pdf

# 3.3 Network Description

## 3.3.1 Geographic Identification

### 3.3.1.1 Track Typologies

The length of the Finnish state-owned railway network in operable condition is 5,926 km, of which 5,244 km are single-track and 682 km are double or multi-track line sections.

The double-track line sections are:

- Leppävaara-Kirkkonummi
- Huopalahti-Havukoski
- Kytömaa–Ainola
- Purola-Riihimäki-Sääksjärvi
- Kouvola-Juurikorpi
- Pohjois-Louko-Seinäjoki station (Lapua)
- Kytömaa–Hakosilta
- Riihimäki station–Luumäki
- Tampere freight-Lielahti
- Tampere Järvensivu–Orivesi
- Kokkola–Ylivieska

The three-track line sections are:

• Sääksjärvi–Tampere freight

The four-track line sections are:

- Ainola-Purola
- Kytömaa–Ainola (expected deployment at the end of 2021)
- Helsinki station-Leppävaara
- Helsinki station-Kytömaa

### 3.3.1.2 Track Gauges

The nominal track gauge in the railway network is 1,524 mm. The speeddependent limit values for the track gauge are indicated in the Finnish Transport and Communications Agency Traficom's provision called "Rautatiejärjestelmän infrastruktuuriosajärjestelmä" (Trafi/18116/ 03.04.02.00/2012). The provision is available in the Finlex service<sup>46</sup>.

### 3.3.1.3 Traffic Operating Points

The traffic operating points in the state-owned railway network are described in Appendix 3B and the map service.

<sup>&</sup>lt;sup>46</sup> https://www.finlex.fi/data/normit/35207/TRAFI\_8591\_03.04.02.00\_2014\_Fi.pdf

## 3.3.2 Capabilities

#### *3.3.2.1* Loading Gauge and Structure Gauge

The loading gauge (KU) (Appendix 3D) and the structure gauge (ATU) (Appendix 3E) are used throughout the railway network. On private sidings, there may be both loading and structure gauge limitations, which railway operators shall clarify separately before carrying out transportation.

Further information on the structure gauge and the vehicle gauge (LKU) can be found on the Finnish Transport and Communications Agency Traficom's website<sup>47</sup> and in part 2 "Radan geometria" (Track geometry) of the Finnish Transport Infrastructure Agency's 'Ratatekniset ohjeet' (RATO) publication. Further information on the track work gauge can be found in TURO (safety instructions in track maintenance)<sup>48</sup>.

### 3.3.2.2 Weight Limits

#### Axle loads

225 kN axle loads are permitted on most of the railway network. The maximum permitted axle loads per line section are indicated in the Network Statement's map service. Appendices 3M and 3N specify the axle loads and restrictions in connection with overweight loads and the wagons used in the eastern transit traffic

#### Metre loads

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

#### 3.3.2.3 Line Gradients

On the main lines, the maximum dominant gradient is 20 mm/m. There are some occasional larger gradients. On secondary lines, the maximum gradient is 22.5 mm/m. The maximum gradient of line sections measured over a distance of 1,200 metres is presented in Appendix 3A.

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

#### 3.3.2.4 Line Speeds

The maximum speed is 220 km/h for passenger trains and 120 km/h for freight trains. The maximum speed on tracks without ATP is 80 km/h. The speeds permitted for passenger and freight trains in the railway network are indicated in the Network Statement's map service. The maximum allowable speeds depending on the rolling stock are presented in Appendix 3L. More information on areas where speed can be temporarily increased due to a steep gradient is included in the rules "Junaliikenteen ja vaihtotyön turvallisuussäännöt (JT)"<sup>49</sup>.

<sup>&</sup>lt;sup>47</sup> https://www.traficom.fi/fi/liikenne/raideliikenne/raideliikenteen-saadokset

<sup>&</sup>lt;sup>48</sup> https://julkaisut.vayla.fi/pdf7/rautatieohjeet\_web.pdf

<sup>&</sup>lt;sup>49</sup> https://julkaisut.vayla.fi/pdf7/rautatieohjeet\_web.pdf

### 3.3.2.5 Maximum Train Lengths

The maximum train length permitted on a line section shall be such that trains can also use sidings at the traffic operating points. Exceptional transport shall be agreed upon separately. Trains need not, however, be capable of using all sidings at all traffic operating points. 1,100 metres long trains are allowed on the line section Vainikkala-Kotka/Hamina. The train lengths used for dimensioning line sections are 700, 750, 925 and 1100 metres. The maximum length of the sidings at each traffic operating point are indicated in Appendix 3B and in the map service.

### 3.3.2.6 Power Supply

The nominal voltage of the electrification is 25 kV/50 Hz AC. On all electrified lines, power is taken from the contact line above the track. One or both of the running rails and return conductors form a return circuit. The neutral sections are adjacent to the feeding sections of the contact line feeder stations. Rolling stock cannot collect current from the neutral sections. The main switch of the electric locomotive or electric train unit shall be opened at the neutral sections. The electric traction unit of the train is not allowed to stop at a neutral section.

The maximum current supply capacity of the overhead line for electrically hauled stock is 350–800 A. The available current is affected by the number and position of stock using electric power at the same time in the power supply area.

For fixed installations, electrification is described in part 5 "Sähköistetty rata" (Electrified railway) of the Ratatekniset ohjeet (RATO) publication<sup>50</sup>".

Provisions on the electrification of electrical appliances in rolling stock have been laid down in Finnish in the Finnish Transport and Communications Agency Traficom's regulation Rautatiekaluston sähköjärjestelmä (RVI/376/411/2008). The provision is available in the Finlex service<sup>51</sup> and in Section 21 'Rolling Stock' of the Finnish Transport Infrastructure Agency's publication 'Ratatekniset ohjeet' (RATO).<sup>52</sup>.

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

<sup>&</sup>lt;sup>50</sup> https://julkaisut.vayla.fi/pdf7/rautatieohjeet\_web.pdf

<sup>&</sup>lt;sup>51</sup> http://www.finlex.fi/fi/viranomaiset/normi/499001/35169

<sup>&</sup>lt;sup>52</sup> https://julkaisut.vayla.fi/pdf7/rautatieohjeet\_web.pdf

## 3.3.3 Traffic Control and Communication Systems

Within the scope of the partnership agreement between the Finnish Transport Infrastructure Agency and Traffic Management Finland, the traffic control company provides data system services<sup>53</sup> and interfaces free of charge to railway operators in accordance with the instructions drafted by the Finnish Transport Infrastructure Agency and the traffic control company.

Agreements on separate operator-specific interfaces or services may also be entered and in such cases the charges are billed according to the actual costs. The traffic control company provides the data and instructions required to use the data system services. Railway operators are responsible for the competence of their own staff and shall arrange or procure the training required to ensure competence.

A description of the data system interfaces, application services and required technology components that are relevant to railway operators are maintained on Finrail's website<sup>54</sup>. An important data system for operating rail services in Finland is the rail capacity management system (for the time being LIIKE). The use of, among other things, the passenger information system and the train driver's data terminal application (KUPLA) are based on the data in the LIIKE system.

### *3.3.3.1 Traffic Control Systems*

The signalling systems in use are described in Appendix 3A, in the map service and in part 6 (Turvalaitteet) of the publication Ratatekniset ohjeet (RATO)<sup>55</sup>.

Line sections equipped with centralised traffic control are listed in the map service. However, on sidings and loading and storage sidings, units may have to secure routes locally.

The Finnish Transport Infrastructure Agency's regulation "Määräys ohjaus-, hallinta- ja merkinanto-osajärjestelmästä" is applied in the state-owned rail-way network (TRAFICOM/251470/03.04.02.00/2019)<sup>56</sup>

#### Railway traffic prediction - data requirements (ENNE system)

ENNE is a railway traffic prediction and optimisation system. It enables predicting the traffic situation over the entire network in order to increase the time for decision-making. In addition, it improves the energy-efficiency of transport. ENNE will be put into operation gradually as of 2020. ENNE system belongs to Finrail Ltd.

In order to produce more accurate railway traffic predictions, improve the effectiveness of the multi-actor environment, achieve smoother flow of traffic and better handling of disruptions, and to increase energy efficiency, railway undertakings shall submit the following updated data in a manner to be agreed

<sup>55</sup> https://julkaisut.vayla.fi/pdf7/rautatieohjeet\_web.pdf

<sup>&</sup>lt;sup>53</sup> https://tmfg.fi/en/finrail/itsystems

<sup>&</sup>lt;sup>54</sup> <u>https://tmfg.fi/fi/finrail/rajapinnat</u>

<sup>&</sup>lt;sup>56</sup>https://www.finlex.fi/fi/viranomaiset/normi/499001/45352

upon, preferably via interfaces. This data is handed over to the operational traffic control, unless otherwise agreed. Based on this data, it is also possible to produce predictions of train services, which can be handed over as such to passengers and open interfaces.

- The predicted train preparation time for departure from the site of departure or for a transfer to the site of departure, when the transfer has been scheduled.
- Requests for track changes at traffic operating points that are relevant for railway undertakings. There is a tool for requesting track changes in the Helsinki and Ilmala areas.
- Reservations for storage sidings and needs in railway yards: advance message submitted in the JETI system or otherwise agreed upon with Finrail's traffic planning.
- Inter-train dependencies (rolling stock, staff, passengers changing trains), shunting operations from Ilmala to Helsinki and from Helsinki to Ilmala, as well as shunting operations at other stations, if they have a different number than the train. Shunting operations between Ilmala and Helsinki are requested as capacity; in other places the aim is to include shunting operations in the capacity.
- Temporary train-specific speed limits due to partial malfunctions in the rolling stock or in the replacing rolling stock are imposed, if it is not possible to request new capacity, or if traffic control is not aware of these.
- Changeover of freight train crews, when there is no other need to stop.
- Changes in commercial stops (increased or reduced number of stops, including crew changeovers).
- Train drivers' estimated repair of malfunctions, in situations where the train, after giving the notification that it is ready to depart, is not able to proceed or the rolling stock breaks down on the line.
- Travel time predictions made by the driver's energy efficiency system or by the drivers, in case these are significantly longer than scheduled or targeted.

### 3.3.3.2 Communication systems

#### **RAILI service**

The RAILI service is only used for communication concerning traffic safety.

The integrated railway communications system, RAILI, can be used on VIRVE phones and smart phones. In order to use the RAILI service on a smart phone, the application RAPLI has to be installed. The VIRVE network is used for communication between trains and traffic control. Railway operators shall apply for a VIRVE **licence** from the Finnish Transport and Communications Agency Traficom to use the VIRVE phones to be installed in the rolling stock in accordance with railway traffic rules. More information about this can be found in Appendix 3P.
Railway operators shall apply for a **permit to use** the RAILI service from the Finnish Transport Infrastructure Agency and familiarise themselves with the permit conditions<sup>57</sup>. In addition to the VIRVE network, other commercial networks can be used for communication between assistant shunters and traffic control, and between track work managers and traffic control, for example, by using the RAPLI application. Further information can be found in Finnish on the Finnish Transport Infrastructure Agency's website<sup>58</sup>.

The Finnish Transport and Communications Agency Traficom sets regulations on, for example, traffic operation, track work and communications. The valid regulations can be found in the Finlex service<sup>59</sup>.

The Finnish Transport Infrastructure Agency provides instructions that deal with traffic control, traffic operation, track work and communications, and complement the regulations. The valid instructions can be found on the Finnish Transport Infrastructure Agency's website<sup>60</sup>. Contact information for traffic control can be found on the Finnish Transport Infrastructure Agency Extranet site<sup>61</sup>.

#### Advance Information System (JETI)

Information of anomalies will be provided via the Advance Information System (JETI), maintained by Finrail Ltd, and through notifications given by the traffic control. Real-time information on track works and train operation is maintained in JETI. Drivers and persons responsible for the track work shall have knowledge of the advance plans that are valid for the duration of the work/journey and in the working area/track sections of the journey. They shall also have the contact information for the traffic control.

More information on Finrail's website: <u>https://tmfg.fi/fi/finrail/jeti</u>

#### 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.

More detailed descriptions of the technical requirements, as well as the principles for procurement and use of the train drivers' terminal application (KUPLA), can be found on Finrail's website<sup>62</sup>.

<sup>&</sup>lt;sup>57</sup> https://julkaisut.vayla.fi/pdf7/rautatieohjeet\_web.pdf

<sup>&</sup>lt;sup>58</sup> http://www.vayla.fi/ammattiliikenne-raiteilla/rautateiden-puheviestinta

<sup>&</sup>lt;sup>59</sup> http://www.finlex.fi/fi/viranomaiset/normi/499001/?\_offset=0&\_max=49

<sup>&</sup>lt;sup>60</sup> https://julkaisut.vayla.fi/pdf7/rautatieohjeet\_web.pdf

<sup>&</sup>lt;sup>61</sup> http://www.vayla.fi/palveluntuottajat/aineistot/ratatiedon-extranet

<sup>&</sup>lt;sup>62</sup> https://tmfg.fi/fi/finrail/tietojarjestelmat

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

In the infrastructure manager's class 1 traffic control area, the RUMA application shall be used for track works performed with the permission of traffic control. RUMA is used to locate track work managers, track work teams and track construction/ maintenance machines. RUMA is also used to submit track work notices and report traffic restrictions. The data in the RUMA application is integrated in the LIIKE system by adding a link to the planning graphics in the RUMA application map. The advance plans and yearly plans made in JETI system are also presented in RUMA application.

More information on Finrail's website: <u>https://tmfg.fi/finrail/ruma</u>

#### TURI

Railway operators and the infrastructure manager's service providers use the TURI system to report safety-related anomalies to the infrastructure manager.

#### *3.3.3.3 Train Control Systems*

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

Locomotives operating in the state-owned railway network shall be fitted with an automatic train protection equipment (ATP) according to class B in the Finnish system (ATP-VR/RHK), or equipped with the European Train Control System in conjunction with legacy ATPs through a specific transmission module (ETCS + STM). Information about the availability and terms of delivery of ATP equipment is given by Bombardier Transportation Finland Oy<sup>63</sup>. Information regarding the conjunction ETCS+STM is provided by both Bombardier Transportation Finland Oy and Hitachi Rail STS.<sup>64</sup>.

ATP locomotive equipment shall be used for train services or, if operating without ATP locomotive equipment, with a special permit as referred to in Section 41 of the Rail Transport Act. The Finnish Transport and Communications Agency Traficom may issue a special permit provided that it does not endanger the safety of the rail system. In cases concerning the use of ATP locomotive equipment, a fixed-term special permit may be issued if the case involves a need for exceptional and temporary train services or if ATP locomotive equipment or spare parts are not available. A special permit may not be issued for a train unit or locomotive which is used in passenger or commercial freight traffic, when it is not directly connected with infrastructure management. ATP locomotive equipment is not required in stock that is used for shunting only.

The Finnish Transport and Communications Agency Traficom provides more information about ATP systems and operations and instructions on museum traffic. The Finnish Transport and Communications Agency Traficom's regulations can be found on the website<sup>65</sup>.

<sup>&</sup>lt;sup>63</sup> http://www.bombardier.com/

<sup>&</sup>lt;sup>64</sup> http://sts.hitachirail.com/en

<sup>&</sup>lt;sup>65</sup> https://www.traficom.fi/fi/liikenne/raideliikenne/raideliikenteen-saadokset

# 3.4 Traffic Restrictions

#### 3.4.1 Specialised Infrastructure

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 refers to a train path, or a part of it, on which priority is given to the type of traffic for which the infrastructure is specialised. The Finnish train paths with specialised lines are: Helsinki–Kerava (easternmost track and eastern middle track), Helsinki–Leppävaara (southernmost track and southern middle track) Huopalahti-Havukoski (both tracks). These urban tracks are reserved primarily for Helsinki Area commuter traffic. It is not allowed to operate passenger trains between Kerava and Vuosaari or freight trains between Havukoski and Huopalahti. In addition to these line sections, platform tracks 1-4 and 13-19 at the Helsinki Central Railway Station, are designated as specialised infrastructure reserved for the commuter transport of Helsinki Region Transport. Access to tracks 4 and 13-16 especially requires coordination between applicants.

#### 3.4.2 Environmental Restrictions

When registering rolling stock, the Finnish Transport and Communications Agency Traficom's regulations and instructions are applied. The regulations set out general and special requirements for rolling stock concerning noise, vibration, electromagnetic interferences, emissions, substances hazardous to the environment and the use of recycled construction materials. For more information, go to the Finnish Transport and Communications Agency Traficom's website<sup>66</sup>.

Vibration-related speed restrictions are imposed throughout Finland. The restrictions mainly apply to over 3,000 ton gross weight heavy trains. More information can be found in Appendix 3H.

#### 3.4.3 Dangerous Goods

#### Provisions, regulations and supervision

In domestic rail transport, the following statutes and regulation are observed: the Act on the Transport of Dangerous Goods (719/1994), applicable to all transport modes, the Government Decree on the Transport of Dangerous Goods by Rail (195/2002) and the Finnish Transport and Communications Agency Traficom's regulation on the carriage of dangerous goods by rail<sup>67</sup>.

In the appendix to The Finnish Transport and Communications Agency Traficom's regulation, there are detailed provisions on, for example, the classification of dangerous goods, packaging, required documentation and

 $<sup>^{66}\,</sup>https://www.traficom.fi/fi/liikenne/raideliikenne/raideliikenteen-saadokset$ 

<sup>&</sup>lt;sup>67</sup> https://www.traficom.fi/fi/liikenne/vak/vaarallisten-aineiden-kuljetusta-koskevia-saadoksia-jamaarayksia

equipment, excepted quantities, marking in the bill of lading and on the packages, 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 by rail arriving to and departing from Finland and the related temporary storage is also supervised by Finnish Customs and the Finnish Border Guard in their respective areas of responsibility. In these cases, The Finnish Transport and Communications Agency Traficom still carries the primary responsibility. Under the regulations issued by the infrastructure manager, wagons loaded with dangerous goods may only be temporarily stored in national railway yards handling dangerous goods specified by the Finnish Transport and Communications Agency Traficom. This restriction will remain in effect until the infrastructure manager has determined whether wagons loaded with dangerous goods can also be temporarily stored in other railway yards. These railway yards will be listed in the Network Statement. Wagons loaded with dangerous goods should primarily be stored in railway yards handling dangerous goods. In case of congestion of dangerous goods transports, or if there are other needs for storing dangerous goods, the infrastructure manager may request that other rolling stock is moved. Transport undertakings are responsible for notifying the traffic control, the Rail Traffic Management Centre and local rescue authorities about the storage of wagons loaded with dangerous goods, for handling the cargo and for ensuring that the wagons remain stationary. More information about the notification responsibility is included in the rules "Junaliikenteen ja vaihtotyön turvallisuussäännöt (JT)68. All types of cleaning the rolling stock, for example, cleaning of leakages, must be separately agreed upon with the rescue authorities, the local environmental authorities and the infrastructure manager.

#### Special Agreements

RID special agreements<sup>69</sup> can also be applied when signed by the states involved in the transport operation.

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 Advisor

Companies transporting or loading dangerous goods or whose operations impact on the safe transport of these goods on roads or railways shall appoint a certified Safety Advisor.

The person appointed Safety Advisor shall pass an examination, where the Finnish Transport and Communications Agency Traficom serves as the examiner.

<sup>&</sup>lt;sup>68</sup> https://julkaisut.vayla.fi/pdf7/rautatieohjeet\_web.pdf

<sup>&</sup>lt;sup>69</sup> https://www.traficom.fi/fi/liikenne/liikennejarjestelma/kansainvaliset-vak-rautatiesopimukset

Provisions on the Safety Advisor have been laid down in the Government Decree on the Safety Advisor for the land transport of dangerous goods  $(274/2002)^{70}$ .

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

Updated information about international carriage of dangerous goods by rail can be found on the Finnish Transport and Communications Agency Traficom's website<sup>71</sup>.

#### Railway yards handling dangerous goods

The Finnish Transport and Communications Agency Traficom has specified the following railway yards as national railway yards handling dangerous goods in the rules Junaliikenteen ja vaihtotyön turvallisuussäännöt (JT)<sup>72</sup>: Hamina, Joensuu (Joensuu Sulkulahti and Joensuu Peltola), Kokkola, Kotka (Kotka Mussalo, Kotolahti), Kouvola (Kouvola Tavara, Kouvola Lajittelu), Niirala, Oulu (Oulu Tavara and Oulu Nokela), Riihimäki (Riihimäki Tavara), Sköldvik, Tampere (Tampere Viinikka and Tampere Tavara), Turku (Turku Asema), Vainikkala and Ykspihlaja (Ykspihlaja tavara ja Ykspihlaja väliratapiha). Those operating in the railway yards shall be able to take action in compliance with the legislation on carriage of dangerous goods by rail. The Finnish Transport and Communications Agency Traficom inspects the designated railway yards handling dangerous goods at least every three years. If necessary, the parties shall participate in joint exercises organised in the area, the time and length of which shall be agreed upon separately.

The use of steam locomotives is prohibited in Sköldvik railway yard. The JT rules<sup>73</sup> include more information about operations on railway yards handling dangerous goods.

#### 3.4.4 Tunnel Restrictions

The tunnel restrictions on the Helsinki–Turku and Orivesi-Jyväskylä line sections are indicated in Appendix 3H.

Only freight trains and track work machinery are allowed to operate in tunnels on the Vuosaari line. It is forbidden to transport passengers or operate steam locomotives in the tunnels of the Vuosaari line.

Only passenger trains and track work machinery are allowed to operate in the tunnel of the Ring Rail Line. Passenger transport between the traffic operating points Leinelä and Kivistö is only allowed when electric traction units are used. Individual diesel locomotive transfers are permitted. It is forbidden to operate steam locomotives in the tunnel.

<sup>&</sup>lt;sup>70</sup> https://www.finlex.fi/fi/laki/smur/2017/20170489

<sup>&</sup>lt;sup>71</sup> https://www.traficom.fi/fi/liikenne/raideliikenne/raideliikenteen-saadokset

<sup>&</sup>lt;sup>72</sup> https://julkaisut.vayla.fi/pdf7/rautatieohjeet\_web.pdf

<sup>&</sup>lt;sup>73</sup> https://julkaisut.vayla.fi/pdf7/rautatieohjeet\_web.pdf

#### 3.4.5 Bridge Restrictions

Bridge restrictions are described in Appendix 3H.

#### 3.4.6 Other

Details concerning the axle loads and restrictions applicable to the carriage of overweight loads and wagons used in the eastern transit traffic can be found in Appendices 3M and 3N.

The substations of the electrified line sections have a limited capacity for supplying 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 commuter area, the maximum input power of the electric trains substantially exceeds the maximum power supply available in 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.

# 3.5 Availability of the Infrastructure

The restrictions affecting traffic are presented in Appendices 3H and 3J and in the JETI system (the system for advance information on train traffic). Track work causing traffic restrictions is presented in Appendix 3K.

The lines with little traffic described in the Network Statement are only in operable condition thanks to intensified maintenance. The technical condition of a line section at the end of its lifecycle may deteriorate rapidly and the maintenance contractor may have to impose significant traffic restrictions on the line section. Applicants shall be prepared for traffic restrictions and even service interruptions on the following line sections:

- Heinävaara-Ilomantsi
- Kontiomäki-Pesiökylä-Ämmänsaari
- Saarijärvi–Haapajärvi
- Mynttilä-Ristiina
- Lieksa-Pankakoski
- Niinisalo-Parkano
- (Lahti)–Loviisa, especially the section Orimattila, 150+407 –Lapinjärvi, 185+432
- (Raisio)-Naantali
- (Ihala)–Viheriäinen

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–lisvesi
- Rantasalmi–Savonlinna
- The maintenance of the section Ahonkylä, (approximately Km 425+000)
   Kaskinen (Km 530+522) on the line (Seinäjoki)–Kaskinen will end on 31
  December 2022

The infrastructure manager will provide information on changes introduced during the timetable period by separate decisions, which will be listed on the Finnish Transport Infrastructure Agency's website https://vayla.fi/rataverkko/vahaliikenteiset-radat

# 3.6 Service Facilities

#### 3.6.1 Passenger Stations

The lengths of passenger platforms (shortest/longest) are indicated in Appendix 3B. Platforms not maintained by the infrastructure manager are indicated in brackets. The passenger stations have been added to the map service and they are described in Appendices 3Q and 3R. Further information on passenger stations is provided in Section 5.3.1.1.

#### 3.6.2 Freight Terminals

Freight terminals in the state-owned railway network are marked with "K" in the table in Appendix 3B. Most of the loading facilities in the state-owned railway network are used for loading timber. Private loading areas are marked with "Y".

Further information on freight terminals and timber-loading facilities in the state-owned railway network is provided in Section 5.3.1.2.

#### 3.6.3 Train Formation Yards

Train formation yards are railway yards in which the layout and size of the track system make it possible to form trains. The train formation yards are marked with "Shunting" in Appendix 3B". More information about train formation yards can be found in Section 5.3.1.3.

At the traffic operating points in Kouvola and Tampere the railway companies have access to inclines for the recomposing of train wagons. Further information about inclines and access to them can be found in Section 5.3.1.3.

#### 3.6.4 Storage Sidings

Storage sidings are yard tracks primarily intended for the parking of wagons and coaches waiting for a transport task. Wagons can only be stored temporarily on these tracks. More information about storage sidings can be found in Section 5.3.1.4.

#### 3.6.5 Maintenance and Facilities

Access to maintenance and facilities requires an agreement with their maintenance provider. The infrastructure manager does not provide maintenance services for the technical maintenance of rolling stock. The services provided by the infrastructure manager include the maintenance platfors at the Ilmala depot and the use of these platforms are described in Section 5.3.1.5. Appendix 3S describes the infrastructure manager's maintenance services provided at Ilmala depot.

#### 3.6.6 Other Technical Services

#### Rolling stock surveillance devices

Hot box detectors have been placed in the railway network at approx. 50 km intervals. The distance can be greater on line sections on which the maximum speed is less than 160 km/h. The devices are installed on the track and to ensure that they function as intended, rolling stock and and the infrastructure must be interoperable as laid down in the acceptance requirements. The alarms given by the system are forwarded to the traffic control of the railway line section in question as well as to the Technical Control Centre.

The wheel force measuring stations are so closely spaced that the rolling stock will cross a measuring station at least once on its normal route. The devices measure the static and dynamic load impact of the wheelset on the rail. Based on these measurement results, defects in the wheel tread (such as wheel flats) and incorrect loading can be detected. The devices are installed in the track. Device alarms caused by critical wheel defects will be forwarded via traffic control to the Rail Traffic Management Centre.

Traffic control will notify the train driver of hot box and wheel force alarms and provide them with the necessary instructions.

The camera systems for monitoring the condition of contact strips in pantographs on electric traction units have mainly been installed on road bridges overpassing the track. The monitoring points are placed so that they photograph the active pantographs approaching the measuring station. Traffic control informs and instructs the driver of the unit if immediate action has to be taken due to the condition of the contact strip in order to avoid damages to the catenary system or rolling stock.

Rolling stock equipped with radio frequency identifiers (RFID), which are interoperable with the infrastructure manager's system, enables prompt allocation of the information to the correct rolling stock unit and its maintenance manager. A map showing the location of rolling stock surveillance devices can be found in Appendix 30 and on Ratatiedon extranet (the Railway Information Extranet) in Finnish. Registration is required to access the extranet <sup>74</sup>.

The Technical Control Centre monitors and maintains the network of control devices. The control centre uses the VALTSU system to collect all measuring data produced by the control devices, combining it with the available RFID reading and forwarding this information to all concerned parties.

#### Camera surveillance

Many of the larger stations have camera surveillance. The system allows traffic controllers to monitor the movement of trains and the Information Centre in Southern Finland to observe the movement of passengers on platforms as well as the technical functioning of the information equipment. The Security Control Centre is able to monitor passenger safety and control vandalism. The Technical Control Centre and property maintenance can use the system to check on the tidiness of platform areas and spot any need for technical maintenance work.

#### 3.6.7 Port Facilities

Most of the tracks in ports are private sidings and the services available are described in port network statements.<sup>75</sup>

#### 3.6.8 Relief Facilities

The infrastructure manager is responsible for the clearing operations concerning the tracks and the rolling stock in the state-owned railway network and for assisting the rescue authorities in rescue operations. The operating procedure is described in more detail in Section 4.8.4.

#### 3.6.9 Refuelling Facilities

Appendix 3B shows the refuelling facilities on traffic operating points. More information can be found in Section 5.3.1.9. The refuelling facilities have been indicated in the Network Statement's map service.

#### 3.6.10 Technical Equipment

Appendix 3B shows the cranes located at traffic operating points. More information can be found in Section 5.3.1.6.

 $<sup>^{74}\,</sup>https://www.vayla.fi/palveluntuottajat/aineistot/ratatiedon-extranet$ 

<sup>&</sup>lt;sup>75</sup>https://www.vayla.fi/ammattiliikenne-raiteilla/rautateiden-verkkoselostus/yksityisraiteiden-haltijoiden-verkkoselostukset

The service provider shall submit information about the provided service facilites, access to them and the charges levied for the service as well as necessary agreements to the infrastructure manager.

Access to service facilities and rail-related services is governed under the Commission Implementing Regulation (EU) 2017/2177. The infrastructure manager publishes a form for this purpose on its website<sup>76</sup> - RNE Common Template for Service Facilities.

Appendices 3B, 3S, 4B and 5D-P include information about the service facilities situated in the state-owned railway network and access to them. The service facilities are also described in the map service. The service facility descriptions provided by parties other than the infrastructure manager are compiled online<sup>77</sup>.

## 3.8 Infrastructure Development

#### National transport system plan

A 12-year national transport system plan is under preparation. The plan is designed under parliamentary direction and in interaction and collaboration with interest groups. The preparation of the plan is guided by the act on the transport system and arterial roads (980/2018) as well as the Government report, which was approved in the spring of 2019, on the preparation of the national transport system plan.

The Ministry of Transport and Communications is responsible for the preparation of the plan, and the plan will be approved by the Government. Prior to approving the plan, it will be provided to the Parliament as a report. The objective is to approve the first national transport system plan in the spring of 2021.

The purpose of the transport system plan is to increase the far-sightedness of transport politics. The plan will present its societal aims, an analysis on the current state and operational environment of the transport system as well as the objectives of the transport system. The plan includes a 12-year programme of measures that contains state and municipal actions as well as the state's financing plan for the transport system. At the beginning of each government term, the transport system plan will be reviewed and coordinated with the General Government Fiscal Plan. The plan describes the impacts of implementing the transport system plan and presents monitoring measures for the plan and the meters used for the monitoring.

<sup>&</sup>lt;sup>76</sup> https://www.vayla.fi/ammattiliikenne-raiteilla/rautateiden-verkkoselostus/rataverkon-palveluntarjonta

 $<sup>^{\</sup>prime\prime} {\rm https://vayla.fi/ammattiliikenne-raiteilla/rautateiden-verkkoselostus/rataverkon-palvelun-tarjonta and the state of the stat$ 

Website of the national transport system plan: https://valtioneuvosto.fi/hanke?tunnus=LVM018:00/2019

#### Service level of the arterial railways

The Ministry of Transport and Communications' degree on arterial routes and their service levels entered into force on 1 January 2019. The infrastructure manager is responsible for maintaining a sufficient service level on the arterial railways, taking account of each railway line's significance for the transport system. The line sections of arterial railways are classified into passenger and freight traffic railways on the basis of their primary transport profile. The degree sets requirements on speed limits and axle loads.

The degree on arterial routes and their service levels: https://www.finlex.fi/fi/laki/alkup/2018/20180933

#### Overall picture of the railway network

The FTIA provides expert opinions on viewpoints concerning the railway network in various ways. In 2018, the overall picture was described in the report "Rataverkon kokonaiskuva – Lähtökohtia ja näkökulmia" (Overall picture of the railway network – offsets and viewpoints). In order to maintain a clear overall picture, various separate reports on numerous topics are prepared continuously.

Overall picture of the railway network: https://julkaisut.vayla.fi/pdf8/lts\_2018-37\_rataverkon\_kokonaiskuva\_web.pdf

#### Railway network development and improvement projects

In 2021, the following development projects will be underway in the railway network:

- Added capacity on the Helsinki–Riihimäki line section
- Improvement of line section Luumäki–Imatra, 2017–2023
- Electrification of the line sections Iisalmi–Ylivieska, Hyvinkää–Hanko, Siilinjärvi–Ruokosuo (Yara mill) and Tornio–Haaparanta.
- lisalmi triangle track
- Refurbishment and improvement of carrying capacity on line sections Kouvola-Kotka-Hamina
- Removal of level crossings on the Pori-Tampere rail line
- Improvement of Joensuu railway yard
- Construction of safety devices on the Pietarsaari–Pännäinen rail line
- Construction of Akaa timber terminal

#### Repair backlog reduction in the railway network 2021

- Rail network renovations (lines, turnouts, bridges, safety devices)
- Repairs of areas with ground frost damage and soft soils in the main railway network
- Renewal of safety devices on Tampere-Seinäjoki rail line
- Improvement of Oulu railway yard
- Renewal of safety devices in Kokkola railway yard
- Refurbishment of the Helsinki–Turku coast rail line
- Refurbishment of the Pori-Mäntyluoto rail line

# 4 Capacity allocation

# 4.1 Introduction

The legal framework for requesting and allocating rail capacity is described in Directive 2012/34/EU<sup>78</sup> of the European Parliament and of the Council establishing a single European railway, in the Rail Transport Act and in the Government Decree on the Timetable Period in Railway Traffic and Requesting Infrastructure Capacity.

# 4.2 Description of Process

Capacity for operating regular train services on the state-owned railway network shall be requested from the Finnish Transport Infrastructure Agency for each timetable period within the time defined. The schedule for capacity requests and allocation for the timetable period 2021 is shown in the figure. It is also possible to make *ad hoc* requests for capacity for other than regular traffic.



#### 4.2.1 Requesting Rail Capacity

The principles of capacity requests are described in the abovementioned Act and Decree. In order to specify them, the infrastructure manager has drawn up an instruction for requesting rail capacity<sup>79</sup>.

Requests for rail capacity for regular services, alterations to the regular services and for *ad hoc* capacity shall be submitted in the LIIKE software or using the interface specified by the infrastructure manager (further information on the traffic control company's website<sup>80</sup>). For the coordination of requests, applicants must be prepared to report the train priority group, as referred to in Section 4.4.3.

<sup>&</sup>lt;sup>78</sup> http://eur-lex.europa.eu/legal-content/FI/TXT/PDF/?uri=CELEX:32012L0034&from=EN

<sup>&</sup>lt;sup>79</sup> https://julkaisut.vayla.fi/pdf7/rautatieohjeet\_web.pdf

<sup>&</sup>lt;sup>80</sup> https://tmfg.fi/en/finrail/itsystems

If the LIIKE system is inoperative due to a widespread malfunction, the Rail Traffic Management Centre can approve requests for ad hoc 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 report information.

Further information about requesting rail capacity and the background information regarding timetable planning is found in the instruction for requesting rail capacity.

#### 4.2.2 Requesting Rail Capacity for Shunting Operations

Rail capacity for shunting operations between traffic operating points and between parts of divided traffic operating points is requested in the LIIKE system. The abovementioned lines between traffic operating points and the sections of the railway yards are specified in the instructions for requesting rail capacity ("Ratakapasiteetin hakuohje" in Finnish)<sup>81</sup>. Rail capacity which has been requested and allocated, as well rail capacity allocated for track work in the LIIKE system is prioritised on all line sections.

Capacity for transfers in regular services between Ilmala railway yard and Helsinki Central Railway Station is requested on the adjustment dates for regular services. Capacity for other transfers is requested as ad hoc capacity.

#### 4.2.3 Requesting railway yard capacity

Different procedures apply to the requesting of railway yard capacity in freight yards, the Ilmala railway yard and the Helsinki Central Railway Station. The use of railway yard tracks is described on a general level in the service facility description on storage sidings provided in Appendix 4B, the use of the tracks in the Ilmala railway yard is described in Appendix 4C, and the use of the tracks in the Helsinki Central Railway Station, as well as the transfers between Helsinki and Ilmala are described in Appendix 4D. The planning of track use in other railway yards intended for passenger transport and the process of requesting capacity in them are described in the instructions for requesting rail capacity<sup>82</sup>.

Applicants and railway operators shall contact the infrastructure manager regarding needs for long-term storage of rolling stock that have arisen during the timetable period. Railway operators operating at an individual traffic operating point shall report their need for access to the railway yard when drawing up the network access agreement. Short-term access may be requested with an advance plan in the JETI system, whereby Finrail's traffic planning checks the suitability of the storage siding.

In exceptional situations, rolling stock can be temporarily stored on separately specified storage sidings, reserved for train traffic, as described in Section 5.3.1.4.

<sup>&</sup>lt;sup>81</sup> https://julkaisut.vayla.fi/pdf7/rautatieohjeet\_web.pdf

<sup>&</sup>lt;sup>82</sup> https://julkaisut.vayla.fi/pdf7/rautatieohjeet\_web.pdf

Decisions on meeting urgent storage needs are made by the traffic planning in the traffic control area, the traffic operator of the specific track, or if necessary, by the Rail Traffic Management Centre, based on current situation. It is possible to enquire about access to a storage siding by submitting an advance plan in the JETI system. In this case, Finrail's traffic control processes the plan and, on approval, converts the advance plan to a capacity reservation. As a rule, it is not allowed to store rolling stock on line tracks intended for train services or on route tracks of a meeting point on a single-track railway line.

#### 4.2.4 Requesting service facility capacity

Service facility capacity is reserved by contacting the infrastructure manager and the service facility operator. In addition to the Network Statement, information on service facilities is provided in the Network Statement's public materials (Traffic operating point services, "Liikennepaikkojen palvelut") and the map service<sup>83</sup>.

#### 4.2.5 Developing the Process of Rail Capacity Management

#### Line capacity

The infrastructure manager is developing the management of line capacity in accordance with the needs of a multi-operator environment. The aim is to develop an operating model in which

- the capacity planning and acceptance processes are guided by uniform planning principles
- the planning is carried out using it-systems that support capacity planning and e.g. conflict detection track-specifically. Planning is based on principles and methods that allow the formation of a detailed description of the utilisation rate and use of the planned capacity
- the workability of the capacity arrangements for the year is ensured by simulating them at least on the most important routes during capacity coordination before the capacity plan is approved

The methods are developed in cooperation with stakeholders. The new methods are expected to be introduced in the timetable period 2022.

#### Railway yard capacity

The infrastructure manager continues its work to define a more detailed level of capacity management in railway yards (such as the level of detail and purpose of track reservations, from the annual level to daily operations). The aim of this work is fair allocation of capacity in a multi-operator environment and sufficient dissemination of situational awareness to different operators. This development work is carried out in collaboration with railway operators, other infrastructure managers, the traffic control company and railway maintenance. The implementation of the new operating models resulting from this develoment work is planned in collaboration with the operators. Information about the changes are included as required in the infrastructure manager's instruction process.

<sup>&</sup>lt;sup>83</sup> https://vayla.fi/web/en/commercial-railway-transport/network-statement

# 4.3 Schedule for Path Requests and Allocation Process

#### 4.3.1 Schedule for Working timetable

The timetable period in railway traffic starts annually at the second weekend of December, at 00.00 hrs on the night between Saturday and Sunday, and ends at the corresponding time the following year. The timetable period 2021 begins on 13 December 2020 and ends on 11 December 2021. Correspondingly, the timetable period 2022 starts on 12 December 2021 and ends on 10 December 2022. Applicants shall request capacity no earlier than 12 and no later than 8 months ahead of the timetable period. One request may include all the changes in traffic to be made during the timetable period.

Requests received after the 13 April 2020 deadline shall be processed in accordance with the following process. Decisions on the allocation of capacity for regular services may be adjusted for the remaining timetable period during the timetable period concerned at specified adjustment dates, provided that these adjustments do not affect the capacity allocated to other applicants or international traffic within the European Economic Area; or that the adjustments have been approved by all parties. The adjustment dates take place at the beginning of the timetable period on the night between Saturday and Sunday at 00:00 hours and on the second weekend after the end of the school year on the night between Sunday and Monday at 00:00, i.e. between weeks 24 and 25. In addition to the above dates, the infrastructure manager may for special reasons decide on other adjustment dates.

	Request submission date	Allocation decision	Entry into force
1.	Wed. 28/10/2020	Fri. 6/11/2020	Sun. 13/12/2020
2.	Wed. 09/12/2020	Fri. 18/12/2020	Mon. 01/02/2021
З.	Wed. 10/02/2021	Fri. 19/02/2021	Sun.28/03/2021
4.	Wed. 05/05/2021	Fri. 14/05/2021	Mon.21/06/2021
5.	Wed. 30/06/2021	Fri. 09/07/2021	Mon.16/08/2021
6.	Wed. 15/09/2021	Fri. 24/09/2021	Sun.31/10/2021

The adjustment dates for the timetable period 2021 are most likely:

The infrastructure manager shall inform all clients, the Ministry of Transport and Communications, the Regulatory Body and all other parties concerned about the new adjustment dates for regular services. The decision on the adjustment dates will be published on the infrastructure manager's website<sup>84</sup>. If a decision to abolish the observance of summertime in 2021 is made prior to April 2020, the possibility to move the adjustment dates taking place on Sundays 28 March and 31 October to the following Mondays may be considered.

 $<sup>^{84} \</sup> http://www.vayla.fi/ammattiliikenne-raiteilla/liikennesuunnittelu/saannollisen-liikenteen-muutokset$ 

#### 4.3.2 Schedule for Ad-Hoc Requests

Information about requesting ad hoc capacity can be found in the instruction for requesting rail capacity<sup>85</sup>.

#### 4.3.3 Applying for Railway yard Capacity

Currently, the infrastructure manager allocates railway yard capacity to railway operators in access agreements and, if necessary, in railway yard agreements included in the access agreement. The objective is to replace these agreements completely or partially during 2020 –2022with a data system which is currently under development. Railway operators shall report and specify their need to use railway yards in the access agreement.

Plans for the use of tracks in railway yards are also prepared and agreements on the use concluded on a daily basis and when adjustments to regular railway traffic are made, as described in Appendices 4B, 4C and 4D.

#### 4.3.4 Service facility capacity

Railway undertakings shall provide the infrastructure manager with information on their railway yard access and service needs when drawing up the network access agreement. Especially important is to provide information on track capacity needs for shunting operations and storage sidings and possible special service requirements (e.g. water outlets) if the requirement is critical or differs from normal use.

Requests concerning the use of the service facility shall be delivered to the infrastructure manager and the service facility operator without delay after becoming aware of the service requirement.

Capacity allocation of service facilities is included in the current development of datasystems.

The capacity of private sidings is requested in the manner specified in the relevant infrastructure manager's Network Statement.

Deadlines for responding to the service request are specified in the instruction TRAFICOM/270984/03.06.04/2019<sup>86</sup>.

<sup>&</sup>lt;sup>85</sup> https://julkaisut.vayla.fi/pdf7/rautatieohjeet\_web.pdf

<sup>&</sup>lt;sup>86</sup> https://www.saantelyelin.fi/asiointi/palvelupaikkaan\_liittyvat\_ohjeet

# 4.4 Allocation Process

#### 4.4.1 Coordination Process

Based on the applications, the Finnish Transport Infrastructure Agency's unit Infrastructure Access draws up the rail capacity allocation proposal (called "draft working timetable" in the legislation) for the next timetable period no later than four months after the deadline for the submission of requests for capacity. It has, however, been agreed by European railway infrastructure managers that no more than 2.5 months shall be used for the coordination of requests.

In cases of conflicting train path requests, the infrastructure manager will attempt to ensure the best possible matching of all requests. In the coordination procedure, the infrastructure manager is entitled to provide alternative train paths, which differ from the original request. The infrastructure manager will resolve possible conflicting applications for train paths through negotiations with applicants. In the coordination procedure and negotiations the infrastructure manager shall take into account the needs of passengers, the freight sector as well as track maintenance and optimum use of the railway network.

The negotiations are based on the following information to be provided by the infrastructure manager within a reasonable timeframe, free of charge and in written form:

- 1) the train paths requested by relevant applicants on the same route section;
- 2) train paths that have preliminarily been assigned to several applicants on the same route section;
- 3) provision of alternative rail capacity on relevant train paths;
- 4) information about the criteria for capacity allocation.

The infrastructure manager will send the capacity allocation proposal for the information of applicants and other interested parties within the prescribed period of time. The consultation period (at least one month) begins when the infrastructure manager announces the completion of the capacity allocation proposal on its website<sup>87</sup>. In addition to the allocation suggestions, there is more detailed information about the comment procedure on the website

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

The infrastructure manager shall inform applicants about how the rail capacity has been allocated between applicants. If the infrastructure manager has decided to reserve part of the capacity to be allocated later, all applicants shall be informed of this. More information about requesting, allocating and

<sup>&</sup>lt;sup>87</sup> http://www.vayla.fi/ammattiliikenne-raiteilla/liikennesuunnittelu/saannollinen-ratakapasiteetti

cancelling rail capacity can be found in the instruction for requesting rail capacity ("Ratakapasiteetin hakuohje").

#### 4.4.2 Dispute Resolution Process

Railway undertakings may appeal against a capacity allocation decision by the infrastructure manager by filing a claim for rectification with the Rail Regulatory Body. For further information, see Section 1.4.3.

#### 4.4.3 Congested Infrastructure and Priority Criteria

Where conflicting requests for train paths during the scheduling procedure cannot be adequately satisfied, despite negotiations and compromises (see instruction for requesting rail capacity), the infrastructure manager will declare the element of infrastructure in question to be congested. This also applies to infrastructure that obviously will be congested during the timetable period. For an element of congested infrastructure, the infrastructure manager may introduce an increased basic infrastructure charge. If an increased charge has not been introduced, or an introduced charge has not had effect on reducing the congestion, the infrastructure manager may apply priority criteria according to which a specific traffic type may be given priority when allocating capacity on an element of congested infrastructure. The priority criteria shall take into account the societal impact in relation to other traffic services. When establishing the priority criteria, the service providers shall be treated in a fair and non-discriminatory manner.

Non-disclosure provisions notwithstanding, the infrastructure manager is entitled to obtain the necessary confidential information, and the information grounds, from the capacity applicants in order to establish the priority criteria. The infrastructure manager shall have established the priority criteria no later than ten days after the conclusion of the negotiations on the element of the congested infrastructure.

When infrastructure has been declared to be congested, the infrastructure manager will carry out a capacity analysis, as referred to in the Rail Transport Act. This analysis will especially focus on steering the railway traffic to other line sections, drawing up a new timetable plan, amendments to speed limits and improving the condition of the railway network. The infrastructure manager will compile a capacity enhancement plan within six months of the completion of the capacity analysis.

# Priority criteria for the allocation of capacity on congested infrastructure and coordination principles applied in Finland

In the coordination phase of allocating rail capacity, conflicting capacity requests on congested infrastructure may be put in order of priority, as presented in Table 1. The application of this priority order is based on the assumption that each train can be defined during its whole journey by one of the priority groups listed in the table.

The priority group may, however, change during the journey. For example, a passenger train may belong to the Synergic transport category for only part of

the journey and otherwise fall under the category Fast passenger transport. Similarly, the priority group may change if a freight train formation changes.

If necessary, the infrastructure manager will arrange an assessment discussion with the rail capacity applicant about whether the priority group reported for the train meets the infrastructure manager's criteria on the priority order assigned to the train.

Table 1.	Priority categories used in Finland and the priority order used for
	allocating railway capacity.
Priority	Type of transport
1	Synergic passenger transport <sup>88</sup>

FILDITLY	iype of transport
1.	Synergic passenger transport <sup>88</sup>
2.	Fast passenger transport <sup>89</sup>
	Synergic freight transport <sup>90</sup>
3.	Other passenger transport
	Other regular freight transport
4.	Freight transport not requiring strict timetables
5.	Other transport <sup>91</sup>

The order within priority groups 2 and 3 may be determined per line section if the services on the line section primarily comprise passenger or goods transport.

The possibility of carrying out necessary maintenance work must be ensured when applying the priority criteria.

In the phase when capacity requests are being coordinated, several criteria may be applied to examine trains within the same priority category. It should be noted that frequent train services have higher priority than less frequent train services. In the coordination process, trains travelling longer distances may have higher priority than trains travelling shorter distances, if changes to the timetables of the train travelling longer distances would lead to several other changes on the train route. The number and length of additional stops due to other traffic must not be unreasonable in relation to the duration of the whole journey.

Factors taken into account in the coordination of passenger services may include the estimated total number of passengers, the significance of the train

<sup>&</sup>lt;sup>88</sup> In passenger transport, the term "synergic passenger transport" refers to the group of trains that form a transport system producing clear added value for customers. Such a system could be, for example, the Basic Interval Timetable, with trains running within or between large city centres, and which have good onward rail or other public transport connections. However, traffic density may depend on the passenger volumes in the area.

<sup>&</sup>lt;sup>89</sup> The term "fast passenger transport" refers to transport that does not belong to the synergy-producing transport system. As a rule, trains are made up of wagons for long-distance traffic, and trains only stop at the most important stations. International passenger transport may belong to this category.

<sup>&</sup>lt;sup>90</sup> Synergic freight transport" refers to a train or a group of trains that is tightly connected to industry processes. Trains carry goods, for example, between industrial plants or from industrial plants directly to ships in port, which requires a strict timetable for train traffic. Typically, transported goods are not intermediately stored, but are carried straight from the factory to the train and further to the ship in port. In general, a certain type of wagons assigned for these transports, are used.

<sup>&</sup>lt;sup>91</sup> "Other traffic" refers to, e.g., traffic in connection with track work, non-commercial traffic or shunting operations carried out on the line sections.

in the transport system and the onward connections from the train to other trains and transport modes. The infrastructure manager shall, if necessary, be given information about the volume of passengers for the coordination process. In passenger transport, it can also be assessed how the coordination affects rolling stock and personnel duty rotations, so that these do not cause unreasonable inconvenience for the operators after the coordination. During peak hours, trains running in the congested direction are prioritised.

When coordinating freight transport, energy-efficiency in situations with meeting trains should be taken into account. For example, heavy trains should not be stopped repeatedly due to other train traffic. The aim should be to locate meeting trains at traffic operating points where the terrain does not hinder the movements of a slowly arriving or departing train, possibly causing disruptions to other traffic. The longitudinal gradient data of tracks is available in the rail data extranet site<sup>92</sup> and the Digitraffic.fi service. Trains carrying dangerous goods can only stop for longer periods of time at railway yards designated to handle dangerous goods.

#### Priority criteria on railway yards

The following priority order for operating on, issuing permits for and using the tracks on railway yards shall primarily be used, unless otherwise agreed upon for specific traffic operating points:

- 1. Use of the rail capacity granted in the rail 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 / passenger 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

Permission for similar type of traffic is granted in the order that permission has been requested. The traffic operator will consider the permits to move track work units (due to malfunctions, service and other movements) at the traffic operating point on a case-by-case basis.

The traffic operator will take impacts of the disruption or the malfunction into account and apply the priority criteria when issuing operating permits.

In situations where a permit to use a storage siding has been issued and it is already used for storage of rolling stock, and where the track, for wellgrounded reasons, is needed for operations of higher priority, the Rail Traffic Management Centre fist 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 shall, without unnecessary delay, move its stationary rolling stock to a location assigned by the Rail Traffic Management Centre. If the railway operator fails to arrange for its rolling stock to be moved within a

<sup>&</sup>lt;sup>92</sup> https://www.vayla.fi/palveluntuottajat/aineistot/ratatiedon-extranet

reasonable period of time, another party may move the wagons, as referred to in Section 4.8.2, to ensure smooth flow of traffic. If necessary, the Rail Traffic Management Centre defines the meaning of reasonable time.

The aim is to ensure smooth operations and predictive analyses of the use of railway yard tracks, so that there is sufficient information on track reservations and the general need for usage, before permits to store rolling stock on the track are issued. A conflict situation as described above is therefore an exceptional situation to be resolved separately.

Railway operators shall contact the infrastructure manager about any needs for storage of rolling stock that have arisen during the timetable period, as referred to in Sections 4.2.3.

Operations on the railway yard may not intentionally obstruct the operations of another party. Rolling stock may not be unnecessarily stored at turnouts or single cross-overs (for example during breaks). It shall be possible to operate between the parts of the railway yards at all times.

Railway operators shall also ensure that the maintenance of tracks can be performed and, for example, move rolling stock as required. Snow clearing operations may be prioritised over the storage of rolling stock and other requirements.

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

The infrastructure manager may derogate from the general priority order in favour of an applicant operating international services or such services that otherwise maintain or improve the functioning of the rail transport system or public transport. The same applies to cases where the rejection of the application would cause unreasonable inconvenience to applicants or to the business activities of their customers. Derogation from the procedure of setting priority criteria when allocating an element of congested infrastructure shall be preceded by a rail capacity analysis, as referred to in the Rail Transport Act.

#### 4.4.4 Impact of Framework Agreements

For the time being, the infrastructure manager does not conclude framework agreements (see Chapter 2.3.1). However, in order to ensure a smoothly functioning timetable structure, applicants are requested, if possible, to provide preliminary information on remarkable adjustment needs concerning the timetable structure in effect at the time. The information should be provided no later than 11 months before the start of the new timetable period so that the infrastructure manager can start co-operations for timetable coordination as early as 10-11 months before the start of the new timetable period, if necessary.

The process described in Chapter 4.2.4 will replace this process starting from the timetable year 2022.

#### 4.5.1 Machinery Operations and Storage

The railway network may also be used for transferring track machines from depots to worksites, between worksites, and for maintenance purposes.

Under the Rail Transport Act, a safety certificate issued by the Finnish Transport and Communications Agency Traficom is required for train or shunting operations outside the area reserved for track works. The safety certificate is issued upon application for a maximum of five years at a time. The requirements for obtaining a safety certificate are that the traffic operator engaged in infrastructure management has sufficient liability insurance and an adequate risk management system, its stock has been approved by the Finnish Transport and Communications Agency Traficom and that the persons conducting the traffic operations are competent to do so.

Requests for the rail capacity required to operate train services shall be submitted in the LIIKE system. Use of storage tracks shall be agreed upon directly with Finrail's traffic control and the applicant saves an andvance plan for this in the JETI system. Finrail changes the advance plan into a capacity reservation, whereby the track or a track section is reserved for the operator in question for a certain period of time.

The TURO publication contains detailed instructions on the track work machinery as well as on the persons and railway undertakings with traffic safety duties operating on the track<sup>93</sup>.

#### 4.5.2 Coordination of Track works and Train services

#### 4.5.2.1 Consulting Stakeholder Groups

The infrastructure manager conducts negotiations with applicants for rail capacity, railway undertakings, and maintenance and transport providers about the timing of track work, track possessions 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 a 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.

The collaboration between infrastructure managers is performed in a separate working group convened by the Finnish Transport Infrastructure Agency.

<sup>&</sup>lt;sup>93</sup> https://julkaisut.vayla.fi/pdf7/rautatieohjeet\_web.pdf

#### 4.5.2.2 Appendix 3K: track works

At the time of the publication, Appendix 3K provides the best estimate of the track work affecting traffic during the timetable period 2021 and of the rail capacity needs for railway infrastructure management arising from the work. Appendix 3K to the Network Statement will be updated in accordance with Section 1.6.2.

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

The capacity restrictions due to track works in 2023 (the first consultation round) and in 2022 (the second consultation round) will be published in autumn 2021 in light of the available information and in accordance with the publication and consultation procedure for capacity restrictions according to the EU Commission-delegated regulation EU 2017/2075 (ANNEX VII (8)). The capacity restrictions will be published in the Network Statement's Appendix 3K.

Track works affecting the timetable period and that the infrastructure manager has been aware of at least six months before the change of the timetable period, and due to which capacity restrictions have to be imposed on traffic, shall be reported no later than four months before the change of the timetable period (ANNEX VII (12)).

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

The allocated track capacity is at the disposal of the railway operators, unless the capacity overlaps the track possessions required for track 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 unexpected infrastructure maintenance work not foreseen in the annual plan must be carried out. These situations are due to the following factors: safe traffic services have to be ensured through capacity restrictions; or the infrastructure manager have no influence on the timing of the restrictions; or application of the time limits is cost-inefficient; or it causes unnecessary damage to railway asset management; or in other situations, where all concerned approve the change (EU 2017/2075, ANNEX VII (14)).

In those cases, the rail capacity allocated to railway undertakings that overlaps infrastructure maintenance needs is not available to railway operators and notification of this is provided no later than:

- 2 months before work commences, if the work has a non-recurring traffic impact.
- 3 months before work commences, if the work has daily traffic impacts lasting for weeks, months or for several weekends.
- 4 months before work commences, if the impact affects high-speed international passenger transport.

In addition to the annual planning, railway capacity is reserved for maintenance operations on the terms of railway traffic, and the railway capacity is defined in the JETI system. When the capacity required for track work has been entered into the Advance Information System and thereby reserved for it, the Railway Operators can no longer apply for it or use it. If not all parts of the Advance Information System are used in the railway yard, information is provided by the traffic management company or, during malfunctions, by the traffic control.

According to the snow conditions snow removal is prioritized on the central railway yards of the central railway network. Detailed snow removal plans are available at the rail data extranet site. 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 there is only a small number of lines that can be used as alternatives. For this reason, major track work is often carried out when there is low traffic. When diversionary rail routes are available, the rail 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.

#### 4.5.2.5 Ordering Track Possession Affecting Traffic

The party requiring track possession must contact the traffic control and management company separately and agree on the track possession and its details accordance with the infrastructure manager's decision on track possessions no later than 2-4 months before the work is scheduled to start. For contact details of Finrail's traffic control, visit the Finnish Transport Infrastructure Agency's website<sup>94</sup>: The party performing the work must have been allocated rail capacity, granted permission for track works, and if necessary, granted a voltage cut-off prior to starting the work during the allocated track possessions.

#### 4.5.2.6 Maintaining Track Work Information

The data in Appendix 3K on major track works affecting services are updated and published in the Advance Information System, JETI. Data from JETI are forwarded to the LIIKE system and published in the TMFG's open data <sup>95</sup>.

 $<sup>^{94}\,</sup>http://www.vayla.fi/ammattiliikenne-raiteilla/liikennesuunnittelu/liikennesuunnittelualueet$ 

<sup>&</sup>lt;sup>95</sup> https://www.rata.digitraffic.fi/vuosisuunnitelmat/

Each party is responsible for its own communication concerning track works. The infrastructure manager is responsible for communication regarding track and rail accessibility and for providing information about track works. The rail-way undertakings are responsible for their own train services and for providing information about their timetables. The parties coordinate beforehand and go over the measures to be taken concerning the communication regarding the track works.

# 4.6 Non-usage

Railway operators shall without delay notify the infrastructure manager of railway or service facility capacity that will not be used.

The infrastructure manager has the right to cancel all or part of the capacity allocated to an applicant for the rest of the valid timetable period, if the applicant has used less than the required threshold quota over a period of at least 30 days. Currently, in Finland, the threshold quota for the minimum use of capacity is 95 % for passenger trains and 50 % for freight trains. The threshold quotas refer to rail capacity for regular services, which are followed up on a monthly basis. If threshold quotas have not been reached, the infrastructure manager will ask the capacity manager to explain the reasons for not having used the capacity. However, action will not be taken unless the train service has been cancelled more than three times in 30 days.

The infrastructure manager may not, however, cancel the rail capacity if the failure to use it is due to non-economic reasons beyond the applicant's or the railway operator's control. The infrastructure manager always cancels the rail capacity of a railway operator for the time during which the general requirements for railway operations described in Chapter 2.2.1 are not met.

The use of granted railway capacity shall be monitored in connection with monitoring the access agreement and, if required, at other times during the timetable period.

# 4.7 Exceptional Transports

A permit for exceptional transports issued is always required for transports on vehicles that exceed the loading gauge. The permit is issued by the Finnish Transport Infrastructure Agency's Railway Technology Unit and applications for exceptional transport permits shall be submitted well in advance by email: erikoiskuljetukset.rata@vayla.fi. The application should include information on weights and dimensions; vehicles, lines and tracks to be used for the transport; and the estimated time of transport. The permits are subject to charge, and they are charged in compliance with the effective Government Decree that applies to the chargeable performances of the infrastructure manager.<sup>96</sup> The charge is based on work performance and is defined separately for each transport.

<sup>&</sup>lt;sup>96</sup> https://www.finlex.fi/fi/laki/alkup/2017/20170653

When the infrastructure manager has issued a permit for exceptional transports, the permit applicant shall submit at least the track diagrams of the hindrance report. The number of the exceptional transport shall be mentioned in connection with the submission of the report.

The following information shall be added to the basic data in the capacity application for exceptional transports:

- that the application is for exceptional transport ;
- the permit number of the exceptional transport; and
- in the text field for additional schedule information: the special conditions concerning the driver and/or traffic control (for example, the transport must not meet another transport exceeding the loading gauge on the adjacent track).

When allocating rail capacity, it must be ensured that the application includes sufficient information about the exceptional transport.

Without a permit issued by the infrastructure manager, the railway operators may transport exceptional transports, which horizontally exceed the loading gauge by no more than 300 mm, at a height of 1,300–4,300 mm above the rail surface, at their own risk. The railway operator should report such transports to the infrastructure manager. The railway operator is responsible for ensuring a smooth traffic flow during the transport, and for requesting that the infrastructure manager issue the required rail capacity. The special characteristic of the transport must be taken into consideration in the request for rail capacity. Two such transports, exceeding the loading gauge, must not meet on adjacent tracks.

A permit issued by the infrastructure manager is always required for special transports with heavy duty cargo wagons.

The terms and conditions of transports with vehicles exceeding the loading gauge are laid down in Appendix 3D. The transport terms and conditions for overweight wagons can be found in Appendix 3M.

# 4.8 Special Measures to be taken in the Event of Disturbance

#### 4.8.1 Principles

The traffic control service is described in Section 5.2.

The infrastructure manager has the right to cancel the rail capacity completely or partially on a train path provisionally out of service due to a technical failure in the railway network, an accident or other incident.

In such case, the infrastructure manager offers the operator alternative train paths, as far as possible. infrastructure manager is, however, not obliged to compensate for damage that may be caused to the operator, unless otherwise is agreed upon in the railway network access agreement.

Compensations due to disruptions are dealt with in Section 6.5.

The organisations involved must designate partners that are authorised to make decisions contributing to operational solution of disruptions (24/7). This operational group is responsible, under the direction of the national traffic control service, on the coordination of measures and on making the necessary anticipatory decisions on providing train services in situations involving major disruptions.

By concluding a separate agreement with the infrastructure manager, a railway undertaking may also place members of its operational staff in the facilities of the traffic control centre so that closer cooperation between rolling stock operations management and traffic control can be ensured during disruptions. The traffic control facilities in Pasila can accommodate altogether five workstations for operators' representatives. A corresponding opportunity cannot be offered in other localities. An operator may only position such personnel whose duties involve supporting the management of traffic disruptions in the facilities. The available workstations will be distributed equally among the operators that wish to use them, and their use must be agreed upon with Finrail Ltd.

For disruptions, the infrastructure manager has, in cooperation with railway operators, prepared cards describing how to deal with different types of disruptions. The purpose of the cards is to produce a clear situation 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.

The infrastructure manager is responsible for preparing an annual traffic reduction plan in cooperation with different railway operators. The purpose of the plan is to prepare for traffic reductions on days with heavy snowfall when snow clearing and cleaning of points reduce capacity available to traffic. Each railway operator must be prepared to suggest which train services could be cancelled 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.

Finrail is responsible for keeping the reduction plan and the information cards up to date. The operating model for disruptions management is being jointly developed by the infrastructure manager, Finrail and railway operators.

#### 4.8.2 Operational Regulation

The infrastructure manager determines the rules on the management of disturbances between railway operators. Railway operators may present their own proposals for instructions how to handle disturbances affecting their own trains.

The Rail Traffic Management Centre of the Finnish Transport Infrastructure Agency resolves instances of disruption and provides guidelines on the correct action to be taken in such situations according to sections 4.8.3 (Foreseen problems) and 4.8.4 (Unforseen problems).

In its instruction "Ohje varautumisesta rautatieonnettomuuksiin" (OVRO)<sup>97</sup>, the infrastructure manager defines the actions to be taken in case of an accident and how to prepare for accidents in advance.

#### Safety issues

Safety issues are dealt with in the network access agreement and in Appendix 4A to the Network Statement. The infrastructure manager gives instructions within its jurisdiction that have to be complied with in the state-owned railway network managed by the Finnish Transport Infrastructure Agency.

#### Moving rolling stock of another party

Moving of rolling stock of another party shall comply with the instruction Junaliikenteen ja vaihtotyön turvallisuussäännöt (Jt)<sup>98</sup>.

The parties agree between themselves on the costs that may incur by the move and possible damages.

#### 4.8.3 Foreseen Problems

The Rail Traffic Management Centre determines the order of priority of trains during disruptions. Disruption management and the manner in which connecting trains should wait for delayed trains are detailed (in Finnish) in the instructions "Häiriötilanteiden hallinta ja yhteysjunien odotus"<sup>99</sup>.

#### 4.8.4 Unforeseen Problems

The infrastructure manager and the railway operators shall be prepared for railway accidents in their fields of activity and follow the Finnish Transport Infrastructure Agency's guidelines "Ohje varautumisesta rautatieonnetto-muuksiin" (OVRO)<sup>100</sup> on how to prepare for railway accidents.

<sup>&</sup>lt;sup>97</sup> https://julkaisut.vayla.fi/pdf7/rautatieohjeet\_web.pdf

<sup>&</sup>lt;sup>98</sup> https://julkaisut.vayla.fi/pdf7/rautatieohjeet\_web.pdf

<sup>&</sup>lt;sup>99</sup> https://julkaisut.vayla.fi/pdf8/ohje\_2016\_tyoohje\_rautatieliikenteenohjaukselle\_web.pdf

<sup>&</sup>lt;sup>100</sup> https://julkaisut.vayla.fi/pdf7/rautatieohjeet\_web.pdf

The infrastructure manager is responsible for the clearing operations of the train and 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 and in the Commission Regulation 2015/995. The infrastructure manager has published guidelines on how to prepare for railway accidents (OVRO). These guidelines apply to both railway operators and to all other operators in the state-owned railway network.

The infrastructure manager may perform the clearing operations itself or engage its network of service providers and cooperative partners. The service providers or cooperative partners are subordinated to the infrastructure manager's operative management, unless otherwise provided by law. The Finnish Transport Infrastructure Agency grants authoritative and priority decisions concerning clearing operations. The infrastructure manager may give instructions on the training or certification required for the task.

The railway operator is obliged to provide the infrastructure manager with any specific information regarding the clearing operations or to be forwarded to the rescue authorities as provided in 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). Moreover, the railway operator is also obliged to, if necessary, instruct the breakdown gang on how to safely recover, de-energise and safeguard the train. This is done to ensure the safety of the rolling stock as well as the people performing rescue and clearing operations. In cases of accidents and exceptional situations, the railway operator shall, at request, provide specialist train technical advice at its own cost.

The division of costs incurred by accidents and clearing operations between involved parties complies with the provisions laid down in the Rail Traffic Liability Act and the Tort Liability Act.

The infrastructure manager is prepared to restore the track to an operable condition as quickly as possible and then, within a reasonable time, to the condition it was in before the accident. The infrastructure manager agrees thereupon when making the railway network maintenance agreements. Performing several simultaneous tasks and the possible prioritisation of tasks affects the availability of clearing and rescue services.

If any safety deficiencies affecting traffic are detected in the railway network, the infrastructure manager may have to reduce the applicable axle load or speed limit.

The Ministry of Transport and Communications provides guidelines for and oversees the different rail sector operators' preparedness for accidents and exceptional circumstances.

## 4.9 Allocation of Capacity for Service Facilities

The allocation of capacity for service facilities is described in Chapter 5.3.

# 5 Services

# 5.1 Introduction

Provisions on services to be supplied to the railway operators are laid down in the Commission Implementing Regulation (EU) 2017/2177 of 22 November 2017 on access to service facilities and rail-related services<sup>101</sup>, the Rail Transport Act, and in the Government Decree on services supplied to railway operators (1489/2015)<sup>102</sup>. According to the legislation, services are divided into services included in the minimum access package, access to service facilities, additional services and ancillary services.

Services concerning access to the railway network are described in Chapter 5, Appendix 3B and in the map service. These services may be supplied by the infrastructure manager or other parties. As a rule, the services supplied by the infrastructure manager are agreed upon in the access agreement. Any changes after the signing of the agreement are agreed upon separately with the railway operator or operators and updated as required in the form of an appendix to the access agreement.

Information about these changes will be posted on the infrastructure manager's website <sup>103</sup>.

The prices for the services provided by the infrastructure manager are listed in Chapter 6.

The service facility descriptions of services provided by the Infrastructure Manager are published in the in appendices 4B and 5D-5P of the Network Statement. The service descriptions of service facilities operated by other operators in the state-owned railway network are published on the FTIA's website

https://vayla.fi/ammattiliikenne-raiteilla/rautateidenverkkoselostus/rataverkon-palvelun-tarjonta.

# 5.2 Minimum Access Package

The infrastructure manager shall, in return for the infrastructure charge referred to in Section 139 of the Rail Transport Act, supply to all railway undertakings, in a nondiscriminatory manner, the services included in the minimum access package laid down in point 1 of Annex II to Directive 2012/34/EU of the European Parliament and of the Council establishing a single European railway area<sup>104</sup>. Moreover, the infrastructure manager shall, in return for the infrastructure charge, supply access to the facilities referred to in Section 133 of the Rail Transport Act.

<sup>&</sup>lt;sup>101</sup> https://eur-lex.europa.eu/legal-content/FI/TXT/PDF/?uri=CELEX:32017R2177&from=EN

<sup>&</sup>lt;sup>102</sup> https://www.finlex.fi/fi/laki/alkup/2015/20151489

<sup>&</sup>lt;sup>103</sup> http://www.vayla.fi/ammattiliikenne-raiteilla/rautateiden-verkkoselostus

<sup>&</sup>lt;sup>104</sup> https://eur-lex.europa.eu/legal-content/FI/TXT/PDF/?uri=CELEX:02012L0034-20161224

The following services, included in the minimum access package as referred to in Section 132 of the Rail Transport Act, are supplied by the infrastructure manager:

- 1) handling of requests for railway infrastructure capacity (described in Chapter 4);
- 2) the right to utilise granted capacity;
- 3) use of the railway infrastructure, including railway junctions and turnouts;
- 4) train control including signalling, regulation, dispatching and the communication and provision of information on train movement;
- 5) connection to the infrastructure manager's transmission network and use of electrical supply equipment for traffic on electrified line sections, as referred to in Sections 2 and 3 in the Network Statement;
- 6) all other information required to implement or operate the service for which capacity has been granted.

The infrastructure manager levies an infrastructure charge for all traffic operations for which rail capacity has been granted. The principles for levying the infrastructure charge and the railway infrastructure tax are described in Chapter 6.

#### Traffic control and management

The infrastructure manager is responsible for traffic control and traffic management in the state-owned railway network. The infrastructure manager purchases the traffic control and management services from the traffic control company. In addition to the rail traffic control service, the service also includes the national rail traffic control and management service (Rail Traffic Management Centre). Traffic control's contact details are available at the rail data extranet site<sup>105</sup>. Traffic control's service hours and service restrictions are given in the list of traffic control service hours, which can also be viewed at the rail data extranet site.

Railway operators may influence traffic management at two different levels: at high level and at the operational level. At the high level, railway operators may comment on the anticipatory information to be included of the Network Statement, influence the new timetable period during access agreement negotiations (Chapter 2.3) and influence the current timetable period in the monitoring groups of the access agreements. The access agreement meetings are mutual forums for the infrastructure manager and the railway operator.

At the operational level, railway operators may influence the procedure for coordinating regular rail capacity for the traffic management (Section 4.4.1), in separate collaboration forums (for example, Section 4.5.2.1) and in operational situations. In the operational level forums, the infrastructure manager offers railway operators and traffic clients the opportunity to contribute to the development of operating models together with the infrastructure manager, the traffic control company and other railway operators.

The operational environment of Finnish railways and the responsibilities of operative work are described in Annex 5 C.

<sup>&</sup>lt;sup>105</sup> https://vayla.fi/palveluntuottajat/aineistot/ratatiedon-extranet

Details of the management of track use in the Helsinki and Ilmala railway yards are provided in Appendices 4C and 4D.

Feedback on the work of the traffic control and management service (traffic control company) can be given to the Finnish Transport Infrastructure Agency personnel responsible for the rail traffic control service agreements or via the feedback channel (www.palautevayla.fi).

Details of the chargeable additional traffic control service for shunting operations provided by the infrastructure manager are given in Section 5.3.2.1 and in appendices 5A and 5D.

# 5.3 Access to Service Facilities

#### 5.3.1 Access to service facilities

As laid down in Section 133 of the Rail Transport Act (1302/2018) and in the Government Decree 1489/2015, the infrastructure manager, the railway operator or the operator of another service facility shall give access, including track access, to the following services facilities, when they exist, and to the services supplied in these facilities as referred to in point 2 of Annex II to Directive 2012/34/EU of the European Parliament and of the Council<sup>106</sup>.

Access to services supplied by the infrastructure manager is mainly agreed upon in the access agreements. Availability of other services and access to these shall be negotiated and agreed upon with the service providers.

Examples of such services may be access to the following services (or other services not mentioned here):

- 1) passenger stations, their buildings and other facilities, including travel information display and suitable location for ticketing services;
- 2) freight terminals;
- 3) railway yards and train formation facilities, including shunting facilities;
- 4) 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;
- 6) other technical facilities than those mentioned in point 3 and 5, including cleaning and washing facilities;
- 7) maritime and inland port facilities which are linked to rail activities;
- 8) relief facilities;
- 9) refuelling facilities and supply of fuel in these facilities, charges for which shall be shown on the invoices separately.

Railway operators shall provide information on the required services and need for access to railway yard tracks closer to the time when capacity is needed. Applications for ad hoc capacity shall include information about the need for access to railway yards and the required services.

<sup>&</sup>lt;sup>106</sup> http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2012:343:0032:0077:FI:PDF

Track access required to access service facilities shall be given in return for the basic infrastructure charge. The operator of the service facility is entitled to collect a charge according to Section 133 in the Rail Transport Act for access to the service facility and track access at the service facilities and for the services supplied at these.

#### 5.3.1.1 Passenger Stations

The infrastructure manager owns and provides access to the tracks and passenger platfors at passenger stations. The service facility description is provided in Appendix 5J.

The facilities at passenger stations that may be rented for railway traffic purposes and that are owned by the infrastructure manager and other owners, as well as their contact information, are presented in Appendices 3Q and 3R.

#### System for passenger information and announcement data

The passenger information provided at railway stations is part of the railway infrastructure and is hence the responsibility of the infrastructure manager. The infrastructure manager is responsible for the information systems at railway stations and in platform areas. This includes timetable screens, announcement systems, route indicators, signs indicating station names and track numbers, and timetable display cases in the station areas. The railway operator or the HSL is responsible for the information in the timetable display cases. The railway operator is responsible for providing information about ticket availability, as well as for the passenger information on the trains. The traffic control company is responsible for the passenger information system and produces the electronic, changing information for display units and announcements for the stations.

To be able to produce the passenger information service, the railway operator must provide the passenger information centre with the following data:

- Basic data: train type, train number, line ID, route, stops (so-called commercial stops), scheduled arrival and departure times, track and sectorisation data, train formation
- Pass-by station data: scheduled arrival and departure times, track, train formation
- Change data: substitutive transportation and its type (bus/taxi), the number of transportation units, their route, schedule, station specific departure locations, ticket eligibility
- Train connection: substitutive train connection (train number, line ID) and ticket eligibility
- Operation data: Diversion traffic, reduced/interrupted service, additional/charter traffic, changes to the basic structure of traffic, e.g. changes to timetables
- Special communication data: two-capacity train connections, international traffic, other matters that require special communication.

#### 5.3.1.2 Freight Terminals

Freight terminals in the state-owned railway network are marked with "K" in the table in Appendix 3B. Most of the loading facilities in the state-owned

railway network are used for loading timber. Private loading areas are marked with "Y".

#### **Timber loading facilities**

The timber loading facilities in the railway network are mostly used for storing and/or loading timber. The timber loading facilities in the railway network available to the infrastructure manager of the state-owned railway network are described in Appendices 3B and 3T, and in the map service of the Network Statement. The land areas and sidings in these facilities are owned by the infrastructure manager of the state-owned railway network. There may also be loading facilities owned by private operators in the private sidings connected to the state-owned railway network.

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 has to be placed in the land area administered by the infrastructure manager, a location permit for the connection must be prepared.

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 3B and 3T.

The contact person in matters concerning the rental and use of loading facilities listed in Appendix 3T is the manager responsible for the nationwide administration of timber loading facilities and authorised by the infrastructure manager of the state-owned railway network. For contact information, visit the infrastructure manager's website.<sup>107</sup> The service facility description is provided in Appendix 5K.

#### *5.3.1.3* Railway yards and train formation facilities

#### Railway yards

The procedures for track access in Finnish railway yards have been described in the Network Statement and in the Infrastructure Manager's (IM) guidelines. The operations and specific features of each traffic operating point shall, if necessary, be described and agreed upon in the network access agreement and in the separate railway yard agreements enclosed in the access agreement. Enclosures regarding specific traffic operating points may be added to the access agreement during the agreement period.

As a rule, rolling stock is not maintained or cleaned at traffic operating points or on railway yard tracks. This requires making a specific agreement with the IM.

The train formation yards owned by the infrastructure manager have been indicated with "Shunting" in Appendix 3B. The service facility description is provided in Appendix 5F.

<sup>&</sup>lt;sup>107</sup> https://www.vayla.fi/rataverkko/kunnossapito/tyonjako

Not all train formation yards are electrified. Information about electrified railways and contact information to the contact persons at the railway yards can be found in Finnish on the Finnish Transport Infrastructure Agency's website Ratatiedon Extranet<sup>108</sup>.

For the present, no charge is collected for the use of train formation yards. Any changes to this will be updated on the Finnish Transport Infrastructure Agency's website<sup>109</sup> and the Network Statement.

If several railway operators need to use the same service (for example, railway yard tracks, control devices or -systems), the principles for access to the service will be examined and an agreement reached under the supervision of the infrastructure manager.

Operating permits and access to shunting frames are granted by the traffic operator/the person issuing permits in the respective area. The traffic operator issues operating permits within the limits of the allocated rail capacity. The area limits where these permits are applicable have been described in the track diagram of each traffic operating point. The communication regarding the operating permits shall comply with the IM's guidelines and the Network Statement.

Staff working in railway yards shall report any malfunctions that they have observed to the traffic operator of the traffic operating point. Based on the malfunction report, the traffic operator shall impose the required restrictions affecting operations before the repair work commences. The traffic operator shall notify all parties of malfunctions affecting operations.

#### Freight traffic railway yard categories

The aim of this railway yard classification is to describe the essential purpose of their use.

#### Multi-operator railway yards

Multi-operator railway yards where, at the time of publishing the Network Statement, operations of multiple railway undertakings take place are located in Vainikkala, Oulu, Kouvola, Kotka, Hamina, Imatra, Kuusankoski, Pitkämäki and Lauritsala.

A railway yard agreement is concluded between the railway yard manager and the railway undertaking concerning operating the traffic operating point, collaboration and track access in the railway yard.

#### Central train formation yards

The central train formation yards are located in the railway yards of Tampere and Kouvola which also operates as a multi-operator railway yard. These railway yards are rail transport hubs through which most freight traffic travels. The central train formation yards serve all train types and provide all railway stations operations required by them.

<sup>&</sup>lt;sup>108</sup> http://www.vayla.fi/palveluntuottajat/aineistot/ratatiedon-extranet

<sup>&</sup>lt;sup>109</sup> http://www.vayla.fi/ammattiliikenne-raiteilla/rautateiden-verkkoselostus

#### Train formation yards

Train formation yards are located at nodes of heavily operated freight traffic lines and enable the use of various transport systems and train types in the railway network.

Train formation yards: Hämeenlinna, Imatra, Iisalmi, Joensuu, Jyväskylä, Kemi, Kokkola, Kontiomäki, Kuopio, Lahti, Lappeenranta, Oulu, Pieksämäki, Pori, Riihimäki, Seinäjoki

#### Port railway yards

Port railway yards are located at the end nodes of the railway network and serve port transportations.

Port railway yards: Ajos (Port of Kemi), Hamina, Hanko, Kaskinen, Kotka (an entity formed by various ports), Loviisa, Mäntyluoto and Tahkoluoto (Port of Pori), Rauma, Vaskiluoto (Port of Vaasa), Vuosaari, Ykspihlaja (Port of Kokkola)

#### Border crossing railway yards

Trains arriving from Russia are received and the trains heading to Russia are released at the border crossings of eastern interconnection traffic. The need for shunting operations may arise from, for example, shortening trains in order to meet route-specific length requirements.

Border crossing railway yards: Imatrankoski, Niirala, Tornio, Vainikkala, Vartius

#### Railway yards handling dangerous goods

In Finland, there are 13 railway yards to which the Finnish Transport and Communications Agency Traficom has granted permission for the handling of dangerous goods. These railway yards are listed in Section 3.4.3.

#### Timber terminals and timber-loading facilities

Further information on timber terminals is provided in Section 5.3.1.2 and Appendix 3T.

#### Other loading facilities

Kauhava, Kontiolahti, Misi, Niinisalo, Otanmäki, Parola, Ryttylä, Utti, Vierumäki ja Vuohijärvi

Railway yard track diagrams are available at the rail data extranet site<sup>110</sup>.

<sup>&</sup>lt;sup>110</sup> https://vayla.fi/palveluntuottajat/aineistot/ratatiedon-extranet
### Inclines and their use

At the traffic operating points in Kouvola and Tampere the railway operators have access to inclines for the recomposing of train wagons. Train operators needing access to the incline shall contact the infrastructure manager in good time (at least two months in advance), so that the arrangements for access to the incline capacity and the related practical arrangements can be commenced. Access to inclines is agreed upon in the access agreements, and the use of inclines shall comply with incline-specific instructions<sup>111</sup>. The service facility description is provided in Appendix 5G.

The railway operator is responsible for ensuring that the operating personnel use the incline, the tracks and the related systems and equipment in compliance with the operating instructions.

The infrastructure manager is responsible for the technical functionality, maintenance and development of the tracks and the related systems and equipment.

With respect to the use of inclines, the aim is to endeavour to implement the practical solutions in the multi-operator environment in a functional manner and to agree on the use of incline equipment so that the track access needs can be coordinated flexibly.

Further information: Finnish Transport Infrastructure Agency, Infrastructure Access

### 5.3.1.4 Storage sidings

Storage sidings are railway yard tracks primarily intended for storage of rolling stock waiting for transport. Rolling stock can only be stored temporarily on these tracks. Storage sidings can also be used for other purposes required for traffic operations. However, in general, storage sidings are not used for the maintenance or cleaning of rolling stock. Should the need to maintain or clean rolling stock on storage sidings arise, the use of the sidings for such purpose must be agreed upon with the infrastructure manager. Only railway operators are allowed to keep stationary wagons on the storage sidings. The infrastructure manager determines which tracks may be used as storage sidings. The number of storage sidings (pcs) and their total length (m) is described for each traffic operating point in Appendix 3B.

Information on the tracks intended for operating train services, which can be used for temporary storage of rolling stock in exceptional situations, is provided by the infrastructure manager. If a railway operator's rolling stock has to be temporarily stored on such storage sidings, this information shall immediately be forwarded to the Rail Traffic Management Centre or to the traffic planner of the traffic control area. Storage requests are also registered in the LIIKE system via the advance reports. Therefore, railway operators shall enter the information in the JETI system and make sure that the report is removed from the JETI system, when the need for storage no longer prevails. If

<sup>&</sup>lt;sup>111</sup> https://julkaisut.vayla.fi/pdf7/rautatieohjeet\_web.pdf

the storage needs prevails after the end of the storage period, the railway operator shall make a new JETI notification and immediately give this information to traffic planning or to the Rail Traffic Management Centre. Traffic planning or the Rail Traffic Mangement Centre may however refuse permission to store the rolling stock, if the situation so requires. In that case the railway operator shall move the rolling stock to another assigned storage place within reasonable time.

The infrastructure manager is actively developing track access management on railway yards (including system entries and request procedures) together with the other operators in the railway network. The infrastructure manager informs the operators in the railway network of possible changes in procedures made before and/ or during the timetable period in a separate notice and/or instructions. The Network Statement is also updated as required.

When storing wagons loaded with dangerous goods, the railway operator is responsible for reporting the storage location of the wagons and the type of substances in them to the rail traffic control

For long-term storage of rolling stock in railway yards: see Section 2.3. The service facility description on storage sidings is provided in Appendix 4B.

### 5.3.1.5 Maintenance facilities

The maintenance, cleaning and repair of rolling stock shall 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.

### Use of maintenance equipment in Ilmala railway yard

The service facility description of maintenance facilities is provided in Appendix 5E.

The Ilmala railway yard in Helsinki is owned by the infrastructure manager. VR Group's Helsinki depot, which accommodates service and cleaning facilities, locomotive depots and lathes, is also situated in the area. The services provided by VR Group and the service prices can be found in the company's Network Statement<sup>112</sup>

The fenced depot hosts the infrastructure manager's service equipment and other technical devices (e.g. maintenance platforms and tracks used for maintenance operations, such as filling of thin oil and water tanks, feeding of heavy current, brake trials using compressed air and vacuum emptying of septic tanks.) There are separate tracks for washing locomotives and applying traction sand to wheels. Other technical devices are safety devices, turnouts and brake-testing equipment. The area also hosts heating points, devices for vacuum emptying, suction pumps, steam, water and air outlets, and compressed air outlets, electrical rooms and oil-absorbing mats (at oilchanging points).

<sup>&</sup>lt;sup>112</sup> https://www.vrgroup.fi/en/vrgroup/vr-group/business-operations/vr-fleetcare/network-statement/

The equipment owned by the infrastructure manager are listed in the Network Statement's map service and in appendix 3S. Anyone needing access to the railway yard or services can view the services provided at Ilmala railway yard and their location in the capacity management system, LIIKE. The tracks and services provided by the infrastructure manager are available to all operators, whereas use of the services provided by VR Group has to be agreed upon with VR. The services and access to them are also available in the railway diagram <sup>113</sup> on Ratatiedon extranet. The diagram also shows the positions of VR Group's depots etc. in relation to the tracks.

Access to the maintenance equipment in the Ilmala railway yard belongs to the access services, the provision of which is agreed upon in the access agreements. The railway operator must provide the infrastructure manager with an estimate of its yearly service needs in the Ilmala railway yard. The document must be submitted before the start of the negotiations on the network access agreement.

The procedure for agreeing on track use in the Ilmala railway yard is detailed in Appendix 4C.

### **Maintenance facilities**

Agreements on access to maintenance services have to be made with the maintenance providers. The infrastructure manager does not provide maintenance services. More information can be found on VR's website<sup>114</sup>.

### 5.3.1.6 Other technical facilities

Use of other technical equipment (e.g. scales, cranes, etc.) shall be agreed upon with the equipment operator. The infrastructure manager does not provide railway operators with access to this equipment.

### 5.3.1.7 Port facilities

Most of the tracks in ports are private sidings and the services available are described in port network statements<sup>115</sup>. The Finnish Transport Infrastructure Agency arranges regular meetings with infrastructure managers of private sidings (cooperation group of infrastructure managers), and participants can suggest matters such as the need to develop operating models between railway networks as topics for the meetings.

### 5.3.1.8 Relief facilities

The infrastructure manager is responsible for the clearing operations concerning the tracks and the rolling stock in the state-owned railway network, and for assisting the rescue authorities in rescue operations. The operating procedure is described in more detail in Section 4.8.4.

<sup>&</sup>lt;sup>113</sup> https://www.vayla.fi/palveluntuottajat/aineistot/ratatiedon-extranet

<sup>&</sup>lt;sup>114</sup> https://www.vrgroup.fi/en/vrgroup/vr-group/business-operations/vr-fleetcare/network-statement/

<sup>&</sup>lt;sup>115</sup> https://www.vayla.fi/ammattiliikenne-raiteilla/rautateiden-verkkoselostus/yksityisraiteiden-haltijoiden-verkkoselostukset

The infrastructure manager does not supply refuelling services. Appendix 3B and the map service show the refuelling facilities on traffic operating points. Use of refuelling facilities shall be agreed upon with the operator of the refuelling facility. More information can be found on VR's website<sup>116</sup>.

## 5.3.2 Supply of services in service facilities

## 5.3.2.1 Shunting

The traffic control service for shunting operations between traffic operating points is available to railway operators as part of the allocated capacity and it is covered by the infrastructure charge. The traffic control service for shunting operations taking place in railway yards is a chargeable additional service provided by the infrastructure manager. For a description of the service and the structure of the service price, see appendices 5A and 5D.

### 5.3.2.2 Other services

The infrastructure manager does not provide other services.

# 5.4 Additional Services

## 5.4.1 Traction Current

### 5.4.1.1 Electricity transfer service

Traction current and pre-heating of passenger trains are additional services, according to Section 4 in Government Decree 1489/2015 on services supplied to railway operators. The service facility description is provided in Appendix 5N.

The infrastructure manager transfers the electricity required for traction current and pre-heating of passenger trains, as well as the balance management of the contact-line network, which gives the railway operator the basis to acquire its own electric power. The transfer fees comprise transfer charges to be paid to the grid companies outside the network of electrified railway lines and dissipations in the contact-line network, as well as measurements, assessment services and balance management related to electricity transfers in the network. The infrastructure manager invoices the operators using electricity in the contact-line network for the transmission costs based on consumption in correlation to the costs.

The charging principles and the transfer fees charged by the infrastructure manager are described in Appendix 5B. The transfer fee of railway operators is expected to increase significantly at the start of 2021 due to higher transfer costs charged by network companies. This is a result of the change in the pricing of filtering and compensation of harmonics and reactive power caused

<sup>&</sup>lt;sup>116</sup> https://www.vrgroup.fi/en/vrgroup/vr-group/business-operations/vr-fleetcare/network-statement/

by transport. The infrastructure manager's costs will increase significantly already in early 2020. The objective is to optimise filtering jointly with railway operators in order to minimise the additional costs. The fee will be specified in 2020. The infrastructure manager will publish the 2021 price list before the start of the 2021 timetable period.

The transfer charges of the network companies and the price of electric power may change during the year. The basic fee for traction units may also change if the number of traction units belonging to the Erex system changes. Transfer will be charged in accordance with the actual volume of electricity transfer. The invoice amount is monitored at access agreement monitoring meetings held during the timetable period.

### *5.4.1.2 Power supply on electrified railway lines*

Use of rail capacity includes the traffic operator's right to use of the infrastructure manager's electricity power supply network for electric stock on the electrified line sections specified in the Network Statement. The infrastructure manager does not, however, provide electricity, but the traffic operator shall enter into an agreement with a service provider.

The 400 and 1,500 V power supply facilities for *rolling stock* are indicated in Appendix 3B and in the map service. Also for the 400 V power supply, the maximum current available is indicated in amperes.

### 5.4.2 Services for trains

The infrastructure manager does not provide other services for trains.

### 5.4.3 Services for exceptional transports and dangerous goods

The infrastructure manager does not provide other services for special transports or transports of dangerous goods.

### 5.4.4 Other Additional Services

### 5.4.4.1 Timetable planning services

At present, the infrastructure manager does not provide timetable planning services in connection with rail capacity applications.

### 5.4.4.2 Planning services for track use

The track use planning services for Helsinki and Ilmala railway yards are described in Appendices 4C and 4D.

### 5.4.4.3 Use of buildings and land areas

The infrastructure manager can supply services on a commercial basis to railway operators. These services may comprise, for example, the use of buildings and land areas owned by the infrastructure manager. The service is agreed upon in separate lease and access agreements. The service facility description is provided in Appendix 5L.

## 5.4.4.4 Trial runs of rolling stock and the Rail Training Centre

Trial runs of rolling stock can be made at the Finnish Transport Infrastructure Agency's centre for trial runs in Laajakangas in Kontiomäki. The use of land areas shall be agreed upon in accordance with separate instructions<sup>117</sup>. More information can be obtained from the Finnish Transport Infrastructure Agency's unit Track and Rolling Stock Technology and the service facility description provided in Appendix 5H.

Noise measurements required for the authorisation for the placing in service of rolling stock can be carried out at Leteensuo (line section Riihimäki-Tampere). For more information, contact the environmental and property unit of the Finnish Transport Infrastructure Agency<sup>118</sup>.

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

Railway operators may rent facilities at the Rail Training Centre <sup>119</sup> . A description is provided in Appendix 5M.

# 5.5 Ancillary Services

## 5.5.1 Access to telecommunication network

For more information about the RAILI service and how to join the service and the VIRVE network, see Section 3.3.3.2 and Appendix 3P.

## 5.5.2 **Provision of supplementary information**

Statistics on the railway network and rail services are published annually in the Traficom's publication The Finnish Railway Statistics<sup>120</sup>.

## 5.5.3 Control Centres

### 5.5.3.1 Security Control Centre

Security Control Centre services are provided to the FTIA by Finrail Ltd. The Security Control Centre has the main responsibility for improving personal security at stations and in platform areas and for protection against vandalism of railway infrastructure. The Security Control Centre monitors situations, receives reports and creates a situation picture, as well as guides security officers, security guards or other authorities to the location where help is required. The operative work in the field is led from the Security Control Centre. A descrption of the service is provided in Appendix 5P.

<sup>&</sup>lt;sup>117</sup> https://julkaisut.vayla.fi/pdf7/rautatieohjeet\_web.pdf

<sup>&</sup>lt;sup>118</sup> https://vayla.fi/web/en/contact-information#.XbKeunjVJPY

<sup>&</sup>lt;sup>119</sup> https://www.vayla.fi/palveluntuottajat/ratatekninen-oppimiskeskus

<sup>&</sup>lt;sup>120</sup> https://www.traficom.fi/fi/tilastot/suomen-rautatietilasto

The camera surveillance of the railway and bus stations for commuter transport in the metropolitan area and of the park-and-ride facilities of the Ring Rail Line has been transferred to the Finnish Transport Infrastructure Agency's Security Control Centre. The Security Control Centre acts as the operations and control centre for security guard services. The Security Control Centre collaborates with the cities of Vantaa, Helsinki and Espoo and with HSL (Helsinki Region Transport) and HKL (Helsinki City Transport).

## 5.5.3.2 Technical Control Centre

Technical Control Centre services are provided to the FTIA by Finrail Ltd. The Technical Control Centre is responsible for supervising all of Finland's rolling stock monitoring systems, as well as the tunnel and facilities management systems on the Ring Rail Line and the Vuosaari railway line. The service facility description is provided in Appendix 50.

The Technical Control Centre has two main duties: The rolling stock control systems involve the monitoring of the data control process and its quality, data analysis, and the measures resulting from the analysis. The purpose of the control is to monitor properties of the rolling stock that have a direct or indirect interface with the rail infrastructure. Rolling stock control devices are located in all parts of the state-owned railway network.

The second duty is monitoring of tunnel and property automation and the measures required by these in both normal and exceptional situations. The system alerts are forwarded on a case-by-case basis to the various collaborative partners, for example the fire and rescue authorities, the police, system maintenance providers, the traffic, control, the security control centre and the operating centre.

## 5.5.4 Ticketing Services in Passenger Stations

Information about facilities for ticketing services and possibilities to place ticket vending machines in passenger stations can be found in Appendices 3Q and 3R.

### 5.5.5 Specialised Heavy Maintenance Services

The infrastructure manager does not provide heavy maintenance or repair services.

### 5.5.6 Other Ancillary Services

The infrastructure manager does not provide other ancillary services.

# 6 Charges

# 6.1 Charging Principles

Provisions on the basis of the basic infrastructure charge are laid down in the Rail Transport Act (in Finnish). The basic infrastructure charge is collected for used services in the minimum access package described in Section 5.2 based on the infrastructure manager's directly incurred costs. The basic infrastructure charge is set using a cost model that calculates to what extent one transport performance unit (one gross tonne-kilometre) increases the costs of railway infrastructure management. Electrification of the railway network and the motive power are taken into account in modelling as well as in the pricing in accordance with the requirements in EU legislation. The calculation method has been described in the PM published on the Finnish Transport Infrastructure Agency's website<sup>121</sup>.

As of 1 January 2019, the basic infrastructure charge will be levied on both train traffic and shunting operations between traffic operation points.

The operator of a service facility provided as part of the access services has the right to charge compensation for the service facility and track access in the service facilities, as well as for the services supplied in them, as laid down in section 133 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 infrastructure manager are laid down in the Act on Criteria for Charges Payable to the State and in the Decree of the Ministry of Transport and Communications on chargeable performances at the Finnish Transport Infrastructure Agency. Services are billed monthly, unless otherwise specified in the access agreementor lease agreement. Possible new chargeable services are billed from the time when the service was taken into use, or from the time when the service became chargeable.

# 6.2 Charging System

The charges levied on the minimum access package and other services provided by the infrastructure manager and detailed in the Network Statement apply for the period of validity of the document and if necessary for a longer period of validity given separately. The charges levied on the minimum access package (basic infrastructure charge) are given for three-year periods, the first of which is between 1 January 2019 and 31 December 2021. Changes in the prices of the basic infrastructure charge can also be introduced if special reasons so warrant. Advance notice of any such changes is given.

The infrastructure manager is implementing an index adjustment procedure that takes changed infrastructure management costs into account in order to

<sup>&</sup>lt;sup>121</sup> https://vayla.fi/ammattiliikenne-raiteilla/rataverkon-kaytto/ratamaksu

adjust the prices of the basic charge during the three-year pricing periods (subindex 'railway maintenance' of Statistics Finland's cost index of civil engineering works). The basic charge of 2021 have been determined based on the value 113,18 (2018 annual average).

# 6.3 Tariffs

## 6.3.1 Infrastructure Charge

## 6.3.1.1 Basic infrastructure charge

Between 1 January and 31 December 2021, the infrastructure charge will be levied according to Table 2.

### Table 2Infrastructure charge

Electrical drive	0.1452 cent/gross tonne-kilometre
Non-electrical drive	0.1296 cent/gross tonne-kilometre

## 6.3.2 Other Charges Levied by the infrastructure manager

## 6.3.2.1 Charges for Communication services

The pricing of railway verbal communication complies with the permit conditions of the RAILI service<sup>122</sup> and the price list of the RAILI service<sup>123</sup>.

## *6.3.2.2* Traffic Control Charges for Shunting Operations

The traffic control service for shunting operations provided by the infrastructure manager is a chargeable additional service. The pricing of the service is based on the number of the shunting routes required by railway operators. 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. An adjustment supplement of 12 per cent is added to the price so that no real-time performance monitoring is required and the service provider will supply the desired service.

For the timetable period 2021, the pricing basis for the shunting traffic control service is EUR 70/hour. The charge is based on Ministry of Transport and Communications Decree on the chargeable transactions of the FTIA. The pricing and confirmed tariffs are described in more detail in Appendix 5A.

The charge for traffic control for shunting operations does not apply to shunting between traffic operating points, which is covered by the infrastructure charge.

<sup>&</sup>lt;sup>122</sup> https://julkaisut.vayla.fi/pdf7/rautatieohjeet\_web.pdf

<sup>&</sup>lt;sup>123</sup> https://julkaisut.vayla.fi/pdf7/rautatieohjeet\_web.pdf

### 6.3.2.3 Access charge for Ilmala railway yard

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 1,500 V feeder points and 400 V socket points), and move to the railway yard services. The location of the equipment is shown in the railway diagram and in Appendix 3S to the Network Statement. 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 halls 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 charge for the service is given in Table 3 of this chapter. In January 2019, the access charge will be adjusted in accordance with the 2018 annual average of the sub-index railway infrastructure maintenance of Statistics Finland's cost index of civil engineering works (2010=100). In addition to the annual index adjustments, other adjustments to the access charge can also be made for special reasons, and advance notification of them is given in the same manner as for the basic infrastructure charge

The number of incoming transfers is calculated for each railway operator 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. 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.

|--|

Service	Price								
Arrival at Ilmala railway yard*	EUR 16.00/transfer								
*Based on capacity allocated to the transfer (excluding cancelled capacity).									

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

arising from their use.

# *6.3.2.4 Using timber loading facilities and storage areas in the railway network*

Access to the timber loading facilities in the railway network described in Section 5.3.1.2 is covered by the basic infrastructure charge. A rent is payable for the storage areas provided as part of the loading facilities. From 1 January 2019 to 31 December 2021, the rent is EUR 0.38/m2/year, with the exception of the storage area of the Patokangas loading facility in Kemijärvi for which a rent of EUR 0.60/m2/year is charged.

equipment and structures do not malfunction or become damaged for reasons

## 6.3.2.5 Rental of Passenger Station Facilities

The rents charged for the passenger stations owned by the infrastructure manager are given in Appendix 3Q.

## 6.3.2.6 Rail Training Centre

The rents charged for the facilities at the Rail Training Centre can be found on the Finnish Transport Infrastructure Agency's website<sup>124</sup>.

# 6.4 Financial Penalties and Incentives

The infrastructure manager has not introduced any other performance charges or penalty fees in connection with the use of the railway network in addition to the performance scheme described in Chapter 6.5.

# 6.5 Performance Scheme

In compliance with Rail Transport Act Section 130, in order to promote the effective use of the railway network and improve train punctuality as well as to minimise operational disruptions to the railway network caused by railway traffic and track maintenance, railway operators and the infrastructure manager are encouraged to limit the disruptions arising from their activities and increase the effective use of the railway network by means of a performance scheme. The scheme shall be equal, non-discriminatory and compliant with the principle of proportionality.

Railway operators shall compensate the infrastructure manager if the operation of the railway operator essentially differs from the rail capacity allocated to it, for reasons attributed to the operator. The infrastructure

<sup>&</sup>lt;sup>124</sup> https://www.vayla.fi/palveluntuottajat/ratatekninen-oppimiskeskus/tilat-ja-tilojen-vuokraus/hinnasto

The performance system applies to train transport practised by the railway undertaking and to shunting operations between railway traffic operating points. Compensations based on the performance scheme and their criteria are described in Appendix 6A of the Network Statement.

The performance scheme is based on disturbance entries concerning the delays of railway transport. The disturbance entries are made in accordance with the valid reason codes<sup>125</sup> for railway transport disturbance entries. The reason codes may be updated during the timetable period which affects the performance scheme. Any changes to the reason codes are prepared jointly with railway undertakings.

Railway undertakings and the infrastructure manager shall agree upon possible changes in the possible monitoring stations used for punctuality monitoring.

The outcome of the performance scheme shall be discussed in connection with access agreement monitoring meetings or in another manner agreed in the access agreement. The FTIA will assess the functionality of the performance scheme during the timetable period.

The performance scheme shall not take a position on how the legislation on the compensation of damages is applied between the parties.

Railway operators shall agree mutually on the compensations caused to each other.

If a railway operator and the infrastructure manager disagree on an issue related to the performance scheme they shall request the Rail Regulatory Body to reconcile (Rail Transport Act section 130). The Regulatory Body adjudicates on the matter within 10 working days after receiving all documents concerned from the railway operator or the infrastructure mananger.

<sup>&</sup>lt;sup>125</sup> https://julkaisut.vayla.fi/pdf7/rautatieohjeet\_web.pdf

# 6.6 Changes to Charges

Information about the upcoming amendments concerning the infrastructure charge will be posted in the infrastructure manager's Network Statement and on the website<sup>126</sup>. The amendments to the infrastructure charge may concern the basic infrastructure charge, the price categories to be specified for these, prices determined for access, additional and ancillary services and the introduction of additional charges.

The prices for the basic infrastructure charge are given for three-year periods, the first of which is between 1 January 2019 and 31 December 2021. The charges are based on cost modelling and index adjustments, in which consideration is given to changes in infrastructure management costs. Changes in the charges can also be introduced if special reasons so warrant. Advance notice of any such changes is given.

# 6.7 Billing Arrangements

The infrastructure manager invoices the infrastructure charge each calendar month based on the realised performance of the previous month. The kilometric performance is based on data obtained from the infrastructure manager's reporting system. The data consists of capacity allocations saved in operative data systems, train composition messages and train weight information e.g. The operator shall provide this information to the FTIA and ensure the correctness of the information.

 $<sup>^{126}\,</sup>https://vayla.fi/ammattiliikenne-raiteilla/rataverkon-kaytto/ratamaksu$ 

# Basic information on line sections

### Markings:

0n	"yes"
_	"no"
AC2	electrification voltage 25 kV / 50 Hz
ATP	Automatic Train Protection

### Chart columns:

**Node of the network** indicates all traffic operating points where the route of the train can be changed.

**Length of line** is the distance between traffic operating points in the railway network (km).

**Max. gradient** is the maximum gradient (mm/m) 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 on the line section there is an automatic safety device system ensuring safe train operation.

**ATP** indicates that the Automatic Train Protection is installed on the line section.

**ERTMS** indicates that the section of line is equipped with the Pan-European safety device system.

**ATP coding for tilting trains** indicates the sections on which ATP allows higher speeds for tilting trains in curves.

FTIA's publication 46eng/2019 Railway Network Statement 2021 Basic information on line sections

Liikennepaikka (verkon solmupiste)	Liikennepaikka (verkon solmupiste)	Radan pituus	Määräävä kaltevuus	Sähköistys- järjestelmä	Suojastettu tai radio- ohjattu osuus	Junan kulunvalvontajärjestelmä	ERTMS	Kallistuvakoristen junien JKV-koodaus	
Traffic operating point (Node of the network)	Traffic operating point (Node of the network)	Lenght of line	Max gradient	Electrification system	Section blocking or radio controlled section	ATP		ATP-coding for tilting trains	
Helsinki asema	Havukoski	18	10,0	AC2	On	ATP	—	On	
Havukoski	Kerava asema	11	7,0	AC2	On	ATP	—	On	
Kerava asema	Hyvinkää	29	7,5	AC2	On	ATP	—	On	
Hyvinkää	Riihimäki asema	12	7,5	AC2	On	ATP	—	On	
Kerava asema	Vuosaari	19	10,0	AC2	On	ATP	—	—	
Kerava asema	Sköldvik	27	10,0	AC2	On	ATP	—	—	
Kerava asema	Hakosilta	65	10,0	AC2	On	ATP	—	On	
Hyvinkää	Karjaa	99	10,5	_	On	ATP	—	—	
lelsinki asema	Huopalahti	6	10,0	AC2	On	ATP	—	_	
luopalahti	Havukoski	27	40,0	AC2	On	ATP	_	—	
luopalahti	Kirkkonummi	31	10,5	AC2	On	ATP	_	—	
Kirkkonummi	Karjaa	49	12,0	AC2	On	ATP	_	On	
Karjaa	Hanko asema	50	10,5		On	ATP	I—	<b>—</b>	
Karjaa	Turku asema	107	12,7	AC2	On	ATP	<u> </u>	On	
Turku asema	Turku satama	3	7,0	AC2	On	ATP	<u> </u>	_	
Riihimäki asema	Toiiala	76	10.0	AC2	On	ATP	_	On	
oiiala	Turku asema	128	10.5	AC2	On	ATP	_	On	
ojiala	Tampere asema	40	10.0	AC2	On	ATP	_	On	
ojjala	Valkeakoski	18	8.0	_	_		_	_	
urku asema	Raisio	8	7.0		On	ΔΤΡ			
Paisio	Naantali	6	9.0		_				
Paisio	lusikaupunki	57	9,0		On	ΔΤΡ			
lusikaupupki	Hangonsaari	3	9,0 11 5		OII				
	Liolohti	5	0.0	 AC2				 On	
iolohti	Kokomäki	01	9,0 10 5	AC2	On			On	
leidilu (okomäki	Roumo	91 47	12,5	AC2	On		_	OII	
		47	9,0	AC2	01		_		
кокетакі		38	9,5	AC2	On On		_		
		21	5,5	AC2	On	AIP	_	_	
'ori	Aittaluoto	6	10,0	_	_		_	—	
lantyluoto	l ahkoluoto	11	5,5	AC2	On	AIP	—	_	
ielahti	Parkano	69	10,5	AC2	On	AIP	—	On	
NIINISAIO	Parkano	42	10,0	<u> </u>			I-		
Parkano	Seinäjoki asema	84	10,0	AC2	On	ATP	-	On	
Riihimäki asema	Hakosilta	48	8,0	AC2	On	ATP	-	-	
lakosilta	Lahti	11	10,0	AC2	On	ATP		On	
ahti	Loviisan satama	77	12,0	—	<b>—</b>	<b>—</b>	-	<b>—</b>	
ahti	Heinola	38	12,0	—	<b>—</b>	<b>—</b>	-	<b>—</b>	
ahti	Mukkula	7	15,0	<b>—</b>	<u> </u>	<b>—</b>	-	<b>—</b>	
ahti	Kouvola asema	61	10,0	AC2	On	ATP		<b> </b> -	
louvola asema	Luumäki	59	10,0	AC2	On	ATP	—	<b>—</b>	
louvola asema	Juurikorpi	33	10,0	AC2	On	ATP	I—	<b>—</b>	
uurikorpi	Kotka asema	18	8,5	AC2	On	ATP	I—	<u> </u>	
Kotka asema	Kotkan satama	1	0,0	AC2	On	ATP	<u> </u>	<b>—</b>	
otka Hovinsaari	Kotka Mussalo	5	6,0	AC2	<u> </u>	ATP	<u> </u>	<b>—</b>	
uurikorpi	Hamina	19	10,0	AC2	On	ATP	I_	<b>—</b>	
Kouvola asema	Kuusankoski	10	9.0	AC2		L	<u> </u>	L	
Kouvola asema	Mynttilä	86	12.0	AC2	On	ATP	<u> </u>	On	
Avottilä	Ristiina	21	12.5			_			

FTIA's publication 46eng/2019 Railway Network Statement 2021 Basic information on line sections

Liikennepaikka (verkon solmupiste)	Liikennepaikka (verkon solmupiste)	Radan pituus	Määräävä kaltevuus	Sähköistys- järjestelmä	Suojastettu tai radio- ohjattu osuus	Junan kulunvalvontajärjestelmä	ERTMS	Kallistuvakoristen junien JKV-koodaus
Traffic operating point (Node of the network)	Traffic operating point (Node of the network)	Lenght of line	Max gradient	Electrification system	Section blocking or radio controlled section	ATP		ATP-coding for tilting trains
Mynttilä	Pieksämäki asema	105	11,0	AC2	On	ATP	—	On
Luumäki	Vainikkala asema	33	8,0	AC2	On	ATP	—	—
Luumäki	Lappeenranta	27	9,5	AC2	On	ATP	—	—
Lappeenranta	Mustolan satama	18	10,0	—	—	—	—	—
Lappeenranta	Imatra tavara	39	9,0	AC2	On	ATP	—	On
Imatra tavara	Imatrankoski-raja	10	11,0	_	_	—		_
Imatra tavara	Parikkala	60	10,0	AC2	On	ATP		On
Pieksämäki asema	Huutokoski	31	11,0	—	On	ATP		—
Huutokoski	Rantasalmi	38	12,0	_	On	ATP	_	
Savonlinna	Parikkala	59	12,0	_	On	ATP	_	
Parikkala	Säkäniemi	93	10,0	AC2	On	ATP	_	
Niirala-raja	Säkäniemi	33	10,5	_	On	ATP	_	_
Säkäniemi	Joensuu asema	37	10,5	AC2	On	ATP	_	L
Joensuu asema	llomantsi	71	12.0	_				
Joensuu asema	Viiniiärvi	32	9.0	_	On	ATP		
Huutokoski	Varkaus	18	10.0	_	On	ATP		
Varkaus	Kommila	6	10,0			_		
Varkaus	Viiniiänzi	101	11.0		 On	ΔΤΡ		
	Limphoriu	50	17.6		On			
Limeboriu	Liokoo	50	11,0	_	On			
Uinanaiju	Denkakaaki	04 c	11,5	_	OII	AIF		_
Lieksa		0	10,0	_		 ATD		—
Lieksa	Nurmes	00	12,5	—	On	AIP	_	_
Nurmes	Vuokatti	85	11,5	—	—	—	_	_
Vuokatti	Lannasiampi	12	10,0	—	_	—		—
Vuokatti	Kontiomäki	24	10,5		_		—	—
Pieksämäki asema	Suonenjoki	38	9,0	AC2	On	АТР	_	—
Suonenjoki	Yläkoski	3	10,0	<u> </u>	_			—
Suonenjoki	Siilinjärvi	76	12,0	AC2	On	АТР		—
Siilinjärvi	Sysmäjärvi	99	10,5	—	On	ATP	_	—
Siilinjärvi	lisalmi	60	12,0	AC2	On	ATP	—	—
lisalmi	Murtomäki	62	12,7	AC2	On	ATP	—	On
Murtomäki	Otanmäki	25	11,0	—	—	—	—	—
Murtomäki	Kajaani	20	12,0	AC2	On	ATP	—	On
Kontiomäki	Vartius	95	11,0	AC2	On	ATP	—	—
Vartius	Vartius-raja	2	10,0	AC2	On	ATP	<u> </u>	<u> </u>
Kontiomäki	Ämmänsaari	92	12,0	—	<u> </u>	<b> </b>	<u> </u>	<u> </u>
Tampere asema	Orivesi	40	12,0	AC2	On	ATP	<u> </u>	On
Orivesi	Vilppula	47	12,5	—	On	ATP	<b>—</b>	
Vilppula	Mänttä	8	5,0		<b> </b> _	<b> </b>	_	
Vilppula	Haapamäki	26	12,5		On	ATP	_	
Haapamäki	Seinäjoki asema	118	12,0	<b>—</b>	On	ATP	<u> </u>	<u> </u>
Haapamäki	Jyväskylä	77	12,0	_	On	ATP	<u> </u>	
Orivesi	Jämsä	56	12.5	AC2	On	ATP		On
Jämsä	Kaipola	7	12.0			L		
Jämsä	Jämsänkoski	4	10.0	AC2	On	ATP		On
Jämsänkoski	Jvväskylä	52	10.5	AC2	On	ATP		_
Jwaskvla	Äänekoski	47	10.5	AC2	On	ATP		
Äänekoski	Haapajärvi	164	10,5	_	<u> </u>		<u> </u>	L

FTIA's publication 46eng/2019 Railway Network Statement 2021 Basic information on line sections

Liikennepaikka (verkon solmupiste)	Liikennepaikka (verkon solmupiste)	Radan pituus	Määräävä kaltevuus	Sähköistys- järjestelmä	Suojastettu tai radio- ohjattu osuus	Junan kulunvalvontajärjestelmä	ERTMS	Kallistuvakoristen junien JKV-koodaus
							_	
Traffic operating point (Node of the network)	Traffic operating point (Node of the network)	Lenght of line	Max gradient	Electrification system	Section blocking or radio controlled section	АТР		ATP-coding for tilting train
Jyväskylä	Pieksämäki asema	80	12,5	AC2	On	ATP	—	On
Seinäjoki asema	Kaskinen	112	10,0	—	On	ATP	—	—
Seinäjoki asema	Vaasa	75	12,0	AC2	On	ATP	—	_
Vaasa	Vaskiluoto	5	1,0	_	_	—	—	_
lisalmi	Pyhäkumpu erkanemisvaihde	63	10,0	_	On	ATP	_	_
Pyhäkumpu erkanemisvaihde	Pyhäkumpu	3	3,0	_	_	_	_	_
Pyhäkumpu erkanemisvaihde	Haapajärvi	36	9,5	_	On	ATP	—	_
Haapajärvi	Ylivieska	55	8,0	_	On	ATP	—	_
Seinäjoki asema	Pännäinen	101	10,0	AC2	On	ATP	_	On
Pännäinen	Pietarsaari	10	6.0	AC2		_	_	
Pietarsaari	Alholma	4	3.0	AC2	_	_	_	_
Pännäinen	Kokkola	33	7.0	AC2	On	ATP	_	On
Kokkola	Ykspihlaia	5	10.0	AC2	_	_	_	_
Kokkola	Ylivieska	79	10.0	AC2	On	ATP	_	On
Ylivieska	Tuomioia	68	10.0	AC2	On	ATP	_	On
Tuomioia	Raahe	28	10.0	AC2	On	ATP	_	_
Raahe	Rautaruukki	9	10.0	AC2	_	_	_	
Tuomioia	Oulu asema	54	10,0	AC2	On	ATP	_	On
Oulu asema	Kontiomäki	166	10,0	AC2	On	ATP	_	_
Oulu asema	Kemi	105	10,0	AC2	On	ATP		
Kemi	Aios	9	10,0		_	_		
Kemi	l aurila	7	10,0	AC2	On	ΔΤΡ		
	Tornio asoma	10	7.5	A02	On		_	_
Laurila	Rovaniemi	106	10.0	AC2	On			
Povaniami	Komijän/i	85	12.0	AC2	On			
Komijärvi	Patokandas	9	12,0	AC2	On			
		2	12,0	7.02	On			
	Doutto	0	4,0	_			_	
	Kolori	0	0,0	_			_	_
	Vuenee	103	10,5	_			_	_
Sysmajarvi	vuonos	1	10,0	—			<u> </u>	—
Viinijarvi	Sysmajarvi	13	1,5	_	On	ATP	—	<u> </u>
Nurtomäki	l aivivaara	24	12,5	AC2	On	AIP	<u> </u>	—
Kajaani	Lamminniemi	3	10,0	<u> </u>	-	— 	<u> </u>	<b>—</b>
Kaiaani	Kontiomäki	26	12.0	AC2	IOn	IATP	I—	I—

# Rail Traffic Operating Points

### Legend:

( ) in columns regarding platforms	platform not maintained by the FTIA,
	must not be used for passenger service.
К	yes
Υ	yes, private
K in columns regarding traffic control	remote control
M in columns regarding traffic control	manual

### Chart columns:

Name refers to the official name of the station used for in traffic safety work.

**Another name** is the name of a traffic operating point in Finland's second official language. Another name is usually a Swedish name and only in Sköldvik is the Finnish name Kilpilahti used as another name, contrary to what the present language situation in the municipality would imply.

**Abbreviation** indicates the abbreviation used for the official name of the station.

**Commercial name** is mentioned in those cases where it differs from the official name of the stations, used in traffic safety work.

**Km Hki**\_describes the distance of a traffic operating point to the old station hall of Helsinki (already torn down), measured by a track kilometre system. According to the system, the location of all elements on tracks is fixed to landmarks.

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

**Traffic control** describes whether the traffic operating point has the technical equipment to control the train traffic manually or remotely. It does not mean that traffic control services are regularly provided.

**Private sidings** indicate that the traffic operating point has at least one connection to a private siding, owned or managed by a private owner (includes everyone except the FTIA).

**Shunting** indicates that the form of the tracks at a traffic operating point is such that it is possible to move at least a locomotive to the other end of a line of rolling stock without having to go through the main line of the traffic operating point.

**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 in brackets (), the platform is not maintained by the FTIA and services are operated at the responsibility of the railway undertaking.

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

**Design train length** indicates the longest track of a traffic operating point, other than the main line going through it. The length is measured in such a way that it is usable in both directions.

**Power supply** indicates at which traffic operating point it is possible to get 400 V or 1,500 V electric current mainly for rolling stock or track machinery power supply purposes.

**Side loading platform** indicates at which traffic operating point it is possible to load freight cars from the side, and shows the maximum platform length at the traffic operating point.

**End loading platform** indicates at which traffic operating point it is possible to load freight rolling stock from the end of the platform (combined transports).

**Loading site** indicates at which traffic operating point it is possible to load freight rolling stock at rail level. A typical example is loading of raw timber from a vehicle or an intermediate depot at a rail yard onto flatcars.

**Crane** indicates at which traffic operating point it is possible to use a crane to load wagons, and states the maximum capacity of the crane. This service is not provided by the FTIA.

**Fuel** indicates at which traffic operating point there is a fuel distribution point. This service is not provided by the FTIA.

**Passenger transport** shows the operating points where passenger traffic can be operated.

**Freight transport** indicates the operating points where freight transport can be operated.

**Turntables** indicates the traffic operating points where turntables can be used. If the turntable is privately owned it is marked with Y. If it is owned by the FTIA, the length of the turntable is indicated.

**Railway yard for dangerous goods** shows the traffic operating points where it is possible to handle wagons loaded with dangerous goods.

Nimi	Toinen nimi	Lyhenne	Kaupallinen nimi	Тууррі	Km Hki	Koodi	Rataosuus	Kunta	Liikenteenohjaus	Yksityisraiteita	Vaihtotyö- mahdollisuus
Name	Another name	Abbr.	Commercial name	Туре	Km Hki	Code	Section	Municipality	Traffic control	Private sidings	Shunting
Ahonpää		Aho		Liikennepaikka	690+468	01343	Seinäjoki-Oulu	Siikajoki	к		к
Ahvenus		Ahv	1	Liikennepaikka	270+960	01000	Lielahti–Kokemäki	Kokemäki	к		
Ainola		Ain		Seisake	34+784	00628	Helsinki–Riihimäki	Järvenpää			
Airaksela		Arl		Liikennepaikka	436+985	00869	Pieksämäki–Kontiomäki	Kuopio	к	к	к
Aittaluoto		Atl		Liikennepaikka	328+220	00676	Pori–Aittaluoto	Pori		к	к
Ajos		Ajo		Liikennepaikka	867+098	00767	Kemi–Ajos	Kemi		к	к
Alapitkä		Apt		Liikennepaikka	505+840	00415	Pieksämäki–Kontiomäki	Lapinlahti	к		к
Alavus		Alv		Liikennepaikka	373+445	00284	Orivesi–Seinäjoki	Alavus	к		К
Alholma	Alholmen	Alh		Liikennepaikka	532+570	00308	Pietarsaari–Alholma	Pietarsaari		к	к
Arola		Aro		Liikennepaikka	707+668	00939	Kontiomäki–Vartius-raja	Hyrynsalmi	ĸ		к
Asola		Aso		Liikennepaikka	31+596	01340	Huopalahti-Havukoski	Vantaa	к		
Aviapolis		Avp		Seisake	25+135	01331	Huopalahti–Havukoski	Vantaa			
Dragsvik		Dra		Liikennepaikka	171+180	00167	Karjaa–Hanko	Raasepori	к		
Dynamiittivaihde		Dmv		Linjavaihde	199+185	00581	Karjaa–Hanko	Hanko		ĸ	к
Elainpuisto-200		Epz		Seisake	338+751	00623		Antari	K		17
Eno En celti		Eno		Liikennepaikka	660+170	00464	Joensuu–Nurmes	Joensuu	ĸ		n
Ervela		EIV		Liikennepaikka	119+610	01004	Reisinki–Turku salama	Salo	n K		K
Eskola	[eho	Eld		Liikennepaikka	003+702	00318		Kannus Fanaa	n K		n
Espoo	ESDO	Epo		Liikennepaikka	20+600	00066	Helsinki–Turku satama	ESP00	ĸ		K
Haapakocki		прј		Liikoppopaikka	049+205	00330	Diskrämäki Kontiomäki	⊓aapajarvi Diokoämäki	r K		n K
		nps Umk		Liniavaihda	393+454	00402		Kouruu	ĸ	K	r.
Haapamäki		Hok		Liijavaliide	200+225	01008	Haanamäki-Juväskulä Orivesi-Seinäioki	Keuruu	ĸ	ĸ	ĸ
Haarajoki		прк Наа		Liikennenaikka	300+235 70+567	00200	Karaya Hakosilta	länvennää	ĸ	r.	n.
Hakosilta		1 Ida 111+		Liikennenaikka	39+507 110+E40	01013	Kerava Hakosilta Piihimäki Kouvola	Hollola	ĸ		
Hakei	Hav	Hei		Soisako	119+540 56+777	01014		Ponyoo	n.		
Hamina	Fredrikshamn	Hma		liikennenaikka	247+646	01015	Juurikorni–Hamina	Hamina	м	ĸ	ĸ
Hammaslahti	i reuriksilailii	Hel		liikennenaikka	243+040 602+100	00527		loensuu	ĸ	IX.	ĸ
Hanala	Hanaböle	Hna		Liikennenaikka	21+704	01018	Helsinki-Biihimäki	Vantaa	ĸ		
Hangonsaari	Tanabote	Has		Liikennenaikka	268+680	01020	Ilusikaununki-Hangonsaari	llusikaupunki	i.	ĸ	ĸ
Hanhikoski		Hnh		liniavaihde	1047+087	01020	Laurila-Kemijärvi	Kemijän/i		IX.	ĸ
Hankasalmi		Hks		l iikennenaikka	418+080	00427	lvväskylä–Pieksämäki	Hankasalmi	к	к	ĸ
HANKO		Han		Osiin jaettu liikennenaikka	-	-	Kariaa–Hanko	nankasatim	ĸ	i.	
Hanko asema	Hanaö	Hnk	Hanko	Liikennepaikan osa (Hanko)	207+119	00073		Hanko		к	К
Hanko tavara		Hnkt		Liikennepaikan osa (Hanko)	206+350	01317		Hanko			к
Hanko-Pohjoinen	Hangö Norra	Hkp		Liikennepaikan osa (Hanko)	205+935	00879		Hanko			
Harjavalta		Hva		Liikennepaikka	295+542	00218	Kokemäki–Pori	Harjavalta	К	к	К
Harju		Hj		Liikennepaikka	201+643	00985	Kouvola–Pieksämäki	Kouvola	к		к
Harviala		Hrv		Liikennepaikka	99+456	00622	Riihimäki–Tampere	Janakkala	к		
Haukipudas		Hd	1	Liikennepaikka	775+159	00342	Oulu-Laurila	Oulu	к		к
Haukivuori		Hau		Liikennepaikka	344+442	00549	Kouvola–Pieksämäki	Mikkeli	к		к
HAUSJÄRVI		Hjr		Osiin jaettu liikennepaikka	-	-	Riihimäki–Kouvola		к		
Hausjärvi tavara		Has		Liikennepaikan osa	86+210	00340		Hausjärvi			κ
Oitti		Oi		(Hausjärvi) Liikennepaikan osa (Hausjänd)	86+809	00092		Hausjärvi			
Haviseva		Hvs	1	Liikennepaikka	208+135	01021	Tampere–]vväskvlä	Kangasala	к		
Heikkilä		Hek	1	Liikennepaikka	34+856	01023	Helsinki–Turku satama	Kirkkonummi	к		
Heinola		На	1	Liikennepaikka	167+607	00113	Lahti-Heinola	Heinola	м	к	к
Heinoo		Hno	1	Liikennepaikka	237+965	01025	Lielahti-Kokemäki	Sastamala	к		
Heinävaara		Häv	1	Liikennepaikka	648+408	00924	Joensuu–Ilomantsi	loensuu	Ľ		к
Heinävesi		Hnv	1	Liikennepaikka	468+135	00437	Pieksämäki–loensuu	Heinävesi	к		к
HELSINKI		Hel		Osiin jaettu liikennepaikka	-		Helsinki–Turku satama. Helsinki–Riihimäki		M		
Helsinki asema	Helsingfors	Hki	Helsinki	Liikennepaikan osa (Helsinki)	0+159	00001		Helsinki	[]		к
		1	päärautatieasema	,							
Pasila asema	Böle	Psl	Pasila	Liikennepaikan osa (Helsinki)	3+230	00010		Helsinki			
1		1	1		l	1			1	1	

Nimi	Toinen nimi	Lyhenne	Kaupallinen nimi	Тууррі	Km Hki	Koodi	Rataosuus	Kunta	Liikenteenohjaus	Yksityisraiteita	Vaihtotyö- mahdollisuus
Name	Another name	Abbr.	Commercial name	Туре	Km Hki	Code	Section	Municipality	Traffic control	Private sidings	Shunting
Pasila autojuna-asema	Böle biltågstation	Pau		Liikennepaikan osa (Helsinki,	) 4+319	01328		Helsinki			
Ilmala asema		Ila	Ilmala	Liikennepaikan osa (Helsinki,	) 4+434	00009		Helsinki			
Helsinki Kivihaka	Stenhagen	Khk		Liikennepaikan osa (Helsinki,	4+701	01028		Helsinki			
Pasila tavara		Pslt		Liikennepaikan osa (Helsinki)	4+748	01034		Helsinki		к	к
Ilmala ratapiha		Ilr		Liikennepaikan osa (Helsinki,	4+950	01030		Helsinki		к	к
Käpylä	Kottby	Käp		Liikennepaikan osa (Helsinki,	5+840	00977		Helsinki			
Oulunkylä	Åggelby	Olk		Liikennepaikan osa (Helsinki)	7+399	00015		Helsinki		к	
Henna		Hnn		Liikennepaikka	79+373	01164	Kerava–Hakosilta	Orimattila	к		
Herrala		Hr		Seisake	115+790	00096	Riihimäki–Kouvola	Hollola			
Hiirola		Hir		Liikennepaikka	318+957	00997	Kouvola–Pieksämäki	Mikkeli	к		
Hikiä		Hk		Seisake	79+743	00091	Riihimäki–Kouvola	Hausjärvi		к	
Hillosensalmi		Hls		Liikennepaikka	233+344	00988	Kouvola–Pieksämäki	Kouvola	к		
Hinthaara	Hindhår	Hh		Seisake	52+150	00561	Olli-Porvoo	Porvoo			
Hirvineva		Hvn		Liikennepaikka	715+500	01041	Seinäjoki–Oulu	Liminka	к		К
Humppila		Hp		Liikennepaikka	188+778	00144	Toijala–Turku	Humppila	к	к	к
Huopalahti	Hoplax	Hpl		Liikennepaikka	6+375	00072	Helsinki–Turku satama. Huopalahti–Havukoski	Helsinki	к		
Huutokoski		Hko		l jikennenaikka	406+088	00470	Pieksämäki-loensuu Huutokoski-Savonlinna	loroinen	ĸ	к	
Hyrkäs		Hvr		L jikennenaikka	800+442	01748	Oulu-Kontiomäki	Muhos	ĸ		
Hypras		Live		Liikennepaikka	704+601	01340	Kontiomäki Ämmäncoori	Humancolmi	M		K
Hydakää	Hudago	nys Llv		Liikennenaikka	704+001	00392	Kontioniaki-Annialisaan Helginki Biibimäki Hadinkää Kariaa	Hyrynsaum		ĸ	ĸ
Hyviikaa	Tavaatabua	гту		Liikenneneikke	50+792	00030		Hyvii kaa Liämeen linne		K	K K
Hameenunna	Tavasterius	ni Llui		Спкепперакка	107+559	00047	Rimmaki–Tampere	Hameenumna	n K	n	n K
Harma		Hm		Спкепператкка	472+940	00300	Seinajoki–Oulu	Kaunava	n		n 
Höljäkkä		Höl		Seisake	765+261	00938	Joensuu–Nurmes	Nurmes		к	ĸ
Ii		Ii		Liikennepaikka	789+165	00343	Oulu–Laurila	Ii	к		к
Iisalmen teollisuusraiteet	Keveli	Itr		Linjavaihde	548+611	01049	Pieksämäki–Kontiomäki	Iisalmi		к	К
Iisalmi	Idensalmi	Ilm		Liikennepaikka	550+360	00420	Iisalmi–Ylivieska, Pieksämäki–Kontiomäki	Iisalmi	к	к	к
Iittala		Ita		Seisake	129+286	00154	Riihimäki–Tampere	Hämeenlinna			
Ilola		Ioa		Seisake	155+102	01345	Toijala–Valkeakoski	Valkeakoski			
Ilomantsi	Ilomants	Ilo		Liikennepaikka	695+203	00459	Joensuu–Ilomantsi	Ilomantsi	M	К	к
IMATRA		Ima		Osiin jaettu liikennepaikka	-	_	Kouvola–Joensuu, Imatra tavara–Imatrankoski-raja	Imatra	к		
Imatra asema		Imr	Imatra	Liikennepaikan osa (Imatra)	323+977	00603		Imatra			
Imatra tavara		Imt		Liikennepaikan osa (Imatra)	326+542	00502		Imatra		К	К
Imatrankoski		Imk		Liikennepaikan osa (Imatra)	331+267	00504		Imatra		К	к
Immola		Im		Liikennepaikan osa (Imatra)	332+699	01352		Imatra			
Pelkola		Pa		Liikennepaikan osa (Imatra)	335+672	01055		Imatra		К	ĸ
Imatrankoski-raja		Imkr		Liikennepaikka	337+095	00503	Imatra tavara–Imatrankoski-raja	Imatra			
Inha		In		Linjavaihde	341+367	00264	Orivesi–Seinäjoki	Ähtäri			К
Inkeroinen		Ikr		Liikennepaikka	212+781	00530	Kouvola–Kotka	Kouvola	к	К	К
Inkoo	Ingå	Iko		Liikennepaikka	70+620	00062	Helsinki–Turku satama	Inkoo	к		К
Isokyrö	Storkyro	Iky		Liikennepaikka	447+488	00295	Seinäjoki–Vaasa	Isokyrö	к		к
Jalasjärvi		Jal		Liikennepaikka	309+871	00276	Tampere–Seinäjoki	Kurikka	к		к
Jepua	Јерро	Jpa		Liikennepaikka	495+784	00303	Seinäioki–Oulu	Uusikaarlepvv	к		к
JOENSUU		Joe		Osiin jaettu liikennepaikka	-	_	Pieksämäki–Joensuu, Kouvola–Joensuu, Joensuu–Ilomantsi,		м		
Joensuu Sulkulahti		Sul		l jikenpenaikan osa	622+650	01071	Joensuu–Nurmes	Joansuu			к
Joensuu Peltola		Plt		(Joensuu) Liikennenaikan osa	623+540	01070		Toensuu		к	ĸ
		Inc	loopsuu	(Joensuu)	624+717	00460		Joonsuu			ĸ
Jokela		3115	Joensuu	(Joensuu)	471075	00400	Holeinki Diikimäki	Tuuculo	K		K .
JUKEL		ж		спкепперакка	4/+93/	00028		Tuusuta	r.		r.
Joroinen	Jorois	Jor	1	Linjavaihde	414+617	00431	Huutokoski–Savonlinna	Joroinen	1	I	ĸ

Nimi	Toinen nimi	Lyhenne	Kaupallinen nimi	Тууррі	Km Hki	Koodi	Rataosuus	Kunta	Liikenteenohjaus	Yksityisraiteita	Vaihtotyö- mahdollisuus
Name	Another name	Abbr.	Commercial name	Туре	Km Hki	Code	Section	Municipality	Traffic control	Private sidings	Shunting
Jorvas		Jrs		Seisake	32+322	00578	Helsinki–Turku satama	Kirkkonummi			
Joutseno		Jts		Liikennepaikka	305+826	00499	Kouvola–Joensuu	Lappeenranta	к	к	к
Juankoski		Jki		Liikennepaikka	531+995	00414	Siilinjärvi–Viinijärvi	Kuopio	К		К
Jutila		Jut		Liikennepaikka	94+620	01085	Riihimäki–Kouvola	Kärkölä	К		
Juupajoki		Jj		Seisake	246+580	00627	Orivesi–Seinäjoki	Juupajoki			
Juurikorpi		Jri		Liikennepaikka	224+898	00535	Kouvola–Kotka, Juurikorpi–Hamina	Kotka	К		
Jyväskylä		Ју		Liikennepaikka	340+970	00240	Jyväskylä–Pieksämäki, Haapamäki–Jyväskylä, Jyväskylä–Äänekoski, Tampere–Jyväskylä	Jyväskylä	к	к	к
Jämsä		Jäs		Liikennepaikka	284+084	00204	Jämsä–Kaipola, Tampere–Jyväskylä	Jämsä	к		к
Jämsänkoski		Jsk		Liikennepaikka	287+917	00205	Tampere–Jvväskylä	Jämsä	к	к	к
Järvelä		]r		Liikennepaikka	103+596	00095	Riihimäki–Kouvola	Kärkölä	к	к	к
JÄRVENPÄÄ		Jvp		Osiin jaettu liikennepaikka	-	-	Helsinki–Riihimäki		ĸ		
Järvenpää asema	Träskända	Jp	Järvenpää	Liikennepaikan osa	36+786	00025		Järvenpää			
				(Järvenpää)	- ,	-					
Saunakallio		Sau		Liikennepaikan osa (Järvenpää)	38+846	00806		Järvenpää		к	к
Purola		Pur		Liikennepaikan osa (Järvennää)	40+533	00564		Järvenpää	к		
Kaipiainen		Кра		Liikennepaikka	214+451	00485	Kouvola–Joensuu	Kouvola	к	к	к
Kaipola		Kla		Liikennepaikka	290+303	00656	Jämsä–Kaipola	lämsä		к	к
Kairokoski		Kko		Liniavaihde	423+184	00230	Niinisalo-Parkano	Parkano			ĸ
Kaitiärvi		Kir		Liikennepaikka	226+912	00944	Kouvola–Joensuu	Luumäki	к		
Kajaani	Kaiana	Kai		Liikennepaikka	633+491	00387	Pieksämäki–Kontiomäki. Kajaani–Lamminniemi	Kaiaani	ĸ		к
Kaleton		Ktn		Liniavaihde	320+875	00697	Haanamäki–]vväskylä	Keuruu			
Kalkku		Kau		l iikennenaikka	100+471	00639	Lielahti-Kokemäki	Tampere	к	к	
Kalliovarasto		Kao		Liniavaihde	644+770	01090	Pieksämäki–Kontiomäki	Kajaani		ĸ	
Kalvitsa		Ksa		L iikennenaikka	330+634	00548	Kouvola–Pieksämäki	Mikkeli	к		к
Kangas		Kas		Liikennepaikka	642+466	01092	Seinäioki–Oulu	Ylivieska	ĸ		ĸ
Kannelmäki	Gamlas	Kan		Liikennepaikka	9+300	00658	Huopalahti–Havukoski	Helsinki	ĸ		.,
Kannonkoski		Ksi		Liikennepaikka	488+694	00256	Äänekoski–Haapaiärvi	Kannonkoski	M		к
Kannus		Kns		Liikennepaikka	591+582	00317	Seinäioki–Oulu	Kannus	к		к
Karheiärvi		Krr		Liikennepaikka	224+902	01095	Tampere-Seinäioki	Ylöjärvi	ĸ		ĸ
Karhukangas		Kha		Liikennepaikka	622+897	01097	Seinäioki–Oulu	Ylivieska	ĸ		
Kariaa	Karis	Kr		Liikennepaikka	157+817	00060	Helsinki–Turku satama, Hyvinkää–Kariaa, Kariaa–Hanko	Raasepori	ĸ	к	к
Karkku		Kru		Liikennepaikka	230+733	00178	Lielahti–Kokemäki	Sastamala	ĸ		ĸ
Karviainen		Kar		Liikennepaikka	247+320	01100	Tojiala–Turku	Aura	ĸ		
Kaskinen	Kaskö	Ksk		Liikennepaikka	530+522	00267	Seinäioki–Kaskinen	Kaskinen	к	к	к
Kattilahariu		Kth		Liikennepaikka	205+556	01319	Kouvola–Joensuu	Kouvola	ĸ		
Kauhaioki		Kii		Liikennepaikka	472+720	00272	Seinäioki–Kaskinen	Kauhaioki	ĸ		
Kauhava		Kha		Liikennepaikka	455+728	00299	Seinäioki–Oulu	Kauhava	ĸ	к	к
Kauklahti	Köklax	Klh	Kauklahti	Liikennepaikka	24+277	00065		Espoo			к
Kaulinranta		Klr		Liikennepaikka	963+350	00790	Tornio–Kolari	Ylitornio	к		
Kauniainen	Grankulla	Kni		Liikennepaikka	16+054	00067	Helsinki–Turku satama	Kauniainen	к		к
Kauppilanmäki		Kpl		Liikennepaikka	568+751	00423	Pieksämäki–Kontiomäki	Iisalmi	ĸ		ĸ
Kausala		Ka		Seisake	169+425	00477	Riihimäki–Kouvola	Iitti			
Keitelepohja		Ktp		Liikennepaikka	519+256	00257	Äänekoski–Haapajärvi	Viitasaari	м		к
Kekomäki		Kek		Liikennepaikka	79+288	01101	Riihimäki–Kouvola	Hausjärvi	к		
Kemi		Kem		Liikennepaikka	858+300	00347	Oulu–Laurila, Kemi–Ajos	Kemi	к	к	к
Kemijärvi		Kjä		Liikennepaikka	1056+399	00367	Kemijärvi–Kelloselkä, Laurila–Kemijärvi	Kemijärvi	к	к	к
Kempele		Kml		Liikennepaikka	741+075	00769	Seinäjoki–Oulu	Kempele	к		к
Kera		Kea		Seisake	14+536	00621	Helsinki–Turku satama	Espoo			
KERAVA		Kev		Osiin jaettu liikennepaikka	-	L	Helsinki–Riihimäki, Kerava–Hakosilta, Kerava–Sköldvik		к		
-				,, J			Kerava–Vuosaari	1			
Kerava asema	Kervo	Ke	Kerava	Liikennepaikan osa (Kerava)	28+869	00020		Kerava		К	к
Kytömaa		Kyt		Liikennepaikan osa (Kerava)	31+274	01111		Kerava			
Kerimäki		Kiä		Liikennepaikka	495+531	00522	Savonlinna–Parikkala	Savonlinna	к		к
Kesälahti		Kti	1	Liikennepaikka	428+003	00966	Kouvola–Joensuu	Kitee	К		

Nimi	Toinen nimi	Lyhenne	Kaupallinen nimi	Тууррі	Km Hki	Koodi	Rataosuus	Kunta	Liikenteenohjaus	Yksityisraiteita	Vaihtotyö- mahdollisuus
Name	Another name	Abbr.	Commercial name	Туре	Km Hki	Code	Section	Municipality	Traffic control	Private sidings	Shunting
Keuruu		Keu		Liikennepaikka	316+041	00235	Haapamäki–Jyväskylä	Keuruu	к		к
Kiiala	Kiala	Kia		Seisake	60+013	01113	Olli-Porvoo	Porvoo			
Kilo		Kil		Seisake	13+035	00580	Helsinki–Turku satama	Espoo			
Kilpua		Kua		Liikennepaikka	668+910	01115	Seinäjoki–Oulu	Oulainen	к		к
Kinahmi		Knh		Linjavaihde	508+922	00873	Siilinjärvi–Viinijärvi	Kuopio		к	
Kinni		Kii		Liikennepaikka	247+982	01120	Kouvola–Pieksämäki	Mäntyharju	к		
Kirjola		Kij		Linjavaihde	384+475	01123	Kouvola–Joensuu	Parikkala		к	
Kirkkonummi	Kyrkslätt	Kkn		Liikennepaikka	37+503	00063	Helsinki–Turku satama	Kirkkonummi	к		К
Kirkniemi	Gerknäs	Krn		Liikennepaikka	136+261	00079	Hyvinkää–Karjaa	Lohja	к	к	К
Kitee		Kit		Liikennepaikka	460+016	00453	Kouvola–Joensuu	Kitee	к		К
Kiukainen		Kn		Liikennepaikka	297+395	00169	Kokemäki–Rauma	Eura	к		к
Kiuruvesi		Krv		Liikennepaikka	583+985	00417	Iisalmi–Ylivieska	Kiuruvesi	к	к	к
Kivesiärvi		Kvi		Liikennepaikka	878+146	00378	Oulu–Kontiomäki	Paltamo	к		
Kivistö		Ktö		Seisake	18+279	01330	Huopalahti-Havukoski	Vantaa			
Kohtavaara		Koh		Seisake	775+927	00848	Joensuu–Nurmes	Nurmes			
Koivu		Kvu		Liikennepaikka	923+373	00362	Laurila–Kemijärvi	Tervola	к		к
Koivuhovi	Biörkgård	Kyh		Seisake	17+861	00675	Helsinki–Turku satama	Espoo			
Koivukylä	Björkby	Kvv		Seisake	10+440	00559	Helsinki–Riihimäki	Vantaa			
Kokemäki	Kumo	Kki		Lijkennenzikka	284+442	00170	Lielahti Kokemäki Kokemäki Pauma Kokemäki Pori	Kokomäki	ĸ		ĸ
Kokkola	Karleby	Kok		Liikennenaikka	204+442	001/0	Kokkola Vkeniaki, Kokeniaki-Nadina, Kokeniaki-Fori	Kokkola	ĸ	ĸ	ĸ
Kolori	Naiteby	KI		Liikonnonaikka	10671206	00312	Tornio Kolari	Kolori	K	IX.	K K
Kolho		Klo		Soisaka	2861265	00358	Orivosi Soinäiski	Mänttä Vilopul	ľ,		K K
Kolno	K & III be a	Kiu		Jelsake	200+205	00199	Seinäislei Oulu	Padereëre	۰ ۲		K K
Kotppi	Naliby	крі		Liikennepaikka	525+100	00309	Selfajoki–Oulu	Verlegen	n	K	n K
Kommita		KIIIII		Спкепперакка	429+700	00500	Varkaus-Kommila	Varkaus		n K	n
Komu		Kom		Linjavaihde	607+174	00758	lisalmi-Ylivieska	Pyhajarvi		к	
Kontiolanti		Khi		Liikennepaikka	640+295	00463	Joensuu–Nurmes	Kontiolahti	ĸ		ĸ
Kontiomaki		Kon		Liikennepaikka	658+786	00390	Nurmes–Kontiomaki, Oulu–Kontiomaki,	Paltamo	ĸ	ĸ	ĸ
							Kontiomäki–Ammänsaari, Pieksämäki–Kontiomäki,				
							Kontiomäki–Vartius-raja				
Koria		Kra		Seisake	185+374	00478	Riihimäki–Kouvola	Kouvola			
Korkeakoski		Kas		Liikennepaikka	247+910	00193	Orivesi–Seinäjoki	Juupajoki	к	к	К
Korso		Krs		Seisake	22+669	00019	Helsinki–Riihimäki	Vantaa			
Korvensuo		Ksu		Liikennepaikka	50+500	01128	Kerava–Hakosilta	Mäntsälä	к		
Koskenkorva		Kos		Liikennepaikka	442+447	00274	Seinäjoki–Kaskinen	Ilmajoki	M		К
КОТКА		Kot		Osiin jaettu liikennepaikka	-	-	Kouvola–Kotka, Kotka Hovinsaari–Kotka Mussalo		M		
Kotka Hovinsaari		Hos		Liikennepaikan osa (Kotka)	240+400	00980		Kotka		К	κ
Kotka tavara		Ktt		Liikennepaikan osa (Kotka)	240+870	01130		Kotka			К
Paimenportti		Pti		Liikennepaikan osa (Kotka)	241+190	00768		Kotka			
Kotka asema		Kta	Kotka	Liikennepaikan osa (Kotka,	242+775	00532		Kotka		ĸ	ĸ
Kotolahti		Kts		Liikennepaikan osa (Kotka)	243+579	00644		Kotka		ĸ	ĸ
Kotka Mussalo		Mcc		Liikoppopaikan osa (Kotka)	245+203	01329		Kotka		K	K
		Kyl		Osijn jaettu liikennenaikka	-	-	Riihimäki-Kouvola Kouvola-Pieksämäki Kouvola-Kotka	ποικά	м	n	n
NOOVOLA							Kouvola–Joensuu Kouvola–Kuusankoski				
Kouvola asema		Kv	Kouvola	Liikennepaikan osa	191+540	00480	Nouvola Sociista, Nouvola Hadsankoski	Kouvola		к	к
				(Kouvola)							
Kouvola lajittelu		Kvla		Liikennepaikan osa	192+570	01132		Kouvola		к	ĸ
Kouvola tavara		Kat		(Kouvola) Liikoppopaikan osa	10.41.050	01174		Kouwola		K	K
Kouvola lavara		NVL		(Kouvola)	194+050	01134		Nouvolu		n in the second s	n.
Kouvola Oikoraide		Oik		(Rouvola) Liikennenaikan osa	104+460	01177		Kouvola			
		OIN		(Kouvola)	1947400	01133		1.00/010			
Kullasvaara		Kuv		Liikennepaikan osa	197+300	01320		Kouvola			
				(Kouvola)	5, 5						
Kovjoki		Koi		Liikennepaikka	508+925	00745	Seinäjoki–Oulu	Uusikaarlepyy	к		
Kruunupyy	Kronoby	Кру		Liikennepaikka	537+585	00311	Seinäjoki–Oulu	Kruunupyy	к	к	к
Kuivasjärvi	-	Kis		Liikennepaikka	276+327	01137	Tampere–Seinäjoki	Parkano	к		к
Κυοριο		Кро		Osiin jaettu liikennepaikka	-	-	Pieksämäki–Kontiomäki		м		

Nimi	Toinen nimi	Lyhenne	Kaupallinen nimi	Тууррі	Km Hki	Koodi	Rataosuus	Kunta	Liikenteenohjaus	Yksityisraiteita	Vaihtotyö- mahdollisuus
Name	Another name	Abbr.	Commercial name	Туре	Km Hki	Code	Section	Municipality	Traffic control	Private sidings	Shunting
Kuopio asema		Kuo	Kuopio	Liikennepaikan osa (Kuopio)	464+590	00408		Kuopio			K
Kuopio tavara		Kuot		Liikennepaikan osa (Kuopio)	465+500	01139	Distance and the second s	Kuopio	17	κ	K
Kurkimaki		Krm		Liikennepaikka	444+074	00406	Pieksamaki–Kontiomaki	Kuopio	ĸ		n
Kuusankocki		Kuk		Liikennepaikka	130+709	00626		Kouvola	n M	ĸ	ĸ
Kuusankoski		ruk Kut		Caisalia	199+290	00537		Kouvola	1*1	n	n
Kytantanti	Kummana	Kyri Ku		Selsake	742+960	00937	Joensuu–Nurmes	Lieksa	N4	V	V
Kyminlinna	Nymmene	Kin		Soicako	233+450	00534	Kouvola Kotka	Kotka	1.1	ĸ	n in the second s
Kyrö		Kä		Liikonnonaikka	23/7255	00981		Karinainan	K		ĸ
Kahda	Kolviš	Kly		Liikennepaikka	232+0/5	00139	Seinäicki Oulu	Kokkola	ĸ		n in the second s
Kövkkäri	Retvia	Kök		Liikennenaikka	486+401	00310	Seinäjoki-Oulu	Kaubaya	ĸ		
		Lav		Liikennenaikka	14+527	01741	Huopalahti Havukoski	Vantaa	ĸ		
Labdennerä		Lav		Liikennenaikka	267+080	01341	Tampere_]wäckulä	lämsä	ĸ		
Lahnaslampi		Lþi		Liikennenaikka	207+000 880+207	00871	Vuokatti-Lahnaslampi	Sotkamo	IX.	к	к
Lahti	Lahtis	Lh		Liikennenaikka	170+170	00100	Riihimäki-Kouvola Lahti-Heinola Lahti-Mukkula	Lahti	ĸ	ĸ	ĸ
Lanci	Lancio	2		Emernepanita	1301170	00100	l abti-l ovijcan satama	Lanci			
Laihia	l aihela	lai		l iikennenaikka	468+016	00207	Seinäioki-Vaasa	Laihia	ĸ		к
Lakiala	Lunicia	Lak		Liikennenaikka	200+214	00293	Tampero-Seinäioki	Vlöjärvi	ĸ		ĸ
Lamminkoski		Lmk		Liikennenaikka	269+214	01151	Tampere_Seinäjoki	Parkano	ĸ		i.
Lamminniemi		Lam		Liikennenaikka	676+664	00845	Kajaani-l amminniemi	Kajaani	i.	к	к
Laniniärvi	Lappträsk	Lni		l iikennenaikka	185+432	00108	Lahti-Loviisan satama	Laniniärvi	м		ĸ
Lapinlahti	Lupptrusk	Lpj		Liikennenaikka	E2E+604	00416	Pieksämäki-Kontiomäki	Lapinjahti	ĸ		ĸ
Lapinneva		Lina		Liniavaibde	525+004 415+618	00410	Niinisalo-Parkano	Parkano	IX.		ĸ
Lappenranta	Villmanstrand	Lr		l jikennenaikka	287+726	00405	Kouvola_Joensuu Lanneenranta_Mustolan satama	Lanneenranta	ĸ	к	к
Lappeentanta	Vitanansalana	Laa		Seisake	07+607	00004	Riihimäki_Kouvola	Kärkölä	i.	i.	i.
Lappohia	Lappvik	Luo		l iikennenaikka	180+630	00075	Kariaa–Hanko	Hanko	к	к	к
Lapyonju	Lappon	Ina		Liikennenaikka	441+004	00208	Seinäioki–Oulu	Lanua	ĸ	ĸ	ĸ
Lapud	сарро	Lyö		Liikennenaikka	777+057	01157	Tampero-Seinäioki	Seinäioki	ĸ		i.
Laukaa		Lau		l iikennenaikka	401+103	00240	lvväskylä–Äänekoski	Laukaa	ĸ		
Laurila		Lla		l iikennenaikka	865+776	00249	Laurila–Kemijärvi Oulu–Laurila Laurila–Tornio-raia	Keminmaa	ĸ		к
Lauritsala		Lrs		l iikennenaikka	201+036	00498	Kouvola–Joensuu	Lanneenranta	ĸ	к	ĸ
Lautiosaari		Li		Liikennepaikka	863+064	00829	Lautiosaari–Elijärvi. Oulu–Laurila	Kemi	ĸ		
l einelä	l eile	L nä		Seisake	31+123	01333	Huopalahti-Havukoski	Vantaa			
Lentoasema	Flygplatsen	Len		Seisake	26+575	01332	Huopalahti–Havukoski	Vantaa			
Lelkola	, 31	Lkl		Liikennepaikka	276+011	00993	Kouvola–Pieksämäki	Hirvensalmi	к		
Lempäälä		Lpä		Liikennepaikka	165+928	00156	Riihimäki–Tampere	Lempäälä	к		
Leppäkoski		Lk		Liikennepaikka	87+830	00043	Riihimäki–Tampere	Janakkala	к		
Leppävaara	Alberga	Lpv		Liikennepaikka	11+249	00068	Helsinki–Turku satama	Espoo	к		к
Leteensuo		Lts		Liikennepaikka	123+554	01154	Riihimäki–Tampere	Hattula	к		
Lieksa		Lis		Liikennepaikka	728+121	00468	Joensuu–Nurmes, Lieksa–Pankakoski	Lieksa	к	к	к
Lieksan teollisuuskylä		Ltk		Linjavaihde	728+847	01157	Lieksa–Pankakoski	Lieksa		к	к
Lielahti		Llh		Liikennepaikka	193+393	00183	Tampere–Seinäjoki, Lielahti–Kokemäki	Tampere	к	к	к
Lievestuore		Lvt		Liikennepaikka	402+191	00246	Jyväskylä–Pieksämäki	Laukaa	к	к	к
Liminka	Limingo	Lka		Liikennepaikka	728+483	00338	Seinäjoki–Oulu	Liminka	к		к
Liminpuro	-	Lmp		Liikennepaikka	863+770	01354	Oulu–Kontiomäki	Vaala	к		
Lohiluoma		Luo		Linjavaihde	463+619	01159	Seinäjoki–Kaskinen	Kurikka			
Lohja	Lojo	Lo		Liikennepaikka	122+965	00081	Hyvinkää–Karjaa	Lohja	к		к
Loimaa	-	Lm		Liikennepaikka	208+870	00142	Toijala–Turku	Loimaa	к		К
Louhela	Klippsta	Loh		Seisake	13+190	00661	Huopalahti–Havukoski	Vantaa			
Loukolampi		Lol		Liikennepaikka	360+013	00861	Kouvola–Pieksämäki	Pieksämäki	к		
Loviisan satama	Lovisa hamn	Lvs		Liikennepaikka	207+209	00106	Lahti–Loviisan satama	Loviisa	м	к	к
Luikonlahti		Lui		Liikennepaikka	557+061	00411	Siilinjärvi–Viinijärvi	Kaavi	к		к
Lusto		Lus		Seisake	509+170	00690	Savonlinna–Parikkala	Savonlinna			
Luumäki		Lä		Liikennepaikka	250+540	00487	Kouvola–Joensuu, Luumäki–Vainikkala-raja	Luumäki	к	к	к
Länkipohja		Läp		Liikennepaikka	256+024	00203	Tampere–Jyväskylä	Jämsä	к		
Maanselkä		Mlk		Liikennepaikka	836+049	00382	Nurmes–Kontiomäki	Sotkamo	М		к

Nimi	Toinen nimi	Lyhenne	Kaupallinen nimi	Тууррі	Km Hki	Koodi	Rataosuus	Kunta	Liikenteenohjaus	Yksityisraiteita	Vaihtotyö- mahdollisuus
Name	Another name	Abbr.	Commercial name	Туре	Km Hki	Code	Section	Municipality	Traffic control	Private sidings	Shunting
Maaria	St. Marie	Mri		Liikennepaikka	262+070	01166	Toijala–Turku	Turku	к		
Madesjärvi		Md		Liikennepaikka	291+821	00217	Tampere–Seinäjoki	Kurikka	к		к
Majajärvi		Mjj		Liikennepaikka	216+317	01168	Tampere–Seinäjoki	Ylöjärvi	к		
Malmi	Malm	ML		Liikennepaikka	10+900	00017	Helsinki–Riihimäki	Helsinki	к		
Malminkartano	Malmgård	Mlo		Seisake	10+730	00659	Huopalahti–Havukoski	Helsinki			
Mankala		Mka		Liikennepaikka	160+050	01336	Riihimäki-Kouvola	Iitti	к		
Markkala		Mrk		Liikennepaikka	403+737	00896	Pieksämäki–Kontiomäki	Suonenjoki	к		
Martinlaakso	Mårtensdal	Mrl		Seisake	14+010	00662	Huopalahti–Havukoski	Vantaa	к		
Masala	Masaby	Mas		Seisake	29+561	00064	Helsinki–Turku satama	Kirkkonummi			
Matkaneva		Mtv		Liikennepaikka	562+607	01171	Seinäjoki–Oulu	Kokkola	к		
Mattila		Mat		Liikennepaikka	159+906	01172	Riihimäki–Tampere	Lempäälä	к		
Melalahti		MIL		Liikennepaikka	893+280	01355	Oulu–Kontiomäki	Paltamo	к		
Metsäkansa		Msä		Linjavaihde	155+811	00558	Toijala–Valkeakoski	Valkeakoski			К
Mikkeli	St. Michel	Mi		Liikennepaikka	305+165	00546	Kouvola–Pieksämäki	Mikkeli	к	к	К
Misi		Mis		Liikennepaikka	1021+255	00366	Laurila–Kemijärvi	Rovaniemi	M		К
Mommila		Mla		Seisake	91+430	00093	Riihimäki–Kouvola	Hausjärvi			
Muhos		Mh		Liikennepaikka	788+424	00375	Oulu–Kontiomäki	Muhos	к		К
Mukkula		Muk		Liikennepaikka	140+012	00594	Lahti–Mukkula	Lahti		к	К
Murtomäki		Mur		Liikennepaikka	613+165	00386	Pieksämäki–Kontiomäki, Murtomäki–Talvivaara,	Kajaani	к		К
							Murtomäki–Otanmäki				
Mustio	Svartå	Mso		Linjavaihde	143+000	00078	Hyvinkää–Karjaa	Raasepori			К
Mustolan satama		Mst		Liikennepaikka	295+515	00077	Lappeenranta–Mustolan satama	Lappeenranta		к	
Muukko		Mko		Liikennepaikka	297+112	01180	Kouvola–Joensuu	Lappeenranta	к		
Muurame		Muu		Liikennepaikka	324+768	00433	Tampere–Jyväskylä	Muurame	к		К
Muurola		Mul		Liikennepaikka	948+494	00363	Laurila–Kemijärvi	Rovaniemi	к		К
Myllykangas		Mys		Liikennepaikka	815+693	01183	Oulu–Laurila	Ii	к		
Myllykoski		Mki		Seisake	203+742	00536	Kouvola–Kotka	Kouvola	к		
Myllymäki		My		Seisake	333+721	00263	Orivesi–Seinäjoki	Ähtäri			К
Myllyoja		Myl		Liikennepaikka	161+727	00606	Lahti-Heinola	Heinola	к	к	К
Mynttilä		Myt		Liikennepaikka	270+889	00543	Kouvola–Pieksämäki, Mynttilä–Ristiina	Mäntyharju	к		
Mynämäki		Myn		Liikennepaikka	229+607	00123	Turku–Uusikaupunki	Mynämäki	к		
Myyrmäki	Myrbacka	Myr		Liikennepaikka	12+130	00660	Huopalahti–Havukoski	Vantaa	к		
Mäkkylä		Mäk		Seisake	9+511	00693	Helsinki–Turku satama	Espoo			
Mäntsälä		Mlä		Liikennepaikka	59+210	00027	Kerava–Hakosilta	Mäntsälä	к		
Mänttä		Män		Liikennepaikka	282+740	00198	Vilppula–Mänttä	Mänttä-Vilppul	á	к	К
Mäntyharju		Mr		Liikennepaikka	262+680	00544	Kouvola–Pieksämäki	Mäntyharju	к		К
Mäntyluoto		Mn		Liikennepaikka	342+020	00223	Pori–Mäntyluoto	Pori	к	к	К
Naantali	Nådendal	Nnl		Liikennepaikka	213+193	00124	Raisio–Naantali	Naantali		к	К
Naarajärvi		Nri		Liikennepaikka	449+862	00895	Jyväskylä–Pieksämäki	Pieksämäki	к		К
Nakkila		Nal		Liikennepaikka	308+091	00672	Kokemäki–Pori	Nakkila	к		
Nastola		Nsl		Seisake	146+169	00595	Riihimäki–Kouvola	Lahti			
Niemenpää		Nmp		Liikennepaikka	923+605	01185	Tornio–Kolari	Tornio	к		
Niinimaa		Nii		Linjavaihde	383+155	00285	Orivesi–Seinäjoki	Alavus			
Niinimäki		Nmä		Liikennepaikka	172+534	01324	Riihimäki–Kouvola	Iitti			
Niinisalo		Nns		Liikennepaikka	386+215	00227	Niinisalo-Parkano	Kankaanpää	M	к	К
Niirala		Nrl		Liikennepaikka	555+846	00446	Niirala-raja–Säkäniemi	Tohmajärvi	М	к	к
Niirala-raja		Nrlr		Liikennepaikka	554+080	00445	Niirala-raja–Säkäniemi	Tohmajärvi			
Niittylahti		Nth		Liikennepaikka	613+475	00917	Kouvola–Joensuu	Joensuu	к		
Nikkilä	Nickby	Nlä		Seisake	39+176	00022	Kerava–Sköldvik	Sipoo			
Niska	-	Nsk		Liikennepaikka	826+118	01353	Oulu–Kontiomäki	Utajärvi	к		
Nivala		Nvl		Liikennepaikka	676+878	00328	Iisalmi–Ylivieska	Nivala	к		к
Nokia		Noa		Liikennepaikka	204+004	00181	Lielahti–Kokemäki	Nokia	к	к	к
Nummela		Nm		Liikennepaikka	109+368	00084	Hyvinkää–Karjaa	Vihti	к		к
Nurmes		Nrm		Liikennepaikka	784+420	00472	Nurmes–Kontiomäki, Joensuu–Nurmes	Nurmes	к	к	к
Närpiö	Närpes	När		Linjavaihde	518+255	00268	Seinäjoki–Kaskinen	Närpiö			
Ohenmäki		Ohm		Linjavaihde	542+264	01190	Pieksämäki–Kontiomäki	Iisalmi			к

Nimi	Toinen nimi	Lyhenne	Kaupallinen nimi	Тууррі	Km Hki	Koodi	Rataosuus	Kunta	Liikenteenohjaus	Yksityisraiteita	Vaihtotyö-
Name	Another name	Abbr.	Commercial name	Туре	Km Hki	Code	Section	Municipality	Traffic control	Private sidings	Shunting
Olli		Olli		Linjavaihde	45+734	00570	Kerava–Sköldvik, Olli–Porvoo	Porvoo	к		
Onttola		Ont		Linjavaihde	631+177	00443	Pieksämäki–Joensuu	Joensuu		к	к
Orimattila		Om		Linjavaihde	150+407	00109	Lahti–Loviisan satama	Orimattila			к
Orivesi		Ov		Liikennepaikka	228+276	00190	Tampere–Jyväskylä, Orivesi–Seinäjoki	Orivesi	к		к
Orivesi keskusta		Ovk		Seisake	231+512	01316	Orivesi–Seinäjoki	Orivesi			
Otanmäki		Otm		Liikennepaikka	638+822	00385	Murtomäki–Otanmäki	Kajaani		к	к
Otava		Ot		Liikennepaikka	290+521	00545	Kouvola–Pieksämäki, Otava–Otavan satama	Mikkeli	к		К
Oulainen		Ou		Liikennepaikka	657+850	00322	Seinäjoki–Oulu	Oulainen	к		К
OULU		Oul		Osiin jaettu liikennepaikka	-	-	Seinäjoki–Oulu, Oulu–Kontiomäki, Oulu–Laurila		м		
Oulunlahti		Oll		Liikennepaikan osa (Oulu)	746+876	01351		Oulu	К		
Oulu Nokela		Nok		Liikennepaikan osa (Oulu)	750+030	01195		Oulu		К	К
Oulu Oritkari		Ori		Liikennepaikan osa (Oulu)	751+180	01196		Oulu		к	к
Oulu tavara		Olt		Liikennepaikan osa (Oulu)	751+360	01197		Oulu		к	К
Oulu asema	Uleăborg	Ol T	Oulu	Liikennepaikan osa (Oulu)	752+778	00370		Oulu			ĸ
Oulu Tuira	-	Tua		Liikennepaikan osa (Oulu)	755+510	00339		Oulu		к	К
Paimio	Pemar	Po		Liikennepaikka	171+885	00128	Helsinki–Turku satama	Paimio	ĸ		
Palopuro		Plp		Liikennepaikka	54+535	00562	Helsinki–Riihimäki	Hyvinkää	ĸ		
Paltamo		Pto		Liikennepaikka	901+579	00379	Oulu–Kontiomäki	Paltamo	к		ĸ
Pankakoski		Pas		Liikennepaikka	731+865	00935	Lieksa–Pankakoski	Lieksa		к	К
Parikkala		Par		Liikennepaikka	387+302	00510	Kouvola–Joensuu, Savonlinna–Parikkala	Parikkala	к		К
Parkano		Pko		Liikennepaikka	262+483	00215	Parkano–Niinisalo, Tampere–Seinäjoki	Parkano	к	к	к
Parola		Prl		Liikennepaikka	115+764	00049	Riihimäki–Tampere	Hattula	к	К	К
Patokangas		Ptg		Liikennepaikka	1064+591	01346	Kemijärvi–Patokangas	Kemijärvi			К
Pello		Pel		Liikennepaikka	1002+632	00356	Tornio–Kolari	Pello	К	к	
Peltosalmi		Pmi		Linjavaihde	545+355	00882	Pieksämäki–Kontiomäki	Iisalmi			
Peräseinäjoki		Psj		Liikennepaikka	318+481	00687	Tampere–Seinäjoki	Seinäjoki	к	к	к
Pesiökylä		Psk		Liikennepaikka	732+752	00393	Kontiomäki–Ämmänsaari	Suomussalmi	M		К
Petäjävesi		Pvi		Liikennepaikka	343+357	00237	Haapamäki–Jyväskylä	Petäjävesi	к		К
PIEKSÄMÄKI		Pie		Osiin jaettu liikennepaikka	-	-	Kouvola–Pieksämäki, Pieksämäki–Kontiomäki, Ivväskylä–Pieksämäki, Pieksämäki–Joensuu	Pieksämäki	м		
Pieksämäki asema		Pm	Pieksämäki	Liikennepaikan osa	376+000	00400		Pieksämäki		к	к
Pieksämäki Temu		Tmu		Liikennepaikan osa	377+340	01212		Pieksämäki		к	К
Pieksämäki lajittelu		Pmla		(Pieksamaki) Liikennepaikan osa	378+640	01210		Pieksämäki		к	κ
Pieksämäki tavara		Pmt		(Pieksämäki) Liikennepaikan osa	379+960	01211		Pieksämäki		к	к
Distance and	1-1	DL.		(Pieksämäki)			Diana State and Distance and Allestone	D'standard			14
Pietarsaari	Jakobstad	Pts		Liikennepaikka	528+780	00306	Pannainen–Pietarsaari, Pietarsaari–Alholma	Pietarsaari	Ivi I		n K
Pintajavesi		Ph		L11кеппера1кка	312+500	00261		Keuruu	n .		n K
Pintipudas	<b>D</b>	Рр		Liikennepaikka	540+605	00258	Aanekoski–Haapajarvi	Pintipudas	M		ĸ
	Pikis	Pik		Liikennepaikka	182+785	00127	Helsinki–Turku satama	Kaarina	ĸ		к
Pikkarala		PKL		Liikennepaikka	771+765	00819	Oulu-Kontiomaki	Oulu	ĸ	ĸ	
Pitkamaki		Ptk		Сіїкеппераїкка	789+619	01350	Nurmes–Kontiomaki	Nurmes	ĸ	к	
Pitäjänmäki	Sockenbacka	Pjm		Seisake	8+474	00069	Helsinki–Turku satama	Helsinki			
Pohjankuru	Skuru	Pku		Liikennepaikka	94+907	00059	Helsinki–Turku satama	Raasepori	к	к	К
Pohjois-Haaga	Norra Haga	Poh		Seisake	8+050	00657	Huopalahti–Havukoski	Helsinki			
Pohjois-Louko		Plu		Liikennepaikka	329+329	01214	Tampere–Seinäjoki	Seinäjoki	к		
Poikkeus		Pkk		Liikennepaikka	254+744	01216	Tampere–Seinäjoki	Parkano	к		
Poiksilta		Poi		Linjavaihde	416+728	00965	Kouvola–Joensuu	Kitee			к
Pori	Björneborg	Pri		Liikennepaikka	322+278	00220	Pori–Aittaluoto, Pori–Mäntyluoto, Kokemäki–Pori	Pori	к	к	к
Porvoo	Borgå	Prv		Liikennepaikka	62+287	00023	Olli–Porvoo	Porvoo			К
Puhos		Pus		Liikennepaikka	452+808	00919	Kouvola–Joensuu	Kitee	к	к	к
Puistola	Parkstad	Pla		Seisake	14+050	00553	Helsinki–Riihimäki	Helsinki			
Pukinmäki	Bocksbacka	Pmk		Seisake	9+442	00551	Helsinki–Riihimäki	Helsinki			
Pulsa		PL		Liikennepaikka	262+491	01217	Luumäki–Vainikkala-raja	Lappeenranta	к		к
Punkaharju		Pun		Liikennepaikka	515+111	00517	Savonlinna–Parikkala	Savonlinna	к	к	к
Pyhäkumpu		Pyk		Liikennepaikka	615+415	00757	Pyhäkumpu erkanemisvaihde– Pyhäkumpu	Pyhäjärvi		к	

Nimi	Toinen nimi	Lyhenne	Kaupallinen nimi	Тууррі	Km Hki	Koodi	Rataosuus	Kunta	Liikenteenohjaus	Yksityisraiteita	Vaihtotyö- mahdollisuus
Name	Another name	Abbr.	Commercial name	Туре	Km Hki	Code	Section	Municipality	Traffic control	Private sidings	Shunting
Pyhäkumpu erkanemisvaihde		Pye		Liikennepaikka	613+511	01218	Iisalmi–Ylivieska, Pyhäkumpu erkanemisvaihde– Pyhäkumpu	Pyhäjärvi	к		
Pyhäsalmi		Phä		Liikennepaikka	615+934	00331	Iisalmi–Ylivieska	Pyhäjärvi	к		к
Pännäinen	Bennäs	Pnä	Pietarsaari-Pedersöre	Liikennepaikka	518+604	00305	Pännäinen–Pietarsaari, Seinäjoki–Oulu	Pedersöre	к		к
Raahe	Brahestad	Rhe		Liikennepaikka	726+726	00335	Raahe–Rautaruukki, Tuomioja–Raahe	Raahe	к	к	к
Raippo		Rpo		Liikennepaikka	270+052	00490	Luumäki–Vainikkala-raja	Lappeenranta	к	к	к
Raisio	Reso	Rai		Liikennepaikka	207+829	00125	Turku–Uusikaupunki, Raisio–Naantali	Raisio	к	к	К
Rajamäki		Rm		Liikennepaikka	72+267	00088	Hyvinkää–Karjaa	Nurmijärvi			к
Rajaperkiö		Rjp		Liikennepaikka	448+396	01220	Seinäjoki–Oulu	Lapua	К		
Rantasalmi		Rmi		Liikennepaikka	445+165	00524	Huutokoski–Savonlinna	Rantasalmi	к		к
Rasinsuo		Ras		Liikennepaikka	258+510	01222	Kouvola–Joensuu	Luumäki	ĸ		
Ratikylä		Rlä		Liikennepaikka	284+344	00596	Tampere–Seinäjoki	Kihniö	ĸ		ĸ
Rauha		Rah		Liikennepaikka	318+490	00501	Kouvola–Joensuu	Lappeenranta	к		к
Rauhalahti	_	Rhl		Linjavaihde	380+510	01225	Jyväskylä–Pieksämäki	Jyväskylä		ĸ	к
Rauma	Raumo	Rma		Liikennepaikka	331+659	00165	Kokemäki–Rauma	Rauma	ĸ	к	к
Raunio		Rio		Liikennepaikka	464+845	01227	Seinajoki–Oulu	Kauhava	ĸ		
Rautaruukki		Rat		Liikennepaikka	730+050	00750	Kaahe-Kautaruukki	Raahe	IZ.	ĸ	к
Rautjarvi		Кја		Liikennepaikka	345+788	00506	Kouvola–Joensuu	Rautjarvi	ĸ	14	
Rautponja	B	Rpn			372+829	01232	Haapamaki–Jyvaskyla	Jyvaskyla		n	
Rekola	Rackhals	RKL		Seisake	20+615	00554	Helsinki–Kiihimaki	Vantaa			
Retretti		Ree		Seisake	507+500	00793	Savonlinna–Parikkala	Savonlinna	r.		
RIIHIMAKI Biibimäki Arolampi		R11 Are		Usiin jaettu liikennepaikka	-	-	Helsinki–Riihimaki, Riihimaki–Kouvola, Riihimaki–Tampere	Housiand	ĸ		
Anninaki Arolampi		АГр		(Piibimäki)	00+000	01235		nuusjuivi			
Riihimäki tavara		Rit		Liikennepaikan osa (Riihimäki)	68+773	01240		Riihimäki			к
Riihimäki lajittelu		Rila		Liikennepaikan osa	70+068	01238		Riihimäki			к
Riihimäki asema		Ri	Riihimäki	(Filininaki) Liikennepaikan osa (Riihimäki)	71+410	00040		Riihimäki		к	к
Bijiarvi		Rir		l iikennenaikka	502+567	01327	Seinäioki–Oulu	Uusikaarlenvv	ĸ		
Biinna		Rna		l iikennenaikka	577+477	00747	Seinäjoki-Oulu	Kokkola	ĸ		
Bistiina		Rst		Liikennepaikka	291+162	00770	Mynttilä–Ristiina	Mikkeli	M	к	к
Bistijärvi		Riv		Liikennepaikka	676+804	00391	Kontiomäki–Ämmänsaari	Ristijärvi	ĸ		
Bovaniemi		Roi		Liikennepaikka	971+775	00364	Laurila–Kemijärvi	Rovaniemi	ĸ	к	к
Ruha		Rha		Liikennepaikka	431+132	00742	Seinäioki–Oulu	Lapua	ĸ		
Runni		Rnn		Seisake	568+518	00886	Iisalmi–Ylivieska	Iisalmi			
Ruukki		Rki		Liikennepaikka	705+228	00337	Seinäjoki–Oulu	Siikajoki	к		к
Ruusumäki		Rsm		Liikennepaikka	20+282	01338	Huopalahti–Havukoski	Vantaa	к		
Ryttylä		Ry		Liikennepaikka	80+770	00042	Riihimäki–Tampere	Hausjärvi	к	к	к
Röyttä		Röy		Liikennepaikka	893+917	00833	Tornio–Röyttä	Tornio		к	к
Saakoski		Saa		Liikennepaikka	305+373	00668	Tampere–Jyväskylä	Jyväskylä	к		
Saari		Sr		Liikennepaikka	405+246	00964	Kouvola–Joensuu	Parikkala	к		
Saarijärvi		Srj		Liikennepaikka	452+723	00254	Äänekoski–Haapajärvi	Saarijärvi	м		К
Salminen		Sln		Liikennepaikka	426+718	00405	Pieksämäki–Kontiomäki, Pieksämäki–Kontiomäki	Suonenjoki	к		к
Salo		Slo		Liikennepaikka	143+981	00055	Helsinki–Turku satama	Salo	к		к
Sammalisto		Sam		Liikennepaikka	74+487	01246	Riihimäki–Tampere	Riihimäki	к		
Santala	Sandö	Sta		Seisake	196+908	00827	Karjaa–Hanko	Hanko			
Saunamäki		Smä		Liikennepaikka	180+534	01325	Riihimäki–Kouvola	Iitti			
Savio		Sav		Seisake	26+265	00555	Helsinki–Riihimäki	Kerava			
SAVONLINNA		Svl		Osiin jaettu liikennepaikka	-	_	Savonlinna–Parikkala, Huutokoski–Savonlinna				
Savonlinna asema	Nyslott	Sl	Savonlinna	Liikennepaikan osa (Savonlinna)	482+797	00521		Savonlinna	к		
Pääskylahti		Pky		Liikennepaikan osa (Savonlinna)	484+913	00519		Savonlinna	к		к
SEINÄJOKI		Sei		Osiin jaettu liikennepaikka	-	-	Tampere-Seinäjoki, Seinäjoki-Oulu, Orivesi-Seinäjoki, Seinäjoki-Vaasa, Seinäjoki-Kaskinen		м		
Seinäjoki tavara		Skt		Liikennepaikan osa (Seinäjoki)	416+580	01252		Seinäjoki		к	К

Nimi	Toinen nimi	Lyhenne	Kaupallinen nimi	Тууррі	Km Hki	Koodi	Rataosuus	Kunta	Liikenteenohjaus	Yksityisraiteita	Vaihtotyö- mahdollisuus
Name	Another name	Abbr.	Commercial name	Туре	Km Hki	Code	Section	Municipality	Traffic control	Private sidings	Shunting
Seinäjoki asema		Sk	Seinäjoki	Liikennepaikan osa	418+001	00280		Seinäjoki		к	К
Selännää		Snä		(Seinajoki) Liikennenaikka	200+860	00570	Kouvola Pieksämäki	Kouvola	ĸ		
Sieppiiänd		Spa		Liikennenaikka	209+809	00539		Kolari	K		K
Sieppijaivi		Shi		Liikennenaikka	617 1 771	00790	Soinäidei Oulu	Sioui	K		K K
Silevi		SVI			013+3/1	00319	Selhajoki–Oulu	Dielevi	n K		n
Silkamaki		Ska			389+747	00429	Pieksamaki–Joensuu	Pleksamaki	n K		
SIILINJARVI Siiliniäni eseme		511		Usiin jaettu liikennepaikka	-	-	Sillinjarvi–Viinijarvi, Pieksamaki–Kontiomaki	Ciiliniänd	ĸ	ĸ	ĸ
Shlinjarvi asema		51]		Citikennepaikan osa	489+718	00413		Silunjarvi	n	n	n
Ruokosuo		Rsu		Liikennepaikan osa	494+735	01342		Siilinjärvi	к	к	к
		<u>.</u>		(Siilinjärvi)	0			<u>.</u>			
Simo		Sim		Liikennepaikka	833+715	00346	Oulu-Laurila	Simo	ĸ		к
Simpele		Spl		Liikennepaikka	368+317	00507	Kouvola–Joensuu	Rautjärvi	ĸ	к	к
Sipilä		Sip		Liikennepaikka	68+697	01254	Kerava–Hakosilta, Kerava–Hakosilta	Mäntsälä	к		
Sisättö		Stö		Liikennepaikka	235+602	01257	Tampere–Seinäjoki	Ikaalinen	к		
Siuntio	Sjundeå	Sti		Liikennepaikka	51+285	00576	Helsinki–Turku satama	Siuntio	к		
Siuro		Siu		Liikennepaikka	213+355	00179	Lielahti–Kokemäki	Nokia	К		К
Skogby		Sgy		Seisake	184+790	00817	Karjaa–Hanko	Raasepori			
Sköldvik	Kilpilahti	Sld		Liikennepaikka	56+360	00560	Kerava–Sköldvik	Porvoo	M	к	К
Soinlahti		Soa		Linjavaihde	559+651	00422	Pieksämäki–Kontiomäki	Iisalmi		к	к
Sorsasalo		Sor		Liniavaihde	473+754	00870	Pieksämäki–Kontiomäki	Kuopio		к	
Sukeva		Sky		l iikennenaikka	580+222	00424	Pieksämäki–Kontiomäki	Sonkajärvi	к		к
Suclahti		Suo		Liikennenaikka	417+706	00251	hvišekulā-Äänekoski	Äänekocki	ĸ	ĸ	ĸ
Suonanioki		Sni		Liikennenaikka	417+842	00404	Pieksämäki Kontiomäki Suonenioki Vläkoski	Suonenioki	ĸ		ĸ
Suonienjoki		Shij		Liikonnonaikka	220 + 655	00404	Lielahti Kokomäki	Nokio	K		K
Suomenn		Siiii		Linkelinepaikka	220+055	00038		NUKId	r.		V
Syrja		Syr			452+005	00435		nemavesi			n
Syrjamaki		Ski		Liikennepaikka	341+621	01265	Tampere–Seinajoki	Seinajoki	ĸ		
Sysmajarvi		Smj		Liikennepaikka	669+601	00912	Sysmajarvi–Vuonos, Siilinjarvi–Viinijarvi	Outokumpu	ĸ	к	к
Säkäniemi		Sä		Liikennepaikka	480+242	00918	Niirala-raja–Säkäniemi, Kouvola–Joensuu	lohmajärvi	к		
Sänkimäki		Skm		Linjavaihde	504+505	00872	Siilinjärvi–Viinijärvi	Kuopio			к
Sääksjärvi		Sj		Liikennepaikka	177+734	00157	Riihimäki–Tampere	Tampere	к		
Taavetti		Та		Liikennepaikka	238+589	00486	Kouvola–Joensuu	Luumäki	к	к	К
Tahkoluoto		Tko		Liikennepaikka	350+235	00702	Pori–Mäntyluoto	Pori		к	К
Taipale		Te		Liikennepaikka	537+605	01268	Pieksämäki–Kontiomäki	Iisalmi	К		
Talviainen		Tv		Liikennepaikka	247+245	01270	Tampere–Jyväskylä	Orivesi	к		К
Talvivaara		Tlv		Liikennepaikka	637+238	01323	Murtomäki–Talvivaara				
Tammisaari	Ekenäs	Tms		Seisake	174+056	00076	Karjaa–Hanko	Raasepori			
TAMPERE		Tre		Osiin jaettu liikennepaikka	_	_	Riihimäki–Tampere, Tampere–Seinäjoki, Tampere–Jyväskylä		м		
Tampere tavara		Tpet		Liikennepaikan osa (Tampere)	184+100	01273		Tampere		к	К
Tampere Viinikka		Vka		Liikennepaikan osa	185+400	01274		Tampere		к	К
Tampere asema	Tammerfors	Тре	Tampere asema	Liikennepaikan osa (Tampere)	187+389	00160		Tampere			К
Tampere Järvensivu		Jvs		Liikennepaikan osa	187+814	01272		Tampere			
Tapanila	Mosabacka	Тпа		Seisake	12+610	00552	Helsinki_Biihimäki	Holsinki			
Tapavainola	Hosubucku	Tan		Lijkennenzikka	270+405	01376	Kouvola_Joensuu	Lappeopranta	ĸ		
Tavastila		Tel		Soicako	228+854	00877	Kouvola-Kotka	Kotka	i v		
Tervajoki				Sojcako	460+156	00304	Seinäioki Vaasa	Icolorio			
Topolo				Liikonnonaikka	400+150	00294	Jeniajon-Vaasa	Topyolo	K		K
Terre	Östermerk	T		Liikennepaikka	900+521	00301	Launa-rennjaf Vi	Tervold	M		K K
	Ustermark	TUV		спкепперакка	497+474	002/1	Seinajoki-Naskinen	reuva	M		n
l ikkala		1 KK		Liikennepaikka	592+461	00916	Kouvola–Joensuu	Ionmajärvi	ĸ		
likkaperä		Ikp		Liikennepaikka	720+741	01335	Seinäjoki–Oulu	Liminka	к		
TIKKURILA		Tik		Osiin jaettu liikennepaikka	-	-	Helsinki–Riihimäki, Huopalahti–Havukoski		ĸ		
Havukoski		Hvk		L11kennepaikan osa (Tikkurila)	17+725	01334		Vantaa	ĸ		

Nimi	Toinen nimi	Lyhenne	Kaupallinen nimi	Тууррі	Km Hki	Koodi	Rataosuus	Kunta	Liikenteenohjaus	Yksityisraiteita	Vaihtotyö- mahdollisuus
Name	Another name	Abbr.	Commercial name	Туре	Km Hki	Code	Section	Municipality	Traffic control	Private sidings	Shunting
Hiekkaharju	Sandkulla	Hkh		Liikennepaikan osa	17+109	00556		Vantaa			
Tikkurila asema	Dickursby	Tkl		(Tikkurila) Liikennepaikan osa	15+861	00018		Vantaa	к	к	к
				(Tikkurila)	-						
Tohmajärvi		Toh		Liikennepaikka	571+752	00448	Niirala-raja–Säkäniemi	Tohmajärvi	к		К
Toijala		тι		Liikennepaikka	147+339	00150	Toijala–Turku, Riihimäki–Tampere, Toijala–Valkeakoski	Akaa	к	к	К
Toivala		Toi		Liikennepaikka	479+162	00412	Pieksämäki–Kontiomäki	Siilinjärvi	к		К
Tolsa	Tolls	Tol		Seisake	35+454	00830	Helsinki–Turku satama	Kirkkonummi			
Tommola		Tom		Liikennepaikka	117+197	01280	Riihimäki–Kouvola	Hollola	к		
Torkkeli		Trk		Liikennepaikka	240+154	01283	Tampere–Jyväskylä	Orivesi	к		
TORNIO		Trn		Osiin jaettu liikennepaikka	-	-	Tornio–Röyttä, Tornio–Kolari, Laurila–Tornio-raja		к		
Tornio asema	Torneå	Tor	Tornio	Liikennepaikan osa (Tornio)	884+656	00351		Tornio	К	K	К
Tornio-raja	Torneå gränsen	Trr		Liikennepaikan osa (Tornio)	887+190	00678		Tornio			
Tornio-Itäinen	Torneå Östra	Tri		Seisake	883+307	01318	Laurila–Tornio-raja	Tornio			
Tuomarila	Domsby	Trl		Seisake	19+022	00579	Helsinki–Turku satama	Espoo			
Tuomioja		Tja		Liikennepaikka	698+504	00336	Seinäjoki–Oulu, Tuomioja–Raahe	Siikajoki	к		К
Turenki		Tu		Liikennepaikka	93+771	00044	Riihimäki–Tampere	Janakkala	к	к	к
TURKU		Tur		Osiin jaettu liikennepaikka	-	-	Helsinki–Turku satama, Toijala–Turku, Turku–Uusikaupunki	Turku	к		
Kupittaa	Kuppis	Kut		Liikennepaikan osa (Turku)	196+372	00126		Turku			
Turku asema	Åbo	Tku	Turku	Liikennepaikan osa (Turku)	199+674	00130		Turku		ĸ	К
			päärautatieasema								
Turku tavara		Tkut		Liikennepaikan osa (Turku)	200+460	01285		Turku		К	κ
Turku satama	Abo hamn	Tus		Liikennepaikan osa (Turku)	202+510	00135		Turku		K	
Tuupovaara		Трv		Liikennepaikka	668+672	00458	Joensuu–Ilomantsi	Joensuu			к
Tuuri		Tuu		Seisake	366+962	00283	Orivesi–Seinäjoki	Alavus			К
Törmä		Tör		Liikennepaikka	878+075	01287	Laurila–Kemijärvi	Keminmaa	к		
Törölä		Trä		Liikennepaikka	264+972	01290	Kouvola–Joensuu	Lappeenranta	к		
Uimaharju		Uim		Liikennepaikka	674+451	00465	Joensuu–Nurmes	Joensuu	к	к	К
Urjala		Ur		Liikennepaikka	165+588	00148	Toijala–Turku	Urjala	к		К
Utajärvi		Utj		Liikennepaikka	810+502	00376	Oulu–Kontiomäki	Utajärvi	к		К
Utti		Uti		Linjavaihde	204+085	00484	Kouvola–Joensuu	Kouvola			К
Uusikaupunki	Nystad	Ukp		Liikennepaikka	264+795	00121	Uusikaupunki–Hangonsaari, Turku–Uusikaupunki	Uusikaupunki	к	к	К
Uusikylä		Ukä		Liikennepaikka	149+485	00105	Riihimäki-Kouvola	Lahti	к		к
Vaajakoski		Vko		Liikennepaikka	384+866	00245	Jyväskylä–Pieksämäki	Jyväskylä	к		к
Vaala		Vaa		Liikennepaikka	844+671	00377	Oulu–Kontiomäki	Vaala	к		к
Vaarala		Vra		Liniavaihde	981+481	00807	Laurila-Kemiiärvi	Rovaniemi			к
Vaasa	Vasa	Vs		l iikennenaikka	402+588	00288	Seinäioki–Vaasa	Vaasa	к	к	ĸ
Vabojanvi	, asa	Vir		l iikennenaikka	244+026	00214	Tampere-Seinäioki	Parkano	ĸ		
		Vai		Osijn jaettu liikennenaikka	-	-	luumäki-Vainikkala-raia	i urkuno	м		
Vainikkala tavara		Vnat		l iikennenaikan osa	281+700	01202		l anneenranta		к	к
		, nat		(Vainikkala)	2011/00	01292		Lappeennanta		~	
Vainikkala asema		Vna	Vainikkala	Liikennepaikan osa	282+784	00492		Lappeenranta		к	к
				(Vainikkala)							
Vainikkala-raja		Vnar		Liikennepaikka	284+862	00493		Lappeenranta			
Valimo	Gjuteriet	Vmo		Seisake	7+480	00847	Helsinki–Turku satama	Helsinki			
Valkeakoski		Vi		Liikennepaikka	164+952	00153	Toijala–Valkeakoski	Valkeakoski	м	к	к
Valkeasuo		Vso		Liniavaihde	583+976	00450	Niirala-raia-Säkäniemi	Tohmaiärvi			к
Valtimo		Vlm		Liikennepaikka	808+636	00475	Nurmes-Kontiomäki	Valtimo	м		к
Vammala		Vma		Liikennepaikka	245+885	00176	Lielahti–Kokemäki	Sastamala	к		к
Vanattara		Vtr		Liikennepaikka	172+340	01295	Riihimäki–Tampere	Lempäälä	к		
Vantaankoski	Vandaforsen	Vks		Seisake	14+907	00839	Huopalahti-Havukoski	Vantaa			
Varkaus		Var		l jikennenaikka	424+685	00472	Pieksämäki-loensuu Varkaus-Kommila	Varkaus	ĸ	ĸ	к
Vartius		Vuc		Liikonnonoikko	4247005	00432	Kontiomäki Vartius raia	Kuhmo	M	IX.	K K
Vartius raia		Vus		Liikonnonaikka	/337/55	00941	Kontiomaki-Valitus-laja	Kuhmo			rx
varuus-raja Veelukekeke		VUI		спкепперакка	/55+050	00949	roncomaki-vartuus-raja	Kunno	K.		
Vasikkanaka	M	VKI		Спкетператкка	51+175	01300	netsiriki–i urku satama	Kirkkonummi	n	17	K
Vaskiluoto	VaSKLOT	VSK		спкеппераїкка	490+463	00291	vaasa-vaskiluoto	vaasa		n	n
Venkala	veckal	Veh		Seisake	15+997	01337	Huopalanti–Havukoski	Vantaa			
Venetmäki	1	Vki		Liikennepaikka	433+164	00428	Jyväskylä–Pieksämäki	Pieksämäki	К		

Nimi	Toinen nimi	Lyhenne	Kaupallinen nimi	Тууррі	Km Hki	Koodi	Rataosuus	Kunta	Liikenteenohjaus	Yksityisraiteita	Vaihtotyö- mahdollisuus
Name	Another name	Abbr.	Commercial name	Туре	Km Hki	Code	Section	Municipality	Traffic control	Private sidings	Shunting
Vesanka		Vn		Liikennepaikka	364+469	00239	Haapamäki–Jyväskylä	Jyväskylä	к		
Viekki		Vk		Linjavaihde	753+979	00471	Joensuu–Nurmes	Lieksa			к
Vierumäki		Vrm		Linjavaihde	153+801	00112	Lahti–Heinola	Heinola			К
Vihanti		Vti		Liikennepaikka	684+573	00334	Seinäjoki–Oulu	Raahe	к	к	к
Vihtari		Vih		Liikennepaikka	489+889	00438	Pieksämäki–Joensuu	Heinävesi	к		к
Vihtavuori		Vri		Liikennepaikka	395+230	00248	Jyväskylä–Äänekoski	Laukaa	к		
Viiala		Via		Liikennepaikka	154+288	00155	Riihimäki–Tampere	Akaa	к		К
Viinijärvi		Vnj		Liikennepaikka	656+569	00440	Siilinjärvi–Viinijärvi, Pieksämäki–Joensuu	Liperi	к		К
Villähde		Vlh		Liikennepaikka	140+442	00104	Riihimäki–Kouvola	Lahti	к		
Vilppula		Vlp		Liikennepaikka	274+760	00196	Orivesi–Seinäjoki, Vilppula–Mänttä	Mänttä-Vilppul	к	к	к
Vinnilä		Vin		Liikennepaikka	131+243	01305	Riihimäki–Tampere	Hämeenlinna	к		
Virkamies		Vms		Liikennepaikka	25+931	01339	Huopalahti–Havukoski	Vantaa	к		
Voltti		Vt		Liikennepaikka	479+402	00302	Seinäjoki–Oulu	Kauhava	к		К
Vuohijärvi		Vhj		Liikennepaikka	221+308	00541	Kouvola–Pieksämäki	Kouvola	к		К
Vuojoki		Vjo		Liikennepaikka	318+501	01310	Kokemäki–Rauma	Eurajoki	к		
Vuokatti		Vkt		Liikennepaikka	868+838	00383	Nurmes–Kontiomäki, Vuokatti–Lahnaslampi	Sotkamo	М		К
Vuonislahti		Vsl		Liikennepaikka	705+240	00467	Joensuu–Nurmes	Lieksa	к		
Vuonos		Vns		Liikennepaikka	588+116	00863	Sysmäjärvi–Vuonos	Outokumpu			К
Vuosaari	Nordsjö	Vsa		Liikennepaikka	50+184	01321	Kerava–Vuosaari	Helsinki	к	к	К
YKSPIHLAJA		Yks		Osiin jaettu liikennepaikka	-	-	Kokkola–Ykspihlaja				
Ykspihlaja tavara		Ykst		Liikennepaikan osa	553+900	00315		Kokkola		к	к
				(Ykspihlaja)							
Ykspihlaja väliratapiha		Yksv		Liikennepaikan osa	555+511	01326		Kokkola		к	К
				(Ykspihlaja)							
Ylistaro		Yst		Seisake	439+558	00296	Seinäjoki–Vaasa	Seinäjoki			
Ylitornio	Övertorneå	Ytr		Seisake	946+139	00789	Tornio-Kolari	Ylitornio			
Ylivalli		Ylv		Liikennepaikka	302+016	00654	Tampere–Seinäjoki	Kurikka	к	к	К
Ylivieska		Yv		Liikennepaikka	630+343	00320	Iisalmi–Ylivieska, Seinäjoki–Oulu	Ylivieska	М	к	К
Yläkoski		Ylk		Liikennepaikka	416+849	00867	Suonenjoki–Yläkoski	Suonenjoki		к	К
Ylämylly		Yly		Liikennepaikka	639+019	00913	Pieksämäki–Joensuu	Liperi	к		К
Ylöjärvi		Ylö		Liikennepaikka	200+753	00211	Tampere–Seinäjoki	Ylöjärvi	к		К
Ypykkävaara		Үру		Liikennepaikka	729+780	00940	Kontiomäki–Vartius-raja	Kuhmo	к		к
Äetsä		Äs		Liikennepaikka	258+280	00174	Lielahti–Kokemäki	Sastamala	к		к
Ähtäri	Etseri	Äht		Liikennepaikka	346+067	00265	Orivesi–Seinäjoki	Ähtäri	к		к
Ämmänsaari		Äm		Liikennepaikka	750+448	00394	Kontiomäki–Ämmänsaari	Suomussalmi	М		к
Äänekoski		Äki		Liikennepaikka	424+515	00252	Jyväskylä–Äänekoski, Äänekoski–Haapajärvi	Äänekoski	к	к	к

### Rail Traffic Operating Points / Traffic Operating Point Information

APPENDIX 3B / 14 (28)

Nimi	Lyhin	Pisin laituripituus	Laituri-	Laituriraiteiden	Mitoittava raidepituus	Sähkö-virran	Sivulaituri,	Päätylaituri	Kuormaus-	Seisontaraide	Seisontaraide (kpl	Nosturi	Polttoaine	Henkilö-	Tavara-	Kääntöpöytä tai	VAK-
Name	Min. platform	Max. platform	Platform	Number of tracks	Design train length	Power supply	Side loading	End loading	Loading site	(m/tilkennepalkka)	/шкепператкка)	Crane	Fuel	Passenger	Freight traffic	Turntable or	Rail vard for
	length	length	height	with platforms	(freight traffic)	. oner suppry	platform	platform	Louis of the				. uct	traffic		triangle rail (KR)	dangerous
							length										goods
	[m]	[m]	[mm]		[m]	[400 V. A]	[m]					[t]					
			1									1 <sup>11</sup>					
Ahonpää				0	927	-	-	-	-			-	-	-	- 1	_	-
Ahvenus				0	747	-	-	-	-			-	-		-	-	-
Ainola	270	270	550	2		-	-	-	-			-	-	н	_	-	-
Airaksela				0	819	-	-	-	-			-	-	-	Т	-	-
Aittaluoto				0	-	-	-	-		1301	4	-	-	-	Т	-	-
Ajos				0			_	-	Y	6746	9	-	-	-	Т	-	-
Alapitkä				0	664	25 A	18	-	ĸ	237	1	-	-		Т	-	-
Alavus	79	203	265	2	711	-	—	-	к	1393	3	_	-	н	I	_	_
Alholma				0			-	-	Y	1952	4	-	-	-	Т	-	-
Arola				0	1087	25 A	24	-	к	1414	2	-	-	-	Т	-	-
Asola				0	-	-	-	-	-			-	-		-	-	-
Aviapolis	230	230	550	2	-	-	-	-	-			-	-	н	-	-	-
Dragsvik		70	550	1	925	-	-	-	-			-	-	н	_	-	-
Dynamiittivaihde				0	-	—	—	-	-	294	2	-	-	-	Т	-	-
Eläinpuisto-Zoo		89	265	1		—	-		-			-	-	н	-	-	
Eno		80	550	1	664	25 A	—	—	к	625	1	—	—	н	т	—	—
Ervelä				0	748	—	—	—	—			-	—	—	—	—	—
Eskola				0	955	—	—	—	—			-	—	—	—	—	—
Espoo	240	322	550	4	326	—	—	-	-			—	—	н	—	-	—
Haapajärvi		84	265	1	731	25 A	—	-	ΚY			—	—	н	т	-	—
Haapakoski				0	725	—	—	—	к	415	1	—	—	—		—	—
Haapamäen kyllästämö				0	—	—	—	—	—	126	1	—	—	—	т	—	—
Haapamäki	188	325	265 (265)	3 (1)	644	63 A	128	—	к	4210	9	—	—	н	т	Y	—
Haarajoki	220	220	550	2	240	—	—	—	—			-	—	н	—	—	—
Hakosilta				0	-	—	—	-	-			—	—	—	—	-	—
Haksi		20	265	1	-	—	—	-	-			—	—	—	—	-	—
Hamina				0	834	25 A	18	к	Y	11281	22	—	Y	—	т	—	к
Hammaslahti				0	686	—	—	-	ΚY	657	1	—	—	—	т	-	—
Hanala				0	-	—	—	-	-			-	-	-	_	-	-
Hangonsaari				0	-	-	-	-				-	-	-	Т	-	-
Hanhikoski				0	-	—	20		ĸ	337	2	-	-		Т	-	-
Hankasalmi	233	289	265	2	754	25 A	20	к	ΚY	1376	5	-	-	н	Т	-	-
HANKO																	
Hanko asema		100	550	1	274	63 A	113	к	-	8453	20	-	Y	н	1 -	-	-
Hanko tavara				0	737	-	-	-	-			-	-		Т	-	-
Hanko-Pohjoinen		68	550	1	_	—	—	-				_	-	н	_	_	_
Harjavalta	250	250	550	2	766	25 A	-	-	к	396	1	-	-	н		-	-
Harju				0	786		-	-	-			-	-	-		-	
Harviala				0	_	-		-				-	-	-	-	-	-
Haukipudas		<i>(</i> )		0	833	-	11	-	к	188	1	_	-	-	_	_	_
Haukivuori	(199)	(200)	(265)	(2)	891	—	_	_	к	593	1	_	—	—		_	—
HAUSJARVI					6-6											_	
Hausjarvi tavara				0	656	_	_	_	n	526	1	Ŷ	_		_	_	_
	102	102	550	2	_	—	_	_	—			_	—	н	_	_	—
Haviseva				0	_	—	_	_	—			_	—	—	_	_	—
Heikkila		(	(-6-)	0	_	—		_				_	—	—		_	—
Heinola		(107)	(265)	(1)	613	_	15		ĸ					-		_	
				U	734	_	_	-					_	_		_	_
nemavaara				0			1 .		ĸ	918	2	1 -			-		-
Heinavési	100	206	265	2	570	—	9		ĸ	366	1			н	1 '	_	
HELSINKI					/					1483	7				1		
Helsinki asema	244	456	550	19	455	I –	-	-	-	_		-	-	н	-		-
Pasila asema	319	435	550	10	-		—		-	2089	14			н	_	22	
Pusila autojuna-asema	450	450	550	2		63 A	-	к		2250	10	1 -		н	_		
undu usemu	270	270	550	2	I –	ı —	I –	I —	I –	1	I		-	Н	I –		I –

### Rail Traffic Operating Points / Traffic Operating Point Information

APPENDIX 3B / 15 (28)

Nimi	Lyhin	Pisin laituripituus	Laituri-	Laituriraiteiden	Mitoittava raidepituus	Sähkö-virran	Sivulaituri,	Päätylaituri	Kuormaus-	Seisontaraide	Seisontaraide (kpl	Nosturi	Polttoaine	Henkilö-	Tavara-	Kääntöpöytä tai	VAK-
Name	Min platform	Max platform	Platform	Number of tracks	(tavaraliikenne)	Saanti Power supply	Side loading	End loading	Loading site	(m/liikennepaikka)	/liikennepaikka)	Crane	Fuel	Passenger	Ereight traffic	Kolmioraide (KR)	Rail vard for
Nume	length	length	height	with platforms	(freight traffic)	i ower suppry	platform	platform	Louding site			Crune	i det	traffic	i reight d'unic	triangle rail (KR)	dangerous
							length							1.1.1		· · J.· · · · · · · · · · · · · · · · ·	goods
	[m]	[m]	[mm]		[m]		[m]					F#1					
	fuil	[m]	[IIIII]		Luit	[400 V, A]	[m]					LU LU					
Helsinki Kivihaka				0	_		_	-	_			-	-	-		_	-
Pasila tavara				0	727	63 A	230	к	КY	3042	8	_	_	_	т	_	_
Ilmala ratapiha				0	_	1500 V. 63 A	29	_	_	43861	153	_	Y	_	_	_	_
Käpylä	279 (278)	336	550 (265)	3 (2)	_	_	_	_	_	325	1	_	_	н	_	_	_
Oulunkvlä	266	266	550	2	_	_	_	_	_	38	1	_	_	н	_	_	_
Herrala	110	110	550	2	_	_	_	_	_	5-	_	_	_	н	_	_	_
Hiirola			•••	0	760	_	_	_	_			_	_	_	_	_	_
Hikiä	120	120	550	2		_	_	_	_			_	_	н	_	_	_
Hillosensalmi		(165)	(550)	(1)	797	_	_	_	_			_	_	_	_	_	_
Hinthaara	(55)	(65)	(265)	(3)		_	_	_	_	306	3	_	_	_	_	_	_
Hirvineva	(55)	(-5)	(==3)	0	753	_	_	_	_	500	5	_	_	_	_	_	_
Humppila	245	127	550	3	753	25 A	20	_	кү	620	2	_	_	н	т		_
Huopalahti	270	270	550	4	-			_	_	020	-	_	_	н	_	_	_
Huutokoski	-/-	_/-	33-	0	659	_	_	_	_			_	_	_	_	_	_
Hyrynsalmi		(100)	(265)	(1)	734	25 A	12	_	к	1702	7	_	_	_	т		_
Hyrkäs		(100)	(203)	(1)	/34	237		_		1/02	5	_	_	_	· .		_
Hwinkää	104	772	FEO (26E)	Z (1)	814	2E A	20	_	_	1050	10	_	_	н	т	20	_
Hämeenlinna	257	450	550 (205)	J(1)	1078	25 A	20	к	к	1950	10	_	_	н	Ť	20	_
Härmä	257	450	550	5	808	25 A	54	K	ĸ	3500	5				Ť		
Häliäkkä		450	350	1	000				K V	000	2				Ť		
Ti		(02)	(265)	(1)	697	_		_		2221	4	_	_				
II Jicolmon toolliguugroitoot		(92)	(205)	(1)	087	_	_	_	K V	100	1	_	_	_		_	_
Jisalmi	70	757	265	0	-	1500 1/ 67 4		ĸ	I V	404	1	_	~		- -		_
lisaum	/0	353	205	3	/54	1500 V, 03 A	50	n.	'	1520	ŏ	_	1	п ц		1	_
Inda	1/0	1/0	550	2	_	_	_	_	_			_	_	п ц	_	_	_
Ilomantsi			205	<u>,</u>	771	25 1			<u>к</u>	2065					т		
IMATRA				0	//1	20 1		_	IX.	2005	4	_	_	_			_
Ima ra		450	265														
Imatra tavara		(218)	205	1 (1)		1500 1 67 4	_	_		10000		_	~	п			_
Imatrankoski		(210)	(205)	(1)	1107	1500 V, 03 A	19	ĸ		18257	37	_	1	_	- -	1	_
Imalia				0	119/	_	10	n.	ĸ	3680	ŏ	_	_	_	- -	_	_
Pelkola				0	510			_			2				Ť		
Imatrankoski raja				0	13/3	_		_	_	443	2	_	_	_	- -		
Induankoski-raja Indu		(00)	(265)	(1)	_	_	42	_		024	-	_	_	_	- -	_	_
Inkereinen	120	(99)	(205)	(1)		_	42	_	ĸ	924	3	_	_		- -	_	_
Inkeromen	120	172	205	3	792		21	_	ĸ	1319	6	_	_		'	_	_
Inkoo	100	170	550	2	243	25 A	14	-		399	1	_	_			_	_
ISOKYIO Jeleeiärei	110	150	550, 205	2	509	_		_	ĸ	189	1	_	_	п	÷	_	_
Jalasjarvi					762	_	20	_	ĸ	303	1	_	_	_	'	_	_
				U	025	_	10	-	ĸ	240	1	_	_	_	_	_	_
	270	700	265	7	<b>F6</b> 1	1500 1/ 67 4	46		K	6					т.	20 V	ĸ
Joensuu üsemu	239	377	205	3	501	1500 V, 03 A	40	_	ĸ	346	1	_	_	п	- +	20, 1	ĸ
Joensuu Pellola				0	621	_	_	_	K T	2246	13	_	_	_	- +	_	ĸ
Joensuu Sulkulunti				0	092	_	_	_	_	4231	19	_	_		'	_	r.
Jokela	313	321	550	3	821	-	_	-		235	1	-	_	н		_	_
Joroinen				0	—	_	_	—	к	1786	2	-	_		· ·	_	_
Jorvas	97	124	265	2	_	_	_	—				-	_	н	-	_	_
Joutseno	460	460	550	2	811	_		-	ĸ	1568	3	-	_	н	1 T	—	-
Juankoski				0	5×3	25 A	13	-	к	925	2	-	_			—	-
		-		0	-	_	_	-	-			-	_		-	—	-
Juupajoki		80	550	1			-		-			-	-	н	-	-	- 1
Juurikorpi	-	1		0	789		-					<u> </u>		<u> </u>	l =	-	
Jyvaskylä	160	449	550	4	796	1500 V, 63 A	89	к	Y	4471	22	Y	Y	Н	T _	-	
Jämsä	387	387	550	2	769	25 A	-	-	К	2269	5		-	н	T	-	-
Jämsänkoski				0	873		-	-		2644	9		-		T	20	-
Jarvelä	122	122	550	3	630	-	12	-	К	936	4	-	-	Н	Т	ı —	-

### Rail Traffic Operating Points / Traffic Operating Point Information

APPENDIX 3B / 16 (28)

Nimi	Lyhin	Pisin laituripituus	Laituri-	Laituriraiteiden	Mitoittava raidepituus	Sähkö-virran	Sivulaituri,	Päätylaituri	Kuormaus-	Seisontaraide	Seisontaraide (kpl	Nosturi	Polttoaine	Henkilö-	Tavara-	Kääntöpöytä tai	VAK-
Name	Min. platform	Max. platform	Platform	Number of tracks	Design train length	Power supply	Side loading	End loading	Loading site	(п/тикепперакка)	/пкепперакка)	Crane	Fuel	Passenger	Freight traffic	Turntable or	Rail yard for
	length	length	height	with platforms	(freight traffic)		platform	platform						traffic		triangle rail (KR)	dangerous
							length										goods
	[m]	[m]	[mm]		[m]	[400 V, A]	[m]					[t]					
JARVENPAA															-	-	
Järvenpää asema	345	393	550	3	_	—	29	К	-	467	1	-	-	н		—	
Saunakallio	180	275	265, 550	4	614	_	_	—	_	642	1	-	_	н	1	—	—
Purola	2/0	270	550	2	_	_		_	~		_	_	_	н	-	_	_
Kaipianen				0	770	_	19	_	T	1437	5	_	_	_		_	_
Kaipola				0	_	_	16	_	к 	2064	4			_		_	_
Kaitiärvi				0	1110	_				2034	4	_	_	_	_	_	_
Kajaani	350	350	265	2	837	1500 V 63 A	122		к	2528	0	_	_	н	т	_	_
Kaleton	550	550	205	0			27	_	ĸ	374	9	_	_		· _	_	_
Kalkku				0	_	_	100	_	Y	124	1	_	_	_	т	_	_
Kalliovarasto				0	_	_	_	_	_	224	2	_	_	_	_	_	_
Kalvitsa				0	864	_	_	_	к		-		_	_	т	_	_
Kangas				0	933	_	_	_	_	946	1	_	_	_	_	_	_
Kannelmäki	226	226	550	2	_	_	_	_	_	•••		_	_	н	_	_	_
Kannonkoski				0	_	_	13	_	к			_	_	_	т	-	_
Kannus		452	550	1	_	_	_	_	—	979	2	-	_	н	—	_	—
Karhejärvi				0	778	25 A	4	-	К			-	-	-	-	_	—
Karhukangas				0	-	-	-	-	-	792	1	-	-	-	-	-	-
Karjaa	249	352	550	4	765	63 A	—	—	к			-	Y	н	т	20	—
Karkku		250	550	1	856	—	—	—	—	2654	14	-	—	н	—	—	—
Karviainen				0	745	_	—	—		377	1	-	_	-	_		—
Karviainen				0	843	-	-	—	Y			-	—	—	Т	Y	-
Kattilaharju				0	—	—	—	_	-	3303	4	-	-	-	—	—	
Kauhajoki		450	550	0	-	_	_	_				-	-			_	_
		450	550	1	803	_	_	_	n	6-1	-	_	_			_	_
Kaulinganta	270	2/0	550	3	447	_	_	_	_	621	2	_	_	п	_	_	_
Kauniainen	104	204	265	z	260					230	1			н	т		
Kauppilanmäki	-54	204	205	0	-	_			к	575	2	_	_		Ť	_	_
Kausala	120	120	550	2	_	_	_	_	_	1580	7	_	_	н		_	_
Keitelepohja			001	0	_	_	_	_	к	1900	5	_	_	_	т	_	_
Kekomäki				0	_	_	_	_	_	1347	2	_	_	_	_	_	_
Kemi	450	450	265, 550	2	949	63 A	148	_	К	517		-	Y	н	т	Y	_
Kemijärvi		350	265	1	501	1500 V, 63 A	6	к	ΚY	6386	17	_	_	н	Т	KR	_
Kempele		450 (119)	550(265)	1 (1)	762	25 A	9	—	К	4206	13	-	-	н	—	—	—
Kera	216	224	265	2	-	-	—	—	-	515	1	-	_	н	-	-	-
KERAVA																	
Kerava asema	270	392	550	4	—	25 A	—	—	-			-	Y	н	—	KR	—
Kytömaa				0	-	_	—	—		1256	6	-	_		_	-	—
Kerimäki		108	265	1	398	-	_	_	к	931	1	-	_	н	Т	-	-
Kesälahti		322	265	1	671	—	_	_		454	1	-	_	н		_	_
Keuruu		111	550	1	676	_	_	_	к	60.		-	-	н	1	_	_
Kilaa		49	265	1	-	_	_	_	_	689	1	_	_	н	_	_	_
Kiloua	270	270	550	2			_	_	_			_	_	н	_	_	_
Kinahmi				0	750	25 A	_			100							
Kinni				0	776					422	1						
Kiriola	1	1		0		_	_	_	Y			_	_	_	_	_	_
Kirkkonummi	316	322	550	3	612	_	_	_	ĸ			_	_	н	_	_	_
Kirkniemi	510	22	555	0	585	_	_	_	_	159	2	I _	1 _		Т	_	I _
Kitee	1	355	265	1	660	25 A	18	_	КY	1145	2	_	_	н	τ	l –	_
Kiukainen	1	000		0	768	_	14	_	К	1389	3	_	_	_	_	_	-
Kiuruvesi		126	265	1	638	25 A	80	_	ΚY	260	1	-	_	н	т	_	-
Kivesjärvi	1	1	-		1118	_	_	_	-	2868	8	-	_	—	l –		-
1	1	1	1	1	1	•	•	•	1		-	1	1	1	1	1	1

### Rail Traffic Operating Points / Traffic Operating Point Information

APPENDIX 3B / 17 (28)

Nimi	Lyhin	Pisin laituripituus	Laituri-	Laituriraiteiden	Mitoittava raidepituus	Sähkö-virran	Sivulaituri,	Päätylaituri	Kuormaus-	Seisontaraide	Seisontaraide (kpl	Nosturi	Polttoaine	Henkilö-	Tavara-	Kääntöpöytä tai	VAK-
Name	Min. platform	Max. platform	Platform	Number of tracks	Design train length	Power supply	Side loading	End loading	Loading site	(т/спкепперакка)	/шкепперакка)	Crane	Fuel	Passenger	Freight traffic	Turntable or	Rail vard for
	length	length	height	with platforms	(freight traffic)		platform	platform						traffic		triangle rail (KR)	dangerous
							length										goods
	[m]	[m]	[mm]		[m]	[400 V, A]	[m]					[t]					1
							1										(
Kivistö	292	336	550	2	—	—	-	-	_			-	-	Н	-	-	-
Kohtavaara		56	265	1		-	-	_				-	_	н	_	-	-
Koivu		(40)	(265)	(1)	617	-	32	_	к			-	_		Т	-	-
Koivuhovi	278	278	550	2		—	—	—	—	499	1	-	_	н	-	—	—
Kolvukyla	270	270	550	2		_	_	_				-	_	н		_	—
Kokemaki	249	249	550	3	765	25 A	29	_	ĸ			-		н	T		
Kokkola	308	482	265	3	829	1500 V, 63 A	40		ř K V	1184	2	_	Ŷ	н		Ŷ	n
Kolari		451	550	1	790	63 A	22	n	K Y	3764	14	_	_	н	T	_	_
Kolno		80	550	1		_	_	_	Ŷ	4091	7	_	_	н	1	_	_
Koppi				0	705		_	_		3009	D	_	_	_	-	_	_
Komu				0	733	25 A	_	_	K T	538	1	_	_	_	'	_	_
Kontiolahti		(06)	(265)	(1)	 F 77	25.4	_	к 	ĸ	206	2			_	т		_
Kontionäki	751	(90)	205)	(1)	577 8EZ	23 A 67 A	71	ĸ	ĸ	1157	2		×	н	Ť	Y KB	
Koria	120	349	205	2	055	03 A	51	K	K	504	2			н Ц		1, 100	
Korkeakoski	120	-72	(265)	(1)	747			ĸ	ĸ	///5	10				т		
Korso	270	-72	(205)	(1)	745			IX						н	· -		
Korvensuo	2/0	2/0	550	2	_		_		_			_	_		_		_
Koskenkorva				0		_	_	_	_			_	_	_	т		_
KOTKA				Ŭ						502	2						
Kotka Hovinsaari				0	865	63 A	85	_	_	502	2	_	_	_	т		_
Kotka tavara				0					_			_	_	_	Ť		_
Paimennortti		57	265	1		_	_		_	11814	21	_	_	н	· ·		_
Kotka asema		193	265	1	270	63 A	_	_	_	11014	21	_	_	н	_	Y	_
Kotkan satama		110	265	1	539	63 A	280	_	к	1750	4	_	Y	н	т	_	_
Kotolahti			5	0	1139			_	_	12/1	4	_	_	_	Т	_	_
Kotka Mussalo				0	1005	_	25	_	Y	2339	4	_	_	_	т	_	к
KOUVOLA							5			180	1						
Kouvola asema	230	480	550	7	600	1500 V, 63 A	_	_	к				Y	н	_	Y	_
Kouvola lajittelu	-			0	992	25 A	175	к	к	3403	26	_	_	_	т	_	к
Kouvola Oikoraide				0	_	_	_	_	_	5647	29	-	_	-	_	KR	_
Kouvola tavara				0	903	_	11	_	Y	2273	11	_	_	-	Т	_	к
Kullasvaara				0	1364	_	_	_	_			_	_	-	Т	_	_
Kovjoki				0	757	—	—	—	—	573	1	-	_	-	—	—	—
Kruunupyy				0	747	—	49	—	к			-	_	-	т	—	—
Kuivasjärvi				0	781	—	—	—	к	402	1	-	_	-	-	—	—
KUOPIO										315	1					-	
Kuopio asema	90	387	265	4	273	63 A	130	к	Y			-	_	н	-	—	—
Kuopio tavara				0	804	1500 V, 63 A	100	_	Y	2489	9	-	Y		Т	Y	-
Kurkimäki				0	734	-	-	_	к	4143	12	-	_	-	т	-	-
Kuurila				0	—	—	—	—	—	1274	2	-	—	—	—	—	—
Kuusankoski				0	811	63 A	Y	—	Y			-	_		Т	-	—
Kylänlahti		56	265	1	—	-	-	—	-	2695	4	-	_	н	-	-	—
Kymi		66	265	1	759	—	-	—	-			-	_	н	—	-	—
Kyminlinna		120	550	1	-	-	-	—		3073	6	-	_	н	_	-	—
Kyrö				0	739	-	-	-	к			-	_	-	Т	-	—
Kälviä				0	_	-	-	_	-	707	2	-	_	-	-	-	-
Koykkäri				0	763	_		-				-		-	-		-
Laajavuori				0		_		-				-		-	-		-
Lahdenperä				0	777	I –.	1 -	-	1 -				-	-	1 =	-	-
Lahnaslampi				0		25 A	1 -		1 -	336	1		-		T		-
Lanti	270	451	265	4	709	63 A	7	К	Y			-		H H	T	20, KR	-
Lainia		201	265	1	456	-		-	К	5770	24	-	-	н		-	
Lakiala				0	733	_	-	-	-	469	1	-	-	-	-	-	-
Lamminkoski		1		0	742	-	-	-	I –	1	1	-	-	-	-	-	-

### Rail Traffic Operating Points / Traffic Operating Point Information

APPENDIX 3B / 18 (28)

Nimi	Lyhin	Pisin laituripituus	Laituri-	Laituriraiteiden	Mitoittava raidepituus	Sähkö-virran	Sivulaituri,	Päätylaituri	Kuormaus-	Seisontaraide	Seisontaraide (kpl	Nosturi	Polttoaine	Henkilö-	Tavara-	Kääntöpöytä tai	VAK-
Name	Min. platform	Max. platform	Platform	Number of tracks	(tavaraliikenne) Design train length	Saanti Power supply	Side loading	End loading	Loading site	(m/liikennepaikka)	/liikennepaikka)	Crane	Fuel	Passenger	Ereight traffic	Turntable or	Rail vard for
	length	length	height	with platforms	(freight traffic)	l oner suppry	platform	platform	Louding Site			C. a.i.e		traffic		triangle rail (KR)	dangerous
							length										goods
	[m]	[m]	[mm]		[m]	[400 V A]	[m]					[t1					
	1.00	1.00			1	[400 1,71]	1										
Lamminniemi				0	-	-	145	-	- 1			-	—	-	Т	-	- 1
Lapinjärvi				0	-	-	12	-	к	914	3	-	-	_	Т	-	-
Lapinlahti	300	354	265	2	759	25 A	—	—	к	773	2	-	—	н	т	—	—
Lapinneva				0	-	-	—	-	к	935	2	-	—	—	—	-	—
Lappeenranta	421	450	265, 550	3	739	25 A	60	К	Y	1044	3	-	Y	н	Т	22	-
Lappila	60	60	550	2	-	-	-	-	-	5456	17	-	-	н	-	-	-
Lappohja		70	550	1	748	-	—	—	—			-	—	н	т	-	—
Lapua		441	550	1	766	-	—	—	к	356	1	-	-	н	т	-	-
Larvakytö				0	932	-	—	—	—	451	2	-	—	—	—	-	—
Laukaa				0	-	-	—	—	к			-	-	—	-	-	-
Laurila				0	618	-	_	-		320	1	-	-	-	_	-	-
Lauritsala				0	657	-	_	-	к	637	1	-	-	-	Т	-	-
Lautiosaari				0	-	-	-	-	-	35	1	-	-		-	-	-
Leinelä	266	266	550	2	-	-	_	-	-			-	-	н	-	-	-
Lentoasema	230	230	550	2	_	-	_	-	-			-	-	н	-	-	-
Lelkola				0	802	-	_	-	-			-	-	—	-	-	-
Lempäälä	170	170	550	2	772	-	—	-	_			-	—	н	—	-	—
Leppakoski				0	—	-	_	—	_			-	-		—	_	—
Leppavaara	266	292	550	4	-	_	_	-	_			-	—	н	—	-	_
Leteensuo			-6-	0	-	_	_			213	1	_					_
Lieksa		151	205	1	077	25 A	24	n	ĸ	10-0		_	Ť	п	і т	20	_
Lieksan leollisuuskylä				0		_	20	_	_	4036	12	_	_	_	і т	_	_
Lievestuore		(250)	(265)	(1)	/00	25.4	27		<u>к</u>	698	1		_		T	_	_
Liminka		(239)	(203)	(1)	730	257	-	_		1/20	8	_	_	_	_	_	_
Liminpuro				0		_	_	_	_	1007	5	_	_	_	_	_	_
Lohiluoma				0	_	_	_	_	_	592	1	_	_	_	_	_	_
Lohja				0	596	25 A	25	_	к	240	1	_	_	_	т	_	_
Loimaa	252	450	550	2	783	_	_	—	к	2067	6	_	_	н	т	_	_
Louhela	236	236	550	2	-	-	_	-	-	179	1	-	_	н	-	-	-
Loukolampi				0	886	—	—	-	—			-	—	-	—	_	—
Loviisan satama				0	683	25 A	28	-	ΚY			-	—	—	Т	-	—
Luikonlahti				0	892	-	—	-	ΚY	4038	9	-	—	—	Т	-	—
Lusto		124	265	1	-	-	-	-	-	624	2	-	-	н	-	-	-
Luumäki				0	1234	-	14	-	Y			-	—	—	т	—	—
Lähdemäki		220	550	0	998	-	_	-	-	1106	2	-	-	-	-	-	-
Länkipohja				0	799	-	_	-				-	-	—	-	-	-
Maanselkä				0	-	-	_	-	к	597	1	-	-	—	-	-	-
Maaria				0	743	-		-		- 6 -		-	—	_		-	—
Majajänvi				0	7/4	25 A	0		ĸ	305	1		_		1	_	
Malmi	(280)	748	FF0 (26F)	2 (2)	/1/	_			_				_	н		_	_
Malminkartano	284	284	550	2 (2)	_	_	_	_	_			_	_	н	_	_	_
Mankala	204	204	550	0	0	_	_	_	_			_	_	_	_	_	_
Markkala				0	753	_	_	_	_			_	_	_	_	_	_
Martinlaakso	233	233	550	2	-	_	_	_	_			_	_	н	_	_	_
Masala	267	267	550	2		- 1	_	_	_				_	н	_	_	_
Matkaneva				0	_	-		-	-			-	_	_	—	-	-
Mattila		1		0		_	—	-	-			-	—	_		_	-
Melalahti		1	1	о	-	-	-	-	-					—	-	-	-
Metsäkansa		1		0	-	-	13		К	623	2		-		т	-	-
Mikkeli	424	452	550	3	760	25 A	5		ΚY	532	3		Y	н	т	Y	-
Misi		352	265	1	718	63 A	52	к	К	2953	4		-	н	Т	-	
Mommila	120	120	550	2	_	-	—	-				-	-	н	-	-	-
Muhos	151	212	265	2	670	25 A	24	-	К	346	1	-	-	н	-	I –	-

### Rail Traffic Operating Points / Traffic Operating Point Information

APPENDIX 3B / 19 (28)

Image         Partial of any and any	Nimi	Lyhin	Pisin laituripituus	Laituri-	Laituriraiteiden	Mitoittava raidepituus	Sähkö-virran	Sivulaituri,	Päätylaituri	Kuormaus-	Seisontaraide	Seisontaraide (kpl	Nosturi	Polttoaine	Henkilö-	Tavara-	Kääntöpöytä tai	VAK-
bayb         bayb <t< th=""><th>Name</th><th>Min. platform</th><th>Max. platform</th><th>Platform</th><th>Number of tracks</th><th>Design train length</th><th>Power supply</th><th>Side loading</th><th>End loading</th><th>Loading site</th><th>(пі/ пікепперакка)</th><th>/пкепперакка)</th><th>Crane</th><th>Fuel</th><th>Passenger</th><th>Freight traffic</th><th>Turntable or</th><th>Rail yard for</th></t<>	Name	Min. platform	Max. platform	Platform	Number of tracks	Design train length	Power supply	Side loading	End loading	Loading site	(пі/ пікепперакка)	/пкепперакка)	Crane	Fuel	Passenger	Freight traffic	Turntable or	Rail yard for
Image         Image <t< th=""><th></th><th>length</th><th>length</th><th>height</th><th>with platforms</th><th>(freight traffic)</th><th></th><th>platform</th><th>platform</th><th></th><th></th><th></th><th></th><th></th><th>traffic</th><th></th><th>triangle rail (KR)</th><th>dangerous</th></t<>		length	length	height	with platforms	(freight traffic)		platform	platform						traffic		triangle rail (KR)	dangerous
Name         Im         No								length										goods
Number         Image         Image <t< th=""><th></th><th>[m]</th><th>[m]</th><th>[mm]</th><th></th><th>[m]</th><th>[400 V, A]</th><th>[m]</th><th></th><th></th><th></th><th></th><th>[t]</th><th></th><th></th><th></th><th></th><th></th></t<>		[m]	[m]	[mm]		[m]	[400 V, A]	[m]					[t]					
Number         Image         <	Mukkula				0		_	-	_	к	1505	4	-	_	_	Т		
Madis	Murtomäki				0	_	_	_	_	ĸ	483	4	_	_	_	T	KR	_
Mander Mander         Name         Image	Mustio				0	_	_	55	_	к	1621	2	_	_	_	т	_	_
Make         Pail         Pail <t< td=""><td>Mustolan satama</td><td></td><td></td><td></td><td>0</td><td>_</td><td>_</td><td>-</td><td>_</td><td>Y</td><td></td><td></td><td>_</td><td>_</td><td>—</td><td>т</td><td>_</td><td>_</td></t<>	Mustolan satama				0	_	_	-	_	Y			_	_	—	т	_	_
Mainage	Muukko				0	784	-	-	-	-			—	—	-	-	_	-
March     35     35     36     26     2     74     -	Muurame				0	841	25 A	_	-	-	364	1	_	—	-	-	-	—
Mystergen         Implementant         Implementant <td>Muurola</td> <td>316</td> <td>318</td> <td>265</td> <td>2</td> <td>724</td> <td>-</td> <td>—</td> <td>-</td> <td>-</td> <td>203</td> <td>1</td> <td>—</td> <td>—</td> <td>н</td> <td>-</td> <td>—</td> <td>—</td>	Muurola	316	318	265	2	724	-	—	-	-	203	1	—	—	н	-	—	—
Mp/pol     DD     DD     EDD     EDD     DD     DD <thdd< th="">     DD     DD     DD</thdd<>	Myllykangas				0	848	-	-	-	-			-	-		-	-	-
mpmbm     mpmm     mpmbm     mpmbm     mpmbm     mpmbm     mpmbm     mpmbm	Myllykoski	120	120	550	2	-	-	-	-				_	—	н	-	-	-
mp/mm         mp/mm <th< td=""><td>Myllymäki</td><td></td><td>216</td><td>265</td><td>1</td><td>—</td><td>-</td><td>_</td><td>-</td><td>к</td><td>1603</td><td>2</td><td>-</td><td>_</td><td>н</td><td>1 </td><td>—</td><td>—</td></th<>	Myllymäki		216	265	1	—	-	_	-	к	1603	2	-	_	н	1 	—	—
proposition         (13)         (14)	Myllyoja				0	—	_	_	-	-	879	3	_	_	-	1	-	—
phymath         <	Munämälui		(12.1)	(065)	0	-	_	_	_	-			_	_	_	_	-	_
minipole         30	Mynamaki Mynamaki	074	(124)	(265)	(1)	495	_	_	_	-			_	_		_	-	_
number     200     000     2     000     2     000     000     0 </td <td>Mäldadä</td> <td>231</td> <td>231</td> <td>550</td> <td>2</td> <td>_</td> <td>_</td> <td>_</td> <td>_</td> <td>_</td> <td></td> <td></td> <td>_</td> <td>_</td> <td></td> <td>_</td> <td>_</td> <td>_</td>	Mäldadä	231	231	550	2	_	_	_	_	_			_	_		_	_	_
numbra         Zob         Zob <thzob< th=""> <thzob< <="" td=""><td>Mänteälä</td><td>270</td><td>288</td><td>550</td><td>2</td><td></td><td>-</td><td>_</td><td>_</td><td>_</td><td>105</td><td></td><td>_</td><td>_</td><td>н</td><td>_</td><td>_</td><td>_</td></thzob<></thzob<>	Mänteälä	270	288	550	2		-	_	_	_	105		_	_	н	_	_	_
bindy-burdy         457         457         50         20         336          49          K         Line               K         Line	Mänttä	220	220	550	2	990	_			к —	105	1			п	т	_	
benchunch         h37         h	Mäntyhariu	457	457	550	0	553	_	150		ĸ	2112	6			ц	Ť	_	_
Namana         Namana<	Mäntyluoto	457	457	550	2	909 770		159		Y	615	3				т		
Namagandri         120	Naantali				0	7/9		20		· _	015	1				т		
Nakia         nakia <th< td=""><td>Naarajärvi</td><td></td><td></td><td></td><td>0</td><td>770</td><td>_</td><td></td><td>_</td><td>к</td><td>15/4</td><td>5</td><td>_</td><td></td><td>_</td><td>Ť</td><td>_</td><td>_</td></th<>	Naarajärvi				0	770	_		_	к	15/4	5	_		_	Ť	_	_
Nation         120         500         20         <	Nakkila				0	773	_	_	_	_	002	2	_	_	_	· _	_	_
Numeropà         La         La <thla< th="">         La         La         <t< td=""><td>Nastola</td><td>120</td><td>120</td><td>550</td><td>2</td><td></td><td>_</td><td>_</td><td>_</td><td>_</td><td></td><td></td><td>_</td><td>_</td><td>н</td><td>_</td><td>_</td><td>_</td></t<></thla<>	Nastola	120	120	550	2		_	_	_	_			_	_	н	_	_	_
Ninimaña	Niemenpää			33-	0	_	_	_	_	_			_	_	_	_	_	_
Ninimaki         Ninimaki         I	Niinimaa				0	_	_	_	_	к	1414	2	_	_	_	_	_	_
Ninfaida Ninfait Ninfait Ninfait Ninfait Ninfait Ninfait Ninfait Ninfait Ninfait Ninfait Ninfait Ninfait 	Niinimäki				0	1077	_	_	_	_		_	_	_	_	_	_	_
Nirala         Nirala         (42)         (41)	Niinisalo				0	_	_	21	_	к	2189	4	_	_	_	-	_	_
Ninda-nja         Ninda-nja         n	Niirala		(42)	(265)	(1)	987	25 A	_	_	к	6406	14	_	_	_	т	_	к
Nittylahti         Image	Niirala-raja				0	_	—	—	-	—			-	-	-	т	_	—
Nikita         - <td>Niittylahti</td> <td></td> <td></td> <td></td> <td>0</td> <td>695</td> <td>-</td> <td>—</td> <td>-</td> <td>-</td> <td></td> <td></td> <td>—</td> <td>—</td> <td>—</td> <td>-</td> <td>—</td> <td>—</td>	Niittylahti				0	695	-	—	-	-			—	—	—	-	—	—
Niska	Nikkilä		(30)	(265)	(1)	-	-	-	-	-			-	-	-	-	-	-
Nivala         97         265         1         825         25A         -         K         1018         2         -         -         H         T         -         -         -         K         1018         2         -         -         H         T         -         -         -         K         2935         7         -         -         H         T         -         -         -         K         2935         7         -         -         H         T         -         -         -         -         K         2935         7         -         H         T         -         -         -         -         K         2935         7         -         H         T         -         -         -         K         2935         7         -         -         H         T         -         -         -         -         3356         9         -         -         I         -	Niska				0	-	-	-	-	-			-	-	-	-	-	-
Nokia         vs         250         550         1         865          120          K         2935         7          H         T            K         2935         7          H         T              Numela         71         205         255         2         850         25A         50         K          3356         9           H         T            3356         9           H         T            3356         9          H         T            3356         9             122         1 <t< td=""><td>Nivala</td><td></td><td>97</td><td>265</td><td>1</td><td>825</td><td>25 A</td><td>-</td><td>-</td><td>к</td><td>1018</td><td>2</td><td>-</td><td>-</td><td>н</td><td>Т</td><td>-</td><td>-</td></t<>	Nivala		97	265	1	825	25 A	-	-	к	1018	2	-	-	н	Т	-	-
Nummela         71         205         265         265         27         87         -         -         K         510         1         -	Nokia		250	550	1	865	-	120	-	к	2935	7	-	—	н	т	-	-
Numes         71         205         265         2         850         25         50         K          3352         9           H         T         18            Ohenmäki         0          -          K         575         2 <t< td=""><td>Nummela</td><td></td><td></td><td></td><td>0</td><td>328</td><td>-</td><td>—</td><td>-</td><td>к</td><td>510</td><td>1</td><td>-</td><td>—</td><td>-</td><td>т</td><td>—</td><td>—</td></t<>	Nummela				0	328	-	—	-	к	510	1	-	—	-	т	—	—
Nårjö         Nårjö              122         1              122         1              122         1             575         2	Nurmes	71	205	265	2	850	25 A	50	К	-	3356	9	-	-	н	т	18	-
Othermakic $0$ $   -$	Nărpiô				0	—	-	—	-		122	1	-	_	-	-	—	—
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Ohenmäki				0	—	-	—	-	к	575	2	-	_	-	-	—	—
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$					0	—	_	_	-	-			_	_	-		-	—
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Onttola				0	—	_		-		1937	4	_	_	-	T	-	—
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Orimattila	057	760		0		-	12	_	ĸ	1125	2	_			т Т	_	_
Only Resultation       Boo       Boo       1       -	Orivesi Orivesi koskusta	2/3	300	550	3	705	25 A	_	_	r.	1879	9	_	T	п ц	'	13,7	_
Odama       (152)       (265)       (1)       735       -       -       -       K       943       3       -       -       -       I       -       -       I       -       I       -       I       -       I       -       I       -       I       -       I       -       I       -       I	Otaamäki		80	550	1	—	_	_	_	ĸ	0.17	-	_	_	п	т	_	_
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Otava		(152)	(265)	(1)		_			ĸ	943	3				Ť	_	_
Outure	Oulainen	450	(152)	(205)	(1) Z	735	<u></u> 2Ε Δ	80		ĸ	307	2			н	т	_	_
Odulahiti         O         945         -         -         -         4015         15         -         Y         -         T         -         -         -         -         4015         15         -         Y         -         T         -         -         -         -         4015         15         -         Y         -         T         -         -         -         -         4015         15         -         Y         -         T         -         -         -         -         4015         15         -         Y         -         T         - <t< td=""><td></td><td>450</td><td>492</td><td>550</td><td>3</td><td>004</td><td>23 A</td><td>00</td><td></td><td>K</td><td>2109</td><td>4</td><td></td><td></td><td></td><td></td><td>_</td><td>_</td></t<>		450	492	550	3	004	23 A	00		K	2109	4					_	_
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Oulunlahti				0	945												
Oulu Orikari     Oulu Orikari     O     -     63 Å     200     -     Y     2903     45     - </td <td>Oulu Nokela</td> <td></td> <td></td> <td></td> <td>0</td> <td>990</td> <td>63 A</td> <td>I _</td> <td>L _</td> <td>_</td> <td>4015</td> <td>15</td> <td></td> <td>Y</td> <td>I _</td> <td>т</td> <td>_</td> <td>  _</td>	Oulu Nokela				0	990	63 A	I _	L _	_	4015	15		Y	I _	т	_	_
Oulu dvara         362         498         550,265         3         488         1500 V, 63 A          K          3231         10           H                         T         Y                  T         Y              H  <	Oulu Oritkari				0	_	63 A	200	_	Y	2903	4	_		l _	т	_	_
Odlu asema         362         498         550, 265         3         488         1500 V, 63 A         -         K         -         3231         10         -         -         H         -	Oulu tavara				0	769	25 A	6	_	_	8573	24	_	_	_	Т	Y	_
Outurina         O         759         -         66         -         K         1035         4         -         -         T         -	Oulu asema	362	<i>4</i> 98	550.265		488	1500 V. 63 A	_	к	_	3231	10	_	_	н	I _	_	_
Paimio 0 763	Oulu Tuira	0.1	15	551, 55	0	759		66	_	к	1035	4	_	_	_	т	_	_
	Paimio				0	763	-		-	-	55	7	_	_	- 1	- 1	—	—
	Palopuro				0	_	-		-	-			_	_	- 1	- 1	—	—
#### Rail Traffic Operating Points / Traffic Operating Point Information

APPENDIX 3B / 20 (28)

Nimi	Lyhin	Pisin laituripituus	Laituri-	Laituriraiteiden	Mitoittava raidepituus	Sähkö-virran	Sivulaituri,	Päätylaituri	Kuormaus-	Seisontaraide	Seisontaraide (kpl	Nosturi	Polttoaine	Henkilö-	Tavara-	Kääntöpöytä tai	VAK-
Name	Min. platform	Max. platform	Platform	Number of tracks	Design train length	Power supply	Side loading	End loading	Loading site	(т/пкепперакка)	/шкепперакка)	Crane	Fuel	Passenger	Freight traffic	Turntable or	Rail vard for
	length	length	height	with platforms	(freight traffic)	i onei suppij	platform	platform	Louding Site			er une	. uct	traffic		triangle rail (KR)	dangerous
					· · · · ·		length										goods
	[m]	[m]	[mm]		[m]	[400 V. A]	[m]					[t]					
	1	1			1												
Paltamo		231	265	1	664	25 A	-	-	К	442	1	-	-	н	Т	-	_
Pankakoski				0	-	-	—	—	ΚY	1866	5	—	—	—	т	—	—
Parikkala	294	379	265	3	705	25 A	30	к	—	858	2	—	—	н	-	—	—
Parkano	600	600	550	3	941	25 A	10	—	ΚY	2756	6	—	Y	н	т	—	—
Parola	180	192	550	2	923	-	31	Y	к	439	1	—	—	н	т	—	—
Patokangas				0	713		-	_	KΥ	1789	3			-	т	—	—
Pello		454	265	1	585	25 A	35	_	KY	1839	3		-	н	Т	-	_
Peltosalmi				0	_	25 A		—	К	1703	3	Y	—	-	1	-	—
Peräseinäjoki			(	0	762	-	16	_	к	206	1	-	_	-	т	-	_
Pesiőkylä		(74)	(265)	(1)	_	-	-	—		963	2	_	—			-	—
Petajavesi		142	265	1	762	-	_	_	к	580	2	_	—	н	· ·	—	_
		<i>C</i> · · ·	-6-				_		X								
Pieksamaki asema	332	611	265	4	499	1500 V, 63 A	5	_	ř K.V	2120	9	_		н	-		_
Pieksamaki Temu				0	947	63 A	-	_	Κĭ	9103	38	_	Ŷ	_		ĸĸ	_
Pieksamaki lajittelu				0	875	-	_	_	_	3171	11	-	_	—	T	_	_
Pieksamaki tavara Distoregori				0	775		-	_	-	103	2	_	_	_	т Т	_	_
Pielarsaari		100	265 550	0	706	25 A	_	_	_	1061	2	_	_		'	_	_
Pintajavesi Bibtipudas	99	120	205, 550	2	540	_	_	_		575	1	_	_			_	_
Piikkiö				0	707	_			ĸ	1553	2			_	Ť	_	
Pikkarala				0	303	_	_	_	ĸ	422	2	_	_	_	'	_	_
Pitäjänmäki	270	706	550	0	759	_								<u> </u>	_	_	
Pitkämäki	2/0	300	550	2	1157	_			ĸ						т		
Pohjankuru				0	301	_	_		ĸ	1020	-	_	_	_	Ť	_	_
Pohiois-Haaga	240	240	550	2		_	_	_	_	1029	5	_	_	н	· _	_	_
Pohiois-Louko	-4-		55-	0	_	_	_	_	_			_	_	_	_	_	_
Poikkeus				0	715	_	_	_	_			_	_	_	_	_	_
Poiksilta				0	_	_	_	_	к	1516	2	_	_	_	т	_	_
Pori	251	251	550	2	733	_	_	_	КY	4280	15	_	_	н	т	_	_
Porvoo		118	265	1	-	—	—	—	—	1669	12	-	—	н	-	Y	—
Puhos				0	648	25 A	13	—	к	3337	9	—	—	—	Т	_	—
Puistola	274	274	550	2	-	-	-	_	-			-	_	н	-	-	-
Pukinmäki	273	279	550	2	-	-	-	_	-			-	_	н	-	-	-
Pulsa				0	1834	-	-	—	-	271	1	-	-	-	-	-	—
Punkaharju		201	265	1	435	25 A	—	—	к	482	1	—	—	н	т	—	—
Pyhäkumpu				0	366	-	9	-	-	399	1	-	_	-	т	-	_
Pyhäkumpu erkanemisvaihde				0	_		—	—				_	—		_	—	—
Pyhäsalmi		105	265	1	666	25 A	—	—	к	1049	3	_	—	н	1	—	—
Pannainen	450	450	550	2	750			_			_	-	_	н		_	_
Raane				0	1147	63 A	53	_	n	2615	5	_	_	_	т Т	_	_
Raippo	(111)	(169)	(265)	(7)	1047	_	144	_	_	1217	4	_	_	_	- -	_	_
Rajamäki	(111)	(100)	(205)	(3)					ĸ	7/2	2				т		
Rajanerkiö				0	746	_	_	_		952	4	_	_	_	· _	_	_
Bantasalmi				0	784	_	_		к	1505	2	_	_	_	т	_	_
Basinsuo				0	740	_	_	_	_	1303	2	_	_	_	· _	_	_
Ratikylä			1	0	748	_	_	_	к			_	_	_	т	_	_
Rauha				0	791	_	_	_	к	1113	7	_	_	_	т	_	_
Rauhalahti			1	0	—	—	-	_	-	492	2	_	_	- 1	т	_	
Rauma				0	916	25 A	15	к	Y	1522	11		_	l –	т	_	- 1
Raunio				0	759	_	_					-	-	-	-		-
Rautaruukki			1	0	-	—	-	-	-	7851	13	—	—		т	—	
Rautjärvi				0	784	-	-	-	-			-	-	-	-	-	-
Rautpohja				0		-	—	—	Y			-	-	—	т	-	—
Rekola	270	270	550	2	-	-	-	-			1	-	-	н	-	-	-

#### Rail Traffic Operating Points / Traffic Operating Point Information

APPENDIX 3B / 21 (28)

Nimi	Lyhin	Pisin laituripituus	Laituri-	Laituriraiteiden	Mitoittava raidepituus	Sähkö-virran	Sivulaituri,	Päätylaituri	Kuormaus-	Seisontaraide	Seisontaraide (kpl	Nosturi	Polttoaine	Henkilö-	Tavara-	Kääntöpöytä tai	VAK-
	laituripituus		korkeus	lukumäärä	(tavaraliikenne)	saanti	suurin pituus		kenttä	(m/liikennepaikka)	/liikennepaikka)			liikennettä	liikennettä	kolmioraide (KR)	ratapihat
Name	Min. platform	Max. platform	Platform	Number of tracks	Design train length	Power supply	Side loading	End loading	Loading site			Crane	Fuel	Passenger	Freight traffic	Turntable or	Rail yard for
	tength	tength	neight	with platforms	(freight traffic)		length	platform						trame		triangle rail (KR)	dangerous
							gui										goods
	[m]	[m]	[mm]		[m]	[400 V, A]	[m]					[t]					
Potrotti		121	265	1													
PTTHIMÄKI		121	205	1	_	_	_	_	_			_	_	п	_	_	_
Riihimäki Arolamoi				0													K
Riinimuki Arotampi Biibimäki laiittalu				0	-	_	_	_		4505	_	_	_	_		_	ĸ
Riihimäki tayara				0	/19	_	_	_	I KV	1595	3	_	_	_	т Т	_	ĸ
Riihimäki asema	702	417	550 265	5	997 647	1500 V 67 A	26		K I	13541	21		×				ĸ
Bijijärvi	392	41/	550,205	0	757	1300 4, 03 A	20	_	_	5339	20	_	· .		_		
Biinna				0	068	_	_	_	_	750	1	_	_	_	_	_	_
Ristiina				0	765	_	_	_	к	1604	2	_	_	_	т	_	_
Ristijärvi				0	/03	_	_	_	_	1094	2	_	_	_	_	_	_
Boyaniemi	113	184	550 265	3	731	1500 V 63 A	188	кү	кү	8824	21	_	Y	н	т	20	_
Buba	445	404	550, 205	0				_		0024	21		· ·				_
Bunni		36	550	1	_	_	_	_	_			_	_	н	_	_	_
Ruukki		454	550	1	738	_	_	_	к	1667	7	_	_	н	т	_	_
Buusumäki		-5-	55-	0		_	_	_	_	1005	5	_	_		_	_	_
Byttylä	171	173	550	2	_	_	7	_	к	044	7	_	_	н	т	_	_
Bövttä	-/-	-75	550	0	_	25 A	_	_	к	285Z	8	_	_		T	_	_
Saakoski				0	816	25 A	5	_	_	3033	1	_	_	_	_	_	_
Saari		(201)	(265)	(1)	692	_	_	_	_	5//	-	_	_	н	т	_	_
Saarijärvi		(69)	(265)	(1)	_	_	40	к	к	1720	3	_	_	_	т	_	_
Salminen		,	,	0	736	_		_	к	383	1	_	_	_	_	_	_
Salo	306	308	550	3	380	_	_	к	к	1552	6	_	_	н	т	_	_
Sammalisto	-	-		0	_	_	_	_	_	55		_	_	_	_	_	_
Santala		70	550	1	_	_	_	_	_			_	_	н	_	_	_
Saunamäki		-		0	_	_	_	_	_			_	_	_	_	_	_
Savio	270	270	550	2	_	_	_	_	_			_	_	н	_	_	_
SAVONLINNA																	
Savonlinna asema		90	550	1	-	_	_	_	_			_	_	н	_	_	_
Pääskylahti		90	550	1	663	63 A	_	-	-	911	4	_	Y	н	_	-	-
SEINÄJOKI										-							
Seinäjoki tavara				0	861	25 A	40	-	к	2455	9	—	—	—	т	Y	—
Seinäjoki asema	396	459	550, 265	4	478	1500 V, 63 A	65	-	Y	4529	23	—	Y	н	т	21	—
Selänpää				0	772	-	—	-	-			—	—	—	—	—	—
Sieppijärvi				0	-	-	_	-	к	756	1	-	-	-	Т	-	-
Sievi				0	-	-	-	-	-			_	-	-	-	-	-
Siikamäki				0	-	-	—	-	-			-	—	-	-	-	-
SIILINJÄRVI																	
Siilinjärvi asema	156	360	265	2	702	25 A	—	-	к	3003	9	—	—	н	т	KR	—
Ruokosuo				0	-		_	-				-	-	-	т	KR	-
Simo		(88)	(265)	(1)	990	_	46	-	к	182	1	-	-		_	-	-
Simpele	247	301	265	3	796	25 A	17	-	к	1045	3	-	—	н	Т	-	-
Sipilä				0	_	-	—	—	_			_	_	—	—	—	—
Sisatto				0	757	_	_	-	_			-	_		_	—	—
Siuntio	112	176	550	2	513	_	_	-				_	—	н	_	-	—
Siuro		<b>60</b>			703	_	_	-	к	744	1	_	—		_	-	—
Skogby		68	550	1	_	_	_	-	_			-	_	н		—	
Skoldvík				0	945	25 A	_	_		441	3	_	_	_	1 T	-	n
Somessio			1	0		-	_	-	Y	2562	5			-	+ +	_	-
Sultava	194		550.06-	0	604	-	_	-		1198	1			-	1 -	_	
Sudahti	181	239	550, 205 (265)	2	676	25 A	_	-	ĸ	1281	2			-	+ +	_	
Suonenioki	(00)	(147)	(205)	(2)	0/0	25 A		_	r. v	1252	2	_	_		і т		_
Suoniemi	350	350	550		/55	25 A			n	002	2					20	
Svriä			1	0	/45		-			2.15							
Syriämäki			1	0			5			245	1						
Sylandki	I	I	1	l v	I –	I –	I —	I —	I —	I	I	I —	I —	I —	I –	I —	I —

Rail Traffic Operating Points / Traffic Operating Point Information

APPENDIX 3B / 22 (28)

Nimi	Lyhin	Pisin laituripituus	Laituri-	Laituriraiteiden	Mitoittava raidepituus	Sähkö-virran	Sivulaituri,	Päätylaituri	Kuormaus-	Seisontaraide	Seisontaraide (kpl	Nosturi	Polttoaine	Henkilö-	Tavara-	Kääntöpöytä tai	VAK-
Name	laituripituus Min platform	May platform	Ristform	lukumäärä Number of trocke	(tavaraliikenne)	saanti	Suurin pituus	Endloading	kenttä	(m/liikennepaikka)	/liikennepaikka)	Crana	Evol	liikennettä	liikennettä	kolmioraide (KR)	ratapihat Rail ward for
Name	Inn. platform	Max. platform	Platform	with platforms	(freight traffic)	Power supply	side loading	platform	Loading site			Crane	Fuel	Passenger	Freight traffic	triangle rail (KR)	dangerous
	tength	tengen	neight	with platforms	(ineight dame)		length	plationi						crunic		changte ruit (ruit)	goods
	[m]	[m]	[mm]		[m]	[400 V, A]	[m]					[t]					
Svemäländ				0					K	1001					- T		
Säkäniemi				0					K	1924	4						
Cânlamăla				0	_	_	_	_		10.10	_	_	_	_		—	_
Safikiifiaki				0	_	_	_	_	ĸ	1948		_	_	_		_	_
SddkSjdrvi				0		_		_	_			_	_	_	-	_	_
Tabkaluata				0	/25	_	10	_		797		_	_	_	- -	—	_
Tainala				0	 820	_	_	_	'			_	_	_		—	_
Talpate				0	829	25.4	_	_	_			_	_	_	_	—	_
Talvianien				0	/32	25 A	_	_	_	321	1	_	_	_		—	_
Tatvivaara		80	550	0	014	_	_	_	_	1257		_	_			_	_
		00	550	1	_	_	_	_	_			_	_	п	_	_	_
						1500 1 67 4	45					V	v		-	22	
Tampere lavara				0	707	1500 V, 63 A	15			4031	26	T	T	_		22	
	500	500	550	0	900	25 A	134	ĸ	т	2793	18	_	_			_	n
Tumpere usernu	500	500	550	5	093	1500 V, 63 A	_	n	_	1588	13	_	_	п	_		_
Tampere Jarvensivu				0	—	_	_	_	_			_	-		_	KR	_
Tapanila	272	272	550	2			-	-	-				-	н	-	-	-
Tapavainola				0	748	—	-	-	-			_	-		-	—	—
Tavastila		47	265	1	—	_	_	_	_			_	-	н	_	—	_
lervajoki		171	265	1	_	_	-	-				_	-	н	-	—	—
Tervola	231	301	265	2	709	25 A	11	-	К	322	1	_	-	н	_	—	—
Teuva				0	-	25 A	-	-	к	477	1	-	-	-	Т	-	-
Tikkala				0	1029	-	-	-	-			-	-	-	-	-	-
Tikkaperä				0	925	-	-	-	-	1930	2	-	-	-	-	-	-
TIKKURILA																	
Havukoski				0	0	-	-	-	-			-	-		-	-	-
Hiekkaharju	255	526	550	3	—	—	-	-				_	-	н	_	—	—
Tikkurila asema	320	445	550	6	412	-	30	-	к	1400	7	-	-	н	Т	-	-
Tohmajärvi				0	735		-	-	к	1143	3		-		Т		-
Toijala	450	450	550	4	690	25 A	-	-	к	4171	12	Y	-	н	Т	Y	-
Toivala				0	749	25 A	-	-	к	219	1	-	-		Т	-	-
Tolsa	220	220	550	2	-	-	-	-	-			-	-	н	-	-	-
Tommola				0	-	-	-	-	-			-	-	-	-	-	-
Torkkeli				0	786	-	-	-	-			-	-	-	-	-	-
TORNIO																	
Tornio asema	(101)	(157)	(265)	(2)	321	63 A	24	к	к	11458	33	-	-	-	т	—	_
Tornio-raja				0	-	—	-	-	-			-	-	-	т	—	_
Tornio-Itäinen		297	550	1	-	-	-	-	-			-	-	н	-	KR	-
Tuomarila	220	222	550	2	—	—	-	-	-			-	-	н	—	—	_
Tuomioja				0	940	—	-	-	-	1101	2	-	-	-	—	KR	_
Turenki	170	170	550	2	1204	—	-	-	к	846	2	-	-	н	т	—	_
TURKU																	
Kupittaa	420	420	550	2	632	—	-	-	-			-	-	н	—		к
Turku asema	315	466	550	6	756	1500 V, 63 A	-	к	-	3680	21	-	-	н	т	—	к
Turku tavara		(200)	(265)	(1)	382	25 A	10	—	ΚY	5787	19	—	-	—	т	—	К
Turku satama	300	304	550	2	421	63 A	-	-	-			-	-	н	—	—	к
Tuupovaara				0	—	—	14	—	к	1208	2	—	-	—	т	—	—
Tuuri		66	550	1		—	-	-	К	320	1		-	н		-	-
Törmä				0	857	—	-	-	-			-				-	-
Törölä				0	756	—	- 1	-	—			-		-	-	-	—
Uimaharju		98	550	1	805	25 A	-	-	ΚY	2263	4	-	-	Н	Т		
Urjala			1	0	732	I –	8	- 1	-	157	1	-	-	-	-	-	I –
Utajärvi	163	174	265	2	713		25	-	К	187	1	-	-	Н	Т		
Utti				0			101	-	-	1310	3	-	-	-	Т		
Uusikaupunki		(66)	(265)	(1)	680	- 1	-	-	-	513	1	-	-		т		
Uusikylä	120	120	550	2	1382	- 1	6		к	1495	6	Y			Т	- 1	-

#### Rail Traffic Operating Points / Traffic Operating Point Information

APPENDIX 3B / 23 (28)

Nimi	Lyhin	Pisin laituripituus	Laituri-	Laituriraiteiden	Mitoittava raidepituus	Sähkö-virran	Sivulaituri,	Päätylaituri	Kuormaus-	Seisontaraide	Seisontaraide (kpl	Nosturi	Polttoaine	Henkilö-	Tavara-	Kääntöpöytä tai	VAK-
Name	laituripituus Min. platform	May platform	Rorkeus	lukumäärä Number of trocko	(tavaraliikenne)	saanti Dowor overely	Suurin pituus	Endloading	kenttä	(m/liikennepaikka)	/liikennepaikka)	Crane	Fuel	liikennettä	liikennettä	kolmioraide (KR)	ratapihat
Name	Min. platform	Max. platform	Platform	with platforms	(freight traffic)	Power supply	side loading	platform	Loading site			Crane	Fuel	Passenger	Freight traffic	triangle rail (KR)	dangerous
	tength	tengen	neight	with platforms	(meight traine)		length	plationin						ti unic		changte ruit (ruit)	goods
	[m]	[m]	[mm]		[m]	[400 V, A]	լայ					[t]					
Vaajakoski				0	725	_	14	_	к	648	2		_		<del>Γ</del>		_
Vaala	183	236	265	2	1019	25 A	25	_	ĸ	248	2		_	н		_	_
Vaarala	105	2.50	205	-				_	ĸ	240	2		_		т	_	_
Vaasa		200	550	1	450	1500 V 67 A	_	_		1478	7		_	н	Ť	_	_
Vahojärvi		250	555	0	716		_	_	_	14/0	3		_			_	_
				0	/10												
Vainikkala tavara				0	1400	25 A	50	к	Y	5267	17		Y	_	т	_	к
Vainikkala asema	482	484	550, 265	3	952			_	ĸ	1078	2	_	_	н	т	_	к
Vainikkala-raia	4		55-, 2-5	0		_	_	_	_	1030	2	_	_		т	_	ĸ
Valimo	270	270	550	2	_	_	_	_	_			_	_	н	· _	_	_
Valkeakoski	_, -	(44)	(265)	(1)	346	_	54	_	к	7658	7	_	_		т	_	_
Valkeasuo		(++)	(==3)	0	-	_	-	_	ĸ	1286	2	_	_	_	_	_	_
Valtimo				0	756	_	_	_	ĸ	1021	7	_	_	_	т	_	_
Vammala	251	251	550	3	843	_	128	_	Y	302	2	_	_	н	т	_	_
Vanattara	5	5	001	0	_	_	_	_	_	55-	-	_	_	_	_	_	_
Vantaankoski	193	196	550	2	_	_	_	_	_			_	_	н	_	_	_
Varkaus	180	213	265	2	728	63 A	124	к	КY	F677	12	_	_	н	т	KR	_
Vartius		5	.0	0	1093	25 A		_	к	761	2	_	_	_	т	_	_
Vartius-raia				0		_	_	_	_	/01	-	_	_	_	т	_	_
Vasikkahaka				0	_	_	_	_	_			_	_	_	_	_	_
Vaskiluoto				0	_	_	Y	_	КY	1489	Δ	_	_	_	т	_	_
Vehkala	242	242	550	2	_	_	_	_	_		-	_	_	н	_	_	_
Venetmäki			001	0	825	_	_	_	_			_	_	_	_	_	_
Vesanka				0	_	_	5	_	к	30/	1	_	_	_	_	_	_
Viekki				0	_	_	_	_	к	2366	3	_	_	_	_	_	_
Vierumäki				0	_	_	92	_	к	2248	5	_	_	_	т	_	_
Vihanti	450	450	550	2	698	_	_	_	КY	569	1	_	_	н	_	_	_
Vihtari	58	98	265	2	562	25 A	134	_	к	706	2	_	-	н	т	_	_
Vihtavuori	-	÷	-	0	723	_	_	_	_	,		_	-	_	т	_	_
Viiala	170	170	550	2	_	_	_	_	_			_	-	н	_	_	_
Viinijärvi	132	186	265	2	641	25 A	-	-	_	452	1	_	_	н	Т	_	-
Villähde	120	120	550	2	-	-	-	-	_			_	_	_	_	_	-
Vilppula		112	550	1	694	25 A	-	-	к	962	3	_	_	н	Т	_	-
Vinnilä				0	_	-	-	-	_	-		_	_	_	-	_	-
Virkamies				0	_	-	-	-	_			_	-	-	—	-	-
Voltti				0	761	-	-	-	_			_	-	-	—	-	-
Vuohijärvi				0	710	—	15	к	—	2272	3	—	-	—	т	—	—
Vuojoki				0	760	-	-	-	_			_	-	-	—	-	-
Vuokatti	(110)	(141)	(265)	(2)	627	25 A	—	-	ΚY	1794	5	—	—	—	т	—	—
Vuonislahti		55	265	1	—	—	—	-	—	701	1	—	—	н	—	—	—
Vuonos				0	—	—	16	-	—	513	1	—	-	—	т	—	-
Vuosaari				0	927	-	-	-	-	2938	10	_	-	-	Т	-	-
YKSPIHLAJA																	
Ykspihlaja tavara				0	767	-	-	-	ΚY	4017	16	_	-	-	Т	-	к
Ykspihlaja väliratapiha				0	939	63 A	-	-	KΥ	1981	4	-	-	-	Т	-	к
Ylistaro		177	265	1	-	-	-	-	-			—	-	н	-	-	-
Ylitornio		167	265	1		25 A	-		-			-		н		-	-
Ylivalli				0	1014		-		Y	1119	2	-		-		-	-
Ylivieska	312	480	265	3	767	63 A	113		ΚY	4781	20	-	Y	н	т	20	-
Yläkoski				0	-		-		Y	1355	3	-		-	т	-	-
Ylämylly				0	-		77		К	1507	3	-		-	т	-	-
Ylöjärvi				0	712	-	62		K	291	2	-		-	Т	—	-
Ypykkävaara				0	1050		-	-	K	775	1		-		т	-	-
Aetsä				0	924		- 1	- 1	К	640	1		-			-	- 1
Antari	82	224	265	2	614	-			-	599	1	-	-	н	-	-	-

FTIA's publication 46eng/2018 Railway Network Statement 2021

Rail Traffic Operating Points / Traffic Operating Point Information

Nimi	Lyhin	Pisin laituripituus	Laituri-	Laituriraiteiden	Mitoittava raidepituus	Sähkö-virran	Sivulaituri,	Päätylaituri	Kuormaus-	Seisontaraide	Seisontaraide (kpl	Nosturi	Polttoaine	Henkilö-	Tavara-	Kääntöpöytä tai	VAK-
	laituripituus		korkeus	lukumäärä	(tavaraliikenne)	saanti	suurin pituus		kenttä	(m/liikennepaikka)	/liikennepaikka)			liikennettä	liikennettä	kolmioraide (KR)	ratapihat
Name	Min. platform	Max. platform	Platform	Number of tracks	Design train length	Power supply	Side loading	End loading	Loading site			Crane	Fuel	Passenger	Freight traffic	Turntable or	Rail yard for
	length	length	height	with platforms	(freight traffic)		platform	platform						traffic		triangle rail (KR)	dangerous
							length										goods
	[m]	[m]	[mm]		[m]	[400 V, A]	[m]					[t]					
Ammänsaari				0	570	25 A	-	-	K	1386	3	—	—	—	Т	-	_
Äänekoski	(35)	(75)	(265)	(2)	850	25 A	14	_	к	3211	6	—	_	—	т	—	—

#### Rail Traffic Operating Points / Future Traffic Operating Points

Nimi	Toinen	Lyhenne	Kaupallinen nimi	Тууррі	Km Hki	Rataosuus	Kunta	Kauko-ohjaus/	Yksityis-	Vaihtotyö-
Namo	Another	Abbr	Commercial name	Тура	Km Hki	Section	Municipality	Traffic control	Private	Shunting
Name	name		Commerciacitatie	Type		Section	municipatity		sidings	Shunting
Haimoo	name	Hmo			87+700	Hyvinkää–Karjaa	Vihti	К	Sidings	
Heikkilänkangas		Hg			762+500	Oulu–Kontiomäki	Oulu	к		
Honkaranta		Hkr			572+882	lisalmi–Ylivieska	Kiuruvesi	к		
lisalmen		llk			553+399	lisalmi–Ylivieska	lisalmi	к		
kolmioraide										
Jäniskorpi		Jnk			586+419	Seinäjoki–Oulu	Kannus	К		
Karvoskylä		Kvä			662+676	lisalmi–Ylivieska	Nivala	К		
Kiilinkangas		Kkg			299+490	Kouvola–Joensuu	Lappeenranta	К		
Kuninkaanmäki		Knm			38+500	Kerava–Vuosaari	Vantaa	к		
Kuusikkoniemi		Ksn			906+900	Oulu–Kontiomäki	Paltamo	к		
Lapinkylä		Lpk			19+900	Vantaankoski–Havukoski	Vantaa	к		
Latukka		Ltk			563+440	Pieksämäki–Kontiomäki	lisalmi	к		
Pappilankangas		Pkg			308+633	Kouvola–Joensuu	Lappeenranta	к		
Petas		Pet			17+170	Vantaankoski–Havukoski	Vantaa	к		
Pitkäkallio		Pio		Liikennepaik	204+424	Kouvola–Kotka	Kouvola	К		
Puikkokoski		Pui			665+680	Kontiomäki–Vartius-raja	Paltamo	К		
Puolukkasuo		Puo			23+510	Vantaankoski–Havukoski	Vantaa	к		
Rasimäki		Rmk			602+460	Pieksämäki–Kontiomäki	Kajaani	к		
Raudaskylä		Rkä			691+015	lisalmi–Ylivieska	Ylivieska	к		
Ruoneva		Rnv				Seinäjoki–Oulu	Siikajoki	к		
Ruskeasanta	Rödsand	Rs			28+760	Vantaankoski–Havukoski	Vantaa	к		
Saarela		Srl			594+018	Seinäjoki–Oulu	Kannus	к		
Salmenmäki		Sal				Seinäjoki–Oulu		к		
Temmesjoki		Tmj				Seinäjoki–Oulu	Liminka	к		
Tesoma		Tso		Seisake	196+200	Lielahti–Kokemäki	Tampere			
Tuomaanvaara		Tva			682+300	Kontiomäki–Vartius-raja	Ristijärvi	К		
Tupavuori		Tvu			260+100	Kouvola–Joensuu	Lappeenranta	к		
Tupos		Тир			736+500	Seinäjoki–Oulu	Kempele	к		
Viinikkala	Vinikby	Vkl			22+590	Vantaankoski–Havukoski	Vantaa	к		
Yllikkälä		YII			268+500	Kouvola–Joensuu	Lappeenranta	к		

#### Updated on 18 June 2020 Rail Traffic Operating Points / Data on Future Traffic Operating Points

Nimi	Lyhin	Pisin	Laituri-	Laituri-	Mitoittava	Sähkövirran	Sivulaituri,	Päätylaituri	Kuormauskenttä	Nosturi	Polttoaine	Henkilöliikennettä	Tavaraliikennettä	Kääntöpöytiä	VAK-ratapihat
	laituripituus	laituripituus	korkeus	raiteiden	raidepituus (tavara-	saanti	suurin pituus								
Namo	Min platform	Max platform	Distform	lukumäärä	liikenne)	Dower cupply	Side leading	Endloading	Looding site	Crana	Fuel	Deconger traffic	Excight traffic	Turntables	Pail yard for
Name	length	length	height	tracks with	(freight traffic)	Power supply	platform	platform	Loading site	Crane	ruel	Passenger trainc	rreight trainc	Turniables	dangerous goods
	tength	length	licigit	platforms	(in eight traine)		length	plation							dungerous goods
	[m]	[m]	[mm]		[m]	[400 V, A]	[m]			[t]					
Haimoo															
Heikkilänkangas															
Honkaranta															
lisalmen															
kolmioraide Jäniskorpi															
Karvoskylä															
Kiilinkangas															
Kuninkaanmäki															
Kuusikkoniemi															
Lapinkulä															
Lapinkyla															
Dessileskesses															
Pappilankarigas															
Distribution															
Pilkakalilo															
Puikkokoski															
Puolukkasuo															
Rasimaki															
Raudaskylä															
Ruoneva															
Ruskeasanta	230	230	550	2	2							к			
Saarela															
Salmenmäki															
Temmesjoki															
Tesoma	250	250	550	i <mark>) 1</mark>											
Tuomaanvaara															
Tupavuori															
Tupos															
Vehkala															
Viinikkala	230	230	550	) 2								К			
Yllikkälä			1	1	1					1				1	

Rail Traffic Operating Ponts / Non-Finnish Border Stations

Nimi	Toinen nimi	Lyhenne	Kaupallinen nimi	Тууррі	Km Hki	Rataosuus	Kunta	Kauko-ohjaus/ manuaalinen	Yksityisraiteita	Vaihtotyö- mahdollisuus
Name	Another	Abbr.	Commercial name	Туре	Km Hki	Section	Municipality	Traffic control	Private sidings	Shunting
	name									
Buslovskaja		Bsl			288+000	Vainikkala raja –		К		
						Viipuri				
Haaparanta	Haparan	Нра			888+130	Tornio–raja – Boden	Haparanda	к		
	da	-				-				
Kivijärvi		Kiv			759+800	Vartius–raja –		к		
						Kostamus				
Svetogorsk		Stg			338+200	Imatrankoski–raja –		к		
						Kamennogorsk				
						(Antrea)				
Värtsilä		Vrs			553+300	Niirala–raja –		К		
						Matkaselkä				

FTIA's publication 46eng/2018 Railway Network Statement 2021

### Updated on 18 June 2020

Rail Traffic Operating Points / Data on Non-Finnish Border Stations

APPENDIX 3B / 28 (28)

Nimi	Lyhin	Pisin laituri	- Laituri-	Laituri-	Mitoittava	Sähkö-	Sivulaituri,	Päätylaituri	Kuormaus-	Nosturi	Polttoaine	Henkilö-	Tavara-	Kääntöpöytiä	VAK-
	laituri-	pituus	korkeus	raiteiden	raidepituus	virran	suurin		kenttä			liikennettä	liikennettä		ratapihat
	pituus			lukumäärä	(tavara-	saanti	pituus								
					liikenne)										
Name	Min.	Max.	Platform	Number of	Design train	Power	Side	End loading	Loading	Crane	Fuel	Passenger	Freight	Turntables	Rail yard for
	platform	platform	height	tracks with	length	supply	loading	platform	site			traffic	traffic		dangerous
	length	length		platforms	(freight		platform								goods
					traffic)		length								
	[m]	[m]	[mm]		[m]	[400 V, A]	[m]			[t]					
Buslovskaja															
Haaparanta															
Kivijärvi															
Svetogorsk															
Värtsilä															

### Loading gauge

The loading gauge (KU) refers to the space inside which the load on an open wagon shall 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 rail network with the exceptions mentioned below.

The loading gauge may be used for wagons in which the wheel-base or the distance between bogie centres is max. 17.5 m, and the length of the loading area of the wagon outside the wheel-base or the distance between bogie centres is max. 0.2 times the length of the wheel-base or the distance between bogie centres. In other cases, loading shall be examined separately.

FTIA's publication 46eng/2019 Railway Network Statement 2021

If there is a risk that the load may be displaced laterally outside the loading gauge during transportation, the width of the load shall be reduced correspondingly. If the displacement of the load may increase the height of some parts of the load so that they extend outside the loading gauge, the height of the load shall be reduced correspondingly.

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

#### Loading gauge restrictions

The bridges on the line section Helsinki–Pasila station – Ilmala railway yard restrict the loading gauge. The loading gauge valid on bridges is marked with a dashed line (-----) on the loading gauge drawing (Figure 1).

On several industrial and other sidings, there are loading gauge restrictions, which shall be taken into account when operating in local traffic.

# Transport terms and conditions for vehicles or 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 to be inserted in the railway undertaking's safety management system – lorries, lorry trailers and containers exceeding the loading gauge.

Other transports exceeding the loading gauge are transported as special transports.

#### Loading

Loading of a vehicle or other loading units exceeding the loading gauge is permitted if the largest width of the vehicle is max. 2,600 mm, and the greatest height is max. 4,200 mm, when the floor height is 1,100 mm.

The greatest load height from the upper surface of the rail shall not exceed 5,300 mm and a maximum ±100 mm deviation of the lateral load is allowed.

The instructions for loading from vehicles to goods wagons shall be applied to loading of wagons intended for vehicle transports (onto combined transport wagons).

The loading dimensions are also shown in Figure 2.

#### FTIA's publication 46eng/2019 Railway Network Statement 2021



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

# Line sections and tracks where it is allowed to transport wagons exceeding the loading gauge

Vehicles or loading units exceeding the loading gauge may be transported on the line sections mentioned in tables 1 and 2 according to the rolling stock category in table 3. The line sections are shown in Figure 3.

At the traffic operating points, which have not been indicated for the different line sections in the tables, it is allowed to use all through routes according to the rules applying to the use of safety devices.

If a track has been indicated for a traffic operating point in the table, where the same track number is used for different track sections separated with letters, the track number itself refers to all such sections.

If these transports require shunting operations on tracks, which are not mentioned here, the tracks shall be specified locally by a railway technology specialist. Loading, inspections and unloading of wagons on or in the vicinity of electrified railways shall comply with the safety regulations.

Table 1. Wagon length ≤ 24.0 m.

Wagon leng	gth ≤ 24.0 m
I	Helsinki–Kemi–Tornio / Rovaniemi
—	Helsinki–Karjaa–Turku
=	Hanko–Hyvinkää
IV	Uusikaupunki-Turku-Toijala
V	(Tampere)–Lielahti–Mäntyluoto /
	Tahkoluoto / Rauma
VI	Seinäjoki–Vaskiluoto
VII	Tampere–Jämsä–Pieksämäki
VIII	Riihimäki–Kouvola–Ämmänsaari
IX	Kouvola-Lieksa
Х	Pieksämäki–Varkaus–Joensuu
XI	Kontiomäki–Oulu
XII	Viinijärvi–Siilinjärvi
XIII	Kouvola–Kotka / Kotka Mussalo
XIV	Lahti–Port of Loviisa
XV	Kerava-Hakosilta
XVI	Luumäki–Vainikkala border
XVII	Rovaniemi-Kemijärvi

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

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

#### Wagon stock and speed of combined transports

The stock used for combined transports has been divided into two categories according to the principal dimensions. The allowed line sections for these categories are presented in tables 1 and 2.

#### Table 3.Principal measures of stock used for combined transports.

Prir	ncipal measures o	of stock used for a	combined transpo	orts
Category	Length [s] over buffers / max. coupling length	Distance between bogie centres	Maximum wheelbase (distance between inner wheelsets)	Example
А	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

The maximum allowed transport speed is 120 km/h. However, the transport speed shall not be higher than the speed limit imposed for the transporting wagons, the line section or otherwise.

FTIA's publication 46eng/2019 Railway Network Statement 2021 APPENDIX 3D / 6 (6) Loading gauge



Figure 3. Operating vehicles exceeding the loading gauge on different line.

### Structure gauge

No fixed installations or equipment must 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 marked by the broken line D-E-F-G-H-L. The widths of the structure gauge in curves, restrictions and more detailed instructions are presented in the Ratatekniset ohjeet (RATO) publication, part 2" Radan geometria" (Track geometry).



Figure 1. Principal dimensions of the structure gauge.

FTIA's publication 46eng/2019 Railway Network Statement 2021

#### Effective passing clearance

The structure gauge is used as a guideline for building and mounting new structures and installations in the vicinity of the track. The structure gauge or the deviations from it constitute the so-called effective available structure gauge, i.e. the passing clearance, for special consignments. Information on the passing clearance is collected for each line section and continuously updated by the track maintenance providers.

### Superstructure categories, EN categories derived from the superstructure categories and permitted speeds for different axle loads

#### Division of lines into EN categories

The lines are divided into EN categories according to the superstructure as follows:

Categories		Superstructure			
Infrastructure manager's superstructure category	EN category SFS-EN 15528	Rails	Sleepers	Ballast	
А	C4	КЗО, КЗЗ	wooden	gravel or equivalent	
B <sub>1</sub>	D4	K43, 54 E1,	wooden	gravel or	
		K60, 60 E1		equivalent	
B <sub>2</sub>	D4	K43, K60	wooden, concrete	railway ballast	
C <sub>1</sub>	D4 /E4	54 E1	wooden, concrete before 1987	railway ballast	
C <sub>2</sub>	D4/E4	54 E1	concrete from 1987 onwards	railway ballast	
D	D4/E4	60 E1/60E2	concrete	railway ballast	

Table 1.Division of lines into EN categories

The limit of the line category is marked in the middle of the station building at the traffic operating point, unless another point is indicated by the kilometre marking.

The line categories for sections of lines are also presented in Figure 1.

#### Responsibility of track maintenance service provider

The track maintenance service provider has the right to restrict the permitted axle load and speed depending on the condition of the track superstructure.

#### FTIA's publication 46eng/2019 Railway Network Statement 2021

# Table 2.Superstructure categories and EN categories derived from the<br/>superstructure categories of the main lines and permitted speeds<br/>for different axle loads.

Section of line	Category			
	Infrastructure manager	SFS-EN 15528		
Helsinki–Turku satama				
Helsinki asema-km 25,2	D	D4		
km 25,2-km 29,0	C1	D4		
km 29,0-km 121,3	D	D4		
km 121,3-km 125,0	C1	D4		
km 125,0– km 152,0	D	D4		
km 152,0– km 193,4	C1	D4		
km 193,4–Turku asema	D	D4		
Turku asema–Turku satama	C1	D4		
Huopalahti-Tikkurila				
Huopalahti-Havukoski	D	D4		
Hyvinkää–Karjaa				
Hyvinkää–km 133,1	C1	D4		
km 133,1–Kirkniemi	D	D4		
Kirkniemi-km 152,2	D	E4		
km 152,2–Karjaa	C1	E4		
Karjaa-Hanko				
Karjaa–km 205,7	D	E4		
km 205,7–Hanko-Pohjoinen	C1	E4		
Hanko-Pohjoinen–Hanko asema	B1	D4		
Turku-Uusikaupunki				
Turku asema–Raisio (km 207,4)	C1	D4		
Raisio (km 207,4)– Uusikaupunki	B1	D4		
Uusikaupunki-Hangonsaari				
Uusikaupunki-km 269,0	C1	D4		
km 269,0–Hangonsaari	B1	D4		
Raisio–Naantali	B1	D4		
Helsinki-Riihimäki				
Helsinki asema–Pasila asema	D	D4		
Pasila asema– Riihimäki asema	D	E4		
Kerava-Hakosilta				
Kytömaa–Hakosilta	D	E4		
Kerava-Sköldvik				
Kytömaa–Sköldvik	D	D4		
Olli-Porvoo	А	C4		

Section of line	Category			
	Infrastructure manager	SFS-EN 15528		
Kerava-Vuosaari	D	E4		
Riihimäki–Tampere				
Riihimäki asema–Tampere asema	D	E4		
Toijala-Turku				
Toijala–Turku asema	D	D4		
Toijala–Valkeakoski	C1	D4		
Tampere-Seinäjoki				
Tampere asema–Seinäjoki asema	D	E4		
Lielahti-Kokemäki	п	F4		
		L7		
Kokemäki–Pori	_	- /		
Kokemäki–Harjavalta	D	D4		
Harjavalta-Pori 	U	E4		
Pori-Mäntyluoto	C1	E4		
Mäntyluoto_Tahkaluoto	<b>ר</b> ח	D/:		
	BZ	U4		
Kokemäki–Rauma	D	E4		
Pori-Aittaluoto	B1	D4		
Niinisalo-Parkano-Kihniö				
Niinisalo-Parkano	A	C4		
Seinäjoki–Vaasa	C2	D4		
Soinäioki Kaskinsa				
Seinajoki-kaskinen				
Seinäjoki–Oulu				
Seinäjoki asema-km 550,5	D	E4		
km 550,5-km 552,2	C2	E4		
km 552,2–0ulu asema	D	E4		
Pännäinen–Pietarsaari	C2	D4		
Pietarsaari-Alholma	B1	D4		
Kokkola-Vksnihlaia				
Kokkola-Ykspihlaja väliratapiha	D	D4		
Tuomioja-Raahe	C2	E4		
Raahe-Rautaruukki	C2	E4		

Section of line	Category			
	Infrastructure manager	SFS-EN 15528		
Riihimäki–Kouvola				
Riihimäki asema-Hakosilta	D	D4		
Hakosilta-Kouvola asema	D	E4		
	_			
Kouvola-Kuusankoski				
Kouvola asema–Kuusankoski	C1	D4		
Lahti–Heinola	B1	D4		
Lahti–Loviisan satama	B1	D4		
Lahti-Mukkula	B1	D4		
Kouvola-Kotka				
läntinen raide	П	n4		
Kouvola Oikoraide–Inkeroinen	D	DH		
itäinen raide	C1	D4		
Inkeroinen-Paimenportti	D	D4		
Paimenportti–Kotka satama	C1	D4		
Kotka Hovinsaari–Kotka Mussalo	C1	D4		
Juurikorpi–Hamina	C1	D4		
Kouvola-Joensuu Kouvola-Joensuu	Р	<b>E</b> /1		
	D	E4		
km 305 5 Säkäniomi		D4		
Säkäniomi-loonsuu Sulkulahti		D4 D/i		
loensuu Sulkulahti-loensuu asema	C1	D4 D4		
		DH		
Luumäki-Vainikkala-raia	D	E4		
	_			
Lappeenranta-Mustolan satama	C1	D4		
lmatra tavara-Imatrankoski-raja	D	D4		
Niirala-raja-Säkäniemi	D	D4		
joensuu–ilomantsi		D./:		
Joensuu Sulkulanti-Heinavaara	BZ	D4		
$\pi e i navaara - KM b b U,4$	A D1	L4		
$K_{11} 000, 4 - K_{11} 004, 1$	ы	C4		
k = 678 / 1 - k = 683 8	л р1			
km 683 8 km 687 0	Δ			
km 687 9_km 697 5	л В1	С <del>ч</del> ГД		
km 692.5–Ilomantsi	A	C4		

Section of line	Category	Category		
	Infrastructure manager	SFS-EN 15528		
loonsuu Kontiomäki				
Joensuu-Kontiomaki	C2	П4		
Lieksa – Dorokylä (km 787.0)	R2	D4		
Paralulä (km 797.0) km 900.7	62	D4		
		D4		
km 809,2-km 810,2	BZ	D4		
km 810,2–Vuokatti	C2	D4		
Vuokatti-Kontiomäki	B1	D4		
Lieksa-Pankakoski	А	C4		
Vuokatti-Lahnaslampi	B2	D4		
Kouvola-Pieksämäki				
Kouvola asema–Pieksämäki asema	D	D4		
Mynttilä–Ristiina	А	C4		
Pieksämäki-Kontiomäki				
Pieksämäki asema–Kuopio km 464.3	D	D4		
Kuonio km 464 3–Kuonio km 466 0	(7	Π4		
Kuopio km /i66 0-lisalmi				
licalmi Murtomäki	C2			
	C2	D4		
Murtomaki–Kontiomaki	CI	D4		
Suonenjoki-Yläkoski	B1	D4		
Murtomäki–Otanmäki	А	C4		
Murtomäki–Talvivaara	C2	D4		
Kajaani–Lamminniemi	B1	D4		
Pieksämäki-Joensuu				
Pieksämäki–Joensuu asema	C2	D4		
Varkaus-Kommila	B2	D4		
Huutokoski-Rantasalmi	C2	D4		
Savonlinna_Parikkala				
Savonlinna asema-Parikkala	B2	D4		
Siilinjärvi–Viinijärvi	C2	D4		
Sysmäjärvi–Vuonos	B2	D4		

Section of line	Category			
	Infrastructure manager	SFS-EN 15528		
Tampere-Jyvaskyla Tampere lärvensivu-Orivesi				
pohjoinen raide	D	E4		
Tampere Järvensivu–km 205,0				
eteläinen raide	C2	E4		
km 205,0–km 208,0 eteläinen raide	D	E4		
km 208,0–Orivesi eteläinen raide	C2	E4		
Orivesi–Jämsänkoski	D	E4		
Jämsänkoski–Jyväskylä	D	D4		
Jämsä-Kaipola	B1	E4		
Orivesi–Seinäjoki				
Orivesi–Haapamäki	B1	D4		
Haapamäki–Pihlajavesi	C2	D4		
Pihlajavesi-Seinäjoki	B1	D4		
Vilppula-Mänttä	B1	D4		
Haapamäki–Jyväskylä	B1	D4		
Jyväskylä–Pieksämäki				
Jyväskylä–Pieksämäki asema	C1	D4		
Jyväskylä–Äänekoski	С1	D4		
Äänekoski–Haapajärvi				
Äänekoski–Saarijärvi	C2	D4		
Saarijärvi–Haapajärvi	А	C4		
lisalmi_Vlivioska				
lisalmi-km 555 8	C1	D4		
km 555.8-km 613.1	П	D4		
km 613.1–km 699.0	C2	D4		
km 699,0–Ylivieska	D	D4		
Pyhäkumpu erk.vh–Pyhäkumpu	C2	D4		
Qulu_l aurila				
Oulu asema-Laurila	C2	D4		
Kemi–Ajos				
Kemi–Ajos km 861,8	B1	D4		
Ajos km 861,8–km 863,5	C2	D4		
Ajos km 863,5–867,1	B1	D4		
Laurila–Tornio-raja				
Laurila–Tornio asema	C2	D4		
Tornio asema–Tornio-raja	C1	D4		

### FTIA's publication 46eng/2019 Railway Network Statement 2021

#### APPENDIX 3F/7 (10) Superstructure categories ...

Section of line	Category	
	Infrastructure manager	SFS-EN 15528
Tornio Böyttö		
Tornio asema_Böyttä	B1	D4
Tormo asema-Noytta	ы	DH
Tornio–Kolari		
Tornio asema–km 886,1	B2	D4
km 886,1–Kolari	D	D4
Laurila–Kemijärvi		
Laurila-Rovaniemi	D	D4
Rovaniemi–Misi	C2	D4
Misi–Kemijärvi	D	D4
Kemijärvi-Patokangas	C2	D4
Oulu-Kontiomäki		
Oulu Nokela–Kontiomäki	D	D4
Kontiomäki–Ämmänsaari	А	C4
Kontiomäki–Vartius-raja		
Kontiomäki–(Vartius)	D	D4
Vartius–Vartius raja	C2	D4

#### Permitted speed in turnouts and diamond crossings

#### Table 3.Permitted speed in turnouts and diamond crossings.

	Superstructure category					
	B <sub>1</sub>	B <sub>1</sub>	B₂	<b>C</b> 1	C2	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	70  70 70 70 35	100 100 100 100 100 90	110 110 110 110 110 90	180 180 140 160 120 90	200 200 140 160 120 90	200 220 140 160 120 90
Standard diamond crossings	32,	90'	90'	90'	90'	90'
Short turnouts R = 165 m Short turnouts Short turnouts when axle load max. 225 kN	20 <sup>1</sup> 35 —	20 <sup>1</sup> 35 10	20¹ 35 20	20 <sup>1</sup> 35 20	20 <sup>1</sup> 35 20	20 <sup>1</sup> 35 35
R = 500 m R = 530 m R = 900 m, when axle load max. 225 kN R = 900 m, when axle load over 225 kN R = 2,500 m R = 3,000 m	 70   	 70 80  	— 70 80 — —	60 — 80 60 140 —	60  80 60 140 	60 — 80 60 140 160
Non-interlocked turnout						
Straight and diverted track	30 <sup>1</sup>	30 <sup>1</sup>	30 <sup>1</sup>	30 <sup>1</sup>	30 <sup>1</sup>	30 <sup>1</sup>

<sup>1</sup> Indicated on speed boards



Figure 1. Superstructure categories.

#### FTIA's publication 46eng/2019 Railway Network Statement 2021

#### Maintenance level on main lines

The maintenance levels on main lines used as the basis for railway maintenance are illustrated in Figure 2.



Figure 2. Maintenance levels in the Finnish railway network.

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

Table 1 lists the following restrictions in each line section:

- railway tunnels in the state-owned railway network, as well as the speed restrictions due to tunnels
- the bridges with axle load and speed limits for rolling stock
- vibration-related speed limits

The reasons for imposing restrictions may be that 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 indicated axle loads must not be exceeded, and excess load shall be unloaded at the station where it is has been discovered.

The weight limits on bridges do not apply to 6-axle or 8-axle wagons built according to the Russian standard. These wagons can be carried over the indicated bridges only as special transport on the conditions laid down in the transport permit.

The train-specific speed limits in tunnels apply to trains including at least one of the wagons indicated in the table.

Rail- way No	Line section	Location/Name (tunnel length/ EN 15528 category of the bridge and maximum permitted axle load)	Km- location	Speed limit
001	Helsinki– Karjaa	Espoo (tunnel, 99 m)	21+145– 21+244	No restrictions due to the tunnel.
	Helsinki– Karjaa	Lillgård (tunnel, 187 m)	46+790– 46+977	Single-decker wagons 160 km/h, Double-decker wagons 120 km/h, Sm3 180 km/h. Reason: piston effect
	Helsinki– Karjaa	Riddarbacken (tunnel, 273 m)	47+770– 48+043	Single-decker wagons 160 km/h, Double-decker wagons 120 km/h, Sm3 180 km/h. Reason: piston effect
001	Karjaa– Salo	Bäljens (tunnel, 298 m)	88+924– 89+218	Single-decker wagons 160 km/h, Double-decker wagons 140 km/h, Sm3 200 km/h. Reason: piston effect

## Table 1.Railway tunnels and speed limits due to bridges, tunnels or<br/>vibration.

### FTIA's publication 46eng/2019 Railway Network Statement 2021

APPENDIX 3H / 2 (7) Railway tunnels...

Rail- way No	Line section	Location/Name (tunnel length/ EN 15528 category of the bridge and maximum permitted axle load)	Km- location	Speed limit
	Karjaa– Salo	Köpskog (tunnel, 43 m)	90+492– 90+535	Single-decker wagons 160 km/h, Double-decker wagons 140 km/h, Sm3 200 km/h. Reason: piston effect
	Karjaa– Salo	Åminne (tunnel, 101 m)	92+391– 92+492	Single-decker wagons 160 km/h, Double-decker wagons 140 km/h, Sm3 200 km/h. Reason: piston effect
	Karjaa– Salo	Högbacka (tunnel, 200 m)	94+365– 94+565	Single-decker wagons 160 km/h, Double-decker wagons 140 km/h, Sm3 200 km/h. Reason: piston effect
	Karjaa– Salo	Kaivosmäki (tunnel, 99 m)	113+961– 114+060	Single-decker wagons 160 km/h, Double-decker wagons 140 km/h, Sm3 200 km/h. Reason: piston effect
	Karjaa- Salo	Haukkamäki (tunnel, 436 m)	114+304– 114+740	Single-decker wagons 160 km/h, Double-decker wagons 140 km/h, Sm3 200 km/h. Reason: piston effect
	Karjaa- Salo	Harmaamäki (tunnel, 265 m)	115+150– 115+415	Single-decker wagons 160 km/h, Double-decker wagons 140 km/h, Sm3 200 km/h. Reason: piston effect
	Karjaa– Salo	Lemunmäki (tunnel, 775 m)	125+820– 126+595	Single-decker wagons 160 km/h, Double-decker wagons 160 km/h, Sm3 160 km/h. Reason: piston effect
	Karjaa– Salo	Märjänmäki (tunnel, 1240 m)	126+940– 128+180	Single-decker wagons 160 km/h, Double- decker wagons 160 km/h, Sm3 160 km/h. Reason: piston effect
	Karjaa– Salo	Lavianmäki (tunnel, 582 m)	137+720– 138+302	Single-decker wagons 160 km/h, Double-decker wagons 160 km/h, Sm3 180 km/h. Reason: piston effect
	Karjaa– Salo	Tottola (tunnel, 531 m)	139+084– 139+615	Single-decker wagons 160 km/h, Double-decker wagons 120 km/h, Sm3 180 km/h. Reason: piston effect

### FTIA's publication 46eng/2019 Railway Network Statement 2021

APPENDIX 3H / 3 (7) Railway tunnels...

Rail- way No	Line section	Location/Name (tunnel length/ EN 15528 category of the bridge and maximum permitted axle	Km- location	Speed limit
		load)		
001	Salo-Turku	Halikko (tunnel, 186 m)	150+207– 150+393	Single-decker wagons 160 km/h, Double-decker wagons 140 km/h, Sm3 200 km/h. Reason: piston effect
	Salo-Turku	Pepallonmäki (tunnel, 531 m)	152+420– 152+951	Single-decker wagons 160 km/h, Double-decker wagons 140 km/h, Sm3 200 km/h. Reason: piston effect
002	Kokemäki-	Nakkila vibration-	305+000-	<u>&gt;</u> 3000-tonne trains
	Pori	related restriction	306+000	50 km/h
	Kokemäki-	Ulvila vibration-	315+000-	<u>&gt;</u> 3000-tonne trains
	Pori	related restriction	317+000	50 km/h
	Kokemäki-	Pori vibration-	322+000-	<u>&gt;</u> 3000-tonne trains
	Pori	related restriction	324+000	50 km/h
	Kokemäki-	Pori vibration-	334+000-	<u>&gt;</u> 3000-tonne trains
007	Pori	related restriction	337+000	50 km/h
005	Diibimäki	Jokela Vibration-	47+950-	$\geq$ 5000-torine trains
00/	KIIIIIIIAKI	Kangasyupri	200,020	40 km/h for all trains
004	Jyvaskyla– Äänekoski	(tunnol 2735 m)	_387+763	Boscon: condition of tunnol
005	Kouvola-	Venekallio	204+400	No restrictions due to the
005	Pieksämäki	(tunnel, 180 m)	- 204+580	tunnel
	Kouvola-	Vuohiiärvi	222+400	No restrictions due to the
	Pieksämäki	(tunnel 191 m)	-222+591	tunnel
	Kouvola-	Kulonpalonvuori	232+075-	No restrictions due to the
	Pieksämäki	(tunneli, 418 m)	232+493	tunnel
005	Pieksämäki –Kontio- mäki	Mustamäki (tunnel, 249 m)	416+960– 417+211	No restrictions due to the tunnel
	Pieksämäki	Mustavuori I	417+791-	No restrictions due to the
	–Kontio- mäki	(tunnel, 283 m)	418+075	tunnel
	Pieksämäki	Mustavuori II	418+341-	No restrictions due to the
	–Kontio- mäki	(tunnel, 374 m)	418+718	tunnel
	Pieksämäki	Pieni Neulamäki	454+288	No restrictions due to the
	-	(tunnel, 1003 m)	-455+291	tunnel.
	Kontiomäki			
	Pieksämäki	Tikkalansaari lift	472+817	Passenger trains 50 km/h
	-Kontio-	bridge (E5 350 kN)		Freight trains 50 km/h
	Maki Diala a su		F37:000	Reason: movable bridge
	Pieksamäki	Honkasalmı railway	527+080	Passenger trains 120 km/h
	-KUTUU-	DI IUBE (D4 225 KIV)		Poscon: poor condition
006	Riihimäki	Hollola vibration	116±200	> 3000-toppo trains
000	Kouvola	related restriction	118+500	<u>- 5000-tonne trains</u> 40 km/h
	Rijhimäki–	Lahti vibration-	125+000-	> 3000-tonne trains 40 km/
	Kouvola	related restriction s	125+400	

Rail- way No	Line section	Location/Name (tunnel length/ EN 15528 category of the bridge and maximum permitted axle load)	Km- location	Speed limit
	Riihimäki–	Koria vibration-	182+900-	<u>&gt;</u> 3000-tonne trains 30 km/
006	Imatra- Parikkala	Mansikkakoski railway bridge (D4 225 kN)	324+183	Passenger trains 40 km/h Freight trains 40 km/h Reason: poor condition The restriction will presumably be abolished during 2021.
006	Parikkala-	Paksunniemi	399+111-	No restrictions due to the
	Parikkala- Säkäniemi	Syrjäsalmi railway bridge (D4 225 kN)	445+395	Passenger trains 80 km/h Freight trains 60 km/h Reason: poor condition
006	Joensuu- Kontiomäki	Pielisjoki railway bridge (E4 250 kN)	625+146	Passenger trains 50 km/h Freight trains 50 km/h Reason: movable bridge
	Joensuu- Kontiomäki	Uimasalmi railway bridge (E4 250 kN)	673+486	Passenger trains 60 km/h Freight trains 60 km/h Reason: movable bridge
007	Kerava- Lahti	Järvenpää vibration- related restriction	35+800- 36+200	2000-tonne freight trains 40 km/h
800	Tuomioja- Oulu	Siikajoki railway bridge (E4 250 kN)	705+684	Passenger trains 80 km/h Freight trains 80 km/h Reason: poor condition
	Tuomioja-	Liminka vibration-	726+900-	> 3000-tonne trains
	Tuomioja- Oulu	Kempele vibration- related restriction	740+600 -741+700	<ul> <li>&gt; 3000-tonne trains</li> <li>50 km/h</li> </ul>
008	Oulu-Kemi	Simojoki railway bridge (D4 225 kN)	832+960	Passenger trains 90 km/h Freight trains 90 km/h Reason: poor condition
009	Tampere– Ivväskylä	Matomäki (tunnel, 262 m)	303+987- 304+249	No restrictions due to the tunnel
	Tampere-	Lahdenvuori	308+214-	120 km/h for all trains.
	Jyväskylä	(tunnel, 4293 m)	312+507	Reason: condition of tunnel
	Tampere-	Sahinmäki	316+064-	No restrictions due to the
	Jyväskylä Taurus	(tunnel, 153 m)	316+217	tunnel
	Tampere–	Lautakkomaki (tunnol 399 m)	321+171-	No restrictions due to the
	Tampere-	Paavalinyuori	328+364	No restrictions due to the
	Jyväskylä	(tunnel, 771 m)	-329+135	tunnel
	Tampere-	Paasivuori	330+107-	120 km/h for all trains.
	Jyväskylä	(tunnel, 2475 m)	332+581	Reason: condition of tunnel
	Tampere-	Keljonkangas I (tuppol 1003 m)	333+973-	No restrictions due to the
	Tampere_	Kelionkangas II	335+301_	Single-decker wagons
	Jyväskylä	(tunnel, 224 m)	335+526	140 km/h, Double-decker wagons 140 km/h, Sm3 140 km/h. Reason: piston effect

Rail- way No	Line section	Location/Name Km- (tunnel length/ EN location 15528 category of		Speed limit
		the bridge and maximum permitted axle load)		
014	Parikkala- Savonlinna	Kyrönsalmi railway bridge (D4 225 kN)	483+659	Passenger trains 20 km/h Freight trains 20 km/h Reason: movable bridge
	Parikkala- Savonlinna	Kyrönniemi (tunnel, 336 m)	483+892 -484+214	No restrictions due to the tunnel
023	Haapamäki –Jyväskylä	Möykynmäki (tunnel, 350 m)	365+969– 366+319	50 km/h for all trains. Reason: condition of tunnel
023	Jyväskylä- Pieksämäki	Pönttövuori (tunnel, 1429 m)	394+476– 395+905	No restrictions due to the tunnel
	Jyväskylä- Pieksämäki	Heinlampi under- pass (E4 250 kN)	448+690	Passenger trains 80 km/h Freight trains 80 km/h Reason: Insufficient ballast depth
024	Varkaus- Viinijärvi	Pirtinvirta railway bridge (D4 225 kN)	425+570	Passenger trains 40* km/h Freight trains 40* km/h Reason: movable bridge * = The bridge and rail joints may be locked, in which case the maximum speed is 60 km/h
	Varkaus- Viinijärvi	Railway bridge over Taipale Canal (D4 225 kN)	426+855	Passenger trains 30* km/h Freight trains 30* km/h Syy: avattava silta * = The bridge and rail joints may be locked, in which case the maximum speed is 60 km/h
123	Huopalahti -Havukoski	Malminkartano (tunnel, 230 m)	10+636– 10+866	No restrictions due to the tunnel
	Huopalahti	Kivistö	18+122-	No restrictions due to the
	–Havukoski Huopalahti –Havukoski	(tunnel, 432 m) Airport (tunnel, 8260 m)	18+554 21+388– 29+636	tunnel No restrictions due to the tunnel
125	Kerava– Vuosaari	Savio (tunnel, 13575 m)	32+659– 46+234	No restrictions due to the tunnel
	Kerava– Vuosaari	Labbacka (651 m)	48+728– 49+379	No restrictions due to the tunnel
131	Kerava– Sköldvik	Kerava vibration- related restriction	30+700– 31+650	All trains 40 km/h
	Kerava– Sköldvik	Nikkilä vibration- related restrictions	38+850– 40+160	All trains 40 km/h
141	Hyvinkää- Karjaa	Ojakkala vibration- related restrictions	102+000- 103+500	<u>&gt;</u> 3000-tonne trains 50 km/h
	Hyvinkää- Karjaa	Nummela vibration- related restrictions	108+500- 109+500	≥ 3000-tonne trains 50 km/h
	Hyvinkää- Karjaa	Lohja vibration- related restrictions	120+600- 128+500	≥ 3000-tonne trains 50 km/h
	Hyvinkää- Karjaa	Lohja vibration- related restrictions	130+500- 132+000	<u>&gt;</u> 3000-tonne trains 50 km/h

Rail- way No	Line section	Location/Name (tunnel length/ EN 15528 category of the bridge and maximum permitted axlo	Km- location	Speed limit	
		load)			
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-	Kehä II	194+646-	No restrictions due to the	
	Kotka	(tunnel, 388 m)	195+029	tunnel.	
	Kouvola– Kotka	Myllykoski vibration-related restriction	200+700 -202+500	<u>&gt;</u> 3000-tonne trains 40 km/h	
	Kouvola– Kotka	Keltakangas vibration-related restriction	207+300– 207+700	All trains 40 km/h	
222	Juurikorpi– Hamina	Suurivuori (tunnel, 765 m)	236+028 -236+793	No restrictions due to the tunnel	
246	Lappeen- ranta- Metsä- Saimaa	Voisalmensaari (tunnel, 198 m)	290+167– 290+365	<ul> <li>No restrictions due to the</li> <li>tunnel</li> </ul>	
251	Lahti- Heinola	Jyränkö railway bridge (D4 225 kN)	166+604 Passenger trains 30 km/ Freight trains 30 km/h Reason: poor condition		
321	Toijala- Turku	Toijala vibration- related restriction	150+400– 150+900	All trains 40 km/h	
	Toijala- Turku	Loimaa vibration- related restriction	208+000 -210+600	≥ 3000-tonne trains 40 km/h	
	Toijala- Turku	Turku vibration- related restriction	271+900– 273+700	≥ 3000-tonne trains 40 km/h	
349	Pori- Mäntyluoto	Tahkoluoto railway 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 (D4 225 kN)	419+367	Passenger trains 50 km/h Freight trains 50 km/h Reason: original load- carrying capacity	
	Seinäjoki– Kaskinen	Kyrönjoki railway bridge (D4 225 kN)	442+875	Passenger trains 50 km/h Freight trains 50 km/h Reason: original load- carrying capacity	
	Seinäjoki– Kaskinen	Nenättömänluoma railway bridge (D4 225 kN)	446+650	Passenger trains 60 km/h Freight trains 60 km/h Reason: original load- carrying capacity	
	Seinäjoki– Kaskinen	Kurikka vibration- related restriction	450+500 -452+000	All trains 40 km/h	
	Seinäjoki– Kaskinen	Kainastonjoki railway bridge (D4 225 kN)	482+348	Passenger trains 60 km/h Freight trains 60 km/h Reason: original load- carrying capacity	

### FTIA's publication 46eng/2019 Railway Network Statement 2021

APPENDIX 3H / 7 (7) Railway tunnels...

Rail- way No	Line section	Location/Name (tunnel length/ EN 15528 category of the bridge and maximum permitted axle load)	Km- location	Speed limit
	Seinäjoki– Kaskinen	Teuvanjoki railway bridge (D4 225 kN)	502+165	Passenger trains 60 km/h Freight trains 60 km/h Reason: original load- carrying capacity
	Seinäjoki– Kaskinen	Närpiönjoki railway bridge (D4 225 kN)	518+951	Passenger trains 60 km/h Freight trains 60 km/h Reason: original load- carrying capacity
	Seinäjoki– Kaskinen	Kaskistensalmi railway bridge (D4 225 kN)	528+922	Passenger trains 60 km/h Freight trains 60 km/h Reason: original load- carrying capacity
531	Oulu– Kontiomäki	Oulu vibration- related restriction	762+800 -763+800	≥ 3000-tonne trains 45 km/h
	Oulu– Kontiomäki	Muhos vibration- related restriction	786+000 -790+300	≥ 3000-tonne trains 50 km/h
	Oulu– Kontiomäki	Vaalansalmi railway bridge (D4 225 kN)	843+637	Passenger trains 80 km/h Freight trains 80 km/h Reason: poor condition
	Oulu– Kontiomäki	Kiehimänjoki railway bridge (D4 225 kN)	902+658	Passenger trains 50 km/h Freight trains 50 km/h Reason: poor condition
731	Joensuu– Viinijärvi	Joensuu vibration- related restriction	631+100– 631+700	≥ 3000-tonne freight trains 40 km/h

# Estimation on speed limits due to track condition during timetable period 2021

The table below presents the best estimation on speed limits due to track condition in 2021.

The estimation is based on the earlier condition of the track and known limitations at the time of publishing the table. The situation may change between the moment of estimation and the year 2021. As the estimation contains speed limits that have not yet been set and whose exact location is therefore not known, the location of speed limits is presented on the level of line sections.

The precision of the estimated information may change line section-specifically. This is the first time the table is published for the next timetable period in the current form, and it will be specified on the basis of practical experience.

Line section no.	Start location	End location	Total length of sections subject to limits, average limits	Description of limits
001	Helsinki	Kirkkonummi	0,3 km 50-80 km/h	Track condition
001	Kirkkonummi	Turku	0,5 km, 80 km/h	Track condition
003	Helsinki	Kerava	0.5 km, 80 km/h	Track condition
003	Kerava	Hyvinkää	0,4 km 80km/h	Track condition
003	Hyvinkää	Riihimäki	0.02 km, 100 km/h	Track condition
006	Riihimäki	Hakosilta	0,2km, 50 km/h	Track condition
006	Hakosilta	Lahti	No speed limits due to track	Construction site
007	Kerava	Hakosilta	No speed limits due to track	
123	Huopalahti	Havukoski	No speed limits due to track condition expected at the moment	
125	Kerava	Vuosaari	No speed limits due to track condition expected at the moment	
131	Kerava	Sköldvik	No speed limits due to track condition expected at the moment	
141	Hyvinkää	Karjaa	0,2 km	Track condition
142	Karjaa	Hanko	No speed limits due to track condition expected at the moment	
321	Toijala	Turku	0,1 km, 100 km/h	Track condition
332	Turku	Raisio	No speed limits due to track condition expected at the moment	
332	Raisio	Hangonsaari	No speed limits due to track condition expected at the moment	
333	Raisio	Naantali		
005	Kouvola	Pieksämäki		
005	Pieksämäki	Siilinjärvi		
005	Siilinjärvi	lisalmi		
006	Lahti	Kouvola		
006	Kouvola	Luumäki		
006	Kouvola	Luumäki	3 km, 80–100 km/h	Frost limits based on empirical observations on the northern and/or southern tracks
006	Kouvola	Luumäki	214+850-214+950 80 km/h	Kaipiainen V220 condition of turnout
006	Luumäki	lmatra	323+614-324+400 50 km/h	Mansikkakoski railway brindge. Also part of the LUIMA project area. Temporary local limits.
006	lmatra	Parikkala	0.2 km, 50 km/h 0.2 km, 80 km/h	367+510 Hiitolanjoki railway bridge, 341+760 Heinä level crossing
006	Parikkala	Säkäniemi	0.2–1 km, 80–100 km/h	Additional limits possible depending on the repair operations
006	Säkäniemi	Joensuu	0.2 km, 80 km/h	Current section subject to limit 593+200–596+400
006	Joensuu	Nurmes	5 km, 50 km/h	Current limits: 784+600–784+800, 787+000–787+200, 765+200–765+400, 640+500–640+700, 741+900–742+070
006	Nurmes	Porokylä	741+900 - 742+070 50 km/h	Condition of Halijoki railway bridge
014	Savonlinna	Parikkala	No speed limits due to track condition expected at the moment	
014	Huutokoski	Rantasalmi		
017	Siilinjärvi	Viinijärvi	0,2 km, 50 km/h	Condition of Virraskoski railway bridge
024	Pieksämäki	Huutokoski		
024	Huutokoski	Viinijärvi	0,2 km, 50-80 km/h	Soft ground
213	Luumäki	Vainikkala	No speed limits due to track condition expected at the moment	
221	Kouvola	Juurikorpi		
221	Juurikorpi	Kotka		
222	Juurikorpi	Hamina		
232	Kouvola	Kuusankoski		

Line section no.	Start location	End location	Total length of sections subject to limits, average limits	Description of limits
243	lmatra	Imatrankoski	No speed limits due to track	
251	Lahti	Heinola	166+415–166+815 30 km/h	Track condition (Jyränkö bridge). Permanent restriction.
252	Lahti	Loviisa harbour	134+200–134+300 30 km/h	Construction site
610	Mynttilä	Ristiina		
611	Varkaus	Kommila		
722	Joensuu	Ilomantsi	648+900–696+149	Maximum axle load 180 kN
731	Viinijärvi	Joensuu		
751	Niirala	Säkäniemi	No speed limits due to track condition expected at the moment	
002	Tampere	Kokemäki	2 km, 80 km/h	Average limit in 2021 (condition of turnouts)
002	Kokemäki	Mäntyluoto		
6003	Riihimäki	Toijala	2 km, 80 km/h	Average limit in 2021
6003	l oijala T	lampere	2 km, 80 km/h	Average limit in 2021
003	Tampere	Seinajoki	3 km, 140 km/n	Average limit in 2021
004	Jyvaskyla	Aanekoski	No speed limits due to track condition expected at the moment	
008	Seinäjoki	Pännäinen	1 km, 140 km/h	Average limit in 2021
800	Pännäinen	Kokkola	1 km, 140 km/h	Average limit in 2021
009	Tampere	Urivesi	2 km, 80 km/h	Average limit in 2021
009	Urivesi	Jyvaskyla	1.2 km 50.00 km /h	Emboulyment stability and condition of even suts
023	Нааратакі	Jyvaskyla Dieksämäki	1,3 km, 50-80 km/n	Embankment stability and condition of open cuts
025	Jyvaskyla	PIEKSamaki	3  km 80  km/h	Average limit in 2021
066	Orivesi	Haapamäki	1 km, 80 km/h	Track condition
066	Haapamäki	Seinäjoki	1 km, 80 km/h	Track condition
314	Toijala	Valkeakoski		
342	Kokemäki	Rauma		
349	Mäntyluoto	Tahkoluoto		
351	Niinisalo	Parkano		
363	Jämsä	Kaipola		
373	Vilppula	Mänttä		
416	Pännäinen	Alholma		
417 431	Kokkola Seinäjoki	Ykspihlaja Vaasa	0,9 km, 50-80 km/h	Problems with bridges and geometry, lateral
432	Vaasa	Vaskiluoto		
441	Seinäjoki	Kaskinen	1,7 km, 50 km/h 3 km, 30-60 km/h 20 km - 60 km /h	Problems with bridges Problems with bridges, soft ground and vibrations
004	Äänekoski	Haapajärvi	2.3 km, 30 km/h	Poikkikuja level crossing 424+858–427+170
004	Äänekoski	Haapajärvi	0.7 km, 60 km/h	Saviniemi level crossing 439+403–440+125
004	Äänekoski	Haapajärvi	1 km, 20–30 km/h	Frost limits
004	Äänekoski	Haapajärvi	20 km, 20–30 km/h	Temporary speed limits in the summer due to track works
005	lisalmi	Murtomäki	590+800-591+000 50 km/h	Raudanjoki railway bridge, geometry
005	lisalmi	Murtomäki	613+270-613+420 100 km/h	Turnout geometry
005	Murtomäki	Kontiomäki		
006	Porokylä	Vuokatti	868+550–868+600 30 km/h	On the spot of turnout Vkt V017. Reason: missing key of turnout V016. Restriction may end during 2020.
006	Vuokatti	Kontiomäki	869+600-889+200 50 km/h	Track condition, geometric errors. Restriction may
008	Kokkola	Ylivieska	5 km, 60 km/h	Average limit in 2021
008	Ylivieska	Tuomioia	2 km, 60 km/h	Average limit in 2021
008	Tuomioja	Oulu	2 km, 60 km/h	Average limit in 2021
008	, Tuomioja	Oulu	730+200-731+200 140 km/h	Temmesjoki shortcut, curve inclination
008	Oulu	Kemi	789+350-789+600 50 km/h	Track condition
008	Kemi	Rovaniemi		
008	Rovaniemi	Kemijärvi		
087	Haapajärvi	Ylivieska		
087	lisalmi	Haapajärvi		
514	Tuomioja	Rautaruukki		
517	Kemi	Ajos		
520	i ornio	KOYTTA		
521	Laurila	i ornio	l	
Line section no.	Start location	End location	l otal length of sections subject to limits, average limits	Description of limits
---------------------	----------------	--------------	---	--
521	Tornio	Kolari		
527	Kemijärvi	Patokangas		
531	Oulu	Kontiomäki	843+500-843+800 80 km/h	Vaalansalmi railway bridge
531	Oulu	Kontiomäki	902+500–902+700 50 km/h	Kiehimäjoki railway bridge
531	Oulu	Kontiomäki	788+149-789+174 50 km/h	Muhos, track 422, condition of superstructure. Restriction may end during 2020.
533	Vuokatti	Lahnaslampi		
553	Murtomäki	Otanmäki		
554	Kontiomäki	Vartius		
555	Kontiomäki	Ämmänsaari		
558	Murtomäki	Talvivaara		
620	Pyhäkumpu	Pyhäsalmi		

Location		Year of implement- ation	Section	Section number	Required rail capacity	Period of rail capacity requirement	Speed limit	Speed limit zone length	Speed limit dates	Speed limit location (traffic operating point or distance between TOPs)	Other service impacts	Priority: 1: Implementation decision made 2: Implementation decision later
					Service interruptions on weeknights							
					and at weekends, track access							
					atterations. Changes to the length of							
					Phase 1: 11/20 5 /21 tracks r1 r2							
					ia r18 - r10							
					Phase 2: $4/21-10/21$ tracks rZ = r0							
					(auxiliary bridges) and $r16 - r17$							
					Phase 3: $9/21-3/22$ tracks r3 – r9							
					(auxiliary bridgest) and r14 – r15							
					Phase 4: 2/22-12/22 tracks r10 –							
					r11 (auxiliary bridges) and r12 – r13.							
					Tracks R12 – R19 shortened							
					gradually 2 at a time,							
Helsinki: Kansalaistori-	-Kaisaniemi				two Sm5 units fit on the tracks.							
bicycle tunnel construc	tion	2021	Helsinki	1101	Completed: 3/23.	-	-	-	-	-	-	1
Helsinki: replacement o	of turnouts	2021	Helsinki	1101	Defined later	-						
					10 x 30h service interruption on							
Toolonlahti pumping si	tation	2021	Helsinki–Pasila	1101	Service interruntions twice a vest	1 January–31 May	-	-	-	-	-	1
Regular service interru	ptions due to				weeks 17 and 38. An 8h interruption							
maintenance		2021	Helsinki–Pasila	1101	on 7 consecutive nights							
Helsinki-Pasila: commi	ssionings after	_			Service interruptions on weeknights							
HELRA	-	2021	Helsinki-(Pasila)	1101	and at weekends	-	-	-	-	-	-	1
					Nightly 8-h track possessions in the							
Helsinki–Pasila: track a	and turnout	0001			turnout area at 22:00–06:00 am, 2–3							
tamping		2021	Heisinki–(Pasila)		turnouts at a time during two							
				1101	weekends in spring and autumn.	-	-	-	-	-	-	1
Hartwall Arena renewal	of undernass	2021	(Pasila) - (Riihimäki)		Service interruptions on weeknights							
indi citada i dena i citada	con under pubb	2021		1102	and at weekends							
			(Pasila)–(Riihimäki)		safety devices 2 x 6 weeks							
Repair of the Kehä I (hi	ighway 101)	2021			alternatively IKR and IsR in May and							
bridge at Pukinmäki sta	ation.			1102	Sep. Adjacent rail max 50km/h.	1 June–31 August	50					
Repair of the Korso und	derpass	2021	(Pasila)–(Riihimäki)	1102	Defined later		-					2
			(Pasila)–(Riihimäki)		6-h track possessions on weeknights							
Pacila Korava track an	d turnout				one track and one line at a time as							
tamping		2021			well as a 3-h service interruption on							
tamping					two tracks in the turnout area on a							
				1102	total of 12 nights a year.	-	-	-	-	-	-	1
Tikkurila: track and tur	nout alterations	2021	(Pasila)–(Riihimäki)	1102								2
Kytömaa-Ainola constr	ruction of a new	2021	(Pasila) - (Riihimäki)		I rack possessions during nights one							
track ( may be postpon	ed for 2022)			1102	Defined later	-	80	-	-	-	-	2
Pasila - Riinimaki ROPI	E	2021	(Pasila) - (Riihimäki)	1102	Service interruptions twice a year:	-	-	-	-	-	-	2
Regular service interru	ptions due to	2021	(Pasita) - (Riifiifiaki)		weeks 18 and 39. An 8h interruption							
maintenance		2021		1102	on 7 consecutive nights							
			(Pasila)–(Riihimäki)		6–10-h track possessions on							
					weeknights one track and one line at				1			
Kerava–Riihimäki: tracl	k and turnout	2021		1	a time as well as a 2-h service							
tamping		2021		1	interruption on two tracks in the				1			
					turnout area on a total of 6 nights a							
				1102	year.	-	-	-	-	-	-	1

Location	Year of implement- ation	Section	Section number	Required rail capacity	Period of rail capacity requirement	Speed limit	Speed limit zone length	Speed limit dates	Speed limit location (traffic operating point or distance between TOPs)	Other service impacts	Priority: 1: Implementation decision made 2: Implementation decision later
Substitution of Kerava interlocking equipment	2021	(Pasila)–(Riihimäki)	1102	Speed limits and service interruptions on tracks and platforms according to a senarate plan	21.6 - 16.8						
Repair of the Monni underpass	2021	(Pasila)–(Riihimäki)	1102	Defined later	21101 1010						
Riihimäki: extension of station tunnel	2021	Riihimäki	4402	Tracks r008-011 closed at the spot of	11.20 6						
Helsinki - Tampere renovation	2021	(Pasila) - (Riihimäki)	1102	Defined later	1.120.0.						1
Hyvinkää–Karjaa: track and turnout tamping	2021	(Pasila)–(Riihimäki)	1102	8-h track possessions during weekdays at 21:00–04:00 am. Track possession each month on the night between the first non-holiday Monday and Tuesday in Riihimäki at 0:40-3:55 am and in Kytömaa at 0:30-4:30 am.	-	-	-	-	-	-	1
Helsinki–Riihimäki: catenary maintenance	2021			Helsinki–Kerava will be agreed upon case by case. The traffic impact area will be specified 2 months prior to implementation. When required, the service interruption can take place more often than once a month so that the necessary maintenance can be carried out							
		Helsinki–Riihimäki	1102	Service interruptions twice a year	1 January–31 December	-	-	-	-	-	1
Regular service interruptions due to maintenance	2021	Riihimäki–Lahti	1103	weeks 19 and 40. An 8h interruption on 7 consecutive nights							1
Riihimäki–Lahti: track and turnout tamping, turnout service and maintenance of the catenary system and safety devices	2021	Riihimäki–Lahti	1103	6–8-h track possessions on weeknights one track and one line at a time as well as a 2–3-h service interruption on both tracks in the turnout area on a total of 8 nights a year.	-	_	_	_	-	-	1
Jorvas railway bridge renovation km33	2021	Pasila-Kirkkonummi	1104	Service interruptions on weeknights and at weekends Service interruptions twice a year	-	80		-	-	-	2
Regular service interruptions due to maintenance	2021	Pasila-Kirkkonummi	1104	weeks 20 and 41. An 8h interruption on 7 consecutive nights 7-h track possessions on weeknights							
Pasila–Kirkkonummi: track and turnout tamping	2021	Pasila-Kirkkonummi	1104	one track and one line at a time as well as a 2-h service interruption on both tracks in the turnout area on a total of 8 nights a year. Both tracks out of service Mon–Fri at	-	-	-	-	-	-	1
Ring Rail Line maintenance and				02:00-04:00 am, Sat-Sun at 02:00-05:00 am. Only one track in use: Mon-Fri 23:40- 05:00 am, Sat. 23:00-7:30 am, Sun. 23:00-8:30 am. In addition, 4-h service interruptions of both tracks for systems tests 6 times a year.	3						
systems tests	2021	(Huopalahti)–(Tikkurila)	1105		-	-	-	-	-	-	1

Location	Year of implement- ation	Section	Section number	Required rail capacity	Period of rail capacity requirement	Speed limit	Speed limit zone length	Speed limit dates	Speed limit location (traffic operating point or distance between TOPs)	Other service impacts	Priority: 1: Implementation decision made 2: Implementation decision later
Huopalahti–Tikkurila: track and turnout tamping	2021	(Huopalahti)–(Tikkurila)	1105	8-h track possessions on weeknights one track and one line at a time as well as a 1-h service interruption on both tracks in the turnout area on a total of a initiate a vector							
Regular service interruptions due to maintenance Ilmala: railway yard renovation,	2021	(Huopalahti)–(Tikkurila)	1105	Service interruptions twice a year: weeks 21 and 42. An 8h interruption on 7 consecutive nights Service interruptions on weeknights	-	-	-	-	-	-	1
replacement of turnouts V0244, V0245, V0246, V0247, V0256 and V0257	2021	Ilmala railway yard	1105	and at weekends, track access alterations.	-	-	-	-	-	-	1
Ilmala power supply station	2021	Ilmala railway yard	1105	-	-		-	-	-	-	1
Frost heave damage and soft soil repair Kerava-Sköldvik: track and turnout	2021	(Kerava)–Sköldvik/Porvoo	1106	10-h track possession Tue. and Thu.	-	-	-	-	-	-	2
tamping	2021	(Kerava)–Sköldvik/Porvoo	1106	10-h track possession Tue. and Thu. Service interruptions twice a year:	-	-	-	-	-	-	1
Regular service interruptions due to maintenance	2021	Kerava–Lahti	1107	weeks 21 and 42. An 8h interruption on 7 consecutive nights							
Kerava–Lahti: track and turnout tamping, turnout service and maintenance of the catenary system and safety devices.	2021	Kerava–Lahti		6–8-h track possessions on weeknights one track and one line at a time as well as a 2–3-h service interruption on both tracks in the turnout area on a total of 6 nights a							
Kerava–Vuosaari: maintenance work in			1107	year. Standard track possession on		-	-	-	-	-	1
Savio tunnei Riihimäki: replacement of turnouts	2021	Kerava–Vuosaari	1108	Mondays at 09:45–17:50.	1 January–31 December	-	-	-	-	-	1
V0402, V0403 and V0404	2021	Riihimäki railway yard	1111	Track access alterations. Service interruptions on weeknights	-	-	-	-	-	-	2
seppus. opposite banks and anderpuss	2021	(Kirkkonummi)–(Turku)	1201	and at weekends. Service interruptions on weeknights	-	50	-	-	-	-	2
Helsinki–Turku: renovation	2021	(Kirkkonummi)–(Turku)	1201	and at weekends.	-	80/50	1000	-	-	- Automatic train	1
Karjaa interlocking system	2021	(Kirkkonummi)–Karjaa–(Turku)	1201	48-h service interruption for implementation.	Midsummer service interruption	-	-	-	-	protection system building site	2
Kirkkonummi–Turku: track and turnout tamping	2021	Kirkkonummi–(Turku)	1201	8-h track possessions on weeknights.	-	-	-	-	-	-	1
Turku–Uusikaupunki: track and turnout tamping	2021	(Turku)–Uusikaupunki	1202	Daily 8-h track possession.	_	-	-	-	-	-	1
Turku–Uusikaupunki: electrification	2021	(Turku)–Uusikaupunki/Hangonsaari	1202	Daily 10-h track possession.	-	-	-	-	-	-	1
Turku - Toijala ROPE	2021	Turku-Toijala	1203	Defined later	-	-	-	-	-	-	2
Turku–Toijala: track and turnout tamping, turnout service and maintenance of the catenary system and safety devices	2021	Turku–Toijala	1203	2 x 3-h or 5-h track possessions during the maintenance weeks in spring at night and in autumn.	_	_	_	_	_	-	1
Hyvinkää-Karjaa-Hanko renovation	2021	(Hyvinkää) - (Karjaa) - Hanko	1204	Daily 8–10-h track possessions.	80/50		-	-	-	-	1
Hyvinkää–Hanko: electrification and removal of level crossings	2021	(Hyvinkää)–(Karjaa)–Hanko	1204		-	-	-	-	-	-	1
Karjaa–Hanko: track and turnout tamping	2021	(Karjaa)–Hanko	1205	5–6-h track possessions during weekdays.	-	-	-	-	-	-	1

Location	Year of implement- ation	Section	Section number	Required rail capacity	Period of rail capacity requirement	Speed limit	Speed limit zone length	Speed limit dates	Speed limit location (traffic operating point or distance between TOPs)	Other service impacts	Priority: 1: Implementation decision made 2: Implementation decision later
Tampere - Riihimäki ROPE, superstructure and drainage	2021	Riihimäki-Tampere	1301	Defined later	-	-	-	-	-	-	2
Riihimäki–Tampere: track and turnout tamping, turnout service and maintenance of the catenary system and safety devices	2021	Riihimäki–Tampere	1301	Mon-Fri daily 2 x 1h track possessions on both tracks. Track possessions 2h on both tracks on Sunday mornings 2h. To be specified during spring 2020.	-	_	-	_	_	_	1
Viialanjoki railway bridge repair	2021	Riihimäki-Tampere	1301	-	-						1
Tampere deck and arena: north deck	2021	Tampere	1306	From January to December, daily 6–12 h work permits required for part of the tracks at a time at both day and night time. Sporadic short service interruptions on all tracks in the railway yard. Midsummer service interruption. Foundation drilling at the tip of the south end of R004–R005. R004–R007 no traffic from the south end. Storage of rolling stock on the tracks is possible. R008 traffic to Jyväskylä is possible. R008 traffic to Jyväskylä is possible. During foundation drilling in 2020, tracks R053 and R096 will be put out of service at different times for approximately 15 weeks. Deck foundation and deck structure works, catenary system alterations. Minor track works.	2	40, temporary short access through the work site at maximum allowed speed of 5–10 km/h.	-			-	1
Sepänkatu underpass	2021	Tampere		Tpe–Llh one track in use, weeknight and Midsummer service interruptions							
			1306	and a masurine service interruptions.	-	-	-	-	-	-	2
Itsenäisyydenkatu underpass	2021	Tampere	1306	-	-	-	-	-	-	-	1
Viinikanoja underpass (new)	2021	l ampere	1306	-	-	-	-	-	-	-	2
Tampere passenger rail yard renovation	2021	Tampere passenger rail yard	1306	Track access alterations. Track possessions according to a separate plan during nights weeks 3- 24. North of Parkano starting from week 18. During weeks 25-49 total	-	-	-	-	-	-	1
Tampere–Seinäjoki: renewal of				service interruptions on nights Sa-						Automatic train	
interlocking system Pohjois-Louko–Seinäjoki: track and	2021	(Tampere)–(Seinäjoki)	1302	Sun 25x12h	January-December	140	-	-	-	protection system	1
turnout tamping, turnout service and maintenance of the catenary system and safety devices	2021	Pohjois-Louko–Seinäjoki	1302	Only one track in use, 8 h.	_	-	-	-	-	_	1
Tampere-Seinäjoki: track and turnout tamping, turnout service and maintenance of the catenary system and safety devices	2021	Tampere–Seinäjoki	1302	2 x 3-h or 5-h track possessions during the maintenance weeks in spring at night and in autumn.	-	_	-	-	-	-	1

Location	Year of	Section	Section number	Required rail capacity	Period of rail capacity	Speed limit	Speed limit	Speed limit	Speed limit	Other service impacts	Priority 1
Location	implement-	occion			requirement	opeed time	zone length	dates	location (traffic	other service impuets	Implementation decision made
									or distance		2:
									between TOPs)		Implementation
					8-h track possessions:						
					altogether 2 weeks before						
l jelahti–Kokemäki: Construction of				Daily track possessions 14 x 8 h or	and after Midsummer.						
Tesoma stopping point platforms	2021	Lielahti–Kokemäki		3–4 h.	Alternatively 3–4-h track						
				- ·	possessions: a remarkably						
			1401		longer period of time.	50	-	-	-	-	2
Lielahti–Pori: removal of level crossings	2021	Lielahti–Kokemäki									
_			1401	Long service interruption	-	-	-	-	-	-	1
l jelahti-Kokemäki: maintenance	2021	l jelahti-Kokemäki		during the maintenance weeks in							
	2021	Eletanti Nokemaki	1401	spring at night and in autumn.	-	-	-	-	-	_	1
Aittaluoto–Pori–Mäntyluoto–Tahkoluot											
o superstructure work	2021	(Pori)–Mäntyluoto/Tahkoluoto	1402	Daily 10-h track possessions.	-						1
				2 x 3-h or 5-h track possessions							
Kokemäki–Rauma: maintenance	2021	Kokemäki–Rauma: maintenance		during the maintenance weeks in							
			1403	spring at night and in autumn.		-	-	-	-	-	1
Tampere - Orivesi replacement of rails		(T) ) () () () () () () () () () () () ()		Tampere - Orivesi one track in use							
Tonyala undernado 4	2021	(Tampere)-Orivesi-(Jyväskylä)	1405	during track possession	-	80	-	-	-	-	2
Tervata underpass 1	2021	(Tampere)–Onvesi–(Jyvaskyla)	1405	2 x 7 h or 5 h track possessions		80	-	-	-	-	2
Orivesi–Ivväskylä maintenance	2021	Orivesi–Jwäskylä maintenance		during the maintenance weeks in							
	2021	onvest syvastyta maintenance	1405	spring at night and in autumn.	-	-	-	-	-	_	1
			1.0	On weeknights: 3-h period with one							
Lahti-Kouvola: track and turnout				track in use + 2-h period with full							
maintenance of the catenary system	2021	Lahti–Kouvola		service interruption + 3-h period with							
and safety devices				one track in use. Scheduled on a case							
			1601	by-case basis.	-	-	-	-	-	-	1
Kouvola: railway yard renovation:	2021	Kouvola	1608	Track access alterations.		_			_	_	1
replacement of turnouts			1000	Track possessions and speed limits		-	_	-	_	_	1
		(Kouvola)–Juurikorpi–(Kotka)/		during weeks 41-43 according to a							
Kouvola–Kotka–Hamina railway project	2021	(Hamina)	1602	separate plan.	-	-	-	-	-	-	2
Kouvola-Kotka/Hamina: track and											
turnout tamping, turnout service and	2021	(Kouvola)–Kotka/Hamina		5-n track possessions on weeknights.							
maintenance of the catenary system	2021	(Notice) Notice/Humine		works.							
and safety devices			1602		-	-	-	-	-	-	1
(painting)	2021	Heinola	1604		_	_		_	_	_	2
Kouvola-Pieksämäki: track and turnout	2021	nemota	1004		_	-	_	_	_	-	2
tamping, turnout service and				2x3h or 5h track possessions during							
maintenance of the catenary system	2021	Kouvola-Pieksämäki		maintenance weeks in spring at							
and safety devices.			1605	night and in autumn.	-	-	-	-	-	-	1
				Daily 8–10-h track possessions and							
Kouvola Luumäki rapovation project (				service interruptions at weekends.							
repoyation of porthern track	2021	(Kouvola) Luumäki	1701	works.		80/50					1
, chowadon of hordleff track	2021	(Nouvota)-Luumaki	1/01	Standard track possession on two	-	00/50	-	-	-	-	1
Kouvola-Luumäki: track and turnout				lines at a time 22:00-01:00 am and							
tamping, turnout service and	2021	(Kouvola)–Luumäki		03:00–06:00 am. Service							
maintenance of the catenary system and safety devices				interruptions on both tracks							
			1701	01:00–03:00 am.	-	-	-	-	-	-	1

Location	Year of implement- ation	Section	Section number	Required rail capacity	Period of rail capacity requirement	Speed limit	Speed limit zone length	Speed limit dates	Speed limit location (traffic operating point or distance between TOPs)	Other service impacts	Priority: 1: Implementation decision made 2: Implementation decision later
				Standard track possession 4 5 h at							
Luumäki–Vainikkala: maintenance	2021	Luumäki–Vainikkala	1701	night at separately agreed upon times.	-	_	-	-	-	-	1
Imatra: Demolition of Imatra overpass and building Imatrankoski level crossing and overpass	2021	Imatra–Imatrankoski border	1707	Full service interruption of border traffic in March and in July.		80					1
Lappeenranta: renewal of safety device	2021	Imatra–Imatrankoski border	1703	Full service interruption of border traffic in March and in July.	-	80	_	-		-	1
Luumäki - Imatra railway project	2021	Joutseno–Imatra	1703	5-40h service interruptions during the project according to a separate plan.	-	50/80	-	-	-	-	1
Luumäki–Imatra: track and turnout tamping, turnout service and maintenance of the catenary system and safety devices	2021	Luumäki–Imatra		during the maintenance weeks in spring at night and in autumn. Coordinated with LUIMA project							
Luumäki - Imatra railway project	2021	Luumäki–Imatra	1703	works. Track possessions and speed limits during weeks 16-44 according to a separate plan.	-	-	-	-	-	-	1
Imatra overpass (Imatrankoskentie)	2021	Imatra	1703	Imatra-Imatrankoski -raja service interruptions 2 x 3-h or 5-h track possessions at	-	-	-	-	-	-	1
Imatra–Joensuu: maintenance	2021	Imatra–Joensuu	1705	night during the maintenance weeks in spring and in autumn. Coordinated with the replacement of droppers. I imited track access and daily 8-b	-	-	-	-	-	-	1
Joensuu: railway yard improvement	2021	Joensuu railway yard	1705	track possessions.	-	-	-	-	-	-	1
Joensuu–Uimaharju: maintenance tamping of turnouts and tracks	2021	Joensuu–Uimaharju	1707	2–3-h track possessions during 2–3 weeknights.	-	-	-	-	-	-	1
Umanarju–Porokyta: maintenance tamping of turnouts and tracks	2021	Uimaharju–Porokylä	1708	2–3-n track possessions during 2–3 weeknights. 10-h shift during weekdays and 12-h	-	-	-	-	-	-	1
Pieksämäki–Joensuu: track tamping	2021	Pieksämäki–Joensuu	1801	shift during weekends with at least 2 h of track possessions.	-	-	-	-	-	-	1
Pieksämäki railway yard renovation Pieksämäki–Kuopio: track and turnout	2021	Pieksämäki	1806	Track access alterations.	-	-	-	-	-	-	2
tamping, turnout service and maintenance of the catenary system and safety devices	2021	Pieksämäki–Kuopio	1804	during the maintenance weeks in spring at night and in autumn.		_	-	_	-	-	1
Kuopio-Iisalmi ROPE	2021	Kuopio-Iisalmi	1805	30 working shifts total		50					1
Kuopio: Kotkankallio new underpass Kuopio–Iisalmi: track and turnout tamping, turnout service and	2021	Киоріо	1808	- 2 x 3-h or 5-h track possessions		-	-	-	-	-	1
maintenance of the catenary system and safety devices	2021	Kuopio–Iisalmi	1805	during the maintenance weeks in spring at night and in autumn.	-	-	-	-	-	-	1
Seinäjoki–Kokkola: track and turnout tamping, turnout service and	2021	Seinäiaki-Kokkola		2 x 3-h or 5-h track possessions							
maintenance of the catenary system and safety devices Biotecroary (Bönnöinon): renouvel of	2021	Jennajoki-NUKKula	1309	spring at hight and in autumn.	-	-	-	-	-	-	1
safety devices	2021	(Pännäinen)–Pietarsaari–Alholma	1311	deployment.	-	-	-	-	-		1

Location	Year of implement-	Section	Section number	Required rail capacity	Period of rail capacity requirement	Speed limit	Speed limit zone length	Speed limit dates	Speed limit location (traffic	Other service impacts	Priority: 1: Implementation
	ation								or distance between TOPs)		2: Implementation
Kakkala: ranoual of cafaty devices	2021	Kokkola–Ylivieska	1001	One 48-h service interruption for							
Kokkola-Vlivieska: track and turnout	2021		1901	Daily 8-h track possessions on two	-	-	-	-	-		1
tamping	2021	Kokkola–Ylivieska	1901	lines at a time.	-	-	-	-	-	-	1
Ylivieska–Oulu: track and turnout				2 x 3-h or 5-h track possessions							
tamping, turnout service and maintenance of the catenary system	2021	Ylivieska–Oulu		during the maintenance weeks in							
and safety devices			1901	spring at night and in autumn.	-	-	-	-	-	-	1
Oulu railway yard renovation and safety				Limited track access and daily 8-h							
devices	2021	Oulu railway yard	1906	track possessions.	-	-	-	-	-		1
Saarijärvi - Haapajärvi renovation Iisalmi–Kontiomäki: track and turnout	2021	Saarijärvi - Haapajärvi	2001	8-10h daily track possession	-	50	-	-	-	-	1
tamping, turnout service and	2021	Iicalmi Kontiomäki		2 x 3-h or 5-h track possessions							
maintenance of the catenary system	2021	IISdum=Ronuomaki		spring at night and in autumn.							
and safety devices		<b>.</b>	2101		-	-	-	-	-	-	1
Iisalmi–Ylivieska: electrification	2021	lisalmi–Ylivieska Jisalmi Vlivieska	2002	Daily 10-h track possessions. 2x72h and 1x24h total service interrup	- tions	-	-	-	-	-	
Iisalmi - Kontiomäki ROPE	2021	Iisalmi-Kontiomäki	2101	Defined later	-	50	-	-	-	-	2
(Kontiomäki)- Hyrynsalmi: Pesiökylä			-			0.1					
new raw wood terminal	2021	(Kontiomäki)-Ämmänsaari		Daily 8-10h track possessions.							
Ämmänsaari renovation			2102		-	-	-	-	-	-	2
Vuokatti – Kontiomaki renovation	2021	(Vuokatti) - (Kontiomäki	2104	Daily 8-10h track possessions.	-	50	-	-	-	-	2
renovation or renewal	2021	Kontiomäki-Oulu	2105	-	-	80	-	-	-	-	1
Kontiomäki–Oulu: track and turnout				2 x 3-h or 5-h track possessions							
tamping, turnout service and	2021	Kontiomäki Oulu	2105	during the maintenance weeks in							
maintenance of the catenary system	2021	Kontioniaki–Outu	2105	spring at night and in autumn.							
and safety devices				possession.	-	-	-	-	-	-	1
Vartius: traffic operating point track				Daily 8-h track possessions and							
alterations	2021	(Kontiomäki)–Vartius	2106	longer full service interruptions.	-	-	-	-	-	-	2
Oulu–Laurila: replacement of	2021	Oulu-Kemi-Laurila-Tornio		2 x 3-h or 5-h track possessions							
superstructure	2021	Outd-Renn-Launta-Tornio	2201	spring at night and in autumn.	-	-	-	-	-	-	2
Oulu–Kemi–Laurila–Tornio: track and				2 v 7 h or 5 h track personalisms							
turnout tamping, turnout service and	2021	Oulu–Kemi–Laurila–Tornio		during the maintenance weeks in							
maintenance of the catenary system	2021			spring at night and in autumn.							
and safety devices			2201		-	-	-	-	-	-	1
turnout tamping, turnout service and				2 x 3-h or 5-h track possessions							
maintenance of the catenary system	2021	Oulu–Kemi–Laurila–Tornio		during the maintenance weeks in							
and safety devices			2201	spring at right and in auturni.	-	-	-	-	-	-	1
Tornio AS K1 and 2	2021	Tornio	2201	-	-	-	-	-	-	-	1
Bail and turnout grinding	2021	sovoral	several	August-December, 8h track	_	_	_	_	_	_	4
Riihimäki, Kouvola, Niirala ja Joensuu	2021	Several	Several	possessions	-	-	-	-	-	-	1
equipping for dangerous goods	2021	several	several	Track access alterations.	-	-	-	-	-	-	2
Removal of level crossings (separate											
program)	2021	several	several		-	-	-	-	-	-	1
ERTMS works	2021	several	several	-	-	-	-	-	-	-	2
Cable renovations	2021	sovoral	soveral	weekends for commissionings	_	_	_	_	_	_	4
Cable renovations	2021	Several	Several	weekends for commissionings	I <sup>-</sup>	1 -	1 -	1 -	1 -	I -	1 <sup>1</sup>

Location	Year of implement- ation	Section	Section number	Required rail capacity	Period of rail capacity requirement	Speed limit	Speed limit zone length	Speed limit dates	Speed limit location (traffic operating point or distance between TOPs)	Other service impacts	Priority: 1: Implementation decision made 2: Implementation decision later
Traffic control interfaces	2021	several	several	-	-	-	-	-	-	-	1
Interfaces (renewal of automatic block											
signalling)	2021	several	several	-	-	-	-	-	-	-	1
ATP (updates)	2021	several	several	On the terms of traffic	-	-	-	-	-	-	1
Renewals of Hot box detectors	2021	several	several	On the terms of traffic	-	-	-	-	-	-	1
Confirmation of power supply											
sufficiency (renovation of feeder											
stations)	2021	several	several	On the terms of traffic	-	-	-	-	-	-	1
Catenary renewals	2021	several	several	-	-	-	-	-	-	-	1
Filter alterations on feeder stations	2021	several	several	-	-	-	-	-	-	-	1

# Speed depending on rolling stock

The rolling stock for which the Finnish Transport Safety Agency has issued a permit, valid until further notice, has been listed in the tables below. As soon as the above mentioned permit has been issued, the rolling stock type will be entered into the respective table.

Superstructure category									
Series	A <sup>1</sup>	<b>B</b> <sub>1</sub>	B <sub>2</sub>	<b>C</b> <sub>1</sub>	C <sub>2</sub>	D			
Dv12	50 <sup>2, 3</sup>	100	110	125	125	125			
Dv17 9810 6003070-8	30	40	40	40	40	40			
Dv19 9810 8000048-3	20	20	20	20	20	20			
Dr14, 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>			
Dr17 9810 6007001-9	30	65	65	65	65	65			
Dr17 9810 6006010-1	-	50	50	50	50	50			
Dr18	_ <sup>6</sup>	90	90	90	90	90			
Dr25 9810 8029002-7	20	25	25	25	25	25			
Dr25 9810 8129002-6	20	25	25	25	25	25			
Dr25 9810 8129003-4	20	25	25	25	25	25			
Dr35 9810 8039011-6	20	60	60	60	60	60			
Dr35 9810 8139005-7	-	30	30	30	30	30			
Dr35 9810 8139006-5	-	30	30	30	30	30			
Dr35 9810 8039013-2	35	60	60	60	60	60			
Dr45 9810 8049001-5	-	60	60	60	60	60			
Dr25 9810 8021043-9	16	16	16	16	16	16			
Dr25 9810 8029002-7	20	25	25	25	25	25			
Dr25 9810 8129002-6	20	25	25	25	25	25			
Dr25 9810 8129003-4	20	25	25	25	25	25			
Dr25 9810 8129166-9	14	14	14	14	14	14			
Dr27 9810 8121053-7-	8	8	8	8	8	8			
9810 8121054-9									
Dr30 9810 1002001-5	60	60	60	60	60	60			
Dr35 9810 8039011-6	20	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			
Dr35 9810 8039011-6	20	60	60	60	60	60			
Dr35 9810 8039013-2	35	60	60	60	60	60			
Dr45 9810 8049001-5	-	60	60	60	60	60			
Sk 9010 9981201-7	7	7	7	7	7	7			
Sk 9010 9981202-5	7	7	7	7	7	7			
Sr1	-	80	100	140	140	140			
Sr2	_	80	100	180 <sup>8</sup>	200	210			

Tahle 1.	Maximum allowable sr	need for tractive	stock and motor cars.
TUDIC II	Maximum accovable of		

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

 $<sup>^2</sup>$  Max. speed 40 km/h in curves with a radius under 600 m. Max. speed 60 km/h on the line section Äänekoski–Haapajärvi.

<sup>&</sup>lt;sup>3</sup> 20 km/h in the deflecting section of K30 turnouts.

<sup>&</sup>lt;sup>4</sup> 80 km/h when hauled.

<sup>&</sup>lt;sup>5</sup> 135 km/h without wagons, either on its own or with double heading.

<sup>&</sup>lt;sup>6</sup>160 km/h without wagons. 160 km/h with double heading.

 $<sup>^{7}</sup>$  60 km/h when hauled.

<sup>&</sup>lt;sup>8</sup> 160 km/h without wagons. 160 km/h with double heading.

#### FTIA's publication 46eng/2019 Railway Network Statement 2021

Su	uperstruc <sup>-</sup>	ture cat	egory			
Series	<b>A</b> <sup>1</sup>	<b>B</b> <sub>1</sub>	B <sub>2</sub>	<b>C</b> <sub>1</sub>	C <sub>2</sub>	D
Sr3	-	80	100	180	200	200
	Mote	or cars				
Sm1, Sm2	-	90	110	120	120	120
Sm3	-	100	110	180	200	220
Sm4	_	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 in brackets, if it differs from the maximum speed when selfpropelled)

Table 2.Maximum allowable speed for small-power locomotives and<br/>track motor cars.

Superstructure category											
Series	A <sup>1</sup>	<b>B</b> 1	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, 243–247	60	80	80	80							
Tka7, with snow plough, nos.	35 <sup>9</sup>	60 <sup>9</sup> (80)	60 <sup>9</sup> (80)	60 <sup>9</sup> (80)							
168–238											
Tka7, nos. 239–242	50	80	80	80							
Tka7, with snow plough, nos	35 <sup>9</sup>	60 <sup>9</sup> (80)	60 <sup>9</sup> (80)	60 <sup>9</sup> (80)							
239–247											
Tka7, with welding container nos.	35	60	60	80							
168–238, 243–247											
Tka8	35	60	80	80							
Tka9 no. 91901	20 <sup>10</sup>	50 <sup>10</sup>	70 <sup>10</sup>	70 <sup>10</sup>							
Otso4 no. 920001	2011	45	45	45							

<sup>&</sup>lt;sup>9</sup> The maximum snow-ploughing speed is specified in the machine operator's manual.

<sup>&</sup>lt;sup>10</sup> Hauling according to the manufacturer's instructions.

 $<sup>^{11}</sup>$  20 km/h on sidings which belong to superstructure category A.

#### MAXIMUM ALLOWABLE SPEED FOR SELF-PROPELLED MACHINERY

(Hauling speed in brackets, if the machine can be coupled to the train and the hauling speed differs from the above mentioned)

 Table 3.
 Maximum allowable speed for self-propelled machinery.

Superstructure category											
Series	A	<b>B</b> <sub>1</sub>	B <sub>2</sub>	<b>C</b> <sub>1</sub> , <b>C</b> <sub>2</sub> , <b>D</b>							
Track inspection cars											
Et no. 66	20 <sup>12</sup>	60	60	100							
Ttr1 no. 51	60	80	120	120							
Ttr 99 10 9129 001-5	40	80	120/160	120/160							
Snow brooms											
Tlh no. 741 <sup>13</sup>	50	60	60	60							
Snow ploughs											
Tla 90109691001-2	35	60	60	60							
Rail planing machines											
Tkh no. 894 <sup>11</sup>	60	80	80	80							
Track replacement machines											
Trk no. 870	20	20 (50)	20 (80)	20 (100)							
Ballast nloughs	20	20 (30)	20 (00)	20(100)							
Tcl poc 880 887 88/ 885 800 <sup>11</sup>	70	80	80	80							
Tsl no. 883 <sup>11</sup>	35	50	60	60							
Tcl po 888 <sup>11</sup>	50	60	60	80							
Tsl no. 880 <sup>11</sup>	20	50	80	80							
Tsl no. 91021	20	70	70	70							
Ballast cleaning machines	20	70	70	70							
Tsn nos 891 893	20	60	80	80							
Tsp no 892	50	80	80	80							
Multi-nurnose machines	50			00							
Ttm1 no. 91101	20 <sup>14</sup>	50	70	70							
Tamping machines	20	30									
Ttk1 <sup>11</sup> nos. 801–803, 821, 823, 831,											
91042	60	80	80	80							
Multi-purpose machines											
Ttk1 <sup>11</sup> nos. 818–820	25 (50) <sup>15</sup>	25 (50) <sup>15</sup>	25 (50) <sup>15</sup>	25 (50)15							
Ttk1 <sup>11</sup> nos. 822, 824–829	50	50 (80)	50 (80)	50 (80)							
Ttk1 <sup>11</sup> no. 830	60	85 (90)	85 (90)	85 (90)							
Ttk1 <sup>11</sup> nos. 832, 833	50	80	80	80							
Ttk1 no. 834	50 <sup>16</sup>	80	80	80							
Ttk1 <sup>11</sup> no. 91041	60	60	60	60							
Ttk1 no. 91042	60	70	70	70							
Ttk1 no. 9010 9122002-9	_ <sup>18</sup>	80	80	80							
Ttk1 no. 9010 9422001-8	50	80	80	80							
Stabilisation machines											
Ttk2 nos. 841, 844, 849 <sup>13</sup>	60	80	80	80							
Ttk2 no. 842 <sup>11</sup>	35	60	60	80							
Ttk2 nos. 850, 856	20	60	80	90 (100)							
Ttk2 nos. 851–855 <sup>11</sup>	50	50 (80)	50 (80)	50 (80)							

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

<sup>15</sup> 15 km/h in turnouts.

<sup>13</sup> Wheel diameter max. 790 mm, which necessitates caution in diamond crossings with slips.

<sup>&</sup>lt;sup>14</sup> Apuvaunun max. akselipainolla 160 kN (16 t).

<sup>&</sup>lt;sup>16</sup> Max. 20 km/h on sidings which belong to railway category A.

#### FTIA's publication 46eng/2019 Railway Network Statement 2021

# $\begin{array}{l} \mbox{APPENDIX 3L / 4 (5)} \\ \mbox{Speed depending on rolling stock} \end{array}$

Superstructure category											
Series	Α	<b>B</b> <sub>1</sub>	B <sub>2</sub>	<b>C</b> <sub>1</sub> , <b>C</b> <sub>2</sub> , <b>D</b>							
Ttk2 no. 857	20	60	80	80 (100)							
Ttk2 no. 858	_ <sup>16</sup>	60	75	90 (100)							
Ttk2 no. 859	2016	60	75	90 (100)							
Ttk2 no. 91051	15	35	50	70 <sup>17</sup>							
Ttk2 no. 9010 9421002-8	_ <sup>18</sup>	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	_ <sup>18</sup>	80	80	80							
Ballast compacting machines											
Ttk3 nos. 862, 863 <sup>11</sup>	60	80	80	80							
Tamping machines											
Ttk4 no. 91501	20	40	40	40							
Ttk5 no. 9010 9422001-8	50	80	80	80							
Service and inspection vehicles on											
electrified lines											
Tta nos. 1, 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>	70 <sup>16</sup>	70 <sup>16</sup>							
Tte nos. 21–29	70	100	110	110							
Tte nos. 91201, 91202	20	60	80	80							
Ttv nos. 6, 9, 12, 15	50	70	70	90							
Rail-mounted cranes											
Tnk4 nos. 982, 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>							
Electrified trains											
Tnv-sr nos. 911002, 911003	40 (40)	40 (60)	40 (80)	40 (100)							

 $<sup>^{\</sup>rm 17}$  5 km/h in diamond crossing with slips, due to the small wheel diameter (440 mm).

 <sup>&</sup>lt;sup>18</sup> Access and speeds on line sections of class A are determined on a case-by-case basis.
 19 Hauling speed 80 km/h, when the balance weight has been moved to the crane trailer.

#### MAXIMUM SPEED FOR MUSEUM LOCOMOTIVES

(Hauling speed in brackets, whether it differs from the maximum speed when selfpropelled)

Superstructure category									
Sarja	A <sup>20</sup>	B <sub>1</sub>	B <sub>2</sub>	C <sub>1</sub> , C <sub>2</sub> , 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	<b>20</b> <sup>21</sup>	80	100	110 <sup>23</sup>					
Hv1	60	80	80	80					
Hv3	2024	70	70	70					
Pr1	<b>20</b> <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					
Rau 2	70	70	70	70					
Dm7	70	95	95	95					

#### USE OF TRACTIVE STOCK ON TRACKS BELONGING TO SUPERSTRUCTURE CATEGORY A

This matter has been transferred to Junaliikenteen ja vaihtotyön turvallisuussäännöt (Jt), Instructions of the Finnish Transport Agency 10/2018.

 $<sup>^{\</sup>rm 20}$  Secondary lines and railway yard sidings belonging to superstructure category A, see section 3.6.5

<sup>&</sup>lt;sup>21</sup> Operation only allowed on sidings.

<sup>&</sup>lt;sup>22</sup> 80 km/h on the line sections Orivesi-Haapamäki and Haapamäki-Jyväskylä.

<sup>&</sup>lt;sup>23</sup> 100 km/h without wagons, either on its own or with double heading.

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

<sup>&</sup>lt;sup>25</sup> 25 km/h on its own.

# Transport of overweight wagons

A wagon whose axle load exceeds the maximum axle load given for the different line sections in table 2 in Appendix 3F is overweight for that line section. The terms for transporting wagons with an axle load over 225 kN in eastern transit traffic are listed below.

The load specified in the wagon load table may not be exceeded intentionally. 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 transported in line with the regulations governing exceptional transport. Before transport the wagon's wheelsets and the rest of the bogie structure must be inspected.

Temporary transport of overweight wagons can be considered in case of an ad hoc need.

Any temporary transport of overweight loads must be notified to the track's maintenance operator with a view to monitoring the condition of the track superstructure.

#### Transport of overweight wagons in the domestic and western transit traffic

When the maximum axle load of a wagon is 225 kN, the speeds of the individual wagons bearing excess weight may not exceed:

Superstructure category	Maximum axle load kN	Speed km/h
A	225 <sup>1</sup>	20 <sup>1</sup>
B1	235	35
B2	235	50
C1, C2, D	235	80

Transport of wagons with an axle load over 225 kN in the eastern transit traffic and on line sections belonging to superstructure categories C and D, on which it is allowed to operate with a maximum axle load of 250 kN.

Maximum axle load 250 kN.

In the eastern transit traffic, individual wagons with an axle load over 225 kN, but no more than 250 kN, may be transported at the speed limit imposed on axle loads exceeding 225 kN.

Maximum speed 60 km/h.

<sup>&</sup>lt;sup>1</sup> On tracks and sidings belonging to superstructure category A, individual overweight wagons with axle loads exceeding 200 kN, but no more than 225 kN, may only be transported on a temporary basis at a

speed of 20 km/h. It is prohibited to operate wagons with an axle load exceeding 225 kN on tracks and sidings belonging to superstructure category A.

Transport of wagons with an axle load over 225 kN in the eastern transit traffic and on line sections belonging to superstructure categories C and D, on which it is allowed to operate with a maximum axle load of 225 kN.

#### a) Axle load over 225 kN, but no more than 235 kN

Maximum axle load 235 kN.

In the eastern transit traffic, individual wagons with an axle load over 225 kN, but no more than 235 kN, may be transported at the speed limit imposed on axle loads exceeding 225 kN.

#### Maximum speed 60 km/h.

On the line section Kouvola–Kotka, transport with axle loads from 225 to 235 kN are permitted with no limitations to the number of wagons.

#### b) Axle load over 235 kN

In case the axle load of a wagon in the eastern transit traffic exceeds 235 kN, the Rail Traffic Management Centre grants transport permits up to an axle load of 245 kN on the line sections listed below. For other line sections, permission must be granted by the Finnish Transport Agency's Engineering and Environment Department. The wagons must be transported as exceptional transport at the speed specified in the permit.

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

# Transport of wagons with an axle load exceeding 225 kN in the eastern transit traffic on a line section belonging to superstructure category B.

Individual wagons with axle loads exceeding 235 kN may temporarily be transported as exceptional transport on a line section belonging to superstructure category B1 at a speed of 35 km/h, and at 50 km/h on a line section belonging to superstructure category B2. A permit for this must be granted by the at the Rail Traffic Management Centre.

# Transport of wagons with axle loads exceeding 225 kN in the eastern transit traffic on tracks and in turnouts with K30 and K33 rail profiles.

It is prohibited to operate wagons with an axle load exceeding 225 kN in the eastern transit traffic on tracks and in turnouts with K30 and K33 rail profiles.

FTIA's publication 46eng/2019 Railway Network Statement 2021

# Transport of wagons complying with the Russian standard

If the train contains at least one goods wagon which complies with the Russian standard, the maximum speed on the sidings of the following traffic operating points or their parts is 20 km/h.

**Helsinki-Turku satama** Kauniainen

Huopalahti-Havukoski —

Hyvinkää-Karjaa

**Karjaa-Hanko** Hanko

Turku-Uusikaupunki

Uusikaupunki-Hangonsaari

Raisio-Naantali

Helsinki-Riihimäki

Kerava-Hakosilta

\_

Kerava-Sköldvik

Kerava-Vuosaari —

Riihimäki-Tampere

Toijala-Turku

Toijala-Valkeakoski

Tampere-Seinäjoki Ylöjärvi

Parkano Ratikylä Peräseinäjoki Seinäjoki asema Seinäjoki tavara

Lielahti-Kokemäki

**Kokemäki-Pori** Pori

**Pori-Mäntyluoto** Pori Mäntyluoto

**Mäntyluoto-Tahkoluoto** Mäntyluoto

Kokemäki-Rauma —

Kiukainen-Säkylä —

**Niinisalo-Parkano-Kihniö** Parkano

**Seinäjoki-Vaasa** Seinäjoki asema Seinäjoki tavara

**Seinäjoki-Kaskinen** Seinäjoki asema Seinäjoki tavara Kaskinen

FTIA's publication 46eng/2019 Railway Network Statement 2021 APPENDIX 3N / 2 (3) Transport of wagons complying...

#### Seinäjoki–Oulu

Seinäjoki asema Seinäjoki tavara Lapua Jepua Pännäinen Kälviä Kannus Eskola Sievi Ylivieska Oulainen Kilpua Vihanti Tuomioja Oulu tavara

#### **Pännäinen–Pietarsaari** Pännäinen Pietarsaari

Tuomioja–Raahe

Riihimäki–Kouvola

Kouvola–Kuusankoski Kuusankoski

**Lahti–Heinola** Heinola

Lahti–Loviisan satama

Kouvola–Kotka Kymi

Kotka Hovinsaari–Kotka Mussalo

#### Juurikorpi–Hamina

**Kouvola-Joensuu** Joensuu Peltola Joensuu asema

Luumäki–Vainikkala-raja

#### Imatra tavara–Imatrankoski-raja

Niirala-raja–Säkäniemi Tohmajärvi

**Joensuu–Ilomantsi** Joensuu Peltola Joensuu asema

**Joensuu–Nurmes** Joensuu Peltola Joensuu asema

**Nurmes–Kontiomäki** Valtimo Vuokatti

Kouvola–Pieksämäki Pieksämäki asema Pieksämäki Temu Pieksämäki lajittelu Pieksämäki tavara

Mynttilä–Ristiina Ristiina

#### Pieksämäki–Kontiomäki

Pieksämäki asema Pieksämäki Temu Pieksämäki lajittelu Pieksämäki tavara Haapakoski Markkala Suonenjoki Salminen Kurkimäki Kuopio asema Kuopio tavara Murtomäki

#### Pieksämäki–Joensuu

Pieksämäki asema Pieksämäki Temu Pieksämäki lajittelu Pieksämäki tavara Varkaus Heinävesi Joensuu asema Joensuu Peltola

Murtomäki–Talvivaara Murtomäki

FTIA's publication 46eng/2019 Railway Network Statement 2021 APPENDIX 3N / 3 (3) Transport of wagons complying...

**Varkaus–Kommila** Varkaus Kommila

Huutokoski–Rantasalmi —

**Savonlinna–Parikkala** Kerimäki Punkaharju

Siilinjärvi–Viinijärvi —

Tampere–Jyväskylä

**Orivesi–Seinäjoki** Vilppula Ähtäri Alavus

Vilppula–Mänttä Vilppula

Haapamäki–Jyväskylä Keuruu

Jyväskylä–Pieksämäki

Pieksämäki asema Pieksämäki Temu Pieksämäki lajittelu Pieksämäki tavara

Jyväskylä–Äänekoski

**Äänekoski–Haapajärvi** Haapajärvi

**Iisalmi–Ylivieska** Pyhäsalmi Haapajärvi

Pyhäkumpu erkanemisvaihde– Pyhäkumpu

**Oulu–Laurila** Oulu tavara

#### Laurila-Tornio-raja

**Tornio–Kolari** Pello

**Laurila–Kemijärvi** Rovaniemi Kemijärvi

Kemijärvi-Patokangas Kemijärvi

**Oulu-Kontiomäki** Paltamo Oulu tavara

**Kontiomäki-Ämmänsaari** Hyrynsalmi Pesiökylä Ämmänsaari

Kontiomäki-Vartius-raja

# Monitoring of rolling stock

#### Rolling stock monitoring devices

The location of the rolling stock monitoring devices in the railway network is illustrated in Figure 1



Figure 1. Rolling stock monitoring devices.

#### Matters concerning wheel defects

Each passing train must be monitored to detect wheel defects, overheated bearings or brakes, an uneven or unstable load, or something else potentially alarming. Both sides of the train should be checked, whenever there is sufficient staff. Detected defects or deficiencies should be corrected immediately or the unit detached from the train. The unit with wheel defects should, if possible, be transported in the same train to the nearest depot, unless this causes apparent danger or damage, and the maintenance provider of the rolling stock unit should be notified.

The condition of the wheels may be monitored both manually and using automated measuring devices following the procedure below:

- I. If harmful wheel flats are detected, the length of the notch should be measured at the next stop. Further transport of a unit with a wheel flat is permitted on the following conditions:
  - a) If the length of the notch is less than 45 mm, no direct action required
  - b) If the length of the notch is 46–60 mm and the outdoor temperature is below -10°C, the maximum speed allowed is 10 km/h. At temperatures  $\geq$  -10°C, there is no speed limit, but the speed range 20–45 km/h should be avoided. The wheelset must be replaced at the next depot.
  - c) If the length of the notch is 61–80 mm, the maximum speed allowed is 10 km/h. The wheelset must be replaced at the next depot.
  - d) If the length of the notch or the combined notches exceeds 80 mm, the wheelset must be replaced at the traffic operating point where the notch is measured.
  - e) If the notch of an overweight wagon exceeds 45 mm, the load should be lightened at the nearest station or the wagon should be transported at a maximum speed of 10 km/h to the nearest depot.
- II. The Qimp limit values of the dynamic percussion force of the wheels on the rail have been specified in the table below. This force is usually caused by defects in the running surface of the wheel, such as notches, roughness or ovalisation. The dynamic force fdyn indicates the ratio of wheel force variation for an unloaded wagon.

These forces are measured by wheel-flat detectors. The locations of these detectors are illustrated in "Junaliikenteen ja vaihtotyön turvallisuussäännöt (JT)"<sup>1</sup>.

<sup>&</sup>lt;sup>1</sup> https://julkaisut.vayla.fi/pdf7/rautatieohjeet\_web.pdf

# Use of the VIRVE network in train traffic

The primary network to be used for verbal communication between trains and traffic control is the VIRVE network. In addition to the VIRVE network, smart phones in commercial networks may be used for verbal communication between assistant shunters and traffic control, and between track work managers and traffic control, for example, by using the RAPLI application that facilitates the log-in procedure.

# 1 Responsibilities of the Finnish Transport Infrastructure Agency

#### 1.1 VIRVE network subscriptions of trains

The Finnish Transport Infrastructure Agency is responsible for paying the subscription and main user charges for the in-cab radio terminals to be used by train drivers in the VIRVE network. *Train* refers to any unit operated in the state-owned railway network that complies with the railway traffic rules.

The pricing of other verbal communication on railways follows the terms and conditions laid down for the operating licenses of the RAILI service as well as the price list of the RAILI service (https://vayla.fi/ammattiliikenne-raiteilla/rautateiden-puheviestinta/raili-palvelu).

#### 1.2 Safety-related functionalities of verbal communication

The Finnish Transport Infrastructure Agency is responsible for the railway safety-related functionalities of verbal communication, for example, for implementing an application that facilitates the log-in procedure.

#### 1.3 Radio network coverage

The Finnish Transport Infrastructure Agency shall ensure adequate VIRVE reception of trains on open railway stretches and in railway tunnels. The Finnish Transport Infrastructure Agency is not responsible for radio reception at 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 by law, railway operators, private infrastructure managers and companies supplying traffic control services are entitled to obtain recordings and identification data of railway verbal communication in order to investigate incidents and accidents that have occurred during the actor's operations, prevent future occurrence, as well as develop the safety communication. The right to obtain information on audio recordings only concerns such recordings of verbal communication where the actor or its staff is directly involved.

# 2 Responsibilities of safety certificate holders

#### 2.1 In-cab radio terminals

The safety certificate holders acquire the in-cab radio terminals required for their trains and are responsible for the costs and maintenance of the radio terminals. The safety certificate holders ensure that in-cab radio terminals of the trains comply with the national requirements in Traficom's regulation <a href="https://www.finlex.fi/data/normit/45352/TRAFICOM\_251470\_03.04.02.00\_2019\_FI\_Rautateiden\_ohjaus-\_hallinta-\_ja\_merkinanto-osajarjestelma.pdf">https://www.finlex.fi/data/normit/45352/TRAFICOM\_251470\_03.04.02.00\_2019\_FI\_Rautateiden\_ohjaus-\_hallinta-\_ja\_merkinanto-osajarjestelma.pdf</a>

and in the Guidelines of the Finnish Transport Infrastructure Agency 36/2016 on VIRVE Network Requirements for Hand Portable and Mobile Terminals LIVI/5777/06.04.01/2016 national requirements http://www2.liikennevirasto.fi/julkaisut/pdf8/ohje\_2017\_virve\_network\_requirements\_web.pdf

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

#### 2.2 Other safety-related verbal communication in commercial networks

The safety certificate holders shall 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 and log in via a spare phone.

#### 2.3 Disruptions and unexpectedly disconnected calls

Radio calls are susceptible to various disturbances and disruptions caused by weather conditions, external radio interferences, device and software failures, as well as changes in the network, phones and their accessories, among other things. The position of the radiophone in relation to the base station and its user, as well as indoor facilities, buildings and constructions, which absorb radio signals, are all factors that may reduce the signal strength in the radio network. The call may be interrupted during a safety-critical work task. An interrupted call can have serious effects on work and occupational safety, since the connection is not automatically restored. Instead the user has to make a new call, may not necessarily connect straight away or not until the interference factor has been eliminated. Continuous monitoring of the talking connection and functionality is important in terms of occupational health and safety.

If the RAILI service cannot be used due to technical disturbances or poor signal strength, other communications media shall be used. The traffic control, or correspondingly, the train drivers, shunting foremen and track work managers shall be informed of any disruptions preventing or hindering the use of the network, and of alternative contact information in accordance with the instructions on verbal communication.

Waiting

Railway Network Statement 2021

#### The Finnish Transport Infrastructure Agency's stations buildings on passenger stations, situation September 2019

Rentals of the Finnish Transport Infrastructure Agency's facilities are perpared by the Railway Maintenance Unit. Regarding rentals, please contact <u>kirjaamo@vayla.fl</u>

The rental rate of the facilities is determined before each rental. The rental level is determined based on the actual price level in the region.

*(accuracy +/- 50 %, depending on the conditio	n of the faci	lity)	kyllä = yes, ei= no					space		Office space Social space			space										
Building	Post code	Region	Street address	Valid contract (No)	Space for rent, in total (m2)	Vacancies yes/no	Other comments	Vacancies yes/no	M2	rent* €/m2/mon	Other comments	Vacancies yes/no	M2	rent* €/m2/mon	Other comments	Vacancies yes/no	M2	rent* €/m2/mon	Other comments	Vacancies yes/no	M2	rent* €/m2/mon	Other comments
HELSINKI HUOPALAHTI	00320	HELSINKI	KYLÄTIE 25		Less than 100	kyllä	Empty facilities for rent in the station hall. The facilities are in poor condition and require extensive repairs.				Kylmä station hall, outdoor space.									kyllä	Alle 100 m2	15	
HELSINKI MALMIN VANHA ASEMA	00700	HELSINKI	LATOKARTANONTIE 1		229,00	kyllä	Vacant stores, office, storage and work space. Far from the station, next to the Jokeri line. Repairs are required before taken into use.					kyllä	no information	15						kyllä	ei tiedossa	15	
HELSINKI PUKINMÄKI	007200	HELSINKI	PUKINMÄENAUKIO 1	61344	125,00	ei	Current pizza-place could be suitable for passenger services, at tunnel level aside from the station.													ei	125,00	15	currently rented
HELSINKI PUISTOLA	00750	HELSINKI	TAPULIKAUPUNGINTIE 1	90183	31,00	ei	Currently a pizza place. Facilities (upper station level), 4 customer seats.													ei	31,00	15-20	currently rented
VANTAA TIKKURILA (NEW STATION BRIDGE	01300	VANTAA	RATATIE 11				YIT manages tenants through long-term contracts.																
VANTAA KOIVUKYLÄ	01360	VANTAA	KOIVUKYLÄN PUISTOTIE	61426	262,00	ei	Previous kiosk is rented for other purposes. Aside from the station, the lower floor is suitable for passenger use, requires extensive repairs.	ei	see "Social space"	8	currently rented					ei	220,00	8	Area includes hall and social spaces. Currently rented.	ei	42,00	10	currently rented
JÄMSÄ	42100	JÄMSÄ	ASEMAKATU 5	5495	70,00	ei		ei	40,00	8	Waiting space and WC. Rented.	ei	30,00	8									
LAPUA	62100	LAPUA	ASEMAKATU 7	90077	121,00	ei		ei	43,00	8	Waiting space and 2 WCs. Rented.	kyllä	78,00	8		kyllä	io informatic	7					
KAUHAVA	62200	KAUHAVA	ASEMAKUJA 3	90076	89,00	ei		ei	64,00	8	Waiting space and 2 WCs. Rented.	kyllä	25,00	8		kyllä	io informatic	7					
PĂNNĂINEN	68910	PÄNNÄINEN	ASEMATIE 13	90004	no information	kyllä	Station recently renovated. Possible vacancies in addition to the waiting space.	ei	48,70	8	Waiting space and 2 WCs. Rented.	kyllä	io informatio	r 8		kyllä	io informatic	. 7		kyllä	to information	8	
HÄRMÄ	62300	HÄRMÄ	PIIRTOLANTIE 6		no information	kyllä	Would require extensive repairs of station building. Possible vacancies in addition to the waiting space.	kyllä	no information											kyllä	no information	8	
KANNUS	69100	KANNUS	ASEMATIE 6	90075	450.00	kviliä	At the western end of the station about 120 m2 space originally intended for housing as well as about 60 m2 in the centre of the previous equipment room. The building was renovated in 1961, no repairs since then. All spaces are in extremely primitive condition and require renovations.	ei	63.00	6		kyllä	180.00	6	In poor condition	kyllä	100.00	0 6	In poor condition				

Bueingee

Station	Building	Service point manager	Timetable Screen	More information about railway traffic premises for rent
Akaa, Toijala	Station building	VR Group Ltd	No	VR Network Statement, Passenger stations (vacancies and prices)1
Fanaa	Station bridge	City of Fores Promises Department	Yes	No vacancies. More information from City of Espoo, Premises
Espoo, Kauklahti	Station building	Senaatin Asema-alueet Oy	Yes	https://www.senaatti.fi/asema-alueet/
Homino	Building at traffic operating point		Yes	VR Network Statement, Passenger stations (vacancies and prices)1
Hanko	Station building	Senaatin Asema-alueet Oy	No	https://www.senaatti.fi/asema-alueet/
Helsinki, Kannelmäki Helsinki, Malmi	Station Station building	Helsinki City Transport HKL	Yes	Helsinki City Transport HKL, Building Management
Helsinki, Malminkartano	Tunnel Station	Helsinki City Transport HKL	Yes	Helsinki City Transport HKL, Building Management
Holsinki Pasila	Station building	Kiintoistä Ov Tripla Mall	Yes	Service facility description: https://vayla.fi/ammattiliikenne-
Helsinki, Pohjois-Haaga	Station	Helsinki City Transport HKL	Yes	Helsinki City Transport HKL, Building Management
Helsnki	Station building	VR Group Ltd	Yes	VR Network Statement, Passenger stations (vacancies and prices)1
Hyvinkää	Station building	VR Group Ltd	Yes	VR Network Statement, Passenger stations (vacancies and prices)1
Hämoonlinno	Station building		Yes	VR Network Statement, Passenger stations (vacancies and prices)1
lisalmi	Station building	Senaatin Asema-alueet Oy	Yes	https://www.senaatti.fi/asema-alueet/
Imotro	Imotro		Yes	VR Network Statement, Passenger stations (vacancies and prices)1
Imatra	Imatra	Kiinteistö Oy Imatran keskusasema	Yes	REIM Imatra Oy
loopouu	Station building		Yes	VR Network Statement, Passenger stations (vacancies and prices)1
Jyväskylä	Jyväskylä	Jyväs-Parkki Oy	Yes	Jyväs-Parkki Oy, facility issues
Järvenpää	Station building	Senaatin Asema-alueet Oy	Yes	https://www.senaatti.fi/asema-alueet/
Kajaani	Station building	VR Group Ltd	Yes	VR Network Statement, Passenger stations (vacancies and prices)1
Kauniainen	Station building	Senaatin Asema-alueet Oy	No	https://www.senaatti.fi/asema-alueet/
Kemi	Station building	Senaatin Asema-alueet Oy	Vee	VR Natural Statement Researce stations (vegencies and prices)1
Kemijärvi	Station building	VR Group Ltd	res	VR Network Statement, Passenger stations (vacancies and prices) i
Kerava	Station building	VR Group Ltd	Yes	VR Network Statement, Passenger stations (vacancies and prices)1
Kirkkonummi Kokkola	Station building Station building	Senaatin Asema-alueet Oy Senaatin Asema-alueet Oy	No? Yes	https://www.senaatti.fi/asema-alueet/ https://www.senaatti.fi/asema-alueet/
Kolari	Station building	VR Group I td	Yes	VR Network Statement, Passenger stations (vacancies and prices)1
Kotka	Station building	VR Group Ltd	Yes	VR Network Statement, Passenger stations (vacancies and prices)1
Kouvola	Station building	VR Group Ltd	Yes	VR Network Statement, Passenger stations (vacancies and prices)1
Kubmo Vartius	Station building	VR Group Ltd	No	VR Network Statement, Passenger stations (vacancies and prices)1
Kuopio	Station building	Senaatin Asema-alueet Oy	Yes	https://www.senaatti.fi/asema-alueet/
Lahti Lapinlahti	Station building	Senaatin Asema-alueet Oy Nelson House Ov	Yes	https://www.senaatti.fi/asema-alueet/
Lappeenranta	Station and customs building	Senaatin Asema-alueet Oy	Yes	https://www.senaatti.fi/asema-alueet/
Mikkeli	Station building	VR Group Ltd	Yes	VR Network Statement, Passenger stations (vacancies and prices)1
Oulainen	Station building	VR Group Ltd	Yes	VR Network Statement, Passenger stations (vacancies and prices)1
Oulu Parikkala	Station building	Senaatin Asema-alueet Oy Municipality of Parikkala	Yes	https://www.senaatti.fi/asema-alueet/
	oration balang	Manopany or annual	Ves	VR Network Statement Passenger stations (vacancies and prices)1
Parkano	Station building	VR Group Ltd	Ves	VP Network Statement, Passenger stations (vacancies and prices)1
Pieksämäki Pori	Station building	VR Group Ltd Senaatin Asema-alueet Ov	Yes	https://www.senaatti fi/asema-alueet/
Raasepori	Station building	Senaatin Asema-alueet Oy	Yes	https://www.senaatti.fi/asema-alueet/
Riihimäki	Station building	VR Group Ltd	Yes	VR Network Statement, Passenger stations (vacancies and prices)1
Rovaniemi	Station building	VR Group Ltd	Yes	VR Network Statement, Passenger stations (vacancies and prices)1
Seinäjoki	Station building	VR Group Ltd	Yes	VR Network Statement, Passenger stations (vacancies and prices)1
Siilinjärvi	Station building	VR Group Ltd	No	VR Network Statement, Passenger stations (vacancies and prices)1
Tampere	Station building	VR Group Ltd	Yes	VR Network Statement, Passenger stations (vacancies and prices)1
Tohmajärvi	Station building	VR Group Ltd	No	VR Network Statement, Passenger stations (vacancies and prices)1
Turku	Station building	VR Group Ltd	Yes	VR Network Statement, Passenger stations (vacancies and prices)1
Turku, Kupittaa	Station building	VR Group Ltd	Yes	VR Network Statement, Passenger stations (vacancies and prices)1
Tuusula, Jokela	Station building	VR Group Ltd	Yes	VR Network Statement, Passenger stations (vacancies and prices)1
Vaasa	Station building, new waiting area	City of Vaasa	Yes	Airaksinen Capital Oy, Vaasa. Vacancies.
Vantaa Vantaa Kivistö	Station bridge, halt	City of Vantaa	Yes	City of Vantaa, Real Estate Centre
Vantaa, Kivisto Vantaa, Leinelä	Station bridge, halt	City of Vantaa	Yes	City of Vantaa, Real Estate Centre
Vantaa, Louhela	Station building	City of Vantaa	Yes	City of Vantaa, Real Estate Centre
Vantaa, Martinlaakso	Station building	City of Vantaa	Yes	City of Vantaa, Real Estate Centre
Vantaa, Myyrmäki	Station building	City of Vantaa	Yes	City of Vantaa, Real Estate Centre
Varkaus	Station building	Varkauden keskusliikenneasema Ov	Yes	Realia isännöinti Oy, Varkaus.
Minda a las	Otation building	VD Oracin I tel	Yes	VR Network Statement, Passenger stations (vacancies and prices)1
t IIVIESKA	Station building	VR GIOUP LTO	1	

<sup>1</sup> https://www.vrgroup.fl/fi/vrgroup/vr-group-yrityksena/liiketoiminnot/vr-fleetcare/verkkoselostus/palvelukuvaukset/tilanvuokraustoiminta/matkustajaasemat-ja-muut-asemaalueen-tilat/

APPENDIX 3S /1(20)

ID	Line section no	Line section	Railway device/building description	Туре	Coordinates (N)	Coordinates (E)	Track	Owner of the device or building	Maintainer of the device or building	Manager of the device or building	Further information
ILR001	1109	Ilmala railway yard	1500 V heating point	heating centre	60.210284	24.929719					LP829-709 / LP522/523-710
ILR002	1109	Ilmala railway yard	1501 V heating point	heating centre	60.213765	24.931689					LP814-710 / LP813-709 between t.709-710
ILR003	1109	Ilmala railway vard	1502 V heating point	heating centre	60.213814	24.93137		_			LP816-712 / LP815-711 between t.711-712
ILR004	1109	Ilmala railway vard	1503 V heating point	heating centre	60.210347	24.929488		_			LP524/525 -712 / LP830-711 between t.711-712
ILR005	1109	Ilmala railway vard	1504 V heating point	heating centre	60.214751	24.923842	792-793	_			LP1008-793 between t.792-793
ILR006	1109	Ilmala railway vard	1505 V heating point	heating centre	60.215252	24.924398	792	_			LP1007-792 next to t.792 Käpylä end.
ILR007	1109	Ilmala railway yard	1506 V heating point	heating centre	60.214166	24.923558	787-788	_			LP1006-788 between t.787-788 Käpylä end
ILR008	1109	Ilmala railway yard	1507 V heating point	heating centre	60.214141	24.923691	786-787	_			LP1005-787 between t.787-786 Käpylä end
ILR009	1109	Ilmala railway yard	1508 V heating point	heating centre	60.213853	24.92371	785-786				LP1004-786 between t.786-785 Käpylä end
ILR010	1109	Ilmala railway yard	1509 V heating point	heating centre	60.213856	24.923806	784-785				LP1003-785 between t.785-784 Käpylä end
ILR011	1109	Ilmala railway yard	1510 V heating point	heating centre	60.214118	24.924121	784-783				LP1002-784 between t.783-784 Käpylä end
ILR012	1109	Ilmala railway yard	1511 V heating point	heating centre	60.214142	24.9241	783-782				LP1001-783 between t.782-783 Käpylä end
ILR013	1109	Ilmala railway yard	1512 V heating point	heating centre	60.216461	24.928611	169				LP27-169 next to t.169 at the dead stop rail
ILR014	1109	Ilmala railway yard	1513 V heating point	heating centre	60.216194	24.928397	167-168				LP26-168 / LP26-167 between t.167-168
ILR015	1109	Ilmala railway yard	1514 V heating point	heating centre	60.215921	24.928315	166-165				LP 25-166 / LP25-165 between t.165-166
ILR016	1109	Ilmala railway yard	1515 V heating point	heating centre	60.215695	24.928125	163-164				LP24-164 / LP24-163 between t.163-164
ILR017	1109	Ilmala railway yard	1516 V heating point	heating centre	60.215563	24.928088	161-162				LP23-162 / LP23-161 between t.162-161
ILR018	1109	Ilmala railway yard	1517 V heating point	heating centre	60.214916	24.927558	159-158				LP22-159 between t.159-158
ILR019	1109	Ilmala railway yard	1518 V heating point	heating centre	60.214684	24.927785	157-158				LP21-158 / LP21-157 betweeen t.157-158
ILR020	1109	Ilmala railway yard	1519 V heating point	heating centre	60.214712	24.92769	155-156				LP20-156 / LP20-155 between t.155-156
ILR021	1109	Ilmala railway yard	1520 V heating point	heating centre	60.214664	24.927849	149-154				LP28-154 between t.149-154
ILR022	1109	Ilmala railway yard	1521 V heating point	heating centre	60.21505	24.928988	146-147				LP67-146 / LP67-147 between t.146-147
ILR023	1109	Ilmala railway yard	1522 V heating point	heating centre	60.214972	24.92914	144-145				LP66-144 / LP66-145 between t.144-145
ILR024	1109	Ilmala railway yard	1523 V heating point	heating centre	60.214957	24.929466	142-143				LP65-142 / LP65-143 between t.142-143
ILR025	1109	Ilmala railway yard	1524 V heating point	heating centre	60.214824	24.929516	137-138				LP64-137 / LP64-138 between t.137-138
ILR026	1109	Ilmala railway yard	1525 V heating point	heating centre	60.214759	24.929737	135-136				LP63-135 / LP63-136 between t.135-136
ILR027	1109	Ilmala railway yard	1526 V heating point	heating centre	60.214704	24.929828	133-134				LP62-133 / LP62-134 between t.133-134
ILR028	1109	Ilmala railway yard	1527 V heating point	heating centre	60.214975	24.930384	131-132				LP61-132 / LP61-131 between t.131-132
ILR029	1109	llmala railway yard	1528 V heating point	heating centre	60.214252	24.931952	812. 811				LP826-811 r.812 behind the dead rail stop next to t. 811
ILR030	1109	Ilmala railway yard	1529 V heating point	heating centre	60.214668	24.932075	813. 814				LP827-813 / LP828-814 r.813 next to t.814 behind the dead rail stop
ILR031	1109	llmala railway yard	1530 V heating point	heating centre	60.213484	24.929031	731-732				LP724-731 / LP723-732between t.731-732 maintenance platform for long-distance traffic
ILR032	1109	Ilmala railway yard	1531 V heating point	heating centre	60.210092	24.927081	731-732				LP512-732 / LP511-731 between t.731-732 maintenance platform for long-distance traffic
ILR033	1109	Ilmala railway vard	1532 V heating point	heating centre	60.213363	24.928866	734				LP713-734 next to t.734

ID	Line section no	Line section	Railway device/building description	Туре	Coordinates (N)	Coordinates (E)	Track	Owner of the device or building	Maintainer of the device or building	Manager of the device or building	Further information
ILR034	1109	Ilmala railway yard	1533 V heating point	heating centre	60.213385	24.928779					Heating point t. 735 and LP715-736
ILR035	1109	Ilmala railway vard	1534 V heating point	heating centre	60.213271	24.928289	743				LP725-743 next to t.743
ILR036	1109	Ilmala railway vard	1535 V heating point	heating centre	60.213391	24.928687	737-738				LP716-737 / LP717-738 between t.737-738
ILR037	1109	Ilmala railway vard	1536 V heating point	heating centre	60.210832	24.926831	601				LP91-601 t.601
ILR038	1109	Ilmala railway vard	1537 V heating point	heating centre	60.210781	24.926676	602				LP93-602
ILR039	1109	Ilmala railway vard	1538 V heating point	heating centre	60.208375	24.926244	601				LP92-601 next to t.601
ILR040	1109	Ilmala railway vard	1539 V heating point	heating centre	60.208312	24.926083	602				LP94-602 next to t.602
ILR041	1109	Ilmala railway vard	1540 V heating point	heating centre	60.208317	24.925905	603				LP96-603 next to t.603
ILR042	1109	İlmala railway vard	1541 V heating point	heating centre	60.208386	24.925685	604				LP98-604 next to t.604
ILR043	1109	İlmala railway yard	1542 V heating point	heating centre	60.210529	24.926288	604				LP97-604 next to t.604
ILR044	1109	Ilmala railway vard	1543 V heating point	heating centre	60.210596	24.92639	603				LP95-603 next to t.603
ILR045	1109	İlmala railway yard	1544 V heating point	heating centre	60.210295	24.926007	605				LP99-605 next to t.605
ILR046	1109	Ilmala railway yard	1545 V heating point	heating centre	60.21027	24.925949	606				LP910-606 next to t.606
ILR047	1109	Ilmala railway yard	1546 V heating point	heating centre	60.214201	24.931024	715-716				LP817-716 between t.715-716 Käpylä end
ILR048	1109	, Ilmala railway yard	1500 V heating point, t.799-800 Russian train services	heating centre	60.215349	24.924133		FTIA	Eltel		LP1009-799 next to t.799
ILR049	1109	llmala railway yard	1501 V heating point, t.799-800 Russian train services	heating centre	60.215372	24.924092		FTIA	Eltel		LP1010-800 between t.799-800
ILR050	1109	llmala railway yard	400V maintence platform for long-distance traffic t.601-602	heating point	60.210761	24.926693	601-602				400V 63A 2pcs and 32A as well as 240V 16A 2pcs between t. 601-602 $$ X13 X14 $$
ILR051	1109	Ilmala railway yard	400V maintence platform for long-distance traffic t.601-602	heating point	60.209804	24.926501	601-602				400V 63A 2pcs and 32A as well as 240V 16A 2pcs X11 X12 between t. 601-602 $$
ILR052	1109	llmala railway yard	400V maintence platform for long-distance traffic t.601-602	heating point	60.209525	24.926214	601-602				400V 63A 2pcs and 32A as well as 240V 16A 2pcs between t. 601-602 $$ X09 X10 $$
ILR053	1109	llmala railway yard	400V maintence platform for long-distance traffic t.601-602	heating point	60.209412	24.926257	601-602				400V 63A 2pcs and 32A as well as 240V 16A 2pcs X07 X08 between t. 601-602 $$
ILR054	1109	llmala railway yard	400V maintence platform for long-distance traffic t.601-602	heating point	60.209198	24.926341	601-602				400V 63A 2pcs and 32A as well as 240V 16A 2pcs X07 X08 between t. 601-602 $$
ILR055	1109	llmala railway yard	400V maintence platform for long-distance traffic t.601-602	heating point	60.20866	24.926085	601-602				400V 63A 2pcs and 32A as well as 240V 16A 2pcs X03 X04 between t. 602-602 $$
ILR056	1109	Ilmala railway yard	400V maintence platform for long-distance traffic t.601-602	heating point	60.208449	24.926132	601-602				400V 63A 2pcs and 32A as well as 240V 16A 2pcs X01 X02 between t. 602-602
ILR057	1109	Ilmala railway yard	400V maintence platform for long-distance traffic t.603-604	heating point	60.20838	24.92585	603-604				400V 63A 2pcs and 32A as well as 240V 16A X16 X15 between t.603-604
ILR058	1109	Ilmala railway yard	400V kaukoliikenteen huoltotaso r.603-604	heating point	60.208626	24.926027	603-604				400V 63A 2pcs and 32A as well as 240V 16A 2 pcs X18 X17etween t.603-604
ILR059	1109	Ilmala railway yard	400V maintence platform for long-distance traffic t.603-604	heating point	60.209127	24.926083	603-604				400V 63A 2pcs and 32A as well as 240V 16A 2 pcs between t.603-604 $$ X20 X19 $$
ILR060	1109	Ilmala railway yard	400V maintence platform for long-distance traffic t.603-604	heating point	60.209258	24.926099	603-604				400V 63A 2pcs and 32A as well as 240V 16A 2 pcs between t.603-604 $$ X22 X21 $$

APPENDIX 3S /3(20)

ID	Line section no	Line section	Railway device/building description	Туре	Coordinates (N)	Coordinates (E)	Track	Owner of the device or building	Maintainer of the device or building	Manager of the device or building	Further information
ILR061	1109	Ilmala railway yard	400V maintence platform for long-distance traffic t.603-604	heating point	60.209532	24.926153	603-604			·	400V 63A 2pcs and 32A as well as 240V 16A 2 pcs between t.603-604 X24 X23
ILR062	1109	llmala railway yard	400V maintence platform for long-distance traffic t.603-604	heating point	60.209773	24.926138	603-604				400V 63A 2pcs and 32A as well as 240V 16A 2 pcs between t.603-604 $$ X26 X25 $$
ILR063	1109	llmala railway yard	400V maintence platform for long-distance traffic t.603-604	heating point	60.210425	24.926381	603-604				400V 63A 2pcs and 32A as well as 240V 16A 2 pcs X28 X27 between t.603-604
ILR064	1109	Ilmala railway yard	400V maintence platform for long-distance traffic t.605-606	heating point	60.210234	24.925911	605-606				400V 63A 2pcs and 32A as well as 240V 16A 2 pcs X35 X36 between t. 605-606 $$
ILR065	1109	llmala railway yard	400V maintence platform for long-distance traffic t.605-606	heating point	60.209506	24.92576	605-606				400V 63A 2pcs and 32A as well as 240V 16A 2 pcs X33 X34 between t.605-606
ILR066	1109	llmala railway yard	400V maintence platform for long-distance traffic t.605-606	heating point	60.209166	24.925627	605-606				400V 63A 2pcs and 32A as well as 240V 16A 2 pcs X31 X32 between t.605-606 $$
ILR067	1109	Ilmala railway yard	400V maintence platform for long-distance traffic t.605-606	heating point	60.208919	24.925676	605-606				400V 63A 2pcs and 32A as well as 240V 16A 2 pcs X29 X30 between t.605-606 $$
ILR068	1109	Ilmala railway yard	400V t. 731-732 (734) maintenance platform for long-distance traffic	heating point	60.213376	24.928957	731-732				400V 63A 2pcs and 32A as well as 240V 16A 2 pcs between t.731-732 X06
ILR069	1109	Ilmala railway yard	400V t. 731-732 (734) maintenance platform for long-distance traffic	heating point	60.212666	24.928692	731-733				400V 63A 2pcs and 32A as well as 240V 16A 2 pcs between t.731-732 X05 $$
ILR070	1109	Ilmala railway yard	400V t. 731-732 (734) maintenance platform for long-distance traffic	heating point	60.212258	24.928469	731-734				400V 63A 2pcs and 32A as well as 240V 16A 2 pcs between t.731-732 X04
ILR071	1109	llmala railway yard	400V t. 731-732 (734) maintenance platform for long-distance traffic	heating point	60.211532	24.927599	731-735				400V 63A 2pcs and 32A as well as 240V 16A 2 pcs between t.731-732 X03
ILR072	1109	Ilmala railway yard	400V t. 731-732 (734) maintenance platform for long-distance traffic	heating point	60.210852	24.92727	731-736				400V 63A 2pcs and 32A as well as 240V 16A 2 pcs between t.731-732 X02
ILR073	1109	Ilmala railway yard	400V t. 731-732 (734) maintenance platform for long-distance traffic	heating point	60.210142	24.926777	731-737				400V 63A 2pcs and 32A as well as 240V 16A 2 pcs between t.731-732 X01
ILR074	1109	Ilmala railway yard	400V t. 731-732 (734) maintenance platform for long-distance traffic	heating point	60.213349	24.928863	734				400V 63A 2pcs and 32A as well as 240V 16A 2pcs next to t.734 X07
ILR075	1109	llmala railway yard	400V outside connection	heating point	60.210307	24.929779	709-710				400V 63A 2pcs and 16A as well as 240V 16A 2 pcs between t.709-710 väli
ILR076	1109	Ilmala railway yard	400V outside connection	heating point	60.211023	24.930148	709-710				400V 63A and 32A as well as 16A and 240V 16A between t.709-710 R9-PRK-4
ILR077	1109	Ilmala railway vard	400V outside connection	heating point	60.211897	24.930663	709-710				400V 63A, 32A and 16A as well as 240V 16A 2 pcs between t.709-710 R9 PRK-3
ILR078	1109	İlmala railway vard	400V outside connection	heating point	60.21209	24.931042	708				400V 63A and 32A as well as 16A and 240V 16A 2 pcs next to t.708
ILR079	1109	Ilmala railway vard	400V outside connection	heating point	60.212854	24.93116	709-710				400V 63A, 32A and 16A as well as 240V 16A 2 pcs R9 PRK-2 between t.709-710
ILR080	1109	Ilmala railway	400V outside connection	heating point	60.213841	24.931788	709-710				400V 63A 2pcs and 16A as well as 240V 16A 2 pcs between t.709-710 Käpylä end
ILR082	1109	Ilmala railway	400V outside connection	heating point	60.213852	24.931443	711-712				R11 PRK-1 400V 63A and 32A as well as 16A and 240V 16A 2 pcs between t.711-712
ILR083	1109	Ilmala railway	400V outside connection	heating point	60.211926	24.930227	711-712				400V 63A and 16A as well as 240V 16A 2 pcs between t. 711-712
ILR084	1109	Ilmala railway yard	400V outside connection	heating point	60.210411	24.929471	711-712				400V 63A 2pcs and 32A as well as 16A and 240V 16A 2 pcs between t.711-712 Helsinki end
ILR085	1109	yard	400V outside connection	heating point	60.213168	24.92293	788				the centre
ILR087	1109	IImala railway yard	400V outside connection	heating point	60.214686	24.927865	149-154				400V 63A and 32A as well as 240V 16A 2 pcs between t.149-154
ILR088	1109	Ilmala railway yard	400V outside connection	heating point	60.214699	24.928011	149				400V 63A and 32A as well as 240V 16A 2 pcs next to t.149 $$

ID	Line section no	Line section	Railway device/building description	Туре	Coordinates (N)	Coordinates (E)	Track	Owner of the device or building	Maintainer of the device or building	Manager of the device or building	Further information
ILR089	1109	Ilmala railway vard	400V outside connection	heating point	60.21485	24.92815	149	Journaning			400V 63A and 32A as well as 240V 16A 2 pcs next to t.150
ILR090	1109	Ilmala railway	400V outside connection	heating point	60.215164	24.928539	149-153				400V 32A 2 pcs and 240V 16A 4 pcs between t.149-153
ILR091	1109	Ilmala railway	400V outside connection	heating point	60.215295	24.92875	149-153				400V 32A 2 pcs and 240V 16A 4 pcs between t.149-153
ILR092	1109	Ilmala railway	400V outside connection	heating point	60.215533	24.929224	152-153				400V 32A 2 pcs and 240V 16A 4 pcs between t.152-153
ILR093	1109	Ilmala railway	400V outside connection	heating point	60.21569	24.929326	152-153				400V 32A 2 pcs and 240V 16A 4 pcs between t.152-153
ILR095	1109	Ilmala railway	400V outside connection	heating point	60.21612	24.929999	151-152				400V 32A 2 pcs and 240V 16A 4 pcs between t.151-152
ILR096	1109	Ilmala railway	400V outside connection	heating point	60.216015	24.929708	151-152				400V 32A 2 pcs and 240V 16A 4 pcs between t.151-152
ILR097	1109	Ilmala railway	400V outside connection	heating point	60.215779	24.929496	151-152				400V 32A 2 pcs and 240V 16A 4 pcs between t.151-152
ILR098	1109	Ilmala railway	400V outside connection	heating point	60.215613	24.929454	151-152				400V 32A 2 pcs and 240V 16A 4 pcs between t.151-152
ILR101	1109	Ilmala railway	400V outside connection	heating point	60.216684	24.930769	150				400V 32A 2 pcs and 240V 16A 4 pcs between t.150
ILR102	1109	Ilmala railway	400V outside connection	heating point	60.215897	24.930008	146-147				400V 63A 2pcs and 32A 2pcs as well as 240V 16A 4 pcs between t.146-147
ILR103	1109	Ilmala railway	400V outside connection	heating point	60.215421	24.929551	146-147				400V 63A 2pcs and 32A 2pcs as well as 240V 16A 4 pcs between t.146-147
ILR104	1109	Ilmala railway	400V outside connection	heating point	60.215119	24.929036	146-147				400V 63A 2pcs and 32A 2pcs as well as 240V 16A 4 pcs between t.146-147
ILR105	1109	Ilmala railway	400V outside connection	heating point	60.215052	24.929271	144-145				400V 63A 2pcs and 32A 2pcs as well as 240V 16A 4 pcs between t.144-145
ILR106	1109	Ilmala railway	400V outside connection	heating point	60.215364	24.929677	144-145				400V 63A 2pcs and 32A 2pcs as well as 240V 16A 4 pcs between t.144-145
ILR107	1109	Ilmala railway	400V outside connection	heating point	60.215792	24.930213	144-145				400V 63A 2pcs and 32A 2pcs as well as 240V 16A 4 pcs between t.144-145
ILR108	1109	Ilmala railway	400V outside connection	heating point	60.215788	24.930315	142-143				400V 63A 2pcs and 32A 2pcs as well as 240V 16A 4 pcs between t.142-143
ILR109	1109	Ilmala railway	400V outside connection	heating point	60.215332	24.929822	142-143				400V 63A 2pcs and 32A 2pcs as well as 240V 16A 4 pcs between t.142-143
ILR110	1109	Ilmala railway	400V outside connection	heating point	60.21506	24.929471	142-143				400V 63A 2pcs and 32A 2pcs as well as 240V 16A 4 pcs between t.142-143
ILR111	1109	Ilmala railway	400V outside connection	heating point	60.214415	24.932027	812				400V 63A and 32A 2pcs as well as 240V 16A 2 pcs next to t.812
ILR114	1109	Ilmala railway	400V outside connection	heating point	60.215235	24.932294	814				400V 63A and 32A as well as 16A and 240V 16A 2 pcs next to t.814
ILR116	1109	Ilmala railway	400V outside connection	heating point	60.214734	24.932184	813-814				400V 63A and 32A 2pcs as well as 240V 16A 4pcs between t.813-814
ILR117	1109	Ilmala railway	400V outside connection	heating point	60.213406	24.92881	735-736				400V 63A 2pcs and 32A as well as 240V 16A 2 pcs between t.735-736 X08
ILR118	1109	Ilmala railway	400V outside connection	heating point	60.213238	24.928356	743				400V 63A 2pcs and 32A as well as 240V 16A 2pcs next to t.743.
ILR119	1109	Ilmala railway	400V outside connection	heating point	60.213113	24.927769	746				400V 63A and 16A as well as 240V 16A 2 pcs attached to the facility wall at t.746
ILR120	1109	Ilmala railway	400V outside connection	heating point	60.213351	24.928643	737-738				400V 63A 2pcs and 32A as well as 240V 16A 2 pcs between t.737-738 X09
ILR122	1109	Ilmala railway	400V outside connection	heating point	60.213595	24.927846	747-748				400V 63A 2pcs and 32A 2pcs as well as 240V 16A 4 pcs betwen t.747-748
ILR123	1109	Ilmala railway	400V outside connection	heating point	60.213689	24.927581	749-751				400V 63A 2pcs and 32A 2pcs as well as 240V 16A 4 pcs betwen t.749-751
ILR124	1109	Ilmala railway	400V outside connection	heating point	60.213683	24.927456	752-753				400V 63A 2pcs and 32A 2pcs as well as 240V 16A 4 pcs betwen t.752-753
ILR125	1109	Ilmala railway	400V outside connection	heating point	60.212538	24.927168	747-748				400V 32A 2 pcs and 240V 16A 4 pcs between t.747-748
ILR126	1109	Ilmala railway	400V outside connection	heating point	60.20949	24.925348	608-609				400V 16A and 240V 16A 2 pcs on the wall of the locomotive cleaning facility between
ILR127	1109	Ilmala railway	400V outside connection	heating point	60.209832	24.925247	609-610				400V 16A and 240V 16A 2 pcs between t.609-610 at teh end of the locomotive cleaning facility. Känylä and PBK2
ILR128	1109	llmala railway yard	400V outside connection	heating point	60.214313	24.927034	754-755				400V 32A 4 pcs and 240V 16A 2 pcs between t.754-755

ID	Line section no	Line section	Railway device/building description	Туре	Coordinates (N)	Coordinates (E)	Track	Owner of the device or building	Maintainer of the device or building	Manager of the device or building	Further information
ILR129	1109	Ilmala railway yard	400V outside connection	heating point	60.214358	24.926726	756-757				400V 32A 4 pcs and 240V 16A 2 pcs between t.756-757
ILR130	1109	Ilmala railway vard	400V outside connection	heating point	60.214336	24.926379	758-759				400V 32A 4 pcs and 240V 16A 2 pcs between t.758-759
ILR131	1109	Ilmala railway vard	400V outside connection	heating point	60.214401	24.926085	760-761				400V 32A 4 pcs and 240V 16A 2 pcs between t.760-761
ILR132	1109	Ilmala railway vard	400V outside connection	heating point	60.212761	24.921885	799-800	FTIA	Eltel		PILOT 1 400V 63A 2pcs and 32A as well as 240V 16A between t.799-800
ILR133	1109	Ilmala railway vard	400V outside connection t.799-800	heating point	60.213717	24.922374	799-800	FTIA	Eltel		PILOT 2 400V 63A 2pcs and 32A as well as 240V 16A between t.799-800
ILR134	1109	Ilmala railway	400V outside connection	heating point	60.214651	24.922592	799-800	FTIA	Eltel		PILOT 3 400V 63A 2pcs and 32A as well as 240V 16A between t.799-800
ILR135	1109	Ilmala railway vard	400V outside connection t.799-800	heating point	60.215277	24.923705	799-800	FTIA	Eltel		PILOT 4 400V 63A 2pcs and 32A as well as 240V 16A between t.799-800
ILR136	1109	Ilmala railway vard	400V outside connection t.801-804	heating point	60.212732	24.921291	803-804				JK 010401 between t.803-804 400V 63A 2pcs and 32A and 240V 16A 2 pcs
ILR137	1109	Ilmala railway vard	400V outside connection t.801-804	heating point	60.213084	24.921453	803-804				JK 010402.1 between t.803-804 400V 63A 2pcs and 32A and 240V 16A 2 pcs
ILR138	1109	Ilmala railway vard	400V outside connection t.801-804	heating point	60.213663	24.921848	803-804				JK 010402.2 between t.803-804 400V 63A 2pcs and 32A and 240V 16A 2 pcs
ILR139	1109	Ilmala railway vard	400V outside connection t.801-804	heating point	60.214095	24.922054	803-804				JK 010501 between t.803-804 400V 63A 2pcs and 32A and 240V 16A 2 pcs
ILR140	1109	Ilmala railway vard	400V outside connection t.801-804	heating point	60.214567	24.922442	803-804				JK 010502 between t.803-804 400V 63A 2pcs and 32A and 240V 16A 2 pcs
ILR141	1109	Ilmala railway yard	400V outside connection t.801-804	heating point	60.21507	24.922666	803-804				JK 010601 between t.803-804 400V 63A 2pcs and 32A and 240V 16A 2 pcs
ILR142	1109	Ilmala railway vard	400V outside connection t.801-804	heating point	60.215482	24.922952	803-804				JK 010602.1 between t.803-804 400V 63A 2pcs and 32A and 240V 16A 2 pcs
ILR143	1109	Ilmala railway yard	400V outside connection t.801-804	heating point	60.215689	24.923132	803-804				JK 010602.2 between t.803-804 400V 63A 2pcs and 32A and 240V 16A 2 pcs
ILR144	1109	Ilmala railway yard	400V outside connection t.801-804	heating point	60.215676	24.923169	801-802				JK010302.2 between t.801-802 400V 63A 2pcs and 32A as well as 240V 16A 2 pcs
ILR145	1109	Ilmala railway yard	400V outside connection t.801-804	heating point	60.215533	24.922965	801-802				JK 010302.1 between t.801-802 400V 63A 2pcs and 32A as well as 240V 16A 2 pcs
ILR146	1109	Ilmala railway yard	400V outside connection t.801-804	heating point	60.214972	24.922675	801-802				JK 010301 between t.801-802 $$ 400V 63A 2pcs and 32A as well as 240V 16A 2 pcs
ILR147	1109	Ilmala railway yard	400V outside connection t.801-804	heating point	60.214507	24.922477	801-802				JK 010202 between t.801-802 $$ 400V 63A 2pcs and 32A as well as 240V 16A 2 pcs
ILR148	1109	Ilmala railway yard	400V outside connection t.801-804	heating point	60.214055	24.922174	801-802				JK 010201 between t.801-802 $$ 400V 63A 2pcs and 32A as well as 240V 16A 2 pcs
ILR149	1109	Ilmala railway yard	400V outside connection t.801-804	heating point	60.213615	24.922116	801-802				JK 010102.2 between t.801-802 $$ 400V 63A 2pcs and 32A as well as 240V 16A 2 pcs
ILR150	1109	Ilmala railway yard	400V outside connection t.801-804	heating point	60.213068	24.921641	801-802				JK 010102.1 between t.801-802 $$ 400V 63A 2pcs and 32A as well as 240V 16A 2 pcs
ILR151	1109	Ilmala railway yard	400V outside connection t.801-804	heating point	60.212639	24.921413	801-802				JK 010101 between t.801-802 $$ 400V 63A 2pcs and 32A as well as 240V 16A 2 pcs
ILR152	1109	Ilmala railway yard	Vacuum suction point WC t.709-710 and t.711-712	vacuum suction device	60.210528	24.929822	709-710				Suction starts when opening the valve, suction stays on until the valve is closed. Vacuum suction device between t.709-710
ILR153	1109	llmala railway yard	Vacuum suction point WC t.709-710 and t.711-712	vacuum suction device	60.210651	24.930102	709-710				Ali9 between t.709-710
ILR154	1109	llmala railway yard	Vacuum suction point WC t.709-710 and t.711-712	vacuum suction device	60.210891	24.930085	709-710				Vacuum suction device between t.709-710
ILR155	1109	llmala railway yard	Vacuum suction point WC t.709-710 and t.711-712	vacuum suction device	60.211147	24.930169	709-710				Vacuum suction device between t.709-710
ILR156	1109	Ilmala railway yard	Vacuum suction point WC t.709-710 and t.711-712	vacuum suction device	60.211359	24.930342	709-710				Vacuum suction device
ILR157	1109	Ilmala railway yard	Vacuum suction point WC t.709-710 and t.711-712	vacuum suction device	60.211576	24.930659	709-710				Vacuum suction device between t.709-710
ILR158	1109	Ilmala railway yard	Vacuum suction point WC t.709-710 and t.711-712	vacuum suction device	60.211832	24.930566	709-710				Vacuum suction device between t.709-710

APPENDIX 3S /6(20)

ID	Line section no	Line section	Railway device/building description	Туре	Coordinates (N)	Coordinates (E)	Track	Owner of the device or building	Maintainer of the device or building	Manager of the device or building	Further information
ILR159	1109	llmala railway yard	Vacuum suction point WC t.709-710 and t.711-712	vacuum suction device	60.212111	24.930698	709-710	building			Vacuum suction device between t.709-710
ILR160	1109	Ilmala railway yard	Vacuum suction point WC t.709-710 and t.711-712	vacuum suction device	60.21227	24.930847	709-710				Vacuum suction device between t.709-710
ILR161	1109	llmala railway yard	Vacuum suction point WC t.709-710 and t.711-712	vacuum suction device	60.212463	24.930934	709-710				Vacuum suction device between t.709-710
ILR162	1109	Ilmala railway yard	Vacuum suction point WC t.709-710 and t.711-712	vacuum suction device	60.21293	24.931272	709-710				Vacuum suction device between t.709-710
ILR163	1109	Ilmala railway yard	Vacuum suction point WC t.709-710 and t.711-712	vacuum suction device	60.213191	24.931286	709-710				Vacuum suction device between t.709-710
ILR164	1109	Ilmala railway yard	Vacuum suction point WC t.709-710 and t.711-712	vacuum suction device	60.213399	24.931518	709-710				Vacuum suction device between t.709-710
ILR165	1109	Ilmala railway yard	Vacuum suction point WC t.709-710 and t.711-712	vacuum suction device	60.213399	24.931518	709-710				Vacuum suction device between t.709-710
ILR166	1109	llmala railway yard	Vacuum suction point WC t.709-710 and t.711-712	vacuum suction device	60.213633	24.931618	709-710				Vacuum suction device between t.709-710
ILR167	1109	llmala railway yard	Vacuum suction point WC t.709-710 and t.711-712	vacuum suction device	60.213645	24.931165	711-712				Vacuum suction device between t.711-712
ILR168	1109	llmala railway yard	Vacuum suction point WC t.709-710 and t.711-712	vacuum suction device	60.213393	24.931014	711-712				Vacuum suction device between t.711-712
ILR169	1109	llmala railway yard	Vacuum suction point WC t.709-710 and t.711-712	vacuum suction device	60.213167	24.93091	711-712				Vacuum suction device between t.711-712
ILR170	1109	llmala railway yard	Vacuum suction point WC t.709-710 and t.711-712	vacuum suction device	60.212942	24.930795	711-712				Vacuum suction device between t.711-712
ILR171	1109	llmala railway yard	Vacuum suction point WC t.709-710 and t.711-712	vacuum suction device	60.21272	24.930684	711-712				Vacuum suction device between t.711-712
ILR172	1109	llmala railway yard	Vacuum suction point WC t.709-710 and t.711-712	vacuum suction device	60.2125	24.930564	711-712				Vacuum suction device between t.711-712
ILR173	1109	llmala railway yard	Vacuum suction point WC t.709-710 and t.711-712	vacuum suction device	60.212243	24.93045	711-712				Vacuum suction device between t.711-712
ILR174	1109	llmala railway yard	Vacuum suction point WC t.709-710 and t.711-712	vacuum suction device	60.212036	24.93035	711-712				Vacuum suction device between t.711-712
ILR175	1109	llmala railway yard	Vacuum suction point WC t.709-710 and t.711-712	vacuum suction device	60.211823	24.930191	711-712				Vacuum suction device between t.711-712
ILR176	1109	llmala railway yard	Vacuum suction point WC t.709-710 and t.711-712	vacuum suction device	60.211556	24.930075	711-712				Vacuum suction device between t.711-712
ILR177	1109	llmala railway yard	Vacuum suction point WC t.709-710 and t.711-712	vacuum suction device	60.211415	24.930099	711-712				Vacuum suction device between t.711-712
ILR178	1109	Ilmala railway yard	Vacuum suction point WC t.709-710 and t.711-712	vacuum suction device	60.211153	24.929928	711-712				Vacuum suction device between t.711-712
ILR179	1109	Ilmala railway yard	Vacuum suction point WC t.709-710 and t.711-712	vacuum suction device	60.21098	24.929649	711-712				Vacuum suction device between t.711-712
ILR180	1109	llmala railway yard	Vacuum suction point WC t.709-710 and t.711-712	vacuum suction device	60.210699	24.929608	721-712				Vacuum suction device between t.711-712

APPENDIX 3S /7(20)

ID	Line section	Line section	Railway device/building description	Туре	Coordinates (N)	Coordinates (E)	Track	Owner of the device or building	Maintainer of the device or building	Manager of the device or building	Further information
ILR181	1109	Ilmala railway yard	Vacuum suction point WC t.709-710 and t.711-712	vacuum suction device	60.210493	24.929561	711-712	building			Vacuum suction device between t.711-712
ILR182	1109	llmala railway yard	Vacuum suction point WC t.709-710 and t.711-712	vacuum suction device	60.210306	24.929459	711-712				Vacuum suction device between t.711-712
ILR183	1109	llmala railway yard	Vacuum suction point WC t.709-710 and t.711-712	vacuum suction device	60.210132	24.929299	711-712				Vacuum suction device between t.711-712
ILR184	1109	Ilmala railway yard	Vacuum suction point WC t.709-710 and t.711-712	vacuum suction device	60.209851	24.929149	711-712				Vacuum suction device between t.711-712
ILR185	1109	Ilmala railway yard	Vacuum suction point WC t.801-802 and clean water	vacuum suction device	60.215836	24.923188	801-802				Vaccum suction device between t.801-802, no cold water connection R802 30
ILR186	1109	Ilmala railway yard	Vacuum suction point WC t.801-802 and clean water	vacuum suction device	60.215676	24.923169	801-802				Vacuum suction device and cold water between t.801-802 R802 29
ILR187	1109	Ilmala railway yard	Vacuum suction point WC t.801-802 and clean water	vacuum suction device	60.215565	24.923059	801-802				Vacuum suction device and cold water between t.801-802 R802 28
ILR188	1109	Ilmala railway yard	Vacuum suction point WC t.801-802 and clean water	vacuum suction device	60.215533	24.922965	801-802				Vacuum suction device and cold water between t.801-802 R802 27
ILR189	1109	Ilmala railway yard	Vacuum suction point WC t.801-802 and clean water	vacuum suction device	60.215351	24.922962	801-802				Vacuum suction device and cold water between t.801-802 R802 26
ILR190	1109	llmala railway yard	Vacuum suction point WC t.801-802 and clean water	vacuum suction device	60.215241	24.923005	801-802				Vacuum suction device and cold water between t.801-802 R802 25
ILR191	1109	llmala railway yard	Vacuum suction point WC t.801-802 and clean water	vacuum suction device	60.215121	24.922715	801-802				Vacuum suction device and cold water between t.801-802 R802 24
ILR192	1109	llmala railway yard	Vacuum suction point WC t.801-802 and clean water	vacuum suction device	60.214972	24.922675	801-802				Vacuum suction device and cold water between t.801-802 R802 23
ILR193	1109	llmala railway yard	Vacuum suction point WC t.801-802 and clean water	vacuum suction device	60.214865	24.92268	801-802				Vacuum suction device and cold water between t.801-802 R802 22
ILR194	1109	llmala railway yard	Vacuum suction point WC t.801-802 and clean water	vacuum suction device	60.214807	24.922447	801-802				Vacuum suction device and cold water between t.801-802 R802 21
ILR195	1109	llmala railway yard	Vacuum suction point WC t.801-802 and clean water	vacuum suction device	60.214586	24.92262	801-802				Vacuum suction device and cold water between t.801-802 R802 20
ILR196	1109	llmala railway yard	Vacuum suction point WC t.801-802 and clean water	vacuum suction device	60.214507	24.922477	801-802				Vacuum suction device and cold water between t.801-802 R802 19
ILR197	1109	llmala railway yard	Vacuum suction point WC t.801-802 and clean water	vacuum suction device	60.214374	24.922524	801-802				Vacuum suction device and cold water between t.801-802 R802 18
ILR198	1109	llmala railway yard	Vacuum suction point WC t.801-802 and clean water	vacuum suction device	60.214325	24.922337	801-802				Vacuum suction device and cold water between t.801-802 R802 17
ILR199	1109	Ilmala railway yard	Vacuum suction point WC t.801-802 and clean water	vacuum suction device	60.214158	24.922324	801-802				Vacuum suction device and cold water between t.801-802 R802 16
ILR200	1109	llmala railway yard	Vacuum suction point WC t.801-802 and clean water	vacuum suction device	60.214055	24.922174	801-802				Vacuum suction device and cold water between t.801-802 R802 15
ILR201	1109	llmala railway yard	Vacuum suction point WC t.801-802 and clean water	vacuum suction device	60.214096	24.922218	801-802				Vacuum suction device and cold water between t.801-802 R802 14
ILR202	1109	llmala railway yard	Vacuum suction point WC t.801-802 and clean water	vacuum suction device	60.213849	24.922068	801-802				Vacuum suction device and cold water between t.801-802 R802 13

ID	Line section no	Line section	Railway device/building description	Туре	Coordinates (N)	Coordinates (E)	Track	Owner of the device or building	Maintainer of the device or building	Manager of the device or building	Further information
ILR203	1109	llmala railway yard	Vacuum suction point WC t.801-802 and clean water	vacuum suction device	60.21368	24.922145	801-802				Vacuum suction device and cold water between t.801-802 R802 12
ILR204	1109	llmala railway yard	Vacuum suction point WC t.801-802 and clean water	vacuum suction device	60.213615	24.922116	801-802				Vacuum suction device and cold water between t.801-802 R802 11
ILR205	1109	llmala railway yard	Vacuum suction point WC t.801-802 and clean water	vacuum suction device	60.21353	24.922046	801-802				Vacuum suction device and cold water between t.801-802 R802 10
ILR206	1109	llmala railway yard	Vacuum suction point WC t.801-802 and clean water	vacuum suction device	60.213393	24.921931	801-802				Vacuum suction device and cold water between t.801-802 R802 09
ILR207	1109	llmala railway yard	Vacuum suction point WC t.801-802 and clean water	vacuum suction device	60.213281	24.921971	801-802				Vacuum suction device and cold water between t.801-802 R802 08
ILR208	1109	Ilmala railway yard	Vacuum suction point WC t.801-802 and clean water	vacuum suction device	60.213081	24.921633	801-802				Vacuum suction device and cold water between t.801-802 R802 07
ILR209	1109	llmala railway yard	Vacuum suction point WC t.801-802 and clean water	vacuum suction device	60.213064	24.921795	801-802				Vacuum set t.801-802 and water main shut t.801-802
ILR210	1109	Ilmala railway yard	Vacuum suction point WC t.801-802 and clean water	vacuum suction device	60.213068	24.921641	801-802				Vacuum suction device and cold water between t.801-802 R802 06
ILR211	1109	llmala railway yard	Vacuum suction point WC t.801-802 and clean water	vacuum suction device	60.212923	24.921529	801-802				Vacuum suction device and cold water between t.801-802 R802 05
ILR212	1109	llmala railway yard	Vacuum suction point WC t.801-802 and clean water	vacuum suction device	60.212771	24.921436	801-802				Vacuum suction device and cold water between t.801-802 R802 04
ILR213	1109	llmala railway yard	Vacuum suction point WC t.801-802 and clean water	vacuum suction device	60.212639	24.921413	801-802				Vacuum suction device and cold water between t.801-802 R802 03
ILR214	1109	llmala railway yard	Vacuum suction point WC t.801-802 and clean water	vacuum suction device	60.212596	24.92141	801-802				Vacuum suction device and cold water between t.801-802 R802 02
ILR215	1109	llmala railway yard	Vacuum suction point WC t.801-802 and clean water	vacuum suction device	60.212493	24.921363	801-802				Vacuum suction point between t. 801-802, no cold water connection R802 01
ILR216	1109	llmala railway yard	Vacuum suction point WC t.803-804 and clean water	vacuum suction device	60.212548	24.921325	803-804				Vacuum suction point between t.803-804, no clean water outlet R804 01
ILR217	1109	llmala railway yard	Vacuum suction point WC t.803-804 and clean water	vacuum suction device	60.212641	24.921233	803-804				Vacuum suction point between t.803-804 R804 02 cold-water outlet
ILR218	1109	llmala railway yard	Vacuum suction point WC t.803-804 and clean water	vacuum suction device	60.212732	24.921291	804				Vacuum suction point and cold water R804 03
ILR219	1109	llmala railway yard	Vacuum suction point WC t.803-804 and clean water	vacuum suction device	60.212949	24.921272	804				Vacuum suction point and cold water R804 04
ILR220	1109	llmala railway yard	Vacuum suction point WC t.803-804 and clean water	vacuum suction device	60.21302	24.921331	803-804				Vacuum suction point and cold water between t.803-804 R804 05
ILR221	1109	llmala railway yard	Vacuum suction point WC t.803-804 and clean water	vacuum suction device	60.213084	24.921453	803-804				Vacuum suction point and cold water between t.803-804 R804 06
ILR222	1109	Ilmala railway yard	Vacuum suction point WC t.803-804 and clean water	vacuum suction device	60.213125	24.921544	803-804				Vacuum set t.803-804 and water main shut t.803-804, Vacuum suction point and cold water t.803-804 R804 07 $$
ILR223	1109	Ilmala railway yard	Vacuum suction point WC t.803-804 and clean water	vacuum suction device	60.213216	24.921487	803-804				Vacuum suction point and cold water between t.803-804 R804 08
ILR224	1109	llmala railway yard	Vacuum suction point WC t.803-804 and clean water	vacuum suction device	60.213329	24.921569	803-804				Vacuum suction point and cold water between t.803-804 R804 09

APPENDIX 3S /9(20)

ID	Line section no	Line section	Railway device/building description	Туре	Coordinates (N)	Coordinates (E)	Owner Track device	or building	Manager of the device or building	Further information
ILR225	1109	llmala railway yard	Vacuum suction point WC t.803-804 and clean water	vacuum suction device	60.213379	24.921607	803-804	-9		Vacuum suction point and cold water between t.803-804 R804 10
ILR226	1109	llmala railway yard	Vacuum suction point WC t.803-804 and clean water	vacuum suction device	60.21354	24.921732	803-804			Vacuum suction point and cold water between t.803-804 R804 11
ILR227	1109	llmala railway yard	Vacuum suction point WC t.803-804 and clean water	vacuum suction device	60.213663	24.921848	803-804			Vacuum suction point and cold water between t.803-804 R804 12
ILR228	1109	llmala railway yard	Vacuum suction point WC t.803-804 and clean water	vacuum suction device	60.213749	24.921823	803-804			Vacuum suction point and cold water between t.803-804 R804 13
ILR229	1109	llmala railway yard	Vacuum suction point WC t.803-804 and clean water	vacuum suction device	60.213918	24.921898	803-804			Vacuum suction point and cold water between t.803-804 R804 14
ILR230	1109	llmala railway yard	Vacuum suction point WC t.803-804 and clean water	vacuum suction device	60.213964	24.921992	803-804			Vacuum suction point and cold water between t.803-804 R804 15
ILR231	1109	llmala railway yard	Vacuum suction point WC t.803-804 and clean water	vacuum suction device	60.214095	24.922054	803-804			Vacuum suction point and cold water between t.803-804 R804 16
ILR232	1109	llmala railway yard	Vacuum suction point WC t.803-804 and clean water	vacuum suction device	60.214232	24.922147	803-804			Vacuum suction point and cold water between t.803-804 R804 17
ILR233	1109	llmala railway yard	Vacuum suction point WC t.803-804 and clean water	vacuum suction device	60.214322	24.922225	803-804			Vacuum suction point and cold water between t.803-804 R804 18
ILR234	1109	llmala railway yard	Vacuum suction point WC t.803-804 and clean water	vacuum suction device	60.214469	24.922354	803-804			Vacuum suction point and cold water between t.803-804 R804 19
ILR235	1109	llmala railway yard	Vacuum suction point WC t.803-804 and clean water	vacuum suction device	60.214574	24.922445	803-804			Vacuum suction point and cold water between t.803-804 R804 20
ILR236	1109	llmala railway yard	Vacuum suction point WC t.803-804 and clean water	vacuum suction device	60.214685	24.922477	803-804			Vacuum suction point and cold water between t.803-804 R804 21
ILR237	1109	llmala railway yard	Vacuum suction point WC t.803-804 and clean water	vacuum suction device	60.214782	24.922529	803-804			Vacuum suction point and cold water between t.803-804 R804 22
ILR238	1109	llmala railway yard	Vacuum suction point WC t.803-804 and clean water	vacuum suction device	60.214913	24.922566	803-804			Vacuum suction point and cold water between t.803-804 R804 23
ILR239	1109	llmala railway yard	Vacuum suction point WC t.803-804 and clean water	vacuum suction device	60.21507	24.922666	803-804			Vacuum suction point and cold water between t.803-804 R804 24
ILR240	1109	Ilmala railway yard	Vacuum suction point WC t.803-804 and clean water	vacuum suction device	60.215254	24.922812	803-804			Vacuum suction point and cold water between t.803-804 R804 25
ILR241	1109	llmala railway yard	Vacuum suction point WC t.803-804 and clean water	vacuum suction device	60.215366	24.92281	803-804			Vacuum suction point and cold water between t.803-804 R804 26
ILR242	1109	llmala railway yard	Vacuum suction point WC t.803-804 and clean water	vacuum suction device	60.215482	24.922952	803-804			Vacuum suction point and cold water between t.803-804 R804 27
ILR243	1109	llmala railway yard	Vacuum suction point WC t.803-804 and clean water	vacuum suction device	60.215589	24.923195	803-804			Vacuum suction point and cold water between t.803-804 R804 28
ILR244	1109	Ilmala railway yard	Vacuum suction point WC t.803-804 and clean water	vacuum suction device	60.215689	24.923132	803-804			Vacuum suction point and cold water between t.803-804 R804 29
ILR245	1109	llmala railway yard	Vacuum suction point WC t.803-804 and clean water	vacuum suction device	60.215813	24.923154	803-804			Vacuum suction point, no cold water hose between t. 803-804 R804 30
ILR246	1109	Ilmala railway vard	Sanding service Helsinki	hiekanantolaite	60.20929	24.925394	608			Also water hose reel and glass and windscreen washing fluid as well as outdoor connection 400V 63A
ILR247	1109	Ilmala railway yard	Sanding service Helsinki Ilmala	hiekanantolaite	60.20929	24.925498	607			Sanding service Helsinki Ilmala t.607-608 Water hose reel and windscreen washing fluid

ID	Line section no	Line section	Railway device/building description	Туре	Coordinates (N)	Coordinates (E)	Track	Owner of the device or building	Maintainer of the device or building	Manager of the device or building	Further information
ILR248	1109	Ilmala railway yard	Sanding service Helsinki Ilmala	hiekanantolaite	60.209298	24.925503	607				400V 63A on the t.607 side
ILR249	1109	Ilmala railway yard	Vacuum suction point between t.601-602, maintenance platform for long-distance traffic	suction pump	60.210726	24.926682	601-602				R601 IMU 20
ILR250	1109	llmala railway yard	Vacuum suction point between t.601-602, maintenance platform for long-distance traffic	suction pump	60.21059	24.926673	601-602				R601 IMU 19
ILR251	1109	Ilmala railway yard	Vacuum suction point between t.601-602, maintenance platform for long-distance traffic	suction pump	60.210464	24.926635	601-602				R601 IMU 18
ILR252	1109	llmala railway yard	Vacuum suction point between t.601-602, maintenance platform for long-distance traffic	suction pump	60.21033	24.926577	601-602				R601 IMU 17
ILR253	1109	llmala railway yard	Vacuum suction point between t.601-602, maintenance platform for long-distance traffic	suction pump	60.210227	24.926617	601-602				R601 IMU 16
ILR254	1109	Ilmala railway yard	Vacuum suction point between t.601-602, maintenance platform for long-distance traffic	suction pump	60.210055	24.926509	601-602				R601 IMU 15
ILR255	1109	llmala railway yard	Vacuum suction point between t.601-602, maintenance platform for long-distance traffic	suction pump	60.209927	24.926424	601-602				R601 IMU 14
ILR256	1109	llmala railway yard	between t.601-602, maintenance platform for long-distance traffic	suction pump	60.20984	24.926503	601-602				R601 IMU 13
ILR257	1109	llmala railway yard	Vacuum suction point between t.601-602, maintenance platform for long-distance traffic	suction pump	60.209779	24.92636	601-602				R601 IMU 12
ILR258	1109	llmala railway yard	Vacuum suction point between t.601-602, maintenance platform for long-distance traffic	suction pump	60.209588	24.926064	601-602				R601 IMU 11
ILR259	1109	llmala railway yard	Vacuum suction point between t.601-602, maintenance platform for long-distance traffic	suction pump	60.209533	24.926238	601-602				R601 IMU 10
ILR260	1109	llmala railway yard	Vacuum suction point between t.601-602, maintenance platform for long-distance traffic	suction pump	60.209411	24.92623	601-602				R601 IMU 09
ILR261	1109	llmala railway yard	Vacuum suction point between t.601-602, maintenance platform for long-distance traffic	suction pump	60.209309	24.92619	601-602				R601 IMU 08
ILR262	1109	Ilmala railway yard	Vacuum suction point between t.601-602, maintenance platform for long-distance traffic	suction pump	60.20927	24.926208	601-602				R601 IMU 07
ILR263	1109	llmala railway yard	Vacuum suction point between t.601-602, maintenance platform for long-distance traffic	suction pump	60.209065	24.926213	601-602				R601 IMU 06
ILR264	1109	llmala railway yard	Vacuum suction point between t.601-602, maintenance platform for long-distance traffic	suction pump	60.208933	24.9261	601-602				R601 IMU 05

APPENDIX 35 /11(20)

ID	Line section no	Line section	Railway device/building description	Туре	Coordinates (N)	Coordinates (E)	Track	Owner of the device or building	Maintainer of the device or building	Manager of the device or building	Further information
ILR265	1109	llmala railway yard	Vacuum suction point between t.601-602, maintenance platform for long-distance traffic	suction pump	60.208856	24.926153	601-602	2 dirating			R601 IMU 04
ILR266	1109	llmala railway yard	Vacuum suction point between t.601-602, maintenance platform for long-distance traffic	suction pump	60.208708	24.926072	601-602				R601 IMU 03
ILR267	1109	llmala railway yard	between t.601-602, maintenance platform for long-distance traffic	suction pump	60.20861	24.926105	601-602				R601 IMU 02
ILR268	1109	llmala railway yard	Vacuum suction point between t.601-602, maintenance platform for long-distance traffic	suction pump	60.208459	24.926144	601-602				R601 IMU 01
ILR269	1109	llmala railway yard	Vacuum suction point between t.603-604, maintenance platform for long-distance traffic	suction pump	60.208386	24.92586	603-604				R603 IMU 01
ILR270	1109	llmala railway yard	Vacuum suction point between t.603-604, maintenance platform for long-distance traffic	suction pump	60.208521	24.925898	603-604				R603 IMU 02
ILR271	1109	llmala railway yard	Vacuum suction point between t.603-604, maintenance platform for long-distance traffic	suction pump	60.208672	24.925979	603-604				R603 IMU 03
ILR272	1109	llmala railway yard	Vacuum suction point between t.603-604, maintenance platform for long-distance traffic	suction pump	60.208729	24.925885	603-604				R603 IMU 04
ILR273	1109	llmala railway yard	Vacuum suction point between t.603-604, maintenance platform for long-distance traffic	suction pump	60.208896	24.926088	603-604				R603 IMU 05
ILR274	1109	llmala railway yard	Vacuum suction point between t.603-604, maintenance platform for long-distance traffic	suction pump	60.209027	24.925981	603-604				R603 IMU 06
ILR275	1109	llmala railway yard	Vacuum suction point between t.603-604, maintenance platform for long-distance traffic	suction pump	60.209157	24.92612	603-604				R603 IMU 07
ILR276	1109	llmala railway yard	Vacuum suction point between t.603-604, maintenance platform for long-distance traffic	suction pump	60.209283	24.926016	603-604				R603 IMU 08
ILR277	1109	llmala railway yard	Vacuum suction point between t.603-604, maintenance platform for long-distance traffic	suction pump	60.209258	24.926099	603-604				R603 IMU 09
ILR278	1109	llmala railway yard	Vacuum suction point between t.603-604, maintenance platform for long-distance traffic	suction pump	60.209371	24.926133	603-604				R603 IMU 10
ILR279	1109	llmala railway yard	Vacuum suction point between t.603-604, maintenance platform for long-distance traffic	suction pump	60.209551	24.926153	603-604				R603 IMU 11
ILR280	1109	llmala railway yard	Vacuum suction point between t.603-604, maintenance platform for long-distance traffic	suction pump	60.209678	24.926185	603-604				R603 IMU 12
APPENDIX 3S /12(20)

ID	Line section no	Line section	Railway device/building description	Туре	Coordinates (N)	Coordinates (E)	Track	Owner of the device or building	Maintainer of the device or building	Manager of the device or building	Further information
ILR281	1109	llmala railway yard	Vacuum suction point between t.603-604, maintenance platform for long-distance traffic	suction pump	60.209857	24.926154	603-604				R603 IMU 13
ILR282	1109	llmala railway yard	Vacuum suction point between t.603-604, maintenance platform for long-distance traffic	suction pump	60.209923	24.926188	603-604				R603 IMU 14
ILR283	1109	llmala railway yard	Vacuum suction point between t.603-604, maintenance platform for long-distance traffic	suction pump	60.210025	24.926216	603-604				R603 IMU 15
ILR284	1109	llmala railway yard	Vacuum suction point between t.603-604, maintenance platform for long-distance traffic	suction pump	60.210145	24.926285	603-604				R603 IMU 16
ILR285	1109	llmala railway yard	Vacuum suction point between t.603-604, maintenance platform for long-distance traffic	suction pump	60.210263	24.926298	603-604				R603 IMU 17
ILR286	1109	llmala railway yard	Vacuum suction point between t.603-604, maintenance platform for long-distance traffic	suction pump	60.210381	24.926316	603-604				R603 IMU 18
ILR287	1109	llmala railway yard	Vacuum suction point between t.605-606, maintenance platform for long-distance traffic	suction pump	60.210242	24.925995	605-606				R605 IMU 12
ILR288	1109	llmala railway yard	Vacuum suction point between t.605-606, maintenance platform for long-distance traffic	suction pump	60.210049	24.925913	605-606				R605 IMU 11
ILR289	1109	llmala railway yard	Vacuum suction point between t.605-606, maintenance platform for long-distance traffic	suction pump	60.209956	24.925907	605-606				R605 IMU 10
ILR290	1109	llmala railway yard	Vacuum suction point between t.605-606, maintenance platform for long-distance traffic	suction pump	60.209839	24.925873	605-606				R605 IMU 09
ILR291	1109	Ilmala railway yard	Vacuum suction point between t.605-606, maintenance platform for long-distance traffic	suction pump	60.209755	24.925833	605-606				R605 IMU 08
ILR292	1109	llmala railway yard	Vacuum suction point between t.605-606, maintenance platform for long-distance traffic	suction pump	60.209618	24.925806	605-606				R605 IMU 07
ILR293	1109	llmala railway yard	Vacuum suction point between t.605-606, maintenance platform for long-distance traffic	suction pump	60.209485	24.92579	605-606				R605 IMU 06
ILR294	1109	llmala railway yard	Vacuum suction point between t.605-606, maintenance platform for long-distance traffic	suction pump	60.209383	24.92584	605-606				R605 IMU 05
ILR295	1109	llmala railway yard	Vacuum suction point between t.605-606, maintenance platform for	suction pump	60.209347	24.925837	605-606				R605 IMU 04
ILR296	1109	llmala railway yard	Vacuum suction point between t.605-606, maintenance platform for long-distance traffic	suction pump	60.209165	24.925702	605-606				R605 IMU 03

APPENDIX 3S /13(20)

	Line		Deilway davies/building		Coordinator	Coordinator		Owner of the	Maintainer of the device	Manager of the	
ID	section	Line section	description	Туре	(N)	(E)	Track	device or	or building	device or building	Further information
	no		Vacuum suction point					building			
ILR297	1109	Ilmala railway	between t.605-606,	suction pump	60.209044	24.925676	605-606				R605 IMU 02
		yard	maintenance platform for long-distance traffic								
			Vacuum suction point	-							
ILR298	1109	limala railway	between t.605-606, maintenance platform for	suction pump	60.208935	24.925808	605-606				R605 IMU 01
		,	long-distance traffic	-							
ILR299	1109	Ilmala railway vard	Vacuum suction point between t.731-732	suction pump	60.213363	24.929039	731-732				R731 IMU 28
ILR300	1109	Ilmala railway	Vacuum suction point	suction pump	60.213159	24.928958	731-732				R731 IMU 27
	1100	yard Ilmala railway	between t.731-732 Vacuum suction point		00 040070		704 700				D704 1941 00
ILR301	1109	yard	between t.731-732	suction pump	60.213078	24.928904	/31-/32				R731 IMU 26
ILR302	1109	jimala raliway yard	between t.731-732	suction pump	60.212979	24.928924	731-732				R731 IMU 25
ILR303	1109	Ilmala railway	Vacuum suction point	suction pump	60.212961	24.928811	731-732				R731 IMU 24
II P204	1100	Ilmala railway	Vacuum suction point	suction nump	60 212711	24 029742	721 722				P721 IMI 122
121304	1109	yard Ilmala railway	between t.731-732		00.212711	27.320142	131-132				
ILR305	1109	yard	between t.731-732	suction pump	60.212621	24.928685	731-732				R731 IMU 22
ILR306	1109	Ilmala railway	Vacuum suction point	suction pump	60.212512	24.92867	731-732				R731 IMU 21
II R307	1109	Ilmala railway	Vacuum suction point	suction pump	60 212402	24 928579	731-732				B731 IMU 20
		yard Ilmala railway	between t.731-732 Vacuum suction point								
ILR308	1109	yard	between t.731-732	suction pump	60.212271	24.928504	731-732				R731 IMU 19
ILR309	1109	limala railway vard	Vacuum suction point between t.731-732	suction pump	60.212173	24.928422	731-732				R731 IMU 18
ILR310	1109	İlmala railway	Vacuum suction point	suction pump	60.212067	24.928169	731-732				R731 IMU 17
II D244	4400	limala railway	Vacuum suction point		CO 044045	04.000004	704 700				D724 INU 40
ILR311	1109	yard	between t.731-732	suction pump	60.211945	24.928091	/31-/32				R731 IMU 16
ILR312	1109	yard	between t.731-732	suction pump	60.211786	24.928009	731-732				R731 IMU 15
ILR313	1109	Ilmala railway	Vacuum suction point	suction pump	60.211695	24.927841	731-732				R731 IMU 14
II R314	1109	Ilmala railway	Vacuum suction point	suction nump	60 211546	24 927625	731-732				R731 IMI 13
	1100	yard Ilmala railway	between t.731-732		00.211040	24.021020	701 702				
ILR315	1109	yard	between t.731-732	suction pump	60.211506	24.927684	731-732				R731 IMU 12
ILR316	1109	llmala railway vard	Vacuum suction point between t.731-732	suction pump	60.21139	24.927622	731-732				R731 IMU 11
ILR317	1109	İlmala railway	Vacuum suction point	suction pump	60.21124	24.927593	731-732				R731 IMU 10
II D240	4400	yard Ilmala railway	Vacuum suction point		CO 0444CC	04 007500	704 700				B724 INU 00
ILR318	1109	yard	between t.731-732	suction pump	00.211100	24.927588	/31-/32				R731 IMO 09
ILR319	1109	yard	between t.731-732	suction pump	60.21095	24.927333	731-732				R731 IMU 08
ILR320	1109	Ilmala railway	Vacuum suction point	suction pump	60.21086	24.927274	731-732				R731 IMU 07
II R321	1109	Ilmala railway	Vacuum suction point	suction nump	60 21081	24 927336	731-732				B731 IMU 06
.21.021	1103	yard Ilmala railway	between t.731-732	easilon pump	50.21001	27.027000	101-102				
ILR322	1109	yard	between t.731-732	suction pump	60.210719	24.927401	731-732				R731 IMU 05
ILR323	1109	Ilmala railway vard	Vacuum suction point between t.731-732	suction pump	60.210624	24.92728	731-732				R731 IMU 04
ILR324	1109	Ilmala railway	Vacuum suction point	suction pump	60.210411	24.927247	731-732				R731 IMU 03
	4400	yard Ilmala railway	between t.731-732 Vacuum suction point		00.04000.1	04.000046	704 700				D704 1041 00
ILR325	1109	yard	between t.731-732	suction pump	60.210304	24.926912	/31-/32				R731 IMU 02
ILR326	4400	innaia raliway	vacuum suction point	suction pump	60.210205	24.926672	731-732				R731 IMU 01
	1109	yard	between t.731-732								

ID	Line section no	Line section	Railway device/building description	Туре	Coordinates (N)	Coordinates (E)	Track	Owner of the device or building	Maintainer of the device or building	Manager of the device or building	Further information
ILR328	1109	Ilmala railway vard	Steam, water and air	Steam, water and air outlet	60.213396	24.929084	731-732	building			R731 LVI-Ö 15 Cold and hot water, compressed air and fuel oil. Collecting pan on both tracks at each outlet
ILR329	1109	Ilmala railway	Steam, water and air	Steam, water and air outlet	60.213096	24.928879	731-732				R731 LVI-O 14 Cold and hot water, compressed air and fuel oil. Collecting pan on both
ILR330	1109	Ilmala railway	Steam, water and air	Steam, water and air outlet	60.21292	24.928737	731-732				R731 LVI-Ö 13 Cold and hot water, compressed air and fuel oil. Collecting pan on both
ILR331	1109	yard Ilmala railway	Steam, water and air	Steam, water and air outlet	60.212649	24.928743	731-732				tracks at each outlet. R731 LVI-Ö 12 Cold and hot water, compressed air and fuel oil. Collecting pan on both
ILR332	1109	yard Ilmala railway	Steam, water and air	Steam, water and air outlet	60.212423	24,928572	731-732				tracks at each outlet. R731 LVI-Ö 11 Cold and hot water, compressed air and fuel oil. Collecting pan on both
IL D222	1100	yard Ilmala railway	outlets t.731-732 Steam, water and air	Steam, water and air outlet	60 212204	24 029471	721 722				tracks at each outlet. R731 LVI-Ö 10 Cold and hot water, compressed air and fuel oil. Collecting pan on both
ILK333	1109	yard Ilmala railway	outlets t.731-732 Steam, water and air		00.212204	24.920471	731-732				tracks at each outlet. R731 LVI-Ö 09 Cold and hot water. compressed air and fuel oil. Collecting pan on both
ILR334	1109	yard Ilmala railway	outlets t.731-732	Steam, water and air outlet	60.21196	24.928088	731-732				tracks at each outlet.
ILR335	1109	yard	outlets t.731-732	Steam, water and air outlet	60.21173	24.927857	731-732				tracks at each outlet.
ILR336	1109	iimaia raiiway yard	outlets t.731-732	Steam, water and air outlet	60.211497	24.927606	731-732				tracks at each outlet.
ILR337	1109	Ilmala railway yard	Steam, water and air outlets t.731-732	Steam, water and air outlet	60.211278	24.927566	731-732				R731 LVI-O 06 Cold and hot water, compressed air and fuel oil. Collecting pan on both tracks at each outlet.
ILR338	1109	Ilmala railway yard	Steam, water and air outlets t.731-732	Steam, water and air outlet	60.211042	24.927538	731-732				R731 LVI-Ö 05 Cold and hot water, compressed air and fuel oil. Collecting pan on both tracks at each outlet.
ILR339	1109	, Ilmala railway vard	Steam, water and air outlets t 731-732	Steam, water and air outlet	60.210797	24.927337	731-732				R731 LVI-Ö 04 Cold and hot water, compressed air and fuel oil. Collecting pan on both tracks at each outlet.
ILR340	1109	Ilmala railway	Steam, water and air	Steam, water and air outlet	60.210671	24.927329	731-732				R731 LVI-Ö 03 Cold and hot water, compressed air and fuel oil. Collecting pan on both
ILR341	1109	Ilmala railway	Steam, water and air	Steam, water and air outlet	60.21033	24.927027	731-732				R731 LVI-Ö 02 Cold and hot water, compressed air and fuel oil. Collecting pan on both
ILR342	1109	Ilmala railway	Steam, water and air	Steam, water and air outlet	60.210103	24.926956	731-732				R731 LVI-Ö 01 Cold and hot water, compressed air and fuel oil. Collecting pan on both
		yard Ilmala railway	Steam water and air								tracks at each outlet R799 LVI1 between t. 799-800. Tracks for Russian train services and their expenses
ILR343	1109	yard	outlets t.799-800	Steam, water and air outlet	60.212545	24.921788	799-800				(incl. outlets) are paid by the FTIA - not by VR's Helsinki depot. Compressed air and water at the outlet.
ILR344	1109	Ilmala railway yard	Steam, water and air outlets t.799-800	Steam, water and air outlet	60.213005	24.922067	799-800				R799 LVI2 between t. 799-800. Tracks for Russian train services and their expenses (incl. outlets) are paid by the FTIA - not by VR's Helsinki depot. Compressed air and water at the outlet.
ILR345	1109	llmala railway yard	Steam, water and air outlets t.799-800	Steam, water and air outlet	60.213546	24.922325	799-800				R799 LVI3 between t. 799-800. Tracks for Russian train services and their expenses (incl. outlets) are paid by the FTIA - not by VR's Helsinki depot. Compressed air and water at the outlet.
ILR346	1109	Ilmala railway yard	Steam, water and air outlets t.799-800	Steam, water and air outlet	60.213887	24.922483	799-800				R799 LVI4 between t. 799-800. Tracks for Russian train services and their expenses (incl. outlets) are paid by the FTIA - not by VR's Helsinki depot. Compressed air and water at the outlet
II D247	1100	Ilmala railway	Steam, water and air	Steam water and air outlet	60 214269	24 022722	700 900				R799 LVI5 between t. 799-800. Tracks for Russian train services and their expenses
ILING47	1109	yard	outlets t.799-800		00.214300	24.922122	799-000				water at the outlet.
ILR348	1109	llmala railway yard	Steam, water and air outlets t.799-800	Steam, water and air outlet	60.21478	24.922886	799-800				K1/99 LVIb between 1. / 99-800. Tracks for Russian train services and their expenses (incl. outlets) are paid by the FTIA - not by VR's Helsinki depot. Compressed air and water at the outlet.
ILR349	1109	llmala railway yard	Steam, water and air outlets t.799-800	Steam, water and air outlet	60.215132	24.923382	799-800				R799 LVI7 between t. 799-800. Tracks for Russian train services and their expenses (incl. outlets) are paid by the FTIA - not by VR's Helsinki depot. Compressed air and water at the outlet.
ILR350	1109	llmala railway yard	Steam, water and air outlets t.799-800	Steam, water and air outlet	60.215359	24.924206	799-800				R799 LVI8 between t. 799-800. Tracks for Russian train services and their expenses (incl. outlets) are paid by the FTIA - not by VR's Helsinki depot. Compressed air and water of the outlet
			Stoom water and sir								R9 LVI-16 outlet between t.709-710. Compressed air, hot and cold water and steam.
ILR351	1109	Ilmala railway yard	outlets t.708, t. 709-710	Steam, water and air outlet	60.210367	24.929728	709-710				LVI-16 at the Helsinki end. Collecting pans on both tracks at each outlet. Certain outlet
	_		anu/ 11-/ 12	_							of them have two 240V 16A.
ILR352	1109	Ilmala railway yard	Steam, water and air outlets t.708, t. 709-710 and t.711-712	Steam, water and air outlet	60.210543	24.929854	709-710				R9 LVI-15 between t.709-710. Compressed air, hot and cold water and steam. Vacuum main discontinued at all outlets and fuel oil discontinued at posts R9 LVI-8 - R9 LVI-16 at the Helsinki end. Collecting pans on both tracks at each outlet. Certain outlet connections at the Hki end and certain outlets at the Käpylä end are identical, nearly all of them have two 240V 16A.

ID	Line section no	Line section	Railway device/building description	Туре	Coordinates (N)	Coordinates (E)	Track	Owner of the device or building	Maintainer of the device or building	Manager of the device or building	Further information
ILR353	1109	llmala railway yard	Steam, water and air outlets t.708, t. 709-710 and t.711-712	Steam, water and air outlet	60.210803	24.930071	709-710				R9 LVI-14 between t.709-710. Compressed air, hot and cold water and steam. Vacuum main discontinued at all outlets and fuel oil discontinued at posts R9 LVI-8 - R9 LVI-16 at the Helsinki end. Collecting pans on both tracks at each outlet. Certain outlet connections at the Hki end and certain outlets at the Käpylä end are identical, nearly all of them have two 240V 16A.
ILR354	1109	llmala railway yard	Steam, water and air outlets t.708, t. 709-710 and t.711-712	Steam, water and air outlet	60.211068	24.930071	709-710	I			R9 LVI-13 between t.709-710. Compressed air, hot and cold water and steam. Vacuum main discontinued at all outlets and fuel oil discontinued at posts R9 LVI-8 - R9 LVI-16 at the Helsinki end. Collecting pans on both tracks at each outlet. Certain outlet connections at the Hki end and certain outlets at the Käpylä end are identical, nearly all of them have two 240V 16A.
ILR355	1109	llmala railway yard	Steam, water and air outlets t.708, t. 709-710 and t.711-712	Steam, water and air outlet	60.211269	24.930262	709-710	I			R9 LVI-12 between t.709-710. Compressed air, hot and cold water and steam. Vacuum main discontinued at all outlets and fuel oil discontinued at posts R9 LVI-8 - R9 LVI-16 at the Helsinki end. Collecting pans on both tracks at each outlet. Certain outlet connections at the Hki end and certain outlets at the Käpylä end are identical, nearly all of them have two 240V 16A.
ILR356	1109	llmala railway yard	Steam, water and air outlets t.708, t. 709-710 and t.711-712	Steam, water and air outlet	60.2115	24.930427	709-710	I			R9 LVI-11 between t.709-710. Compressed air, hot and cold water and steam. Vacuum main discontinued at all outlets and fuel oil discontinued at posts R9 LVI-8 - R9 LVI-16 at the Helsinki end. Collecting pans on both tracks at each outlet. Certain outlet connections at the Hki end and certain outlets at the Käpylä end are identical, nearly all of them have two 240V 16A.
ILR357	1109	llmala railway yard	Steam, water and air outlets t.708, t. 709-710 and t.711-712	Steam, water and air outlet	60.211756	24.930546	709-710	1			R9 LVI-10 between t.709-710. Compressed air, hot and cold water and steam. Vacuum main discontinued at all outlets and fuel oil discontinued at posts R9 LVI-8 - R9 LVI-16 at the Helsinki end. Collecting pans on both tracks at each outlet. Certain outlet connections at the Hki end and certain outlets at the Käpylä end are identical, nearly all of them have two 240V 16A.
ILR358	1109	llmala railway yard	Steam, water and air outlets t.708, t. 709-710 and t.711-712	Steam, water and air outlet	60.211971	24.930681	709-710	1			R9 LVI-9 between t.709-710. Compressed air, hot and cold water and steam. Vacuum main discontinued at all outlets and fuel oil discontinued at posts R9 LVI-8 - R9 LVI-16 at the Helsinki end. Collecting pans on both tracks at each outlet.
ILR359	1109	llmala railway yard	Steam, water and air outlets t.708, t. 709-710 and t.711-712	Steam, water and air outlet	60.212176	24.930726	709-710	I			R9-LVI-8 between t.709-710. Compressed air, hot and cold water and steam. Vacuum main discontinued at all outlets and fuel oil discontinued at posts R9 LVI-8 - R9 LVI-16 at the Helsinki end. Collecting pans on both tracks at each outlet. Certain outlet connections at the Hki end and certain outlets at the Käpylä end are identical, nearly all of them have two 240V 16A.
ILR360	1109	llmala railway yard	Steam, water and air outlets t.708, t. 709-710 and t.711-712	Steam, water and air outlet	60.212403	24.930897	709-710	I.			R9 LVI-7 fuel oil, Compressed air, hot and cold water and steam. Vacuum main discontinued at all outlets. Collecting pans on both tracks at each outlet. Certain outlet connections at the Hki end and certain outlets at the Käpylä end are identical, nearly all of them have two 240V 16A.
ILR361	1109	llmala railway yard	Steam, water and air outlets t.708, t. 709-710 and t.711-712	Steam, water and air outlet	60.212605	24.93106	709-710	1			R9 LVI-6 pö, Paineilma, lämminvesi, kylmävesi ja höyry. Alipaineviemäri poistettu käytöstä kaikista posteista. Jokaisen postin kohdalla varoallas molemmilla raiteilla. Postin Hki päässä tietyt liitännät ja Käpylän päässä tietyt, postit identtisiä, lähes kaikissa lisäksi 240V 16A 2 kpl.
ILR362	1109	Ilmala railway yard	Steam, water and air outlets t.708, t. 709-710 and t.711-712	Steam, water and air outlet	60.212838	24.931204	709-710	1			R9 LVI-5 fuel oil between t.709-710 Compressed air, hot and cold water and steam. Vacuum main discontinued at all outlets. Collecting pan on both tracks at each outlet. Certain outlet connections at the Hki end and certain outlets at the Käpylä end are identical, nearly all of them have two 240V 16A.
ILR363	1109	llmala railway yard	Steam, water and air outlets t.708, t. 709-710 and t.711-712	Steam, water and air outlet	60.213072	24.931284	709-710	I			R9 LVI-4 tuel oil between t./09-/10 Compressed air, hot and cold water and steam. Vacuum main discontinued at all outlets. Collecting pan on both tracks at each outlet. Certain outlet connections at the Hki end and certain outlets at the Käpylä end are identical nearly all of them have two 240V 16A.
ILR364	1109	Ilmala railway yard	Steam, water and air outlets t.708, t. 709-710 and t.711-712	Steam, water and air outlet	60.21328	24.931427	709-710	1			R9 LVI-3 fuel oil between t.709-710 Compressed air, hot and cold water and steam. Vacuum main discontinued at all outlets. Collecting pan on both tracks at each outlet. Certain outlet connections at the Hki end and certain outlets at the Käpylä end are identical. nearly all of them have two 240V 16A.
ILR365	1109	llmala railway yard	Steam, water and air outlets t.708, t. 709-710 and t.711-712	Steam, water and air outlet	60.21354	24.931618	709-710	I.			R9 LVI-2 fuel oil between t.709-710 Compressed air, hot and cold water and steam. Vacuum main discontinued at all outlets. Collecting pan on both tracks at each outlet. Certain outlet connections at the Hk end and certain outlets at the Käpylä end are identical, nearly all of them have two 240V 16A.
ILR366	1109	llmala railway yard	Steam, water and air outlets t.708, t. 709-710 and t.711-712	Steam, water and air outlet	60.213734	24.931594	709-710	I.			R9 LVI-1 fuel oil between t.709-710 Compressed air, hot and cold water and steam. Vacuum main discontinued at all outlets. Collecting pan on both tracks at each outlet. Certain outlet connections at the Hki end and certain outlets at the Käpylä end are identical, nearly all of them have two 240V 16A.
ILR368	1109	llmala railway yard	Steam, water and air outlets t.708, t. 709-710 and t.711-712	Steam, water and air outlet	60.213785	24.931372	711-712	!			R11 LVI-1 fuel oil between t.711-712 Compressed air, hot and cold water and steam. Vacuum main discontinued at all outlets. Collecting pan on both tracks at each outlet. Certain outlet connections at the Hki end and certain outlets at the Käpylä end are identical, nearly all of them have two 240V 16A.

ID	Line	Line continu	Railway device/building	<b>T</b>	Coordinates	Coordinates	Treats	Owner of the	Maintainer of the device	Manager of the	
UD	no	Line section	description	туре	(N)	(E)	ГГАСК	building	or building	device or building	rurther information
ILR369	1109	llmala railway yard	Steam, water and air outlets t.708, t. 709-710 and t.711-712	Steam, water and air outlet	60.213538	24.931167	711-712				R11 LVI-2 fuel oil between t.711-712 Compressed air, hot and cold water and steam. Vacuum main discontinued at all outlets. Collecting pan on both tracks at each outlet. Certain outlet connections at the Hki end and certain outlets at the Käpylä end are identical, nearly all of them have two 240V 16A.
ILR370	1109	Ilmala railway yard	Steam, water and air outlets t.708, t. 709-710 and t.711-712	Steam, water and air outlet	60.21332	24.931034	711-712				R11 LVI-3 fuel oil between t.711-712 Compressed air, hot and cold water and steam. Vacuum main discontinued at all outlets. Collecting pan on both tracks at each outlet. Certain outlet connections at the Hki end and certain outlets at the Käpylä end are identical, nearly all of them have two 240V 16A.
ILR371	1109	Ilmala railway yard	Steam, water and air outlets t.708, t. 709-710 and t.711-712	Steam, water and air outlet	60.213097	24.930935	711-712				R11 LVI-4 fuel oil between t.711-712 Compressed air, hot and cold water and steam. Vacuum main discontinued at all outlets. Collecting pan on both tracks at each outlet. Certain outlet connections at the Hki end and certain outlets at the Käpylä end are identical, nearly all of them have two 240V 16A.
ILR372	1109	llmala railway yard	Steam, water and air outlets t.708, t. 709-710 and t.711-712	Steam, water and air outlet	60.212852	24.930746	711-712				R11 LVI-5 fuel oil between t.711-712 Compressed air, hot and cold water and steam. Vacuum main discontinued at all outlets. Collecting pan on both tracks at each outlet. Certain outlet connections at the Hki end and certain outlets at the Käpylä end are identical, nearly all of them have two 240V 16A.
ILR373	1109	llmala railway yard	Steam, water and air outlets t.708, t. 709-710 and t.711-712	Steam, water and air outlet	60.212713	24.930758	711-712				R11 LVI-6 fuel oil between t.711-712 Compressed air, hot and cold water and steam. Vacuum main discontinued at all outlets. Collecting pan on both tracks at each outlet. Certain outlet connections at the Hki end and certain outlets at the Käpylä end are identical, nearly all of them have two 240V 16A.1.
ILR374	1109	Ilmala railway yard	Steam, water and air outlets t.708, t. 709-710 and t.711-712	Steam, water and air outlet	60.212404	24.930633	711-712				R11 LVI-7 fuel oil between t.711-712 Compressed air, hot and cold water and steam. Vacuum main discontinued at all outlets. Collecting pan on both tracks at each outlet. Certain outlet connections at the Hki end and certain outlets at the Käpylä end are identical, nearly all of them have two 240V 16A.
ILR375	1109	Ilmala railway yard	Steam, water and air outlets t.708, t. 709-710 and t.711-712	Steam, water and air outlet	60.212196	24.930531	711-712				R11 LVI-8 between t.711-712, Compressed air, hot and cold water and steam. Vacuum main discontinued at all outlets. Collecting pan on both tracks at each outlet. No fuel oil at outlets R11 LVI-8 - R11 LVI-16. Certain outlet connections at the Hki end and certain outlets at the Käpylä end are identical, nearly all of them have two 240V 16A.
ILR376	1109	llmala railway yard	Steam, water and air outlets t.708, t. 709-710 and t.711-712	Steam, water and air outlet	60.211958	24.930281	711-712				R11 LVI-9 between t.711-712, Compressed air, hot and cold water and steam. Vacuum main discontinued at all outlets. Collecting pan on both tracks at each outlet. No fuel oil at outlets R11 LVI-8 - R11 LVI-16. Certain outlet connections at the Hki end and certain outlets at the Käpylä end are identical, nearly all of them have two 240V 16A.
ILR377	1109	Ilmala railway yard	Steam, water and air outlets t.708, t. 709-710 and t.711-712	Steam, water and air outlet	60.211729	24.930179	711-712				R11 LVI-10 between t.711-712, Compressed air, hot and cold water and steam. Vacuum main discontinued at all outlets. Collecting pan on both tracks at each outlet. No fuel oil at outlets R11 LVI-8 - R11 LVI-16. Certain outlet connections at the Hki end and certain outlets at the Käpylä end are identical, nearly all of them have two 240V 16A
ILR378	1109	llmala railway yard	Steam, water and air outlets t.708, t. 709-710 and t.711-712	Steam, water and air outlet	60.21155	24.93019	711-712				R11 LVI-11 between t.711-712, Compressed air, hot and cold water and steam. Vacuum main discontinued at all outlets. Collecting pan on both tracks at each outlet. No fuel oil at outlets R11 LVI-8 - R11 LVI-16. Certain outlet connections at the Hki end and certain outlets at the Käpylä end are identical, nearly all of them have two 240V 16A.
ILR379	1109	Ilmala railway yard	Steam, water and air outlets t.708, t. 709-710 and t.711-712	Steam, water and air outlet	60.211278	24.92998	711-712				R11 LVI-12 between t.711-712, Compressed air, hot and cold water and steam. Vacuum main discontinued at all outlets. Collecting pan on both tracks at each outlet. No fuel oil at outlets R11 LVI-8 - R11 LVI-16. Certain outlet connections at the Hki end and certain outlets at the Käpylä end are identical, nearly all of them have two 240V 16A
ILR380	1109	llmala railway yard	Steam, water and air outlets t.708, t. 709-710 and t.711-712	Steam, water and air outlet	60.211084	24.929908	711-712				R11 LVI-13 between t.711-712, Compressed air, hot and cold water and steam. Vacuum main discontinued at all outlets. Collecting pan on both tracks at each outlet. No fuel oil at outlets R11 LVI-8 - R11 LVI-16. Certain outlet connections at the Hki end and certain outlets at the Käpylä end are identical, nearly all of them have two 240V 16A.
ILR381	1109	llmala railway yard	Steam, water and air outlets t.708, t. 709-710 and t.711-712	Steam, water and air outlet	60.210906	24.92979	711-712				R11 LVI-14 between t.711-712, Compressed air, hot and cold water and steam. Vacuum main discontinued at all outlets. Collecting pan on both tracks at each outlet. No fuel oil at outlets R11 LVI-8 - R11 LVI-16. Certain outlet connections at the Hki end and certain outlets at the Käpylä end are identical, nearly all of them have two 240V 16A
ILR382	1109	llmala railway yard	Steam, water and air outlets t.708, t. 709-710 and t.711-712	Steam, water and air outlet	60.210622	24.929717	711-712				Nor., R11 LVI-15 between t.711-712, Compressed air, hot and cold water and steam. Vacuum main discontinued at all outlets. Collecting pan on both tracks at each outlet. No fuel oil at outlets R11 LVI-8 - R11 LVI-16. Certain outlet connections at the Hki end and certain outlets at the Käpylä end are identical, nearly all of them have two 240V 16A.

ID	Line section no	Line section	Railway device/building description	Туре	Coordinates (N)	Coordinates (E)	Track	Owner of the device or building	Maintainer of the device or building	Manager of the device or building	Further information
ILR383	1109	Ilmala railway yard	Steam, water and air outlets t.708, t. 709-710 and t.711-712	Steam, water and air outlet	60.210399	24.929491	711-712				R11 LVI-16 between t.711-712, Compressed air, hot and cold water and steam. Vacuum main discontinued at all outlets. Collecting pan on both tracks at each outlet. No fuel oil at outlets R11 LVI-8 - R11 LVI-16. Certain outlet connections at the Hki end and certain outlets at the Käpylä end are identical, nearly all of them have two 240V 16A.
ILR384	1109	Ilmala railway yard	Steam, water and air outlets between t. 601-602	Steam, water and air outlet	60.210758	24.92668	601-602				R601 LVI 11 At these outlets: hot and cold water, compressed air. Fuel oil at outlets with the symbol Ö, collecting pans on both tracks at these outlets.
ILR385	1109	llmala railway yard	Steam, water and air outlets between t. 601-602	Steam, water and air outlet	60.210479	24.926608	601-602				R601 LVI 10 At these outlets: hot and cold water, compressed air. Fuel oil at outlets with the symbol Ö, collecting pans on both tracks at these outlets.
ILR386	1109	llmala railway yard	Steam, water and air outlets between t. 601-602	Steam, water and air outlet	60.210261	24.926605	601-602				R601 LVI-Ö 09 At these outlets: hot and cold water, compressed air. Fuel oil at outlets with the symbol Ö, collecting pans on both tracks at these outlets.
ILR387	1109	llmala railway yard	Steam, water and air outlets between t. 601-602	Steam, water and air outlet	60.209975	24.926482	601-602				R601 LVI-Ö 08 At these outlets: hot and cold water, compressed air. Fuel oil at outlets with the symbol Ö, collecting pans on both tracks at these outlets.
ILR388	1109	llmala railway yard	Steam, water and air outlets between t. 601-602	Steam, water and air outlet	60.209782	24.92645	601-602				R601 LVI-Ö 07 At these outlets: hot and cold water, compressed air. Fuel oil at outlets with the symbol Ö, collecting pans on both tracks at these outlets.
ILR389	1109	Ilmala railway yard	Steam, water and air outlets between t. 601-602	Steam, water and air outlet	60.209575	24.926195	601-602				R601 LVI-Ő 06 At these outlets: hot and cold water, compressed air. Fuel oil at outlets with the symbol Ö, collecting pans on both tracks at these outlets.
ILR390	1109	llmala railway yard	Steam, water and air outlets between t. 601-602	Steam, water and air outlet	60.209344	24.92621	601-602				R601 LVI-Ö 05 At these outlets: hot and cold water, compressed air. Fuel oil at outlets with the symbol $\ddot{O}_i$ collecting pans on both tracks at these outlets
ILR391	1109	llmala railway yard	Steam, water and air outlets between t. 601-602	Steam, water and air outlet	60.209154	24.926299	601-602				R601 LVI-Ö 04 At these outlets: hot and cold water, compressed air. Fuel oil at outlets with the symbol Ö, collecting pans on both tracks at these outlets.
ILR392	1109	llmala railway yard	Steam, water and air outlets between t. 601-602	Steam, water and air outlet	60.208865	24.92619	601-602				R601 LVI-Ő 03 At these outlets: hot and cold water, compressed air. Fuel oil at outlets with the symbol Ő, collecting pans on both tracks at these outlets.
ILR393	1109	llmala railway yard	Steam, water and air outlets between t. 601-602	Steam, water and air outlet	60.208643	24.926076	601-602				R601 LVI 02 At these outlets: hot and cold water, compressed air. Fuel oil at outlets with the symbol $\ddot{O}$ , collecting pans on both tracks at these outlets.
ILR394	1109	llmala railway yard	Steam, water and air outlets between t. 601-602	Steam, water and air outlet	60.208417	24.926179	601-602				R601 LVI 01 At these outlets: hot and cold water, compressed air. Fuel oil at outlets with the symbol $\ddot{O}$ , collecting pans on both tracks at these outlets.
ILR395	1109	llmala railway yard	Steam, water and air outlets between t. 603-604	Steam, water and air outlet	60.208322	24.925931	603-604				R603 LVI 01
ILR396	1109	llmala railway yard	Steam, water and air outlets between t. 603-604	Steam, water and air outlet	60.208617	24.925838	603-604				R603 LVI 02
ILR397	1109	llmala railway yard	Steam, water and air outlets between t. 603-604	Steam, water and air outlet	60.208937	24.925957	603-604				R603 LVI-Ö 03
ILR398	1109	llmala railway yard	Steam, water and air outlets between t. 603-604	Steam, water and air outlet	60.209034	24.926033	603-604				R603 LVI-Ö 04
ILR399	1109	llmala railway yard	Steam, water and air outlets between t. 603-604	Steam, water and air outlet	60.209261	24.926103	603-604				R603 LVI-Ö 05
ILR400	1109	llmala railway yard	Steam, water and air outlets between t. 603-604	Steam, water and air outlet	60.209493	24.926178	603-604				R603 LVI-Ö 06
ILR401	1109	llmala railway yard	Steam, water and air outlets between t. 603-604	Steam, water and air outlet	60.209737	24.926176	603-604				R603 LVI-Ö 07
ILR402	1109	llmala railway yard	Steam, water and air outlets between t. 603-604	Steam, water and air outlet	60.20997	24.926214	603-604				R603 LVI-Ö 08
ILR403	1109	llmala railway yard	Steam, water and air outlets between t. 603-604	Steam, water and air outlet	60.210197	24.926277	603-604				R603 LVI 09

ID	Line section no	Line section	Railway device/building description	Туре	Coordinates (N)	Coordinates (E)	Track	Owner of the device or building	Maintainer of the device or building	Manager of the device or building	Further information
ILR404	1109	llmala railway yard	Steam, water and air outlets between t. 603-604	Steam, water and air outlet	60.210518	24.926379	603-604				R603 LVI 10
ILR405	1109	llmala railway yard	Steam, water and air outlets between t. 605-606	Steam, water and air outlet	60.210338	24.925944	605-606				R605 LVI 07
ILR406	1109	Ilmala railway yard	Steam, water and air outlets between t. 605-606	Steam, water and air outlet	60.210001	24.925938	605-606				R605 LVI 06
ILR407	1109	Ilmala railway yard	Steam, water and air outlets between t. 605-606	Steam, water and air outlet	60.209772	24.925828	605-606				R606 LVI-Ö 05
ILR408	1109	Ilmala railway yard	Steam, water and air outlets between t. 605-606	Steam, water and air outlet	60.209555	24.925833	605-606				R605 LVI-Ö 04
ILR409	1109	Ilmala railway yard	Steam, water and air outlets between t. 605-606	Steam, water and air outlet	60.209353	24.925828	605-606				R605 LVI-Ö 03
ILR410	1109	Ilmala railway yard	Steam, water and air outlets between t. 605-606	Steam, water and air outlet	60.209122	24.925808	605-606				R605 LVI 02
ILR411	1109	Ilmala railway yard	Steam, water and air outlets between t. 605-606	Steam, water and air outlet	60.208818	24.925696	605-606				R605 LVI 01
ILR412	1109	Ilmala railway yard	Compressed air for main air supply pipe and brake testing system	Compressed air outlet	60.210365	24.92977	709-710				Compressed air for main air supply pipe and brake testing system between t.709-710 Helsinki end
ILR413	1109	Ilmala railway yard	Compressed air for main air supply pipe and brake testing system	Compressed air outlet	60.213786	24.931697	709-710				Compressed air for main air supply pipe and brake testing system between t.709-710 Käpylä end
ILR414	1109	Ilmala railway yard	Compressed air for main air supply pipe and brake testing system	Compressed air outlet	60.213865	24.931312	711-712				Compressed air for main air supply pipe and brake testing system between t.711-712 Käpylä end
ILR415	1109	Ilmala railway yard	Compressed air for main air supply pipe and brake testing system	Compressed air outlet	60.210243	24.929488	711-712				Compressed air for main air supply pipe and brake testing system between t.711-712 Helsinki end
ILR416	1109	Ilmala railway yard	Compressed air for main air supply pipe and brake testing system	Compressed air outlet	60.214751	24.923842	792-793				Compressed air for main air supply pipe and brake testing system between t.792-793
ILR417	1109	Ilmala railway yard	Compressed air for main air supply pipe and brake testing system	Compressed air outlet	60.215264	24.924641	792				Compressed air for main air supply pipe and brake testing system t.792 Käpylä end
ILR418	1109	Ilmala railway yard	Compressed air for main air supply pipe and brake testing system	Compressed air outlet	60.214101	24.923785	787-788				Compressed air for main air supply pipe and brake testing system between t.787-788 Käpylä end
ILR419	1109	Ilmala railway yard	Compressed air for main air supply pipe and brake testing system	Compressed air outlet	60.214153	24.923697	786-787				Compressed air for main air supply pipe and brake testing system between t.786-787 Käpylä end
ILR420	1109	Ilmala railway yard	Compressed air for main air supply pipe and brake testing system	Compressed air outlet	60.213891	24.923796	785-786				Compressed air for main air supply pipe and brake testing system between t.786-785 Käpylä end
ILR421	1109	Ilmala railway yard	Compressed air for main air supply pipe and brake testing system	Compressed air outlet	60.213847	24.923762	784-785				Compressed air for main air supply pipe and brake testing system between t.784-785 Käpylä end
ILR422	1109	Ilmala railway yard	Compressed air for main air supply pipe and brake testing system	Compressed air outlet	60.214118	24.924121	784-783				Compressed air for main air supply pipe and brake testing system between t.783-784 Käpylä end
ILR423	1109	llmala railway yard	Compressed air for main air supply pipe and brake testing system	Compressed air outlet	60.214142	24.9241	783-782				Compressed air for main air supply pipe and brake testing system between t.783-782 Käpylä end
ILR424	1109	llmala railway yard	Compressed air for main air supply pipe and brake testing system	Compressed air outlet	60.213459	24.929036	731-732				Compressed air for main air supply pipe and brake testing system between t.731-732 Käpylä end
ILR425	1109	llmala railway yard	Compressed air for main air supply pipe and brake testing system	Compressed air outlet	60.210143	24.92723	731-732				Compressed air for main air supply pipe and brake testing system between t.731-732 Helsinki end

	Line							Owner of the			
ID	section no	Line section	Railway device/building description	Туре	Coordinates (N)	(E)	Track	device or building	Maintainer of the device or building	Manager of the device or building	Further information
ILR426	1109	llmala railway yard	Compressed air for main air supply pipe and brake testing system	Compressed air outlet	60.213363	24.928866	714				Compressed air for main air supply pipe and brake testing system next to t. 714 Käpylä end
ILR427	1109	llmala railway yard	Compressed air for main air supply pipe and brake testing system	Compressed air outlet	60.213387	24.928802	735-736				Compressed air for main air supply pipe and brake testing system between t. 735-736, Käpylä end
ILR428	1109	llmala railway yard	Compressed air for main air supply pipe and brake testing system	Compressed air outlet	60.213287	24.928282	743				Compressed air for main air supply pipe and brake testing system next to t. 734, Käpylä end
ILR429	1109	Ilmala railway yard	Compressed air for main air supply pipe and brake testing system	Compressed air outlet	60.21344	24.928693	737-738				Compressed air for main air supply pipe and brake testing system between t. 737-738, Käpylä end
ILR430	1109	Ilmala railway yard	Compressed air for main air supply pipe and brake testing system	Compressed air outlet	60.210814	24.926722	601				Compressed air for main air supply pipe and brake testing system t. 601
ILR431	1109	Ilmala railway yard	Compressed air for main air supply pipe and brake testing system	Compressed air outlet	60.210771	24.926691	602				Compressed air for main air supply pipe and brake testing system t. 602, Käpylä end
ILR432	1109	Ilmala railway yard	Compressed air for main air supply pipe and brake testing system	Compressed air outlet	60.208343	24.926211	601				Compressed air for main air supply pipe and brake testing system t. 601, Helsinki end
ILR433	1109	Ilmala railway yard	Compressed air for main air supply pipe and brake testing system	Compressed air outlet	60.208335	24.926159	602				Compressed air for main air supply pipe and brake testing system t. 602, Helsinki end
ILR434	1109	Ilmala railway yard	Compressed air for main air supply pipe and brake testing system	Compressed air outlet	60.208319	24.925938	603				Compressed air for main air supply pipe and brake testing system t. 603, Helsinki end
ILR435	1109	Ilmala railway yard	Compressed air for main air supply pipe and brake testing system	Compressed air outlet	60.208316	24.925761	604				Compressed air for main air supply pipe and brake testing system t. 604
ILR436	1109	Ilmala railway yard	Compressed air for main air supply pipe and brake testing system	Compressed air outlet	60.210571	24.926427	604				Compressed air for main air supply pipe and brake testing system next to t. 604
ILR437	1109	llmala railway yard	Compressed air for main air supply pipe and brake testing system	Compressed air outlet	60.210598	24.926393	603				Compressed air for main air supply pipe and brake testing system next to t. 603
ILR438	1109	llmala railway yard	Compressed air for main air supply pipe and brake testing system	Compressed air outlet	60.210309	24.926155	605				Compressed air for main air supply pipe and brake testing system t. 605, Käpylä end
ILR439	1109	llmala railway yard	Compressed air for main air supply pipe and brake testing system	Compressed air outlet	60.210298	24.925964	606				Compressed air for main air supply pipe and brake testing system t. 606, Käpylä end
ILR440	1109	Ilmala railway yard	Compressed air for main air supply	Compressed air outlet	60.216408	24.928633	169				Compressed air for main air supply t.169
ILR441	1109	Ilmala railway vard	Compressed air for main air supply	Compressed air outlet	60.216123	24.928426	167-168				Compressed air for main air supply t.167-168
ILR442	1109	Ilmala railway	Compressed air for main	Compressed air outlet	60.215909	24.928332	165-166				Compressed air for main air supply between t.165-166
ILR443	1109	Ilmala railway	Compressed air for main	Compressed air outlet	60.21568	24.928083	163-164				Compressed air for main air supply between t.163-164
ILR444	1109	Ilmala railway	Compressed air for main	Compressed air outlet	60.215512	24.928177	161-162				Compressed air for main air supply between t.161-162
ILR445	1109	Ilmala railway	Compressed air for main	Compressed air outlet	60.214915	24.927646	158-159				Compressed air for main air supply between t.158-159
ILR446	1109	Ilmala railway	Compressed air for main	Compressed air outlet	60.214812	24,927653	157-158				Compressed air for main air supply between t 157-158
ILR447	1109	yard Ilmala railway	air supply pipe Compressed air for main	Compressed air outlet	60.214689	24.927702	154, 155	,			Compressed air for main air supply t. 144, 145 and 146
ILR448	1109	yaro Ilmala railway	Compressed air for main	Compressed air outlet	60.214958	24.929064	156 146-147				Compressed air for main air supply between t.146-147
II D 4 40	1100	yaro Ilmala railway	Compressed air for main		CO 04407	04 0004 40	444 445				
ILR449	1109	yard Ilmala railway	air supply pipe	Compressed air outlet	00.21497	24.929149	144-145				Compressed air for main air supply between 1.144-145
ILR450	1109	yard	air supply pipe	Compressed air outlet	60.214937	24.929482	142-143				Compressed air for main air supply between t.142-143
ILR451	1109	yard	air supply pipe	Compressed air outlet	60.21488	24.92957	137-138				Compressed air for main air supply between t.137-138

ID	Line section no	Line section	Railway device/building description	Туре	Coordinates (N)	Coordinates (E)	Track	Owner of the device or building	Maintainer of the device or building	Manager of the device or building	Further information
ILR452	1109	Ilmala railway yard	Compressed air for main air supply pipe	Compressed air outlet	60.214759	24.929633	135-136				Compressed air for main air supply between t.135-136
ILR453	1109	Ilmala railway yard	Compressed air for main air supply pipe	Compressed air outlet	60.214643	24.929859	133-134				Compressed air for main air supply between t.133-134
ILR454	1109	Ilmala railway yard	Compressed air for main air supply pipe	Compressed air outlet	60.215012	24.930165	131-132				Compressed air for main air supply between t.131-132
ILR455	1109	Ilmala railway yard	Compressed air for main air supply pipe	Compressed air outlet	60.214238	24.932054	812				Compressed air for main air supply t. 812 behind the dead stop rail
ILR456	1109	Ilmala railway yard	Compressed air for main air supply pipe	Compressed air outlet	60.214595	24.932105	813				Compressed air for main air supply t. 813
ILR457	1109	Ilmala railway yard	Compressed air for main air supply pipe	Compressed air outlet	60.214679	24.931983	813-814				Compressed air for main air supply between t.813-814
ILR458	1109	Ilmala railway yard	Compressed air outlet t.799-800	Compressed air outlet	60.215427	24.924192	799-800	Liikennevirasto			Compressed for main air supply and brake testing system between t.799-800, received in spring 2016, RATEK
ILR459	1109	Ilmala railway yard	Compressed air outlet t.799-800	Compressed air outlet	60.215405	24.924259	799	Liikennevirasto			Compressed for main air supply and brake testing system next to t.799, received in spring 2016, RATEK
ILR460	1109	Ilmala railway yard	Fuel tank	tank	60.211539	24.926024		VR	Caverion		Fuel tank is filled with car transports. No tanking facilities at the tank. Fuel tank fire extinguisher, inspection OK.
ILR461	1109	Ilmala railway yard	Electric connection? 125?	Electrical room	60.21003	24.926473	601-602				Electric connection between t.601-602, for Russian rolling stock
ILR462	1109	Ilmala railway yard	Electric connection? 125?	Electrical room	60.20906	24.926179	601-602				Electric connection 125A between t.601-602, for Russian rolling stock
ILR463	1109	Ilmala railway yard	Electric connection? 125?	Electrical room	60.209003	24.92598	603-604				Electric connection 125A between t.603-604, for Russian rolling stock
ILR464	1109	Ilmala railway yard	Electric connection? 125?	Electrical room	60.209691	24.926165	603-604				Electric connection 125A between t.603-604, for Russian rolling stock
ILR465	1109	Ilmala railway yard	Electric connection? 125?	Electrical room	60.209486	24.925761	605-606				Electric connection 125A between t.605-606, for Russian rolling stock
ILR466	1109	Ilmala railway yard	Oil-absorbing mat	Oil-absorbing mat	60.213568	24.927594	748	VR			Oil-absorbing mat t. 748, new
ILR467	1109	Ilmala railway yard	Oil-absorbing mat	Oil-absorbing mat	60.213419	24.927799	747	VR			Oil-absorbing mat t. 747, new
ILR468	1109	Ilmala railway yard	Oil-absorbing mat	Oil-absorbing mat	60.212706	24.927278	747	VR			Oil-absorbing mat t. 747, Helsinki, new
ILR469	1109	Ilmala railway vard	Oil-absorbing mat	Oil-absorbing mat	60.212625	24.927255	748	VR			Oil-absorbing mat t. 748, Helsinki, new

## FTIA's publication 46eng/2019 Railway Network Statement 2021

Location for timber loading in the railway network (FTIA)	Line section	Railway kilometre	Loading tracks	Rails	Length of loading track	Possibility of electric traction	Connection to private siding
Akaa*	Toijala–Valkeakoski	149+400	r001	54E1	650	Yes	
Akaa*	Toijala–Valkeakoski	149+400	r002	54E1	650	Yes	
Alapitkä	Pieksämäki–Kontiomäki	505+840	r004	К30	237	No	
Alavus	Orivesi–Seinäjoki	373+445	r834	K30	664	No	
Arola	Kontiomäki–Vartius-raja	707+668	r464	54E1	705	No	
Eno	Joensuu–Nurmes	660+170	r253	K43	625	No	
Haapajärvi	lisalmi–Ylivieska	649+205	r007	K30	698	No	
Haapajarvi		649+205	r014	K30	2/5	No	
Haapajarvi	lisalmi–Ylivioska	649+205	r015	K30	718	No	
Haanamäki	Orivesi–Seinäioki	300+235	r410	54F1	721	No	
Hammaslahti	Kouvola–loensuu	602+199	r004	54F1	657	Yes	
Hankasalmi	Jyväskylä–Pieksämäki	418+089	r304	54E1	483	Yes	Yes
Haukivuori	Kouvola–Pieksämäki	344+442	r835	54E1	593	No	
Heinola	Lahti–Heinola	167+607	r008	K43	469	No	
Heinävaara	Joensuu–Ilomantsi	648+408	r002	K30	684	No	
Heinävaara	Joensuu–Ilomantsi	648+408	r003	K30	234	No	
Humppila	Toijala–Turku	188+778	r634	54E1	413	No	
Hyrynsalmi	Kontiomäki–Ämmänsaari	704+601	r004	К30	588	No	
Hyrynsalmi	Kontiomäki–Ämmänsaari	704+601	r012	K30	875	No	
Hämeenlinna	Riihimäki–Tampere	107+559	r007	54E1	599	Yes	
Hämeenlinna	Riihimäki–Tampere	107+559	r008	54E1	293	Yes	
Harma	Seinajoki–Oulu	472+940	r574	54E1	635	No	
llomantsi	Joensuu–Ilomantsi	695+203	r002	K30	/53	NO	
llomantsi		695+203	r004	K30	496	No	
Immola/Imatra	Kouvola–loensuu	332+699	r682	54F1	581	No	
Immola/Imatra	Kouvola–Joensuu	332+699	r683	54E1	518	No	
Immola/Imatra	Kouvola–Joensuu	332+699	r684	54E1	540	No	
lsokyrö	Seinäjoki–Vaasa	447+488	r603	K30	189	No	
Joensuu Peltola	Kouvola–Joensuu	623+540	r067	K43	461	No	Yes
Joensuu Peltola	Kouvola–Joensuu	623+540	r080	K30	195	No	Yes
Joensuu Peltola	Kouvola–Joensuu	623+540	r081	K30	195	No	Yes
Joroinen	Huutokoski–Savonlinna	414+617	r272	54E1	881	No	
Jämsä	Tampere–Jyväskylä	284+084	r009	54E1	302	No	
Kalvitsa	Kouvola–Pieksämäki	330+634	r784	54E1	944	Yes	
Kannonkoski	Aänekoski–Haapajärvi	488+694	r002	K30	736	No	
Kannonkoski	Aánekoski–Haapajárvi	488+694	r011	K30	243	No	
Karjaa	Hyvinkaa–Karjaa	87+056/157+817	r111	K43	410	NO	
Kariaa	Hyvinkää–Karjaa	87+056/157+817	r35	5/JE1	352	r 2	
Karjaa	Hyvinkää–Karjaa	87+056/157+817	r36	K43	428	: Yes	
Karjaa	Hyvinkää–Karjaa	87+056/157+817	r37	54E1	208	Yes	
Karjaa	Hyvinkää–Karjaa	87+056/157+817	r38	54E1	448	No	
Kauppilanmäki	Pieksämäki–Kontiomäki	568+751	r393	54E1	489	No	
Keitelepohja	Äänekoski–Haapajärvi	519+256	r002	K30	670	No	
Keitelepohja	Äänekoski–Haapajärvi	519+256	r003	K30	674	No	
Kerimäki	Savonlinna–Parikkala	495+531	r673	K43	454	No	
Kitee	Kouvola–Joensuu	460+016	r004	54E1	603	Yes	
Kitee	Kouvola–Joensuu	460+016	r031	54E1	578	Yes	
Kiuruvesi	lisalmi–Ylivieska	583+985	r284	54E1	443	No	
Kiuruvesi	lisalmi–Ylivieska	583+985	r285	54E1	678	No	
Kokemäki	Lielahti–Kokemäki	284+442	r085	K43	592	No	
Kolari	Tornio-Kolari	1067+206	r605	54E1	1204	No	
Kolali	Toffilo-Kolafi Diakaämäki Kantiomäki	1067+206	r004	K3U	1029	No	
Kontiomäki	Pieksämäki–Kontiomäki	658+786	r883	K43	645	Yes	
Kontiomäki	Pieksämäki–Kontiomäki	658+786	r881	K43	636	Yes	
Korkeakoski	Orivesi–Seinäioki	247+910	r104	K43	299	No	Yes
Kouvola lajittelu	Riihimäki–Kouvola	192+570	r162	54E1	282	No	Yes
Kouvola lajittelu	Riihimäki–Kouvola	192+570	r163	54E1	282	No	Yes
Kurkimäki	Pieksämäki–Kontiomäki	444+074	r004	54E1	409	No	
Kurkimäki	Pieksämäki–Kontiomäki	444+074	r005	54E1	410	No	
Kurkimäki	Pieksämäki–Kontiomäki	444+074	r006	54E1	257	No	
Кугö	Toijala–Turku	232+875	r433	K43	596	No	
Lapinjärvi	Lahti–Loviisan satama	185+432	r002	K30	582	No	
Lapinjärvi	Lahti–Loviisan satama	185+432	r003	K30	191	No	
Lapinlahti	Pieksämäki–Kontiomäki	525+604	r004	K30	556	No	
Lapinianti	Pieksamaki–Kontiomäki	525+604	r011	K30	379	No	
Lapua	зепајок-Оши	441+094	r454	54E1	31/	NO	

## FTIA's publication 46eng/2019 Railway Network Statement 2021

Location for timber loading in the railway network (FTIA)	Line section	Railway kilometre	Loading tracks	Rails	Length of loading track	Possibility of electric traction	Connection to private siding
Lieksa	Joensuu–Nurmes	728+121	r555	K43	576	No	Yes
Lieksa	Joensuu–Nurmes	728+121	r556	K43	908	No	Yes
Lohja	Hyvinkää–Karjaa	122+965	r469	K43	338	No	
Lohja	Hyvinkää–Karjaa	122+965	r468	K43	377	No	
Lonja	Hyvinkaa–Karjaa Siiliniänsi Viiniiänsi	122+965	r4/0	K43	287	No	
	Sillinjärvi–Viinijärvi Siiliniärvi–Viinijärvi	557+061	r503	K30	353 214	NO	
Metsäkansa	Tojjala–Valkeakoski	155+811	r002	K30	300	No	
Myllymäki	Orivesi–Seinäioki	333+721	r332	K43	792	No	
Naarajärvi	Jyväskylä–Pieksämäki	449+862	r503	K43	657	No	
Niirala	Niirala-raja–Säkäniemi	555+846	r013	K60	634	No	
Niirala	Niirala-raja–Säkäniemi	555+846	r019	K43	613	No	
Nivala	lisalmi–Ylivieska	676+878	r683	K30	511	No	
Nivala	lisalmi–Ylivieska	676+878	r684	K43	507	No	
Nummela	Hyvinkää–Karjaa	109+368	r363	K43	510	No	
Orivesi	Tampere–Jyvaskyla	228+276	r537	K43	586	No	
Oulainen	Seinäjoki–Oulu	657+850	r021	54E1	396	No	
Parkano	Tampere–Seinäioki	262+483	r006	54E1	716	Yes	
Parkano	Tampere–Seinäjoki	262+483	r007	54E1	790	Yes	
Patokangas	Kemijärvi–Patokangas	1064+591	r904	54E1	581	Yes	Yes
Patokangas	Kemijärvi–Patokangas	1064+591	r905	54E1	581	Yes	Yes
Patokangas	Kemijärvi–Patokangas	1064+591	r906	54E1	627	Yes	Yes
Pello	Tornio–Kolari	1002+632	r403	K30	630	No	Yes
Pello	Tornio–Kolari	1002+632	r404	K30	715	No	Yes
Petäjävesi	Haapamäki–Jyväskylä	343+357	r673	K43	483	No	
Pihtipudas	Aänekoski–Haapajärvi	540+605	r002	K30	784	No	
Pihtipudas	Aánekoski–Haapajárvi	540+605	r003	K30	797	No	
PIIKKIO Pitkämäki	Helsinki–Turku salama	182+785	r902	60F1	610	NO	Vec
Poiksilta		416+728	r011	54F1	737	No	163
Pori	Kokemäki–Pori	322+278	r822	K43	803	No	
Pyhäsalmi	lisalmi–Ylivieska	615+934	r484	K30	552	No	
Pyhäsalmi	lisalmi–Ylivieska	615+934	r488	54E1	319	No	
Pyhäsalmi	lisalmi–Ylivieska	615+934	r489	54E1	169	No	
Rantasalmi	Huutokoski–Savonlinna	445+165	r473	54E1	850	No	
Ristiina	Mynttilä–Ristiina	291+162	r002	K30	888	No	
Rovaniemi	Laurila–Kemijärvi	971+775	r664	K43	846	Yes	
Rovaniemi	Laurila-Kemijarvi	9/1+//5	r660	K43	766	Yes	
Saarijärvi	Äänekoski–Haanaiärvi	452+723	r004	K30	576	No	
Salo	Helsinki–Turku satama	143+981	r101	K43	404	No	
Salo	Helsinki–Turku satama	143+981	r102	K43	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	r602	K43	640	No	
Sänkimäki	Siilinjärvi–Viinijärvi	504+505	r252	K30	693	No	
Tohmajärvi	Niirala-raja–Säkäniemi	571+752	r273	K43	462	No	
Tonmajarvi	Niirala-raja–Sakaniemi	5/1+/52	r2/4	K43	455	NO	
	Riinimaki–Tampere Biihimäki–Tampere	147+339	r073	54E1	485	NO	
Turku tavara	Helsinki–Turku satama	200+460	r354	K43	345	No	Yes
Tuupovaara	Joensuu–Ilomantsi	668+672	r002	K30	603	No	100
Tuupovaara	Joensuu–Ilomantsi	668+672	r003	K30	605	No	
Uimaharju	Joensuu–Nurmes	674+451	r359	54E1	527	No	Yes
Vaajakoski	Jyväskylä–Pieksämäki	384+866	r103	54E1	336	No	
Vaajakoski	Jyväskylä–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	Yes
Varkaus	Pieksamaki–Joensuu Kontiomäki Vortius rois	424+685	r112	K30	404	NO	Yes
Vilnnula	Orivesi–Seinäioki	753+755 27/1+760	r206	54E1 K/13	581	No	
Vuokatti	Nurmes–Kontiomäki	868+838	r004	54F1	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	
Ykspihlaja väliratapiha	Kokkola–Ykspihlaja	555+511	r011	54E1	902	No	Yes
Ylivieska	Seinäjoki–Oulu	630+343	r603	K43	402	No	
Ylivieska	Seinäjoki–Oulu	630+343	r604	K43	389	No	
Ylämylly	Pieksämäki–Joensuu	638+981	r802	K43	576	No	

## FTIA's publication 46eng/2019 Railway Network Statement 2021

Location for timber loading in the railway network (FTIA)	Line section	Railway kilometre	Loading tracks	Rails	Length of loading track	Possibility of electric traction	Connection to private siding
Ylämylly	Pieksämäki–Joensuu	638+981	r803	K43	579	No	
Ylämylly	Pieksämäki–Joensuu	638+981	r804	K43	248	No	
Ylöjärvi	Tampere–Seinäjoki	200+753	r004	54E1	230	No	
Ypykkävaara	Kontiomäki–Vartius-raja	729+780	r563	54E1	775	No	
Ämmänsaari	Kontiomäki–Ämmänsaari	750+448	r001	K30	721	No	
Ämmänsaari	Kontiomäki – Ämmänsaari	750+448	r003	K30	597	No	
* Akaa is a new timber terminal un	der construction. The commission	ing schedule will be	e defined later.				

# Safety issues

## Reporting safety anomalies and forwarding of safety information

The Infrastructure Manager (IM) is responsible for the safety in the stateowned rail network. Railway operators shall report accidents, safety anomalies and dangerous situations to the rail traffic control, which forwards this information to the Rail Traffic Management Centre of the IM. The report shall be submitted on the same working day as the safety anomaly occurred. Serious safety anomalies shall be reported immediately. The railway operator shall submit a report, regardless of whether or not the railway operator itself is involved or the anomaly affects its operations. In the report, it shall be stated whether the anomaly occurred in the state-owned rail network or elsewhere in the railway network.

All railway operators shall enter information about incidents or dangerous situations involving train and shunting operations (safety anomalies) into IM's TURI system. The following incidents must be reported:

## Train services

- Collisions
- Collisions between trains
- Collisions between a train and a vehicle unit
- Train collision with obstacle
- Derailing
- Level crossing accidents
- Dangerous situations in level crossings
- Level crossing warning system malfunction
- Person hit by train
- Unauthorised persons in the railway area
- Unauthorised passing of stop aspect (risk of collision)
- Unauthorised passing of stop aspect (no risk of collision)
- Route protection failure (obstruction on track)
- Route protection failure (no obstruction on track)
- Train departure without required preparations
- Train running without a functional ATP onboard unit without permission from the traffic control
- Breaking-loose of a train
- Overspeed of train
- Overheating
- Fire or explosion in vehicle unit
- Leakage of dangerous goods
- Accidents involving dangerous goods (emissions)
- Accidents involving dangerous goods (no emissions)
- Signal aspect changing into stop aspect during train operations (train passing the signal)
- Signal aspect changing into stop aspect during train operations (no train passing the signal)
- Defective cab vehicle ATP (railway undertakings report this quarterly)
- Breaking away of vehicle units during transport
- Other anomalies
- Fatalities: passengers
- Fatalities: personnel

- Fatalities: third parties
- Seriously injured: passengers
- Seriously injured: personnel
- Seriously injured: third parties

## **Shunting operations**

- Collisions of shunting units and other rolling stock units
- Shunting unit hitting an obstacle
- Derailing of shunting unit
- Level crossing accidents
- Dangerous situations in level crossings
- Level crossing warning system malfunction
- Person hit by train
- Unauthorised persons in the railway area
- Passing of stop aspect during shunting operations (risk of collision)
- Passing of stop aspect during shunting operations (no risk of collision)
- Unauthorised shunting operations
- Bursting open the points during shunting operations
- Directing to the wrong track during shunting operations
- Dangerous goods leakage
- Accidents involving dangerous goods during shunting operations (emissions)
- Accidents involving wagons carrying dangerous goods during shunting operations (no emissions)
- Fire or explosion in a vehicle unit during shunting operations
- Runaway vehicle unit during shunting operations
- Other anomalies
- Fatalities (passengers, personnel, third parties)
- Seriously injured (passengers, personnel, third parties)
- Slightly injured (passengers, personnel, third parties)

Railway operators shall report anomalies affecting safety (as listed above) and enter them into the TURI system. Data can be submitted as data transfers between systems, or the railway operator can enter the anomalies directly into the TURI system. Correspondingly, the IM can transmit information about anomalies concerning the railway operator from the TURI system in a manner separately agreed upon with the railway operator.

If the information cannot be transferred via the TURI system, the information about safety anomalies shall be submitted in a monthly report. The parties shall agree between themselves on the data transfer process, technical arrangements and implementation of the system.

Moreover, the railway undertaking shall submit written reports on and analyses of safety anomalies that have occurred in the traffic control of shunting operations, if the traffic control of shunting operations is handled by the railway undertaking using the operations control equipment of the IM. It is not possible for the IM to acquire these reports and analyses via the traffic control service in its use.

The aforementioned information can be extracted from the railway operator's system for handling anomalies and the like.

## Reporting damages and defects

The railway operators shall immediately report observed defects or malfunctions in the railway network to the railway traffic control of the Infrastructure Manager. For the investigation of each case, the railway operator shall contact the railway manager of the Infrastructure Manager. The Infrastructure Manager is obliged to inform the railway operators about observed damages to rolling stock or defects in it.

## Occupational safety in railway yards

In the railway yards, the Infrastructure Manager is responsible for keeping the infrastructure in operable condition, whereby occupational safety is ensured and the provisions in the legislation as well as the requirements in the Railway Track Technical Instructions (RATO) are met.

Railway operators are responsible for the condition of their rolling stock operated in the railway yards and for traffic safety.

The railway operator is responsible for the occupational safety of its employees in the railway yards and for the safety aspects involved in the handling of the devices and rolling stock in their possession.

When storing rolling stock, the railway operator must ensure that it is stationary and that stop blocks are used and stored properly.

## Precautionary action to be taken by the railway operator

The railway operator shall be prepared for accidents and exceptional situations as provided by law. The IM collaborates with the railway operators in implementing precautionary measures. The IM publishes guidelines for railway operators on railway accident preparedness (OVRO). The railway operator shall integrate the OVRO procedures into its own operations. Additionally, the railway operator shall follow the IM's further instructions on how to prepare for exceptional situations.

# Service facility description on the use of storage sidings in the state-owned railway network

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 of the Finnish 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 shall, if necessary, be 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 in the Network Statement). Enclosures regarding specific traffic operating points may be added to the access agreement during the agreement period.

The FTIA has prepared this service facility document in compliance with the requirements set in the Commission Implementing Regulation (EU) 2017/2177. In accordance with Appendix II of the Directive 2012/34 of the European Parliament and of the Council, the service facility's type is d) storage sidings.

1.2 Operator of the service facility

Finnish Transport Infrastructure Agency, Infrastructure Access, Opastinsilta 12 A, FI-00520 Helsinki Finrail Oy, Palkkatilanportti 1, FI-00240 Helsinki, the contact details of traffic planning are available on the FTIA's web page: https://tmfg.fi/fi/finrail/liikennesuunnittelun-yhteystiedot

Detailed division of responsibility among service facility operators is described in Chapter 6.

1.3

Validity period and updating process

This document shall be updated annually in connection with the publication of the Network Statement. If required, minor changes may also be made on the statement's update dates during the timetable period.

## 2. Services

2.1 Storage of rolling stock

Storage sidings are yard tracks primarily intended for the parking of wagons and coaches waiting for a transport task. Broadly speaking, storage siding requirements can be divided into long-term and temporary storage needs.

APPENDIX 4B / 2 (5) Service facility description, storage sidings

## 3. Service facility description

3.1

List of service facility sections

Storage sidings are listed traffic operating point-specifically in Appendix 3B of the Network Statement.

3.2

Names of service facility sections

Storage sidings are named so that the abbreviation of the traffic operating point comes first, followed by the track number (= track identifier). Track identifiers are shown in data systems for rail capacity management and 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 3B of the Network Statement and in the map service. The locations of storage sidings in traffic operating points are specified in track diagrams.

3.2.2 Operational hours

Storage sidings are available 24/7 and can be used as agreed. The LIIKE system contains information on railway yards' deviant service times (traffic control, railway yard traffic control or signal box operator service). In addition, information can be requested in a listed form from palveluluaika@finrail.fi.

3.2.3

Technical characteristics

Sidings: number and length (in metres) of storage sidings is stated in Appendix 3B of the Network Statement (see also Section 5.2).

3.2.4

Planned changes to technical characteristics

No changes have been planned to the technical characteristics of storage sidings.

## 4. Charges

4.1 Information on charges

In general, the use of storage sidings is currently free of charge. Note: The access charge of Ilmala railway yard is specified in Section 6.3.2.3 of the Network Statement.

If the use of storage sidings involves the lease of land areas, the lease is charged in accordance with Section 5.4.4.3 of the Network Statement.

4.2 Information on discounts

Discounts are not granted for 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 periodspecific, and they shall be re-negotiated prior to the start of each timetable period. A railway yard agreement may also be re-negotiated 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 Infrastructure Access. However, it should be noted that the agreement model may change for the timetable period of the Network Statement in question.

5.2 Technical terms

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 rail data extranet site:

https://vayla.fi/palveluntuottajat/aineistot/ratatiedon-extranet.

In addition, the lengths of storage sidings are specified in Appendix 3B of the Network Statement.

5.3

Production of rail transport services

Rolling stock may also be stored on private sidings connected to the stateowned 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 model used by the FTIA.

5.4 IT systems

Railway yard tracks can be viewed in Finrail's 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. Further information on data systems is available (in Finnish) at https://www.tmfg.fi/fi/finrail/tietojarjestelmat.

As the infrastructure manager, the FTIA provides further information on railway yard storage sidings. If the need to use storage sidings is continuous, a railway yard agreement shall be concluded among the operators under the supervision of the FTIA, if required. See Chapter 6.

## 6. Granting access to the capacity

6.1

Access right and service applications

## 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 shall deliver to the infrastructure manager a free-form, traffic operation pointspecific estimate of their rolling stock storage needs (track reservations) before the start of access agreement negotiations. On the basis of track 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. With regard to Ilmala railway yard, the operating method for track access is described in further detail in Appendix 4C of the Network Statement.

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 shall 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 stateowned railway network, an agreement on the storage of the rolling stock shall be concluded with the infrastructure manager. The agreement concerns a single timetable period and each agreement shall 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 regarding specific traffic operating points (railway yard agreement) with respect to the common management of situational information on tracks. In addition, railway operators may participate in regional snow clearing operation planning meetings or other cooperation procedures which are organised each autumn.

Storage of dangerous goods is discussed in Section 3.4.3 of the Network Agreement.

## Temporary requirements:

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 whereby Finrail's traffic planning checks the suitability of the storage siding. Decisions on meeting urgent storage needs are made by Finrail'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 shall take account of the longitudinal gradient presented in the track diagram and ensure that the rolling stock stays in place.

APPENDIX 4B / 5 (5) Service facility description, storage sidings

## 6.2

Responding to applications

Applications concerning storage siding needs are responded to 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 agreements and agreements on the storage of museum train traffic operators' rolling stock is the person responsible for agreements at Infrastructure Access. Finrail's traffic planning should be contacted in matters regarding temporary storage needs (see Sections 1.2 and 6.1).

The priority criteria for operation, granting of permits and track use in railway yards are specified in Section 4.4.3 (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 (2017/2177 Article 11).

The infrastructure manager and its service providing traffic control company are responsible for the traffic control at traffic operating points. At railway yards, limited area traffic control is performed by the service provider responsible for maintenance in that specific area. More detailed information (contact information, procedures and roles regarding granting of permits) can be found (in Finnish) on the rail data extranet site under the heading, "Liikenteen-ohjauksen yhteystiedot" (Traffic control contact information): https://vayla.fi/palveluntuottajat/aineistot/ratatiedon-extranet

In case of conflicting needs for track use, the aim is to find solutions through means of negotiation and, if required, in collaboration with the operators and infrastructure managers of other service facilities. Other viable alternatives, such as an alternative location or time for the storage of rolling stock, may be proposed to the applicant (2017/2177 Article 10).

## 6.3

Information on available capacity and temporary capacity limitations

Information on the available capacity and temporary capacity limitation is visible to all operators in the data system for rail capacity management (LIIKE). In addition, information may be requested from Finrail's traffic planning or traffic control.

# Description of track access at Ilmala railway yard as of timetable period 2020

This Appendix describes the operations of the Ilmala railway yard and the access to the yard's tracks. The Infrastructure Manager (IM) and Finrail work together to ensure equal access to the services at Ilmala railway yard. The operations of Ilmala railway yard and the depot area play a significant role in the management of sensitivity to disruptions for both commuter and long-distance traffic. For this reason, access to the Ilmala railway yard is limited primarily to commercial passenger traffic and the needs of railway infrastructure management in the metropolitan area.

# 1 Agreements regarding track access, the situational awareness management required for operations and traffic control

The railway operator or traffic client provides the IM with *an annual assessment* of their needs for storage and maintenance tracks (the quantity of rolling stock using the tracks at the same time according to track group and rolling stock type) as well as their preferred times for making use of the maintenance tracks (days and times) annually by the end of September (see section 4.3.4). Based on this, the primary track access purposes are checked if necessary (Figure 1) and a preliminary annual track scheme is drawn up for maintenance tracks. Any overlapping requests are resolved by means of coordination based on both the requested line capacity and the scheduled access to other services, such that the use of the Ilmala railway yard tracks is resolved as a whole in the best way possible. Where needed, line capacity priority criteria are applied in the coordination process (Chapter 4.4.3).

After the preparing the annual track scheme, the need for track access at the Ilmala railway yard is handled on the *adjustment dates for regular services* (Chapter 4.3.1). The railway operator or traffic client requests track capacity for the track group's default track and prepares a track access plan for storage and maintenance tracks for standard days (Mon-Fri, Sat, Sun), using where possible only their own tracks (the tracks which have been initially allocated to the operator in question, as shown in Figure 1 of this Appendix). The capacity solver of Finrail's capacity management resolves conflicts in track access and coordinates changes, where needed, with the different parties.

For changes relating to individual days, the body responsible for the operations (= transport client, railway operator or rolling stock maintainer, depending on the contract in question) makes day-specific track change requests concerning changes to track access requirements caused by the rolling stock scheduled for maintenance. On the basis of this, Finrail's capacity controller confirms and, if required, coordinates through negotiation a day plan for movements within the railway yard, including the tracks leading to services, taking into account any infrastructure limitations.

It is the responsibility of the railway operator to inform the capacity controller of the number of rolling stock units coming to and leaving the depot (for the HKI-ILR-HKI route) in accordance with the requested traffic capacity. It is also the responsibility of the body responsible for operations to be aware of maintenance needs, including use of the lathe, washing needs, depot building usage needs and the number of storage places needed at each point in time.

*In operational situations*, the capacity controller decides on track access according to the traffic situation according to the priority criteria given below. The capacity controller maintains information about the location of different rolling stock and which maintenance facilities (maintenance tracks, lathe) are in use by whom and at what time, in accordance with the information received from the body responsible for operations. The primary purpose of the maintenance tracks is small maintenance measures, and they are not intended for storage of rolling stock.

The priority order for operations, permissions and track usage in the Ilmala railway yard is primarily as follows:

- 1. Arrivals to and departures from the railway yard (especially departures from the Ilmala railway yard to ensure punctual train departures)
- 2. Access to services in accordance with advance plans
- 3. Other internal shunting operations within the railway yard

Permission for the same type of traffic is given in the order that the permission requests are received. The traffic control operator considers movement permissions for trackwork units at traffic operating points on a case-by-case basis. In case of disruptions and malfunctions, the traffic control operator takes into account the impact of the disruption or malfunction on operations when giving permissions.

## 2 Main principles for track allocation

With regards to commuter traffic, the tracks of the Ilmala railway yard are primarily used as shown in Figure 1 up to the point where at least three railway undertakings are operating in the area. This allocation does not, for example, prevent VR from using the tracks allocated to HSL, but instead this allocation guides the general planning of track access. A more precise track diagram with accompanying service information can be viewed on the IM's extranet. As the coordinating body for track access, capacity solver and capacity controller coordinate track needs in accordance with the process depicted above.

With regards to long-distance traffic, use is made primarily of the tracks and services of Ilmala one and Ilmala two, as depicted in the track diagram. Regarding the access to these, the requested infrastructure capacity and the arrival and departure track information specified on the adjustment dates for regular services are of decisive importance. The capacity solver and capacity controller also coordinate this track access, from planning through to operational situations.

## FTIA's publication 46eng/2019 Railway Network Statement 2021

APPENDIX 4C / 3 (3) Description of track access at Ilmala ...



Figure 1. The primary purposes of use for the tracks in the zone of Ilmala kolme.

Maintenance platforms for common use, lathe and washing facilities Special tracks for Russian border traffic Storage and depot tracks for VR commuter traffic Storage and depot tracks for HSL commuter traffic

## Description of the planning and operational activities at Helsinki railway yard and the transfer of rolling stock between Helsinki and Ilmala depot as of the 2020 timetable period

## Planning

Owing to the large quantity of traffic passing through Helsinki station as well as the station's special status as the endpoint for much passenger traffic, a separate operational process has been developed for planning the track access in Helsinki station railway yard. This process takes into account the traffic of a number of different railway operators and will enter into force in the autumn of 2020. Before this, the current practices will continue.

The new process will be applied to the planning of adjustment dates of regular services as well as the planning carried out within change periods, such as planning for trackwork exceptions, right up to the initiation of operational traffic management. The operating model will be specified as required after the information system solutions related to the operating model have been specified, and practical experience of the operating model has been gained.

The starting point for the planning model is that the railway operators will plan their Helsinki track access and rolling stock transfers for their own traffic and the capacity solver of Finrail's capacity management coordinates the plans, in the following manner:

The railway operator's responsibilities include

- planning the track access at Helsinki station railway yard and the timetables for rolling stock transfers for their own traffic, taking as their starting point the default tracks indicated for the traffic in question (see list at end of chapter)
- planning the rolling stock cycles for their own rail traffic
- provide, in connection with requesting track capacity for the change period, the information on the tracks used by their own traffic, the rolling stock transfers and the rolling stock cycles either in the file format specified by the infrastructure manager or by using the information system interface
- participate in cooperation with other railway operators and the capacity solver in order to coordinate track access in situations where the track reservations of one party have had to be made using the default tracks of other parties
- participate in cooperation with other railway operators and the capacity solver in order to precisely coordinate timetables for rolling stock transfers in situations where they are in conflict with other traffic
- apply to the infrastructure manager for traffic capacity for tracks and rolling stock transfers once the coordination work is complete.

#### Exceptions to railway operator's responsibilities

1. A railway operator whose traffic at Helsinki station mostly fits onto one track may, if desired, leave the planning to the capacity solver, who in such cases will make the track allocations for this railway operator as part of the coordination of other traffic. The railway operator may nevertheless have a say on the maintenance cycles for their rolling stock by reporting to the capacity solver which rolling stock units should be transferred to Ilmala or from Ilmala. In these cases, the railway operator's responsibilities include

- planning the rolling stock cycles for their own rail traffic
- providing the information on rolling stock cycles either in the file format specified by the infrastructure manager or by using the information system interface
- reporting to the capacity solver all requirements for rolling stock transfers to Ilmala / from Ilmala
- participating together with the capacity solver in the probable iteration rounds for rolling stock cycles that result from the coordination process
- receiving the track information for their own traffic and the rolling stock transfer timetables in the file format specified by the infrastructure manager or by using the information system interface
- applying to the infrastructure manager for traffic capacity for rolling stock transfers once the coordination work is complete
- reporting to the infrastructure manager six months before the beginning of the timetable period if they are not going to participate in planning during the next timetable period.

2. Railway operators that do not have regular traffic capacity at Helsinki station do not participate in the planning process described here. For these railway operators, the capacity solver decides the track allocations as part of the coordination process for individual traffic days.

#### Capacity solver's responsibilities

#### In the planning process, the capacity solver's responsibilities include

- planning the use of tracks and rolling stock transfers in situations where the railway operators do not plan them themselves (see exceptions to railway operator's responsibilities)
- coordinating in an unbiased manner the traffic of all railway operators in accordance with infrastructure management policy

In the operating model, the planning for the Helsinki railway yard is based primarily on cooperation between the parties involved in the planning. Nevertheless, the following prioritisation rules are to be followed, with due consideration given to operational safety:

- the needs of commercial trains are prioritised over those of non-commercial trains
- the need for traffic functionality takes priority over precise track allocations. In other words, participants must be flexible about track allocations where needed for the improvement of traffic flows
- the unnecessary storage of rolling stock in the Helsinki railway yard is to be avoided, and rolling stock should be transferred, where necessary, to the Ilmala depot or to the storage sidings at the railway yard
- the guiding principle is that rolling stock that has arrived at Helsinki should, following a sufficiently long rotation period, be dispatched for the railway operator's next departure which is suitable for the rolling stock and from the same track group. If this is not possible, the rolling stock should be transferred to Ilmala. There can be some flexibility with this principle, however, as long as it does not cause interference to other traffic.

Where needed, the final planning decisions are made by the capacity solver.

### **Planning process**

The planning process described above is an iterative process, which begins with the railway operators' own planning (using the default tracks and being carried out seven weeks before the application for capacity for the adjustment date timetables) and their planning of traffic for standard days (= days when there are no traffic exceptions) and continues after this with the planning of days that contain exceptions. The railway operators' plans are then fitted together in the coordination negotiations, which begin around two weeks before the application for traffic capacity. These negotiations also include the coordination of tracks and rolling stock transfers for significant traffic exceptions.

This planning process is worked through in the planning of each change period. For planning periods, see Chapter 4.3.1 of the Network Statement.

For rolling stock transfers which have been planned and coordinated before the application period for regular traffic capacity, this capacity is then applied for as regular traffic capacity. For rolling stock transfers being planned after this date, this capacity is applied for as ad hoc traffic capacity. Because changes affecting rail traffic may arise quite close to the traffic's execution date, the parties participating in the planning must reserve planning resources for the planning of traffic exceptions throughout the whole change period. Planning takes place primarily during office hours. The dates for the process's different stages and the other details can be specified in more precisely once enough experience of this operating method has been acquired.

With this operating model, which will be implemented in the autumn of 2020, preparations are being made for the initiation of a competitive market for HSL traffic, which will take place in summer 2021. The default Helsinki station tracks to be used are:

- HSL traffic: 1 4 and 13 19
- other traffic: 5 12.

The default tracks will be updated as required. In the coming years, the construction of the bicycle tunnel passing under Helsinki station may periodically affect the default tracks and track access planning at the station.

#### **Operational activities**

As part of the transfer to a multi-operator environment, the operational management of the track access at Helsinki railway yard is being transferred from the railway operators to the infrastructure manager. The principle for the new operating model is that the capacity controller of the traffic control company's capacity management decides on the track allocations of the train units arriving in Helsinki in situations where there is a need to diverge from the plan made beforehand and also in situations involving unplanned shunting movements within a traffic operating point.

This coordinating function will begin in the autumn of 2020, and the current practices will continue until this date. In this new operating model:

### The railway operator's responsibilities include

- Planning one's own needs, such as exceptions to rolling stock cycles and used tracks resulting from rolling stock faults
- Taking into use preprepared exception plans and planning the changes to rolling stock cycles that result from them
- Reporting to the capacity controller changes to rolling stock cycles and needs for transfer of rolling stock to the Ilmala depot
- Providing information and engaging were needed in cooperation with the capacity controller to plan track changes
- Receiving plans relating to altered rolling stock transfers
- Applying to the infrastructure manager for traffic capacity for altered rolling stock transfers and tracks

#### The capacity controller's responsibilities include

- Ensuring equal access to tracks in Helsinki and Ilmala railway yards under both normal and exceptional circumstances
- Planning changes to Helsinki and Ilmala railway yards jointly with railway operators as response to problems related to the railway network and provide situational information on the changes
- Cooperating with the railway operators to fulfil their needs relating to rolling stock transfers
- Providing railway operators with situational information also on other disturbances that may affect their operation in Helsinki and Ilmala railway yards
- Deciding on changes to the timetables for Helsinki track usage and rolling stock transfers
- Sending the new and altered rolling stock transfer timetables to the railway operators
- Sending all changes to the traffic control company

Operational activities continue around the clock, so the railway operators and Finrail's capacity management must be staffed accordingly. The resources required vary depending on the time of day and density of traffic. The infrastructure manager aims to organise operations so that the different parties can work in the same facilities, thus facilitating good communication.

## Description and pricing of the traffic control service for shunting operations supplied by the infrastructure manager (IM)

# 1 Description of the traffic control service supplied by the infrastructure manager

This document describes the traffic control services supplied by the IM to the railway operators in the class 1 traffic control area in return for the infrastructure charge, as included in the allocated rail capacity. The document also includes descriptions of such traffic control services that the IM may supply to railway operators that are not included in the infrastructure charge but instead covered by a separate service charge. Provision of traffic control services not covered by the infrastructure charge shall be agreed upon with the IM. Services requiring interlocking and shunting operations shall be agreed upon with the provider of other services, depending on the traffic operating point.

## 2 Traffic control service in return for the infrastructure charge

## Train traffic control

Trains departing from their departure station

- Moving a locomotive to the front of an already coupled set of wagons (including change of locomotives while underway)
- 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 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 actions.

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 underway)
- 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 covered by a separate service charge).

On-call units:

- Permission for shunting operations
- Local permissions

If a traffic control service covered by the infrastructure charge described here cannot be fully provided due to technical circumstances (operation of points) by anyone other than the railway operator's staff travelling in the rolling stock, this is not considered "shunting operations in line service", and therefore the railway operator shall not invoice the IM for these operations.

Similarly, if there is no local traffic control staff or shunting or signal box operators in the railway yard, the railway operator shall operate the points.

Moving departing sets of wagons to departure tracks and arriving trains to service or storage sidings are included in the basic infrastructure charge.

The additional service charge covers arrangements regarding rolling stock which have been damaged in Helsinki and in the railway network, moving parts of arriving sets of wagons to another departure track, as well as sorting sets of wagons for service or storage.

The required changes are discussed in the meetings on railway network access.

## 3 Pricing of the traffic control service for shunting operation

The traffic control service for shunting operations supplied by the IM is a chargeable additional service. The pricing of traffic control service for shunting operations is based on performance. The railway operator's need for a control service, the time used for traffic control shunting operations and the performance-based price for traffic control have been taken into account when calculating the price. The traffic control performance refers to the so-called shunting route in one direction.

- The railway operator reports his need of traffic control to the IM in a mutually agreed-upon manner. The quantity describing the control need is determined on a case-by-case basis (for example, shunting route, quantity, time)
- The time used for the traffic control performance and the performance quantity is specified/confirmed at least twice a year on the basis of the weekly follow-up carried out by Oy Finrail Ltd. The time spent on the autumn's follow-up is taken into account in the charges of the following year's first six months (January–June) and the spring's follow-up in the charges of the last six months (July–December). The practices of any other follow-up times are agreed upon in the 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.
- In accordance with the Ministry of Transport and Communications' Decree on the chargeable performances of the Finnish Transport Infrastructure Agency (1147/2018), the traffic control service for shunting operations is a fixed-price performance governed by public law. In 2019, the price of the performance is EUR 70/hour.

The IM invoices the supplied service monthly during the contract period. The annual price is confirmed by the end of April of the year in question. Until then, the price used during the previous year is valid. When the price has been confirmed, a balancing invoice will be sent for the beginning of the year.

The checking/verifying of the information on the need for control services submitted by the railway operator is based on the weekly follow-ups carried out by Oy Finrail Ltd. If changes occur in the traffic control of the railway yard, the performance and invoicing procedure is examined based on the changed situation.

# Electricity transfer fees in the contact line network from 1 January 2020

The fees will be confirmed before the beginning of the 2020 timetable period.

The transfer fee is charged on a monthly basis (VAT 0).

	Basic fee/tractiv	e unit	Transfer fee from high-voltage	Fee for contact-line dissipation	
	With gauges	Without gauges	Winter months*)	Other months	
Fees	v = 39 €/month	w= 39 €/month	x = 14 € /MWh	y = 10 € /MWh	z = 48 € /MWh

\*) The winter months are December, January and February

## Basis for railway undertakings' transfer fee

	Basic fee				Transfer fee from high-voltage networks			Dissipation fee	
	With gauges Units		Without gauges Units		Consumption	Winter months	Other months	Dissipation	
	Quantity	€/month	Quantity	€/month	MWh/month	€/month	€/month	MWh/ month	€/month
Railway operator	a quantity	a*v€	b quantity	b*w€	m MWh	m*x €	m*y €	n MWh	n*z €

The transfer fee comprises the basic fee specified for the tractive unit, the average transfer fee from high-voltage networks in winter months/other months, and the contact-line dissipation costs.

- The basic fee specified for the tractive unit is based on the measurement and reporting services required for the procurement of electric power. The basic fee is based on the estimated total quantity of the transport operator's tractive units. The basic fee may also change if the number of traction units belonging to the Erex system changes.
- The transfer fee from high-voltage networks is based on the transfer fees from 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, since the high-voltage networks 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 dissipations. The dissipation cost is based on the actual price of electric power procured by the Infrastructure Manager in 2021. The transfer fee in the price list is based on an average cost estimate for 2021.

# The responsibilities of operative work

The general requirements for operating railway traffic are described in section 2.2.1 of the network statement. In addition, in a multi-operator environment the roles and responsibilities of operative work of the various parties depend on the agreements between the various actors. The Infrastructure Manager treats all parties equally and assumes responsibility for the operations of traffic control. In operative 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 disturbances 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 marshalling 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 activities of the operational group (see section 4.8.1).

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 the trains use
- Providing real-time data for the use of the operators via interfaces

## Service facility on the traffic control service for shunting operations at railway yards in the state-owned railway network

## 1. General information 1.1 Introduction

This appendix of the Railway Network Statement and the infrastructure manager's guidelines specify the procedures for traffic control services for shunting operations in Finnish railway yards. The operations and specific features of each traffic operating point shall, if necessary, be described and agreed upon in the network access agreement and in the separate railway yard agreements enclosed in the access agreement (Section 2.3 of the Network Statement). The access agreement's enclosure concerning traffic control service for shunting operations and railway yard agreements regarding specific traffic operating points may be updated during the agreement period.

The FTIA has prepared this service facility document in compliance with the requirements set in the Commission Implementing Regulation (EU) 2017/2177. In accordance with Appendix II of the Directive 2012/34 of the European Parliament and of the Council, the service facility's type is c) marshalling yards and train formation facilities, including shunting facilities.

1.2

Operator of the service facility

Finnish Transport Infrastructure Agency, Infrastructure Access, Opastinsilta 12 A, FI-00520 Helsinki

Finrail Oy, Palkkatilanportti 1, FI-00240 Helsinki, the contact details of traffic planning are available on Finrail's web page:

https://tmfg.fi/fi/finrail/liikennesuunnittelun-yhteystied ot.

Provision of traffic control services not covered by the infrastructure charge shall be agreed upon with the FTIA or the provider of other services, depending on the traffic operating point (see the up-to-date list: https://vayla.fi/ammattiliikenne-raiteilla/liikennesuunnittelu/ratapihojen-liikenteenohjaus.

In addition, the contact details of railway yard contact persons are available at the FTIA's rail data extranet site under traffic control contact details: https://vayla.fi/palveluntuottajat/aineistot/ratatiedon-extranet

1.3

Validity period and updating process

This document shall be updated annually in connection with the publication of the Network Statement. If required, minor changes may also be made on the statement's update dates during the timetable period.

APPENDIX 5D / 2 (5) Service facility description ...

### 2. Services

2.1 Traffic control service for shunting operations

The traffic control service for shunting operations between traffic operating points is available to railway operators as part of the allocated capacity and it is covered by the infrastructure charge. The traffic control service for shunting operations taking place in railway yards is a chargeable additional service provided by the infrastructure manager. The service's detailed content and pricing are described in Appendix 5 A of the Network Statement. In simple terms, the traffic control service for shunting operations taking place in railway yards is implemented either under local permissions or using shunting routes formed by the traffic controller (Chapter 4 in the JT rules). Operating under local permissions is not subject to a charge.

Some railway yards have applied operations carried out by shunting or signal box operators, but they have been replaced by limited area traffic control operations. The FTIA maintains a traffic operating point-specific list of limited area traffic operation points and/or their parts on its web page (https://vayla.fi/ammattiliikenne-raiteilla/liikennesuunnittelu/ratapihojen-liikenteenohjaus)

Limited area traffic control operation 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. Limited area traffic control participates in protecting rail transport in accordance with the qualification requirements of the limited area.

## 3. Service facility description

3.1

List of service facility sections

Traffic control service for shunting operations are provided in state-owned train formation yards. Train formation yards owned by the FTIA are marked with "Shunting" in Appendix 3B of the Network Statement. The largest train formation yards are Tampere and Kouvola which also provide incline services (Section 5.3.1.3 of the Network Statement).

3.2 Names of service facility sections

Railway yard tracks are named so that the abbreviation of the traffic operating point comes first, followed by the track number (= track identifier). Track identifiers are shown in data systems for rail capacity management and 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 3B of the Network Statement and in the map service. The track locations in traffic operating points are specified in track diagrams.

## 3.2.2

Operational hours

Railway yard tracks are available 24/7 and can be used as agreed. The LIIKE system contains information on railway yards' deviant service times (traffic control, railway yard traffic control or signal box operator service). In addition, information can be requested in a listed form from palveluaika@finrail.fi.

3.2.3 Technical characteristics

Train formation yards owned by the FTIA are marked with "Shunting" in Appendix 3B of the Network Statement (see also Section 5.2).

3.2.4

Planned changes to technical characteristics

No changes have been planned to technical characteristics.

## 4. Charges

4.1 Information on charges

Currently, the FTIA does not charge the use of train formation yards except for the additional traffic control service for shunting operations (Appendix 5A of the Network Statement).

4.2 Information on discounts

Discounts are not granted for the use of the traffic control service for shunting operations.

## 5. Terms of use

5.1 Legal requirements

The use of the traffic control service for shunting operations shall be agreed timetable period-specifically with the FTIA in the access agreement.

If required, a railway yard agreement is prepared for railway yards used by several railway operators. The railway yard agreements are timetable periodspecific, and they shall be re-negotiated prior to the start of each timetable period. A railway yard agreement may also be re-negotiated 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 Infrastructure Access. However, it should be noted that the agreement model may change for the timetable period of the Network Statement in question.

## 5.2

Technical terms

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 rail data extranet site: https://vayla.fi/palveluntuottajat/aineistot/ratatiedon-extranet.

5.3

Production of rail transport services

The FTIA does not provide train formation services except for the protection of routes by the traffic controller. Railway operators can carry out train formation operations themselves.

5.4 IT systems

Railway yard tracks can be viewed in Finrail's data systems, such as the capacity management system LIIKE and its modules. Further information on data systems is available (in Finnish) at https://www.tmfg.fi/fi/finrail/tietojarjestelmat.

## 6. Granting access to the capacity

6.1 Access right and service applications

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 shall deliver to the infrastructure manager a freeform, traffic operation point-specific estimate of their train formation yard needs before the start of access agreement negotiations. The application shall also state the applicant's need for traffic control services for shunting operations. On the basis of track 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 shall 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 regarding specific traffic operating points (railway yard agreement) with respect to the common management of situational information on tracks.
APPENDIX 5D / 5 (5) Service facility description ...

#### 6.2

Responding to applications

Applications concerning train formation yard needs are responded to 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 after all necessary information for processing the application has been received. With respect to processing applications, the contact person for access agreements and railway yard agreements is the person responsible for agreements at Infrastructure Access.

The priority criteria for operation, granting of permits and track use in railway yards are specified in Section 4.4.3 (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 (2017/2177 Article 11).

The infrastructure manager and its service providing traffic control company are responsible for the traffic control at traffic operating points. Traffic control in a limited area is performed by the service provider responsible for maintenance in that specific area. More detailed information (contact information, procedures and roles regarding granting of permits) can be found (in Finnish) on the rail data extranet site under the heading, "Liikenteenohjauksen yhteystiedot" (Traffic control contact information):

https://vayla.fi/palveluntuottajat/aineistot/ratatiedon-extranet.

In case of conflicting needs for track use, the aim is to find solutions through means of negotiation and, if required, in collaboration with the operators and infrastructure managers of other service facilities. Other viable alternatives, such as an alternative location or time for the formation of rolling stock, may be proposed to the applicant (2017/2177 Article 10).

#### 6.3

Information on available capacity and temporary capacity limitations

Information on the available capacity and temporary capacity limitations is visible to all operators in the data system for rail capacity management (LIIKE). In addition, information may be requested from Finrail's traffic planning or traffic control.

APPENDIX 5E / 1 (5) Service description - Maintenance facilities ...

## Service 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 category of the service facility is a service falling within the scope of the obligation to supply services 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 00520 Helsinki <u>kirjaamo@vayla.fi</u>

#### 1.3 Validity period and updating process

This document shall be 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.

The maintenance platforms at the Ilmala depot are services provided by the infrastructure manager, and access to them is described in section 5.3.1.5 of the Network Statement. Services provided on the maintenance tracks include such operations as 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 located in the Ilmala railway yard is listed in appendix 3S of the Network Statement and in the map service.

The tracks provided at the Ilmala railway yard are described in the track diagrams published on the rail data extranet site <a href="https://vayla.fi/palveluntuottajat/aineistot/ratatiedon-extranet">https://vayla.fi/palveluntuottajat/aineistot/ratatiedon-extranet</a>

#### 3.2 Name of installation

Helsinki depot, Ilmala railway yard

## 3.2.1 Location

The locations of services provided at the Ilmala railway yard are described in appendix 3S of the Network Statement and in the track diagram.

## 3.2.2 Opening hours

The Ilmala railway yard is accessible on all weekdays year-round.

#### *3.2.3 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 section 1.2).

#### *3.2.4 Planned changes in technical characteristics*

No significant changes 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 16.00/transfer.

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 operator 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 1,500 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 adjustment procedure is applied to the access charge as to the basic infrastructure charge. In addition to the annual index adjustments, other adjustments to the access charge can also be made for special reasons, and advance notification of them is given in the same manner as for the basic infrastructure charge.

#### 4.2 Information on discounts

No discounts granted.

#### 5 Access conditions

#### 5.1 Legal requirements

The tracks and services provided by the Finnish Transport Infrastructure Agency are available to all operators. Access to the tracks and services is agreed upon in the network access agreements. The procedure for agreeing on track use in the Ilmala railway yard is detailed in appendix 4C.

The maintenance, cleaning and repair of rolling stock shall 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 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) on the rail data extranet site: https://vayla.fi/palveluntuottajat/aineistot/ratatiedon-extranet.

#### 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

More information on the use of capacity management systems can be found on the Finrail Oy website: <u>https://tmfg.fi/fi/finrail/tietojarjestelmat</u>

#### 6 Capacity allocation

#### 6.1 Requests for access or services

The procedures related to requests for access to and supply of services at the Ilmala railway yard are described in appendix 4C of the Network Statement. The railway operator shall 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

Applications for the supply of services provided by the Finnish Transport Infrastructure Agency will be responded to within the deadlines set by the rail regulatory body (record 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 Infrastructure Access. Finrail'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 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. Additional information on the procedures applied to the Ilmala railway yard is given in appendix 4C.

#### 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. In addition, information may be requested from Finrail's traffic planning or traffic control.

APPENDIX 5F / 1 (5) Service description - Train information yards ...

## Service description

## Train formation yards and access to them

- 1 General information
- 1.1 Introduction

This service description describes the possibilities and terms and conditions of access to train formation yards.

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 category of the service facility is a service falling within the scope of the obligation to supply services 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, Infrastructure Access Opastinsilta 12 A 00520 Helsinki <u>kirjaamo@vayla.fi</u>

Contact information of railway yards can be found on the Finnish Transport Infrastructure Agency's rail data extranet site.

#### 1.3 Validity period and updating process

This document shall be 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 Access to train formation 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 its service providing traffic control company are responsible for the traffic control at traffic operating points. At railway yards, limited area traffic control is performed by the service provider responsible for maintenance in that specific area. More detailed information (contact information, procedures and roles regarding granting of permits) can be found (in Finnish) on the rail data extranet site under the heading, "Liikenteenohjauksen yhteystiedot" (Traffic control contact information): <u>https://vayla.fi/palveluntuottajat/aineistot/ratatiedon-extranet</u>

## 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 3B of the Network Statement.

## 3.2 Name of installation

The train formation yards owned by the infrastructure manager have been named, and their names and abbreviations have been marked in appendix 3B of the Network Statement and in the map service.

## 3.2.1 Location

The locations of train formation yards in the state-owned railway network are specified in Appendix 3B of the Network Statement and in the map service.

## 3.2.2 **Opening hours**

The train formation yards are always open. Traffic control service hours are presented in the rail capacity management system and in rail data extranet service.

## 3.2.3 Technical characteristics

The technical characteristics of train formation yards are specified in the track diagrams available on the rail data extranet site <a href="https://vayla.fi/palveluntuottajat/aineistot/ratatiedon-extranet">https://vayla.fi/palveluntuottajat/aineistot/ratatiedon-extranet</a>

## 3.2.4 Planned changes in technical characteristics

More information on the development plans for train formation yards and ongoing projects on the Finnish Transport Infrastructure Agency's website <a href="https://vayla.fi/ratahankkeet">https://vayla.fi/ratahankkeet</a>

## 4 Charges

#### 4.1 Information on charges

Access to train formation yards is currently free of charge. Pricing of the traffic control service for shunting operations has been described in the relevant service description.

#### 4.2 Information on discounts

No discounts granted.

## 5 Access conditions

#### 5.1 Legal requirements

Access to and the terms of use of train formation yards are agreed upon 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. More information on the subject in 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) on the rail data extranet site: https://vayla.fi/palveluntuottajat/aineistot/ratatiedon-extranet.

The railway operator shall take account of 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 railway yards are described in the Network Statement and in the infrastructure manager's guidelines [e.g. the safety guidelines set by Junaliikenteen ja vaihtotyön turvallisuussäännöt (Jt)]. The operations and specific features of each traffic operating point shall, if necessary, be described and agreed upon in the network access agreement and in the separate railway yard agreements enclosed in the network access agreement.

Carriage of dangerous goods is dealt with in section 3.4.3 of the Network Agreement.

Operating permits and access to shunting frames are granted by the traffic operator/the person issuing permits in the respective area. The traffic operator 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 shall comply with the infrastructure manager's guidelines and the Network Statement.

Staff working in railway yards shall report any malfunctions that they have observed to the traffic operator of the traffic operating point. Based on the malfunction report, the traffic operator shall impose the required restrictions affecting operations before the repair work commences. The traffic operator shall notify all parties of malfunctions affecting operations.

In general, train formation yards are not used for the maintenance or cleaning of rolling stock. Should the need to do so arise, the use of the yard for such purpose must be agreed upon 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

## 5.4 IT systems

Railway yard tracks can be viewed in Finrail'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

The access to train formation yards is agreed upon in the network access agreements.

For the purpose of access agreement negotiations, the railway operator or another capacity applicant shall deliver to the infrastructure manager a freeform, traffic operation point-specific estimate of their train formation yard needs 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.

With regard to the Ilmala railway yard, the operating method for track access is described in further detail in appendix 4C of the Network Statement.

If any changes happen in the railway operators' operations that affect both the needs for track access in railway yards during the timetable period and the issues described in this appendix or agreed upon in the access agreement, they shall 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 will be responded to within the deadlines set by the rail regulatory body (record 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 Infrastructure Access. Finrail'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 the operators and infrastructure managers of other service facilities.

The priority criteria for operations, issuing of permits and track access applied on railway yards are described (in Finnish) in the safety guidelines set by Junaliikenteen ja vaihtotyön turvallisuussäännöt (Jt). 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 (2017/2177 Article 11).

#### 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). In addition, information may be requested from Finrail's traffic planning or traffic control.

## Service 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. The category of the service facility is a service falling within the scope of the obligation to supply services 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, Infrastructure Access Opastinsilta 12 A 00520 Helsinki <u>kirjaamo@vayla.fi</u>

#### 1.3 Validity period and updating process

This document shall be 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 its service providing traffic control company are responsible for the traffic control at traffic operating points. At railway yards, limited area traffic control is performed by the service provider responsible for maintenance in that specific area. More detailed information (contact information, procedures and roles regarding granting of permits) can be found (in Finnish) on the rail data extranet site under the heading, "Liikenteen-ohjauksen yhteystiedot" (Traffic control contact information): https://vayla.fi/palveluntuottajat/aineistot/ratatiedon-extranet

## 3 Service facility description

## 3.1 List of all installations

Track access to inclines is described in track diagrams published on the rail data extranet site <a href="https://vayla.fi/palveluntuottajat/aineistot/ratatiedon-extranet">https://vayla.fi/palveluntuottajat/aineistot/ratatiedon-extranet</a>

For additional information on the installations and technical characteristics of inclines, see the operating instructions for inclines <a href="https://julkaisut.vayla.fi/pdf7/rautatieohjeet\_web.pdf">https://julkaisut.vayla.fi/pdf7/rautatieohjeet\_web.pdf</a>

## 3.2 Name of installation

The inclines are named after their locality, and a specifier is added to the name, if necessary.

## 3.2.1 Location

Kouvola train formation yard Tampere Viinikka

## 3.2.2 Opening hours

In general, inclines are always open. The railway undertaking determines 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.

#### 3.2.3 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.

## 3.2.4 Planned changes in technical characteristics

No planned changes.

#### 4 Charges

4.1 Information on charges

For the present, no charge is collected for access to train formation yards. The charges for the traffic control service for shunting operations are specified in the relevant service description.

#### 4.2 Information on discounts

No discounts granted.

## 5 Access conditions

#### 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 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) on the rail data extranet site: https://vayla.fi/palveluntuottajat/aineistot/ratatiedon-extranet.

#### 5.3 Self-supply of rail-related services

-

#### 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 shall deliver to the infrastructure manager a free-form, traffic operation point-specific estimate of their incline needs 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 shall 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.

More information on the handling of dangerous goods is provided in chapter 3.4.3 of the Network Statement and in the operating instructions for inclines.

#### Ad hoc capacity requests:

Decisions on meeting urgent need of access to inclines are made by Finrail'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 will be responded to within the deadlines set by the rail regulatory body (record 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 Infrastructure Access. Finrail'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 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 is visible to all operators in the data system for rail capacity management (LIIKE). In addition, information may be requested from Finrail's traffic planning or traffic control.

## Description

## Trial runs of rolling stock

## 1 General information

## 1.1 Introduction

This description specifies the services provided by the centre for trial runs in Laajakangas, located at the Kontiomäki traffic operating point.

#### 1.2 Operator of the service facility

Operator of the service facility:

Finnish Transport Infrastructure Agency, Railway Technology Opastinsilta 12 A 00520 Helsinki <u>kirjaamo@vayla.fi</u>

## 1.3 Validity period and updating process

This document shall be 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 Trial runs of rolling stock

Trial runs of rolling stock can be made at the Finnish Transport Infrastructure Agency's centre for trial runs in Laajakangas in Kontiomäki. The use of the area shall be agreed upon in accordance with the arrangements described in the track reservation and operating instructions of the centre for trial runs in Laajakangas (see the Finnish Transport Infrastructure Agency's instructions, Rautatieohjeet, in Finnish).

## 3 Description

#### 3.1 List of all installations

The installations of the centre for trial runs are described in the track reservation and operating instructions of the centre for trial runs (see Railway instructions, Rautatieohjeet, in Finnish).

#### 3.2 Name of installation

Laajakangas, Kontiomäki.

#### 3.2.1 Location

Kontiomäki-Ämmänsaari line section.

## 3.2.2 Opening hours

No specific opening hours.

## 3.2.3 Technical characteristics

The technical characteristics of the centre for trial runs are described in the track reservation and operating instructions of the centre for trial runs (see the Finnish Transport Infrastructure Agency's instructions, Rautatieohjeet, in Finnish).

## 3.2.4 Planned changes in technical characteristics

No major changes planned. Changes are made based on the condition of the track, as necessary.

## 4 Charges

## 4.1 Information on charges

The charges and criteria for invoicing of the centre for trial runs are described in the track reservation and operating instructions of the centre for trial runs.

## 4.2 Information on discounts

No discounts granted.

## 5 Access conditions

#### 5.1 Legal requirements

The operators using the services of the centre for trial runs shall draw up a safety plan based on risk assessment. More information on the track reservation and operating instructions of the centre for trial runs (see the Finnish Transport Infrastructure Agency's instructions, Rautatieohjeet, in Finnish).

#### 5.2 Technical conditions

The technical conditions of the centre for trial runs are described in the track reservation and operating instructions and track diagrams.

#### 5.3 Self-supply of rail-related services

No self-supply. You can request guidance from the centre for trial runs.

#### 5.4 IT systems

- -
- 6 Capacity allocation
- 6.1 Requests for access or services

Track reservations to the centre for trial runs are made according to the procedure described in the reservation and operating instructions. The request for track reservation must be made at least three (3) weeks before the intended use.

The acceptance of the reservation is conditional on the submission of a safety plan in connection with the reservation request and finding it sufficient. The request for track reservation shall be made in writing using a form intended for the purpose.

For more information, see the track reservation and operating instructions of the centre for trial runs.

#### 6.2 Response to requests

-

#### 6.3 Information on available capacity and temporary capacity restrictions

For more information, contact the operator of the service facility (see section 1.2).

## Service description Passenger stations

## 1 General information

#### 1.1 Introduction

This service description specifies access to and terms of use of passenger stations, their buildings and other facilities 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 category of the service facility is a service falling within the scope of the obligation to supply services 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 00520 Helsinki <u>kirjaamo@vayla.fi</u>

#### 1.3 Validity period and updating process

This document shall be 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.

Information on the station buildings and other facilities owned by the Finnish Transport Infrastructure Agency at passenger stations that may be rented out is presented in appendix 3Q.

The list of facilities owned by other parties and their contact details are presented in Appendix 3R.

Open data bank on railway stations and the development of their urban surroundings:

https://www.asemanseutu.fi/in-english/

## **3** Service facility description

## 3.1 List of all installations

The passenger stations and their facilities owned by the Finnish Transport Infrastructure Agency that may be rented out are listed in appendix 3Q of 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.

#### 3.2.1 Location

The addresses of the passenger stations owned by the manager of the stateowned railway network are presented in appendix 3Q of the Network Statement and in the map service.

## 3.2.2 Opening hours

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.

#### 3.2.3 Technical characteristics

Information on the rental facilities of passenger stations and their technical characteristics is presented in appendix 3Q of the Network Statement.

#### 3.2.4 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 network manager's passenger stations are presented in appendix 3Q.

The fair rental rate of the facilities is determined before each rental. The rental level is determined based on the actual price level in the region.

#### 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 shall be drawn up on the use of passenger stations.

#### 5.2 Technical conditions

Technical conditions and information regarding individual service points on each specific station are presented in appendix 3Q of 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 shall be agreed upon when the rental agreement is made.

## 6 Capacity allocation

#### 6.1 Requests for access or services

An applicant wishing to rent passenger station facilities submits to the infrastructure manager a free-form enquiry regarding the renting of passenger station facilities. The enquiry shall 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.

The rental enquiries shall be sent to the Finnish Transport Infrastructure Agency's Railway Maintenance Services by e-mail: kirjaamo@vayla.fi.

#### 6.2 Response to requests

Applications for renting passenger station premises will be responded to within the deadlines set by the rail regulatory body (record 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. Renting out passenger station facilities often includes, for example, viewings, condition surveys and suitability assessments of the premises. These are agreed upon separately in connection with each rental.

Matters related to the rental of passenger stations in the state-owned railway network are prepared by the Finnish Transport Infrastructure Agency's Railway Maintenance Services.

No principles of primacy have been set for the rental of passenger stations.

If there are conflicting requests for leased facilities, attempts shall 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 (2017/2177, article 10).

#### 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 3Q in connection with the publication and updating of the Network Statement.

## Service 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 category of the service facility is a service falling within the scope of the obligation to supply services 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, Infrastructure Access Opastinsilta 12 A, 00520 Helsinki <u>kirjaamo@vayla.fi</u>

The contact point in matters concerning the rental and use of loading facilities and the condition of loading areas and tracks in the state-owned railway network is the manager, authorised by the infrastructure manager of the stateowned railway network, responsible for the nationwide administration of timber loading facilities. For contact information, visit the infrastructure manager's website: https://vayla.fi/rataverkko/kunnossapito/tyonjako

The contact point in matters concerning track access to loading areas in the state-owned railway network and their use is Infrastructure Access at the Finn-ish Transport Infrastructure Agency.

#### 1.3 Validity period and updating process

This document shall be 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 described in appendices 3B and 3T of the Network Statement, and in the map service. As the infrastructure manager of the state-owned railway network, 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.

## **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 3B, are used for loading timber. The marking "Y" means a private loading area, which are leased by the facility owner.

Appendix 3T 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.

## 3.2.1 Location

The locations of the timber loading facilities of the state-owned railway network are described in appendices 3B and 3T of the Network Statement and in the map service.

## 3.2.2 Opening hours

In general, the timber loading facilities of the state-owned railway network are accessible on all weekdays year-round. There may be restrictions on traffic and loading/unloading operations in certain timber loading facilities. Further information is provided by the manager, authorised by the infrastructure manager of the state-owned railway network, responsible for the nationwide administration of timber loading facilities (see section 1.2).

#### 3.2.3 Technical characteristics

The loading facilities are available to railway operators for the purpose of loading timber wagons. The number and length of loading tracks and the possibility of using electric traction is presented in the track diagrams for each specific track: <u>https://vayla.fi/palveluntuottajat/aineistot/ratatiedon-extranet</u>.

The availability of loading facilities for unloading cargo shall be investigated on a case-by-case basis, as needed.

## *3.2.4 Planned changes in technical characteristics*

No major changes have been planned to the technical characteristics of the current loading sites. Information on the construction of new loading facilities and changes in the current loading facilities is given in appendix 3T of the Network Statement.

The target status and development of the timber loading point network is discussed in the publication "Development of the railway raw wood loading point network" (Studies and reports of the Finnish Transport Agency 11/2018).

#### 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 with the same national rate. From 1 January 2019 to 31 December 2021, the rent is EUR 0.38/m2/year, Except for the storage area of the Patokangas loading facility in Kemijärvi for which a rent of EUR 0.60/m<sup>2</sup>/year is charged. The rent for the storage area does not include maintenance costs that are charged from the leaseholder as agreed in the lease agreement.

#### 4.2 Information on discounts

No discounts granted.

- 5 Access conditions
- 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. More information on the subject in chapter 2.3 of the Network Statement.

The lease agreement on the use of loading site storage areas is made with the Finnish Transport Infrastructure Agency. The manager, authorised by the infrastructure manager of the state-owned railway network, acts as the contact point on the matter (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 can be found in the track diagrams available on the rail data extranet site: <u>https://vayla.fi/palveluntuottajat/aineistot/ratatiedon-extranet</u>.

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.

#### 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.

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. Further information: <u>https://vayla.fi/rataverkko/yksityisraiteet</u>

#### 5.4 IT systems

The arrival/departure tracks of loading facilities can be viewed in Finrail'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 upon in the of the network access agreements.

For the purpose of access agreement negotiations, the railway operator or another capacity applicant shall deliver to the infrastructure manager a free-form, traffic operation point-specific estimate of their loading facility needs 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 any changes happen 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 shall 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. 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 shall take account of 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 responded to by the national manager of the timber loading facility network (see chapter 1.2).

#### 6.2 Response to requests

Applications for access to loading facilities will be responded to within the deadlines set by the rail regulatory body (record 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 Infrastructure Access. Finrail's traffic planning should be contacted in matters regarding ad hoc capacity needs (see sections 1.2 and 6.1). Applications concerning the leasing of storage sites are responded to by the national manager of the timber loading facility network (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 capacity and temporary capacity restrictions is visible to all operators in the data system for rail capacity management (LIIKE). In addition, information may be requested from Finrail's traffic planning or traffic control. Further information concerning the track reservations of storage sites is available from the national manager of the timber loading facility network (section 1.2).

## Speed depending on rolling stock

The rolling stock for which the Finnish Transport Safety Agency has issued a permit, valid until further notice, has been listed in the tables below. As soon as the above mentioned permit has been issued, the rolling stock type will be entered into the respective table.

Superstructure category						
Series	A <sup>1</sup>	<b>B</b> <sub>1</sub>	B <sub>2</sub>	<b>C</b> <sub>1</sub>	C <sub>2</sub>	D
Dv12	50 <sup>2, 3</sup>	100	110	125	125	125
Dv17 9810 6003070-8	30	40	40	40	40	40
Dv19 9810 8000048-3	20	20	20	20	20	20
Dr14, 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>
Dr17 9810 6007001-9	30	65	65	65	65	65
Dr17 9810 6006010-1	-	50	50	50	50	50
Dr18	_ <sup>6</sup>	90	90	90	90	90
Dr25 9810 8029002-7	20	25	25	25	25	25
Dr25 9810 8129002-6	20	25	25	25	25	25
Dr25 9810 8129003-4	20	25	25	25	25	25
Dr35 9810 8039011-6	20	60	60	60	60	60
Dr35 9810 8139005-7	-	30	30	30	30	30
Dr35 9810 8139006-5	-	30	30	30	30	30
Dr35 9810 8039013-2	35	60	60	60	60	60
Dr45 9810 8049001-5	-	60	60	60	60	60
Dr25 9810 8021043-9	16	16	16	16	16	16
Dr25 9810 8029002-7	20	25	25	25	25	25
Dr25 9810 8129002-6	20	25	25	25	25	25
Dr25 9810 8129003-4	20	25	25	25	25	25
Dr25 9810 8129166-9	14	14	14	14	14	14
Dr27 9810 8121053-7-	8	8	8	8	8	8
9810 8121054-9						
Dr30 9810 1002001-5	60	60	60	60	60	60
Dr35 9810 8039011-6	20	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
Dr35 9810 8039011-6	20	60	60	60	60	60
Dr35 9810 8039013-2	35	60	60	60	60	60
Dr45 9810 8049001-5	-	60	60	60	60	60
Sk 9010 9981201-7	7	7	7	7	7	7
Sk 9010 9981202-5	7	7	7	7	7	7
Sr1	-	80	100	140	140	140
Sr2	_	80	100	180 <sup>8</sup>	200	210

Tahle 1.	Maximum allowable sr	peed for tractive	stock and motor cars.
TUDIC II	Muximum accovable sp		

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

 $<sup>^2</sup>$  Max. speed 40 km/h in curves with a radius under 600 m. Max. speed 60 km/h on the line section Äänekoski–Haapajärvi.

<sup>&</sup>lt;sup>3</sup> 20 km/h in the deflecting section of K30 turnouts.

<sup>&</sup>lt;sup>4</sup> 80 km/h when hauled.

<sup>&</sup>lt;sup>5</sup> 135 km/h without wagons, either on its own or with double heading.

<sup>&</sup>lt;sup>6</sup>160 km/h without wagons. 160 km/h with double heading.

 $<sup>^{7}</sup>$  60 km/h when hauled.

<sup>&</sup>lt;sup>8</sup> 160 km/h without wagons. 160 km/h with double heading.

## Updated on 18 June 2020

#### FTIA's publication 46eng/2019 Railway Network Statement 2021

Superstructure category							
Series	<b>A</b> <sup>1</sup>	<b>B</b> <sub>1</sub>	B <sub>2</sub>	<b>C</b> <sub>1</sub>	C <sub>2</sub>	D	
Sr3	-	80	100	180	200	200	
Motor cars							
Sm1, Sm2	-	90	110	120	120	120	
Sm3	-	100	110	180	200	220	
Sm4	_	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 in brackets, if it differs from the maximum speed when selfpropelled)

Table 2.Maximum allowable speed for small-power locomotives and<br/>track motor cars.

Superstructure category						
Series	A <sup>1</sup>	<b>B</b> 1	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, 243–247	60	80	80	80		
Tka7, with snow plough, nos.	35 <sup>9</sup>	60 <sup>9</sup> (80)	60 <sup>9</sup> (80)	60 <sup>9</sup> (80)		
168–238						
Tka7, nos. 239–242	50	80	80	80		
Tka7, with snow plough, nos	35 <sup>9</sup>	60 <sup>9</sup> (80)	60 <sup>9</sup> (80)	60 <sup>9</sup> (80)		
239–247						
Tka7, with welding container nos.	35	60	60	80		
168–238, 243–247						
Tka8	35	60	80	80		
Tka9 no. 91901	20 <sup>10</sup>	50 <sup>10</sup>	70 <sup>10</sup>	70 <sup>10</sup>		
Otso4 no. 920001	2011	45	45	45		

<sup>&</sup>lt;sup>9</sup> The maximum snow-ploughing speed is specified in the machine operator's manual.

<sup>&</sup>lt;sup>10</sup> Hauling according to the manufacturer's instructions.

 $<sup>^{11}</sup>$  20 km/h on sidings which belong to superstructure category A.

#### MAXIMUM ALLOWABLE SPEED FOR SELF-PROPELLED MACHINERY

(Hauling speed in brackets, if the machine can be coupled to the train and the hauling speed differs from the above mentioned)

 Table 3.
 Maximum allowable speed for self-propelled machinery.

Superstructure category						
Series	A	<b>B</b> <sub>1</sub>	B <sub>2</sub>	<b>C</b> <sub>1</sub> , <b>C</b> <sub>2</sub> , <b>D</b>		
Track inspection cars						
Et no. 66	20 <sup>12</sup>	60	60	100		
Ttr1 no. 51	60	80	120	120		
Ttr 99 10 9129 001-5	40	80	120/160	120/160		
Snow brooms						
Tlh no. 741 <sup>13</sup>	50	60	60	60		
Snow ploughs						
Tla 90109691001-2	35	60	60	60		
Rail planing machines						
Tkh no. 894 <sup>11</sup>	60	80	80	80		
Track replacement machines						
Trk no. 870	20	20 (50)	20 (80)	20 (100)		
Ballast nloughs	20	20 (30)	20 (00)	20(100)		
Tcl poc 880 887 88/ 885 800 <sup>11</sup>	70	80	80	80		
Tsl no. 883 <sup>11</sup>	35	50	60	60		
Tcl po 888 <sup>11</sup>	50	60	60	80		
Tsl no. 880 <sup>11</sup>	20	50	80	80		
Tel no. 01021	20	70	70	70		
Ballast cleaning machines	20	70	70	70		
Tsn nos 891 893	20	60	80	80		
Tsp no 892	50	80	80	80		
Multi-nurnose machines	50			00		
Ttm1 no. 91101	20 <sup>14</sup>	50	70	70		
Tamping machines	20	30				
Ttk1 <sup>11</sup> nos. 801–803, 821, 823, 831,						
91042	60	80	80	80		
Multi-purpose machines						
Ttk1 <sup>11</sup> nos. 818–820	25 (50) <sup>15</sup>	25 (50) <sup>15</sup>	25 (50) <sup>15</sup>	25 (50)15		
Ttk1 <sup>11</sup> nos. 822, 824–829	50	50 (80)	50 (80)	50 (80)		
Ttk1 <sup>11</sup> no. 830	60	85 (90)	85 (90)	85 (90)		
Ttk1 <sup>11</sup> nos. 832, 833	50	80	80	80		
Ttk1 no. 834	50 <sup>16</sup>	80	80	80		
Ttk1 <sup>11</sup> no. 91041	60	60	60	60		
Ttk1 no. 91042	60	70	70	70		
Ttk1 no. 9010 9122002-9	_ <sup>18</sup>	80	80	80		
Ttk1 no. 9010 9422001-8	50	80	80	80		
Stabilisation machines						
Ttk2 nos. 841, 844, 849 <sup>13</sup>	60	80	80	80		
Ttk2 no. 842 <sup>11</sup>	35	60	60	80		
Ttk2 nos. 850, 856	20	60	80	90 (100)		
Ttk2 nos. 851–855 <sup>11</sup>	50	50 (80)	50 (80)	50 (80)		

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

<sup>15</sup> 15 km/h in turnouts.

<sup>13</sup> Wheel diameter max. 790 mm, which necessitates caution in diamond crossings with slips.

<sup>&</sup>lt;sup>14</sup> Apuvaunun max. akselipainolla 160 kN (16 t).

<sup>&</sup>lt;sup>16</sup> Max. 20 km/h on sidings which belong to railway category A.

## Updated on 18 June 2020

#### FTIA's publication 46eng/2019 Railway Network Statement 2021

# $\begin{array}{l} \mbox{APPENDIX 3L / 4 (5)} \\ \mbox{Speed depending on rolling stock} \end{array}$

Superstructure category						
Series	Α	<b>B</b> <sub>1</sub>	B <sub>2</sub>	<b>C</b> <sub>1</sub> , <b>C</b> <sub>2</sub> , <b>D</b>		
Ttk2 no. 857	20	60	80	80 (100)		
Ttk2 no. 858	_ <sup>16</sup>	60	75	90 (100)		
Ttk2 no. 859	2016	60	75	90 (100)		
Ttk2 no. 91051	15	35	50	70 <sup>17</sup>		
Ttk2 no. 9010 9421002-8	_ <sup>18</sup>	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	_ <sup>18</sup>	80	80	80		
Ballast compacting machines						
Ttk3 nos. 862, 863 <sup>11</sup>	60	80	80	80		
Tamping machines						
Ttk4 no. 91501	20	40	40	40		
Ttk5 no. 9010 9422001-8	50	80	80	80		
Service and inspection vehicles on						
electrified lines						
Tta nos. 1, 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>	70 <sup>16</sup>	70 <sup>16</sup>		
Tte nos. 21–29	70	100	110	110		
Tte nos. 91201, 91202	20	60	80	80		
Ttv nos. 6, 9, 12, 15	50	70	70	90		
Rail-mounted cranes						
Tnk4 nos. 982, 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>		
Electrified trains						
Tnv-sr nos. 911002, 911003	40 (40)	40 (60)	40 (80)	40 (100)		

 $<sup>^{\</sup>rm 17}$  5 km/h in diamond crossing with slips, due to the small wheel diameter (440 mm).

 <sup>&</sup>lt;sup>18</sup> Access and speeds on line sections of class A are determined on a case-by-case basis.
 19 Hauling speed 80 km/h, when the balance weight has been moved to the crane trailer.

#### MAXIMUM SPEED FOR MUSEUM LOCOMOTIVES

(Hauling speed in brackets, whether it differs from the maximum speed when selfpropelled)

Superstructure category					
Sarja	A <sup>20</sup>	B <sub>1</sub>	B <sub>2</sub>	C <sub>1</sub> , C <sub>2</sub> , 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	<b>20</b> <sup>21</sup>	80	100	110 <sup>23</sup>	
Hv1	60	80	80	80	
Hv3	2024	70	70	70	
Pr1	<b>20</b> <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	
Rau 2	70	70	70	70	
Dm7	70	95	95	95	

#### USE OF TRACTIVE STOCK ON TRACKS BELONGING TO SUPERSTRUCTURE CATEGORY A

This matter has been transferred to Junaliikenteen ja vaihtotyön turvallisuussäännöt (Jt), Instructions of the Finnish Transport Agency 10/2018.

 $<sup>^{\</sup>rm 20}$  Secondary lines and railway yard sidings belonging to superstructure category A, see section 3.6.5

<sup>&</sup>lt;sup>21</sup> Operation only allowed on sidings.

<sup>&</sup>lt;sup>22</sup> 80 km/h on the line sections Orivesi-Haapamäki and Haapamäki-Jyväskylä.

<sup>&</sup>lt;sup>23</sup> 100 km/h without wagons, either on its own or with double heading.

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

<sup>&</sup>lt;sup>25</sup> 25 km/h on its own.

## Description Rail Training Centre (RTC)

## 1 General information

## 1.1 Introduction

This service description specifies the services of the Railway Training Centre, 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.

## 1.2 Operator of the service facility

Operator of the service facility:

Rail Training Centre (RTC) Hallituskatu 19 Kouvola <u>https://rok.vayla.fi/</u>

#### 1.3 Validity period and updating process

This document shall be 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. For more information, see <u>https://rok.vayla.fi/</u>

## 3 Description

3.1 List of all installations

The installations of the Rail Training Centre are described on the RTC website <a href="https://rok.vayla.fi/tilat/">https://rok.vayla.fi/tilat/</a>

#### 3.2 Name of installation

The traffic operating points of the Rail Training Centre have been named according to the locality in question.

#### 3.2.1 Location

Kouvola, Hallituskatu 19. Further information at <u>https://rok.vayla.fi</u>

#### 3.2.2 Opening hours

The Rail Training Centre is open during training, rental use and events.

## 3.2.3 Technical characteristics

The RTC area is isolated from the state-owned rail network with iron gates and, therefore, 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 on the rail data extranet site

https://vayla.fi/palveluntuottajat/aineistot/ratatiedon-extranet

## 3.2.4 Planned changes in technical characteristics

The Finnish Transport Infrastructure Agency determines the annual maintenance needs and replacement intervals of track sections at the RTC. No changes have been planned to the technical characteristics of the RTC.

#### 4 Charges

#### 4.1 Information on charges

The rent rates are presented on 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 Access conditions

#### 5.1 Legal requirements

The RTC users must have a valid liability insurance. Any external training institute operating in the RTC facilities must have received induction to the use of the facility's technology (induction provided by the infrastructure manager).

The use of any 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 (RTC) 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 can be found on the RTC website. Trainees can enrol on the courses through the website.

#### 6.2 Response to requests

Further information at <u>https://rok.vayla.fi</u>

#### 6.3 Information on available capacity and temporary capacity restrictions

Further information at <a href="https://rok.vayla.fi">https://rok.vayla.fi</a>

## Service description Electricity transfer service

## 1 General information

## 1.1 Introduction

This service description specifies the electricity transfer service provided in the state-owned rail 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 category of the service facility is an additional service referred to in point 3 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 Technology Opastinsilta 12 A 00520 Helsinki <u>kirjaamo@vayla.fi</u>

#### 1.3 Validity period and updating process

This document shall be 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 transfer service

The infrastructure manager transfers the electricity required for traction current and provides the balance management of the contact-line network, which gives the railway operator the basis to acquire its own electric power. For the purposes of heating and power supply of rolling stock, railway operators also have access to 1500V heating points and 400V socket points.

## **3** Service facility description

#### 3.1 List of all installations

The locations of electrified railway lines are described in appendix 3A of the Network Statement and in the map service. The list of heating points and socket points is provided in appendix 3B of the Network Statement.
## 3.2 Name of installation

The heating points and socket points are named after their track location, and a specifier is added to the name, if necessary.

## 3.2.1 Location

The electricity transfer service is provided on the electrified railway network. The electrified line sections of traffic operating points are specified in the track diagram.

The 400V and 1500V power supply facilities for rolling stock are indicated in appendix 3B of the Network Statement and in the track diagrams and map service.

## 3.2.2 Opening hours

The electrified railway network, heating posts and socket points are always accessible. Any temporary voltage cut-offs are indicated in capacity management information systems (LIIKE, JETI).

## 3.2.3 Technical characteristics

The technical characteristics of power supply systems are described in the Finnish Transport Infrastructure Agency's instructions at <a href="https://julkaisut.vayla.fi/pdf7/rautatieohjeet\_web.pdf">https://julkaisut.vayla.fi/pdf7/rautatieohjeet\_web.pdf</a>

## 3.2.4 Planned changes in technical characteristics

Changes have been planned in the harmonic filters and equipment for reactive power compensation attached to the railway network. The aim is to cut additional costs and, on the other hand, to reduce the problems caused by such equipment to electricity networks.

These devices were once installed to compensate for the harmonics caused by electric traction units and the need for reactive power. Therefore, the equipment is being optimised in cooperation with transport operators.

APPENDIX 5N / 3 (4) Service description - Electricity transfer service

## 4 Charges

#### 4.1 Information on charges

The charging principles and the transfer fees charged for electricity transfer in the contact line network are described in Appendix 5B. More information on the subject in chapter 5.4.1 of the Network Statement.

The transfer fee of railway operators is expected to increase significantly at the start of 2021 due to higher transfer costs charged by network companies. This is a result of the change in the pricing of filtering and compensation of harmonics and reactive power caused by transport. The infrastructure manager's costs will increase significantly already in early 2020. The objective is to optimise filtering jointly with railway operators in order to minimise additional costs. The fee will be specified in 2020. The infrastructure manager will publish the 2021 price list before the start of the 2021 timetable period.

#### 4.2 Information on discounts

No discounts granted.

## 5 Access conditions

#### 5.1 Legal requirements

The use and terms of use of electricity transfer service are agreed upon in the network access agreement.

The pre-requisite for using the electricity transmission service is a valid contract with an electricity supplier. The use of rail capacity includes the traffic 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. The infrastructure manager does not, however, provide electricity, and the traffic operator should enter into an agreement on the supply of power with a service provider.

#### 5.2 Technical conditions

All new or significantly revamped electric traction stock shall be equipped with an energy measurement system compliant with the requirements for billing according to standard EN 50463 (2017). Data transmission to the Finnish Transport Infrastructure Agency's measurement and balance management system shall comply with part 4 in Standard EN 50463. Data can also be transmitted in a UTILTS message.

More information on the subject in chapter 3.3.2.6 of the Network Statement and the instructions regarding electricity transfer systems <a href="https://julkaisut.vayla.fi/pdf7/rautatieohjeet\_web.pdf">https://julkaisut.vayla.fi/pdf7/rautatieohjeet\_web.pdf</a>

#### 5.3 Self-supply of rail-related services

## 6 Capacity allocation

## 6.1 Requests for access or services

The electricity transfer 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 in use during the timetable period is needed for the access agreement. Reservations for using heating posts or socket points are made by reserving the track where the service is located.

## 6.2 Response to requests

Track reservation requests for heating or socket points are responded to as specified in chapter 4.2.3 of the Network Statement.

#### 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). In addition, information may be requested from Finrail's traffic planning or traffic control.

# Service description Technical Control Centre

## 1 General information

## 1.1 Introduction

This service facility description specifies the Technical Control Centre services commissioned by the infrastructure manager of the state-owned railway network, the Finnish Transport Infrastructure Agency. The Finnish Transport Infrastructure Agency commissions control centre services for rolling stock, tunnels and properties in the railway network from Traffic Management Finland Oy and its subsidiary Finrail Oy as a service.

The Technical Control Centre aims to improve the safety and punctuality of 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 category of the service facility is a service falling within the scope of the ancillary services 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:

Finrail Oy tel. 029 450 7000 <u>info@tmfg.fi</u>

## 1.3 Validity period and updating process

This document shall be 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 Technical Control Centre

The Technical Control Centre uses rolling stock control 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 the wear and tear caused to the rail infrastructure by malfunctioning stock and to avoid disruptions. The monitoring system placed in the railway network is the property of the infrastructure manager, or the Finnish Transport Infrastructure Agency. The information system that collects the alarm data (VALTSU) is owned by Finrail Oy. With the help of the alarms given by monitoring system it is possible to analyse unnecessary alarms, and the frequency and causes of failures. The objective is to use data analytics to reduce susceptibility to disruptions and delays in train traffic.

In addition, the monitoring system is used for examining and monitoring, for example, vibration, wheel forces and noise. Furthermore, at border crossing points analytics can be used for monitoring the condition of foreign rolling stock and its suitability to the state-owned rail network.

# 3 Service facility description

## 3.1 Technical Control Centre's operating area

The operating area of the Technical Control Centre covers the entire stateowned railway network. The locations of technical monitoring devices are displayed in the map interface and in the appendix 30.

## 3.2 Monitoring performed by the Technical Control Centre

The Technical Control Centre monitors

- rolling stock pantographs, bearings, brakes hot box detectors and alarms on wheel forces and excess loads
- the condition of the rolling stock's wheel profiles and bogies
- technical alarms from railway tunnels and agreed properties

## 3.2.1 Opening hours

The Technical Control Centre provides services 24/7, 365 days a year.

## 3.2.2 Joining the service

Finrail Oy provides the services of the Technical Control Centre as commissioned by the Finnish Transport Infrastructure Agency. 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 Technical Control Centre are provided free of charge.

## 4.2 Information on discounts

Discounts are not applied to the service.

## 5 Access conditions

## 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 Finrail Oy's system. Finrail Oy 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

# Description Security Control Centre

- 1 General information
- 1.1 Introduction

This description specifies the Security Control Centre services commissioned by the infrastructure manager of the state-owned railway network. The Finnish Transport Infrastructure Agency commissions monitoring service for the railway network's safety systems from Traffic Management Finland Oy and its subsidiary Finrail Oy.

The objective of the Security Control Centre 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 vandalization of property, and to prevent disruptions in the ground areas, platforms and station areas of the state-owned railway network.

## 1.2 Operator of the service facility

Operator of the service facility:

Finrail Oy tel. 029 450 7000 info@tmfg.fi

Contact person at the Finnish Transport Infrastructure Agency Arto Muukkonen <u>firstname.lastname@ftia.fi</u>

## 1.3 Validity period and updating process

This document shall be 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 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
- Reporting offences against the assets of the Finnish Transport Infrastructure Agency and Finrail
- Maintaining order and security in the platform areas, station areas and other separately agreed areas

## 3 Description

## 3.1 Security Control Centre's operating area

The Security Control Centre's operating area is the entire state-owned railway network. The main focus of operations is on the railway stations in the Helsinki Metropolitan Area. Upon agreement, the operations will also be expanded to other areas.

## 3.2 Parties to the Security Control Centre agreement

The operation of the Security Control Centre is based on the Framework Agreement: Maintenance of order and security guard services on passenger stations. The parties to the agreement are Finrail Oy, Helsinki Region Transport (HSL), Helsinki City Transport (HKL) and the cities of Espoo and Vantaa. The Finnish Transport Infrastructure Agency orders the comprehensive services from Finrail.

In addition, VR Group Ltd partly covers the costs of the processing of the recordings on vandalism.

When it comes to maintenance of order and security guard services, each party commissions the services independently. The Security Control Centre is the same for all parties.

## 3.2.1 Opening hours

The Security Control Centre provides services 24/7, 365 days a year.

## 3.2.2 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 Access conditions

## 5.1 Legal requirements

Each participant to the agreement places its own order with the service provider and provides information on its own part to Finrail Oy, which acts as the administrator of the main agreement.

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, the 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

Any parties willing to join the agreement shall contact the Finrail Oy or the Finnish Transport Infrastructure Agency. 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

Finrail Oy and the Finnish Transport Infrastructure Agency will respond to the notifications within a reasonable time.

# Performance scheme

In rail transport, timetables play a central role due to the nature of the transport mode. For the functionality of the railway system, it is important that rail transport operates on schedule and that track works are performed during the agreed track possessions. A train that operates behind or ahead of schedule may cause disturbances to other transport. Similarly, exceeding the track possession or a malfunctioning railway device may cause disruptions in transport. 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 2021. In December 2020, the FTIA and the railway undertakings shall comply with the performance scheme based on the access agreements for the timetable period of 2020.

In addition to the elements of the performance scheme, the parties shall monitor the initial stations' operation ahead of schedule (E) as well as any delays caused by temporary speed restrictions (T1 and T2).

## 1.1 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 caseby-case examination in the following cases:

- L5 Track blockage caused by rolling stock on the track ahead, excluding the following level 2 reason code:
  - L502 A broken non-commercial train or track construction/maintenance machine in case the broken rolling stock falls within the infrastructure manager's responsibilities.
- 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.

## 1.2 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 Rolling stock fault.
- K3 Reduction of speed caused by a reason attributable to rolling stock.
- K4 Coupling.
- K5 Decoupling.
- K6 Uninspected rolling stock.
- V1 Lack of locomotive.
- V2 Locomotive fault.
- 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.
- L5 Track blockage caused by rolling stock on the track ahead, excluding the following level 2 reason codes:
  - L501 Broken rolling stock.
  - L502 A broken non-commercial train or track
    - construction/maintenance machine in case the broken rolling stock belongs to the same railway undertaking as the delayed train.

- 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.

## 1.3 Determining the compensation

Monitoring stations have been specified with the purpose of checking that trains run on schedule. 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:

- Helsinki Area commuter traffic (trains ordered by the HSL)
- Other passenger trains
- Freight trains

A penalty is paid when the (additional) delay that was caused by reasons specified in sections 1.1 and 1.2 of this appendix between two monitoring stations or at a monitoring station is equal or greater than

- 3 minutes for Helsinki Area commuter traffic.
- 15 minutes for other passenger trains.
- 30 minutes for freight trains.
- or when a Helsinki Area commuter traffic train or other passenger train is cancelled at a short notice.

The amount of penalty is determined as follows:

• a delayed Helsinki Area commuter traffic train 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 Helsinki Area commuter traffic train EUR 1,000/train
- other cancelled passenger train EUR 1,500/train

The penalty will be based on all minutes of the (additional) delay, not only the minutes exceeding the threshold value.

Starting from 2021, the performance scheme will take the reasons of delay into account more extensively. These reason codes include:

- H1 Absence of operator's personnel
- 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.
- K207 Wheel flat.
- K3 Speed limitation caused by rolling stock, excluding K303 Tilting error Sm3/Sm6.
- V1 Lack of locomotive.
- V207 Wheel flat.
- A2 Timetable planning error.
- L5 Track blocked by rolling stock ahead.
- L6 Delay related to departure.
- L7 Traffic management error.

These new reason codes will not bring on sanctions during timetable period 2021.

## 1.4 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. The infrastructure manager and the railway undertaking may be able to affect some of these cases with reasonable effort, but some cases are outside of their control.

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 six 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.
- 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).
- 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

APPENDIX 6A / 6 (6) Performance scheme

jointly by the Rail Traffic Management Centre, the operators, traffic control and, if required, the HSL.

Updated on 18 June 2020



ISSN 2490-0745 ISBN 978-952-317-744-4 www.vayla.fi