

<b>Version:</b> vom 10.12.2020-0 <b>Valid from:</b>	<b>Confidentiality:</b> Intern <b>Owner:</b> SBB Infrastruktur <b>Process:</b> Netzzugangsbedingungen festlegen und publizieren <b>Languages:</b> DE
<b>Specific receiver/distributor:</b>	EVU mit Netzzugang bei SBB Infrastruktur
<b>Replacement for:</b>	
<b>Assignment:</b>	

## Network Statements als PDF

### zur Nachweisführung

Mit dem Network Statement 2022 ändert erstmalig die Publikationsform von der bisherigen PDF-Version zu einer Umsetzung auf der neuen Vorgaben-Plattform der SBB.

Bei der vorliegenden Datei handelt es sich um einen Export in eine PDF-Datei zur Nachweisführung zum auf der Titelseite und in der Fusszeile erwähnten Datum. Jede Änderung hat einen neuen Export zur Folge. Bei materiellen Änderungen erfolgt zusätzlich eine Verständigung der Parteien der Netzzugangsvereinbarung.

Der Zugang zur stets aktuellen Version ist über [www.networkstatement.ch](http://www.networkstatement.ch) gewährleistet.

# Table of contents

Network Statement 2021 .....	3
1 Note .....	3
Network Statement 2022 .....	4
1 General Information .....	4
2 Infrastructure .....	12
3 Access Conditions .....	18
4 Capacity Allocation [TVS] .....	33
5 Services and Charges .....	54
6 Operations .....	57
7 Service Facilities .....	59
Glossary .....	65
1 Terms .....	65

# Network Statement 2021

1

## Note

The Network Statement 2021 is currently only available as a PDF version and can be downloaded from [www.OneStopShop.ch](https://www.OneStopShop.ch) > OneStopShop. > Track Access (<https://company.sbb.ch/en/sbb-as-business-partner/services-rus/onestopshop/track-access.html#sbb879b27>).

# Network Statement 2022

## 1 General Information

### 1.1 Introduction and list of changes

Version 1.0 dated 10 December 2020

This Network Statement (NWS) is published by the Infrastructure Division of Swiss Federal Railways (SBB) in respect of its own network, as well as of the networks of Sensetalbahn AG and Hafenbahn Schweiz AG – hereinafter referred to as the [SBB] rail network.

The SBB rail network covers around 80% of Switzerland's standard-gauge network. A [general map of the network \(https://company.sbb.ch/de/sbb-als-geschaeftpartner/leistungen-evu/onestopshop/netzzugang.html\)](https://company.sbb.ch/de/sbb-als-geschaeftpartner/leistungen-evu/onestopshop/netzzugang.html) is available online.

Capacities (i.e. basic and ancillary services) on the interoperable standard-gauge rail networks, including Emmenbrücke-Lenzburg, are allocated by the independent Swiss train path allocation body (TVS), which also ensures that timetables are designed without discrimination. The train path allocation body is responsible for the content of those headings and sub-sections to which [TVS] has been appended.

At the time this document was written, the structure of the TVS had not been definitively determined. Changes to responsibilities and the new procedures will also require further adjustments to be made to this NWS. The TVS and IMs therefore reserve the right to publish an appropriately adjusted NWS following publication of this document.

#### List of changes compared to NWS 2021

Section	Point No.	Changes
General	Various	Various editorial adjustments and updates of addresses, dates and references to laws, standards and regulations
		The way in which the sections of the Network Statement are laid out has been completely revised compared to the previous year; this work was coordinated by RailNetEurope. Summary: <ul style="list-style-type: none"> <li>• The order in which the "Access conditions" and the "Infrastructure" sections appear has been reversed.</li> <li>• "Services" and "Charges" have been combined</li> <li>• New section "Operational arrangements"</li> <li>• New section "Service facilities"</li> <li>• Various subsections re-arranged</li> </ul>
1 General information	1.1	The new responsibilities of the train path allocation body (TVS) following implementation of the draft "Organisation of Railway Infrastructure (OBI)" legislation. Those sections and sub-sections for which the TVS is responsible are specially marked.
	1.3.3.2	SKE renamed as RailCom
	1.4	Overview of the new section structure. This also entailed renumbering the annexes.

2 Infrastructure	2.3	An overview of the technical conditions affecting a route can be accessed from the OneStopShop.  This sub-section has been editorially reduced in length. The provisions relating to recording voice communications are set out in I-50094.
	2.3.12.2	
	2.3.13.1	Train control systems and the responsibilities of non-Swiss infrastructure managers on cross-border routes – additions.
	2.6	The reference to the FOT communication regarding the dismantling of third party train control systems on cross-border routes – additions.
3 Access conditions	3.2.3 and 3.2.4	Recognition of EU licenses and Single Safety Certificates – additions
	3.3.2	Elements of the network access agreement adjusted to meet the new legal requirements.
	3.4.1	Cross acceptance for rail vehicles added.
	3.4.1.8	New regulation regarding the wheel/rail adhesion threshold value
	3.4.1.15	New provision regarding noise from parked vehicles  The provisions regarding exceptional consignments have been aligned with those set out in I-30111.
	3.4.3	The responsibility for authorising the management of exceptional consignments has been set out more precisely.  Aspects relating to train path orders are now included in Sub-Sections 4.7.1 and 4.5.3.4.
4 Capacity allocation	Various	The entire section has been renumbered  Adjustments made to details required for designations in NeTS; background and reference documents for basic service applications – added.
	4.2.7	
	4.5.1	New NWS Annex 4.5 with ordering deadlines
	4.9	New sub-section (including Annex 4.9) on Timetabling and Capacity Redesign TTR
5 Services and charges	5.7	Mention of the IT application EFA for recording delays, with indication of causal factors
6 Operational provisions	Various	New section with content taken from existing sub-sections
	6.2.3	V-App as a new method for accessing regulations
	6.3.1	New option of renting special workstations in SBB operational premises
7 Service facilities	Various	New section with content taken from existing sub-sections

## 1.2 Purpose of the Network Statement

The NWS contains the conditions applicable to accessing and using the rail network (within the meaning of Art. 10 (1) (d) Network Access Ordinance [NZV (<https://www.admin.ch/opc/de/classified-compilation/19983395/index.html#a10>)] and EU Directive 2012/34); it forms an integral element of the network access agreement between the IM and the RU.

It may also be used as a tool for requesting network access and for managing traffic on the SBB rail network. Therefore, the term "applicants" is used below if it applies equally to RUs and third parties.

Within Switzerland, SBB, other infrastructure managers and the TVS ensure that their published network access and usage conditions are harmonised with the structure of the Network Statement established in the EU in accordance with Article 27 of EU Directive 2012/34. Further information about the structure can be found in Section 1.4.

### 1.3 Legal Aspects

This NWS complies with the current legal framework in accordance with Railway Reform 2.2. Legislative changes will be added to the NWS as updates. Changes will also be listed in the overview of changes. In its Overland Transport Agreement with the European Union, Switzerland undertakes to apply legal provisions that are equal to those listed in [Annex 1 of the agreement](#) (<https://www.admin.ch/opc/de/classified-compilation/19994647/index.html#app1ahref0>). COTIF and CUI are applicable in Switzerland. The applicable Swiss laws and ordinances are published in the Swiss Certified Compilation of Federal Legislation (SR), and are also available online at [www.admin.ch](http://www.admin.ch) (<https://www.admin.ch/gov/en/start.html>).

#### 1.3.1 Legal Framework

A list of the most important international and domestic legislation is set out below as a guide:

1.3.1.1 Key EU legislation (to aid interpretation)

Number	Designation
<a href="http://eur-lex.europa.eu/legal-content/DE/TXT/?qid=1532936761716&amp;uri=CELEX%3A32015R1136">Implementing Regulation (EU) 2015/1136</a>	Commission Implementing Regulation (EU) 2015/1136 of 13 July 2015 amending
<a href="http://eur-lex.europa.eu/legal-content/DE/TXT/?qid=1532936761716&amp;uri=CELEX%3A32015R1136">Implementing Regulation (EU) No 402/2013</a>	Implementing Regulation (EU) No 402/2013 on the common safety method for risk evaluation and assessment.
<a href="https://eur-lex.europa.eu/legal-content/en/TXT/?qid=1532936761716&amp;uri=CELEX:32015R1136">Implementing Regulation (EU) 2017/2177</a>	Commission Implementing Regulation (EU) 2017/2177 of 22 November 2017 on access to service facilities and rail-related services.
<a href="https://eur-lex.europa.eu/legal-content/DE/ALL/?uri=CELEX%3A32010R0913">Regulation (EU) 913/2010</a>	Regulation (EU) No 913/2010 of the European Parliament and of the Council of 22 September 2010 concerning a European rail network for competitive freight.
<a href="https://eur-lex.europa.eu/legal-content/DE/ALL/?uri=CELEX:32012L0034">Directive (EU) 2012/34</a>	Directive 2012/34/EU of the European Parliament and of the Council of 21 November 2012 establishing a single European railway area (recast).
<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1587448954623&amp;uri=CELEX:32016L2370">Directive (EU) 2016/2370</a>	Directive (EU) 2016/2370 of the European Parliament and of the Council of 14 December 2016 amending Directive 2012/34/EU as regards the opening of the market for domestic passenger transport services by rail and the governance of the railway infrastructure.
<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1587448968204&amp;uri=CELEX:32016L0797">Directive (EU) 2016/797</a>	Directive (EU) 2016/797 of the European Parliament and of the Council of 11 May 2016 on the interoperability of the rail system within the European Union.
<a href="https://eur-lex.europa.eu/legal-content/de/TXT/?uri=CELEX%3A32016L0798">Directive (EU) 2016/798</a>	Directive (EU) 2016/798 of the European Parliament and of the Council of 11 May 2016 on railway safety.

1.3.1.2 Important domestic and international legislation applicable within Switzerland (extract)

Number	Abbreviation	Designation
<a href="http://www.admin.ch/ch/d/sr/c0_742_403_1.html">SR 0.742.403.1 – COTIF</a>	-	Convention concerning International Carriage by Rail
<a href="https://www.admin.ch/opc/de/classified-compilation/20010972/index.html#app5ahref0">SR 0.742.403.12 – Anhang E</a>	-	Uniform Rules concerning the Contract of Use of International Rail Traffic (CUI)
<a href="http://www.admin.ch/ch/d/sr/c0_740_72.html">SR 0.740.72</a>	LVA	Agreement dated 21 June 1999 between the Swiss Confederation and the European Community regarding the transport of passengers by rail and road (incl. Annexes and final
<a href="http://www.admin.ch/ch/d/sr/c742_101.html">SR 742.101</a>	EBG	Railways Act

<a href="http://www.admin.ch/ch/d/sr/c742_122.html">SR 742.122</a> ( <a href="http://www.admin.ch/ch/d/sr/c742_122.html">http://www.admin.ch/ch/d/sr/c742_122.html</a> )	NZV	Network Access Ordinance
<a href="https://www.admin.ch/opc/de/classified-compilation/20112106/index.html">SR 742.122.4</a> ( <a href="https://www.admin.ch/opc/de/classified-compilation/20112106/index.html">https://www.admin.ch/opc/de/classified-compilation/20112106/index.html</a> )	NZV-BAV	BAV ordinance on the Network Access Ordinance
<a href="https://www.admin.ch/opc/de/classified-compilation/20200121/index.html">SR 742.101.4</a> ( <a href="https://www.admin.ch/opc/de/classified-compilation/20200121/index.html">https://www.admin.ch/opc/de/classified-compilation/20200121/index.html</a> )	-	Business regulation issued by the Rail Transport C  Railways Ordinance. Annex 7 EBV states those tec for interoperability (TSI) which are applicable in Sw national regulations deviate from the TSIs, this will FOT by means of notified national technical regulat ( <a href="https://www.bav.admin.ch/bav/de/home/rechtlich-vorschriften/nntv.html">https://www.bav.admin.ch/bav/de/home/rechtlich-vorschriften/nntv.html</a> ).
<a href="http://www.admin.ch/ch/d/sr/c742_141_1.html">SR 742.141.1</a> ( <a href="http://www.admin.ch/ch/d/sr/c742_141_1.html">http://www.admin.ch/ch/d/sr/c742_141_1.html</a> )	EBV	
<a href="http://www.admin.ch/ch/d/sr/c742_141_11.html">SR 742.141.11</a> ( <a href="http://www.admin.ch/ch/d/sr/c742_141_11.html">http://www.admin.ch/ch/d/sr/c742_141_11.html</a> )	AB-EBV	Implementing Provisions for the Railways Ordinanc
<a href="http://www.admin.ch/ch/d/sr/c742_144.html">SR 742.144</a> ( <a href="http://www.admin.ch/ch/d/sr/c742_144.html">http://www.admin.ch/ch/d/sr/c742_144.html</a> )	RNAA	Federal Law on Railway Noise Abatement
<a href="http://www.admin.ch/ch/d/sr/c742_144_1.html">SR 742.144.1</a> ( <a href="http://www.admin.ch/ch/d/sr/c742_144_1.html">http://www.admin.ch/ch/d/sr/c742_144_1.html</a> )	VLE	Ordinance on Railway Noise Abatement
<a href="https://www.admin.ch/opc/de/classified-compilation/20153251/index.html">SR 742.173.001</a> ( <a href="https://www.admin.ch/opc/de/classified-compilation/20153251/index.html">https://www.admin.ch/opc/de/classified-compilation/20153251/index.html</a> )	FDV	Swiss Rail Service Regulations (R 300.1-15)
<a href="http://www.admin.ch/opc/de/classified-compilation/20121700/index.html">SR 742.412</a> ( <a href="http://www.admin.ch/opc/de/classified-compilation/20121700/index.html">http://www.admin.ch/opc/de/classified-compilation/20121700/index.html</a> )	RSD	Ordinance on the Carriage of Dangerous Goods by Cableways
<a href="https://www.admin.ch/opc/de/classified-compilation/20140476/index.html">SR 742.41</a> ( <a href="https://www.admin.ch/opc/de/classified-compilation/20140476/index.html">https://www.admin.ch/opc/de/classified-compilation/20140476/index.html</a> )	GüTG	Goods Carriage Act
<a href="http://www.admin.ch/ch/d/sr/c742_411.html">SR 742.411</a> ( <a href="http://www.admin.ch/ch/d/sr/c742_411.html">http://www.admin.ch/ch/d/sr/c742_411.html</a> )	GüTV	Carriage of Goods Ordinance
<a href="https://www.admin.ch/opc/de/classified-compilation/20061345/index.html">SR 745.1</a> ( <a href="https://www.admin.ch/opc/de/classified-compilation/20061345/index.html">https://www.admin.ch/opc/de/classified-compilation/20061345/index.html</a> )	PBG	Passenger Transport Act
<a href="http://www.admin.ch/ch/d/sr/c745_11.html">SR 745.11</a> ( <a href="http://www.admin.ch/ch/d/sr/c745_11.html">http://www.admin.ch/ch/d/sr/c745_11.html</a> )	VPB	Ordinance on Passenger Transport
<a href="http://www.admin.ch/ch/d/sr/c745_13.html">SR 745.13</a> ( <a href="http://www.admin.ch/ch/d/sr/c745_13.html">http://www.admin.ch/ch/d/sr/c745_13.html</a> )	FPV	Timetables Ordinance
<a href="http://www.admin.ch/ch/d/sr/151_3/index.html">SR 151.3</a> ( <a href="http://www.admin.ch/ch/d/sr/151_3/index.html">http://www.admin.ch/ch/d/sr/151_3/index.html</a> )	BehiG	Federal Act on Equality for People with Disabilities
<a href="http://www.admin.ch/ch/d/sr/c151_31.html">SR 151.31</a> ( <a href="http://www.admin.ch/ch/d/sr/c151_31.html">http://www.admin.ch/ch/d/sr/c151_31.html</a> )	BehiV	Ordinance on the Elimination of Discrimination aga Disabilities

1.3.2 Legal Status and Liability



All the conditions for the use of railway infrastructure published in this NWS are subject to subsequent changes to legislation and regulations.

If Swiss laws and ordinances are revised after publication of the Network Statement and introduce additional requirements, compliance with these subsequent requirements is mandatory. SBB Infrastruktur and the TVS accept no liability for the consequences of failure to comply with subsequent amendments to legislation and regulations.

SBB and the TVS are conscious of the need to ensure that the information in this NWS is correct. They shall not be liable for any direct or indirect damage arising from obvious defects in this NWS and in other documents. Furthermore, they reject all responsibility for the contents of any external websites to which this publication links. Where the contents of linked pages contradict those of this NWS, the latter shall take precedence. This reservation does not apply to links in the official collection of Swiss laws and ordinances.

This Network Statement is published in German, French, Italian and English language versions. In the event of differences between language versions, the German version shall be legally binding.

### 1.3.3 Appeals Procedure

#### 1.3.3.1 The principle

If you have any complaints regarding the content of this NWS, please contact SBB Infrastruktur or the TVS. Responsibilities are described at Point 1.1; the relevant contacts can be found in the address directory at Point 1.6.

#### 1.3.3.2 RailCom

Disputes relating to the granting of network access and the associated conditions are subject to claims to the Railways Commission RailCom (<https://www.railcom.admin.ch/>) (Art. 29 LVA, Art. 40a<sup>ter</sup> EBG).

In accordance with Art. 33 (f) VGG (Administrative Court Act), RailCom's decisions can be referred to the Federal Administrative Court in St. Gallen.

## 1.4 Structure of the Network Statement

The structure, or layout, of this NWS corresponds to the structure which was developed and adopted by the association of European infrastructure managers and train path allocation bodies, RailNetEurope (RNE). Details of this 'common structure' can be found at [www.rne.eu/network-statements/](http://www.rne.eu/network-statements/) (<http://www.rne.eu/network-statements/>).

The common structure is intended to make information about network access required by readers available in a standard structure throughout Europe.

- Section 1 contains general information about the NWS and points of contact.
- Section 2 describes the characteristics of the track network, including capacity restrictions.
- Section 3 defines the legal requirements and the conditions for accessing the IM's network.
- Section 4 specifies the procedure for allocating train paths.
- Section 5 describes the services that can be purchased and the corresponding charges.
- Section 6 contains operational provisions for rail movements on the IM's network.
- Section 7 provides an overview of the service facilities offered by the IMs and third parties.

Where appropriate, further information is provided in the annexes. The annexes are numbered so as to correspond with the section or paragraph to which they relate. For example: the Gotthard Base Tunnel is classified as special infrastructure. Detailed information about the conditions which apply there can be found in NWS Annex 2.4.1B:

- Annexes 2.4.1A-E: Special infrastructures (B2000, GBT, CBT, CEVA, TT Chiasso)

- Annex 3.4.1.6.4: Energy measurement systems for energy billing
- Annex 4.2.7 (only applicable to the 2022 timetable): Providing data
- Annex 4.5 (only applicable to the 2022 timetable): Ordering deadlines
- Annex 4.9: Timetabling and Capacity Redesign TTR

## 1.5 Validity Period, Updating and Publishing

### 1.5.1 Validity Period

This NWS applies to the ordering and execution of transport operations in the 2022 timetable year from 12 December 2021 to 10 December 2022.

### 1.5.2 Updating

The NWS is kept up to date. Information on new and amended versions is provided in accordance with the provisions of the Track Access Agreement.

### 1.5.3 Publishing

The NWS is published exclusively in digital form at [www.onestopshop.ch \(https://company.sbb.ch/en/sbb-as-business-partner/services-rus/onestopshop/track-access.html#sbb9c438f\)](https://company.sbb.ch/en/sbb-as-business-partner/services-rus/onestopshop/track-access.html#sbb9c438f) -> Track access and [www.networkstatement.ch \(http://www.networkstatement.ch\)](http://www.networkstatement.ch).

## 1.6 Contacts

Detailed information on all topics relating to network access and network usage can be obtained from the contact persons shown at [www.sbb.ch/kontakt-onestopshop \(https://company.sbb.ch/de/sbb-als-geschaeftpartner/leistungen-evu/onestopshop/kontakt.html\)](https://company.sbb.ch/de/sbb-als-geschaeftpartner/leistungen-evu/onestopshop/kontakt.html). The list is constantly updated.

For general questions about the NWS, please contact:

SBB Infrastructure

Verträge und Netzzugang

Hilfikerstrasse 3

3000 Bern 65

Switzerland

+41 79 732 67 73

[netzzugang@sbb.ch](mailto:netzzugang@sbb.ch)

[www.onestopshop.ch \(https://company.sbb.ch/de/sbb-als-geschaeftpartner/leistungen-evu/onestopshop.html\)](https://company.sbb.ch/de/sbb-als-geschaeftpartner/leistungen-evu/onestopshop.html)

If you have any questions about matters for which the TVS is responsible (cf. Point 1.1), please contact:

Schweizerische Trassenvergabestelle

Schwarztorstrasse 31

Postfach

3001 Bern

Switzerland

+41 79 928 01 63

[info@trasse.ch](mailto:info@trasse.ch) / [info@tvs.ch](mailto:info@tvs.ch)

[www.trasse.ch \(http://www.trasse.ch\)](http://www.trasse.ch) / [www.tvs.ch \(http://www.tvs.ch\)](http://www.tvs.ch)

## 1.7 Cooperation between European IMs/ABs

### 1.7.1 Rail Freight Corridors

EU regulation 913/2010 states that there are eleven rail freight corridors (RFC) in Europe. These corridors are intended to achieve the following objectives:

- Improving cooperation between the IMs of the countries involved as regards capacity allocation, development of interoperable systems and infrastructure upgrades and refurbishment.
- Achieving a balance between freight and passenger trains along the rail freight corridors in order to satisfy freight train capacity and punctuality requirements.
- Promoting intermodal traffic by incorporating terminals into the rail freight corridors.

An interactive map (<http://www.rne.eu/rail-freight-corridors/rail-freight-corridors-general-information/>) showing all freight corridors is available from RNE.

Under the Overland Transport Agreement with the EU, Switzerland has undertaken to apply legislation equivalent to the EU Regulation. Switzerland is therefore involved in the Rhine-Alpine RFC and the North Mediterranean RFC.

**RFC Rhine-Alpine:** Zeebrugge/Antwerp/Vlissingen/Rotterdam/Amsterdam–Cologne–Mannheim–Basel–Gotthard/Lötschberg–Genoa. Further details are available at [www.corridor-rhine-alpine.eu](http://www.corridor-rhine-alpine.eu) (<http://www.corridor-rhine-alpine.eu>)

**RFC North Sea-Mediterranean:** Glasgow/Edinburgh/Dunkirk/Zeebrugge/Rotterdam/Amsterdam–Metz–Basel/Dijon/Lyons–Geneva/Marseilles. Further details are available at [www.rfc-northsea-med.eu](http://www.rfc-northsea-med.eu) (<http://www.rfc-northsea-med.eu>)

## 1.7.2 RailNetEurope

The European Association of Infrastructure Managers and Train Path Allocation Bodies (RNE), established in January 2004, aims to simplify international business activities. This is achieved through harmonised business processes, templates, manuals, guides and tools, all of which are made available to the participating infrastructure IMs and applicants. SBB Infrastructure, BLS Netz AG and the TVS are all members of RNE.

Additional information, such as the contact details for other infrastructure managers and train path allocation bodies, can be found at [www.rne.eu/organisation/rne-approach-structure](http://www.rne.eu/organisation/rne-approach-structure) (<http://www.rne.eu/organisation/rne-approach-structure>).

## 1.7.3 Weitere internationale Kooperationen [folgt]

### 1.7.3.1 OneStopShop (OSS) [TVS]

RNE members have created an international network of one-stop shops to support applicants in matters relating to network access and cross-border train path orders. Within Switzerland, the TVS is responsible for all domestic and international train path applications – with the exception of train paths on freight corridors.

A list of the national contact agencies is available at [www.rne.eu](http://www.rne.eu) (<http://www.rne.eu>).

### 1.7.3.2 Special interest groups on which SBB Infrastructure is represented

Other international associations and (standards) committees on which SBB Infrastructure is represented include:

- the Community of European Railways and Infrastructure Companies (CER),
- the Union International des Chemins de Fer (UIC),
- the Rail Freight Corridors (RFC),
- the Platform of Rail Infrastructure Managers in Europe (PRIME) and
- the European Committee for Standardization (CEN/GENELEC).

There are also bilateral committees with the infrastructure managers of neighbouring countries.

## 2 Infrastructure

### 2.1 Introduction

Section 2 of the NWS contains a description of the SBB railway infrastructure.

### 2.2 Extent of Network

#### 2.2.1 Limits

The SBB track network is primarily located within the territory of the Swiss Confederation. SBB Infrastructure also operates the route from the national border with Italy (in the Simplon tunnel) to Iselle di Trasquera and the route on German territory between Bülach and Schaffhausen.

#### 2.2.2 Connecting Railway Networks

##### 2.2.2.1 Foreign normal-gauge networks

SBB Infrastructure borders on the following foreign infrastructure networks:

- SNCF Réseau in Basel, Boncourt-Delle, Le Locle-Col-des-Roches, Les Verrières-Pontarlier, Vallorbe, La Plaine-Bellegarde and Chêne-Bourg-Annemasse
- DB Netz AG in Basel, Koblenz-Waldshut, Schaffhausen and Kreuzlingen-Konstanz
- RFI in Chiasso, Ranzo-Luino, Iselle di Trasquera-Domodossola and Stabio-Gaggiolo
- ÖBB-Infrastruktur AG in Buchs (St. Gallen) and St. Margrethen

The key transit routes are the north-south axis from Schaffhausen/Basel to Chiasso/Luino or Brig/Domodossola (via the BLS network) and the east-west axis from St. Margrethen/Buchs SG to Genève.

The precise definitions of the network borders are set out in I-30121 under the heading «Border station».

### 2.2.2.2 Domestic IMs with standard-gauge routes

The SBB Infrastructure network borders on the following domestic standard gauge networks:

- Aargau Verkehr (<https://www.aargauverkehr.ch/unternehmen/partner/netzzugang>)
- Appenzellerbahnen (<https://appenzellerbahnen.ch/>)
- Aare Seeland mobil (<http://www.asmobil.ch/>)
- BLS Netz AG (<https://www.bls.ch/de/unternehmen/leistungen-fuer-dritte/leistungen-fuer-evu>)
- Chemins de fer du Jura (<https://www.les-cj.ch/>)
- Emmentalbahn GmbH (<http://www.etb-infra.ch/de/>)
- Oensingen Balsthal Bahn AG (<http://www.oebb.ch/>)
- Regionalverkehr Bern Solothurn (<https://www.rbs.ch/>)
- Rhätische Bahn (<https://www.rhb.ch/de/home>)
- Museumsbahn SEHR & RS (<https://www.etzwilen-singen.ch/museumsbahn/netzzugang/>)
- SOB Südostbahn (<https://www.sob.ch/dienstleistungen/netzzugang.html>)
- Sursee-Triengen-Bahn (<https://www.sursee-triengen-bahn.ch/infrastruktur/netzzugang/>)
- Sihltal Zürich Uetliberg Bahn (<https://www.szu.ch/service-information/netzzugang-szu.html>)
- Transports de Martigny et Régions SA (<https://www.tmrta.ch/>)
- Transports publics fribourgeois TPF (<https://www.tpf.ch/>)
- Transports publics neuchâtelois transN (<https://www.transn.ch/>)
- Transports publics de la région lausannoise (<https://www.t-l.ch/>)
- TRAVYS (<http://www.travys.ch/>) (incl. Chemin de fer Orbe-Chavornay ([https://de.wikipedia.org/wiki/Chemin\\_de\\_fer\\_Orbe%E2%80%93Chavornay](https://de.wikipedia.org/wiki/Chemin_de_fer_Orbe%E2%80%93Chavornay)))
- Zentralbahn AG (<https://www.zentralbahn.ch/de/zentralbahn/infrastruktur/netzzugang>)

## 2.3 Network Description

Constantly updated statistical information about the SBB rail network is published on the [reporting.sbb.ch/infrastrukturen](https://reporting.sbb.ch/infrastrukturen) ([reporting.sbb.ch/infrastrukturen](https://reporting.sbb.ch/infrastrukturen)) portal. Technical conditions affecting routes can be accessed from the [OneStopShop](https://company.sbb.ch/de/sbb-als-geschaeftspartner/leistungen-evu/onestopshop/netzzugang.html#sbb454032) (<https://company.sbb.ch/de/sbb-als-geschaeftspartner/leistungen-evu/onestopshop/netzzugang.html#sbb454032>).

Data about the permanent way can be requested from SBB Infrastructure's Permanent Way Data Management department (see [address directory](https://company.sbb.ch/de/sbb-als-geschaeftspartner/leistungen-evu/onestopshop/kontakt.html) (<https://company.sbb.ch/de/sbb-als-geschaeftspartner/leistungen-evu/onestopshop/kontakt.html>)) for the department's contact address. The data include track layout data, effectively measured track geometry data and traction current data. The data will be made available following receipt of a written purchase order and a signed confidentiality agreement (incl. a statement of the purpose for which the data will be used); an invoice will be issued. The company requesting the data will receive the non-transferable right to use and benefit from the data supplied. All technical documentation made available by SBB Infrastructure will remain its property and may not be copied, duplicated or brought to the knowledge of third parties in any way without its written consent.

If measuring vehicles such as vehicles with an On-Board Monitoring (OBM) system are used, the provisions set out at Point 3.4.5.1 will apply.

### 2.3.1 Track Typologies

There are no separate tracks for passenger and freight services (mixed traffic routes are used). Detailed information on the routes can be found in I-30131 RADN.

### 2.3.2 Track Gauges

The track gauge is 1,435mm. Curve radii are designed to be as minimal as possible:

- Main track:  $R_{min} = 150m$
- Shunting track:  $R_{min} = 135m$
- Siding track:  $R_{min} = 80m$  or  $35m$

The minimum radius that interoperable vehicles must be able to traverse in accordance with the TSI is  $R_{min} = 150m$ . However, this is not sufficient for unrestricted operation on SBB Infrastructure's rail network. If rail vehicles are also to be able to travel on shunting track and older rail systems without any restrictions, the curve radius requirements in accordance with I-50007 must also be met. Further details can be found in I-30111, Section 5.3, Point 4.

See also IRS 50502 "Exceptional consignments – Outline procedure". Industrial and private sidings are governed by separate rules.

### 2.3.3 Stations and Nodes

A list of all passenger stations can be accessed from SBB's [Open-Data-Platform](https://data.sbb.ch/explore/dataset/perron/table) (<https://data.sbb.ch/explore/dataset/perron/table>).

### 2.3.4 Loading Gauge

#### Unlimited-use vehicles

- Upper area: max. EBV O1 (including UIC G1)
- Lower area: in accordance with UIC Leaflet 505-1
- Calculation rules (calculation of vehicle construction gauge) associated with the reference line: in accordance with UIC Leaflet 505-1.

#### Vehicles designed for use on specific routes (especially double-deck vehicles)

- Upper area: max. EBV O2
- Lower area: in accordance with UIC Leaflet 505-1
- Calculation rules (calculation of vehicle construction gauge): in accordance with UIC Leaflet 505-1 (for vehicles running exclusively in Switzerland: in accordance with EBV special regulation)
- See I-30111, Section 5.1, Point 4.9 regarding routes approved for use by double-deck rail vehicles

#### Please note

The calculation of vehicle construction gauge in accordance with EN 15273-2 (with Austria variant for CH) corresponds to the vehicle construction gauge calculation in UIC 505-1.

#### Intermodal freight

- I-30111, Section 5.1, Point 4.8 provides a summary of the route codes

#### Pantograph (see also section 3.3.1.4)

- Pan head width 1,450mm, insulated end horns, envelope: in accordance with UIC Leaflet 608.
- Profile certification for pantographs in accordance with EN 15273-2, UIC 505-1.
- Exception for historic vehicles: pan head with 1,320 mm authorised (routes with specific track access conditions are excluded).
- Further details can be found in I-30111, Section 5.1, Point 3.1.

Technical aspects of track access with regard to the loading gauge are described in detail in Regulation I-20030 (Technical Aspects of Track Access: The Vehicle Clearance Line – The Impact of the Loading Gauge on Vehicles and their Loads).

### 2.3.5 Weight Limits (Route classes)

The standard route category is D4. All further information can be found in chapter 5.1 section 4.2 of I-30111.

### 2.3.6 Line Gradients

The gradient columns in I-30131 RADN list the critical descents and ascents for each route section.

### 2.3.7 Maximum Line Speed

The maximum speed depends on the route section, the train composition and the train series and brake sequence. Details of sections of the route, essential for train movements, can be found in I-30131 'Block Tables RADN' (<https://bahninfrastruktur.sbb.ch/de/produkte-dienstleistungen/bahninformatiksysteme/anlagenmanagement/eradn-service.html>) or, for ETCS Level 2 routes, in the DMI. The right is reserved to impose speed variations (slower or faster) for operational reasons, e.g. due to shipments of hazardous goods, exceptional consignments or test runs.

### 2.3.8 Maximum Train Lengths

The maximum train lengths are specified in chapter 5.1 sections 6.1 and 6.2 of I-30111.

### 2.3.9 Power Supply

The rail network for train movements is fully electrified and has a standard voltage and frequency of 15 kV/16.7 Hz with tolerances in accordance with EN 50163.

90% of the traction current requirement is supplied from renewable energy sources. In accordance with SBB's energy strategy, this is planned to increase to 100% by 2025.

### 2.3.10 Signalling Systems

On the SBB Infrastructure network, the Swiss L and N signal systems are used for train movements involving trackside signalling.

ETCS Level 2 is used in the case of in-cab signalling. Further information can be found in the FDV, Section R 300.2 'Signals', as well as in the corresponding sub-sections in I-30111.

### 2.3.11 Traffic Control Systems

SBB has used the Rail Control System (RCS) for train assignment since 2009. For further information, visit [www.sbbrcs.ch](http://www.sbbrcs.ch) (<http://www.sbbrcs.ch>).

### 2.3.12 Communication Systems

#### 2.3.12.1 Coverage

There are currently no plans to equip the entire SBB route network with GSM-R. On some routes where it is possible to do so, GSM-R coverage is provided via a public mobile phone operator's existing mobile phone network (national roaming):

- 111 Puidoux-Chexbres-Vevey
- 131 Monthey-Le Bouveret-St-Gingolph
- 201 Le Day-Le Pont
- 221 Travers-Les Verrières Front. (-Pontarlier)
- 226 Moutier-Sonceboz
- 239 Courtemaîche-Bure (armasuisse)
- 415 Busswil-Büren an der Aare
- 503 Sissach-Läufelfingen-Hauenstein-Tunnel-Olten
- 651 Waldibrücke-Beinwil am See-Lenzburg
- 737 Glarus-Linthal

A reduced range of GSM-R functions will be available on these routes. The changeover points between "national roaming" and the GSM-R network are listed in the RADN route tables.

### 2.3.12.2 Recording voice communications

Train traffic control communications are recorded on the SBB rail network. These recordings serve on the one hand to reconstruct the communication chain after an event that has led to an accident or a dangerous situation, and on the other hand to identify safety-relevant trends and patterns as regards communication. More details can be found in I-50094.

### 2.3.13 Train Control Systems

#### 2.3.13.1 Trackside signalling

##### The SBB rail network

Where the SBB rail network uses trackside signalling, the SIGNUM and ZUB or ETCS Level 1 LS train control systems are employed.

Signal settings (warning and stop signals) and speed monitoring information are transmitted to the vehicle from the Eurobalise/Euroloop via the following transmission paths:

- Packet 44 to the ETM antenna of the ETM-S (SIGNUM system) or to the ETM antenna of the ETM-M or ZUB 262 (SIGNUM and ZUB system) (ETCS Level 0)
- ETCS telegram to the ETCS antenna of a vehicle equipped with an ETCS system in accordance with Baseline 3 (ETCS Level 1 Limited Supervision).

##### Cross-border routes managed by non-Swiss infrastructure managers

The following cross-border routes have been additionally equipped with ETCS Level 1 LS incl.

EuroZUB/EuroSignum by the neighbouring infrastructure managers (RFI, DB, and SNCF):

- Les Verrieres (excl.)–Pontarlier, SNCF Réseau
- Domodossola–Iselle di Trasquera, RFI
- Ranzo–Luino, RFI
- (Schaffhausen)–Singen, DB Netz AG, Business Unit (GE) Infrastructure Switzerland
- Erzingen–(Schaffhausen), DB Netz AG, GE Infrastructure Switzerland
- Rheinbrücke–Basel Bad station–Weil / Haltingen, DB Netz AG, GE Infrastructure Switzerland
- Basel Bad station–Kleinhünigen Hafen (excl.), DB Netz AG, GE Infrastructure Switzerland

#### 2.3.13.2 In-cab signalling

ETCS Level 2 is used with in-cab signalling and is currently active on the following lines:

- Rail 2000 line between Mattstetten (excl.) and Rothrist (excl.)
- Rail 2000 line between Wanzwil and Solothurn (excl.)
- Rail 2000 line between Wanzwil and Solothurn (excl.)
- Gotthard Base Tunnel
- Bodio (excl.)–Pollegio Nord–Biasca (excl.)
- Biasca (excl.)–Osogna–Claro–Castione (excl.)
- Lausanne(excl.)–Vevey–Villeneuve–Roche VD (excl.)
- Puidoux (excl.)–Corseaux–Cornalles (excl.)–Vevey–Funi–Vevey
- Bellinzona (excl.)–Giubiasco–Sant’Antonino (excl.)–Cadenazzo (excl.)
- Bellinzona (excl.)–Giubiasco–Ceneri Base Tunnel–Vezia–Lugano (excl.)
- Ardon (excl.)–Sion–Sierre–Salgesch (excl.)

## 2.4 Traffic Restrictions

### 2.4.1 Specialized Infrastructure

Specific network access conditions apply to the following routes and stations due to their differences from the rest of the network.

- Rail 2000 lines Mattstetten–Rothrist, Wanzwil–Solothurn and connecting line Rothrist–Zofingen NWS Annex 2.4.1A (<https://company.sbb.ch/de/sbb-als-geschaeftpartner/leistungen-evu/onestopshop/grundlagen-netzzugang.html>)



- Gotthard Base Tunnel route and Gotthard panoramic route [NWS Annex 2.4.1B](https://company.sbb.ch/de/sbb-als-geschaeftpartner/leistungen-evu/onestopshop/grundlagen-netzzugang.html) (<https://company.sbb.ch/de/sbb-als-geschaeftpartner/leistungen-evu/onestopshop/grundlagen-netzzugang.html>)
- Ceneri Base Tunnel route Giubiasco–Ceneri-Base Tunnel–Vezia [NWS Annex 2.4.1C](https://company.sbb.ch/de/sbb-als-geschaeftpartner/leistungen-evu/onestopshop/grundlagen-netzzugang.html) (<https://company.sbb.ch/de/sbb-als-geschaeftpartner/leistungen-evu/onestopshop/grundlagen-netzzugang.html>)
- "Rolling border transition" through Chiasso station [NWS Annex 2.4.1D](https://company.sbb.ch/de/sbb-als-geschaeftpartner/leistungen-evu/onestopshop/grundlagen-netzzugang.html) (<https://company.sbb.ch/de/sbb-als-geschaeftpartner/leistungen-evu/onestopshop/grundlagen-netzzugang.html>)
- CEVA (Geneva–Annemasse (France)) [NWS Annex 2.4.1E](https://company.sbb.ch/de/sbb-als-geschaeftpartner/leistungen-evu/onestopshop/grundlagen-netzzugang.html) (<https://company.sbb.ch/de/sbb-als-geschaeftpartner/leistungen-evu/onestopshop/grundlagen-netzzugang.html>)
- Seetal route Waldibrücke–Lenzburg (clearance gauge smaller than EBV O1) in accordance with I-30121, Route 431

## 2.4.2 Environmental Restrictions

Due to noise control requirements, certain routes are subject to operating restrictions. These are set out in the annexes to section 2.4.1 (see in particular Rail 2000 routes).

## 2.4.3 Dangerous Goods

For restrictions in stations and at operating points, see I-30121.

For restrictions on the Rothrist–Zofingen connecting line, see [Annex 2.4.1A](https://company.sbb.ch/en/sbb-as-business-partner/services-rus/onestopshop/track-access.html#sbbf6c79d) (<https://company.sbb.ch/en/sbb-as-business-partner/services-rus/onestopshop/track-access.html#sbbf6c79d>) to the NWS.

For restrictions in connection with the main substance chlorine, see I-50062.

## 2.4.4 Tunnel Restrictions

Exceptions and restrictions applicable to thermally powered trains (coal, oil, diesel) are set out in chapter 16.1 of I-30111 and in I-30121.

## 2.4.5 Bridge Restrictions

Running restrictions on bridges usually depend on the route class or can be found in I-30121.

## 2.5 Availability of the Infrastructure

### 2.5.1 Route opening times

The majority of SBB routes are open 24 hours a day. Other route opening times are published [on the internet](https://company.sbb.ch/en/sbb-as-business-partner/services-rus/onestopshop/train-paths.html) (<https://company.sbb.ch/en/sbb-as-business-partner/services-rus/onestopshop/train-paths.html>). It is possible to travel on a route outside of its opening hours by taking advantage of the additional service "Use of the route outside of the route/station opening hours" in accordance with the catalogue of services.

### 2.5.2 Capacity restrictions

SBB Infrastructure bundles various construction activities on the network into possessions. Detailed information about capacity restrictions is published well in advance on the [OneStopShop](https://company.sbb.ch/en/sbb-as-business-partner/services-rus/onestopshop/capacity-limitations.html) (<https://company.sbb.ch/en/sbb-as-business-partner/services-rus/onestopshop/capacity-limitations.html>) in accordance with the Track Access Ordinance. Further details can be found in Section 4.3 of this NWS.

## 2.6 Infrastructure Development

### Train control systems on cross-border routes

In accordance with the [ETCS/GSM-R location decision](https://www.bav.admin.ch/bav/de/home/themen-a-z/zugbeeinflussung/etcs/informationen-fachleute.html) (<https://www.bav.admin.ch/bav/de/home/themen-a-z/zugbeeinflussung/etcs/informationen-fachleute.html>) issued by the FOT on 14 February 2019, the following applies:

The increasing complexity and the associated costly and time-consuming task of maintaining and verifying the safety of train control systems requires some simplification of cross-border routes as part of migration to ETCS. The FOT therefore intends to order the dismantling of the existing third party systems PZB, KVB/RPS and SCMT, particularly in the cross-border track sections which form part of the freight corridors (RALP / NSM). In line with the European implementing regulation (EU) 2017/6 (European Deployment Plan for the European Rail Traffic Management System), the target horizon for dismantling to start is 2023. Vehicle owners are requested to take appropriate measures.

#### **Converting further routes to ETCS Level 2**

The southern feeder line Vezia–Lugano–Capolago–Riva S.Vitale is to be equipped with ETCS Level 2 and is provisionally scheduled to be brought into operation in 2023.

#### **Additional information**

Additional information about SBB Infrastructure's construction projects can be found on the internet at <https://company.sbb.ch/de/ueber-die-sbb/projekte.html> (<https://company.sbb.ch/en/the-company/projects.html>).

## **3 Access Conditions**

### **3.1 Introduction**

Section 3 of the NWS sets out the requirements for accessing the SBB rail network as regards both domestic and cross-border traffic.

### **3.2 General Access Requirements**

The legal basis for accessing the network and for operating as an RU is set out in the Railway Act (EBG), in the Ordinance on the Construction and Operation of Railways (Railway Ordinance, EBV), in the Railway Network Access Ordinance (NZV) and in the FOT's Ordinance on Railway Network Access (NZV-BAV).

#### **3.2.1 Conditions for Applying for Capacity [TVS]**

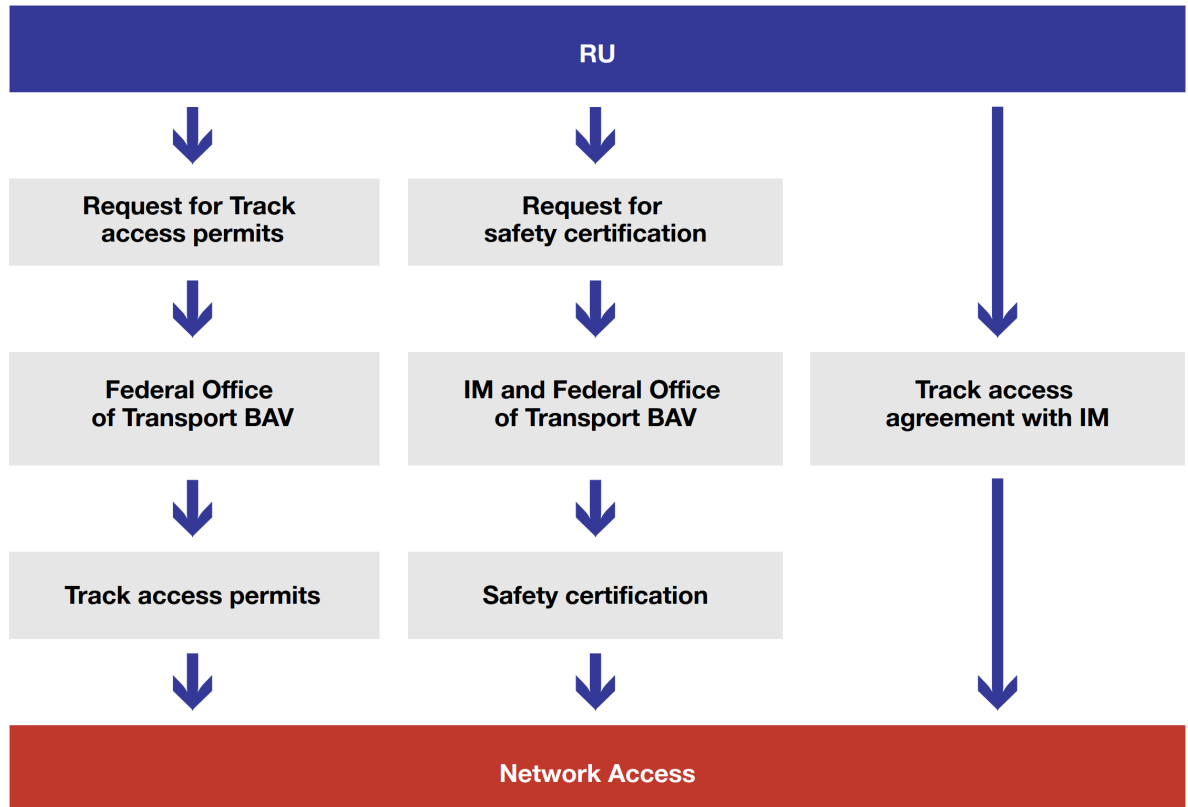
The conditions for applying for a train path are described in Section 4. In accordance with Art. 9a Para. 4 EBG, companies which are not RUs are also permitted to apply for freight traffic train paths.

#### **3.2.2 Conditions for Access to the Railway Infrastructure**

**3.2.2.1 The principle**

On condition that it complies with the legal requirements and the other provisions mentioned in this document, any company interested in operating rail transport is entitled to apply for network access (Art. 9a Para. 4 EBG).

In order for a Swiss RU to be able to operate on the SBB rail network, the administrative level requirements are: a network access permit (Point 3.2.3), safety certification incl. route compatibility check (Point 3.2.4) and a network access agreement with the IM (Point 3.3.2).



### 3.2.2.2 Change of use process safety

SBB Infrastructure reserves the right to initiate a change of use process safety (NAeP), i.e. a risk assessment of safety-relevant concerns, questions and elements 4: This is carried out as standard on the basis of a new service request (request/order for a new train path by an RU/applicant) or other triggering criteria in order to identify any newly emerging safety shortfalls (e.g. insufficient platform lengths, missing departure blocking devices, missing stop boards, insufficient flank protection measures, etc. The NAeP is performed using an electronic tool (App-NAeP). SBB Infrastructure also requires RUs to fill in the “Train Operating Company – Basic Information” form. This form already contains a vehicle matrix showing the most common passenger vehicle types. Some of the criteria applied are given below:

#### Passenger trains

The NAeP focuses primarily on systematic changes to or increases in the frequency of the service offer or on extensive changes to the rolling stock to be used in the medium term (planning horizon  $\leq 6$  years). SBB Infrastructure thus requires detailed basic information at an early stage. This includes rolling stock lengths and types, cycles and information on train personnel as well as forwarding. As previously, the NAeP is also used for individual scheduled or special extra trains, e.g. during peak hours, to which additional coaches/modules are attached or which operate during at least one timetable year with different rolling stock. Other major trigger criteria are changes in stops, stations with new train turn-arounds and new crossing points/overtaking points.

#### Freight trains

The most important criteria for initiating a change in freight traffic use are when there is a fundamental change in system/catalogued train paths or in shunting operations at stations, or when track sections/operating points are (re)scheduled or scheduled for the first time to include freight traffic train paths.

If the NAeP is conducted, the RU should expect to receive a response in no less than thirty days.

If safety-relevant infrastructure measures are identified, SBB Infrastructure clarifies whether the

RU can compensate for these through organisational measures. If not, SBB Infrastructure reserves the right to only approve the service request after relevant infrastructure upgrades have been implemented or to reject it on the grounds of insufficient project funds.

The majority of the safety-relevant infrastructure elements are based on the Implementing Provisions for the Railways Ordinance (AB-EBV), with which all RUs and IMs are obliged to comply.

### 3.2.2.3 Exceptional use of infrastructure

In the event of exceptional use of the infrastructure (e.g. major event, unusually high passenger frequencies, large numbers of visitors/private individuals near the tracks, etc.), the railway undertaking shall notify the infrastructure manager as soon as possible so that the necessary safety measures can be organised.

### 3.2.3 Network access permit / EU licences

The network access permit certifies, among other things, that the RU possesses the required knowledge to undertake rail operations safely and reliably, that it is financially sound, reliable, and complies with the relevant labour regulations. The network access permit is issued by the FOT, is valid for a maximum of ten years and can be renewed. The [FOT-Directive](https://www.bav.admin.ch/bav/de/home/rechtliches/rechtsgrundlagen-vorschriften/richtlinien/richtlinien-bahn/erlangen-von-netzzugangsbewilligung-und-sicherheitsbescheinigung.html)

(<https://www.bav.admin.ch/bav/de/home/rechtliches/rechtsgrundlagen-vorschriften/richtlinien/richtlinien-bahn/erlangen-von-netzzugangsbewilligung-und-sicherheitsbescheinigung.html>) describes the necessary steps for obtaining the network access permit, safety certification as well as the safety permit.

Network access for foreign companies is governed by Art. 9 NZV (<https://www.admin.ch/opc/de/classified-compilation/19983395/index.html#a9>) in accordance with the relevant intergovernmental agreement. This means that simplified conditions may be applicable to routes close to the border as defined in Annex 1 of the FOT-Directive (<https://www.bav.admin.ch/bav/de/home/rechtliches/rechtsgrundlagen-vorschriften/richtlinien/richtlinien-bahn/erlangen-von-netzzugangsbewilligung-und-sicherheitsbescheinigung.html>) for obtaining the network access permit, safety certification as well as the safety permit.

### 3.2.4 Safety Certificate

The safety certificate is issued or recognised by the FOT in accordance with Art. 8e EBG. The FOT Directive (<https://www.bav.admin.ch/bav/de/home/rechtliches/rechtsgrundlagen-vorschriften/richtlinien/richtlinien-bahn/erlangen-von-netzzugangsbewilligung-und-sicherheitsbescheinigung.html>) describes the necessary steps for obtaining the network access permit, safety certification as well as the safety permit.

It is the RU's responsibility to check the technical compatibility of its rolling stock with the sections of track it intends to use. The procedure is described in the OneStopShop (<https://company.sbb.ch/de/sbb-als-geschaeftpartner/leistungen-evu/onestopshop/fahrzeugeinsatz.html>).

### 3.2.5 Insurance

Art. 5 and 5a NZV govern the requirements for financial capacity and insurance cover. For example, a liability insurance policy for CHF 100 million per loss event or equivalent securities must be presented.

## 3.3 Contractual Arrangements

### 3.3.1 Framework Agreement [TVS]

Applicants and IMs may conclude framework agreements in accordance with Article 12b NZV; (see also Point 4.4).

### 3.3.2 Contracts with RUs

Once the provisions at Points 3.2.3 and 3.2.4 have been met, the business relationship between an RU and the IM will be governed by the network access agreement in accordance with Articles 15 to 17 NZV. The contents of such an agreement will determine the cooperation between the RU and the IM. The agreement must be issued in duplicate in writing, either in an official Swiss language or in English, and must contain the following contractual elements:

- the IM's General Terms and Conditions for the Use of Railway Infrastructure (AGB-ISB)
- the IM's list of infrastructure services
- the IM's Network Statement
- the basic and ancillary services allocated by the TVS

In addition to its own network access agreements, SBB Infrastruktur also coordinates the conclusion of network access agreements with the Sensetalbahn AG and the Hafentbahn Schweiz AG IMs. A specimen network access agreement is available online from the OneStopShop (<https://company.sbb.ch/en/sbb-as-business-partner/services-rus/onestopshop/track-access.html>).

### 3.3.2.1 Accounting code (Debicode)

Railway undertakings are identified via an accounting code for the purpose of purchasing and billing for services. This code is issued to the railway undertaking by the infrastructure manager.

The RU must comply with the following rules in its use of the accounting code:

- The accounting code issued must be used every time a train path is ordered
- Train paths (train numbers) must be ordered with a single accounting code for the entire Swiss section of the route.
- So as to determine responsibility for safety, the "SMS-EVU" must, without fail, be entered in the NeTS-AVIS ordering tool.

### 3.3.2.2 Responsibilities when there is a changeover between two RUs

This provision sets out in greater detail the requirements at Annex 1, "Routes close to borders", to the FOT Directive for obtaining a network access permit and safety certification as well as the safety permit.

#### The principle

The incoming RU will continue to be the IM's contractual partner and thus its contact organisation until the outgoing locomotive driver declares that the train is ready to depart. Thereafter, the outgoing RU will become the contractual partner.

#### Alternative provisions for marshalling yards

As regards rolling stock undergoing the "marshalling yard wagon throughput" procedure (splitting up, sorting, configuring freight trains via the shunting hump), the contractual relationship changes over once the train has been split up, i.e. as soon as the rolling stock has come to a halt in the sorting siding.

This provision does not affect which RU is responsible for the availability of the rolling stock. The outgoing RU is always responsible.

These provisions also remain in force where shunting is carried out by third parties at the transfer station. In all other respects, the AGB-ISB shall apply. Any liability on the part of the third party shall be determined based on the relevant statutory provisions.

### 3.3.3 Contracts with non-RU Applicants [TVS]

Article 9a Para. 4 EBG states:

Any company which is interested in carrying out rail traffic movements may apply for network access to a particular section of permanent way (train path) at a specified time. At least one month before commencing operations, the company must submit a network access permit or commission a railway undertaking to carry out the rail traffic movement. The railway undertaking carrying out the movement must submit a safety certificate by the time it commences traffic operations at the latest.

An agreement is not a pre-condition for being able to order train paths in Switzerland. The provisions issued by the TVS as regards applying for and allocating train paths apply irrespective of whether an agreement has been previously concluded.

### 3.3.4 General Terms and Conditions

The IM's General Terms and Conditions of Business for the Use of Railway Infrastructure (AGB-ISB) are available from the [OneStopShop \(https://company.sbb.ch/en/sbb-as-business-partner/services-rus/onestopshop/track-access.html\)](https://company.sbb.ch/en/sbb-as-business-partner/services-rus/onestopshop/track-access.html). The provisions of the TVS apply to capacity allocation (cf. Point 1.1).

## 3.4 Specific Access Requirements

### 3.4.1 Rolling Stock Acceptance and technical requirements

#### Area of validity

The technical requirements listed in this section apply in principle to the entire SBB track network. Further requirements for particular infrastructure facilities (e.g. fire protection requirements in specific tunnels) are set out in the annexes to section 2.4.1.

#### Accreditation body

The FOT is responsible for accepting rolling stock (obtaining the necessary operating permit/type acceptance). The legal bases are set out in the Swiss Railways Act, Swiss Railways Ordinance and Implementing Provisions to the Railways Ordinance (IP-RailO). The FOT publishes guidelines for the accreditation of railway vehicles and for the accreditation of historic railway vehicles.

#### Support

Inspection of the technical network access conditions as per this section by the Technical Network Access (TNZ) department of SBB Infrastructure is part of the FOT's accreditation procedure and a strict requirement for access to SBB's track network.

The main focus of the investigative work is on making certain that the vehicles and SBB Infrastructure's equipment and systems are mutually compatible in order to ensure their safe and reliable interaction. The TNZ specifies, in consultation with the applicant (RU, vehicle manufacturer, independent testing body), those infrastructure requirements for which evidence of compliance must be provided and checks whether the conditions have been met and the relevant evidence has been furnished (particularly in the case of uniquely Swiss requirements, so-called national technical rules). The TNZ issues non-objection certificates (similar to a report) for each aspect as its formal comment on the evidence submitted and as confirmation of compliance with the infrastructure requirements (proof of compatibility):

- Provisional non-objection certificates (for test runs)
- Definitive non-objection certificates (for commercial journeys)

TNZ also supports the interested railway undertakings/vehicle keepers and manufacturers in matters relating to network access, i.e. from creation of the requirements specification through to acceptance of traffic on the SBB track network. TNZ is authorised to attend the test journeys carried out by the railway undertakings on the SBB Infrastructure track network at any time. It thus makes an important contribution to ensuring safe circulation of traffic on the SBB track network and preventing operational disruptions.

The following technical and operational requirements must be met:

#### 3.4.1.1 Train control equipment

According to AB-EBV, the data required for the overall maintenance of train control systems must be made available to the IM. Upon request, the RU must provide the IM with the information (e.g. log files from on-board units) free of charge and promptly, i.e. within seven days. The IM will treat this information as confidential.

#### 3.4.1.1.1 Minimum equipment with trackside signalling

Rail vehicles wishing to travel on the SBB Infrastructure network (excluding ETCS Level 2 routes) must be equipped with at least ETM-S (SIGNUM system) or ETM-M (SIGNUM and ZUB system). Every vehicle for which a type approval or an operating permit (initial registration) is sought must either be fitted with an ETCS train control system in accordance with Baseline 3 or must at the very least be prepared in such a way that a system can be easily installed subsequently.

Systems to be operated in conjunction with trackside signalling must at the very least have the following software versions:

- ETM-M: Version 1.00
- ETM-S: Version 1.00
- ZUB 262 ct (DAZ version): Version 14\* (note the BAV transition regulation)
- ZUB 262 ct (MVB version): Version 14\* (note the BAV transition regulation)
- ZUB 262 (light variant): Version 15
- ETCS Baseline 3: BL 3.4.0

#### 3.4.1.1.2 Minimum equipment with cab-signalling

Vehicles must be fitted with an approved and functioning on-board ETCS system in order to travel on routes equipped with ETCS Level 2 (cab signalling).

#### 3.4.1.1.3 Driving without sufficient train control equipment

As a general rule, all leading vehicles must be equipped with the Automatic Train Protection that is present on the infrastructure being driven on. If this is not possible (e.g. driving with historic rolling stock or test runs at overspeed), an exception permit must be obtained from the FOT, which has published a corresponding [guideline \(http://www.bav.admin.ch/bav/de/home/verkehrsmittel/eisenbahn/fachinformationen/netzbetrieb-und-netzbenutzung/fahrten-ohne-ausreichende-zugbeeinflussungseinrichtung.html\)](http://www.bav.admin.ch/bav/de/home/verkehrsmittel/eisenbahn/fachinformationen/netzbetrieb-und-netzbenutzung/fahrten-ohne-ausreichende-zugbeeinflussungseinrichtung.html).

The statement must be submitted to the infrastructure manager in order to process the exception permit. The infrastructure manager will do this within ten working days.

#### 3.4.1.1.4 Cross-border routes managed by foreign IMs

Access to cross-border routes managed by foreign IMs (cf. Point 2.3.13.1) is subject to the respectively applicable regulations.

The relevant authorities (ANSF, EBA, EPSF, BMK, BAV) are responsible for approving vehicles for use. The FOT has concluded bilateral agreements with the EBA, the EPSF and the ANSF on matters governing [cross acceptance \(https://www.bav.admin.ch/bav/de/home/themen-a-z/cross-acceptance.html\)](https://www.bav.admin.ch/bav/de/home/themen-a-z/cross-acceptance.html) as regards the approval of vehicles for use on cross-border routes.



### 3.4.1.2 Wheel track interaction

Wheel/track interaction is based on the limiting conditions and limit values set out in the AB-EBV. An inspection is to be conducted taking into account the relevant Swiss legal provisions/specialities and in accordance with CEN standard EN 14363 (Testing for the acceptance of running characteristics of railway vehicles – Testing of running behaviour and stationary tests). The vehicles are to be inspected, in accordance with the standard, in their usual position in the train composition and with their buffer lubrication and couplings in a condition appropriate for normal operation.

The following serve as guidelines and benchmarks:

- Adherence to the limiting conditions and limit values set out in the AB-EBV
- Internationally recognised standards (EN 14363, EN 15663, UIC 518, UIC 645)
- The Swiss track network with its many very small curve radii  $250\text{ m} \leq R < 400\text{ m}$  (test range 4 in accordance with EN 14363 and UIC 518)
- Specific lines with a significant number of extremely small curve radii  $R < 250\text{ m}$  in accordance with I-50127 (test range 5, not covered by EN 14363 or UIC 518)
- Ensuring that points on tight curves can be traversed safely and without undue strain on the track and maintaining the minimum buffer overlap in accordance with I-50007
- Minimum technically traversable radius (curve radius) in accordance with I-50007
- Route classes (interface between the vehicles' maximum load and the infrastructure) in accordance with I-50064

### 3.4.1.3 Interface between load limits of vehicles and infrastructure

In accordance with EN 15528 and I-50064 (technical specification for effecting the interface between load limits of vehicles and infrastructure in line with the EU standard EN 15528), the line category is determined by the maximum wheelset load and the mass per unit of length. The line category of an entire train is always determined based on the vehicle in the train that has the highest load, i.e. that is in the highest-numbered line category. Compatibility is ensured if the vehicle's line category (or payload limit for freight wagons) is the same as or lower than the line's own category, taking account of the maximum permitted speed.

### 3.4.1.4 Pantograph/overhead line interaction

Pantographs require component approval from the BAV in accordance with the BAV [Guideline on the Acceptance of Railway Vehicles \(https://www.bav.admin.ch/bav/en/home/modes-of-transport/railways/informations-for-professionals/approval-of-rolling-stock.html\)](https://www.bav.admin.ch/bav/en/home/modes-of-transport/railways/informations-for-professionals/approval-of-rolling-stock.html).

The following serve as guidelines and benchmarks:

- Adherence to the limiting conditions and limit values set out in the AB-EBV
- Adherence to the force criteria in accordance with EN 50367
- Adherence to the contact wire uplift criteria in accordance with EN 50119
- Adherence to the pantograph requirements in accordance with EN 50206
- Infrastructural requirements governing the interaction between pantographs and overhead lines in accordance with I-50088
- Verification of pantograph gauges (see also section 2.3.4)
- Optimised pantograph horns
- SBB Infrastructure's many different overhead power line systems (compliance will be demonstrated over several reference sections of track depending on the intended employment)

### 3.4.1.5 Flange lubrication

All rolling stock in use on the SBB track network must have flange lubrication ("Spurkranzschmierung"). Detailed requirements governing the lubricants to be used (especially with regard to their environmental impact), the required quantities and frequency of lubrication can be found in the Swiss Public Transport Association's Technical Rail Regulation 49410.

### 3.4.1.6 Electrical requirements for motive power units

In order to guarantee safe and reliable interaction of motive power units with infrastructure installations and systems, the following conditions must be met and the corresponding proof submitted with the type acceptance for the motive power units:

#### 3.4.1.6.1 Requirements for input admittance

In order to reliably prevent the line-side converters of motive power unit converters, including the associated line-side converter controller, from generating network resonances and thus possibly rendering the traction current supply network unstable, the input admittance frequency response must be passive for any values above a defined threshold frequency. The corresponding requirements for input admittance of motive power unit converters and the specifications for motive power unit frequency response measurements are set out in SBB Regulation I-20005. This regulation is a binding operating rule within the meaning of Art. 12 para. 4g EBV.

#### 3.4.1.6.2 Requirements for power limitations

In order to prevent failures arising from under- or overproduction in the case of special configurations of the traction power supply network, motive power units must be equipped with a frequency-dependent power limitation function in accordance with SBB Regulation I-55068. In order to prevent a power outage in the event of a weak power grid, e.g. where there are long supply bypasses or special circumstances such as failure of a substation, motive power units must be equipped with a voltage-dependent power or current limitation function in accordance with SBB Regulation I-50069. The regulations are binding operating rules within the meaning of Art. 12 para. 3g EBV for vehicles accepted for operation since 1 January 2011. For older motive power units, the aim is for these functions to be added within the context of general software updates.

#### 3.4.1.6.3 Compatibility with track-release systems

Adherence to EN 50238 will ensure the compatibility of all rolling stock with track-release systems. This standard is divided into three sections: process (EN 50238-1, formerly EN 50238), parasitic currents (CLC/TS 50238-2) and magnetic interference (TS 50238-3).

More detailed documents exist for SBB infrastructure which set out specific Swiss characteristics supplementing the provisions of CLC/TS 50238-x. These are:

- SBB Regulation I-50097 on parasitic currents and
- SBB Regulation I-50098 on magnet interference.

All rolling stock with electronic equipment on board (and in particular static convertors with output of 500 W or higher) must be able to prove compliance for all parts of that equipment with EN 50238, I-50097 and I-50098. Depending on the vehicle and the operational concept, proof of compliance obtained abroad on a 15 kV/16.7 Hz system (and, as necessary, 25 kV/50 Hz for certain of SBB Infrastructure's cross-border routes) may also be presented for EN 50238 parts. Details of any CLC/TS 50238 parts that are not yet complete are contained in I-50097 und I-50098.

#### 3.4.1.6.4 Energy measurement (with energy measurement systems)

The specifications concerning energy measurement systems for calculating actual power consumption according to RailNAO are defined in Annex 3.4.1.6.4 (<https://company.sbb.ch/en/sbb-as-business-partner/services-rus/onestopshop/track-access.html#sbb2af6d3>) to the NWS.

If the railway undertaking renounces the use of energy measurement systems for measuring power consumption, invoices will be based on the flat-rate fees published in the List of Services.

### 3.4.1.7 Communication devices

Authorised GSM-R-compatible devices equipped with Swiss GSM-R SIM cards can be used in Switzerland.

In addition, devices which are equipped with SIM cards from the rail IMs shown below can also be used on the GSM-R routes listed in the roll-out plan (see also Section 2.3.12.1) by means of “International GSM-R Roaming”:

- DB Netz AG (Germany)
- RFI S.p.A. (Italy)
- SNCF Réseau EPIC (France)
- ProRail N.V. (Netherlands)
- Infrabel SA (Belgium)
- ÖBB-Infrastruktur AG (Austria)

Communication using GSM-R devices is essentially possible on the entire SBB rail network, either through the existing GSM-R radio coverage or (on routes which are not or not yet covered) by means of “National Roaming”. On SBB routes with no GSM-R radio coverage, “National Roaming” should be used. As regards foreign railway undertakings whose GSM-R devices are fitted with foreign SIM cards which do not support “National Roaming” but whose train services will on rare occasions run on routes where only “National Roaming” is available, appropriate access arrangements will be made separately.

Requests (from a mobile subscriber to the movements inspector) for train paths for shunting manoeuvres must be transmitted using GSM-R devices. As regards regular shunting manoeuvres, radio route commands (digital train path requests via mobile radio) should be used.

The reference documents for GSM-R are those European TSI CCS specifications based on the GSM-R baselines which are currently applicable within Switzerland.

It is recommended that vehicles be fitted with GSM-R-compatible cab radios. Using handheld radios is only permitted on regular train services under the following conditions:

- Hands-free operation must be guaranteed. The train driver must not be distracted from his tasks by using his hand-held radio.
- Radio reception in the driver’s cab must be good enough for voice communication. Achieving the minimum level is the responsibility of the RU. It is not envisaged that an external antenna should be installed.
- It must be possible for the hand-held radio to be supplied with power from an external source.

On trains making irregular journeys on the SBB network, the minimum requirement is for a handheld device capable of sending and receiving a “Railway Emergency Call”.

The list of authorised GSM-R terminal devices can be seen in the FOT’s Domain Safety Engineering (<http://www.bav.admin.ch/bav/de/home/verkehrsmittel/eisenbahn0/typenzulassungen-eisenbahnanlagen/fachbereich-sicherheitstechnik.html>).

The communication systems to be used on each route are listed in I-30131 RADN.

### 3.4.1.8 Brakes

Electric or electrodynamic brakes may explicitly also be used for rapid braking on the SBB Infrastructure rail network. If electric brakes are used, there must be an assurance in the event that they fail that rapid braking can continue to be applied automatically and reliably (e.g. failure of the external power supply).

According to AB-EBV, the limit value or maximum permissible adhesion value for wheel/rail adhesion for vehicles with wheel slide protection systems is  $\mu = 0.22$ . This means that manufacturers and/or operators can define the adhesion value limit in respect of vehicles with wheel slide protection systems as a function of the existing dynamic braking system (including thermal load capacity) and of the operational requirements.

Using eddy current systems or other braking systems that operate independently of the friction between wheel and rail is not permitted on the SBB Infrastructure rail network for service braking and emergency braking.

#### Exceptions

- Electromagnetic rail brakes may be used for emergency braking. This also includes rapid braking initiated by the driver either by reducing the pressure of the main brake pipe in accordance with UIC leaflet 541-06 (including the corresponding speed thresholds) and/or via direct manual operation.
- Using eddy-current brakes, which have an effect on the infrastructure, is only permitted after carrying out further local investigations or line upgrading. Proof of compatibility with the track-release signalling devices on the particular section of track must be provided (axle counters not intended for this purpose can be permanently damaged and destroyed) and the track must be approved for their use.

### 3.4.1.9 Sanding (greater adhesion)

Equipment which automatically dispenses sand if the driver initiates emergency or rapid braking is not permitted and must be deactivated for rail operations within Switzerland. Sanding by single traction units of up to four axles, including multiple unit control, is not permitted on SBB Infrastructure's rail network when travelling at less than 40 km/h. (Exceptions are emergencies in order, for example, to avoid passing a signal at danger or to prevent a collision/see also I-30111, section 13.3.

### 3.4.1.10 Aerodynamics

In order to ensure safe operation when affected by side winds, the method for determining the side wind stability (vehicle assessment) according to EN 14067-6 Table 2 shall be used (for passenger cars, multiple units and locomotives in the speed range above 160km/h and for freight wagons in the speed range above 120km/h up to the maximum speed of the vehicle). As far as is known today, this guideline covers all parts of the SBB track network which are critical as regards side wind, in particular the Mattstetten–Rothrist Rail 2000 line. A special risk assessment should be submitted in coordination with the infrastructure manager if corresponding proof cannot be obtained. In addition, operational conditions should be defined if necessary to ensure that the vehicles can be operated safely in the entire speed range.

If test runs in the extended speed range at faster than 200km/h (test speed) are to be conducted on SBB Infrastructure's network, details are needed of the maximum pressure surge in tunnels [train/tunnel pressure pattern at a fixed location in a tunnel ( $\Delta p_N/\Delta p_N + \Delta p_{Fr}/\Delta p_N + \Delta p_{Fr} + \Delta p_T$ )] produced by the vehicle being tested in the maximum possible train length in accordance with TSI LOC & PAS.

### 3.4.1.11 Negotiating curves at high speed

For negotiating curves at speeds above the R series (tilting trains, passive tilt mechanisms), a route-specific licence for the higher speed is required for each route travelled in addition to the general vehicle licence (operating permit with R series licence). Further details on licensing requirements and procedures can be found in Document I-20019.

### 3.4.1.12 Intervention (rescue/rerail of trains)

Before commercial commissioning of newly registered vehicle types, Intervention ([intervention@sbb.ch](mailto:intervention@sbb.ch)) has to be informed with technical documentations in accordance with I-50131 (Operational intervention requirements governing the registration of new rail vehicles) for the purpose of towing. (see also EU Directive 1302/2014 TSI LOC & PAS, Clause 4.2.2.2.4 "Rescue coupling"). If necessary RU (or the manufacturer) instructs the necessary specific vehicle information.

### 3.4.1.13 Vehicle type and determining the vehicle price

#### 3.4.1.13.1 Applying for a new vehicle type

Before a new vehicle or one which has been subjected to technical modifications is introduced onto the SBB network, it must be assigned a j type. Journey time calculations for train path planning and other operational systems are based on this. Values for the vehicle's dynamics must be submitted to SBB Infrastructure for this purpose. The exact procedure is explained in the OneStopShop under [Rolling Stock Data](http://company.sbb.ch/de/sbb-als-geschaeftpartner/leistungen-evu/onestopshop/technischer-netzzugang.html) (<http://company.sbb.ch/de/sbb-als-geschaeftpartner/leistungen-evu/onestopshop/technischer-netzzugang.html>).

#### 3.4.1.13.2 Determining the vehicle type

Determining the vehicle price includes the option of applying the basic pricing element of wear and tear when calculating the train path price; see also Point 5.3.1. The exact procedure can be found in the [OneStopShop](https://company.sbb.ch/en/sbb-as-business-partner/services-rus/onestopshop/services-and-prices.html) (<https://company.sbb.ch/en/sbb-as-business-partner/services-rus/onestopshop/services-and-prices.html>) under Determining the Vehicle Price.

In the case of unknown vehicles or those that have not been priced, standard values are used for billing.

### 3.4.1.14 Emergency brake neutralisation and toilet systems

Prevention of stopping in the event of emergencies in tunnels and channels and on bridges (e.g. emergency brake neutralisation), as well as closed toilet systems, are not generally required. However, they are compulsory for some specific infrastructure according to section 2.4.1.

### 3.4.1.15 Noise from parked vehicles

Noise from parked trains is not defined in the TSI Noise or in other railway-related regulations; in Switzerland it is subject to the Noise Protection Ordinance (LSV) SR 814.41. The LSV classifies the noise from parked vehicles as industrial and commercial noise (see Annex 4, Point 1 of LSV 814.41). The limits for exposure to industrial and commercial noise, ascertaining the noise rating level and the level corrections to be taken into account as well as additional allowances are described in Annex 6 to the LSV.

Details of the procedure and of how noise from parked vehicles is assessed can be found on the website of the Federal Office for the Environment (FOEN). The following relevant documents and the FOEN calculation tool needed for assessing the source of the noise are available under the heading "Parked trains":

[1] [EMPA Investigation Report 460395-2a](#)

[http://www.bafu.admin.ch/dam/bafu/de/dokumente/laerm/externe-studien-berichte/beurteilung\\_und\\_begrenzungdeslaermsvonabgestelltenzuegen.pdf.download.pdf/beurteilung\\_und\\_begrenzungdeslaermsvonabgestelltenzuegen.pdf](http://www.bafu.admin.ch/dam/bafu/de/dokumente/laerm/externe-studien-berichte/beurteilung_und_begrenzungdeslaermsvonabgestelltenzuegen.pdf.download.pdf/beurteilung_und_begrenzungdeslaermsvonabgestelltenzuegen.pdf)

, commissioned by the FOEN, " Beurteilung und Begrenzung des Lärms von abgestellten Zügen"

("Assessment and Limitation of Noise from Parked Trains"), 29.01.2015

[2] Summary of the EMPA report and Excel tool for calculating the noise of parked trains based on the EMPA investigations. ([http://www.bafu.admin.ch/dam/bafu/de/dokumente/laerm/fachinfo-daten/berechnungstool-agbestellte-zuege.zip.download.zip/ZusammenfassungBericht\\_und\\_Berechnungstool.zip](http://www.bafu.admin.ch/dam/bafu/de/dokumente/laerm/fachinfo-daten/berechnungstool-agbestellte-zuege.zip.download.zip/ZusammenfassungBericht_und_Berechnungstool.zip))

In accordance with [1], when assessing the noise level at the noise emission site, the following corrections are to be applied to those vehicle noise emission sources which are identified as significant:

Sound source	K1	K2	K3
	Day / Night	(Tone content)	(Pulse content)
Heating/ventilation/air conditioning systems	5 / 10	0	0
Cooling systems: Fans	5 / 10	0	0
Cooling systems: Pumps	5 / 5	2	0
Air compressors	5 / 5	4	2
Preparing trains for service	5 / 5	0	6

The calculations and inputs into the Excel tool referred to in [2] require the dominant sound sources from the vehicle to be recorded using measuring equipment and account to be taken of the following parameters:

- Sound output level in third-octave spectra
- Activity duration (continuous and intermittent)
- Geometric arrangement of the sound sources on the vehicle

These measurements are recorded both while the vehicle is parked and also during transitional procedures as the vehicle is moving into its parking location and back out of it (preparing the train for service). If parking conditions vary due to the weather, these should be recorded. This also applies to automatically generated safety and component testing of the vehicles.

By inputting these measurements into the Excel tool, it is possible to determine the 'critical distances' from emission sites at the locations where the vehicles are parked. The shorter the vehicle's critical distance, the easier it is to park the vehicle anywhere throughout Switzerland.

Vehicles are to be configured in such a way that they have a parking mode (parked with no occupants, snooze or standby mode) which limits noise emissions and energy consumption in a technically, economically and operationally acceptable way and which can be activated within the shortest possible time once the vehicle is no longer in operational use.

Based on the LSV exposure limits, it is recommended that the noise emissions from the vehicles should not exceed an A-weighted equivalent continuous sound pressure level of  $L \leq 50$  dB(A). If this recommendation is followed (measured at the usual measuring positions according to EN ISO 3095 as the assessment parameter; the reference value is the individual value at each measuring position measured from the centre of the track at 1.2 m and 3.5 m above the upper surface of the rail), it will permit positive (i.e. small) safety distances to be achieved.

### 3.4.1.16 Service vehicles

Owing to their use on work sites (construction service), certain railway vehicles are classed as “rail-bound construction and maintenance machines” (for construction, maintenance and inspection of the trackbed, substructures, engineering works and overhead contact line systems, self-driving or towed) in accordance with Article 57 of the Railways Ordinance and the FOT directive on the approval of rolling stock as service vehicles. These include, according to Art. 57.1 of the Implementing Provisions to the Railways Ordinance (Definition and categorisation of service vehicles):

- [1] Rail-bound vehicles (or machines) according to EN 14033
- [2] Road/rail vehicles (or machines) according to EN 15746
- [3] Demountable machines according to EN 15955
- [4] Trailers according to EN 15954

The following are classed as working equipment (not service vehicles):

- [5] Portable machines and trolleys according to EN 13977

For the area of application “Driving and working on railway infrastructures”, service vehicles [1]–[4] also require an operating licence from the BAV as a prerequisite to use on the SBB Infrastructure track network. Here, simplifications to conventional railway vehicles are possible under certain circumstances in accordance with Art. 57.2 of the Implementing Provisions to the Railways Ordinance.

In addition to the FOT operating licence, road/rail vehicles [2], demountable machines [3] and trailers [4] require a work permit from SBB Infrastructure in accordance with Regulation I-40036 (work permits for service vehicles). The use of unbraked service vehicles is prohibited regardless of the gradient. This applies in particular to trailers [4], which may only be used with automatic brakes.

Service vehicles which cannot meet the technical network access conditions (infrastructure requirements) (e. g. road/rail vehicles), or for which the infrastructure requirements have not been fully examined, are classed as special vehicles under the train service regulations (TSR) (see I-30111, Chapter 4.2, Clause 4 as a supplement to TSR R 300.4, Clause 2.2.4) and are subject to specific conditions of use. If service vehicles are used for commercial shunting and train operations in centralised areas, the same infrastructure requirements must be met as for conventional railway vehicles. If you have any questions or if anything is unclear, please consult SBB Infrastructure Technical Network Access (see also section 3.4.1).

### 3.4.2 Staff Acceptance

The BAV is responsible for approving staff. The provisions contained in Regulations (EU) No. [1158/2010](https://eur-lex.europa.eu/legal-content/DE/TXT/?uri=CELEX%3A32010R1158) (<https://eur-lex.europa.eu/legal-content/DE/TXT/?uri=CELEX%3A32010R1158>) and No. [1169/2010](http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwiMsPibzcPsAhUL-qQKHR7uC3MQFjAAegQIBBAC&url=https%3A%2F%2Feur-lex.europa.eu%2Flegal-content%2Fde%2FTXT%2F%3Furi%3DCELEX%253A32010R1169&usg=AOvVaw3ToPzaHY9FAsWYHsQUAdcY) (<http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwiMsPibzcPsAhUL-qQKHR7uC3MQFjAAegQIBBAC&url=https%3A%2F%2Feur-lex.europa.eu%2Flegal-content%2Fde%2FTXT%2F%3Furi%3DCELEX%253A32010R1169&usg=AOvVaw3ToPzaHY9FAsWYHsQUAdcY>) apply. All application documents must be submitted to the FOT.

### 3.4.3 Exceptional Consignments

The provisions regarding exceptional consignments (aS) are set out in the following documents:

- IRS 50502
- Implementation regulation FDV Infrastructure I-30111 and associated regulations

Exceptional consignments are divided into two categories:

- those not requiring Infrastructure to take operational measures
- those requiring Infrastructure to take operational measures (security measures at the signal box)

An individual, case-by-case processing time applies to heavy goods consignments not covered by the provisions of UIC leaflet 700 This should be agreed depending on the type of heavy goods consignment or else settled on a case-by-case basis.

At all events, we ask you to make early contact with the office listed in the [address directory](https://company.sbb.ch/en/sbb-as-business-partner/services-rus/onestopshop/contact.html) (<https://company.sbb.ch/en/sbb-as-business-partner/services-rus/onestopshop/contact.html>) so as to apply for an exceptional consignment approval number.

Exceptional consignments require time to prepare and plan; this will be billed as an additional service. The relevant provisions are set out at Point 3.13 in the List of Services.

The FOT will authorise RUs to transport exceptional consignments by issuing a "freight traffic" type safety certificate; RUs must submit the relevant CIS/ZIS data. Measurement and test runs with special train numbers not including CIS/ZIS are excepted from these provisions. The IM and/or the TVS reserve the right to contact the FOT if these directives are not observed.

The provisions relating to train path applications for exceptional consignments can be found at Points 4.7.1, 4.5.3.4 and 4.2.7.

#### **3.4.4 Dangerous Goods**

Transporting dangerous goods is governed by the RSD Ordinance (Ordinance on the Carriage of Dangerous Substances by Railway or Cableway/SR 742.412), by I-50026 (Network access: dangerous goods directives) and by I-50062 (restrictions on the transport of dangerous goods which are classified under chlorine as the main substance).

Parked dangerous-goods block trains must be inspected in accordance with Directive I-50026 and reported to the network management. Should the railway undertaking fail to conduct the required inspection for block train loads of dangerous goods, it will be sent a one-time reminder by the infrastructure manager via e-mail. If there is still no inspection within the grace period specified by the infrastructure manager, the latter may commission the inspection at the expense of the railway undertaking.

The provisions relating to the ordering of train paths for trains carrying dangerous goods are set out at Points 4.2.7 and 4.7.2.

#### **3.4.5 Measurement and test runs and other special rail movements**

##### **3.4.5.1 Measurement runs**

Measuring vehicles, such as commercially operated vehicles fitted with an On-Board Monitoring (OBM) system, which are used by RUs on the SBB network and which measure and record data about the permanent way, may only operate after consultation with SBB Infrastructure and after signing a confidentiality agreement (incl. stating the purpose of such measuring). The contact address can be found in the address list. The data gathered should be used in accordance with the provisions set out in Point 2.3. Otherwise, permanent way measuring systems installed in the vehicle must be switched off.



### 3.4.5.2 Test runs and special train movements

If the train control system in effect during test runs is inadequate or if it has to be switched off, e.g. when running at excessive speeds, the provisions at Point 3.4.1.1.3 shall apply.

The provisions relating to the ordering of train paths for measurement and test runs and for other special train movements are set out in Points 4.2.7 and 4.5.3.4.

## 4 Capacity Allocation [TVS]

### 4.1 Introduction

This section defines the procedures for allocating capacity.

#### 4.1.1 Legal basis

The definitive legal provisions for ordering and allocating train paths and ancillary services can be found in the Railways Act (EBG; especially Articles 9a and 9b), in the Rail Network Access Ordinance (NZV; Section 4 in particular) and in the FOT's Ordinance on Rail Network Access (NZV-BAV). This list is by no means exhaustive.

The deadlines for ordering train paths and ancillary services are laid down and published by the FOT and always cover the next two-year timetable period.

#### 4.1.2 Requirement for ordering train paths

Using the interoperable, standard-gauge rail networks within Switzerland is only permitted if the appropriate train paths have been ordered and allocated. In order to ensure coordination with other train movements, this also applies to infrastructure managers (IMs) if they are intending to use their networks for their own internal operations (e.g. for special service trains) or if they need to use parts of the network for their own purposes (e.g. parking of vehicles in marshalling yards).

This requirement to order train paths is irrespective of how frequently and regularly they intend to use the network. Train paths must be ordered both for regularly operating trains and for one-off train movements.

#### 4.1.3 Permits and documents required when applying for train paths

Applicants do not necessarily have to be in possession of a network access permit (see Point 3.2.3), a safety certificate (see Point 3.2.4) and a network access agreement (see Point 3.3.2) at the time a train path is applied for and allocated. One month at least before commencing operations, the applicant must either submit a track access permit or instruct a railway undertaking (RU) to carry out the rail movement. The safety certificate must have been issued at the very latest by the time rail operations commence (Art. 9a, Para. 4 EBG).

If a train path which has been ordered and definitively allocated cannot be used because the network access permit, the name of the RU tasked with carrying out the operation, the safety certificate or the network access agreement have not been submitted in time, the TVS will withdraw the allocated train path from the applicant. The applicant will be liable to compensate the IM in accordance with the IM's relevant service catalogues.

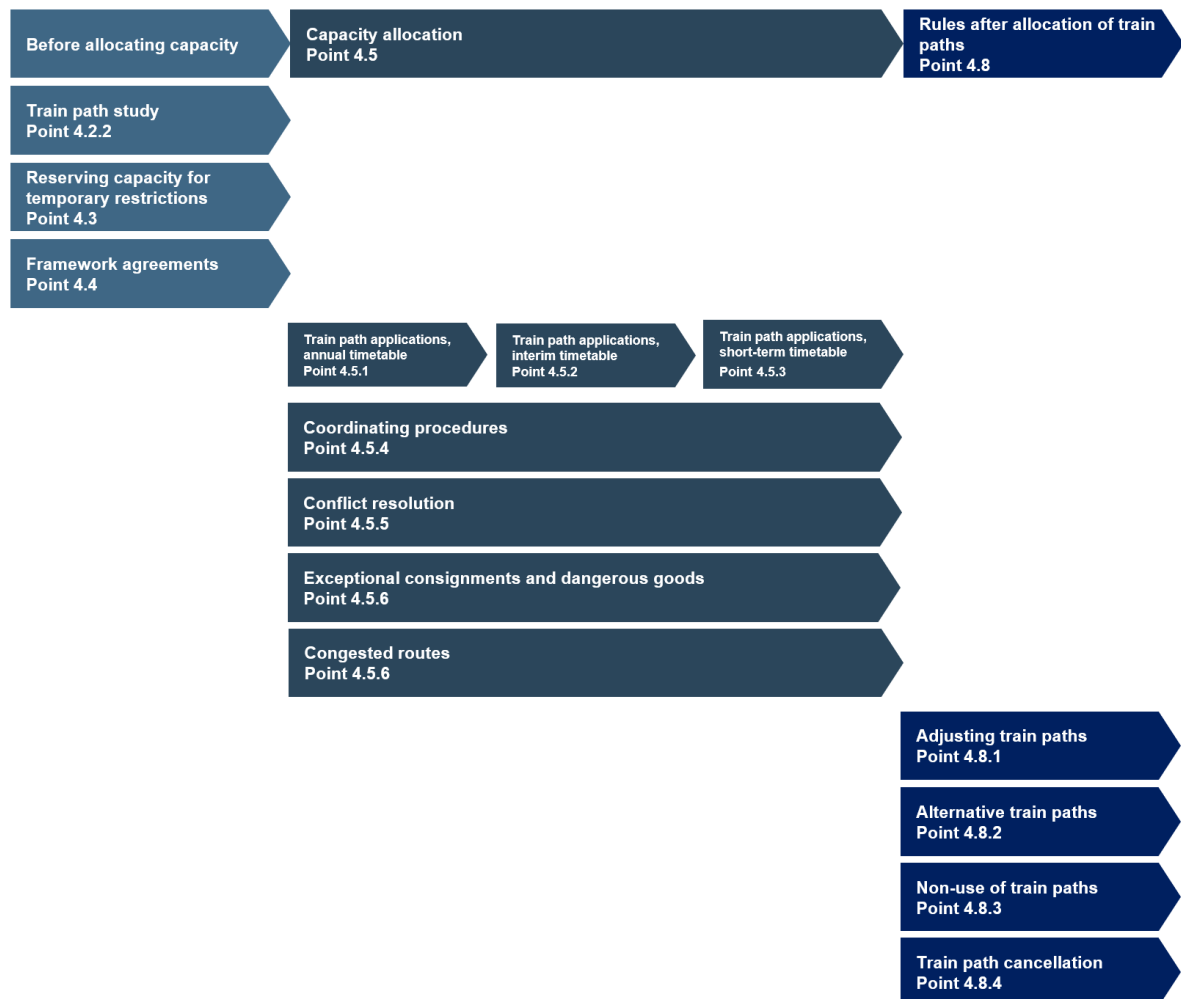
#### 4.1.4 Geographical scope

In addition to the rail networks listed in Section 1.1 – and on the basis of international treaties or bilateral agreements between the IMs and subject to the relevant foreign legislation – these provisions apply to the routes between the border in the Simplon tunnel to Domodossola, from Pino-Confine to Luino, from Les Verrières-Frontière to Pontarlier, from Boncourt to Delle and from Chêne-Bourg to Annemasse. However, these provisions do not apply to the SBB routes from Vallorbe to the national border in the Tunnel du Mont d'Or, from Le Locle-Col-des-Roches to the national border in the Tunnel du Col-des-Roches and from La Plaine to the national border. The SNCF Réseau conditions apply to those three routes. The RFI's provisions apply to the route from Stabio to the national border. See also Point 4.2.4 regarding train paths for cross-border traffic.

## 4.2 General Description of the Process

### 4.2.1 Overview

Train paths can be ordered for the annual or interim timetables. A simplified diagrammatical representation of the individual phases involved in ordering a train path is given below; the paragraph number where the relevant phase is explained is also given.

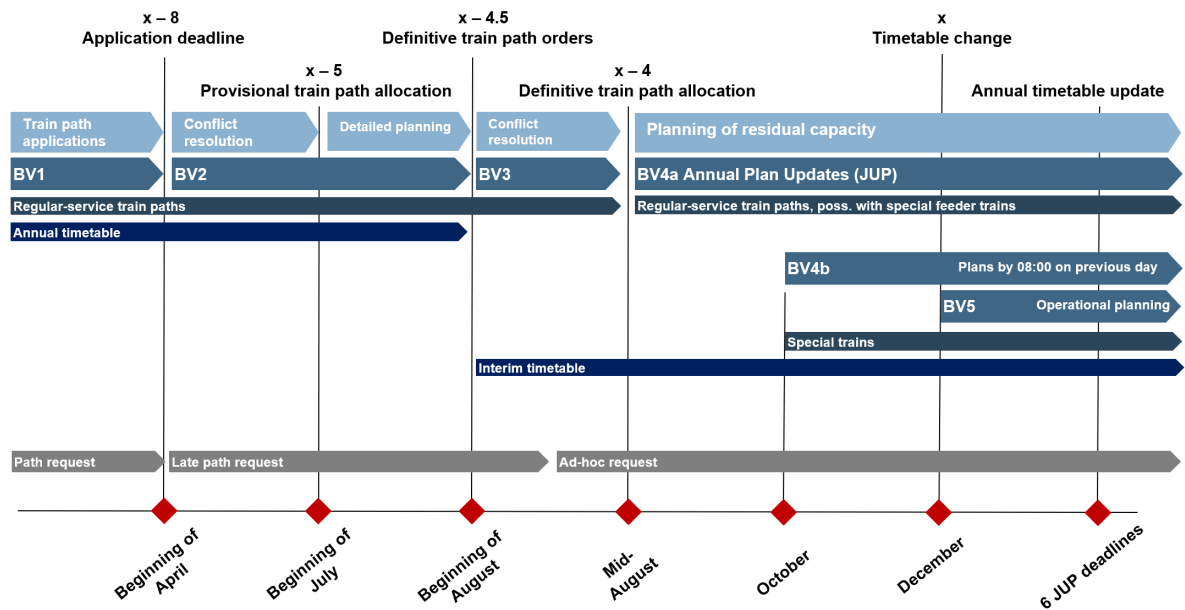


### 4.2.2 Overview of the Swiss ordering procedures

The table and chart below illustrate the Swiss ordering procedures set against the international time axis. The meanings of the terms used are also explained.

BV	Frist	TVS	RNE	Art	Receipt of order and allocation
----	-------	-----	-----	-----	---------------------------------

BV1	Annual timetable up to application deadline	Annual timetable	Path request	Regular-service train path	TVS in acc. with order of priority
BV2	Annual timetable after application deadline	Annual timetable	Late path request	Regular-service train path	TVS first come, first served
BV3	Annual timetable after definitive allocation	Interim timetable	Late path request Ad-hoc request	Regular-service train path	TVS first come, first served
BV4a	Annual timetable update (JUP)	Interim timetable	Ad-hoc request	Regular-service train path with special feeder train if necessary	TVS first come, first served
BV4b	Daily timetable Short-notice orders for special trains	Interim timetable	Ad-hoc request	Special event train	IM first come, first served
BV5	Daily timetable Operational orders for special trains	Interim timetable	Ad-hoc request	Special event train	IM first come, first served



## 4.2.3 Train path studies

### 4.2.3.1 The principle

Train path studies (timetable studies) enable applicants to examine the feasibility of new or amended service and production concepts, using an iterative process to develop them further with a view to ordering train paths for the annual or current timetables.

The ordering horizon for the Swiss ordering procedure as set out at Point 4.2.2 defines how train path studies should be submitted.

#### 4.2.3.2 Train path studies within the time horizon before BV1

Train path studies are to be submitted using the "Train Path Study Order Form" (see address list for contact details).

#### 4.2.3.3 Train path studies within the BV1 to BV4a time horizon

Train path studies are to be submitted using the NeTS-AVIS ordering tool.

#### 4.2.3.4 Train path studies within the BV4b and BV5 time horizons

No train path studies are envisaged within the time horizons for the 4b and 5 ordering procedures.

#### 4.2.3.5 Binding nature of train path studies

The feedback from the results of train path studies does not constitute a binding commitment to the allocation of timetabled train paths and does not exempt the applicant from submitting train path applications.

#### 4.2.3.6 Option of having the TVS monitor the conduct of studies

So as to ensure that there is no discrimination, companies which request studies can ask that the TVS monitor how the studies are processed. The same companies can also approach the TVS subsequently if they are not satisfied with the way in which the study was conducted (see address directory for the contact address).

#### 4.2.4 Ordering tools

Two ordering tools are available when applying for train paths on the Swiss standard-gauge rail network:

##### 4.2.4.1 NeTS-AVIS

NeTS-AVIS is Switzerland's national ordering tool for train path applications across all the ordering procedure time horizons as set out at Point 4.2.2.

Within the annual timetable, the ordering tool includes some planning data to assist applicants when ordering. For deadlines, see NWS Annex 4.5.

##### 4.2.4.2 PCS

The Path Coordination System (PCS) is an international system for coordinating train path applications on behalf of railway undertakings and other applicants, infrastructure managers, train path allocation bodies and rail freight corridor organisations. This internet-based application optimises international train path coordination in that it supports the harmonisation of the train path applications and offers made by all parties involved. In addition, PCS is used to publish the binding catalogued corridor train paths and the reserve capacity offers and to manage international train path applications on the freight corridors. There is no charge for accessing the PCS. A user account can be requested via the relevant website: <http://pcs.rne.eu> (<http://pcs.rne.eu>).

#### 4.2.5 Freight corridors

Catalogued corridor train paths are ordered and allocated as set out in the procedures and provisions for the Rhine-Alpine and North Sea-Mediterranean freight corridors. Details can be found in Book 4 of the respective corridor information documents, which are published on the websites of those corridor organisations ([www.corridor-rhine-alpine.eu](http://www.corridor-rhine-alpine.eu) (<http://www.corridor-rhine-alpine.eu>), [www.rfc-northsea-med.eu](http://www.rfc-northsea-med.eu) (<http://www.rfc-northsea-med.eu>)).

#### 4.2.5.1 Catalogued train paths for freight traffic corridors

The Rhine-Alpine and North Sea-Mediterranean freight corridor OneStopShops publish the catalogued corridor train paths (Pre-arranged Paths; PaP) in the Path Coordination System (PCS) ordering tool. In contrast to the national catalogued train paths, it is not possible to deviate from the catalogued corridor train paths, i.e. train path applications must, without fail, take the published train path parameters into account. The only exception to this rule is when choosing proposed operating points on the specially designated catalogued corridor train paths (the so-called Flex-PaPs). If they are not required, the applicant can reduce the number of these operating points.

Further details can be found in the relevant corridor information documents published on the websites of the corridor organisations.

#### 4.2.5.2 Ordering and allocating

The provisions for the Rhine-Alpine and North Sea-Mediterranean freight corridors apply to the ordering and allocating of catalogued corridor train paths.

#### 4.2.6 National train path catalogues

Train path catalogues as defined in EU Directive 2012/34 (Art 40, Para. 5 and Annex VII, Point 4) are available for freight traffic on the north-south Gotthard and Lötschberg-Simplon axes.

Train path catalogues are published from mid-January onwards on the [TVS website \(http://www.tv.s.ch\)](http://www.tv.s.ch) (keyword: services/train path usage/documents, "Train path catalogue Gotthard/Lötschberg"); they show which train paths are available for transalpine freight traffic in the forthcoming annual timetable. The times specified in the train path catalogues for border stops and shift changes should be taken into account when requesting train paths. Ordering border stops that exceed the guideline times is possible but doing so will put an excessive strain on the capacity of the nodal point. If it comes to conflict resolution, these applicants will be expected to show greater flexibility.

The train path catalogues published on the [TVS website \(http://www.tv.s.ch\)](http://www.tv.s.ch) (keyword: services/train path usage/documents "Residual Gotthard/Lötschberg capacity") will show what residual capacity is available in the interim timetable. They serve as a planning aid for train path orders in the current timetable. Updates are usually published at the internationally coordinated dates for annual timetable updates.

#### 4.2.7 Information required for train path requests and orders

The essential information set out in the following paragraphs is required when ordering train paths via NeTS-AVIS.

In order to provide the various infrastructure services (train control, customer information and intervention) needed to deliver an efficient railway system and to ensure that train path charges (basic charge for wear and tear and traction power consumption) are correctly billed to those RUs which use these services, RUs must also supply train-related data to the IM's CIS/ZIS, FOS and Erex systems. The relevant provisions are laid down in [NWS Annex 4.2.7 \(https://company.sbb.ch/en/sbb-as-business-partner/services-rus/onestopshop/track-access.html#sbb9c438f\)](https://company.sbb.ch/en/sbb-as-business-partner/services-rus/onestopshop/track-access.html#sbb9c438f).

#### 4.2.7.1 Basic services: data required

- Type of traffic (passenger or freight traffic [in the case of mainly freight wagons, whether RID or exceptional consignments; excl. measurement and test runs])
- Timetable period or deadline (annual timetable, annual timetable update, daily timetable) as per Point 4.2.2 (Deadline column)
- Regular-service or special train as per Point 4.2.2 (Type column)
- Type of service (regular-service or special train ) as per Point 4.2.2 (Type column)
  - Regular-service train:
    - Locomotive path
    - Passenger train path
    - Local freight train path
    - National freight train path
    - International freight train path
    - Cancellation
  - Special train
    - Special lightrunning service, special passenger train, special freight train
    - Configuration, breakdown, unscheduled stop, unscheduled transit without stopping
    - Transportation plan
    - Mod train
- Name of the applicant or of the RU commissioned to carry out the task
- Train number (if known)
- Accounting code
- Train category / type of train in relation to the type of traffic and service
- Clearance gauge (route code: main process (HP) or Simplon (SIM) profile, EBV profile, etc.)
- Route class / non-standard route class
- Dangerous goods (RID: Dangerous goods number, formation-type-danger (FAG code / UN number)
- ETCS L2 (yes /no)
- Train path allocation priority (departure-oriented, arrival-oriented, key-times, fixed)
- Trusted route ('Gong' trains, i.e. freight trains without noteworthy border stops)
- Freight forwarder / end customer
- Operating period (operational, movement or pre-arranged days, operating period) in relation to service type
- Details of the train movement
  - Departure operating point of the train movement applied for, including planned departure time and stop code; even if not in Switzerland
  - Destination operating point of the train movement applied for, including the planned arrival time and stop code; even if not in Switzerland
  - Intermediate stations, incl. details of time required and stop code (with additional information about, for example, change of system, removal of a wagon group, increase/decrease in motive power, change of locomotive crew, etc.)
  - Origin (place of loading, siding, etc.) or from train ..... (incl. train relation "from/to" and, if applicable, name(s) of partner applicants)
  - Destination (place of unloading, siding, etc.) or for train ..... (incl. train relation "from/to" and, if applicable, name(s) of partner applicants)
  - Safety Management System – RU (SMS-RU; the RU responsible for train safety in Switzerland)
  - Additional information for domestic train paths applied for
    - Border crossings (national infrastructure borders) incl. requested handover time(s); in NeTS-AVIS operating points in accordance with published border factsheet
  - Additional information for international train paths applied for
    - Route (at least one foreign operating point per transit country)
    - Border crossings (national borders) including requested handover time(s); in NeTS-AVIS operating points in accordance with published border factsheets: [www.OneStopShop.ch](http://www.OneStopShop.ch) > OneStopShop. > Train paths > International train paths (<https://company.sbb.ch/en/sbb-as-business-partner/services-rus/onestopshop/train-paths.html>)
  - Additional information for train paths for trains consisting solely of locomotives:
    - Origin (siding etc.) or from train ..... (incl. train relation)
    - Destination (siding etc.) or for train ..... (incl. train relation)
- Catalogued train path number (for freight traffic on the north-south axes)
- Connections and waiting periods
- Passenger traffic, long-distance traffic: line number
- Composition / formation incl. journey type and vehicle type
  - Traction unit(s) and towed load
  - Train series and brake sequences

#### 4.2.7.2 Basic services, background and reference documents

The requested train characteristics must definitely comply with the FDV and AB-FDV directives as well as with other associated regulations and the operating regulations of the RUs.

Service concepts can only be implemented in the annual timetable if the train characteristics take into account, and are able to comply with, the minimum requirements of the directives in the NNP relating to concepts.

For example:

If there is no guarantee that rolling stock capable of fast acceleration will be used, as specified, on a particular route, then the alternative rolling stock used instead must be capable of keeping to the journey times specified in the concept.

**Regular-service trains:**

- run regularly within an operating period on at least ten traffic operating or pre-arranged days
- are requested using the ordering procedures at Point 4.2.2 (BV column) in conjunction with Point 4.2.2 (Type column)
- travel at Vmin 80km/h
- have no operational conditions imposed (i.e. they do not require any special operational arrangements)
- are included in the timetable handover or in the timetable updates documents

**Background to, and reference documents for:**

- Train category / train type
  - According to FDV R 300.1 4.2 and AB FDV I-30111 1.4 1 (train categories) and in conjunction with the type of traffic and service
  - In addition, the following criteria for the train category per traffic type must also be met:

Traffic type: passenger transport	Traffic type: freight transport
Train category: empty equipment train	Train category: freight train
Criterion: composition consists of: - Mostly (= length in metres) P coaches or - Vintage passenger or freight rolling stock of no commercial use. Definition according to <u>FOT Directive</u> <a href="https://www.bav.admin.ch/bav/de/home/rechtliches/rechtsgrundlagen-vorschriften/richtlinien/richtlinien-bahn/zulassung-historischer-fahrzeuge-der-eisenbahnen.html">https://www.bav.admin.ch/bav/de/home/rechtliches/rechtsgrundlagen-vorschriften/richtlinien/richtlinien-bahn/zulassung-historischer-fahrzeuge-der-eisenbahnen.html</a> "Approval of vintage railway vehicles"	Criterion: composition consists of: Mostly (= length in metres) freight wagons and/or is carrying dangerous goods and/or is carrying exceptional consignments

- Maximum permissible clearance gauge
  - According to AB FDV I-30111 5.1 4.8.9 (General map route code for HP profiles or SIM profiles)
  - According to AB FDV I-30111 5.1 4.9.3 (General map EBV O2 profile (e.g. double-decker vehicles))
- Maximum permissible route class
  - According to AB FDV I-30111 5.1 4.2 (route classes)
- Operating period (operational, movement or pre-arranged days, operating period)
  - Difference between regular-service trains and special trains: see above under regular-service trains
  - Point 4.2.7.3 applies to train movements with variant operating periods
- Details of the train route
  - Infrastructure or ordering and planning limits according to factsheets [www.OneStopShop.ch](http://www.OneStopShop.ch) > OneStopShop. > Train paths (<https://company.sbb.ch/de/sbb-als-geschaeftpartner/leistungen-evu/onestopshop/trassen.html>)
- Catalogued train path number as per train path catalogue

- Composition / formation
  - Type of control: directly controlled / indirectly controlled
    - According to AB FDV I-30111 5.1 2. (Controlling trains)
  - Operating mode: traction unit(s) diesel or electrical operation
  - Sequence (traction unit(s) and towed load incl. journey type and vehicle types)
    - According to FDV R 300.5 1.3 and AB FDV I-30111 5.1 3 (location of traction units within the train composition)
    - According to FDV R 300.5 1.4 and AB FDV I-30111 5.1 4 (location of the hauled load within the train composition)
  - Permissible profile and load dimensions
    - According to AB FDV I-30111 5.1 4.3 (load dimensions)
    - According to AB FDV I-30111 5.1 4.8 (route code (HP profiles or SIM profiles)
    - According to AB FDV I-30111 5.1 4.9 (EBV O2 profile (e.g. doubledecker vehicles)
    - Point 4.2.7.3 applies to train movements with variant profiles and load dimensions
  - Maximum train weight
    - Maximum towing hook and normal load (or increased normal load) per traction unit(s) according to FDV R 300.5 1.5 or the RU's operating rules in relation to the relevant gradient according to I-30131 RADN
    - Maximum wheelset and metre load AB FDV I3-0111 5.1 4.2 (route classes)
    - Point 4.2.7.3 applies to train movements with variant profiles and load dimensions
  - Maximum train length including traction unit(s)
    - According to FDV R 300.5 3.7.2 (maximum speed and maximum permissible length of trains)
    - According to AB FDV I-30111 5.1 6.1.(length restriction for passenger trains)
    - According to AB FDV I-30111 5.1 6.2.(length restriction for freight trains)
    - Point 4.2.7.3 applies to train movements with variant maximum train lengths
  - Train series and brake sequences
    - According to AB FDV I-30111 5.3 4 (train series and maximum speed) in relation to I-30131 RADN. Point 4.2.7.3 applies to train movements with variant train series and brake sequences
  - Speeds:

Minimum speeds $V_{min}$	Maximum speed $V_{max}$
<p>All regular-service trains of train series and with brake sequences which, in respect of the relevant speeds according to I-30131 RADN, must travel at a speed of less than 80 km/h on certain route sections</p> <p>These include:</p> <ul style="list-style-type: none"> <li>• All regular-service trains which, for technical reasons, cannot/should not travel at <math>V_{min}</math> 80km/h</li> <li>• The minimum speed for regular-service trains is 80km/h. Point 4.2.7.3. applies to regular-service trains travelling at a <math>V_{min}</math> of &lt; 80 km/h.</li> </ul> <p>Exceptions are:</p> <ul style="list-style-type: none"> <li>• Regional tractor trains and train movements for infrastructure maintenance tasks (incl. measuring and test runs)</li> </ul>	<ul style="list-style-type: none"> <li>• According to FDV R 300.5 3.7.2 (maximum speed and maximum permissible length of trains)</li> <li>• Point 4.2.7.3 applies to train movements at excessive speeds</li> <li>• According to AB FDV I-30111 5.3 4 (train series and maximum speed) in respect of the relevant maximum speed according to I-30131 RADN</li> <li>• According to FDV R 300.5 3.7.3 (additional restrictions)</li> </ul>



#### 4.2.7.3 Basic services with special features

In principle, this includes all trains which (must) travel in accordance with a specially drawn up running order according to FDV 300.1 4.1.2 and/or which deviate from the directives at Point 4.2.7.2.

These are trains which:

- are not applied for regularly (i.e. for at least ten traffic days per timetable period)
- also operate on certain weekdays (less than ten pre-arranged days) and do not conform to those pre-arranged days or weekdays which are most often ordered (asterisk operating period [VP\*]).

Examples:

- Train always runs Monday to Friday and also on five Sundays
- Train always runs on Sundays and also on Easter Monday and Whit Monday
- exhibit impermissible characteristics, such as:
  - Variant profiles and loading dimensions
  - Variant maximum train lengths
  - Variant train series and brake sequences
  - Travelling at excessive speeds
  - Regular service train paths at  $V_{min} < 80\text{km/h}$  as per Point 4.2.7.2
  - Exceptional consignments involving operational infrastructure measures
  - Steam trains
  - etc.

These trains operate as special trains (or with a transportation plan), which must be requested within the BV4b and BV5 deadlines (or within the deadlines according to the exception regulations set out at Point 4.5.3.4).

#### Additional details required for:

- Measurement and test runs  
The appropriate permit in accordance with FDV and AB-FDV and their follow-up regulations must have been issued by the time an application is made for train movements at excessive speeds (or involving excessive weight).
- Exceptional consignments  
The provisions for exceptional shipments are set out at Point 3.4.3  
The deadlines for ordering are set out at Point 4.5.3.4.  
Additional conditions are set out at Point 4.7.1
- Special passenger trains  
If special passenger trains are ordered in connection with a travel chain (e.g. in the event that service provision is doubled, relief trains are provided, rail traffic measures are taken, major events, etc.), the connecting trains, both incoming and outgoing, and the waiting times at the station stops must be specified when ordering.

#### Exceptions to the 2022 timetable period

The following exceptions are permitted when applying Point 4.2.7.3:

- Passenger services:
  - Additional trains such as
    - Double service provision,
    - Holiday traffic
    - Major events
- Freight services:
  - Trains covered by Point 4.2.7.3 which are already operating in the 2021 timetable period:
    - Shipments in accordance with I-50062 (restrictions on the transportation of dangerous goods which are classified under chlorine as the main substance)
    - Shipments of alumina

#### 4.2.8 Details required and directives to be taken into account for ancillary services

#### 4.2.8.1 Ancillary services, details required

- Service type / type of ancillary service ordered
- Name of the applicant or of the RU commissioned to carry out the task
- Train number (if known)
- Accounting code
- Dangerous goods (RID: dangerous goods number, FAG (formation-type-danger) code / UN number)
- Need for a special siding (details of siding number or loading platform including time period from ... to ...)
- Traffic data / operating period (travel days or pre-arranged days, operating period) in conjunction with
- Details of the operating point
  - Arrival time in the operating point or starting point or time for the start of the ancillary service
  - Departure time from the operating point or destination or time for the end of the ancillary service
- Additional information for parking traction units
  - Siding number (preferred siding)
  - Traction unit type
- Composition / formation (traction unit[s] diesel/electric, number of wagons/coaches, type, length in metres)

#### 4.2.8.2 Ancillary services, directives to be observed

The information required according to the "Form for ordering ancillary services".

#### 4.2.9 Arbitration in the event of a dispute over train path allocation

RailCom is responsible for resolving complaints in connection with network access. RailCom can, by virtue of its official status, initiate investigations if it is suspected that network access is being prevented or not being granted in a non-discriminatory manner.

### 4.3 Reserving Capacity for Temporary Capacity Restrictions

#### 4.3.1 General Principles

IMs plan maintenance and upgrade work as part of the process of producing the network timetable. The basis for doing this is set out in the network usage plan (NNP). Essentially, applicants will be informed at the earliest possible time. Applicants' interests will be incorporated into this planning process and taken into account as far as possible.

The network usage plan (NNP) will identify the following reductions in train paths over the planning horizon (guideline indications):

- Continuous closures (total or individual track closures) lasting at least 30 days
- Repeated, identical individual closures lasting at least 30 days
- To an extent, shorter possessions with major implications for capacity

The NNP will not include all temporary capacity restrictions. In some cases, these will only be scheduled after the deadline for applying for train paths. Art. 11b NZV specifies the deadlines within which the IMs must publish temporary capacity restrictions for undertaking construction work. Art. 10 NZV-BAV governs the procedure which applies in the event that the number of train paths for each type of traffic guaranteed in the NNP per standard hour can no longer be implemented during the capacity restriction.

In the case of temporary capacity restrictions which are not fully taken into account in the NNP, an amicable solution will be sought with the applicants concerned.

If no amicable solution can be found, the train paths will be allocated to the different traffic types, based on the NNP as far as possible. Thus as a first step, and for as long as the capacity restriction lasts, any applications for train paths will not be considered which, during the period when there was no capacity restriction, exceed the guaranteed number for each traffic type and take up residual capacity.

If available capacity is still insufficient for allocating train paths in accordance with NNP rules, the IM may, for the duration of the capacity shortage, adjust the number of train paths envisaged and their suitability for each type of traffic as regards both the affected route and any diversionary routes being considered. Train paths will be allocated in accordance with the provisions at Points 4.5.1 ff of this Network Statement.

If, at the time that train paths are being allocated as part of the annual timetable process as per Point 4.3.1, temporary capacity restrictions have been announced, but it has not yet been possible to make definitive plans for the specific impact these restrictions will have on individual train paths, applicants will be allocated train paths subject to appropriate reservations.

Applicants will be informed in writing of any maintenance or upgrade work that will affect train paths that have already been allocated.

#### 4.3.2 **Deadlines and Information Provided to Applicants**

The same provisions apply as in Point 4.3.1.

#### 4.4 **Impacts of Framework Agreements**

The TVS will draw up a framework capacity statement. Applicants and IMs may conclude framework agreements in accordance with Art. 12b NZV.

##### 4.4.1 **Framework capacity statement**

Route section	Capacities allocated in framework agreements	Free capacity for framework agreements
n/a	Blank	Blank

##### 4.4.2 **Current situation**

At present the IM is not offering any framework agreements.

#### 4.5 **Path Allocation Process**

##### 4.5.1 **Train path applications / train path orders, annual timetable**

###### 4.5.1.1 **Deadlines**

Standard train path allocation is based on the deadlines set by the FOT for applying for train paths. The specific deadlines for the relevant timetable year are set out in NWS Annex 4.5.

###### 4.5.1.2 **The Swiss ordering procedure for the annual timetable**

BV	Deadline	TVS	RNE	Type	Receipt of order and allocation
BV1	Annual timetable up to application deadline	Annual timetable	Path request	Regular-service train path	TVS in acc. with order of priority
BV2	Annual timetable after application deadline	Annual timetable	Late path request	Regular-service train path	TVS first come, first served

#### 4.5.1.3 Train path request

Applicants must ensure that their train path requests are submitted in the appropriate form and on time and using the prescribed ordering tool.

If requests are incomplete or implausible, the TVS will give the applicant an additional deadline of five (5) working days to amend or correct any insufficient, missing or inadmissible details. If the applicant does not comply, the TVS will not process the train path request.

So-called variant requests, containing two or more implementation options, are inadmissible because they cause unnecessary planning effort and tie up network capacities. If variant requests are made, the TVS will not process any of them.

If, by the application deadline for a train path to be allocated in the standard way, too little is still known about certain requirements (e.g. locomotive and tractor-hauled freight trains), it is recommended that these train paths be ordered at a later date (BV2). However, orders submitted at a later date will be assigned a lower priority than requests submitted on time.

The TVS will provisionally allocate train paths for national and cross-border traffic to applicants in accordance with the deadlines in NWS Annex 4.5. Applicants will then receive a binding train path offer and thus the assurance of being able to implement their production concepts. Each provisional allocation is made subject to the feasibility of the ancillary services ordered. If outstanding conflicts remain, train paths will only be allocated once these have been resolved, but in any case as soon as possible.

##### **Train paths for cross-border services (not applicable to catalogued corridor train paths)**

Cross-border train paths (with the exception of catalogued corridor train paths) can be applied for either nationally from the relevant train path allocation bodies or from the OSS network of IMs and independent train path allocation bodies which are grouped together in RailNetEurope (RNE). The OSS network allows applicants to use the Path Coordination System (PCS) ordering tool to submit their harmonised application for the entire international route to a single train path allocation body affiliated to the network. Details of how train paths for cross-border traffic are applied for and allocated can be found in the guide entitled "Procedure for international train path registrations" (see [www.rne.eu \(https://rne.eu/sales-timetabling/\)](https://rne.eu/sales-timetabling/); keyword: 'Timetabling').

When transferring to networks managed by non-Swiss IMs, orders must be placed as described on the [TVS website \(http://www.tvs.ch/\)](http://www.tvs.ch/) (keyword: services/train path usage, "Regulations applicable to border stations").

##### **Note**

Train paths will be officially allocated in each case in accordance with the relevant national provisions.

**4.5.1.4 Requesting and allocating ancillary services**

Ancillary services ordered in the annual timetable, in particular capacities for parking railway vehicles and for using loading sidings/facilities, must be ordered in accordance with the deadlines set out in NWS Annex 4.5 using the "Ancillary Services Order Form". The TVS will definitively allocate these ancillary services in accordance with the deadlines set out in NWS Annex 4.5. In the event of outstanding conflicts, train paths will only be allocated once these have been resolved, but in any case as soon as possible.

Formation groups in marshalling yards affect the train-path allocation for the associated basic service. For this reason, using formation groups in marshalling yards must be applied for in the annual timetable together with the basic services; this should also be done in accordance with the deadlines in NWS Annex 4.5 using the NeTS-AVIS ordering tool.

When placing an order, the applicant can state a preference for a particular siding (when stabling motive power units, it is essential to state the siding number and type of motive power unit). However, there is no entitlement to a specific siding.

**4.5.1.5 Allocation of unused capacities**

Once any conflicts in the standard timetable procedure have been resolved (this concerns all applications for the annual timetable received up to the second Monday in April), the TVS can allocate any capacities guaranteed in the NNP for one type of traffic (but which have not been taken up) to other types of traffic.

Allocations for standard passenger services which make use of the unused capacity allocated to another type of traffic need to be approved by the FOT (Article 12, Para. 3 NZV). Within the meaning of this provision, passenger services are deemed to be standard if they are published in timetables and are scheduled to run between two places at the same times for at least ten (10) days a year.

**4.5.1.6 Definitive train path orders and allocation**

Train paths applied for (basic services) must be definitively ordered no later than the dates set out in NWS Annex 4.5. The TVS will definitively allocate the basic services on the dates specified in NWS Annex 4.5.

**4.5.2 Train path applications / train path applications, interim timetable**

**4.5.2.1 Deadlines**

See NWS Annex 4.5

**4.5.2.2 Swiss ordering procedures, interim timetable**

BV	Deadline	Train path allocation body	RNE	Type	Receipt of order and allocation
BV3	Annual timetable after definitive allocation	Interim timetable	Late path request	Regular-service train path	TVS
			Ad-hoc request		first come, first served
BV4a	Annual timetable update (JUP)	Interim timetable	Ad-hoc request	Regular-service train path with special feeder train if necessary	TVS first come, first served

#### 4.5.2.3 Train path applications

Train paths for the annual timetable can still be ordered after the application deadline for allocating train paths in the standard way has passed. However, train path applications submitted after the deadline will be accorded a lower priority than those submitted on time and will be processed in the order in which they are received.(on the principle of "first come – first served").

On the interoperable standard-gauge networks, train path orders (basic and ancillary services) for standard train paths in the current year must be submitted to the TVS and will then be processed on its behalf by the relevant IM. Once processed, the TVS will allocate the train path.

Allocations for standard passenger services which make use of the unused capacity allocated to another type of traffic need to be approved by the Swiss Federal Office of Transport (FOT) (Article 12, Para. 3 NZV). Within the meaning of this provision, passenger services are deemed to be standard if they are published in timetables and are scheduled to run between two places at the same times for at least ten (10) days a year.

If a train path ordered for the interim timetable conflicts with previously allocated train paths, the IM will, where possible, offer alternatives to the company ordering the train path. If no adequate alternatives are available or if these are not acceptable to the company ordering the train path, the TVS will judge how the conflict is to be resolved. Depending on the nature of the conflict, the TVS will invite the applicant concerned together with the IM to a conflict resolution meeting under its chairmanship. Train path orders for standard train paths within the current year will be allocated or, as the case may be, rejected by the TVS. Orders following an offer of a train path must be received by the IM at least three (3) working days before the date on which the service is due to run.

#### Ad-Hoc Path Requests

#### 4.5.3

##### 4.5.3.1 Deadlines

Art. 11 Para. 3 NZV states that the final deadline for train path applications is:

- 17:00 on the day before one-off non-regular train movements are carried out by RUs which have already booked other train paths on a route within the same timetable period;
- 30 days before the first train movement in all other cases.

##### 4.5.3.2 Swiss ordering procedures, short-notice timetable

BV	Deadline	Train path allocation body	RNE	Type	Receipt of order and allocation
BV4b	Daily timetable Short-notice orders for special trains	Interim timetable	Ad-hoc request	Special event train	IM first come, first served
BV5	Daily timetable Operational orders for special trains	Interim timetable	Ad-hoc request	Special event train	IM first come, first served

#### 4.5.3.3 Train path applications

Train paths and ancillary services can also be ordered at short notice for the current timetable year. However, orders submitted during the current timetable are given a lower priority compared to train paths ordered and allocated in the annual timetable and can only take up residual capacity. They are allocated on a first come, first served basis in the order in which they are received, regardless of the traffic type involved.

Train paths for the current timetable year are to be requested using the NeTS-AVIS ordering tool (for international train paths, see Point 4.2.4).

For reasons of time, train path orders for special trains will be processed, allocated – or, as the case may be, rejected – by the IM's operational services. IMs will inform the TVS of any orders they reject. The TVS will check retrospectively whether the order was processed correctly and whether the rejection decision was made without discrimination and was well-founded.

##### **BV4b ordering procedure**

Under this procedure, the company placing the order can choose whether to place an order "with offer" or to waive this option and to make a direct request for an allocation as per the order or the best possible alternative.

Orders placed "with offer" must be submitted at least three (3) working days before the train movement is to be carried out. IMs are bound to their offer for five (5) working days or until the date proposed for the train movement to be carried out. If the offer is not taken up within this period, it will be deemed to have been refused by the applicant.

##### **BV5 ordering procedure**

This applies to orders for special trains and applications for train paths which are submitted later than 08:00 on the day before the train movement is to be carried out (Saturday/Sunday weekends and public holidays as per the NeTS calendar do not count as working days or as days in advance of the train movement being carried out). The last possible order deadline for receipt of an order by the IM's operational services is 90 minutes before the train's departure time. However, IMs reserve the right to take as much time as they need to process orders that are more complex than usual.

#### 4.5.3.4 Exceptions

##### **Measurement and test runs and other special rail movements**

For measuring and test runs and movements involving special vehicles (e.g. trolleys), the minimum order deadline is five working days.

##### **Exceptional consignments involving operational infrastructure measures**

- Exceptional consignments requiring operational infrastructure measures: 5 working days
- Exceptional consignments requiring operational infrastructure measures and involving lateral loading gauge excess (Lü-S): 10 working days

Registering for the consignment to be transported (registering for the task to be completed) is only possible if the exceptional consignments requiring operational infrastructure measures have been ordered in advance. The latest possible registration is 120 minutes before train departure. Short-notice changes (e.g. shifting of loads, no transport plan) can only be processed for exceptional consignments which do not require operational infrastructure measures.

#### 4.5.4 Coordination Process

#### **4.5.4.1 The principles: blank orders (orders with no content) are prohibited**

In principle, applicants are free to define – without restriction – the train paths they would like. They must be able to acquire in good time the train paths needed to implement their production plans or to carry out the orders they expect to receive from their customers even if they have not yet concluded any contracts with their end customers at this point in time. However, orders submitted with the sole intention of impeding a competitor and/or of securing a better starting position in the path allocation process compared with other competing path orders (particularly in order to circumvent the order of priority in which they are processed) are not permitted. If the TVS suspects that an applicant has submitted blank orders unsupported by any business plan, i.e. is abusing their rights, it may request that the applicant provide additional information and documentation to demonstrate the credibility of the actual or planned train movement. If this documentation or information is not submitted in the requisite quality or not submitted at all, the path request may be rejected wholly or in part.

#### **4.5.4.2 Multiple orders for the same transport task**

If it is suspected that multiple orders are being placed for the same transport task (e.g. in the case of ongoing invitations to tender), the TVS will request details of the background to the order (customer, business plan). In doing so, the TVS will take applicants' need for confidentiality vis-à-vis competitors into account as far as possible.

In the case of multiple orders that are clearly known to both applicants involved, the TVS will superimpose both requests onto identical train paths. If this succeeds, the train path will be allocated to whichever applicant is able to provide evidence that it will be carrying out the transport task. If, by the allocation deadline, none of the applicants can provide evidence that it will be carrying out the transport task, they will all receive a conditional allocation.

If the attempt to place the various applications together on a single train path fails, all the applications involved will remain in the normal process without restriction.

#### **4.5.4.3 Obligation to participate in the coordinating procedure**

The TVS will make every effort to satisfy as many train path applications as possible. If applications are submitted for simultaneous train paths which cannot be reconciled, TVS will undertake coordination procedures based on the NZV-BAV and (analogously) Art. 46 EU Directive 2012/34. The applicants concerned are obliged to participate in these procedures, in particular by taking part in conflict resolution negotiations and submitting the information and documentation requested by the TVS. If an applicant fails to comply either in whole or in part with its obligation to participate and, in so doing, makes the coordination procedure difficult or impossible, then it shall bear the adverse consequences. This may extend as far as having its train path application rejected.



#### 4.5.4.4 Ancillary services

A distinction is made between ancillary services that are essential for carrying out a basic service and ancillary services not directly linked to a basic service. In the case of conflicts where no mutually acceptable solution can be reached, a greater degree of flexibility is expected from companies ordering ancillary services not directly linked to a basic service.

A coordination process will also be carried out in cases where there is a conflict between orders for ancillary services. If no agreement can be reached in the coordination process, ancillary services will be allocated according to the following procedure:

1. Orders for ancillary services that are essential for the provision of basic services will be given priority over those that have no direct link to the basic services. Orders for ancillary services which are directly linked to basic services will be accorded the same priority as the associated basic service.
2. Ancillary services which are not directly linked to a basic service will be allocated in the following order of priority:
  1. Ancillary services for requirements for which – for technical reasons – no alternatives can be offered.
  2. Ancillary services for requirements which recur repeatedly during the timetable year, depending on the frequency of those requirements as stated. These priorities will be assessed in the same way as for the procedure used for train path conflicts in the annual timetable.

#### 4.5.4.5 Catalogued corridor train paths for freight traffic

Special procedures and priority rules apply to the catalogued corridor paths allocated by the corridor OSS. These procedures are described in Book 4 of the corridor information document for the respective corridor ([www.corridor-rhine-alpine.eu](http://www.corridor-rhine-alpine.eu) (<http://www.corridor-rhine-alpine.eu>), [www.rfc-northsea-med.eu](http://www.rfc-northsea-med.eu) (<http://www.rfc-northsea-med.eu>)).

#### 4.5.5 Conflict resolution

As part of the coordination procedure, applicants will, where possible, be offered alternative paths that differ from those originally requested. In the interests of optimising the use of infrastructure capacity, the TVS may require each applicant to show flexibility, both as regards passenger and freight traffic, if this will allow additional train path applications to be met. As far as possible, connections within a coordinated public passenger traffic or freight traffic transport chain should be assured. As regards regular clockface passenger services, this affects connections between trains with a clockface frequency of up to (and including) a half-hourly interval. As regards trains that add to capacity between the half-hourly services, the degree of flexibility expected goes above and beyond guaranteeing connections.

If no agreement can be reached during the coordinating procedure, train paths will be allocated on the basis of the provisions of the EBG, NZV and NZV-BAV in accordance with the rules set out below:

##### 4.5.5.1 Conflict resolution when allocating train paths based on the network usage plan (NNP)

Train paths will be allocated based on the NNP. However, it is not possible – based on the NNP – to conclude that any individual railway undertaking has any particular rights and obligations because the NNP only assures capacity for certain traffic types and not for individual undertakings.

#### 4.5.5.2 Order of priority

If no alternatives can be offered to the applicants within the degree of flexibility that can reasonably be expected of them or if the conflicting orders cannot be resolved by mutual agreement, TVS will – in accordance with the legal requirements – give priority to those applications which do not restrict the number and quality of train paths that the NNP guarantees for the applicant's own types of traffic or for the other applicants' types of traffic.

If more train path applications are submitted for a particular type of traffic than are provided for in the NNP, or if there are conflicts between applications for train paths which cannot be resolved by mutual agreement, the following order of priority applies:

1. Conflicts between orders exclusively involving passenger traffic
  1. Applications submitted under a framework agreement (Art. 12c Para. (2) Letter (a) NZV)
  2. Applications for regular clockface passenger traffic.
  3. Trains which deliver a higher contribution margin for each train path application concerned
  
2. Conflicts between orders that do not exclusively involve train paths for passenger services.
  1. Applications submitted under a framework agreement (Art. 12c Para. (2) Letter (a) NZV)
  2. Freight trains to which – for technical reasons, notably the critical clearance gauge – no alternatives can be offered. The burden of proof lies with the company submitting the application.
  3. Applications made on the basis of agreed transport chains for year-round freight transport but for which no possible alternatives exist. This applies to trains for which a year-round application exists, where these trains are part of domestic wagonload freight connection systems including the express network or postal and parcel services.
  4. Trains which run repeatedly during the timetable year, depending on how frequently they operate. These applications are divided into the following three categories, in decreasing order of priority:
    - Trains which operate on average  $\geq 5$  days per week each year,
    - Trains which operate on average  $\geq 3$  to  $< 5$  days per week each year,
    - Trains which operate on average  $\geq 1$  to  $< 3$  days per week each year.

The train path days stated on the application will count as the measurement parameter. Within each category, applications will count as being of equal importance. If seasonal train services amount to a yearly average of less than one operating day per week, the actual traffic days ordered per timetable year will be compared.

If the ranking in accordance with Letters a or b does not produce a result and the conflicts cannot be resolved, the TVS will carry out a bidding process.

In the event of conflicts between orders within the unallocated capacity (i.e. the residual capacity not guaranteed by the NNP), regular clockface passenger traffic will have priority (Art. 9b Para. 4 EBG). If this is unable to resolve the conflict, the TVS will carry out a bidding process.

#### 4.5.5.3 Bidding process

The subject of the bidding process is the individual train path for which more than one allocation application has been submitted.

The TVS will inform all the applicants involved at the same time that a bidding process will be carried out. The TVS will invite them to submit a bid by a specified deadline (date and hour). The deadline for submitting bids is four (4) working days, unless the parties involved in the bidding process agree to a different deadline.

If the bidding process involves a passenger traffic application, the bid must be at least as high as the contribution margin in accordance with Art. 20 NZV, which applies to the passenger traffic application involved in the conflict.

The highest bid will win without further negotiation. The TVS will set the amount to be paid so that the difference between the winning bid and the second highest bid does not exceed CHF 1000.

If two or more bids are submitted for the same amount, the bidding process will continue until one bid wins.

#### 4.5.5.4 Ancillary services

If a conflict between orders cannot be resolved even on the basis of the order of precedence described at Point 4.5.4.4 and it is not possible, as a result, to allocate the ancillary service to any company, the TVS will carry out a bidding process. The ancillary service will be allocated to whichever applicant submits the highest bid. The winner will pay a maximum of CHF 1,000 more than the second-highest bid. The TVS will invoice the winning applicant directly. The bid price must also be paid even if the ancillary service allocated as a result of the bidding process is not used or is subsequently relinquished.

In complex conflict circumstances involving several applicants and/or a range of allocation options, the TVS will determine the precise procedure to be followed and will inform the parties concerned.

##### **Freight traffic: stationary-period conflicts**

The period that counts as a 'stationary period' is the length of time from a train's arrival until it recommences its journey and during which it occupies siding capacity at the operating points.

If no mutually agreed solution can be found in the event of stationary period conflicts, the TVS will group the stationary periods in the time window affected by such conflicts into 15-minute units based on the train path application.

If it is not possible to resolve all the conflicts within a group, the TVS will conduct a bidding process with the applicants concerned within this group (Point 4.5.5.3 applies analogously). No stationary periods will be allocated to unsuccessful applicants, nor for grouped applications for which no solutions can be found within a time window.

The following options are available to applicants who could not be allocated the stationary period which they had applied for:

- Rejection of their application for the basic service (train path), including ancillary service (stationary period), by the TVS without cost implications;
- Definitive granting of the basic service (train path), without any ancillary service (stationary period); at the same time, the applicant gives an undertaking to amend its order for the basic service (train path) and to take up that basic service at a time when no conflict arises and at the latest 30 days before a timetable change.

If the relevant train path has not been adjusted by 30 days before a timetable change at the latest, it must be cancelled for the entire timetable year (cost implications as per the List of Infrastructure Services).

### **Resolving motive power unit stabling conflicts**

There is essentially no entitlement to any specific siding. The TVS will allocate sidings in such a way that the capacity of that part of the facility can be used to the maximum extent.

Conflicts arise between orders for stabling capacity for motive power units if several orders have been submitted for the same siding at a particular operating point. The first step is for conflicts to be coordinated. This involves dividing the motive power units into three categories which are then processed sequentially:

1. Locomotives in productive use;
2. Reserve locomotives;
3. Locomotives undergoing repairs and other stabling requirements not directly connected to basic services.

After this coordination procedure, sidings which are conflict-free will be allocated. 'Conflict-free' denotes that only one order has been submitted for a particular siding by just one party and that this submission is not disputed.

If this processing sequence fails to produce a conclusive result, the TVS will conduct a bidding process for the sidings affected by the conflict. Point 4.5.5.3 applies analogously.

#### **4.5.5.5 Catalogued corridor train paths for freight traffic**

Special procedures and priority rules apply to the catalogued corridor paths allocated by the corridor OSS. These are described in the Corridor Information Document Book 4 for each corridor ([www.corridor-rhine-alpine.eu](http://www.corridor-rhine-alpine.eu) (<http://www.corridor-rhine-alpine.eu>), [www.rfc-northsea-med.eu](http://www.rfc-northsea-med.eu) (<http://www.rfc-northsea-med.eu>)).

### **4.6 Congested Infrastructure**

If the TVS is unable to consider applications for train path allocations due to insufficient capacity on a route, or if it is reliably foreseeable that this will be the case, it will declare the route in question to be congested. The TVS, together with the affected IM(s), will carry out a capacity analysis so as to ascertain what has caused the bottleneck which has led to the route being congested. Depending on the cause and the duration of the capacity shortfall, the TVS will arrange possible short- to medium-term remedies. Furthermore, the TVS may withdraw train paths and allocate them to another applicant if the train path on the congested route is being used to a lesser extent than the published network access conditions may stipulate (Art. 12 Para. 4 NZV).

The statements above apply both to routes and nodal points as well as to basic and ancillary services.

All current congestion notifications together with the corresponding capacity analyses are published on the [TVS website](http://www.tvs.ch) (<http://www.tvs.ch>) (keywords "News / Data Library").

### **4.7 Exceptional Transport and Dangerous Goods**

#### **4.7.1 Exceptional transports**

Within the ordering procedures BV1 to BV4a (annual timetable and annual timetable update JUP), train path applications for scheduled trains which include exceptional consignments not requiring operational infrastructure measures will only be processed if a corresponding exceptional consignment approval number has been issued in accordance with Point 3.4.3.

Exceptional consignments involving operational infrastructure measures are to be ordered under the BV4b ordering procedure (short-notice orders for special trains) stating the relevant exceptional consignment approval number, either by:

- ordering train paths for special trains and using a transport plan or

- just using a transport plan if trains have already been ordered.

They are to be ordered using the NeTS-AVIS ordering tool in the interim timetable while following the requirements at Point 4.2.7.

Point 4.5.3.4 sets out the ordering deadlines.

#### **4.7.2 Dangerous goods**

The provisions for the carriage of dangerous goods can be found at Point 2.4.3. When ordering, the risk category according to RID as well as the FAG (formation-type-danger) code / UN number must also be stated.

### **4.8 Rules after Path Allocation**

#### **4.8.1 Rules for Path Modification / Rules if applicants make changes to train paths**

The details provided when applying for or ordering a train path (see Point 4.2.7 ff) are binding. Any subsequent changes to these details by the applicant must be made using the ordering tool and must be in the form of a cancellation and a new order. Exceptions to this rule are changes that have no impact on the train path and which do not require cancellation and reordering.

Train paths may not be sold nor transferred to another company (Art. 9a, Para. 5 EBG). The contract under which an RU is instructed to carry out the rail movement on behalf of another company does not count as selling or buying train paths.

#### **4.8.2 Rules for Path Alteration / Rules if IMs make changes to train paths**

IMs should reduce the need for changes to train paths to a minimum. However, IMs may need to change a train path for the following reasons:

- If they become aware of the implications, the unexpected postponement, the shortening or extension of a temporary capacity restriction which has already been announced.
- Capacity restrictions which occur as a result of force majeure.
- The need to adjust already allocated train paths due to receiving lower-priority applications. If the IM decides to include in the timetable any lower-priority applications it receives and if this affects train paths which have already been allocated, the agreement of those applicants affected must be obtained.

The IM will inform applicants without delay as soon as a change to a train path appears likely. IMs will offer alternative train paths whenever possible. When doing so, they will take account of the original application and of the applicants' commercial and operational needs.

#### **4.8.3 Non-Usage Rules / Rules applicable to the non-use of train paths**

Any train paths that are not needed must, without fail, be cancelled using the ordering tool; if train paths have already been arranged, a cancellation must be requested. If a train path is neither cancelled nor a cancellation requested, then the train movement which is not carried out will be billed based on standard rates; see also Point 5.6.3.

#### **4.8.4 Rules for Cancellation / Rules applicable to the cancellation of train paths**

Train paths which have been definitively allocated must be cancelled using the appropriate ordering tool. The precise terms and conditions for waiving the use of definitively allocated train paths (basic and ancillary services) can be found at Point 5.6.4. Different provisions may apply to congested routes as per Point 4.6 for both definitively and provisionally allocated train paths.

If cross-border train paths are not used, this must be coordinated and agreed with any non-Swiss partner RUs. When cancelling, the agreements made with partner RUs must be quoted in the ordering tool under "Notifications" (e.g. "Project is not being implemented" or "Train paths on the non-Swiss routes have been cancelled by the partner applicant").

If allocated catalogued corridor train paths are cancelled, the provisions of the Rhine-Alpine or North Sea-Mediterranean freight corridor will take precedence over national provisions ([www.corridor-rhine-alpine.eu](http://www.corridor-rhine-alpine.eu) (<http://www.corridor-rhine-alpine.eu/>), [www.northsea-med.eu](http://www.northsea-med.eu) (<http://www.northsea-med.eu/>)).

## 4.9 Timetabling and Capacity Redesign (TTR)

The European description of TTR can be found in NWS Annex 4.9. This section only provides a short description of the special Swiss features.

### 4.9.1 Purpose of TTR

To optimise the use of existing infrastructure capacity by harmonising the train path allocation process at international level, including its general parameters.

### 4.9.2 Component parts of the process

The TTR process is based on the following components:

- The network usage concept (NNK)
- The network usage plan (NNP)
- Temporary Capacity Restrictions (TCR)
- Annual planning
- Continuous planning
- Ad-hoc planning

### 4.9.3 Introduction

In Switzerland, the NNK and the NNP form the basis for the capacity model.

#### 4.9.3.1 Registering capacity requirements

In Switzerland, capacity requirements are registered in accordance with the NNK and NNP processes.

#### 4.9.3.2 Capacity model

The capacity model is based on the NNK and the NNP.

### 4.9.4 The TTR pilot project

The Swiss IMs and the TVS are collaborating in the "Mannheim-Basel" pilot project, which aims to integrate the initial components of TTR into the train path ordering and allocation process in a way that will bring benefits.

## 5 Services and Charges

### 5.1 Introduction

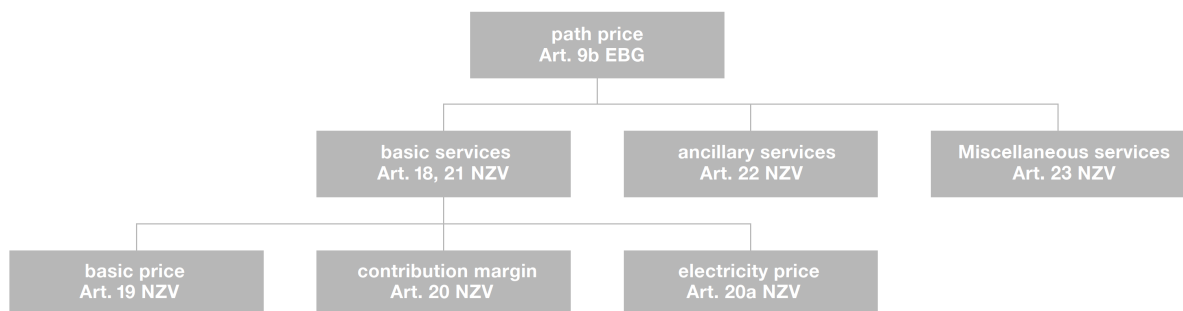
The EU member states offer services according to Annex 2 of Directive 2012/34/EU in the form of a minimum access package, additional services and ancillary services. In contrast, the services, basic services and ancillary services defined in the [Rail Network Access Ordinance](http://www.admin.ch/opc/de/classified-compilation/19983395/index.html) (<http://www.admin.ch/opc/de/classified-compilation/19983395/index.html>) are used in Switzerland.

For this reason, the contents of this chapter are not directly comparable with those of Network Statements from other countries. Further information can be found in the joint [List of Services of the infrastructure managers](https://company.sbb.ch/en/sbb-as-business-partner/services-rus/onestopshop/services-and-prices.html) (<https://company.sbb.ch/en/sbb-as-business-partner/services-rus/onestopshop/services-and-prices.html>).

## 5.2 Charging Principles

According to [Art. 18 NZV](https://www.admin.ch/opc/de/classified-compilation/19983395/index.html#a18) (<https://www.admin.ch/opc/de/classified-compilation/19983395/index.html#a18>), the charge for using the infrastructure is referred to as the 'train path price'.

The train path price is made up of the basic and ancillary services. Services not associated with network access make up a third price element.



## 5.3 Basic services and prices according to NZV (EU: minimum access package according to 2012/34/EU)

The basic services are based on the provisions set out in [Art. 21 NZV](https://www.admin.ch/opc/de/classified-compilation/19983395/index.html#a21) (<https://www.admin.ch/opc/de/classified-compilation/19983395/index.html#a21>) and are divided into [basic price](https://www.admin.ch/opc/de/classified-compilation/19983395/index.html#a19) (<https://www.admin.ch/opc/de/classified-compilation/19983395/index.html#a19>), [contribution margin](https://www.admin.ch/opc/de/classified-compilation/19983395/index.html#a20) (<https://www.admin.ch/opc/de/classified-compilation/19983395/index.html#a20>) and [electricity price](https://www.admin.ch/opc/de/classified-compilation/19983395/index.html#a20a) (<https://www.admin.ch/opc/de/classified-compilation/19983395/index.html#a20a>).

They comprise use of the train path (in the quality specified), including train operating services, power supply from the contact wire, the safe and punctual management of operations including the necessary telecommunications and IT services, use of tracks by trains in unchanged formation for freight operations and, for passenger services, the provision of a track with a platform including access to public facilities.

If the data as listed at Point 4.2.7 and in [NWS Annex 4.2.7](https://company.sbb.ch/en/sbb-as-business-partner/services-rus/onestopshop/track-access.html) (<https://company.sbb.ch/en/sbb-as-business-partner/services-rus/onestopshop/track-access.html>) are missing or incorrect, this can result in standard values according to the List of Services being applied when charging the basic price for wear and/or power consumption.

### 5.3.1 Basic price

The statutory provisions relating to all elements affecting the basic price are set out in [Art. 19 and 19a ff NZV](https://www.admin.ch/opc/de/classified-compilation/19983395/index.html#a19a) (<https://www.admin.ch/opc/de/classified-compilation/19983395/index.html#a19a>). The basic price must cover the marginal infrastructure costs.

Various incentives and product-related factors (e.g. wear, demand for a train path, quality of a train path, stopping surcharges, environmental impact, ETCS, traction equipment, cancellation fees) can result in different prices for different trains. In this connection, the provisions set out in the [NWS Annex 4.2.7](https://company.sbb.ch/en/sbb-as-business-partner/services-rus/onestopshop/track-access.html) (<https://company.sbb.ch/en/sbb-as-business-partner/services-rus/onestopshop/track-access.html>), in particular, should be observed.

**5.3.2 Contribution margin**

The statutory provisions relating to the contribution margin are set out in [Art. 20 NZV](https://www.admin.ch/opc/de/classified-compilation/19983395/index.html#a20) (<https://www.admin.ch/opc/de/classified-compilation/19983395/index.html#a20>).

**5.3.3 Electricity price**

The statutory provisions relating to the electricity price are set out in [Art. 20a NZV](https://www.admin.ch/opc/de/classified-compilation/19983395/index.html#a20a) (<https://www.admin.ch/opc/de/classified-compilation/19983395/index.html#a20a>).

Additional important provisions about installing, registering and using energy metering systems so that the effective electricity consumption can be billed can be found in Point 3.4.1.6.4 and also in the associated [NWS Annex](https://company.sbb.ch/de/sbb-als-geschaeftpartner/leistungen-evu/onestopshop/netzzugang.html#sbb2660a) (<https://company.sbb.ch/de/sbb-als-geschaeftpartner/leistungen-evu/onestopshop/netzzugang.html#sbb2660a>) [3.4.1.6.4](https://company.sbb.ch/en/sbb-as-business-partner/services-rus/onestopshop/track-access.html#sbb2af6d3) (<https://company.sbb.ch/en/sbb-as-business-partner/services-rus/onestopshop/track-access.html#sbb2af6d3>).

**5.4 Ancillary services and prices according to NZV (EU: Additional services according to 2012/34/EU)**

The statutory provisions relating to the ancillary services are set out in [Art. 22 NZV](https://www.admin.ch/opc/de/classified-compilation/19983395/index.html#a22) (<https://www.admin.ch/opc/de/classified-compilation/19983395/index.html#a22>).

The prices for ancillary services are based on the provisions set out in Section 3 of the List of Services.

As regards using the ancillary services, responsibility for providing movable materials is split as follows:

Railway undertaking	Infrastructure manager
Brake bars	Heating system
Heating cable	Water tap connection
Heating plate	De-icing devices for track equipment
Hoses	Stop blocks (for both rails)
De-icing devices for rolling stock	Protection signal
Stop blocks (for one rail)	Points wedges
Iron handles	Hand crank for points
Earthing rods	Inspection rod
Tarpaulins (for covering wagons)	Lantern with white and red and light
Chocks	Red signal flag
Nets	Red stop signal disc
Stop block plates	Departure signal rod
Preheating panel	
Tail light	
Tail end indicator	
Mobile lifts	
Luggage trolleys	

**5.5 Services and prices according to NZV (EU: Ancillary services according to 2012/34/EU)**

According to [Art. 23 NZV](https://www.admin.ch/opc/de/classified-compilation/19983395/index.html#a23) (<https://www.admin.ch/opc/de/classified-compilation/19983395/index.html#a23>), RUs may buy in services from companies other than the IMs at freely negotiated prices. These do not come under the principle of discrimination-free network access and include, for example, distribution services, luggage handling, rectification of faults if this does not impede operations, small-scale maintenance, large-scale maintenance, vehicle cleaning and telecommunications and IT services that do not affect the train route itself.



## 5.6 Fees, incentives and discounts

### 5.6.1 Fee payable if applicants make changes to train paths (Path Modification)

If a train path is cancelled, the procedure set out at Point 3.1 of the List of Services will apply.

### 5.6.2 Fee payable if IMs make changes to train paths (Path Alteration)

Remains blank.

### 5.6.3 Fee for non-use of a train path

Train paths which are not used will be charged for in accordance with Point 5.3.2 of the List of Services.

### 5.6.4 Fee for cancellation of a train path

If a train path is cancelled, the procedure set out at Point 2.3 of the List of Services will apply

### 5.6.5 Incentives and discounts

Incentives and discounts are defined at Point 2.2 ff of the List of Services. They include:

- Diesel traction supplement
- Freight traffic dangerous goods supplement
- Freight traffic low-noise bonus
- ETCS discount
- Discount for trains with reinforced traction
- Discount for long trains >500m

## 5.7 Performance Scheme

SBB Infrastructure uses the EFA IT application (previously ErZu) to assign delays to incidents which caused them. However, no bonus/malus system is applied on the SBB network.

## 5.8 Changes to Charges

We reserve the right to make changes to the statutory services and prices. The applicable prices are defined in the List of Services; where necessary, they will be adjusted to conform with the legal framework conditions.

## 5.9 Billing Arrangements [TVS]

Invoices will issued by the IMs after prior approval by the TVS.

# 6 Operations

## 6.1 Introduction

This section contains a summary of the operational provisions which are to be observed on the IM's network.

## 6.2 Operational Rules

### 6.2.1 Rail Service Regulations

The FOT publishes the rail service regulations (FDV), based on Article 11a EBV. These apply to all RUs that use the Swiss railway infrastructure. They comprise the safety rules for all movements by rail.

They can be accessed at [bav.admin.ch – Rechtliches – Rail Service Regulations \(FDV\)](https://www.bav.admin.ch/bav/de/home/rechtliches/rechtsgrundlagen-vorschriften/fdv-2020.html)  
(<https://www.bav.admin.ch/bav/de/home/rechtliches/rechtsgrundlagen-vorschriften/fdv-2020.html>).

### 6.2.2 Implementing provisions

To supplement the rail service regulations, railway companies (RUs and IMs) issue implementing provisions, operating regulations and technical and operational recommendations in accordance with Art. 12 and 12a EBV.

### 6.2.3 Regulations relevant to network access

The most important SBB Infrastructure provisions are:

- I-30111: Implementing provisions to the Rail Service Regulations – AB FDV Infrastructure
- I-30121: FDV implementing provisions, local provisions for train movements and shunting manoeuvres
- I-30131: RADN block tables

All regulations relevant to network access can be downloaded from [OneStopShop](https://company.sbb.ch/en/sbb-as-business-partner/services-rus/onestopshop/track-access.html#sbbfae7a9) (<https://company.sbb.ch/en/sbb-as-business-partner/services-rus/onestopshop/track-access.html#sbbfae7a9>) as PDF files and partly from [vorgaben.sbb.ch \(/\)](http://vorgaben.sbb.ch/). The electronic document distribution system LIDI-R ensures that RUs with network access agreements are notified of changes.

Hard copies (paper versions) of individual regulations can also be obtained for a fee. An [order form](https://company.sbb.ch/en/sbb-as-business-partner/services-rus/onestopshop/track-access.html#sbbfae7a9) (<https://company.sbb.ch/en/sbb-as-business-partner/services-rus/onestopshop/track-access.html#sbbfae7a9>) is available. Subject to change.

### 6.2.4 Exceptions

Article 11a EBV states that on routes close to borders, the FOT may deem that the neighbouring country's rail service regulations apply. For example, for Italian RUs operating from and to Chiasso (the Viaggiatori and Smistamento station sections), the regulations, i.e. the RFI's Fascicolo di Linea 25 published in the relevant Italian IM's directory, will apply<sup>1</sup>.

<sup>1</sup>In accordance with the agreement between the Federal Office of Transport (FOT) and the Agenzia Nazionale per la Sicurezza delle Ferrovie (ANSF) of 8 July 2014 concerning sections of the Swiss and Italian rail networks between the national borders and border stations as well as access to these sections.

## 6.3 Operational Measures

### 6.3.1 Principles

SBB Infrastructure is convinced that physical proximity to its rail production partners will enable it to deliver the best possible service to its customers particularly as regards disruption management.

Consequently, if requested, it can provide all IMs and RUs with special workstations for rent in its operational premises. For further information about requirements and terms and conditions, please contact [verkauf@sbb.ch](mailto:verkauf@sbb.ch).

### 6.3.2 Normal operation

Normal operation is based on the provisions set out in the regulations related to track access and on the RUs' operating regulations.

### 6.3.3 Disturbances

If operations are disrupted, IMs are obliged to inform RUs. So as to remedy the disruption and keep public transport running, the IMs and RUs are obliged to provide each other with mutual assistance in the form of information, staff and resources.

### 6.3.3.1 Principle applied where there are implications for domestic traffic

Art. 14 NZV applies in the event of disruptions to operations.

If the disruption is likely to cause a line to be closed for several days, the IM, after consulting those RUs which are affected, will draw up an emergency timetable and publish it.

If the line closure is expected to last longer than three days, the TVS will calculate what proportion of the overall freight traffic on the closed line and on the diversionary route(s) is attributable to each RU.

It will allocate train paths on the diversionary route to each RU, based on their proportion of the overall traffic on the line affected by the closure and on the diversionary route. In doing so, it may revoke passenger and freight traffic train paths that it has already allocated if this helps to optimise capacity utilisation.

### 6.3.3.2 Principle applied where there are implications for international traffic

In the event of major incidents with significant international implications, emergency management will require international coordination.

If international disruptions last longer than three days and severely impact international traffic, the international emergency management system will come into effect.

The rail freight corridors will act as intermediaries in the disruption management and the communication process. Jointly with the IMs involved, they have developed and published general summaries of the diversion and operating scenarios. A reference to the diversion summary and to the scenarios can also be found in Book 4, Section 5 of the Corridor Information Documents published by the freight corridors (see Point 1.7.1 of this NWS).

Further details are set out in the [Handbook for international contingency management \(http://rne.eu/wp-content/uploads/International\\_Contingency\\_Management\\_Handbook\\_final\\_v1.5.pdf\)](http://rne.eu/wp-content/uploads/International_Contingency_Management_Handbook_final_v1.5.pdf). This handbook describes standards aimed at enabling the continuation of traffic flows at the highest possible level despite an international disruption incident; it also aims to ensure that the status of the incident and its impact on traffic flows is clear to all those involved throughout Europe. It defines interruption management and communication processes that complement national disruption management procedures so as to enable better international cooperation between IMs and train path allocation bodies.

## 6.4 Tools for Trains Information and Monitoring

### SBB Infrastructure's systems

Info-Hub PT and Rail4 offer modern standardised solutions for exchanging data on train path production with other licensed transport companies and for obtaining such data from them. Further information is available at [bahninfrastruktur.sbb.ch \(https://bahninfrastruktur.sbb.ch/de/produkte-dienstleistungen/bahninformatiksysteme/verkehrssteuerung/infocenter-pt-rail4.html\)](https://bahninfrastruktur.sbb.ch).

### RNE TIS

The Train Information System operated by RailNetEurope (RNE TIS) collates real-time information on international trains in one place. The relevant data are supplied to the RNE TIS by the participating IMs and merged into a single cross-border train movement. RUs and terminal operators can apply for access to the system at no charge under [tis.rne.eu \(https://tis.rne.eu\)](https://tis.rne.eu) and participate in RNE TIS Advisory Board meetings.

## 7 Service Facilities

### 7.1 Introduction

Within Switzerland, in accordance with Art. 6 of the Freight Transport Ordinance (GüTV) and in addition to the basic and ancillary services, access to intermodal transshipment facilities, port installations and sidings jointly financed by the federal government must be granted without discrimination.

In EU member states, third party providers of service facilities are also obliged in accordance with EU Implementing Regulation 2017/2177 to offer their services without discrimination.

The publication can be downloaded from the [European Rail Facilities Portal \(https://railfacilitiesportal.eu/\)](https://railfacilitiesportal.eu/). Alternatively, the document template developed by the RNE can be used. This is available from [rne.eu/network-statements/ \(http://www.rne.eu/network-statements/\)](http://www.rne.eu/network-statements/) keyword: Common Template for Service Facilities.

Both the European Rail Facilities Portal and the Common Template for Service Facilities are divided into six sections:

1. General information
2. Services offered
3. Detailed description of the facility
4. Charges
5. Access conditions
6. Capacity allocation

## 7.2 Service Facility Overview

The locations of the service facilities operated by IMs and third parties together with the conditions for accessing and using them can be downloaded from the [European Rail Facilities Portal \(https://railfacilitiesportal.eu/\)](https://railfacilitiesportal.eu/). Not all of SBB Infrastructure's service facilities were included in this Network Statement at the time of publication.

## 7.3 SBB Infrastructure's service facilities

### 7.3.1 Overarching provisions

Remains blank.

### 7.3.2 Passenger stations

#### 7.3.2.1 General information

A list of all passenger stations and their platform lengths can be downloaded from the SBB's [Open Data Platform \(https://data.sbb.ch/explore/dataset/perron/table\)](https://data.sbb.ch/explore/dataset/perron/table).

#### 7.3.2.2 Services

Remains blank.

#### 7.3.2.3 Description

Remains blank.

#### 7.3.2.4 Charges

Remains blank.

#### 7.3.2.5 Access conditions

Remains blank.

### 7.3.2.6 Capacity allocation

Capacity at passenger stations is allocated by ordering the basic service.

### 7.3.3 Freight terminals

#### 7.3.3.1 General information

As defined by RailNetEurope, the following facilities count as freight terminals

- Intermodal freight terminals
- Multifunctional rail terminals (e.g. freight stations)
- Public loading sidings (e.g. loading facilities)
- Private sidings (sidings)

SBB Infrastructure possesses loading facilities.

For information about their locations and equipment, go to [freiverlad@sbb.ch](mailto:freiverlad@sbb.ch)

#### 7.3.3.2 Services

For information, contact [freiverlad@sbb.ch](mailto:freiverlad@sbb.ch).

#### 7.3.3.3 Description

For information, contact [freiverlad@sbb.ch](mailto:freiverlad@sbb.ch).

#### 7.3.3.4 Charges

For information, contact [freiverlad@sbb.ch](mailto:freiverlad@sbb.ch).

#### 7.3.3.5 Access conditions

For information, contact [freiverlad@sbb.ch](mailto:freiverlad@sbb.ch).

#### 7.3.3.6 Capacity allocation

For information, contact [freiverlad@sbb.ch](mailto:freiverlad@sbb.ch).

### 7.3.4 Marshalling Yards and Train Formation Facilities including Shunting Facilities

#### 7.3.4.1 General information

There are marshalling yards in Basel, Buchs SG, Chiasso, Lausanne-Triage and in Spreitenbach/Dietikon (Limmattal marshalling yard).

In the Limmattal and Lausanne-Triage marshalling yards, trains are split and reformed by SBB Cargo on behalf of SBB Infrastructure.

#### 7.3.4.2 Services

Information about ancillary services can be found in the List of Services; information about other services is available from the OneStopShop (<https://company.sbb.ch/de/sbb-als-geschaeftpartner/leistungen-evu/onestopshop/oeffnungszeiten-rangierbahnhoefe.html>).

#### 7.3.4.3 Description

Details of the facilities (e.g. opening times) can be found in the OneStopShop (<https://company.sbb.ch/de/sbb-als-geschaeftpartner/leistungen-evu/onestopshop/oeffnungszeiten-rangierbahnhoefe.html>).

#### 7.3.4.4 Charges

Information about prices for ancillary services can be found in the List of Services; and for other services in the [OneStopShop \(https://company.sbb.ch/de/sbb-als-geschaeftpartner/leistungen-evu/onestopshop/oeffnungszeiten-rangierbahnhofe.html\)](https://company.sbb.ch/de/sbb-als-geschaeftpartner/leistungen-evu/onestopshop/oeffnungszeiten-rangierbahnhofe.html).

#### 7.3.4.5 Access conditions

Remains blank.

#### 7.3.4.6 Capacity allocation

Capacity allocation for ancillary services is governed by the provisions at Point 4.2.8 and for other services in accordance with the details set out in the [OneStopShop \(https://company.sbb.ch/de/sbb-als-geschaeftpartner/leistungen-evu/onestopshop/oeffnungszeiten-rangierbahnhofe.html\)](https://company.sbb.ch/de/sbb-als-geschaeftpartner/leistungen-evu/onestopshop/oeffnungszeiten-rangierbahnhofe.html).

### 7.3.5 Storage sidings

#### 7.3.5.1 General information

The exact locations of parking facilities can be obtained from the contact persons as shown in the address list.

#### 7.3.5.2 Services

Details can be provided by the contact persons shown in the address list.

#### 7.3.5.3 Description

Details can be provided by the contact persons shown in the address list.

#### 7.3.5.4 Charges

Prices are based on the provisions at Point 3.4 of the List of Services.

#### 7.3.5.5 Access conditions

Details can be provided by the contact persons shown in the address list.

#### 7.3.5.6 Capacity allocation

Capacity allocation is based on the provisions at Point 4.2.8.

### 7.3.6 Maintenance facilities

#### 7.3.6.1 General information

SBB Infrastructure, Sensetalbahn AG and HBSAG do not have their own facilities for maintaining and repairing rail vehicles.

#### 7.3.6.2 Services

Remains blank.

#### 7.3.6.3 Description

Remains blank.

#### 7.3.6.4 Charges

Remains blank.

**7.3.6.5 Access conditions**

Remains blank.

**7.3.6.6 Capacity allocation**

Remains blank.

**7.3.7 Other Technical Facilities, Including Cleaning and Washing Facilities**

**7.3.7.1 General information**

Certain sidings as shown at Point 7.3.5 have facilities which, in accordance with Art. 22 NZV, come under ancillary services that are to be offered without discrimination. These include brake testing systems, the provision of water and power to passenger trains (pre-heating/pre-cooling) and the disposal of rubbish, sewage and waste water. The precise locations of these facilities can be obtained from the relevant point of contact shown in the list of addresses.

**7.3.7.2 Services**

Remains blank, see general information.

**7.3.7.3 Description**

Remains blank, see general information.

**7.3.7.4 Charges**

Prices are based on the provisions at Point 3.4 of the List of Services.

**7.3.7.5 Access conditions**

Remains blank, see general information.

**7.3.7.6 Capacity allocation**

Capacity allocation is based on the provisions at Point 4.2.8.

**7.3.8 Port facilities in maritime and inland ports**

**7.3.8.1 General information**

Hafenbahn Schweiz AG operates port facilities in Basel Kleinhüningen and Birsfelden. Detailed information can be found on the [Hafenbahn Schweiz AG website \(https://port-of-switzerland.ch/hafenfirmen/hafenbahn-schweiz-ag\)](https://port-of-switzerland.ch/hafenfirmen/hafenbahn-schweiz-ag).

**7.3.8.2 Services**

Remains blank, see general information.

**7.3.8.3 Description**

Remains blank, see general information.

**7.3.8.4 Charges**

Remains blank, see general information.

**7.3.8.5 Access conditions**

Remains blank, see general information.

**7.3.8.6 Capacity allocation**

Remains blank, see general information.

**7.3.9 Relief facilities (Auxiliary equipment, railway facilities for emergency services)**

**7.3.9.1 General information**

SBB Infrastructure maintains fire-fighting and rescue and recovery trains at 16 sites (see I-30111, Section 1.4, Point 2.4). Details are available from [ALSI@sbb.ch](mailto:ALSI@sbb.ch) and Regulation I-50042.

**7.3.9.2 Services**

Remains blank, see general information.

**7.3.9.3 Description**

Remains blank, see general information.

**7.3.9.4 Charges**

Remains blank, see general information.

**7.3.9.5 Access conditions**

Remains blank, see general information.

**7.3.9.6 Capacity allocation**

Remains blank, see general information.

**7.3.10 Refuelling Facilities**

**7.3.10.1 General information**

For information on the services provided by and the conditions for accessing fuel tank facilities, please contact the fuel tank facilities centre of excellence (KPZ TTA): [kpz-tta@sbb.ch](mailto:kpz-tta@sbb.ch).

**7.3.10.2 Services**

Remains blank, see general information.

**7.3.10.3 Description**

Remains blank, see general information.

**7.3.10.4 Charges**

Remains blank, see general information.

**7.3.10.5 Access conditions**

Remains blank, see general information.

**7.3.10.6 Capacity allocation**

Remains blank, see general information.



## Glossary

In addition to the glossary below, an English language [Glossary \(https://rne.eu/wp-content/uploads/RNE\\_NS\\_CID\\_Glossary.xlsx\)](https://rne.eu/wp-content/uploads/RNE_NS_CID_Glossary.xlsx) produced by RNE can be accessed online.

Term	Definition
Movement type	<p>The movement type is a grouping element for several vehicle types that do not differ with respect to their physical characteristics. Movement types are only assigned by the infrastructure manager.</p> <p>Mandatory information required by various IT tools used by IMs (incl. NeTS-AVIS) in order to be able to distinguish the RU responsible for the safety management system from the ordering party.</p>
SMS-RU	<p>On the day of the transport, the SMS-RU must be in possession of valid safety certification. If the SMS-RU does not have a separate track access agreement with the IM, the ordering party is responsible for passing the SMS-RU's control centre contact details (email and telephone number) to the IM.</p> <p>In the event of train monitoring system alerts and safety checks by the IMs or the FOT regarding access to the network, the SMS-RU's control centre will be informed.</p>
asterisk operating period [VP*]	operating period with different traffic days

1

## Terms

In addition to the glossary below, an English language [Glossary \(https://rne.eu/wp-content/uploads/RNE\\_NS\\_CID\\_Glossary.xlsx\)](https://rne.eu/wp-content/uploads/RNE_NS_CID_Glossary.xlsx) produced by RNE can be accessed online.

Term	Definition
Movement type	<p>The movement type is a grouping element for several vehicle types that do not differ with respect to their physical characteristics. Movement types are only assigned by the infrastructure manager.</p> <p>Mandatory information required by various IT tools used by IMs (incl. NeTS-AVIS) in order to be able to distinguish the RU responsible for the safety management system from the ordering party.</p>
SMS-RU	<p>On the day of the transport, the SMS-RU must be in possession of valid safety certification. If the SMS-RU does not have a separate track access agreement with the IM, the ordering party is responsible for passing the SMS-RU's control centre contact details (email and telephone number) to the IM.</p> <p>In the event of train monitoring system alerts and safety checks by the IMs or the FOT regarding access to the network, the SMS-RU's control centre will be informed.</p>
asterisk operating period [VP*]	operating period with different traffic days