

Appendix 2.9 to the Network Statement 2020 by  
SBB Infrastructure, Thurbo, Sensetalbahn and Hafenbahn Schweiz  
Version 1.0

## Data provision.

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## **1 Current situation**

The RU must send SBB Infrastructure data as outlined in this chapter so that traffic on the SBB network can be managed and the train-path price calculated effectively.

## **2 Legal information**

The RU is responsible for ensuring that the data supplied is correct and complete, irrespective of the form of delivery. Missing or incorrect data may result in a train being unable to continue its journey until the information is supplied, or in standard values from the List of Services being used when calculating the basic price by wear and/or the power consumption.

The right to modify required operational data in line with legal requirements (e.g. due to changes to customs regulations) necessitating the provision of further data is reserved.

Depending on the method of delivery, the data may be provided as a free basic service. Upon request, IT systems may be used for additional purposes or the data may be obtained as a free basic service or as a service that is subject to a fee. The data supplied may be modified due to procedures that are necessary for operations.

The data collected will be used to provide the relevant infrastructure service (e.g. timetable planning, train control, customer information, billing). The data will also be disclosed to third parties if required for providing services and/or to fulfil overriding obligations (e.g. statutory requirements).

### **3 Passenger services and all light engine trains:**

#### **3.1 Data to be supplied**

Required train formation operating data (to be submitted electronically):

- Train path ID
- Train number
- operating day or traffic period
- timetable period
- RU
- formation journeys with start and end operating points including arrival and departure times.
- coupling of the formation element (inward train, outward train) at the start or end of the formation journey
- Productive power (vehicles of the same rotation that are assigned together)
- Direct run of the wagons (coupling of formation elements between trains without the passengers having to leave the vehicles)
- Drive type (code)
- Vehicle type per coach body (All wagon bodies that are part of a specific articulated vehicle must be provided under the same movement type)
- Equipment features (seats 1st and 2nd class air-conditioning, wheelchair spaces; air-conditioning and other)
- Wagon number for reservations
- Whether the locomotive is towed. Optional, for deduction from train-path costs
- Vehicle condition for customers: open, closed
- EVN of the vehicles, mandatory for locomotives and articulated trains  
The EVN is the 12-digit vehicle number registered in the register of vehicles.
- Train sequence (optional)
- Brake sequence (optional)
- Operating power of the locomotive
- Role of the locomotive

#### **3.2 Methods of delivery**

The correct formation data for passenger trains and all light engine trains (passenger and freight services) must be supplied to SBB Infrastructure via the IT system FOS. This can be done in the following ways:

- Data provision to FOS via an electronic interface using defined messages (XML) according to the interface specifications in consultation with SBB Infrastructure. The interface can be set up for a fee.
- Direct data entry in the FOS user interface.
- Importing the formations stored in NeTS for annual and daily data into FOS. The RU shall be responsible for checking that the data imported from FOS is correct and complete.

- FOS transmits the freight service tractions to CIS-Infra for all supply channels and can be checked/updated during train inspection. If the locomotive type, number of locomotives and route are identical to the data confirmed during train inspection, the EVN number is updated in the production calendar once train inspection is complete.

### **3.2.1 Disruptions**

If it is not possible to deliver the data due to a disruption, the data that is required for operations must be entered and sent as soon as possible once the interruption has ended.

### **3.3 Delivery intervals**

The RU must send data to SBB Infrastructure as follows:

- 1) Provision of complete annual data at the latest one week after provisional train path allocation (for the SBB Infrastructure annual planning).
- 2) Subsequent provision of complete annual data at a two-week interval (even if no changes have been made) so that it can be ensured that the annual data is up to date.
- 3) The daily data may be sent from 40 days prior to the journey. However, the data must be sent no later than 3 operating days after the journey. This still applies if the daily data does not deviate from the annual data. Alternatively, generation of the daily formations from NeTS can be requested in FOS.
- 4) Any change to the SMS-RU must be reported via CIS Infra before the train departs.

### **3.4 Contact**

FOS contact for any questions, problems and requests for access rights:

SBB Infrastruktur  
 I-B-APM  
 Hilfikerstrasse 3  
 3000 Bern 65  
 Schweiz  
[fos@sbb.ch](mailto:fos@sbb.ch)

### **3.5 Further use of systems**

The sales contacts will be happy to advise on the purchase of IT services from SBB Infrastructure (use of the IT systems and access to data):

SBB Infrastruktur  
 I-ESP-VK  
 Hilfikerstrasse 3  
 3000 Bern 65  
 Schweiz  
[verkauf@sbb.ch](mailto:verkauf@sbb.ch)

## 4 Freight traffic

### 4.1 Data to be supplied

#### 4.1.1 Obligatory for all freight trains

- Customer accounting code (ordering RU)
- SMS-RU (RU managing the train)
- Train number
- Departure date
- train's departure station code (incl. UIC country code)
- train's destination station code (incl. UIC country code)
- UIC border entry code (if any) and scheduled date of border crossing
- special interchange station for wagons (if any)
- message type
- motive power units along entire route: code number and EVN, position in train, brake type, unladen and braked weights, energy (combustion-based or electric regenerative/non-regenerative), locomotive Vmax, brake loading weight required to bring the train to a stop (in kilonewtons or tonnes)
- train and brake sequence
- train's maximum speed
- wagon number plus loading unit number for intermodal traffic
- relevant consignment identification number(s)
- consignment accounting code or RU's RICS code for the transferring and accepting RU/ carrier
- country code of the wagon or consignment's forwarding station
- wagon or consignment forwarding station code
- loading point (if forwarding station is in Switzerland)
- country code of the wagon or consignment's destination station
- wagon or consignment destination station code
- unloading point (if destination station is in Switzerland)
- routing code (of the foreign destination station)
- for cross-border services at least the wagons' UIC border entry and/or departure code (UIC routes) for Switzerland
- wagon's position number in the train composition
- composition group in the train
- number of axles per wagon
- wagon's unladen weight
- length over buffers
- handbrake type code and Handbrake loading weight (in kilonewtons or tonnes)
- wagon's brake type, status and equipment
- braked and brake changeover weights and the wagon's current braked weight
- any special characteristics of the brakes
- number of brake units on wagon
- load limit chart
- agreed chart
- maximum speed of wagon (as a function of load, construction and damage)
- load weight
- any faults on the wagon bill and damage
- date of last overhaul and safety allowance

- date of last special inspection and period between inspections (if applicable)
- load carriage restriction code (damage/engineering; if applicable)
- form, type and hazard (FTH/FAG) code
- Structure gauge for combined traffic vehicles (P/C or NT profile per coach), time of introduction to be clarified.
- If services are required in a marshalling yard, once the new system ZIS goes into operation from approximately 2022, the formation information (outgoing train, departure date, formation groups) must also be supplied for each vehicle.

#### **4.1.2 Additional requirements for dangerous goods**

For each wagon or each loading unit in combined traffic

- Hazard number (Number indicating de level of danger): for conveying type “tank” or “loose bulk goods”
- Material number (UN number)
- RID class
- packing group
- Form, type and hazard (FTH/FAG) code)

For each wagon or each loading unit in combined traffic with more than 8 tonnes of dangerous goods packed in limited quantities (LQ)

- Form, type and hazard (FTH/FAG) 97

#### **4.1.3 Additional requirements for exceptional consignments**

- load carriage restriction
- form, type and hazard (FTH/FAG) code
- permit number of exceptional load (see also NWS section 2.5)

#### **4.1.4 Trains without loads**

Before departure of the train, a “departure check without wagons” or “empty” message must be created in CIS for any station from which a freight train operates without a load.

### **4.2 Method of delivery**

The correct formation data for freight trains must be delivered to the Cargo information system (CIS Infra) of SBB Infrastructure.

The RU may supply data free of charge as follows:

- Direct data entry into the SBB Infrastructure CIS via Internet/Citrix emulation using the application "Train monitoring".<sup>1</sup>

The RU may supply data for a fee as follows:

- Data transfer via UIC Hermes train advance notice (Treno)
- If desired by the RU, it may also be arranged to supply the data required for operations via a different interface.

From approximately 2020, a revised version of CIS Infra will be available (train information system, ZIS).

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<sup>1</sup> Further use of other applications in CIS-Infra is described in section 4.5.

### **4.2.1 Disruptions**

The RU is responsible for ensuring that data is supplied on time, in full and without any errors. If data is not sent correctly, the standard values per train category published by SBB Infrastructure in the List of Services shall be used as the basis for billing.

If it is not possible to send data electronically due to a disruption, the most important operational data for freight services must be sent immediately to the designated office (freight services network management in Bern) via fax +41 51 227 39 24 or via e-mail [netzleitung-g@sbb.ch](mailto:netzleitung-g@sbb.ch). A corresponding model list (template) can be obtained from the system managers and is available on the Internet.

The necessary data must also be entered into the system/delivered electronically by the RU once the disruption has been resolved.

### **4.3 Delivery time**

The correct formation data for freight trains defined by the RU and the infrastructure manager must be entered into SBB Infrastructure's Cargo Information System (CIS) before the departure or border crossing of the train.

### **4.4 Contact**

ZIS/CIS Infra contact for any questions, problems and requests for access rights:

SBB Infrastruktur I-B-APM  
Hilfikerstrasse 3  
3000 Bern 65  
Schweiz  
[zis@sbb.ch](mailto:zis@sbb.ch)

### **4.5 Further use of systems**

The sales contacts will be happy to advise on the purchase of IT services from SBB Infrastructure (use of the IT systems and access to data):

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I-ESP-VK  
Hilfikerstrasse 3  
3000 Bern 65  
Schweiz  
[verkauf@sbb.ch](mailto:verkauf@sbb.ch)

#### **4.5.1 Local planning, production and information system (LoPPIS)**

From 2020/2021, SBB Infrastructure will be using the application LoPPIS for certain formation stations.

Use of LoPPIS may be offered for a fee and can be arranged as a miscellaneous service by separate request.

## **5 Delivery of energy measurement data**

### **5.1 Data to be supplied**

In order to ensure effective billing of the energy used, the measurements from the energy measurement systems and the associated EVN (12-digit vehicle number) must be provided in a timely manner.

Provision of the EVN forms part of the data that is to be supplied for each train according to sections 3.1 and 4.1 of this appendix.

### **5.2 Method of delivery**

The RU shall send energy measurements to the infrastructure manager in consultation with the latter and in accordance with UIC leaflet 930. The data shall be sent to the billing system. The infrastructure manager uses the system EREX Exchange for this. The RU is responsible for implementing the relevant interfaces with EREX Exchange.

#### **5.2.1 Handling missing and implausible data**

If the vehicles are registered for energy billing, replacement values or flat rates shall be used in accordance with the List of Services in the event of missing or implausible data.

The situations where this applies include

- a) failure of the energy measurement systems
- b) incorrect or implausible data that is therefore invalid, or missing data for individual sections of a train route.
- c) the EVN of a registered vehicle is missing or incorrect.
- d) failure to submit the data to the infrastructure manager on time in accordance with section 5.3 of this appendix.

If the necessary data for a locomotive according to section 5.1 of this appendix is not submitted for 30 successive operating days, billing will be based on the flat rates per train type published in the IM's List of Services. The RU must submit a request to the infrastructure manager in order to return to actual billing.

### **5.3 Delivery interval**

The measurements and the associated EVN must be provided to the infrastructure manager daily (no later than the operating day of the train path + 3 days at 22:00).

### **5.4 Contact**

Should you have any questions about the provision of energy measurement data, please contact [onestopshop@sbb.ch](mailto:onestopshop@sbb.ch).



## 6 Amendments

Version	Date	Amendment	Comments
1.0	26.11.2018	<p>- Published</p> <p>Section 3.3 3 Formulation of daily data delivery simplified.</p> <p>Section 4.1.1 New elements:</p> <ul style="list-style-type: none"><li>- Structure gauge in combined traffic</li><li>- Formation information for ZIS from approximately 2022</li></ul>	<p>Chapter 7 and the part relating to data delivery of chapter 8 of the Network Statement 2019 have been copied into this appendix and editorial revisions made.</p>